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THE SITUATIONAL MODEL IN THE ANALYSIS OF
INTERNATIONAL RELATIONS

BY

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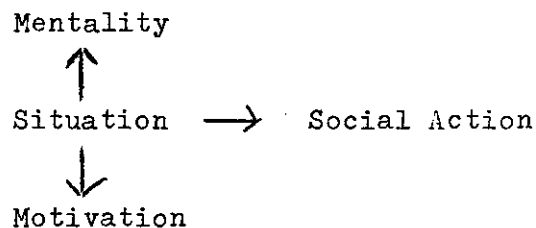
The situational model in the analysis of
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Prof. Dr. B. Landheer (Netherlands)

The situational model is based upon the recognition that Man operates always within a system, consisting of his natural and social environment as it is reflected in and by his consciousness. He continuously reacts to "situations" which together constitute the "stream" to which his consciousness reacts.

In the most simple form, this can be presented as follows:



At any given moment there is a "situation" (the "situation" of the social and natural environment). Man reacts to this situation in terms of motivation (positive or negative; never completely neutral as in this case there is no "processing" of the environment) while the reaction to the situation takes place with a mentality which is the result of previous experience.

As the mentality reflects previous experience, it is always "relational" and never absolute in regard to the situation. It presents a pattern or a configuration of patterns of consciousness (inclusive those termed "science") which reflect greater or lesser experience but never directly reflect "reality" as our patterns of consciousness are a function of this consciousness itself and the unknown factor "reality". Patterns of consciousness in the form of "mentality" for this reason can only present more or less experience, resulting in more complex or simpler structures of consciousness.

If "mentality" is only considered as such, we operate with a static concept because the mentality is, apart from experience, also shaped by motivation. An overriding strong motive, like hunger or desire for power, gives a different form to mentality than a less intense or diversified motivation.

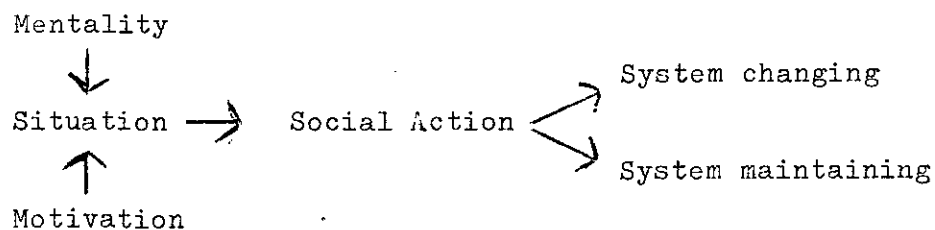
The social action which results out of the situational context can be either habitual or it can contain a new element if either the situation is a different one or the motivation differs in content or intensity or if the mentality has acquired new elements, for instance by the process of invention or learning.

Thus we can distinguish two types of social action:

- system changing
- system maintaining.

If the amount and weight of the social actions of the first type is significant, we speak of "dynamic systems" in contrast to "static systems". There is no objective preference for either of these systems as they are both "situationally" determined so that value-judgments cannot be applied to them.

If this simple model is applied to international relations, a number of problems present themselves:



In the first place, the factor "mentality" presents itself in a different manner than it does in internal relations.

The factor "mentality" in terms of previous experience applied to internal relations of nation-states or blocs has a fairly direct relationship to the motivation of social groups (political, economic and other interest groups). In the case of the external situation the factor "mentality" is more stabilized and less flexible because the "international mentality" of country A, B or C is produced by a relatively small group of politicians

and image-builders while for long periods there is often no strong link to the motivation of a referent-group.

The "international mentality" tends to create a social system of its own which is more remote from the motivation of people than most other activities of governments. In the image-of-self which the international system creates, there are obviously always the usual contemporary image-building concepts, like progress, democracy, self-determination, global organisation, etc. but their verbal value and their "action"-value show great differences, much more than in internal relationship.

Secondly, the factor "motivation" also plays a different role.

Motivation in international relations can be brought under the heading of capability-increase, capability-maintenance and capability-decrease (power-fatigue). Capability means political, ideological, military, economic-industrial power, etc.: in each individual case the capability-pattern of nation A, B, or C or bloc X of Y shows a different structural pattern of these components.

If the motivation aims at capability-increases, we speak of imperialism, expansionism, a high rate of outer penetration, etc. The capability-concept helps to dispel ambivalent notions like considering only political-military expansion as "imperialism", but not economic expansion or penetration. They both come under outer-directed capability increases.

In regard to world-society, it is exceedingly difficult to obtain data on motivation as it can only be measured indirectly and because no accepted standards of measurement are available. Outerdirected capability-increases over a longer period create a high probability of continued motivation in the same direction but only if all other factors (situation, mentality) remain constant.

In applying the situational model to international relations, the greatest difficulty lies, however, in the concepts of "system-changing" and "system-maintaining".

As international society is in our days the field of new experience and new situations, it has not led to the formation of a "system" in the proper sense of the word. In the international field all social action can obviously be interpreted as part of a "natural order" but not in terms of a systematic social order which is needed, even if it were only to define what "system-changing" means. There has to be a system before it can be changed.

As international society can be only characterised by the term "chaotic", we have to ask what systems of order are read into it. If there is no agreed-upon system, efforts will nevertheless be made to interpret situations and actions in terms of an order which seems desirable.

Of those desired systems we may distinguish three:

- A. The power-system.
- B. The coordinated interstate system.
- C. The global or regional industrial system.

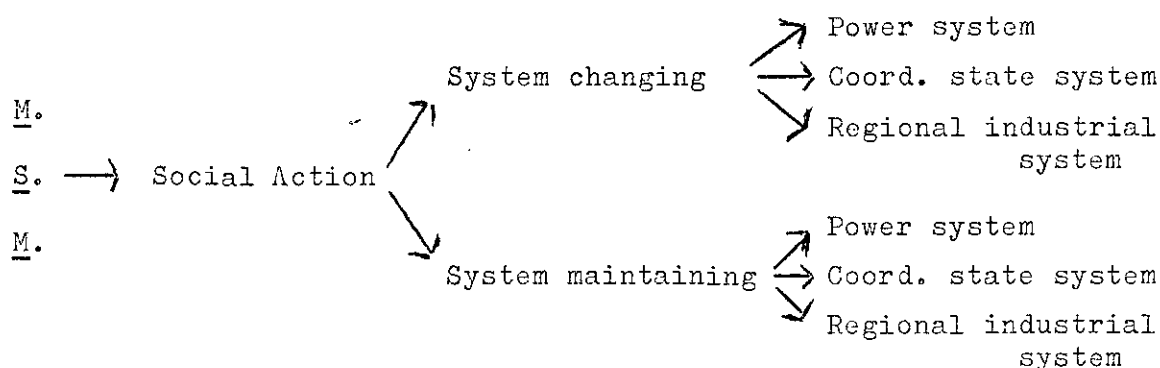
In the case of these three systems the projected carriers differ: in system A the carriers are nation-states or groups of states.

: in system B nation-states and international organisations in which nation-states appear as the social actors.

: in system C the carriers are functional groups (employers, workers, consumers, technologists, etc.) which, however, appear within national or regional societies and not to a great extent within a world-society as such.

The "international mentality" as such operates strongly in terms of system B, the desired traditional system. It ignores system A and is hesitant and uncertain about the role of regional industrial systems while advocating a global industrial system of which it does not present a concrete or workable image.

Thus, we have arrived at the following position:



This confronts us with great complexity and great difficulty of analysis. The factor "mentality" is not helpful for the analysis of structural changes in the world-society because every conceivable international action can be rationalised with the terminology of either of the three systems as we witness daily in our newspapers ("National glory"; "We are preserving the stability of the international system"; "All our efforts are directed at the progress of Mankind"). Abrupt changes in the terminology used occur if the "situation" makes one verbal pattern seem more desirable than the other.

An analysis of the structural attributes of world-society therefore has to concentrate on motivations and situations more than upon mentality.

The motivation can be maximalist, preserving (status quo, balance of power, etc.), or minimalist (power-decline, power-fatigue).

As the world population is rapidly increasing while the present population has increasing economic demands, the major aspect of world-society in general is the economic one. This causes a great deal of ambivalence because economic maximalisation seems at the same time a national, a regional and a global goal. This would lead to a more unified world-society if the global goals had priority over the regional ones; the regional ones over the national ones. The first condition, viz. the priority of global goals would lead to a certain coordination between the regional industrial societies (groups of economically integrated countries or very powerful individual industrial systems).

Let us recapitulate in terms of the three systems:

A. The power-system. This system in its political form will not lead to a world-society, and this is not claimed or advanced as a solution by any country.

B. The coordinated state-system. As the identification of the majority of the worldpopulation is in relation to economic systems which are no longer national, this system does not offer a rational solution or a workable structure. It is the projected order of the predominantly political society of the past.

C. The regional industrial systems are the dominant social systems of the present time. They can be maximalist, preserving or minimalist (The Gandhian society, for instance).

C.1. The maximalist attitude. The regional industrial society can be maximalist in regard to its own population or, more concretely, its followers who may consist of people from a number of nations. If it is maximalist in regard to its outer-directed capability, it will come into conflict with the other regional industrial societies. These conflicts can only be solved by compromises which mean a limitation of the maximalist attitudes in the interest of global integration. This limitation could be achieved by a world industrial code, regulating access to raw materials, markets, limitation of production, preservation of resources, etc.

C.2. The preserving attitude. If the most powerful regional industrial society would seek to limit its capability, this would be in the interest of world society as there would be a relative increase in the role of the other regional societies. Aid to pre-industrial societies is only positive in terms of world-society if it is preceded by coordination of the most powerful industrial societies. Otherwise it might create "negative capabilities".

C.3. The minimalist attitude, for instance, in terms of the Gandhian society, the cultural society, etc. Not significant in terms of the motivation of people, but useful as an image in order to achieve corrections in the maximalist attitude.

Possibilities of measurement

The question arises in how far the situational model can be used scientifically in terms of measurement of the factors involved: capability-structure (the situational factor), mentality, motivation.

The capability-structure is measurable in terms of production, import and exports, investment, technical assistance, etc. More difficult to measure are the cross-national developments, for instance, within the Atlantic society as the financial fusions do not fall under the control of a given nation or a supranational agency. The relation between inner- and outer-directed capability is also measurable.

Whether military expenditures can be analysed in a comparable fashion is questionable unless some standards in regard to lower and upper ceilings would be accepted, for instance, as a percentage of the national income.

Although the capability-structure and its changes are undoubtedly to some extent reflected in the international mentality of countries A, B, C, etc. it does not seem possible to make this factor measurable, except by very crude methods like counting hostile utterances. This method can, however, be rejected as unreliable while also opinion-analysis is only of limited value as the image which nations have of one another are to a considerable extent situationally determined.

Opinion-analysis can, however, be helpful in regard to non-maximalist attitudes. They occur in the form of the rejection of capability maximalisation in terms of political and industrial power while there are also groups which are concerned about the ecological crisis which seems to develop out of the continued maximalisation processes. Particularly the latter group is beginning to have some impact on planning on the national, regional and global level and it may operate in the direction of a more coexistential pattern of the regional industrial societies, and to an increase in the possibilities of coordination and cooperation via functional international agencies.

The factor "motivation" can be only measured in terms of overt-behavior which can be maximalist, preserving or minimalist. The periods chosen for measurement should be fairly long, like ten year periods, to get a fairly reliable degree of probability for the following period.

Overlapping outerdirected capability defines the conflict-areas.

It is submitted that analysis in terms of the situational model by an independent, non-political scientific institution could furnish a useful tool to determine probable conflict-areas and to calculate the intensity of the conflicts for periods of about ten years. Compromise-solutions could result from such analyses.

TOWARDS A WORLD PEACE ACADEMY

A Proposal

By

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P R E F A C E

The present paper is an effort to bring together some ideas concerning the training of what may perhaps be called "peace workers", "peace-makers", "peace-consultants" or "peace specialists". The terminology is far from settled, nor does it have to be for the time being. But the idea is to try to start bridging the tremendous gap found today between peace research and peace action by training well-chosen people in the implementation of, among other things, peace research findings. The paper coincides to some extent with talks given by the author at the Oslo Conference on the plan for a peace-makers' academy (organized jointly by the Peacemakers' Academy Committee, Vermont and the International Peace Research Institute, Oslo) in Oslo, November 14-17, 1968; and at the conference organized by the International Peace Academy Committee (IPAC), London, June 28-30, 1969). But the conferences were so constructive that the paper also reflects much of the discussion. Deep gratitude is expressed to fellow participants for extremely stimulating discussions, but the responsibility for the points of view put forward rests with the author and are not necessarily representative of IPAC as a whole.

The entire discussion is concretized in the form of a proposal for a World Peace Academy, to start its operation on a pilot project basis during the summer of 1970 and its possible full scale operation fall 1971.

It should be emphasized from the very beginning that the latter proposal is by no means original, nor is it in any sense final. The present proposal includes many elements taken over from other proposals, among them a proposal prepared by the author for the International Peace Research Association, presented at the Second IPRA Conference in Tällberg, Sweden, June 1967 and published in the International Peace Research Newsletter 1968, and some new ones, put together in a new framework, and presented here for discussion. Any criticism and comment would be most welcome.

Finally, I would like to express my gratitude to the Gandhian Institute of Studies for excellent working conditions and to Sri Sushil Sharma for excellent clerical assistance.

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Johan Galtung

1. Introduction

In the struggle for peace, defined negatively as the absence of personal violence and positively as the presence of social justice, and carried out by means of associative or dissociative strategies or both; in the struggle to manage conflict, whether by controlling it or resolving it; in the struggle for development in the horizontal sense of increasing averages and in the vertical sense of decreasing dispersions; concrete actions are needed and concrete people are needed as the carriers of these actions.

Peace research, defined as research on how peace policies, past and present, worked and work in practice is not enough. It is indispensable because of the insight it may yield in what has been the case, but to the extent that research is an effort to bring propositions about data and propositions derived from theories (hypotheses) together to compare them, peace research is limited to the past since only the past has produced data.

Peace proposals giving concrete blue-prints of future states of affairs as well as the means of attaining them, with explicit theories as to why these states of affairs are peace-productive, come closer. Such peace proposals will, of course, in part be based on peace research but not on peace research alone, since that would assume that the future will be an extrapolation from the past so that from what worked/did not work in the past one can infer what will/will not work in the future. This type of sociological determinism is probably among the more harmful carry-overs from the physical sciences, and still seems to be believed in by many.

But peace proposals, however laudable, are only words more or less well put together. What is needed is peace action, and many types of peace action can be seen in the world today. Some of them, such as the various peace corps operations (particularly US), the peace-keeping forces (particularly UN) and the abortive world peace brigade (various peace organizations) also make use of the term "peace". Most of them are based on fairly limited conceptualizations of "peace", however.

In the peace corps the theory is often simply either that underdevelopment itself is a source of "unrest" or that difference in development levels is a source of "unrest". The first idea often fails to distinguish between the structural violence so often found in connection with underdevelopment, and the manifestations of this in the

forms of some kind of personal, direct violence. One then tries to quell or prevent the latter without understanding that this is attacking the symptoms rather than the disease. Thus, a development project is regarded as successful from this point of view if personal violence disappears, regardless of how much social injustice there may still be in the structure. And as to the second theory, which is more egalitarian and hence often takes the form of righting social wrongs: this may reduce structural violence, but it is rather naive to believe that open violence cannot still take place after gaps have been bridged and/or the parties have become more similar. It should also be emphasized that one nation may still depend on another or be exploited by another long after economic and social indicators of all kinds have been brought to the same level.

Another objection to the peace corps approach is, of course, that it operates at the micro level. Its frame of reference is the community, and there is little doubt that it may lead to improved community structures as well as help in diverting conflict energy to more constructive outlets than open violence. But intra-community conflicts, however important they may be in some parts of the world, account for only a fraction of the total conflict volume at the group level, and certainly not for the most consequential ones.

The peace-keeping forces are constructed in such a way that they can operate both at the micro and at the macro levels. The basic formula is dissociative: to keep antagonists apart by drawing a demarcation line, or defining a no man's land, to be policed by the peace-keeping forces. It is a typical example of a type of dissociative peace making based on third party intervention, and usually only operative in a symmetric conflict between underdogs, with some top-dogs appearing in the role of the third parties. Typically, UN peace-keeping operations have mainly been carried out by center nations and been used to separate periphery parties, as in the UNEF, ONUC, UNFICYP, etc. operations.

A difficulty with the peace-keeping operations is that they seem only to be legitimately used under two conditions: that the violence is open, and that the parties are nations. Under all other conditions the violence is usually referred to as an "internal concern", and even if both conditions are satisfied but the nations belong to the same bloc the "problem" is also often said to be an "internal" one that can "best" be handled by the appropriate regional organization where

a big nation usually has hegemonial power.

To obviate this difficulty many people have been thinking in terms of world peace brigades that would mobilize volunteers to penetrate through national borders and intervene in cases of intra-national open and/or structural violence. In order for such operations not to be interpreted as efforts by a third power to use intervention as a pretext to conquest they would probably have to take place under the conditions of 1. non-violence, and 2. international composition, and 3. non-governmental auspices. But the problems involved in organizing such efforts seem to far almost to be insurmountable, since we are deeply imbred with the billiard-ball image of the nation-state.

At this point it should be strongly emphasized that one should not be misled by semantics here. The correlation between the tendency of an organization to use the term "peace" and to be "peace-productive" is probably neither positive nor negative but rather close to zero. For that reason just as much attention should be given to the many other policies instituted in the world today of relevance for the gross problems of peace, conflict and development that do not necessarily sail under the banner of "peace", but often under quite different and even, at the verbal level, contradictory terms.

Thus there is the whole international machinery, governmental as well as non-governmental, non-profit as well as profit, that every day contributes to associative, if not necessarily egalitarian, structures.

There are many institutions for associative conflict management through mediation and arbitration.

There is the military machinery that not only is used to wage wars, but also no doubt saves the world from some wars because the various balance of power theories, like most social science theories, are neither completely true, nor completely false. Of course, this machinery is a typical expression of dissociative peace-making.

There are the efforts to control the military machinery referred to as "arms control" and the efforts to abolish them referred to as "disarmament". As to the latter it should be emphasized that the attempts towards disarmament often seem to be based on a very basic misconception: when spatial distance can no longer be relied upon, internalized social distance mechanisms are insufficient, and associative peace policies are so embryonic as to be virtually non-existent, then disarmament is tantamount to leaving the system almost without any mechanism at all, neither dissociative, nor associative. Hence,

in spite of all efforts disarmament is likely to be the consequence, not the cause of associative peace making. But this critique does not affect arms control efforts that can be seen as efforts to get rid of imperfections (technical failure, human failure, faulty communication of intentions, unwanted escalation etc.) in a dissociative system based on military deterrence. And it is certainly not impossible that very special conditions, like superhuman statesmen, imminent catastrophes or what not, might get us out of the vicious armament-fear circle and into a virtuous disarmament-trust circle.

Then, there are all the revolutionary and evolutionary efforts, violent and non-violent, to bring about more just social orders. We have touched the relation between open and structural violence before, and however laudable the motivations and often also the achievements of revolutionary movements in terms of social justice it is hard to see that the use of open violence should be unavoidable and inevitable. A revolutionary movement that decreases social injustice but keeps the level of open violence constant or even increases it is, in our view, as unsatisfactory as a peace-keeping operation or a technical assistance operation that decreases open violence but keeps the level of social injustice constant or even increases it.

We would now like to emphasize the following very strongly, since it is basic for the concept of a world peace academy that we are driving at:

1. The various peace policies or forms of peace action, often with direct or indirect conflict or development relevance, that have been discussed briefly above, all have their shortcomings, but should in our mind be regarded as incomplete rather than as wrong. They may be good in and by themselves within a certain limited range of goals, but usually fail to justify the all-embracing claims often made for them by enthusiastic protagonists.
2. When enacted singly these policies may often do much more harm than good, when operated in combination they may be highly meaningful. However, they are so often defined as antithetical to each other that many people feel they have to choose between them so that support for one automatically implies opposition to another. This makes it difficult today to find personnel with versatility when it comes to peace action, and also to find organizations that can act on several peace fronts simultaneously. However, what individuals cannot combine for reasons of ideological or intellectual limitations organizations may be able to combine by means of compartmentalization, as witnessed by the ability of the total UN system to play on many factors of a peace-productive nature.
3. It would be wrong to say that we do not have people in the world today with impressive training in the fight against violence, and for social justice. But there are important biases in the

quantity and the quality of the personnel available. Some such biases can be expressed as follows:

- a. Whereas there is an impressive amount of personnel available for dissociative peace policies, there is much less available for associative policies. Thus, more people are working (as politicians, as diplomats, etc.) in the dissociative, competitive self-interests of the nation-states than for the associative, cooperative international organizations, that associate nations, but may be dissociative among themselves. An impressive number of people are working for the dissociative military machinery, extremely few for truly international peace-keeping forces that as third parties are less dissociative.
- b. Whereas there is an impressive number of persons concerned with the control of open, personal violence on a professional basis, as witnessed by the magnitude of police forces and military forces, by much of the work done by court personnel and by others, there is much less professionalism involved in the control of structural violence. Of course, much of the political machinery in any country is concerned with this, but the professional part of it is usually concerned with the maintenance of a certain level of injustice rather than with its change towards more justice.
- c. Whereas there is an impressive number of persons professionally trained in violent methods of effecting and counteracting change (e.g., as guerillas and counter-insurgency forces), very few people are systematically trained in nonviolent means of effecting or counteracting changes, in spite of the fact that such methods have been used extensively in this century (India, the US South and recently in Czechoslovakia).
- d. Whereas there is an impressive number of people professionally trained in creating, maintaining and increasing the strength of the military machineries, in armament, there are very few who are professionally trained in arms control and disarmament.
- e. Whereas many people are trained in techniques of conflict control, i.e. of keeping the attitudinal and behavioral manifestations of conflict under control, relatively few are systematically trained in conflict resolution, i.e. in resolving the incompatibility underlying the conflict.
- f. Whereas many people are trained in techniques of horizontal development, i.e. of increasing averages of various kinds in a population, relatively few people seem to be systematically trained in vertical development, i.e. in decreasing the dispersion of resources in a population.

All these six biases are important, since they all contribute to the present structure and tendencies of the various forms of peace action. Instead of searching for evil intentions behind these tendencies we often find it more fruitful to analyse them in terms of the training imparted to people available, and instead of blaming available people for the training they do not have, ask: how can new training programs

be started so as to correct some of the biases? If you do not have them and feel you need them, make them! To this we now turn.

2. The peace worker

First, some words about terminology. It is suggested to use the term "peace workers" for the kind of people we have in mind. There are several reasons for this.

One is the pretentiousness inherent in other, competitive terms. "Peace-makers" suggest that they really, de facto, make peace, not only that they work towards it. "Peace specialists" and "peace experts" suggest a level of commonly accepted knowledge and skill that it is hard to associate, today, with such a hazy concept as "peace". Moreover, it suggests a hierarchy of "high priests" removed by their expertise from the people they are supposed to work together with. "Peace consultants" is better, but suggests the relatively passive role of the wise man who is called upon to draw upon his brilliance and pronounce his verdict upon hearing the merits of the case. It does not suggest personal involvement and hard work.

Another reason is the academic connotation of all three competitive terms, as opposed to the more practically sounding term "peace worker". This term indicates less distance to the common man around the world. A third reason, closely related to this, is the analogy with the social worker: the idea of the peace worker as a world social worker. This does not mean that there cannot be specialists in the field, just as for social workers there is room for a distinction between the generalist and the specialist, to be developed later. The basic point is only the idea of training in knowledge and skills, of being at the disposal of those who ask for their services, and a complex combination of impartiality and engagement, of detachment and attachment.

The peace workers are then to be used as instruments to diffuse those forms of social action that are compatible with, or conducive to, peace in both meanings of the term. Which are these forms of social action? We shall now try to be more precise where the concrete content is concerned.

First of all, it is relatively easily seen what they are not. Any form that would imply the use of open violence by one group against another, or the repression of one group by another, would be

ruled out. Thus, a world peace academy would not train people from one group (nation, class, racial/ethnic group) in waging open or structural violence against another group. But this formula, however satisfactory it may look on the surface, hides at least one important problem.

Thus, does the formula apply to the third party, the peace workers themselves? Are they also subject to the same rule, or are they somehow exempt from it? Could a world peace academy train people as participants in international peace-keeping forces? The answer would to many probably hinge on the precise meaning of the word "international": does it mean the type of "peace-keeping" occasionally carried out by the leading power in a bloc or region, to keep deviants in line, or does it mean action according to much more generalized norms in the international community? In the latter case there is a UN machinery available for the definition of situations under which the use of violence is seen as legitimate. Is this implicit formula acceptable? The answer will probably have to be that although it can be improved upon, no better formula seems to be available today.

Or, to take an argument more from the social justice aspect of peace. To many this concept seems to imply higher standard of living. But as is only too well known the average standard of living can increase without any corresponding decrease in social injustice; the development can be horizontal only, not vertical. With higher standard of living on the average there may even be more opportunities for groups in power to exploit lower ranking groups, because of improved technology that may favor the dominant group more than others (this is particularly clear in some of the racist societies still existing). Would it then be proper to assist in training for the type of development that may lead to such consequences? Again the argument may be that it matters whether one trains a local, national hierarchy so that it can maintain its privileged power position, or trains an international hierarchy that has a power position, but derives it more legitimately from some international, close-to-universal organization. But then the counter-argument would be that an international bureaucracy can be even more oppressive because it is harder to reach. The answer obviously lies in the autonomy of the common man, in his liberation, but it is not always so easily seen how this is done.

In general these problems are complex, and the least one can do is to direct the attention to their existence. But we are faced with the very concrete problem of what to include in a course training peace workers. One could imagine a highly restrictive line excluding anything that might conceivably be converted into actions leading to personal or structural violence, and a highly tolerant line that would include a very wide range of training on the old assumption that "legitimate action is action carried out by a legitimate body" - and then hinge it on to the UN formulas. But there are severe difficulties with both positions.

The restrictive line would probably lead to the exclusion of almost everything, since it is difficult to see that there is any form of social action in this world that cannot somehow be abused, especially if it is not balanced by other forms of action. If this argument sounds too general, it may easily be specified in one particular direction. Any kind of training gives a skill to the trainee, and this skill makes him different from those who do not have the skill. If the skill is important enough and difficult enough to acquire, then it may easily be converted into power by setting up society in such a way that people with that particular skill somehow come up on top, or close to the top. Thus, if one is trained in community development of a particular type, and this becomes an important task in the social structure, then it is not far-fetched to believe that people possessing that particular skill will end up somewhere close to the top of the community. Thus, any speciality may become a weapon, not in the service of others, but to dominate others - and that applies to the specialist in peace as well as to the specialist in war. But the specialists in peace would at least not protect themselves by means of secrecy but practice a maximum of openness and sharing of knowledge with people in general.

The tolerant line would lead to other types of difficulties, but they would not rest with the training program as such. The formula above would place the responsibility for action firmly on the shoulders of some other body, such as the UN. But even if this formula were acceptable to very many, this would essentially convert what might become an initiative in a new direction into a subsidiary under an existing organization. The world peace academy would become a voluntary organization performing training for a UN that might be completely uninterested, even hostile towards its operation. The problem is not so much that of accepting its goals as that of also taking over all of its methods instead of constantly trying to develop new methods.

Hence, a better formula would probably be to say that any form of social action, or peace action, may backfire and have consequences very different from what was intended. But this may to some extent be counteracted by foresight and by training in a wide spectrum of types of peace action. Peace workers should be trained in many directions, and the peace academy should give a wide range of courses. The legitimacy of their actions should not be derived from efforts to hide behind some other organization, but from the intrinsic value of their contributions.

3. Peace workers and health workers: some general comparisons

At this point a parallel may perhaps be drawn with medical science and the training of health workers, "nurses" or "physicians" as they are commonly called. They derive the larger part of their legitimacy from an uninterrupted flow of evidence to the effect that they are instrumental, not by being voted into action by an assembly. And in this versatility seems to play a crucial role. The physician has his knowledge spread over a wide field, all over the body so to speak (although not necessarily evenly) so that there is at least some guarantee against too narrow and one-sided conceptions of health. And even if one physician should be unable to perform a certain operation he may "leave this to be done by men who are practitioners of this work" as it is expressed in the Hippocratic oath. In other words, the versatility lost at the level of the individual physician may be regained at the level of the collectivity of physicians.

In designing courses for peace workers this parallel with medical science can perhaps be squeezed further. In most countries there is a certain general pattern according to which the theory and practice of medical science are taught. We shall draw on two aspects of this in the following general design of the courses, and the methods of teaching. It is unnecessary to stress that there is considerable variation between the medical schools of the world, so the following does not in any sense pretend to give a comprehensive picture of the situation.

Basic to the course design is the distinction, certainly found in all professions, between a general and a special part. By the latter we do not mean "special" in the sense of dealing with specific diseases instead of with the general theory of pathology, nor do we mean the division of courses according to the parts of the body, into

ophthalmology, oto-rhino-laryngology, etc. These are only subdivisions of the general course. What is meant is "special" in the sense that he who studies it can handle difficult cases better than a generalist; he who masters the general part becomes a generalist ("general practitioner", GP, in the medical case) whereas the who in addition masters one of the specialities may become a specialist. Usually the general training in the speciality is organized around hospitals rather than medical schools and often takes many years.

This lays the basis for a very important division of labour between the two: the GP is supposed to diagnose and cure some of the easier diseases, the specialist is supposed to take care of the more difficult cases within his field, however his field is defined. Ideally, the GP, or even some medical technician, should be trained in mastering the most common diseases, for diseases are by no means evenly distributed on people. A very small percentage of the total number of diseases known to the science of pathology accounts for a very high number of the cases of disease among people. However, one often has the impression that the borderline between what belongs to the generalist and what belongs to the specialist is drawn on basis of tradition rather than on empirical research into the morbidity distribution in a population and theories as to what would be the optimal basis for the division of labor. At any rate the generalist buys versatility at the expense of a certain superficiality and the specialist thoroughness at the expense of narrowness - which means that they should ideally operate in teams with the generalist serving as a filter that takes care of the most frequent cases, knowing to which specialist the more difficult cases should be referred.

The basic assumption is that whereas everyone will have to go through the general training, there is a completely different rule concerning the specializations. The general course is a sine qua non, and may even give a basis for practice as a physician. Specializations may be added but they also may not, but in general one adds only one speciality if any at all. Thus, they are seen as mutually exclusive, if not exhaustive.

The second basic point has to do with the method of teaching. We are not thinking so much of the various ways of obtaining a two-way flow of communication and more equalization of power in the teaching process, by means of seminars, discussions, independent student presentations, students witnessing debates and dialogues between teachers with different views just as much as or rather than

being exposed to only one of them, and so on. All of this is important, and it is only to be hoped that in the search for new methods of teaching one will not in the enthusiasm for every new device be completely blind to possible virtues of old methods so that one will have to rediscover them at some later date. But the point here is rather how training in medical science has been based on a combination of teaching, with research and practice.

In a sense one may surmise that much of the success of the medical science in our days is due to the way in which one has been able to combine, within one person - the university professor of medicine - both the teacher, the scientist and the practitioner. In practice this means that there may be a process of immediate transfer: what the professor learns from his practice and his research he can immediately translate into teaching, and vice-versa. Along all sides of the teacher-scientist-practitioner triangle there is a potential two-way traffic of ideas and knowledge, immensely facilitated by the location of the triangle within one person. Nevertheless, we say "potential" because there is such a thing as mental compartmentalization. But if one imagined for a moment that the three functions were subject to complete division of labor, being carried out by completely different persons, then the transfer would in general be much more difficult. And such was, in fact, the situation to some extent before the revolution in medical science some centuries ago, and such is still the situation in peace science.

The basic point, however, is not only the combination in one person of these virtues, but also that he serves as a role model for coming physicians. In so doing he becomes a contact point to a rich social experience which he can draw upon and hand over to the students. He can have them as students in the auditorium, as research assistants in the laboratory and as onlookers and assistants in the operation room - which means that the same person has contact with another person along at least three channels.

It may be argued that this is too much and that the power implicit in this type of relationship is too overwhelming. This is probably correct. The university professor of medicine becomes an omnipotent father figure, his advice takes the form of commandments, and this may easily serve to institutionalize patterns of thinking and make it very difficult for new ideas to penetrate. The feudal structure of many medical schools testifies to this. But that should not serve as an apology for the opposite pattern with complete detachment:

research by the person who never sees a patient, practice by the person who has never been exposed to search and research, teaching by the person who never has touched a patient, nor had his teaching challenged by new insights derived from research.

In the field of peace many of these shortcomings are predominant, so if one should translate this into the training of peace workers it is obvious that the parallel is very imperfect, for these and many other reasons. However, that is beside the point. We are not concerned here with description of the present state of peace research or training of peace workers, but with the question of how a useful profession of peace workers could come into being. Hence, the medical profession does not serve as a descriptive but to some extent as a normative model, and not as an infallible one to be copied blindly, but as one that can serve as reservoir of ideas and inspiration that can be drawn upon.

4. A general design for the training of peace workers

The first idea, then, would be to design courses keeping a certain parallelism between the training of health workers and peace workers in mind. Here is one such outline in diagrammatic form:

Basic division	Subdivisions	<u>Health Workers</u>	<u>Peace workers</u>
<u>General</u>	Preparatory	Physics Chemistry Biology	<u>Basic social science</u> from micro to macro; from psychology to international relations including methods of research
	Basic	Anatomy Physiology Pathology, general Pathology, special	<u>Applied social science</u> <u>Development theory</u> <u>Conflict theory</u> <u>Peace theory, general</u> <u>Peace theory, special</u>
<u>Special</u>	Theory	Surgery Internal medicine Oto-rhino-laryngology Psychiatry, etc.	a. International organization b. Peace-keeping c. Conflict resolution d. Arms control & disarmament e. Development f. Non-violence
	Practice, Research	Practice, internships Research experience Training in diagnosis and prescription	Practice, internships Research experience Training in diagnosis and prescription

The Table is rather self-explanatory. Four stages are envisaged in the training of peace workers, although these stages should overlap considerably in time. First a solid grounding in social science, then basic courses in conflict and development theory indispensable in connection with peace theory, then general peace theory followed by special peace theory in the form of application to cases in past and present.

Then there are the special practice- or action-oriented fields of which we have mentioned six. More could be added to the list, but we doubt that much can be subtracted without doing damage to the total concept of training peace workers. For these six fields are taken from the list of biases that were postulated earlier in the introduction, which means that training in them would be tantamount to an effort to correct the biases mentioned. More precisely, the field of international organization would train people for associative rather than dissociative peace policies; the field of peace-keeping would be in an intermediate position between the purely dissociative and purely associative policies; the field of conflict resolution would emphasize resolution and not only control (as opposed to peace-keeping which would be more control-oriented); the field of arms control and disarmament, although concerned with dissociative policies, would be focussed on making these policies less dangerous; the field of development would focus on structural violence and efforts to fight it by means of vertical social development and the field of non-violence would essentially focus on asymmetric conflict and how an underdog group can increase its own self-reliance and self-respect.

And finally, there is the practice and the research. Here one might emphasize such elements as internships, in organizations using the type of skills given during the training as well as training in elaborating proposals as to future application of the skills.

But let us return to the six special fields of training for the peace workers, among other reasons to justify the assumption that they are all compatible with both aspects of peace, and that they are, in fact, fields that can be meaningfully taught.

The six specialities can be organized along two dimensions. First of all, there is a dimension of level. The two specialities of "development" and "non-violence" are, especially as conceived of here, mainly international approaches. Then, although the distinction is not very clear-cut, "conflict resolution" and "disarmament-arms control"

are above all seen as internationally relevant approaches. Finally, "international organization" and "peace-keeping forces" have clearly supranational components.

On the other hand, there is an associative-dissociative distinction: development, conflict resolution and international organization are more associative approaches in so far as they consist of building up something that did not exist before; non-violence, arms control and disarmament and peace-keeping forces are more seen as dissociative approaches focussed on the removal of evil (exploitation in the first case, means of violence in the second and the exercise of violence in the third). Thus, we get:

	<u>Associative</u>	<u>Dissociative</u>
<u>Supranational</u>	Intern. organization	Peace-keeping
<u>International</u>	Conflict Resolution	Arms Control & Disarm.
<u>Intranational</u>	Development	Non-violence

We mention this not as an exercise in making taxonomies but to point out how the six fields supplement each other. In fact, one almost immediately encounters the objection that a fully-fledged peace worker should be knowledgeable about all - but we rule this out by definition, since we assume that this would be impossible. The courses would be so difficult and so time-requiring that one could not request any one to take all six. However, to avoid too much specialization two simple devices could be brought in from the very beginning.

First, there is the idea that instead of picking one speciality each participant should pick two. It is immediately seen that this would impose a burden on the teaching, and a traditional way of organizing it is to see to it that the lectures etc. do not overlap in time. This would be impossible for all pairs of specialities, but it would not be impossible to stipulate that each candidate could pick one associative and one dissociative speciality, and that the associative ones might be taught in the morning and the dissociative ones in the afternoon, or something of the kind. The other obvious solution, that one set of specialities could be taught in the fall and the other set in the spring is much less fortunate since we would assume that there would be so much material to pack into any one of them that students would need an extended time-contact to digest it successfully together with their teachers.

Second, there is the idea that a general overview of basic concepts and approaches within the six specialities should be included in

the general course. In other words, nobody should be completely ignorant of what is being taught in the other specialities. But it would be fool-hardy to insist that division of labor in this field should be avoided at all costs: there is much too much material to give and to absorb, and there is also the very essential problem of highly differential interests. A person may be interested, and very legitimately so, only in one of these specialities and it is felt that he should be given the opportunity to pursue that interest unless it is stipulated that everybody would have to choose two specialities. In that case it does not seem unreasonable to stipulate further that the two specialities should be at the same level, since there is a high degree of functional interrelation between specialities at the same level (to be developed further in section 7).

5. The meaning of "examination"

All of this could then end with some kind of examination. But what would be the meaning of an examination in this type of training? Again,, a distinction should be made between the debate about the form of examination, and the debate concerning the content of the examination.

As to the form a good general principle is probably that any examination should have a form that is as similar as possible to the type of work the candidate will have to carry out when he has his degree. Since it is exceedingly rare that one is not allowed to consult books and references and talk with colleagues before some task is to be achieved, this simple principle would throw out most forms of examination, written or oral, that depend on memory alone. Thus, instead of the traditional written examination the candidate may be given three weeks to write an article which he then will have to defend in a seminar; instead of the oral examination he may be given one week to prepare a lecture, and so on. We mention this because this is intimately connected with the way in which one would train professionals with an action-orientation rather than intellectuals who are usually trained in a tradition that goes back to centuries before the device of printing books was discovered: the intellectual as a live reservoir knowledge, as a walking library.

However, the dimension of content is even more important in this connection. Training professionals means to train people who can act, who can bring general knowledge to bear on action in a special

situation so as to realize goals, and not only people who remember knowledge or create more knowledge. This is very general, and should apply to peace workers as well as to architects, to physicians, to engineers etc. Hence, the appropriate way of assessing his or her ability is not by testing him in how much general knowledge he has absorbed, nor in how much new knowledge he can create, but in how able he is to apply it to a specific situation.

The latter means two things: how able he is, on paper, to write about what should be done; and, indeed, how able he is to do it.

In other words, the classical concept of science as intellectual pursuits designed to bring a mass of appropriately processed reports on sense-impressions, called data, in as close correspondence as possible with a mass of appropriately structured hypotheses called a theory, can no longer be used as a model for the thesis. The thesis will have to deal with situations in the future, not only with the past and the present. This means that the candidate will have to peer into the future since the state of affairs he is supposed to contribute to will only exist in the future, if at all. He shall of course use general theories that at least in part are based on data from the past. But in addition there will be specific demands arising from the existing, concrete situation he is supposed to pronounce himself on, and from the goals he is supposed to take into account. In other words, he is not given the free choice of the "pure" scientist who can choose his problem and select data accordingly. Here the problem will be given for him, and he has to choose his tools, his combination of general theories accordingly; and variables and concepts are no longer just "interesting" or "fruitful", but have to be concerned with how certain states of affairs rather than others can be brought into being. It is prescription for the future, not only description of the past.

In short, we may put it like this: the thesis will have to be future-oriented rather than past-oriented, and explicitly goal-oriented rather than "value-free". General theories will have to be, used, but they will have to be utilized in clusters that have a richness that covers many aspects of the concrete situation the professional is dealing with. It is not very fruitful to speculate as to whether this is more or less difficult than the tasks attempted solved in pure research because the degree of difficulty probably depends much more on the amount of talent that has been brought to bear on the task so far than on any intrinsic aspects of the task. It is also obvious that this applied research depends on pure research as a reservoir of

general theories, just as much as it depends on insight in the concrete situation and an understanding of the goals to be pursued.

Even more concretely, the candidate would not write about the fate of a development project that has been carried out but suggest one, he would not write about conciliation in the nineteenth century but suggest some basis for conciliation in a concrete conflict, etc. In short, the whole program would be focussed on implementation rather than on pure theory, and on the future rather than on the past.

Some time in the future one might also, perhaps, go one obvious step further. Of the professional one would require not only a focus on implementation in the future rather than a focus on understanding the past (and the present). One would also require loyalty to the goals, to the values around which the whole activity is built. For the health worker this is obvious: it is a question of loyalty to the value of life, of saving life and of enriching life, any life - friend or enemy, rich or poor (the former dilemma so often solved much better than the latter). For the peace worker one would require loyalty to the value of peace, for instance defined as loyalty to the fight against open and structural violence, for a world saved from the scourges of war and social injustice.

Thus, one could imagine future forms of graduation from such academies where those who have had their theses accepted are called upon to declare their loyalty to such values, much like the health workers do in connection with the age-old Hippocratic oath. One would probably need much time and experience before a sufficient consensus about such values could develop to crystallize them into the form of a declaration of loyalty - but sooner or later it will probably have to come. And when it comes, the graduation from a peace academy might prove to be a highly meaningful counterpart to the graduation from a university, precisely because it is different in content.

5. A world peace academy: a proposal

In principle everything that has been suggested in the preceding section could be carried out by universities, since universities have a long tradition in housing faculties for pure research and schools for the training of professionals in various fields. But since most universities so far do not even have courses in peace theory one would

certainly not expect them immediately to create schools in peace practice. One could therefore rather imagine the creation of a world peace academy (WPA), with a maximum of cooperation from universities and other sites of higher learning and research (such as academies in the socialist countries, research institutes, etc.).

A note should be added here about terminology again: we prefer "world" peace academy to "international" peace academy. "International" is no longer a neutral term. It stands for an ideology, for a vision of the world as divided into nation-states, a vision that neglects (and some time even rejects) the cross-, trans-, and supra-national trends. The term "world" is more neutral, it does not reflect any particular organization of the world.

An academy of that kind would of course be of value in itself, as a place where peace workers could be trained. But it could also have another function: to serve as an experimental ground for universities in forming curriculae for the general part, the part that does not imply specialization or practice. To set up institutional arrangements for practising what a real peace specialist should learn requires an institutional network that only few universities could develop, the major reason being that most universities are geographically tied to some territorial unit (a province, a state, a prefecture, a department, a country). The major universities in each country are national in practice, not only in theory, and almost none (if any) are cross-, trans-, or supra-national. This should not be confused with having an international student body, an internationally composed staff or a geographically unbiased curriculum. The question is whose interests the university would serve and where the ultimate loyalties lie, particularly in times of crisis. Even in a small country like Norway professors are requested to declare their loyalty to the King and the Constitution - an idea which may prove to be incompatible with the loyalties a peace academy would try to engender.

Thus, a truly international peace academy could develop the general course and give it much more meaning by tying it intimately, within the framework of the academy, to the specialization courses. Just to mention a figure: let us imagine that one year was devoted to the general part and one year to the special part, on the condition that people admitted to the first year would already have a solid basis, somewhere between the MA and Ph.D. levels at a good UN university - or similar level of maturity acquired in practice. The assumption, then, is not that they would be admitted so much on the

basis of the concrete knowledge acquired beforehand as on the basis of the intellectual and emotional maturity attained. A solid fraction of the value of any degree, as a matter of fact, probably lies in the degree as an indication of how old the person is, and not in the chronological sense but in the sense of how much he has been through intellectually and emotionally, etc.

The academy could then bring the candidates up to the level of as solid professional training as one could offer; something corresponding to the good national diplomatic academies, but wider in scope and above all universal, not national in identification. After some time experience will be gained in how to run courses at both the general and the special levels. The universities that have been closest in cooperation with the academy would then have shared some of this experience, since much of the staff at the peace academy would have to be part time staff on leave from universities, even for very short periods, to give intensive courses of two weeks duration etc.

This means that after some time, for instance after the general course has been run through three to five times at the international peace academy and much experience has been gained, universities might take over the general course. This would make it possible for the international academy to devote itself more fully to the specialized courses, possibly with a very brief introductory course corresponding to the former general course in order to standardize terminology etc. In the meantime it could also be imagined that the experience with the specialized courses would lead to an extension of them so that the time gained could suitably be used for expansion of the specialized courses.

With this broad outline in mind it is not inconceivable that the output of truly world-minded and interdisciplinary trained peace workers could be considerable already within a decade. The suggestion, then, is that one should devote the decade of the 1970's to this, for instance with the following time table:

<u>First phase:</u>	a <u>mini-course of two months</u> , extremely intensive,
Summer 1970,	fashioned after the outline given in the preceding
15 July to	section, with the first month devoted to the general
15 September	part and the second month devoted to the special
	part. This mini-course would be a highly concentra-
	ted <u>model</u> of the real course, and serve as a <u>pilot</u>
	<u>project</u> to gain experience and to show in action
	what WPA would stand for. Obviously one would have
	to select from the general outline, see below. This
	course could be repeated every summer, and also be
	given on a regional basis around the world.

- Second phase: a maxi-course of two years, also fashioned after the outline in the preceding section. The general course would start again in September 1972, so that with 30 well-selected candidates each year and not more than five drop-outs there would be an output of 25 peace specialists each year, from spring 1973 on. This means that each year general and special courses will be run at the same time for Year I and Year II students respectively, utilizing the staff optimally.
- Starting
October 1971
- Third phase: Universities that have been particularly cooperative may incorporate some of the experience gained and start general courses at a post-graduate level in development theory, conflict theory and peace theory. These courses would probably not be so intensive as in the "hotbed" atmosphere of an academy entirely devoted to this, but might, for instance, take two years instead of one. They would call for a maximum of cooperation between various social scientists in the university.
- Starting
October 1972
- Fourth phase: The world peace academy can now receive among its candidates students who already have taken general courses in conflict, development and peace theory at universities. The specialization courses can then be extended, and the general course may, possibly, be reduced to a summer course.
- Starting
October 1974
- Fifth phase: Some of the general course graduates from various universities will now also possess the special training offered by the academy, and could then go back to their alma mater and possibly introduce complete courses at their universities. This should, of course, only be done at universities that would give graduates sufficient freedom in their implementation of what they learn and not tie them to national loyalties.
- Starting
October 1976
- Sixth phase: The various institutions would now continue in close cooperation. No doubt, there will develop separate trends and schools of thought, emerging on political and scientific grounds (or on one as a rationalization of the other), but this should be regarded as a strength and not as a weakness provided some formulae of contact and exchange of ideas and experiences are developed.
- Rest of the
decade

Let us now add some more details concerning the course itself. The general outline has already been presented, so what we should do here would be to emphasize some important points.

1. Student recruitment. The students would have to be recruited on the basis of some simple principles:

- a. Background: a representative mixture where sexes, races, ethnic groups, nations (especially East-West and North-South) and disciplines and other forms of training are concerned.

- b. Training: diversified experience, not necessarily academic. The best is probably close to Ph.D. (on either side) in a social science, combined with some practical social, political and/or administrative experience.
- c. Personality: open-minded, undogmatic, not in the sense of not resisting any "brainwashing" by the academy (some element of this is hardly avoidable, regardless of intentions), but in the sense of always being able to question assumptions and to seek new answers, yet not be too paralyzed by doubts to be able to act.

The students should be selected on the basis of application and personal interviews.

2. Fellowships: since the financial background of the candidate should not be any objection fellowships must be made available to cover all personal expenses during the two years duration of the course. With the age and experience level of the candidates one should not calculate with less than US \$500 per month for ten months in each of the two years, which would mean a total of US \$10.000 per student, or, with a student body of sixty (thirty in each year course) US \$300.000 per year. This would be the largest fraction of the total budget, and would of course include board and lodging expenses. For the mini-course accommodation in a collective basis might be arranged, but it is strongly advised not to use this solution for the max-course, the students should not be forced to be together always.

2. Location: The World Peace Academy should not be tied to any institution existing today, for many reasons, one of them being to be able to build its own image without any carry-over from any mother-institution. It should not be located in any country that is aligned with any of the big power blocs in order not to be associated with major powers on the political arena. Nor should it be too closely linked to any international organization. Rather, it should be an international organization in its own right. Ideally, it should be located between East and West and between North and South, close to all of them. Countries like Malta and Cyprus might be ideal from these points of view, particularly since they also speak English that is obviously going to be a major language at the Academy (perhaps even a prerequisite for admission), and because they possess sufficient infrastructure to sustain an institution of this kind. Cyprus would also exemplify development problems as well as communal conflict; Malta would be located in very centrally between these four corners of the world. Another good possibility would be Vienna, or some of the countries South of the Mediterranean.

4. Excursions: However, there is also another possibility that might be considered in conjunction with the preceding point: the Academy could possess a bus, or a small plane (such as a DC3) and in some periods circulate the students between institutes and other sites of higher learning. Thus, if a subject can best be taught at a certain institute (e.g., conflict resolution by means of contact, arbitration and mediation at the Conflict Research Centre of the University of London College) then one might move the whole student body to that place. This would combine instruction with excursions to major places of interest, e.g. to foreign offices and IGOs for discussions, to centers of conflict and development problems, etc. (In the beginning one would probably be limited by financial considerations to Europe and the Mediterranean basin.) But one method does not exclude the other,

which means that residential location of the academy with most teaching tied to that place could be combined with some itinerant teaching and field study.

5. Methods of teaching: Students should of course be presented with much concrete knowledge, analytical schemes etc., but above all be trained in independent analysis and constructive proposal-making, not to mention in action. The following are some basic principles:

- a. Lectures should always be combined with discussions, e.g. according to the formula "one hour lecture, one hour discussion".
- b. The double lecture using two lecturers with opposed views should often be used, e.g. contrasting liberal and marxist interpretations. Students should of course be encouraged to participate in the discussions.
- c. Seminars with as egalitarian participation as possible should be used.
- d. Teaching machines should be developed for fundamentals to speed up assimilation of analytical schemes etc. used in discussions.
- e. Simulation of roles and situations would also be basic, both as a teaching instrument and as a research tool.
- f. Case studies and general theories should be interspersed so that students may get insight in how ideographic and nomothetic approaches supplement each other. In general, great care should be eclectic in methods and theories, in presenting methods etc. as complementary rather than as antithetical.
- g. Instruction should be given in intensive courses rather than dispersing a topic over one, two or four hours every week.
- h. There should be a maximum of symmetry between teachers - better defined as resource persons - and student participants. All work together in a team to learn from each other and to develop the best possible course and the most meaningful learning experience. This means not merely feed-back but full multi-lateral discussions and decision-making - and particularly evaluation by all participants of all aspects of the course. Thus, the first summer course should also be seen as a conference designed to develop the course together.

6. Faculty: The faculty should consist of a very small (two, three) nucleus with permanent residence and a great number that would be flown in for short periods to teach their speciality. This way they would more easily get leave of absence and also be optimally made use of. They would be guaranteed a heterogeneous student body really able to "squeeze" them and be guaranteed that there would be no waste of time. The Academy should from the very beginning aim for the best and invite only top specialists, theorists as well as practitioners, to come and lecture. They should be well remunerated (e.g. UN expert pay scale and all expenses covered), but experience seems to indicate that the best people are much more attracted by intellectual challenge and feeling of being used and pressed hard than by any form

of material remuneration. It is important that the Academy should be able to compete with any university and other institution in the world where quality of faculty is concerned, otherwise it is doubtful that it would be worth the effort. However, it should not be one more summer school in social science, but have a real action focus. For that reason students should perhaps not be admitted for the general course only. The faculty would perhaps consist mainly of university professors for the general course, and mainly of practitioners, often without academic qualifications at all, for the special course.

7. The general course: This is divided into two: basic social sciences, and applied social sciences, with emphasis on development, conflict and peace. One may devote one term to each, or teach one in the morning and one in the afternoon over two terms - the latter would be more expensive since individual teachers from the outside would not be so well made use of, but would also lead to more time contact with each subject. Great care should be taken that the intensive course in each subject should not be introductory undergraduate courses, but lead straight to important assumptions, methods, findings, perspectives and to the research frontier. The participants are supposed to be mature persons and the courses should be designed accordingly. Tentatively, one might dedicate four hours every day, to teach the following subjects:

psychology	
social psychology	
sociology	
anthropology	
economics, developmental	all of them with a
economics, international	special view to
political science	development, conflict
international relations	and peace
international law	
military science	

and then introduce historical material (past and contemporary) in case study sessions and have an additional series on research methods. As to the latter, the students should be able to evaluate research reports and also make small studies themselves. Even some insights in empirical techniques often have a very sobering effect.

8. The special course: In these courses the permanent staff would have to help students apply what they have been given in the general course, since new faculty members would be called in. Just as the teachers in the general part should be researchers (in order to avoid routinization and dogmatism), teachers in the second part should as far as possible be practitioners together with theoretically oriented people. Evidently, much more emphasis would be placed on case studies and above all on real or imagined situations involving conflicts, development and peace problems. Some sentences to define more explicitly the content of the six specialities:

a. International organization: This would emphasize not only the structure and function of existing IGOs and INGOs, but also train participants systematically as international civil servants, able to anticipate problems and solve them constructively, to have a clear international identification etc. Obviously, a number of IGO and INGO officials would be asked to lecture, as well as scientists who have done research on such organizations.

- b. Peace-keeping forces: This would emphasize the same matters as the course on international organizations, but in addition bring in problems of logistics, coordination, legal problems etc. connected with such operations. A great number of case studies should be presented as well as scenarios, and simulation games for future operations, down to the most minute details. Lecturers would again be participants in such operations, past and present, officers and privates, and scientists who have done research on peace-keeping operations.
- c. Conflict resolution: This course would emphasize all the techniques currently available for solving symmetric conflicts. A major distinction would be between conflicts without and with pre-existing third parties (particularly legal institutions), and the course should deal with the many roles such third parties can play in bringing actors together, in facilitating discussions, in acting as mediators and arbitrators, and above all in making constructive efforts towards resolving (not only controlling) the conflicts should be indicated. By "resolution", then, one means not merely a verbal agreement, but some self-supporting organization of the relations between the contending parties. Again, case studies would be a major method even to the point of drilling students in imaginative conflict resolution by presenting them with scenarios of real and imagined conflicts asking for proposals. Lecturers would be judges, mediators etc. with experience from domestic and international conflicts, and scientists.
- d. Arms control and disarmament: There is already considerable tradition in this field where teaching is concerned (for instance at an informal level by the summer school organized by the Italian Pugwash Group), but not so much case material to draw upon, except for unsuccessful cases, which are abundant. But a considerable literature exists already, and lecturers would be drawn from among disarmament conference participants, people who have already supervised such agreements in the past from agencies preparing to supervise them in the future, and from scientists.
- e. Development: The general idea here is planned social change, but this specialization course should be different from the numerous courses on development presented all over the world. The major emphasis should be on vertical development, on equalizing, not only on increasing life chances, on mass participation, on liberating the creative energy of the people at large, on political development etc. General development theory would undoubtedly have to be drawn upon, but new material on how to decrease social injustice and equalize and extend human rights would have to play a major role. Essential here would be the experiences gained within evolutionary and revolutionary traditions with major redistribution of resources, not only with creating new resources. Lecturers would be politicians, often of a militant nature, administrators of welfare state and socialist programs, and scientists.
- f. Nonviolence: This is the course that is likely to cause most controversy since it may train people for action directed against governments, for second party rather than third party participation. By and large there are two broad traditions in the field of non-violence, one dissociative and the other associative. In the dissociative tradition the emphasis is on non-cooperation and civil disobedience, on mass strikes and demonstrations, on decreasing communication with the other party and increasing it within one's own group. There are very many technicalities in connection with such political strategies and they should be taught since the alternative is either passive acceptance of structural violence, or active in-

volvement in manifest violence. Such techniques can be used in symmetric conflict as defense against occupation by a foreign army (and hence be a useful ingredient in a world where attempts towards disarmament have been successful), and in asymmetric conflict as defense against exploitation and hence be useful in the fight against oppressive minorities and the fight against structural violence in general. But there is also an associative school in nonviolence, emphasizing contact between the parties, efforts to convert through persuasion more than through coercion as a result of non-cooperation, efforts to demonstrate in practice what one is for not only refusing to participate and in what one is against, etc. This tradition should also be stressed, and together they should be used to extend the spectrum of effective forms of creative conflict behavior, particularly in asymmetric conflict (by first using dissociative nonviolence to gain, autonomy, then associative nonviolence to gain cooperation and, possibly, integration). Lecturers should be practitioners.

Again, we should like to emphasize that the new factor in the World Peace Academy would be the coexistence, in one organization, of these courses. They could all be presented separately as training programs somewhere in the world. But to present them together would be something new, and it is expected that only relatively broad-minded people will be able to accept this coexistence of what is so often defined as incompatible and hence kept apart. In our mind this is because development, conflict and peace are exceedingly complex matters so that all ideologies, programs and systems catch only a little part of this complexity and very little one can say about them is completely wrong or completely right - the present paper not excepted.

If these courses should be separated organizationally, one would be back in the old tradition. The virtue in this way of organizing it is to try to show the unity in these various attempts and to integrate them better than has been done so far. And this is of course a process where courses would be continuously improved upon, new will be added, old ones will be split up and parts will be removed, etc. The moment one settles down to a "final" course plan the Academy will be dead.

9. Internship: The Academy should as soon as possible contact a number of IGOs and INGOs that could imagine taking on students as interns during their second year - or possibly as a third year during which they would also write their thesis. This should of course be done in complete understanding with the students.

10. Summer courses: The regular course would have a two or three months break each year, e.g. from 15 June till 15 September. During this period a summer course may be organized. This course could either be a repetition of the mini-course, or specialized courses. In general one should be careful and require full attendance in the two year course, but it is obvious that this rule should not be too rigid; the Academy should be willing and able to present highly concentrated

versions of the whole course on some occasions, to accept students for the general course only, or for the special course only (but this should only very rarely be done), and to present some course material in specialized courses. There would also be direct feed-back to the Academy in doing such things: one will reach more persons and persons in more responsible positions who have less time, these persons may be helpful in criticizing and improving the courses, some of them may serve as teachers after knowing from participation what the Academy is like, etc. All this is particularly true for the participants in the first mini-course: they will play a crucial role in planning the maxi-course and perhaps also be among the future teachers.

11. Courses of shorter duration: The Academy should be able to organize courses down to one-day institutes for particular audiences, for instance for decision-makers for whom time would be much too scarce to permit participation in anything more extended. Such courses would also be built around the presence at the Academy of particular resource persons, and hence be organized inside a course of longer duration.

12. Who will use them? This problem is important, but its solution should not necessarily be regarded as the responsibility of the Academy alone. The Academy may facilitate, may bring employer and employee in contact with each other, and so on, but should not guarantee anything in this direction and not be directly responsible for finding jobs, for job execution or for authorisation to enter a conflict (just as a medical school does not assume any similar responsibility for their students). But it is obvious that specialists in international organizations would be placed in IGOs, and above all in the UN system - in fact, much of the training should take place with the needs of the UN system in mind. The same applies a fortiori, for the course in peace-keeping forces. The conflict resolution specialists would be found, it is hoped, among the members of mediation/arbitration and fact-finding commissions and teams despatched all over the world; the arms control and disarmament specialists would find their way into the many national and international agencies dealing with such problems; the specialists in development would have ample organizational basis in the countless development agencies and projects all around the world (although these are mainly concerned with horizontal development); and the people trained in non-violence would work for oppressed groups anywhere.

Will they be used? If the courses are sufficiently good there is hardly any doubt - if for no other reason because of snobbishness and curiosity in organizations looking for something new. But it is to be hoped that this would not be the only motivation. For the world needs cadres of this type, for the simple reason that almost any problem today, on our shrinking planet, is a world problem and hence calls for the skills and the loyalties of truly world-minded people.

PEACE THROUGH CONFLICT?

On the future of the nation-state.

by

Per Olav Reinton

International Peace Research Institute, Oslo

To be presented at the Third Conference of the International
Peace Research Association, Karlovy Vary, September 21-23, 1969.

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1. Introduction

According to statements frequently made by nation-state effectors all nations and all people gathered in nations seek three convergent and complementary goals: Peace, cooperation and development. We are so accustomed to this that we accept it - sometimes with cynicism, but always as a natural and expected form of expression - as part of a ritual. As an image, or as the totality of one's knowledge of one-self, it is amazingly simple.

Why do not responsible men in state bureaucracies claim that violence and conflict are necessary and good elements in the dynamic struggle for happiness?

Items never discussed should alarm an observer, because they are the pillars of society, much more solid than values and events that are under discussion. The claim that nations seek peace, cooperation and development may just be statements necessary to preserve the nation-state system in its present form.

Stagnation may be one form of peace, conflict a medium for development and violence seems to be inherent in all societies more or less institutionalized. Such ritualistic statements may have a nucleus of rationalization: violence in the cause of peace (USA in Vietnam), conflict in the cause of cooperation (friends and allies must keep together), stagnation in the cause of development (fighting inflation in poor countries). But first of all: peace, cooperation and development are seen as positively valued simply because they are contrasts to negative experiences. They are negatively defined, and by such negative definitions they become values in themselves. The content and the purpose of peace, cooperation and development become secondary problems.

2. Characteristics of the nation-state

One of the most total organization forms to-day is the nation-state, similar to the prison or the ghetto where boundaries play equally important roles. Boundaries are erected both physically and in people's minds, in order to facilitate steering and control. The main purposes of the nation-state is to make people similar, to make them change regularly timed, to make needs consistent and reconcilable.

This is done by grouping like-minded people together, either through convention, purchase or force. Around this group a boundary, militarily defended, is formed - though the military forces both function far outside the boundaries as well as within the boundaries, depending on conceptions of security.

Since the news flow is audience-oriented, people get expected information from outside to a considerable extent, and this is dispersed by newspapers that have the same sources of information. This is one way of making social surroundings homogeneous and make people conform, together with legislation, and the emergence of social norms and standards.

Adjustment, stability and order is achieved if people follow the rules. The justification of the nation-states is both mythical and utilitarian, to make the leaders of the nation-states the focus of identification. Extra-national boundaries and converging points are covered up by the control and the steering of the nation-state. The nation-myth becomes as potent as the race-myth to make people secure and satisfied and know where they belong. Those with other superficially dissimilar characteristics like language and place of birth are kept at a distance.

In that way state bureaucracies monopolize conflict behavior. Conflict behavior - that is: behavior based on incompatible values - is made a national concern. Three important consequences are:

1. Conflict within the nation-state is wrong, values should conform.
2. Conflicts between nations start and continue on the bases of ritualistic considerations inside state bureaucracies.
3. Conflicts are reserved for people on top of the national bureaucracy, for those who accept the rules of the game.

The general principle is that those creating conflict shall be subordinated those creating order.

3. Re-organization: why and how?

3.1. Criteria for re-organization

One of the most comprehensive and penetrating studies of the creation of the nation-state was made by Karl W. Deutsch et.al.¹⁾ at Princeton. The creation of the nation-state, or integration as they call it, took place within the context of a new way of life which involved a significant measure of social innovation as against the recent past. In all their cases of successful amalgamation they found widespread expectations of greater social or political rights or liberties. In all their cases the basic issue of integration became acute in the course of a process of habit-breaking. The emerging new way of life involved necessarily a change in many habits of behavior.

The issue of political integration arose primarily when people demanded "greater capabilities, greater performance, greater responsiveness, and more adequate services" from the governments. Integration were first considered as possible means to further these ends, rather than ends in themselves.

As to leadership it was furnished by a cross-class coalition, uniting the "most outside of the insiders" with the "most inside of the outsiders". In other words, some of the less secure members of the established ruling class became allied with the top-status outsiders. The basis of such cooperation was not necessarily similarity of values or outlook, but rather complementary, or - as they call it: "an interlocking relationship of mutual resources and needs".

The main point here is that the process of integration and the process of revolution²⁾ have got some identical premises in the beginning of the process. Or as Deutsch et.al. put it, this new way of life and the interlocking relationship of mutual resources and needs may as well lead to secession. They refer to other background variables that decide the outcome, like capabilities and communication processes, mobility of persons, multiplicity and balance of transactions, mutual predictability of behavior. But they do not mention that in the process of habit-breaking, integration or revolution as a path is decided by the politics of the representatives of old habits, the state bureaucracy. If the old state bureaucracy just dwindle away and the representatives of old habits are replaced by a younger generation,

then the probability of a smooth process of change by the means of the state bureaucracy is high. But if the representatives of old habits are stubborn and well established, this change and challenge for re-organization may be violent.

Such demands following a new way of life have been underestimated or neglected in integration theory. A coalition of state bureaucracies is a sort of unification, but has so far been status quo alliances. The examples are EEC, the Andean Common Market and the Latin American Free Trade Association, The Central American Common Market and EFTA. They add strength to the nation-state by an extension of their capabilities. That is probably the reason why integration is identified with regional integration so often, with the nation-state as the paragon, with no new contents but with a larger scale.

There is no reason to abandon the nation-state or deny that the nation-state has a future. Nation-states are still in their making, and will probably remain the most important form of human organization for a long time to come. But to believe that the nations of today will be similar to-morrow, is naive. It is not dangerous to predict that nation-states will change, and we must understand the element of conflict in that process of change. In order to understand conflict it is of fundamental importance to analyse the role of the similarity/dissimilarity dichotomy in this process.

3.2. The role of similarity and dissimilarity.

Comparative variables (similarity/dissimilarity), which are the basic matrices or charter for interaction, must be consistent with interactional variables (reciprocity/dominance) to create security and stability in a social system. ³⁾ Comparative dissimilarity and interactional reciprocity create a structure where change is an expected outcome. When comparative and interactional variables are inconsistent, as they are in social situations with dissimilarity and reciprocity, the change will either be towards more similarity along the comparative dimension, or towards dominance along the interactional dimension.

In any case similarities are not the bases for reorganization. Dissimilarities, which consequently lead to incompatible values, are conducive to change. Conflict is then an important element in change, probably even a necessary condition.

The present theory of international relations, and particularly the theory of integration, is far more occupied with similarity as a fundamental premise in the extension of the scope and domain of cooperative aspects of interaction. ⁴⁾

Through the findings of a small survey of students in Africa and Latin America ⁵⁾ we shall discuss the expected content and criteria for cooperative interaction. The criteria seem to be dramatically different in these two continents, as shown by Table 1 and 2.

Type of criterium	Most important	Least important	Not marked
1. Common econ. interest	91%	0%	9%
2. Ident. views on foreign policy	41	5	54
3. Ident. views domestic policy	27	16	57
4. Similar level of income/cap	17	22	60
5. Racial or cultural simil.	15	31	54
6. Geographical proximity	12	19	69
7. Common language	1	72	27

Table 1. Criteria for integration in Latin America

Type of criterium	Most important	Least important	Not marked
1. Geographical proximity	58 %	5%	37%
2. Common language	42	26	32
3. Racial and cultural sim.	42	26	32
4. Common economic interest	26	0	74
5. Similar colonial past	11	42	47
6. Identical view on foreign pol.	10	16	74
7. Ident. views on domestic pol.	5	16	79
8. Similar income/cap	5	53	42

Table 2. Criteria for integration in Africa

The African sample is so small that not even the marginals shall be discussed later in the paper. But just at this point the emphasize is on opposite criteria, and I think it valuable to present the dramatic discrepancy: the three criteria considered most important in the African sample are among the three least important criteria in the Latin America sample.

These tables do not show what similarity means in the integration process, but they demonstrate that a common language means much more to Africans that do not have it, than to Latin Americans that to some extent understand each other!

There is more to it, however, and we shall discuss some of the most important criteria below.

3.3. Geographical proximity

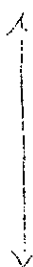
Geographical proximity is relevant for regional integration, and Latin American respondents list this criterium among the least important. This demonstrates a rather sophisticated attitude, a position that is rather advanced in one sense: International reorganization goes beyond territories. Those believing in geographical proximity as one of the most important criteria, think naturally - that integration should start with some few selected nations - in opposition to those listing other criteria as most important.

Non-territorial integration is seen as quite realistic within Latin America, but Africans adhere to the territory as the most important fact in consideration.

3.4. Similarity versus complementarity

Since geographical proximity is a particular criterium in this context, we shall leave it here and concentrate on the others. Only one respondent in Latin America believed that common language was among the most important criteria, and we delete this item as uninteresting. The six other criteria are grouped along a similarity-complementarity continuum as shown by Figure 1.

Similarity



1. Similar colonial past
2. Racial or cultural similarity
3. Similar income pr. capita
4. Identical views on domestic policy
5. Identical views on foreign policy
6. Common economic interests

Complementarity

Figure 1: The similarity-complementarity continuum

The reasoning behind is the following: Similar colonial past is the most general similarity we can imagine in Latin America. All have a colonial past, and all had common fate and experiences on colonization. Racial or cultural similarity is less general, though not very specific. There are racial and cultural cleavages within Latin American nations as well as between them, traditionally categorized as Spanish, African and Indian. Similar income pr. capita is the most specific among the genuine similarity-items. Identical views on domestic policy may imply some similarity, but we are now approaching a

category which may be characterized as a form of common interest. Complementarity may enter, as well as similarity. The same also holds for identical views on foreign policy, but here is similarity along the comparative dimension weakening. Common economic interests is farthest towards the complementarity-end of the continuum. Similar economies create competition, and are not easily reconcilable with common economic interests. On the other hand, there is some similarity involved in this criterium also, because Latin America countries may have both similar and common economic interests towards their international surroundings.

Now we ask five questions:

1. Should one try to carry out integration as quickly as possible or should one be careful and take one step at a time?
2. Should one try to integrate as many countries as possible at once or should one start with some selected countries and areas and take the rest afterwards?
3. Do you think all nations want to integrate, but hesitate to do so before other nations are willing, or do you think that there are some nations that want to preserve the independence they have and not yield anything of it?
4. Do you think the common man wants integration more than the leaders or do you think the leaders want integration more than the common man?
5. Do you think serious conflicts could arise in an integrated area or do you think that relations between nations would be completely changed?

We then combine answers on these questions with responses evaluating the importance of different integration criteria. The measurement is very rough because the material does not invite more sophisticated statistics, and we shall make use of two types of numbers to make points easily detectable. The first type of number is placed on top of Table 3 below after a Δ -sign and represent the difference between those who answered affirmative to the first part of the question and those who answered affirmative to the second part of the question among all respondents. The other type of number is found within the cells and represent the difference between those who answered affirmative to the first part of the question and those who answered affirmative to the second part of the question among those who found that particular criterium the most important. Table 3 looks then like this:

	\sum -29	\sum -24	\sum -13	\sum -10	\sum +49
	Common man + Leaders -	Many nations + few nations -	Nations want to inte- grate + No -	Quickly + Care- fully -	Relations change + Serious conflicts -
1. Similar colonial past	-13	-50	-25	-50	+88
2. Racial or cul- tural similarity	-14	-42	-21	-37	0
3. Similar income/ cap.	-47	- 6	-30	+ 6	+47
4. Identical views domestic policy	-27	-12	-15	+ 4	+65
5. Identical views foreign policy	-37	-15	- 5	- 5	+47
6. Common economic interests	-38	-26	-13	-14	+46

Table 3. Integration: questions and criteria

We see that the two criteria at the similarity end of the continuum - "similar colonial past" and "racial or cultural similarity" follow each other: 1) They tend to believe that the common man desires integration slightly more than the others, 2) they tend to be the most careful among all, thinking that one should start with some selected countries and areas and take the rest afterwards, 3) They tend to believe - together with those thinking "similar income/cap." most important - that nations want to preserve the independence they have and not yield anything of it, 4) and they want to take one step at a time - but 5) they differ violently when it comes to the question whether serious conflicts could arise in an integrated area, or whether relations between the nations would be completely changed. We shall turn to this point later.

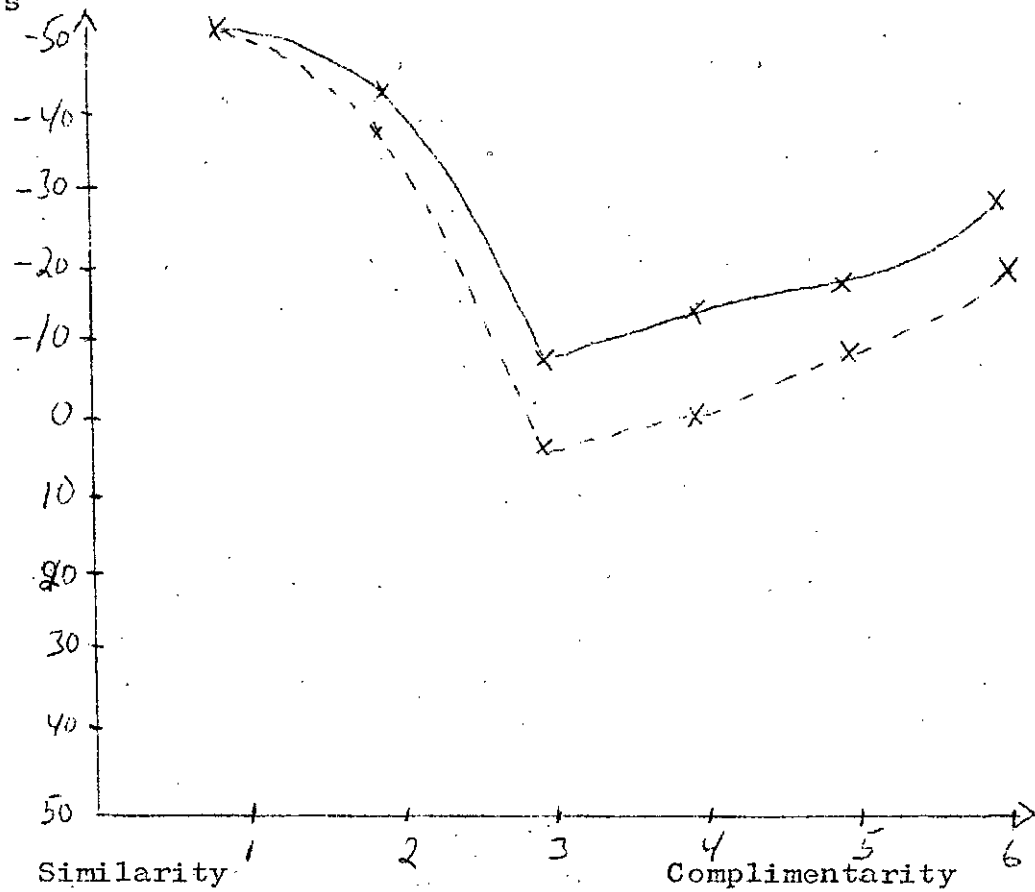
We see that criteria organize in two groups, with "similar income/cap." in-between: on the one hand "similar colonial past" and "racial or cultural similarity", on the other hand "identical views on domestic and foreign policy" and "common economic interests". Those belonging to the similarity-end of the continuum tend to be more careful and in a certain sense more conservative than others.

3.5. Time and domain

Along two variables we find a V-shaped curve in Table 3 with "similar level of income/cap." as the bottom. This occurs when we ask whether integration should include many nations or few nations, and whether it shall be quick or careful. This is shown by Figure 2.

Figure 2: Time and domain

Differences
between
affirmative
answers to
both parts
of the
question



Domain —————

Time - - - - -

When we go from the most general similarity to the more specific, respondents become more daring. They need less time and want to enlarge the domain. The smaller the scope, the larger domain and shorter time. This is consistent with functionalist theory.

Time and domain decrease in the direction from general similarity to more specific similarity, but increase somewhat towards more complementarity. The respondents believe, in other words, that integration is most difficult when it is based on ~~complementarity~~ ^{similarity}. The empirical bases of this attitude should be tested, but it is consistent with our theoretical premise that reorganization is least probable in cases with overall similarity.

3.6. The role of conflict

As we saw in Table 3, respondents considering "similar colonial past" and "racial or cultural similarity" as most important, followed each other in attitudes on integration, except when they came to the question whether serious conflicts could arise in an integrated area or relations would change into a more peaceful state. Those suggesting that "colonial past" rated among the most important criteria were far more assured that relations would change than the others, while those suggesting "racial or cultural similarity" rated far below the others when they considered the possibility for a change into peaceful relations.

The reason seems to be that race and culture is something floating and dynamic with a great possibility for change. Race in Brazil, for instance, is not a polarized matter between blacks and whites, but it is floating between preto, moreno, mulato, chulo, creolo, cabo, verde, branco. Categorizations may differ within families and between generations. Culture is also usually considered something heterogeneous, something developing through debate. This is not so with "similar colonial past" - nor with "similar level of income per capita".

Heterogeneity seems then related to tolerance of conflict, a conflict within an integrated area developing by means of debate. The questionnaire is biased towards similarity in

cooperation and processes of integration. We may now go further: At certain points in history there are not only questions of debate, but of habit-breaking. Habit-breaking may imply destruction of boundaries that at present facilitate the steering and control by representatives of old habits, creating dissimilarity among people, making people change untimed, making needs in a population inconsistent and irreconcilable - and the process may enter phases of polarization. At that point change means someone's defeat - and the debate becomes a game, and the game becomes a fight. 6)

To take one example: Multinational business firms are less defeats to the nation-state than the student proletariat. The student proletariat will then meet more repression. The change towards a world governed by multinational business firms will be peaceful, and a change towards a world governed by the values of the student proletariat will be violent.

When two or more ways of life compete, what do we do? Try to make people like incompatibilities, make them like and live with conflict, or do we try to reconcile the conflicting ways of life? To achieve this aim, social science has contributed with some receipts like fractionating conflict 7) and establishing multiple group loyalties. 8)

But if the concepts of peace, cooperation and development shall get a positive content, it seems evident that science has to be future-oriented. And then it is both a question of analysis and wishes. It is unavoidable: Political research has to present wishes, made explicit through the rectitude which is distinguishing science from other types of social activity.

4. Conclusion.

A man interested in cooperation or integration as a value in itself, or a man supporting old habits, would recommend action along dimensions of specific similarities - as functionalists do, and according to findings in this paper.

With the emergence of new habits, for instance those we anticipate through student revolts versus the growth of multinational business corporations, this receipt becomes neutralized and meaningless. Do we want integration through state bureaucracies, through monopolistic capital, or through the student proletariat? The functionalistic technician may work within each group where values are consistent and salient items similar. But what about the relations between three ways of life and the choice between them?

If we want to be guided - not only by "background variables" like family, friends and acquaintances - but by science, a future must be imagined based on explicit wishes. Politics must become decent scientific behavior - and science become conscience engagé.

There is no rational choice when two ways of life compete, and the request for a strict justification may be unreasonable. The apology of our choice should, according to Radnitzky ⁹⁾, appeal to 1) previously accepted engagement, 2) a survey of social and other consequences, 3) our world design.

According to both him and Jürgen Habermas ¹⁰⁾ our practice of life should be a striving for increased autonomy, liberation, Mündigkeit. Those striving for liberation are just those who conduct the dialogue in which humanity has been engaged ever since it became human, the dialogue in which mankind build up the world in which we live.

If peace research aim at structural as well as manifest violence, such a practice of life appear necessary, trying to diminish de-humanization and humiliation both within existing structures and within processes of structural change.

NOTES

- 1) Karl W. Deutsch et al: Political Community and the North Atlantic Area. International Organization in the Light of Historical Experience. (Princeton, 1957), particularly pp.46-50, pp.85-95, and p. 133.
- 2) See Johan Galtung: A Structural Theory of Aggression. Journal of Peace Research, no.2, 1964, pp.95-120, and the theory of rank inconsistency as presented by E.F. Jackson: Status Consistency and Symptoms of Stress. American Sociological Review, 1962, pp.469-480, and G. Lenski, Social Participation and Status Crystallization, American Sociological Review, 1956, pp.458-464.
- 3) Per Olav Reinton: Inequality in International Systems of Nations. Peace Research Society: Papers XI, The Budapest Conference, 1968, pp.47-56.
- 4) Bruce M. Russett: International Regions and International Integration. (Rand McNally, 1968?) may be mentioned as a standard text for this tradition.
- 5) The study was made in Brazil, Chile and Nigeria. The planned survey covered a lot of other countries in the two continents, but due to university strikes, closure of universities during crises, general scepticism towards questionnaires made and presented by foreigners after the Camelot project (where Pentagon disguised by some US universities and scholars tried to make a study of how to control revolutions) etc. the survey was minimized and covered only some 120 social science students. I am indebted to Horacio Godoy and his students, and to Franke Strecker, A. Valadares and Alice Rangel for necessary help in gathering data.
- 6) Paraphrasing the title of Anatol Rapoport's book.
- 7) This method is suggested by Roger Fisher, in his Fractionating Conflict, in Roger Fisher ed.: International Conflict and Behavioral Science. The Craigville Papers. (Basic Books, N.Y. 1964) pp. 91-110
- 8) An approach commented upon by Chadwick F. Alger, Decision-making Theory and Human Conflict, in Elton B. McNeil: The Nature of Human Conflict (Prentice Hall, 1965) pp.274-295.
- 9) Gerard Radnitzky: Contemporary Schools of Metascience II, Continental Schools of Metascience, (Akademiförlaget, Göteborg, Sweden, 1968)
- 10) Jürgen Habermas: Knowledge and Interest. Inquiry, no.9, 1966, pp.285-300.

Attitudes to Multilateral Institutions as
a Function of Cultural Background: A com-
parative analysis of American and Norwegian
simulation experiments.*

by

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Introduction.

Inter-Nation Simulation can be and indeed has been used for a variety of different research purposes: among other things to test hypotheses about the referent international system, foreign policy decision-making behavior, or interpersonal patterns of perception and behavior. In the present paper a somewhat different perspective will be used, insofar as simulate behavior is regarded as expressions of commonly held attitudes to foreign policy in the culture from which the participants are recruited. In this way simulation experiments functions as a kind of projective interviewing session in which the participants constantly have to choose within a given set of alternatives. The simulate model of the international system is the equivalent of the interview guide or the questionnaire, while the main dimensions in the model represent items or questions in an interviewing situation.

Compared to survey research simulation may prove fruitful as a vehicle for catching essential elements of what may be called the "foreign political culture" within a group or a nation, because it provides the participants (respondents) with a meaningful context within which they have to make their policy choices. A context of this kind is often lacking in an interviewing situation. This does not imply that answer categories chosen in response to a questionnaire item on foreign or international politics are in any sense "wrong" or "invalid". But most persons have very limited experience in this field, and a great deal of probing would be needed in order to be able to draw coherent inferences about political culture on the basis of survey results. The contention of this paper is that INS may serve as a "probing device" for this purpose by analysing the patterns of behavior and choices made by the participants in their assigned roles as decision-makers in a fictitious international system.

The Project

The data used in this analysis have been recorded during four runs of Inter-Nation Simulation, in a project designed to "gather data relevant to decision-making on a cross-national

basis". The initiative to this cooperative project was taken by the Western Behavioral Sciences Institute and researchers from 6 nations took part in the initial planning of the design. However, due to a mixture of difficulties only two research groups (USA and Denmark/Norway) completed their part of the experiment and made all data available for analysis, with the deplorable result that the basis for cross-cultural comparison was reduced to a minimum of two. The planning conference was held in September 1966 and the runs conducted in January/February 1967. The participants were students of political science who volunteered. They were assigned to nations and roles on a random basis.

It is difficult to get indisputable evidence of cultural background as causal factor producing different patterns of events in the Norwegian and American runs. However, when an actor is placed in a situation in which he has a number of possible alternatives for action, the natural thing for him is to draw upon and make use of the resources provided by attitudes and norms familiar to him through his own culture. To the extent that consistent behaviour differences are found between the American and the Norwegian experiments, we shall regard the hypothesis of differences between political cultures in the two nations as supported. To a limited extent comparisons with some available survey data will also be made.

The Model.

The model used as a basis for the experiments is considered to serve the same purpose as the questionnaire in a survey project, as mentioned above. This implies that the main parameters and relationships by which the simulate international structure is defined limit the number of possible action choices available to the participants in the experiment. In order to clarify assumptions behind the present project, some of the main elements in the model are presented and discussed below. In addition an effort will be made to connect key dimensions of the model to the specific research interests which the project was designed to cover, and to discuss some implications of the design.

On the basis of "standard" INS model developed for educational purposes a number of adaptations were made in order to make it better suited for the specific demands of the participants in the cross-cultural project. The main changes aimed at making the original model less power- and military oriented, primarily by strengthening its political and economic aspects. In the absence of a coherent theory for a model of the kind needed for the present research purpose, the result was to a large extent a model structured on a rather ad hoc basis. However, to compensate for a lack in theoretical perspective, the model gained insofar as it became much richer and with more possibilities for alternate policy choices than is the case with an "ordinary" INS model, designed to test one major hypothesis.

The simulate consists of a fictitious world with 8 nations, representing some main types of national profiles in the referent system. There are two military alliances: the Green and the Blue, each with three members and each with one of the two superpowers as the dominant partner. Two of the nations are the parts of one previous nation, having been divided as a result of war. The two parts now belong to different alliances and have no diplomatic contact. There is an international organization, of which all but two of the nations are members. The nations differ in economic and military capacity as well as in "degree of industrialization", but all have essentially the same internal political structure.

A major reason for the effort to design a simulate model with a highly diversified structure was the fact that the original group of participant researchers in itself represented a variety of nation types: Japan, Mexico, Korea, Scandinavia and USA. By aiming at a fairly close correspondence between types of nations represented among the participating researchers, and in the structure of the simulate, one hoped to arrive at conclusions regarding the general validity of INS research findings. This is of interest because almost all INS experiments conducted so far have taken place in USA and have been staffed with American participants. In this perspective the loss of data from three members of the original research groups is particularly to be deplored, since Norway and USA

represent only the northwestern segment of the international system, although they clearly differ radically along a number of dimensions relevant to foreign policy. One possible further limitation in the same direction should also be mentioned, even though its importance is difficult to estimate. Almost all adaptations of the original American model were suggested and incorporated by the Scandinavian members of the planning group. The intention was to make it as truly "international" as possible within its necessarily narrow and simple framework, particularly along the economic dimensions. Still the possibility remains that a similar kind of implicit cultural biases are present in the model as well as in the data produced in the experiments.

Hypothesis and data.

There are two multilateral institutions in the simulate international system: the military alliances and the international organization. The following analysis is centered around behavior related to these institutions. The corresponding institutions in the real world, NATO and the United Nations, both represent integral parts of the foreign policy for Norway as well as for USA, although with a widely different relative importance for the two nations. Both are members of NATO and of the UN and thus formally maintain equal status within the organizations. But as an element of the total foreign policy conducted by Norway and by USA respectively, multilateral activity clearly represents a much larger part for Norway than it does for USA.

On basis we expect the Norwegian participants in the simulate to pay more attention to and to make more use of the multilateral institutions available to them than their American colleagues. In the following sections formal as well as informal alliance- and I.O.-related behavior will be examined after a brief description of each^{of} these simulate international institutions.

Formal alliance-related behavior.

As mentioned above there are initially two alliances in the simulate world, the Green and the Blue, with three members

each. The two remaining nations are neutral. The alliances are primarily militarily defined, insofar as the military capacity of all member nations in one alliance are pooled and used as basis for the calculation of each member's VSns (Validator Satisfaction with National Security). Apart from this there are no formal obligations - or advantages - connected with alliance membership.

In both the Norwegian runs there were formal changes in alliance patterns (although in different directions). In N I LoAl changed her membership from the Blue to the Green bloc, while the initially nonaligned Rena and Soro joined into a new Red bloc. In this run the alliance system was maintained and even strengthened. In N II on the other hand the tendency was to dissolve the blocs. At the end of the run all nations except Soro had formally disarmed (see the list of I.O. agreements below), and considered themselves to be members of one (universal) bloc with Soro remaining non-aligned.

In the American runs there were no changes made in alliance formalities in the sense that existing alliances were dissolved or new ones formed. However, the simulate newspaper the World Times for US I reports three cases of mutual defense agreements between neutral and allied nations. According to experiment instructions such agreements make the signatories "de facto allied" in the sense that their "VSns will be computed by comparing the strength of your alliance with the strength of any opposing alliance." Still the psychological difference between formally joining an organization and making an agreement for a limited practical purpose should not be dismissed as insignificant.

Informal alliance-related behavior.

Simulate decision-makers may interact with each other by trading and by writing messages. Unfortunately no detailed analysis of the extent to which message communication is alliance dependent can be made because systematic records of message communication between the DMs exist for the two last periods only. The reason for this was that the communication flow was not originally intended for detailed ana-

lysis. One of the members of the group needed the participants' evaluation of degree of friendliness or hostility of message content, and it was primarily for this purpose that the communication for the two periods 8 and 9 was put on cards.

Trade.

There are no equivalent of money in the simulate, so all trade has to be made on an exchange basis. The exception to this is the possibility to ship goods from one nation to another unilaterally as "loan" or "aid". The shipping nation marked off which category the shipment belonged to. The proportion of unilateral shipments was about 1/10 in the Norwegian runs and 1/4 in the American. The present analysis is limited to the category of shipments which was intended as bilateral, even though this did not always function in practice. It turned out that many of the participants had great difficulties in mastering the technicalities of trade, with the result that a great deal of shipments never were paid for and thus in effect became unilateral. Only in one run, N II, were these difficulties overcome to the extent that prolonged trade agreements were fulfilled.

There are three types of "goods" which may be produced, bought and sold: Capital goods (BRs), consumption goods (CGSs), and military (MFs). Because the nations differ in their capacity to produce the various types at a profit, advantageous trade agreements are possible between most pairs. Trade within alliances was "cheaper" than across alliance borders, because there was a shipment cost of 1 % on intrabloc and 3 % on interbloc trade. The difference is too small to influence the profit margins or nearly all possible trade agreements, but was intended to create an objective basis for alliance cohesion of a non-military nature. In the present context it will be used to examine the degree to which intra-alliance trade was preferred by Norwegian and American DMs respectively.

The following table shows the pattern of total bilateral trade as well as within alliances.

Table 1. Trade participation in four simulate runs.

	No of shipments	No of traders (%)	% intrabloc shipments	% intrabloc traders
N I	28	21 (38)	43 %	38 %
N II	72	31 (56)	48 %	92 %
US I	21	21 (38)	29 %	33 %
US II	28	17 (30)	25 %	18 %

There are 56 potential traders in the simulate system, because each of the 8 nations may send or receive goods from 7 other nations. If all members of the system trade with each other at least once, the ~~trade matrix~~ would have no empty cells. However, as table 1 shows this of course not the case. Apart from the fact that in three of the runs the total number of shipments was much lower than the number of potential traders, the trade flow is influenced by at least two other factors: alliance membership and habit.

Used in this connection the term "habit" signifies the cumulative effect of interaction. There is a tendency to continue to keep up a relationship once established, unless it proves unsatisfactory. In this connection this tendency will lead to a certain degree of concentration of trade. In table 1 this concentration is measured by the number of the 56 matrix cells which are involved in bilateral trade at all. The effect of habit shows up in N II, where the number of shipments was about three times as high as that of the other runs (in which, as mentioned, trade never really was mastered). Still the number of traders in N II was only 50 % higher than in the rest. More nations traded in N II than in the other runs, but the traders also traded more than in the others.

The two right-hand columns show intrabloc trade. Here Norwegian alliance awareness shows up clearly. Almost one half of the shipments took place between alliance partners which make up 12 of the 56, or 21 %. In the American runs the number of intrabloc shipments are on the same level as the proportion of allied traders.

If the percentages of traders in the total system are compared with the corresponding percentages of allied

traders, one sees that the "level of participation" in this group is decreased for the two American runs, while one of the Norwegian remained the same and the other was raised almost to the maximum level possible. The effect of shipment cost, then, is not present in participation to the extent it was found in shipment frequency, but the tendency is in the expected direction both for the Norwegian and the US runs, and the hypothesis at least not disconfirmed.

Alliance awareness in trading patterns may also be examined from the point of view of profit. A "Trade Profit Chart" has been developed for all possible exchanges between each pair, based on the ascribed differences in generation rates for each of the three products in the simulate. The chart shows the profit available to each pair exchanging any two kinds of goods. Because reciprocal trade took place to such a limited degree in three of the runs, this angle can only be studied in N II. It turns out that in 7 of the 11 intra-bloc exchanges conducted in this run, one or both partners could have made a better deal by trading across alliance borders, even accounting for the higher shipment cost. In these cases alliance partners were preferred to profit.

International Organization.

As with formal and informal alliance-related behavior, the hypothesis predicts a similar pattern in the participants' respective use of the International Organization in the simulate. I.O. activity may be in terms of membership, formal agreements arrived at in the I.O. meetings and/or in the name of the organization, or by financial or other contributions which serve to strengthen the I.O.

Formal I.O.-related behavior.

At the outset of the experiment all nations except Ingo and Rena are members of the I.O. With only two nonmembers the membership pattern varies very little between the runs. In N I, N II and US I both nonmembers had joined the I.O. at the end of period 3. In US II Ingo joined in period 2, while Rena never did. In none of the runs did any of the nations leave the I.O. Unlike alliance membership I.O. membership

had no formal consequences for the nations. However, a number of participants stressed the useful function of the I.O. meetings, which was the only occasion on which DMs from different nations were allowed to confer verbally.

The following agreements were made in the I.O.:

N I: World army established and contributed to.

World bank established and contributed to,

N II: World bank established and contributed to.

Total disarmament decided.

Both alliances dissolved, reliance on I.O. protection

US I: Military freeze agreed on and (partly) executed.

A single world alliance agreed on, but not executed
(time was up)

US II: No agreements made.

Informal I.O.-related behavior.

Contributions to the I.O./

/ is the area in which the behavior towards the I.O. differs most from run to run. Number and size of such shipments depend both on the number of international agreements arrived at and on the time at which they were made. The last point was decisive in the present case. N I established both an I.O. force and a World Bank, but still lags behind in contributions compared to N II with an I.O. force only. The N I agreements were made in period 8 and the N II in period 2. The number and size of contributions to the International Organization (counted at the end of each run) is presented in table 2.

Table 2. Number and size of contributions to the International Organization in four simulate runs.

	No. of ship- ments to I.O.	BRs accum. in I.O.	MFs accum. in I.O.
N I	8	4420	166
NII	36	1730	32525
US I	3	0	314
US II	0	0	0

Both formal (agreements) and informal (contributions) I.O.-related behavior confirms the hypothesis. Not only were four

agreements concluded during the Norwegian runs compared with one in the American, but the agreements also differed in an important respect. The Norwegian agreements required the signatories to take active steps (disarm, contribute to the I.O.), while the American military freeze agreement merely obliged the member nations to refrain from certain acts (engage in further arms race). The figures in table 2 show that the agreements were actually adhered to.

Simulate behavior and survey research.

The previous section has confirmed the hypothesis on a tendency for Norwegian simulate decision-makers to pay more attention to the multilateral dimensions in the simulate model than American.

Still the question remains: What does behavior patterns of this kind tell us about the "real world" ? It has been argued above that it is possible and useful to regard simulate behavior as equivalent to responses to a survey interview or questionnaire. This perspective makes the simulation run serve as a kind of projective test to uncover elements of the system of political norms held by a group or a nation.

A thorough test on this methodological point would require extensive data from surveys as well as from INS runs with the respondents as participants. It should also be studied how representative the respondents are of their own group/nation/culture.

The present project makes no claim of possessing data good enough to permit a test of this kind. But in a "Social Opinion Survey" which was administered to the participants before it started, there are two items which relate to the bilater-multilateral dimension examined above.

The items are formulated as statements to which the respondents are asked to mark off their degree of agreement or disagreement on a 7-point scale. The mean scores of each national sample were compared to see if there were significant differences between the samples on any of the items.

The items are the following: 1) "It would be better if nuclear weapons were controlled by a supernational organization rather than by individual nations." The Norwegian mean score on this was 2.22, or close to "somewhat agree", while the U.S. mean score was 3.14, or "weakly agree". The difference is .92, which is statistically significant. The Norwegian students are more in favor of giving binding power to a supernational organization than the Americans.

2) "There should be a world government able to control the laws made by each country". Here the Norwegian mean score is 3.14, while the Americans are almost in the middle, neutral position of 3.89. The difference is .75, which is not significant but strongly in the expected direction.

Needless to say there ought to have been a battery of items related to foreign and international policy. Still the result of the available data strengthens the claim made above that INS results can give important information on the foreign policy "climate" from which the participants are recruited.

Discussion.

The data examined above confirm the hypothesized difference in behavior patterns produced by American and by Norwegian students placed in an experimental situation. It was found that Norwegians tended to pay more attention to and to make more use of the multilateral institutions in the simulate system than the Americans. This was the case for behavior related to formal as well as to informal aspects of these institutions.

On the basis of a general knowledge of Norwegian and U.S. foreign policy the results contain nothing new. The American participants behaved as Americans in their runs, and the Norwegian as Norwegians. The model is validated insofar as it was capable of catching major dimensions in the political culture. This is further emphasized by the correspondence found between patterns of simulate behavior and responses to the two relevant items on the Social Opinion Survey.

The question remains whether the results permit further inferences of a more general nature. The final sections of the paper will be concentrated on two lines of discussion, one on some possible theoretical implications of the findings and the other on methodological problems related to this way of using simulation.

Some theoretical implications.

If the explanation for the differences in behavior patterns has to be sought primarily in the national or perhaps regional (Scandinavian) background of the participants, then the results have a fairly limited value as a basis for further theoretical discussions. However, there is a finding from a previous effort of cross-cultural simulation research which puts our results in a wider perspective. An Inter-Nation Simulation experiment designed to test certain strategic hypotheses was replicated in Mexico after the initial American runs. The results of this replication are summed up by the researchers as follows: "In general the results of the hypotheses were the same as with the American participants. The Mexicans, however, exchanged far more messages, concentrated much more energy on the international interaction, neglected their internal economies, did not engage in arms races, emphasized the importance of the International Organization, and shared power more with subordinates."¹) We do not have information on how "sharing power with subordinates" is defined and cannot make a comparison on this point. But the rest of the items are almost identical with the differences observed in the present runs (except for communication: Norwegians seem to have communicated less, not more than their American colleagues). On this basis the loss of Mexico as a participant country in the present project is a loss particularly to be deplored. What in the Winsafe replication appeared to be "Mexican", and in our project "Norwegian" behavior, may well be expressions of general small-power behavior in the international system.

In the first part of the paper some points were raised to explain why small-power international activity would have a tendency to cluster around the multilateral institutions in the system. One reason is clearly scarcity of resources. Bila-

teral relations are a much more expensive way for a nation to interact with other nations than through regional organizations or the United Nations. Chadwick Alger has pointed out that 86 % of a sample of U.N. diplomats considered the U.N. as better suited for contacts with diplomats from other nations than a national capital.²⁾ Unfortunately his figures are not broken down on size or rank of nations. In a case study of the Norwegian Foreign Service it was found that there is an increasing tendency to concentrate diplomatic activity on permanent mission to international organizations rather than on bilateral relations.³⁾

One effect of membership in an international governmental organization is that low-ranking nations in the international system are put more on an equal footing with the powerful high-ranking nations. In a sense such organizations serve an equalizing function, by enhancing the status of its small-power members and constraining the big. This tendency could explain why low-ranking nations pay more attention to formal aspects in their international behavior. Lacking in coercive power, a weaker nation can compensate by insisting on the norms and rules which define acceptable behavior in the international system. By sticking to the rules themselves, and thus setting a good example, they are in a better position to expose deviants and thereby exert normative power.

For a powerful nation the situation is different, because formal rules will often serve the purpose of limiting its freedom to act. By emphasizing bilateral relations it becomes possible to avoid a good deal of the control exerted in a multilateral organization. The powerful participate in the multilateral institutions, but for different purposes than nations with less power. This difference has been shown by Ib Jarvad in his research on the role and function of the International Court of Justice. He found a tendency for low-ranking nations to stress the norm-creating function of the Court more than the high-ranking nations did. The high-ranking nations, on the other hand, were more frequently represented on the board of judges - the group which has in its power to apply these norms.⁴⁾

It appears that smaller nations tend to use normative power as a way of influencing the international system. A prerequisite for success in this is the presence of a common value system from which these norms may be derived. Strong and high-ranking nations, on the other hand, have coercive as well as normative power at their disposal and can change between altering and observing rules. Unless the nations of lower rank are able to find broader power bases, or in other ways redefine the values of the international system, their influence will continue to be limited.

Methodological problems.

The structure of a questionnaire in an attitude study decides which items the researcher regards as relevant to include. Likewise the parameters and relationships in an INS model define the borderlines of the types of activity available to the participants in a simulation experiment. Although there are a number of options open to the simulate decision-makers, they had no possibility to influence the sequence of events in a discontinuous way, by introducing new elements etc. A few efforts of this kind had to be dismissed by the experimentors, because it would have violated the research design agreed on when the project was planned.

After the close of the runs, the Norwegian participants were asked to give their reactions to the experiment on a "post-simulation questionnaire". The answers show that most of them were concerned with the practical problems they had experienced in filling out forms correctly, maintaining contact with other DMs, lack of time etc. Further a number complain of a general "lack of realism" in the play, but this tends to be on weaknesses which can be removed by longer training periods etc., rather than on the structure of the world in which they had been behaving.

Very few of the participants mention points with wider implications: the absence of ideologies (in other words: the absence of political goals), unrealism in the relations between rich and poor nations, too weak basis for identification with own nations. One reason for the small proportion of critical

comments on the basic structure is probably the fact mentioned in the beginning that the original cross-cultural design was reduced to a comparison between Norwegian and American behavior in an American model modified by Scandinavians.

But in addition there is reason to stress another aspect of simulation: its value as an educational tool. By providing the participants with a coherent and "meaningful" frame within which they are asked to function, the simulate model of the world may be used to impose a particular perspective on the international system which is likely to be biased according to the knowledge and preferences of the designer. The same kind of bias is present in textbooks and other literature on international relations, but it is more difficult to discover it in the experimental situation, precisely because of its "realism".

Consequently, in order to make Inter-Nation Simulation a better tool for comparative research on political cultures it is necessary to pay much more attention to the development of the model. One strategy might be to have political scientists with different backgrounds develop their own models for instance on the basis of international statistics. Then it would be meaningful to make comparative analyses of the models as well as of the simulate behavior, and information would be gained on the extent to which different structures do produce varying patterns of political behavior. Rather than taking the model as a given fact and make inferences about relationships in more or less "realistic" constructs of the international system, we would conclude by arguing that more important insight may be gained by analysing the model as a product of specific cultural backgrounds.

Notes.

- * This paper is a part of a larger report, "Perception and Behavior in International Simulate Systems". The project on which the report is based is a cross-cultural study of decision-making behavior, initiated in 1966 with Dr. John R. Raser, Western Behavioral Sciences Institute, La Jolla, USA as project director. Central expenses were covered by the US Office of Naval Research under contract no. N00014-66-CO279. The reader is referred to the general report for detailed information on the project. The runs in Oslo were conducted and partly financed as a cooperative effort between the Institute of Peace and Conflict Research, Copenhagen and P.R.I.O., with Anders Boserup and the author as co-directors. Anders Boserup also was responsible for the data-reduction from all INS conducted under this project. Rådet for Konflikt- og Fredsforskning and Nordiska Samarbetskommitten för Internationell Pol. och Fredsforskning covered my expenses in connection with project seminars in Copenhagen in 1967 and 1969 respectively.

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Above all, however, I am indebted to Anders Boserup, for collaboration, hospitality, criticism and support during crucial stages of the project.

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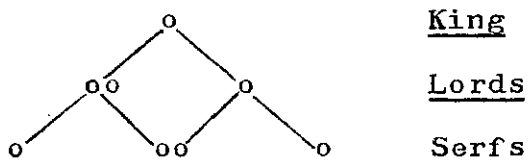
NON-TERRITORIAL ACTORS AND THE PROBLEM OF PEACE*

By

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International Peace Research Institute, Oslo1. Some assumptions about "peace"

It is today customary to talk about "peace" as, at least, a two-sided concept. This does not mean that one cannot meaningfully define "peace" as "absence of violence", provided one uses a sufficiently extended concept of violence. One way of doing this would be as follows. There is, on the one hand, what could be referred to as "personal violence", the violence committed by person(s) against person(s). It takes various forms, depending on whether it attacks the human body anatomically by piercing, tearing, crushing, burning, poisoning etc., or physiologically by controlling the input to the human body (through suffocation, starvation, dehydration), or by controlling the output from the human body (through chains, imprisonment, detention; or by use of more modern weapons affecting the higher nerve centers). This kind of violence is well known; it is dramatic and it is, literally speaking, deadly significant.

Then there is what could be referred to as "structural violence", where the violence is built into the social structure. Typically it takes the form of a pyramidal or feudal structure, something like this:



All legitimate interaction is vertical, and mostly from high to low. There can also be horizontal interaction, but then it is much more developed on the top, for good or for bad, than lower down. The structure produces the primary, secondary or tertiary sector products of society, but usually in such a way that surplus is extracted from

* Revised version of a paper presented at the World Order Models Meeting, Northfield Inn, Massachusetts, 18-24 June, 1969.

the lower levels and transferred upwards, making the higher levels richer and richer at the expense of the lower levels. The result is high differentials in morbidity and mortality rates, just to take one example, between high and low among nations, districts and individuals. And the way the structure is organized makes it exceedingly difficult for the underdog to organize and overthrow the structure since the low levels are fragmented and atomized and have to go via the higher levels to interact.

But sometimes there are revolts, as is well known - and this brings out clearly not only the difference between personal and structural violence, but also how they are continuous with each other. For imagine there is a revolt against the higher echelons of the structure, whether the structure is referred to as truly feudal, as capitalist, as state capitalist or what not, and whether the revolt is intended to substitute underdogs for the topdogs holding the top positions or is a truly revolutionary movement with the intention of changing the feudal structure as such. It is generally assumed that the topdogs will react to defend not only the structure, but also their own position in the structure. Ultimately they may use personal violence to obtain this, but usually as a response: they do not have to do so before the underdog throws the first stone. Hence the underdog can be labelled as an aggressor - there are laws and legal institutions to do this - and all types of personal violence can be used, singly or combined.

But imagine further that the revolt is a very feeble one, very easily crushed. It will still be registered by the attentive observer, and even put into newspapers and on the TV. But if one extrapolates even further, down to the point where there is no revolt simply because it is already crushed in advance, then one sees more clearly how continuous these two types of violence are with each other. However, structural violence is only continuous with personal violence between unequals, in vertical or asymmetric conflict. Between equals, in a horizontal conflict, the structural violence element is absent or negligible and the violence there is of the personal variety.

If to work for peace is to work against violence, then it means to work for the absence of both types. This means, more concretely, to work not only for the reduction of personal violence, but also for egalitarian structures and social justice. Economic development is not included in this picture, but the distribution of the results of economic development are.

If we now study "peace" in its more classical sense, simply as absence of personal or direct violence, then there seem through history to be two major trends in peace thinking. We shall refer to them as the dissociative and the associative trends respectively. According to dissociative thinking the best thing one can do is to keep actors on a collision course apart from each other, whether by geographical (oceans, mountain chains, "natural borders") or social (prejudices, stereotypes, deterrence) techniques. According to associative thinking the best one can do when they are on a collision course is exactly the opposite: to keep them together in cooperative relations. A typical example of the former is alliance formation, polarization and balance of power policies; equally typical examples of the latter are exchange and cooperation across conflict borders and the creation of supra-national organizations.

At this point it is interesting and important to bring in the two types of violence. It is generally held today that dissociative strategies are somewhat old-fashioned, tailor customed as they were to a world with slow speeds of communication and a doctrine of national self-sufficiency. Today, with communication and transportation still on an exponential increase and with a corresponding increase in cross-, trans- and supra-national bonds the objective situation calls for extensive use of associative rather than dissociative strategies. A good example is the relation between France and Germany. Three invasions by one of the other during 70 years could have lead to increased efforts to come up with the final, dissociative answer, but what today is being moulded between the two within the framework of the EEC is certainly of the associative variety. And it is certainly not impossible that it will eliminate large-scale use of personal violence between the two for any foreseeable future.

But what about structural violence? Dissociative peace policies have the advantage of killing two birds with one stone: it often produced absence of violence at least in the short run (except for the remarkable success in the European system in the nineteenth century) and at the same time often solved the problem of exploitation and injustice in vacuo: where there is no interaction there cannot be any exploitation either. With associative strategies, based on interaction, this becomes a major point - and not only because exploitation may lead to personal violence later and hence is not stable, but because it is violence in and by itself.

How, then, should one conceive of associative peace making? There seem to be five factors or conditions that are at least heuristically very helpful, and also seem empirically to play considerable role:

1. Symmetry - that the relationship is really egalitarian; that no party enriches itself at the expense of the other.
2. Symbiosis - that the relation is based on needs that lead to real interdependence, and so much so that both A and B know that if they destroy the other they also hit themselves.
3. Homology - that the two parties are reasonably similar in structure so that cooperation is easy because they know where the "opposite number" is to be found.
4. Entropy - that all interaction channels are used, if not equally at least in such a way that heavy concentration on one channel alone is avoided.
5. Supra-actors - that there are moves in the direction of integration so that there is medium in which conflicts can be articulated and attempted resolved.

A typical example of a region where these conditions obtain reasonably well is the Nordic countries. They are among each others' highest trade partners, and not only of commercial goods, but of cultural goods and human manpower as well; this exchange and cooperation take place in a reasonably non-exploitative way, partly due to the fact that the countries are not that different in size (Iceland excepted); the countries are institutionally very similar and become increasingly so through processes of "harmonization"; an impressive number of channels of communication exists and are used; and there is a certain supra-structure: the Nordic Council with its various ramifications. And - there is peace, by and large in the double sense of this term. Of course, one example proves nothing, but it serves as an illustration, particularly if it is compared with other regions of the world (such as the Western Hemisphere or Eastern Europe) where condition no. 1 is typically not satisfied.

What, then, does one do if one has an associative structure that satisfies all conditions but the first one, a structure with absence of personal violence but presence of structural violence? There are many answers to this, but one simple answer is as follows: one destroys the structure by dissociative policies, by severing ties between high and low, by withdrawing cooperation and association - for instance by bloc members severing ties with the big power, whether military, political, economic, cultural or all four - to gain autonomy and independence and build their own institutions. Later on time may come to change from

fission to fusion policies, from dissociation to association, but then on a basis of equality. In other words: for horizontal conflicts, associative techniques may be the most appropriate ones; for vertical conflicts a first phase of dissociation is probably needed before association can come into play. This is not because association is ineffective, it is probably the most effective bulwark against direct violence there is, but exactly for this reason it may be too much, too effective. Where dissociation may buy freedom from structural violence at the expense of isolation, association buys freedom from personal violence very often at the expense of structural violence.

This leads to the well known polarization in political thinking between those (to the right) who say that the human animal can only be kept nonviolent in a structure of "law and order" provided a basically hierarchical set-up; and those (to the left) who have the view that the human being can only set himself free from structural bondage by means of personal violence. According to these ideologies freedom from one type of violence can only be bought at the expense of the other. According to the present author's ideology these are false dilemmas that represent a political and intellectual capitulationist view in human affairs; the task is to strengthen those institutions and forms of action that try to maximize both types of peace.

What, then, is the role of arms control and disarmament in all this? The present author's view is that when most conferences and negotiations in this field of disarmament fail it is due not to ill will or lack of skill, but to something much more basic. What one tries to do is to square the circle: one tries to disarm a highly dissociative structure prepared for the violent cataclysm called war, and refer to the result as peace. But a disarmed dissociative structure is still a dissociative structure, only this time an unprotected one. It has neither the peace-building effects of the associative structure where parties are tied together in a web of exchanges and cooperation, nor the peace-building effects of the dissociative structure where parties are kept apart by the threat of severe punishment if they transgress called retaliation. One little incident, and the disarmed dissociative structure will crumble: one party will prevail over the other and/or there will be a quick arms race up to and even surpassing pre-disarmament levels.

The answer to this is not that "in addition to disarmament one of course has to do other things". For the problem is that disarmament in

a dissociative structure can only take place in an atmosphere of distrust for the reasons already mentioned. If one could fall back upon geographical distance there would be no problem, but in our days the alternative to a dissociative peace structure maintained by the threat of violence is an associative structure. And it is probably far more correct to say that such a structure will lead to disarmament than vice versa, for in an associative structure weapons may cease to be targeted on the other party and only remain as a capability, until they even "wither away". Or, strictly speaking: they do not even have to "wither away". Norway and Sweden have more than enough weaponry to stage a respectable war: the reason why there is no feeling of threat is not disarmament but dis-targeting (after 1905).

Quite another thing is arms control aiming at reducing the chances of war by "accident" and "escalation" - even though one may say that all wars are caused by some escalation and are by accident, only that the human frailty or madness is usually not found at the level of the soldier, sergeant or trigger-happy officer, but much higher up. They are the definers of madness and sanity, exempt themselves from such accusations, and it is built into the structure that they can make others accept their definitions. Nevertheless, there is undoubted virtue to such measures since they aim at perfecting a dissociative peace structure - even though we would certainly rank it low relative to an associative peace structure.

2. Some assumptions about non-territorial actors

Unfortunately, all these premises were needed to arrive at one conclusion that can now be stated quite briefly. The peace-building role of non-territorial actors is not as the purveyors of disarmament to a world overfled with arms, but as the framework providing the world with an associative structure. Of course, the non-territorial actors may serve as meeting grounds for disarmament negotiations that typically are organized by one such actor and on neutral ground, and they can supply ideas and the staff for the needed operations. But they cannot, as pointed out so often, provide the means for enforcing disarmament. The owners of most arsenals of arms are nation states; hence it is between nation states an accord has to be reached and by nation states, singly or in concert, it has to be enforced.

All this would change under the following two scenarios, however:

1. Non-territorial actors get arms themselves, for wars among themselves or with territorial actors. It is possible that this may provide a balance (see below), but it is also possible that it only means that future disarmament will have to comprise non-territorial as well as territorial actors.
2. Arms are transferred from territorial to non-territorial actors. This is not inconceivable: if the point of gravity of decision-making in general is moving from T to NT, then it would not be strange if weapons followed the same power gradient. There are two sub-cases:
 - 2.1. The transfer is to several NT actors. In this case everything would be set for armed conflict between NTs and one is back to, for instance, religious wars in Europe. It is difficult to believe that such weapons possessed by NTs would not be either the cause or the consequence of conflict.
 - 2.2. The transfer is to one NT actor. In this case, very often described in the literature, the NT would have the power monopoly so often aspired to by nations. The transfer, according to classical thinking, would not have to be complete: it is sufficient to overpower any conceivable coalition of Ts.

We shall keep these possibilities in mind in connection with the following brief resume of basic aspects of NT growth, of the growth of the world's sixth continent, the invisible continent of non-territorial actors.

Underlying any analysis of this continent is the fundamental variable of communication/transportation speed and capacity. This remained basically constant for the first million years of human history, but started growing exponentially after the first successful attempts to install steam engines in ships (Fulton) and engines (Stephenson). The system of territorial actors (T) developed in the first phase where spatial continuity was a basic and undisputed assumption for at least metropolitan states. That the ensuing exponential growth should lead to the emergence of non-territorial actors (NT) is hardly strange; but it should also be pointed out that we are just at the beginning of this process.

The standard typology of NTs into IGOs (international governmental organizations), INGOs (international non-governmental organizations) and BINGOs* (business international non-governmental organizations) will be used in the following and it should be pointed out that this general system of NT actors now seem to have gained sufficient momentum to have reached a stage of self-sustained growth. In the first phase

* Credit for this felicitous term goes to Tord Høivik, PRIO.

governments came together, first bilaterally and ad hoc, later multilaterally and in an institutionalized form, and the result is an IGO. Correspondingly, "non-governments" came together, also first bilaterally and ad hoc, later multilaterally and in an institutionalized form, and the result was an INGO. In the second phase IGOs and INGOs are started directly, one proceeds immediately to the multilateral, institutionalized form often using a strong base developed in one nation. The result is offices in national governments, national chapters or members - and local subsidiaries: this is the typical way of forming a BINGO.

But then comes the third phase when the system has become more autonomous, more detached from its territorial base. First of all, there is the formation of super-IGOs, super-INGOs and super-BINGOs, due to the necessity of coordination, articulation and solution of conflict and so on. There is also the formation of links between the three types, at any level of complexity. Second, there is the tendency for each IGO, INGO and BINGO to foster, through the usual social dialectics, a counter-IGO, INGO, BINGO in competition with it, vying with each other for political, socio-cultural and economic markets among the territorial actors. In fact, they may often cancel each other out, like matter and anti-matter, leaving behind only a lot of noise. Third, there is the equally dialectical differentiation in the NT system along class lines: as it is now, masters and servants are already emerging, and although the smaller, younger and less powerful NTs are badly organized it will hardly last long before they see the need for some kind of trade union formation. A stratification system may sooner or later crystallize into a class system - and the result will be gigantic super-IGOs, super-INGOs and super-BINGOs, pitted against each other.

In other words: the invisible continent will grow, and unlike the visible continents there is no fixed borderline. One cannot postulate any upper limit if communication/transportation speed and capacity continue to develop as they have done, except, perhaps, by the number of human beings and the time they have available to make the organizations meaningful. Some figures may illustrate this (from Kjell Skjelsbæk's research at PRIO):

Table 1. Number of NT actors.

	IGOs	INGOs
1951	124	823
1968	229	1899

In these figures are not included 273 EEC and EFTA commercial and professional groups and 16 national organizations that have consultative status with the UN. The ratio between IGOs and INGOs has been approximately 1 to 9 during the period, again excluding the mushrooming Western European groups. The present number of BINGOs seems to be around one thousand, but we do not have good data for them, as yet.

Let us then make some extrapolations to the Year 2000:

Table 2. Extrapolations to the Year 2000.

IGOs		INGOs	
<u>A growth rate of</u>	<u>would yield</u>	<u>A growth rate of</u>	<u>would yield</u>
3.5%	635	3.5	6000
<u>4.5%</u>	855	<u>5.0</u>	9600
5.5%	1215	6.0	13400

The present rate is underlined, but we have also given one lower and one higher estimate. The results with the highest growth rates but also with the present growth rates, are impressive. There is hardly any doubt that this will make the invisible continent a rather important one. Even today there are only 13 nations in the world with a higher product than General Motors, and although it is difficult to locate such IGOs as the UNESCO, or INGOs as international professional associations, or the emerging, informal INGOs like the world wide New Left, the Student Movement, the Vietnam movement, etc. on a scale of nations when it comes to power, they would certainly not be among the lowest ranking nations. And it should also be noted that the growth of NT is a post-war phenomenon as indicated by the fact that of all the IGOs and INGOs in existence in 1966, 75-80% were founded since 1945.

In addition to this one certainly also has to take into account how the existing organizations are broadening their membership base. PRIO sent a questionnaire to the general secretaries of all of them, and got response from 42% that seem to make up a very representative sample. Among other things they report the following:

Table 3. National chapters

	loosing	constant	expanding	SUM
report from past	4%	41%	55%	100%
image of future	2%	37%	61%	100%

The figures are clear enough, although it should be added that organizations in crisis may be less inclined to answer a questionnaire.

As to super-INGO formation - like the International Social Science Council with the various international social science associations as members - as many as 93 were found from the Yearbook for 1968. This is 4% of the total INGO number, and is expected to grow.

But in all this change there are also some very stable factors. Thus, when it comes to types of INGOs there is a surprising stability: the only category that suffers a substantial decline as percentage of the total is the category called "religious and moral organizations". And, when it comes to geographical location of headquarters and secondary offices it is even more dramatic because of the tremendous political implications:

Table 4. Percentages of Headquarters and Secondary Offices, IGOs and INGOs.

REGION	1960	1962	1964	1966
Africa - White	.5	.2	.4	.2
Africa - Black	1.7	1.8	2.7	2.8
Arab	1.2	1.4	1.7	1.7
Latin America	7.8	6.9	7.5	7.2
Western Europe	82.5	82.1	79.9	80.0
North America				
Oceania	.7	.8	.7	.8
Asia (- Japan, Israel, Communist countries)	3.4	4.0	3.7	3.8
Communist	1.5	1.7	1.9	2.2
Rest (mainly Japan, Israel)	0.7	1.1	1.5	1.2

Total	100.0	99.9	100.0	100.0
N	2,137	2,209	2,429	2,815

Percentage secondary offices	-	29.9	27.6	21.6

The time-span is short, but the general conclusion is nevertheless clear: 4/5ths of the NT machinery is located in the North Atlantic area. And this would become even more pronounced if one included the EEC and EFTA groups mentioned. Hence, it is difficult to escape the conclusion that this structure is very similar to the colonial pattern, with a center located in the world North-West, so richly endowed with

superiority-complexes, spreading out to the world periphery. This not only means that the power center of gravity is located in the North-West, but the invisible continent is also anchored there in other ways. The whole conception underlying NT will have a North-West color or imprint. Dominant personnel will be taken from that region, sources of finance will have to be found there, and so on. However, one does not have to see this merely as a deliberate, macchiavellian plot to engulf the rest of the world, using NT as the machinery of neo-colonialism just as much as T was used for colonialism, with a chain of bases and supply points reaching out to the colonized periphery. One can also see it in terms of the post-industrial North-West having to expand to make the neo-modern socio-economic system meaningful at all.

However, there is another aspect to this pattern that should be pointed out. In the rich and capitalist North-West there is one group of nations that probably benefits particularly from the development of the invisible continent: the small nations. If we calculate INGO membership per one million population, and exclude territories with less than one million inhabitants, the ranking list is as follows:

Table 5. The first nations in terms of INGO/capita and IGO/capita.

Rank	INGO/capita	IGO/capita
1	Israel	Panama
2	Norway	Costa Rica
3	Switzerland	Nicaragua
4	Denmark	Mauritania
5	Finland	Liberia
6	New Zealand	Paraguay
7	Panama	Central African Republic
8	Ireland	Israel
9	Uruguay	Norway
10	Austria	Honduras

The two lists are quite different and the reason simple. There are many IGOs in the world today to which a nation simply has to belong in order to be a nation; hence the nations on top of the list are about all the very small nations. That does not mean that we do not have the same post-colonial pattern in the IGO system, even for UN specialized agencies, none of which has a headquarter in East or South - headquarters are either in the military organized West or in nations "neutral to West". But it does mean that the whole world is taken in in a way that is not the case for the INGOs. INGO membership presupposes a certain social structure, above all developed and capitalist, and this is clearly reflected in the list.

It may be argued that the absolute number of memberships is more significant than the relative number per million inhabitants, but they both are. Thus, it is not unreasonable to assume that with a constant number of memberships the smaller of two nations is more penetrated, more people are affected, the invisible continent is more visible. And this brings us to the important perspective that the invisible continent is the continent the small, developed and capitalist nations try to colonize; particularly since all other continents have to some extent been colonized by the big powers, capitalist or socialist.

The importance of this factor, and the validity of this general hypothesis, can be further appreciated by studying

Table 6. No. of International Officials per Million Inhabitants, 1954*

1. Switzerland	86	6. France	22
2. Belgium	55	7. Norway	19
3. Netherlands	42	8. United Kingdom	16
4. Denmark	25	9. Italy	9
5. Sweden	23	10. North America	4

* International Associations, Vol. VII, no. 2, February 1955.

Although the site of the organization definitely is an important factor here, it is an important indicator of the extent to which small, rich nations have made use of this resource.

But it is also quite obvious that numbers are not enough here. It is an indicator: if the NT system grows as envisaged in Table 2, there is little doubt that it gains in salience. The growth in number of cars would not in itself be sufficient as an indicator of how dominant cars are as cultural themes: socio-psychological investigations would also be needed to say something about the grip cars have on people's minds. And the same with NTs: we do not know to what extent there is real identification with the NTs. This is probably a function (but not a simple linear one) of the extent to which NTs really satisfy perceived needs, and even can start competing with the T system in so doing. And if this competition really gets off the ground to the extent that T is threatened, how will it hit back in efforts to control and possibly stifle T growth?

All we can say where this is concerned is the rather trite conclusion that for the last decade of this century there will be three

possibilities when it comes to relative salience:

1. NT weaker than T in salience
2. NT equal to T in salience
3. NT stronger than T in salience

We shall now turn to the basic problem of peace, in both meanings of that word, for all three possibilities, and in that order.

3. Non-territorial actors and peace

The question is now what influence in general this growth, barely started, of the "invisible continent" is going to have on the problem of peace, both in the sense of absence of violence and in the sense of presence of social justice. That the NT system will, by and large, affect development in the sense of economic growth positively is probably beyond doubt: if anything permits economics of scale - not only of the systems of production and consumption in the more narrow sense, but of the systems for circulating information, skills and manpower - this system does.

We shall discuss this problem in three separate sections, under the assumption that NT is less, equal or greater in salience than T. Needless to say, this is a very gross way of characterizing the international system - or the world system as it will have to be called when international relations decrease in relative salience. For one thing, at any one point in time there will be some regions in the world where the NT system has penetrated so far that one is already in the third phase, other regions will be in the second phase and in the first phase, and there will be regions where the NT system is virtually non-existent (although it shall be difficult to find a region where some major US dominated BINGOs, producing cars, gasoline or at least Coca-Cola does not have some degree of penetration). But by and large we assume that the development is in the direction indicated by the phases, all over the world, only that the development is very poorly synchronized, and that this asynchrony is in itself a major factor on the world scene.

3.1. Non-territorial system lower than the territorial system in salience.

This is the system we have today, and the question is how it can be improved from the point of view of peace theory - assuming that the

territorial actors will still be the major foci of decision-making and that NT will to a large extent still depend on T for their existence. They may be granted some extra-territorial rights, but they will still be controlled by T and be financially dependent on national organizations, governmental or non-governmental. In this general setting NT will continue to grow and has ample opportunities for growth, but undirected growth will not in itself change the world structure in a direction that favors peace automatically. For that to happen new NT organizations have to be created with more relevance in this particular field of peace, old and new NT organizations have to penetrate more deeply into the T system, and this entire NT system has to be more symmetrically distributed over the T system. We shall look into these three points in some more detail.

As to new INGOs a suitable point of departure is the already existing international organizations of parliamentarians and international civil servants. These INGOs unite people with a particular direct concern with peace problems, and although the participation as usual is very asymmetric in terms of the T system the former is undoubtedly an efficient channel of communication and the latter an instrument for the internationalization of a real world administration.

But much more could be done along these lines. World perspectives will be the cause as well as the effect of world movements and world political parties. The general formula here is, of course, that sub-national movements find each other and create an international organization, as conservative, liberal, socialist and communist parties to a large extent have done. But this is still only an NT coordination for T action: the parties are active in an institutionalized form only at the national level. The perspective changes completely when such INGOs can act in an IGO setting - as to some extent they do in the European Parliament and the Council of Europe. Hence, a basic problem is to find institutional settings within which world organizations can act, and one general formula would be to extend the system of "consultative status" tying professional INGOs to the UN specialized agencies and ideological INGOs to the UN itself. But this system will only become effective when INGOs are called upon to do some real decision-making - and that belongs more to phases II and III to be treated below.

Whether one likes it or not an NT infrastructure will continue to grow, preparing the ground for a real Weltinnenpolitik, to use von Weizsäcker's apt expression. The informal world movements will probably prove to be much more important than the formalized movements

where this is concerned: the (world) Hippie movement, the New Left, the anti-Vietnam movement and other youth movements, are good examples. We say "youth" because these movements are based on persons who are highly explicit in their ideological orientation precisely because they are low on occupational identification. They are preparing for occupations, but statuses such as "youth" or "student" do not command lasting attention and organizational potential because they are transitory so that the turn-over is too high. But this may change: youth may start working earlier and people may study at later stages in their lives. In this phase, however, this type of organizational growth must be seen as preparation for a later stage when such informal movements can act as direct pressure groups in relevant global decision-making institutions.

Hence, of much more immediate importance would be organizations tying together people occupationally concerned with the politics of peace and war. More concretely, we are thinking of international organizations of

heads of state
heads of government
foreign ministers
defense ministers
generals and other top military personnel
ambassadors and other top diplomatic personnel

This may look strange because one is used to conceive of these statuses as highly competitive, playing zero-sum games against each other. But this is a very partial vision indeed.

First, it is well known that such organizations are being developed every day on a regional and sub-regional basis. This is partly because of "opposite number" diplomacy: a ranking decision-maker in one country seeks his opposite number in another country rather than using the cumbersome road often involving two foreign ministries and two embassies. Such contacts may start bilaterally and ad hoc and end up in a multilateral and institutionalized form, as with the Nordic meetings of foreign ministers and so on.

Second, it is of course trivially true that such informal or formal organizations derive much of their significance from the circumstance that they define (sub-)regional actors, to some extent engaged in zero-sum games with other (sub-)regions. But not all political games are of that type at the world level: the very existence of the UN is a demonstration of this fact. And even if they were there would be

some need for regulation of the competition and for direct, efficient channels of communication to increase the level of predictability in the system. Summit meetings serve this function, to some extent, but they also preserve the feudal structure of the world by facilitating interaction at the top of the international system, among big powers. For that reason summit meetings (including one or more of the three top statuses on the list above) should be really universal and institutionalized - for instance linked to the opening of the General Assembly every year (and not only to random head of state funerals, although that no doubt also may be useful).

Third, there is a more subtle reason why such organizations probably will proliferate in the near future: as a response to the rapid growth of the NT system. General-secretaries - the heads of government (presidents being the heads of state) on the NT continent - will easily find each other because this type of interaction is the sine qua non of their existence. In the near future the world will probably see the first clear signs of general secretaries pitted against prime ministers, almost forcing a tighter coordination among the latter. They are going to have common interests in their relations with the NT system, perhaps even in fighting it in the first phase after they wake up to discover that the baby created to serve T interests has outgrown many of its parents. The adequate response to the NT challenge, hence, will be continued growth of the NT system - one more indication of how invincible this system is, because it is the only system compatible with the technological infrastructure in communication and transportation.

Of equal significance would be institutionalized cooperation between military and diplomats in all countries. The World Veterans Association is an approximation to the first, the Quaker seminars all around the world for diplomats a very informal but significant start of the latter. But much more can be done and in all probability will be done to give an organizational basis for articulation of their common concerns. Military people all over the world can meet on a basis of shared resentment against "civilians", They can define civilians and politicians as ignorant and develop a certain professionalism around a nucleus of arms control (not disarmament) ideology: if it only were left to us there should be no problem, we know how military systems work. Moreover, in a world that somehow will have to be headed for arms control and disarmament, sooner or later, military people will have extremely difficult and often also humiliating transition problems to face - and this will probably also drive them together. There will

be a premium on military from countries with experience in demilitarizing armies, giving them increasingly civilian functions.

Diplomats will have corresponding problems. As NT grows at the expense of T bilateral diplomacy will recede into the background and multilateral diplomacy will be on a constant increase in salience. Many of these problems will be handled by the foreign ministries that will gradually have to transfer personnel from the bilateral to the multilateral sector, reducing the size and number of embassies and increasing the size and number of delegations to IGOs. This will mean that an increasing number of diplomats will have their horizons extended from a bilateral to a multilateral view, and some of them may de facto, if not de jure, become rather like international civil servants. Thus, they will have trade union problems in common and they will have a gradually increasing communality in their views on world affairs, or rather: their views will tend to be less correlated with national background and more with other factors (personality, experience, ideology).

This leads us to the possibility of creating more IGOs with direct relevance for peace and war. Since this will be elaborated elsewhere we shall not go into much detail here, only mention that the following organizations, to our mind, seem particularly relevant:

- a system of regional security commissions, parallel to the system of regional economic commissions, under the UN
- a UN arms control and disarmament agency,
- a UN space agency, UNSA
- a UN space communication agency
- a UN ocean floor agency - the latter three partly to see to it that space, space communication and ocean floor are demilitarized, at least below an acceptable threshold, partly to see to it that the benefits from these activities accrue to all mankind, and partly to secure for the UN independent sources of income (that will be spent, however, in accordance with standard UN procedures).

All this is within the UN system. But the UN, with its Security Council and generally strong big power dominance not only reflects, but also to a large extent maintains a status quo in the international system of stratification of nations. Hence, as will be argued extensively elsewhere, there is a need for:

- an organization of non-aligned countries (to challenge the bloc system)
- an organization of poor (often formerly colonial) countries, (to challenge the world distribution)
- an organization of small countries (to challenge the system of big power dominance).

These organizations would not be universal, nor regional in a geographic sense, and consequently cannot be accommodated inside the UN system. There is also the important argument that the UN system tends to gloss over and usurp these important contradictions: UN becomes to a large extent an instrument of bloc politics, of the rich nations and of the big powers. This is certainly not an argument against the UN, but an argument in favor of organizations to supplement the UN for efficient articulation of basic conflict, for new power groups to emerge unimpeded by the status quo orientation of the present system. Of course, these groups are already emerging, to some extent: the Bandoeng, Cairo and Beograd conferences are examples of ad hoc forms of an organization of non-aligned countries, the Habana-based Tri-continental and the Algiers group of 77 (but certainly not the entire UNCTAD system) are examples of organizations of poor countries - but organizations of the third type do not as yet exist. This would be the type of organization where countries, like the Dominican Republic and Czechoslovakia would be side by side, joining each other in a shared interest to be protected against protection from certain big powers. The very circumstance that their situation was handled by the respective big powers inside a regional framework dominated by them (the OEA and the Warsaw Pact organization), to the exclusion of the UN, is a solid indication of the need to develop new instruments in this sphere.

In short we are arguing both for associative and for dissociative policies, both for integrating the international system by strengthening the UN so that it can offer more services and enter more effectively in the security field, and for disintegrating the international system by more organization of the uncommitted, the poor and the weak. We do not see any contradiction here, but are also aware that most people probably do: most people tend to be either "integrationists" favoring the former course of action, or "disintegrationists" favoring the latter. But to take a nation level parallel: in certain stages of social development there is value both to trade unions for workers only, pitted against employers union - and to governmental organizations where the two parties meet. It may well be that the course of development leads towards the elimination of one or another of the groups (socially, not necessarily biologically), but that is another

dimension of the total system. The basic point here is that a necessary condition for the poor and the weak to attain autonomy and identity, is to do it alone, to be without strings, without crutches, without aid - and then, on a basis of equality, to reestablish ties with the rich and the strong (who are then less rich and less strong since these are relative terms).

Let us then look at the possibility of more penetration of the NT system into the T system. The first suggestion that may come to one's mind could be the following

establishment of a UN embassy in all member states, with sections for the various UN and Specialized Agencies program in that country, and a UN ambassador from a different region,

internationalizing the moribund bilateral corps diplomatique by making the UN ambassador doyen of the corps diplomatique, ex officio and using the CD, gradually, as an instrument for articulating UN agenda points concerning the host nation in a multi-lateral form, not only bilaterally,

penetration of UN personnel into the local executive and legislative, e.g. as observers on foreign relations committees, as personnel in bilateral technical assistance agencies and even in foreign ministries - gradually internationalizing the "foreign affairs" of a country.

The rationale behind this kind of proposal is simple. In past centuries, with a relatively low degree of mutual interpenetration of nations and a low level of interaction in general, "foreign affairs" were, perhaps, more bilateral in their consequences and above all less significant, affecting a lower fraction of the lives of fewer people than today. Today we are faced with the anomaly that decision-makers in a democratic country discussing domestic affairs would have the representatives of parties concerned built into the decision-making machinery. A parliament discussing communication and transport programs would do so with due weight given to the districts affected (or not affected) by the program. But a parliament discussing a technical assistance program in communication/transportation can still do so without building directly into the decision-making machinery the parties affected, i.e. the "developing" countries.

To many the idea of having the receiver countries permanently represented on the boards of the bilateral TA agencies with a right not only to listen but to speak, and not only to speak but to vote, might seem somewhat utopian. But nothing of this is very utopian. The UN Resident Representative (for the UNDP program) acts de facto very much like a UN ambassador would in some countries, and his staff has

important reporting functions both ways. But the corps diplomatique is not directly built into this, and we feel there should be some possibilities along these lines, particularly because of the factors mentioned above in connection with diplomats. Hence structures of this kind may start developing any year, and there is no reason why all member states should embrace the total package at once. Some countries might go further than others along this scale of UN penetration and although this would introduce certain asymmetries it might still be a highly valuable contribution to the internationalization of foreign policy.

But the NT system does not only consist of IGOs, there are also the INGOs to consider. How can they become more international? One way of doing this is structural, another is more attitudinal, and they can easily be brought to work hand in hand. Thus, the classical way of making an INGO was a weak coordination center for national associations. If not all nations were represented, in the second phase one had to look for organizational bridgeheads into non-member nations. In this case the initiative would come from the international center, but it could of course also come from interested persons in non-member states and from groups in any number of member-states. However, throughout this phase the idea is still to have national associations, although they may be more "chapters" than associations, because the international center is so strong.

In the third phase there is direct membership in the INGO, which then becomes an association of individuals and not of national associations. Obviously, such an INGO may easily find itself operating in a vacuum: there is no other organization at the international level (for instance no IGO) with which it can have institutionalized interaction, and at the national level where such organizations may exist there are no local chapters, only individuals who are connected internationally only. In this sense this type of INGO is ahead of its time: it is an actor in search of contra-actors at the right level of operation which is the world level (not the international level which it has transcended). Of course the INGO will always find some roots in the NT system but generally be too weak to convert organizational investment into real social action.

It is important that this type of structure with direct affiliation (or affiliation mediated through very weak national chapters only) should be combined with a global pattern of identification - for if the basic identification is still at the national level the incon-

gruence between structure and attitude will lead to basic friction. As an example take scientists, both in the natural and the social sciences. With increasing technification of warfare they become increasingly important and relevant to the national cause, and there is a very basic imbalance today between the international nature of scientific research - international teams, published in international journals etc. - and the application of scientific research. In times of crises scientists employed by national universities and academies of science are supposed to rally to the national cause, and may even be pledged to do so by oaths of loyalty (like in Norway, to take an example from a small country without belligerent traditions). For this reason it is so important to work for new loyalty patterns in this field, not tying the scientist loyalty to supposedly value-free science (such a thing never existed and will never exist) but to a more global identification, that "the benefits of his scientific activity should accrue to all mankind, etc." Of course, one organizational structure that would correspond to this would be a UN university (or a UNESCO university, or a proliferation of non-governmental world universities), perhaps even defining national universities (to the extent they want) as national chapters.

The Pugwash Conferences, and the International Peace Research Association are examples of efforts to internationalize the war-peace interested scientist. Such organizations may or may not have national chapters, the important factor is whether the members are dominated by their national values and loyalties or by more universalistic, international loyalties. Scientists are important examples here but they are not the only ones whose work itself transcends national boundaries (if not necessarily national interests). This is also to a large extent the case for businessmen, so let us turn to the BINGOs for a moment.

And that can be done by entering the third point of our discussion of this first phase: how to guarantee a more symmetric distribution of the NT system over the T system. This is a general problem: the NT system is terribly biased in favor of the North-Western corner of the world and thus serves to preserve and maintain a certain structure with highly feudal and exploitative aspects. The question is what to do about it.

As to BINGOs the typical pattern in the multi-national corporation is a strong initiative from one nation (notably the USA and the UK in which the 8 major multinational corporations, handling enough money

to be located among the 32 richest nations in the world), establishing daughter companies in other nations. Later on they may gradually approximate equality among the national companies, but there may be considerable lag, and the predominance of the mother "branch" may carry over into all later stages both in terms of input and in terms of output. That this is problematic is more than well known: the BINGO may be so strong that decisions taken in a BINGO meeting may affect smaller and even bigger nations significantly, as an exogenous variable of the same magnitude as basic endogenous variables, but not easily controlled by the planners and the decision-makers in the host nations. Of course, BINGO executives know this - often by learning it the hard way - but that knowledge is not necessarily translated into adequate organizational structure.

There are two basic approaches to the problem of symmetry here, both of them aiming at reducing the predominance of the North-Western corner of the world. One has to do with the territorial location of the central focus of decision-making, and the other with the ultimate power over that decision-making. The two approaches are heavily related since it is obvious that territorial location means a lot: the host country will contribute not only site and housing, but also very often personnel, patterns of work, basic concepts of work, sometimes capital and the power that flows in its wake, and so on.

As to location the NT system is extremely biased, but much of that can be recovered if there is a serious concern for the problem. In general, it will not be so easy to move old headquarters, nor is it so crucial. New headquarters, however, should as much as possible be established in the East and in the South - and as communications become better and better old objections should decrease in significance. This is particularly true for new specialized agencies under the UN, such as the examples mentioned above, and, e.g., an agency for housing (which is today not handled by any one UN agency). Potentially the number of UN agencies may become very vast, especially if more non-UN IGOs are converted into such agencies as they very well could: the borderline is often an artificial one. There are also other solutions than symmetric distribution of location, and the classical ones would be rotation (not very practical) and the creation of a world federal territory. The latter is a much more attractive solution, provided that territory were located outside the North-West (thus, West Berlin would not be a good idea here, although it might very well function as a site for all-German and all-European cooperation agencies). It may well be that some important present or future conflict over .

disputed territory can be solved by federalizing it and putting into it a high number of NT organizations.

In this connection it should be emphasized that much of what has been lost so far in terms of asymmetry can be regained by focussing on the super-INGOs, super-IGOs and super-BINGOs. They are bound to come in increasing numbers, and since they will control to some extent the lower levels of organization it is highly important that their location is more fair to the needs of symmetry than the distribution of the lower levels. And this also applies to the second basic approach to the problem of symmetry.

According to this approach location is not the essence of control, control itself is. If one wants symmetric control of IGOs, INGOs and BINGOs, then the lasting solution is not symmetric territorial distribution, but symmetric power distribution. It is rather similar to the problem of land reform: the old model was equality by means of territorial distribution according to the one family-one farm principle; the more modern approach is in terms of distribution of power to decide over enormous farms - in other words, industrial farming with industrial democracy.

In the field of BINGOs this is referred to as "co-production", whereby two countries enter an agreement to co-produce something. The "co" stands for symmetry, although often more in theory than in practice. Often an ad hoc organization is created to manage the co-production in order to start from scratch with something that is sufficiently symmetrical. Thus, one form is bilateral, ad hoc, IGO managing a BINGO between the same countries - although we should use these terms for multilateral relationships only.

However, our point here is rather the possibilities of generalization implicit in this scheme. The general principle would be to concentrate ultimate power over the NT system in the most representative, most symmetric NT organizations. This is probably the way it will have to develop anyhow, so why not anticipate it?

There are many possibilities. In the first phase there will probably be a lot of cases where BINGOs are put under IGO control: the multilateral corporations are internationalized just as the national corporations have been nationalized before them. Exactly which forms this will take is not so easily predicted. But one beginning could be a very small tax levied on all BINGOs, to and by the UN, using the rationale that these BINGOs operate on the international level and

benefit from general peace and prosperity on that level. In other words, the basic point would be that the operation of a BINGO concerns not only the nations in which daughter or sister companies (why these feminine terms, is that in order to appear more innocent?) are located, but is of basic interest to the whole international system.

In the second phase there will probably be a lot of cases where IGOs are put under INGO control - although there will also be instances of the opposite. In short, all nine combinations of IGOs, INGOS and BINGOs being controlled by IGOs, INGOS and BINGOs could be explored - all these avenues will somehow have to be tried. But we focus on the "INGOs controlling IGOs" pattern for the simple reason that this is our model of democracy: people shall control government and not vice versa, at least ultimately - so associations of people should control associations of governments. Thus, one is led gradually toward a world government model with world-wide elections, based on world-wide parties (all of them INGOS, of course) to a world-wide parliament tied in with a world-wide executive (an improved version of the UN secretariat and specialized agencies).

However, this is only one pattern, and so many others are possible. Instead of INGOS controlling IGOs controlling BINGOs it seems just as descriptive of our situation today to say that we have BINGOs controlling IGOs controlling INGOS. At least both trends are quite discernable in the European Common Market system and it would be a fascinating task for a political scientist to try to disentangle them and assay their relative significance. But all of this in a sense belongs to the second and third phase where NT growth relative to T strength is concerned - all we can say here is that this first phase will witness, and in our mind should witness, the first efforts to control for the asymmetries in the system of non-territorial actors by means of new patterns of control, transcending the territorial actors completely.

3.2. Non-territorial system equal to the territorial system in salience.

This is a system that will some time come into being. Under this condition the three basic patterns of influence are about equalized:

NT commands about as much loyalty (normative power) as T
NT renders about as much services (utilitarian power) as T
NT has about as much force (coercive power) as T

Obviously nothing like this will come into being simultaneously all over the world, nor is it so essential that it does. Moreover, these three aspects of power will not be equalized simultaneously. For instance, since most T-oriented people probably are prone to believe that ultimate power is coercive power they will not surrender this kind of power monopoly easily - especially not when they see that NT commands more and more loyalty and renders more and more services to increasing fractions of the world population. They will not understand that ultimo ratio regis is not necessarily ultimo ratio secretarios generalis or they will understand this too late.

Hence we proceed on the assumption that there is some kind of equal balance between T and NT where loyalty is concerned and that this loyalty is not merely an attitude but is tied in with services. The individual exchanges loyalty for services in both directions - and there will be intermediate phases where he will be overrewarded by T and underrewarded by NT. What does all of this mean for the prospects of peace?

It is difficult to tell. More particularly, there are theoretical approaches to the problem that lead to rather different results. In this future world, for instance, a man will share his loyalty between his own government and people with whom he identifies in some other country because they belong to the same race, ethnic group, class or association in general. The problem arises when his confreres in the other country are suppressed by the government in that country. To this man non-intervention now becomes meaningless. Whether his own government joins him in his effort to help or not is not so important. Whether it takes the form of governmental intervention or rank-and-file infiltration is of less significance - he cannot refrain from doing something. The whole doctrine of non-intervention is based on the assumption that T dominates in salience so that governments can hold their people at bay with soft, normative strings (it also presupposes bad means of communication and a generally low level of political consciousness and information). In short, in this phase the doctrine of non-intervention will have to go or take on new forms - it cannot survive when patterns of loyalties work completely against it. It shall be interesting to see how international lawyers will tackle this problem.

In other words, a balanced criss-cross of loyalties may in some cases break down to impediments of the past against intervention and infiltration. But it is also clear that it may lead to a higher

potential for communication, mediation/arbitration, for neutrals who can withdraw and serve as bridges between the belligerents etc. than when NT has very low salience. Just as wars to help brothers abroad may increase, wars against other countries as a whole will probably decrease for the simple reason that they would also be wars against people with whom there is solid identification because of NT bonds. So the conclusion is that this phase will be dominated by other types of wars and we are there already: international relations are strained by wars of liberation rather than wars of conquest, and the old T system fails, of course, to come to grips with the realities of this world.

But there are, of course, many other aspects to this world. First of all: all the trends we have mentioned in the preceding section will continue, mostly at an increased rate. Sooner or later this will lead to a stronger consolidation of the relations between the IGOs, INGOs and BINGOs. More particularly, we assume that in this phase BINGOs will be much more controlled by IGOs than in the first phase, and also that IGOs will be much more controlled by INGOs. And one way of obtaining some of the latter could be as follows.

There are many ways of conceiving of a future United Nations and particularly of the General Assembly and the Security Council. To us it does not seem unreasonable to assume that in this phase the trade union of small powers will have been able to reduce the power of the remaining two big powers, the USA and the Soviet Union, considerably. Today we have some kind of upper-house-lower house system in the UN: one, the Security Council based on ascription (bigness, as in classical national assemblies all over the world), and one, the General Assembly, more representative. The upper house has become diluted and of the original five one is represented by some poor, hated by tenacious, grand-uncle and two have lost most of their property and are frequently devaluating their currencies. There are two to go, and pax americana is being curtailed effectively as a system and pax sovietica, possibly even more oppressive, will probably be exposed to tremendous strains in the 'seventies and the 'eighties. Give or take a decade or two and the veto system will have to go - 1789 will ultimately come to international system.

But there is a need for a two-chamber system in the UN because the world is a complicated one; it is certainly not uni-dimensional. In this phase, hence, one might think in terms of a General Assembly with two chambers, one representing nations more or less as now, and

one representing international organizations. In other words: one chamber for T, one for NT. This contrasts with the most current proposal at present which is to have one chamber as now and another chamber, corresponding to the House of Representatives in the US Congress, representing people more directly, in proportion to their number (e.g., with one representative for each million inhabitants). But the trouble with that proposal is not that it is potentially more democratic, but that it also is basically territorial, assuming that people basically identify with their territory. Hence, an alternative model might be as follows.

One chamber represents T, and that leaves us with two problems:

1. Are we to continue with the old one nation-one vote system, or should we move to one man-one vote system? In other words, should we accept one of the many proposals for weighted voting?
2. How shall the delegations be constituted - shall we continue with the old pattern that they are appointed by the executive and/or legislative branches of government, or should we try towards more democratic procedures encouraging direct election for participation in the UN delegation?

If we combined these two proposals we would in reality have a world parliament, since this could hardly happen without the crystallization of present and future formal and informal INGOs into political parties. But both will not happen at the same time, the changes will be both traumatic and dramatic, and certainly not synchronized for the world as a whole.

But we are right now more concerned with the second chamber representing NT. This smacks of the corporate state which to Europeans and Latin Americans alike has rather unfortunate connotations. However, it looks as if we have to leave that aside since we simply cannot go on forever pretending that territorial foci dominate all other in relevance and salience. Hence it is a question of building on the existing institution of INGOs with consultative status of various categories. The nucleus exists already and could be expanded and given more formal power. Like for the inclusion into the UN of mini-states it would arise the general problem of standards for inclusion, and if seniority and level of crystallization are accepted as criteria the system will be severely weighted in favor of existing establishments of all kinds - in favor of the topdogs in the topdog nations to express it briefly. It is highly important to find some way of articulating the interests expressed in very new and very informal INGOs.

In short, in this chamber the principle of voting would be one organization-one vote. It may be objected that this will indirectly give multiple votes to individuals with multiple memberships and zero votes to those who are members nowhere - and this is in a sense true. But the world has had tremendous capacity so far for accepting unequal de facto voting distributions, the UN itself being a major example. Moreover, nothing has been said about the relative power of the two chambers, and here a host of possibilities are open to us. We would be inclined to think that in this phase the NT chamber should perhaps have more than a consultative, deliberate role but somewhat less than equal power to the T chamber.

A third aspect of this world is the real power some of the NTs will now start acquiring. We are not thinking so much of the IGOs since that is rather trivial, but of some of the INGOs. The point is simply this: just as a national trade union organizing workers in some key occupation (e.g., concerned with communication or energy) can paralyze a modern nation and throw it back to a traditional stage in a well organized strike, an international organization will in some time be able to do the same to the international system. More effective than international associations of longshoremen will probably be such organizations as the international pilots association. Their effort to strike out against the Algerian government during the 1968 capture of the El Al plane is a telling foreboding of things to come. The question is to what extent these strikes will be for peace and not only for higher salaries or in the interests of certain nations (dominating the INGOs) rather than others - and this latter point underscores again the importance of equalizing the power over the NT system.

Thus, what would be the impact of a world-wide strike of the future INGOs of heads of state, of heads of governments, of foreign ministers, of defense ministers, not to mention of diplomats and military? The latter seems somehow to be directly related to the prospects for peace, but perhaps too utopian to hope for in the near future. More likely would be the emergence of other forms of defense, non-military forms, based on non-cooperation and civilian defense etc. But that belongs perhaps even more in the third phase.

3.3. Non-territorial system higher than the territorial system in salience.

This is a world hard to imagine for many, but not hard to imagine for people living in nation-states where district identification is

quickly approaching zero, where territorial mobility is high, and identification with organizations and associations correspondingly high. This world is that nation-state writ large. Actually, we already have a system in the world that can serve as an illustration: India. As a nation-state this continent is badly integrated, but as an international system, and it really is an international system, it is highly successful. Of course there are local protests against super-system penetration, and these protests might conceivably one day accumulate and lead to a new and loose India, more reminiscent of the world as a whole. But the present India is certainly not only cut through by state borderlines, but more so by overriding loyalties to the total system and by horizontal loyalties that follow caste lines (the castes are possibly the first trade unions in the world), by ideological and occupational associations and so on. Hence, one way of studying mechanisms for sewing together an international system is to study India.

In this system, to stick to our image of the two-chamber UN, a chamber representing the territorial subunits would disappear. That would leave us with two possibilities: to develop that chamber into a world parliament based on world political parties and movements, and the chamber of organizations. But this is not a question of either/or. Inside the nation-states of today there will probably also arise a necessity to give more of a chance for the organizational/associational system to articulate itself, not only the old territorial system based on district representation. Hence, one might think in terms of retaining two chambers, but using nations in the first chamber only as administrative subunits to organize locally world-wide elections. Another possibility would be to proceed as outlined above under phase II, but giving all real power to the NT chamber, using the T chamber (which we then assume to be of the one nation-one vote variety with appointed delegations) as an ornament, something like the House of Lords.

In this system war as it is known today will be considerably less probable simply because it is less feasible. There is a very simple reason for this: people live together in such a way that friends and enemies are too spatially mixed to permit the free, unimpeded use of explosives. Explosives, from the smallest dum-dum bullet of that kind to the fusion bomb, are effective means in warfare but they presuppose low entropy in the spatial distribution of people: a bomb is to be placed at points of maximum enemy and minimum friend density. If such points do not exist or are not satisfactory because of the growth in

geographical entropy resulting from general NT growth bombs simply cannot be used. But people fought religious wars under such conditions, one can use cloak-and-dagger techniques, one can use selective poisoning, and there is the possibility of placing homing devices for mini-missiles on the backs of enemies - and so on. We are in no doubt that military technical ingenuity, to which any number of scientists and technicians seem to be willing to prostitute themselves, will be able to overcome this setback to the "bigger bang for the buck" enthusiasts. "More kill for the buck" will simply have to be done without so much "bang".

The question is, however, whether this will not offer a relatively good basis for non-military defense, since that type of defense by its very nature is social rather than spatial. It is not a question of keeping territory clean from enemies, but of retaining values and forms of life and organization. But this point will not be developed here, but in a future article on the NT system and peace-keeping.

Our general conclusion would be that in this world the loyalty entropy as well as the geographical entropy are both so high that we very much doubt that major world wars will be feasible. There will be local violence, and it may well be that this world will be so complicated and so taxing on individuals (because the simplicity of spatial organization is lost and because functional organization is much more abstract) that there will be more micro-level violence. In other words, it may well be that what we have gained at the macro-level will to some extent be lost at the micro-level. Nevertheless, if a major world war leading to total elimination or major setbacks of human civilization would be the result in any system with low entropy this may not be too high a price to pay.

In this world there will sooner or later be a transfer of all kinds of power towards a single power center. There will be some kind of world government, in other words - for instance based on the development of UN that we have traced in the various phases. According to this model some world power center will have to serve as a repository of arms of all kinds, and a number of transfer models could be spelt out. And then we are, in a certain sense, back to the beginning again: instead of a set of nation-states we have a world that is organized as one giant nation-state, a world state. This is a conclusion also arrived at by many others, but the standard scenario is to see this process in terms of city-states that coalesce to nation-states, nation-states that coalesce to super-states (regions), and super-states

that coalesce to a world state. Our point is that this scenario is

1. not very probable - because there will also be disintegration and secession, and the NT growth does not respect territorial contiguity and will be much quicker than the coalescence into super-states anyhow, and
2. not very desirable - because the last step towards the world-state is a very dangerous one, because the super-states will have important grievances against each other and because super-states have a tendency to fight super-wars.

We feel that the present scenario is just as or more likely. And for that reason we feel one should from the very beginning stop thinking in terms of the "international system" because the term itself has a T connotation, and talk about the "world system".

And then it remains only to say that this world system depicted here is also one with tremendous opportunities for structural violence, for a feudal order organizing the topdog, for alienating the man in the street, often left behind because he is still busy identifying with the foci of the past, with the foci left behind by the center of the world system generations ago. And this is perhaps the major challenge to any such vision of the future: how to reconcile it with the demand and the goal of general and equal participation.

ETHNIC CONFLICT AND CLASS CONSCIOUSNESS:

A Case Study from Belgium

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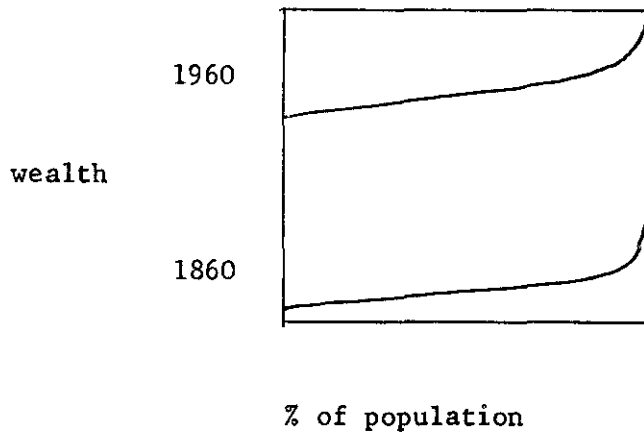
1. Introduction

The Marxist theory of capitalist society maintained that a dialectical conflict existed between capital and labour, such that the greater the surplus produced by capital, the greater the poverty of workers would come about as a direct and necessary consequence. Marx hypothesised that this process of the pauperisation of the masses would lead to the consciousness of workers as a class and that the class conflict so produced had revolutionary implications which would eventually bring about the downfall of capitalism.

In the majority of advanced capitalist societies, the masses have not been pauperised and they have not become politically conscious as a class either. However, the absence of one phenomenon does not necessarily explain the absence of the other. There is no reason to believe that if the masses had become pauperised, they would also have become class conscious. The Marxist theory therefore produces a number of problems that demand explanation and there is no shortage of these:

Marx failed to predict the degree to which capitalism could raise the standard of living of the masses without altering its basic structure. In the last hundred years, the distribution of wealth in capitalist societies has remained stable. A small elite still owns and uses most of the surplus value produced by labour and labour has not increased its slice of the cake in any significant way. In fact it has been the role of the trade unions to fight for the slice of cake that the masses have traditionally received and this role is now institutionalised in the productivity agreements which form the normal, bargaining process in industrial relations. If the distribution of wealth has not changed, the absolute amount of wealth available for distribution has increased by whole orders of magnitude. It is true that all classes in modern capitalist societies have "never had it so good". This fact by itself fails to explain why the masses are apparently satisfied with what they have and do not struggle as a class for a bigger slice of the cake. In order to explain this, it is necessary to theorise about the subjective image of the system that the masses believe in. The following table indicates in simplified form what has happened to the amount of wealth over the last hundred years and how it has been distributed amongst the population. It

TABLE 1



appears that the masses are more influenced by increases in their absolute wealth than in the relative distribution of total wealth. In some capitalist societies, the distribution of wealth has actually become more unequal than it was one hundred years ago and in relative terms, the masses have indeed suffered pauperisation. However, it was absolute pauperisation that Marx referred to and that has not come about; nor is there any predictable likelihood that it will come about in the conceivable future. So Marx's theory of the formation of class consciousness apparently falls on this count alone, though the perspective remains fruitful even if only to produce an accurately pessimistic conclusion about the chances of revolutionary change in many advanced capitalist societies.

A second reason that is commonly put forward for the failure of the Marxist model is the nature of the Communist Parties in capitalist societies and the reactionary role that they play as a result of their ties to Moscow with its policy of maintaining socialism in one state.

Another reason stems from the empirical finding that it is not the poorest who are necessarily the most revolutionary but rather those sections of the population that have been exposed to unfulfilled expectations. At different times this might be different groups but evidence indicates that the most radical demands are made by a working class when a period of rapid absolute improvement comes to an abrupt end, not when absolute wealth deteriorates year after year. The latter process

is more likely to produce a fatalistic and anti-political response which in the last analysis is determined by the day to day problem of fulfilling basic needs like getting enough food to live, etc.. The least revolutionary and class conscious group that can be imagined is a starving and uneducated group. Both these reasons would lead one to suppose that if the masses had become pauperised by the apparent dialectic of capitalism, this would not in itself have led to a revolutionary potential - far from it, the potential might have grown objectively smaller as a result of this.

All these reasons for the lack of class consciousness in advanced capitalist societies pale into insignificance when compared with another explanation which has been relatively ignored. It is highly significant that those societies that have very little class conflict exhibit a great deal of ethnic conflict. In the U.S.A. there is race conflict, in Ireland there is religious conflict, in Belgium it is language, in Sweden it is racialism - in fact these societies exhibit every conceivable type of social conflict except overt class conflict. Why? Is the correlation accidental or is there a causal relationship? This paper examines the hypothesis that ethnic conflict prevents the formation of class consciousness and integrates capitalist societies, that in addition, ethnic conflicts are consciously manipulated by elites to serve this end. It focuses on the relation between the language conflict and class conflict in Belgium. As such, it is part of a wider study which includes an analysis of religion in Northern Ireland and race in Rhodesia.

2. Some Belgian History

After the 1848 revolutions, during which the Belgian bourgeoisie retained full political control of the state, Marx called Belgium the paradise of capitalists. In many senses it still is, but in order to investigate the reasons for this, it is necessary to go back to the decisions taken at the Congress of Vienna in 1815. The Belgian Provinces were at that time made part of Holland by the great powers. Holland was predominantly under Protestant control and one of the first consequences of the unification involved the persecution of Catholics; in 1824 many small seminaries were suppressed. This policy was followed by the replacement of French by Dutch as the

official language. This alienated the aristocracy and the bourgeoisie, most of whom were Francophones.

The revolution in 1830 was nationalist and bourgeois. Although it was the workers who defeated the Dutch, it was the old aristocracy and the rising bourgeoisie that gained political power and established a monarchy in 1831. Shortly afterwards there was a fresh Dutch invasion which defeated the Belgian forces and forced the new king to call on French troops for support. Belgium was eventually given international recognition and protection by the great powers as an independent and perpetually neutral state.

Immediately after independence, Belgium started an industrial boom which was rivalled only by Britain. Much of this was financed by the Société Générale which was founded by the king, primarily to finance the construction of the railways and to prevent Dutch capital from gaining control of the communication system. In order to float the capital, there was a large influx of loans from Britain starting as early as 1836. The pattern of large foreign investments has remained and has had important consequences for the structure and development of the Belgian bourgeoisie. Industrialisation took place under the French-speaking bourgeoisie which came to power with the 1830 revolution and this resulted in the Walloon part of Belgium becoming industrialised first. The easily worked coal mines around French-speaking Liege rapidly became the backbone to heavy industry which was concentrated almost entirely in Wallonia.

The Flemings became very much an underclass during this period, providing a convenient supply of cheap migrant labour as the industrial belt in Wallonia expanded. No significant Flemish movement existed at any stage between the revolution and the First World War. Politically, this period was marked by the expansion of the French-speaking bourgeoisie, much of it dependent on the import-export foreign-financed sector of the economy whilst the bourgeoisie founded on domestic capital remained smaller than in the great powers like France, Britain and Germany. In one sense, Belgium has never had an independent national bourgeoisie whose power derived from its ownership of domestic capital and the implication of this fact is clear - the power of the

Belgian bourgeoisie resides in other factors besides its capital. This is where, first religion and later language fit into the total structure and knit it together. Most of the political issues of the late 19th century were in fact religious, and centred around the organisation of education. This conflict mostly took place within the ranks of the bourgeoisie between Catholics and Liberals, since the franchise was limited to the aristocracy and the bourgeoisie. The Flemings were thus excluded from the political scene altogether and it is significant that the only 19th century Flemish movements were entirely cultural in focus.

Class identifications did not enter until 1880 when the first co-operative movement was founded, and in 1885, when the socialist party which included Flemish and Walloon workers was formed.

By 1914, politics had become a mixture of religious and class issues. In the meantime, the Flemings were beginning to get vocal. Successive laws allowed Flemish to be used in the lower courts in Flanders, and allowed primary education to take place in Flemish. Even so, it was impossible to get any secondary education in the language.

The First World War changed this situation drastically. The German occupation lasted four years. "Various groups soon arose in Flanders which were willing to co-operate with the Germans in return for linguistic and administrative reforms. Collectively they became known as the Activists. In 1916, the German governor-general, Baron von Bissing, acceded to two of their main requests by splitting the Ministry of Arts and Science into Flemish and Walloon sections and re-opening the University of Ghent as a Flemish institution (two reforms which were to be granted again by later Belgian governments). Encouraged by these successes, about two hundred Activist leaders met in a Brussel's cafe in February 1917, to form a 'Council of Flanders'. The following months, von Bissing agreed to their requests that the country should be split into two administrative units. This was done on March 21, with Brussels as the capital of Flanders alone and Namur as the capital of the south." (Huggett, 1969, pp. 39-40)

Although the Activists only gained the support of a minority of Flemings, the Flemish Front Party gained five seats in the 1919 elections. In the same elections, the Socialist Party became part of the Liberal-Catholic coalition and in 1925, the Liberals were excluded and a brief coalition of Catholics and Socialists formed a government. Reconstruction after the war entailed another huge influx of foreign capital, which by now formed a significant proportion of total Belgian domestic investment. In 1926 the Vlaams Nationaal Verbond (Flemish Nationalist Party) was formed under the slogan of "Weg met België" (Away with Belgium) but it tended to concentrate more on nationalist demands within Belgium than partition as such.

The Second World War provoked a large amount of collaboration with the Germans by Flemish nationalists though the German occupation command never tried to exploit the Flemish demands as previously.

After the Second World War, Belgium received \$150 million, in direct aid from the U.S.A. and a further \$518 million under the Marshall Aid scheme all of which created an economic boom but also opened up the country to the increased control of foreign investment. "Since 1959, the biggest prop to the economy has been foreign investments, which are needed, not only to provide more jobs in the economically underdeveloped and declining regions, but even more to maintain the inflow of technological know-how of which the country is deficient, mainly because of its low spending on research and development. No restrictions are placed on the import or export of capital or the repatriation of profits of foreign companies. Neither need any of the company directors or auditors be Belgian; they may all be foreigners and live abroad. There is no requirement that Belgians should own any part of the equity. In fact, the foreign firms are treated just the same as native firms and share all the advantages and inducements provided by the government to stimulate economic growth. Some of these are: subsidies on interest rates, which may be as high as five per cent over a period of five years; subsidies of up to 30 per cent on the cost of investments in buildings; double the normal rate of depreciation for the first three years of business; a contribution to the expense of training workers, which may include up to 50 per cent of the travel and living costs of foreign engineers and supervisors sent to Belgium; and participation of the

Société National d'Investissements in the capital, of the company." (Huggett, 1969, pp. 220-221) Since 1968, the Belgian government has even gone further with these measures and is now willing to provide up to 100 per cent of the costs of new foreign investments. Apart from the foreign control of the economy that indirectly arises from such good facilities for foreign investors, these measures inevitably have consequences for the Belgian bourgeoisie, whose power and control in the total economy necessarily becomes smaller. One sure effect of foreign investment is to undermine the power base of the indigenous bourgeoisie. This is one of the keys to the language conflict in Belgium, one of the reasons why the language conflict is so important to the maintenance of the present power structure.

Recent political history has been complex. Since the Second World War there have been the usual coalitions between the Catholic, Liberal and Social Democrat Parties, all of which have changed their names from time to time and are most conveniently identified as above. For religious reasons, the support for the three main parties has always been differentially distributed between Flemings and Walloons. The Catholic Party is strongest in the Catholic north and is more dependent on Flemish than Walloon votes. For the same reason, the Social Democrats gain more support in the less Catholic Walloon areas than in Flanders. Only the Liberals, who have recently emerged from a fifty year eclipse, gain more or less equal support from both linguistic groups. Even the Communists find more support amongst the Walloons than the Flemings - again because of the dominant Catholicism of the north. The relationship between political affiliation and voting patterns and the two ethnic conflicts - religion and language - is best shown diagrammatically.

Catholic Party (Christian Social Party) 40 - 50% of total vote

50 - 60% Flanders vote	30% Brussels vote	30% Wallonia vote
mostly peasants and industrial workers	mostly bourgeoisie	mostly bourgeoisie* and lower-middle classes

* Wallonia bourgeoisie includes the 5% French-speaking elite

Social Democratic Party (Socialist Party) 30 - 40% of total vote

25% Flanders vote	40% Brussels vote	50% Wallonia vote
mainly industrial workers	intellectuals middle-classes industrial workers	industrial workers and middle-classes

Liberal Party (Part of Liberty and Progress) 11 - 12% of total vote

French-speaking bourgeoisie some lower-middle	bourgeoisie lower-middle	lower middle classes
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Voting statistics are a relatively good measure of political affiliations because it is illegal not to vote. It can be seen from this diagrammatic representation of voting patterns that each of the three main parties is socially heterogeneous. This is most true of the Catholic Party, which attracts support from totally different strata in Flanders, Wallonia and the capital. The apparently greater homogeneity of the Social Democrats is not real because the Flemish and Wallonian wings are split over the federation issue. The Wallonians (with 50% of the Wallonia vote), see themselves becoming the government in a federal parliament of Wallonia and are therefore in favour of the idea. The Flemings see themselves as a minority in a predominantly Catholic Flanders if federation comes about and are consequently strongly opposed to the idea. For this reason, the party is permanently split and cannot even put up single lists of candidates in the elections, where candidates from the two linguistic groupings stand against one another.

The smaller parties that are presently at the periphery of the parliamentary system are either distorted by the language conflict - like the Communist Party - or have their very basis in the conflict - like the Flemish Volksunie, and the Walloon Front Democratique des Francophones and the Rassemblement Wallon. The language-based parties are fundamentally federalist.

There is not a single political party which represents the interests of a single class in the whole country. However, this is not simply because of the language conflict but because of the religious issue as well. Both of the parties that are normally class-based (the Social Democrats and the Communists) gain more support in Wallonia than in Flanders because of the religious issue, though this fact then has consequences for the language conflict of course. The purpose of this discussion of the political parties has been to show that politics in Belgium is frequently and dominantly a matter of religion and language, not class or the distribution of wealth. This is a second key to the permanence of the language conflict and its importance in maintaining the capitalist power structure.

3. The Present Structure

Before looking closer at the social functions of the language conflict, a diversion into some more abstract notions of social control is desirable.

In section 1 it was noted that advanced capitalist societies tend to exhibit ethnic conflict in inverse relation to class conflict and that the dominant pattern is for them to exhibit every conceivable type of conflict except class conflict. First, some general remarks about this type of society. There is ample evidence for significant individual mobility within the middle strata of these societies. At the same time, there is evidence which suggests that entry into the power-holding elite is almost impossible whilst at the bottom of society, there is a similar phenomenon - a 'pariah' group that is collectively identified and denied social mobility either individually or as a class. It is an ascribed as well as an achievement criterion that maintains these groups at the bottom. The members of this group are

at the bottom because they have not achieved mobility and they have not achieved mobility because they are, in the case of Belgium, Flemings. The Belgian bourgeoisie is essentially French-speaking; Flemish peasants and unskilled workers are not seen as part of Belgium society but as a residual category - almost a lumpen proletariat. Inherent in this double - achieved and ascribed - explanation of their position as a 'pariah' group is an important key to their perception of themselves as a group and thus their social consciousness and political potential. Their perception of themselves allows of two possibilities:

1. They are poor and at the bottom of society - or excluded from it - because of personal inadequacy like lack of intelligence, laziness or lack of other values that are deemed to be social pre-requisites of success by the wider society. It should also be noted that there is invariably a large discrepancy between the subjective theory of social mobility and the real facts. In the U.S.A. for instance, the "American Dream" deems that mobility stems from achievement but the facts show that it is the white, anglo-saxon protestants who get to the top and they are identified by ascribed characteristics.
2. The alternative explanation for personal poverty is the belief that because they are Flemings and the society is basically run by francophones, they are kept at the bottom as an exploited group. The fact that they see themselves as an oppressed group does not mean that they will necessarily engage in class conflict as a class. Far from it, they see themselves as an oppressed linguistic group, not as a class in the Marxist sense. When those at the bottom of the structure are characterised by an ascriptive identification - like being Flemish - they will have a high degree of group consciousness simply because their ascribed characteristic is easily identified. It is also likely that they will believe their position to be inevitable since changing their position implies changing the structure of the whole society. There is every reason to believe that an ascriptive society fosters fatalistic philosophies. There have always been oppressed classes and races but the achievement of a revolutionary self-consciousness is after all, a rare historical event.

One self-explanation is self-blame, the other blames the wider society for discriminating against them as members of a group. The criteria which keep groups at the bottom of a society, and the reasons that people at the bottom give for their plight are, of course, related. Those at the bottom who believe they are there because of personal inadequacy are therefore there because they have not achieved anything - which is a consequence of the first belief. Those at the bottom who believe they are there because their group is discriminated against are thereby made into a conscious group based on ascribed characteristics.

Only in the years immediately after the 1830 revolution could it possibly be argued that the majority of Flemings formed an oppressed group with a socially-blaming ideology to explain their position. Ever since then, more and more Flemings have gained access to the middle strata of the society, though even now, their access to the real power elite is more or less barred. However, as a result of this upward mobility which has continued since 1830, there has necessarily been a movement to the self-blame ideology by those left at the bottom of society. This shift in consciousness from a social-blame to a self-blame ideology has had two set-backs - the First and Second World Wars, during which there was much higher Flemish consciousness as a national group than at other times, even to the extent of spawning purely Flemish political parties. The social consequences of these two underclass ideologies are quite different. Self-blame leads to the attitudinal integration of the society whilst social-blame leads to ethnic conflict. However, the two ideologies can also be seen as complementing one another from the perspective of the maintenance of the total social structure.

Like other advanced capitalist societies, Belgium is characterised by an ascribed (Flemish) group at the very bottom of the social structure - a group which has no chance of mobility and which is increasingly becoming peripheral to the economic but not the social structure. Given that the dominant value of the society is undoubtedly personal achievement, this ascriptive group at the bottom becomes the basis for the attitudinal integration of the rest of the society. This is simply explained in terms of in-groups and out-groups. An ethnically different group, which is seen as separate from the society as

theless, they do represent an increasingly powerful group, maintaining close contact with each other, and constituting what can best be described as a Flemish grapevine. ... Some of the French-speaking elite purposefully helped to create this 'mini-Establishment' in the 1930s, when it was realised that the almost total absence of a Dutch-speaking elite in Flanders had inevitably produced a serious deterioration in Belgian national feelings in that part of the country. From 1932 onwards it was made possible for the first time for Flemings to be educated in their own language both at the school and university level. It was hoped that this would dissipate the separatist tendencies which had appeared in Flanders at that time. That it has done so is mainly due to the fact that the problem is not linguistic alone, but also socio-economic." (Huggett, 1969, pp. 78-79)

Tokenism does several things at once. It increases the tendency to adopt a self-blame ideology amongst the 'pariah' group. It cuts off the potential leadership from the 'pariah' group as a group without any significant chance of mobility, so the integrative consequences of such a group for the whole system is maintained. The tokenised Flemings in Brussels show up in a recent survey as a small administrative and intellectual elite which is so marked that French-speaking members of this strata are actually discriminated against in favour of Flemings.

One further factor complicates the Belgian situation and that is assimilation. Although being Flemish is an ascribed status, it is not permanently so, like having a black skin. It is possible for Flemings to 'pass' in public as Walloons, and indeed, this is what many do. One of the more important language controversies has arisen as a direct result of assimilation and passing. The last national census that asked questions about language came up with the conclusion that only 18 per cent of the population of Brussels were really Flemish. This created an uproar and the production of other data that contradicted this information. For instance, the sales of Flemish-language newspapers in Brussels are more than 36 per cent of the total and this discrepancy cannot be explained simply by taking commuters into account either. The conclusion is that many people are Flemish in the home

and pass as Walloons in public. However, passing and assimilation are not identical phenomena. One results in two conflicting personal identities - one public, one private, whilst the other results in a total change in identifications. Some Flemings pass as Walloons; others in effect, become Walloons. It is not uncommon to find families where the grandparents speak only Flemish, the parents speak French and Flemish and the children speak only French.

There are thus three mechanisms for Flemish social mobility within the present structure:

1. Move into the tokenised elite as a Fleming.
2. Pass as a Walloon outside the home.
3. Become socialised as a Walloon from childhood.

These three factors make it exceptionally difficult to give a unique interpretation to any statistical material on mobility since it is by no means easy to separate these groups with questionnaire data. A further paper will analyse the mechanisms of social mobility in more detail. Here, it is sufficient simply to point out that the situation is quite complex though the different mechanisms all appear to serve the same function of inducing stability in the system as a whole.

So much for the mechanisms that stabilise a society where inequality of income, property and wealth is enormous. No doubt the system could have been stabilised for ever but for one factor, mentioned earlier. Foreign investment in Belgium has reduced the power that the bourgeoisie has over the economy. The law actually encourages foreign interests and in no way protects Belgian capital against foreign take-overs of important sectors of the economy. Behind this there is another conflict - between international capital and indigenous capital. International capital has come out on top - the Common Market and its legislation enabling free flows of capital and labour between member states has seen to that. As a consequence, the Belgian bourgeoisie based on indigenous capital no longer has the freedom to use economic power as a means of manipulating and controlling Belgian society. Even such mechanisms as

tokenism are no longer in the hands of the bourgeoisie so much as the international corporations which are in no way answerable to the Belgian government.

The increase in influence of foreign investment, plus the discovery of North Sea Gas have begun to change the whole structure of Belgian society. All the mechanisms of control - stimulating ethnic conflicts to the detriment of class consciousness, instigating tokenism and encouraging assimilation - do the same thing; they maintain the unequal distribution of wealth on which capitalist society is based. There is one phenomenon that these mechanisms cannot deal with and that is now taking place. The ascribed group at the bottom of society has gained access to a source of value (north sea gas and its consequences) which is independent of the Belgian bourgeoisie. There has been an enormous industrial boom in Flanders and especially around Antwerp, which has built one of the largest ports in the world. At the same time, the material base of the Walloon bourgeoisie that has controlled Belgium for over a century has gone into rapid decline; the old coal seam which runs from one end of Wallonia to the other is practically used up and the industrial towns built on that belt are all in decline. Whilst the bourgeoisie has become threatened by international capital, its own source of capital has become exhausted. A new Flemish managerial class is taking over the elite position in the name of international capital.

4. The Future

There are many instances of one bourgeois elite wresting power from another without upsetting the exploitative structure of the society but there are good reasons for believing that a transition from a predominantly Walloon elite to a Flemish elite cannot take place without having profound consequences for the whole social structure in Belgium. It is reasonable to suppose that the unemployed Walloon workers from the coal fields might become the new 'pariah' group in Belgian society, thus taking over the role of the Flemish peasantry and workers and affording the society the same degree of attitudinal integration as before. However, this is not a simple transition and there are many things that might happen on the way. In addition, the tokenised Flemings being recruited into the international

corporations are becoming the new elite and accumulating real wealth, thus dominating the Walloon bourgeoisie. Whatever happens at the top and bottom of the society - and a reversal of roles between the two linguistic groups is not impossible - there are quite different consequences for the middle 80 per cent of the society.

Since politics is dominated by religion and language, there is no basis for class consciousness or class conflict in the near future. Even the unions are split amongst the Catholic, Liberal, Social Democrat and Communist Parties, each of which is completely bound up with language issues. The language boundary adopted by law in 1964 makes the situation relatively inflexible at the same time as it necessarily binds politics to the language issue. What might be expected, as Flanders increases in prosperity and Wallonia continues to decline, is an intensification of the language conflict. One can predict Wallonian feelings on the matter - here are these Flemings accusing us of persecution and exploitation yet their part of the country is expanding industrially at our expense. In Brussels, feelings are likely to run even higher as less Flemings find it necessary to assimilate or pass as Walloons and the Flemish influence on national affairs increases. An intensification of the language conflict seems almost inevitable. There will also be an increase in separatist and federalist movements and none of them can possibly come up with any proposals for Brussels that are in any way acceptable to the other side.

Belgian politics have been changed twice already this century by foreign influence. The first two times it was through the direct influence of the German occupation; now it is the indirect influence of foreign capital. As before, one can predict a rise in hostility between the two language groups, and as before, the basic exploitative structure will stay intact. In the meantime, Belgium remains a paradise for capitalists.

5. Some Implications for Conflict Research

I have argued throughout that where ethnic conflict exists in capitalist societies, class consciousness does not, that in addition, the bourgeoisie uses ethnic conflicts as a means of maintaining exploitative social structures. The political implications of conflict research on ethnic conflict are therefore complex. If one sets out to do applied research which ends up with policy implications, then policies which are aimed at reducing ethnic conflict can undoubtedly be either reactionary or radical. If the research concentrates on the maintenance or creation of an attitudinal integration, as so much bourgeois social science does, then it can be accused of trying to mystify the people in order that they might continue to be exploited. If the research concentrates on the potential for the formation of economic classes and political parties, then it can be accused of encouraging revolution. One thing is certain - the notion of a symmetrical approach rapidly breaks down and any study necessarily stems from a political perspective. My own perspective must be abundantly clear and for that I make no apologies. In return, I would hope that those who study ethnic conflict from a different political perspective also make their sympathies clear, for in the long run, the confusion of science and politics and the dishonest presentation of political preferences as scientific facts does a disservice to both science and politics.

Note

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7

PEACE RESEARCH AS PACIFICATION RESEARCH

by

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ABSTRACT of a paper submitted to the Third General Conference of
IPRA, Karlovy Vary 20 - 23 September 1969.

In order to bring the realities of peace research into the discussions I decided to present an examination of three cases of applied peace research plus a concluding analysis. This, however, was both more laborious than I had expected and more stimulating. Four days before the conference the manuscript was well above 40 pages with a substantial section yet to be completed. Rather than presenting a nearly-finished paper of 50 pages I decided to make an abstract of it. No one would have had time to read the full paper during the conference anyway.

The three examples chosen for examination are the following ones:

1. The contributions to Volume X (1968) of Papers, Peace Research Society (International). These contributions apply peace research to various aspects of the American war in Vietnam.
2. A study called "Productivity and Conflict" by Oppenheim and Bayley, which applies peace and conflict theory to a process of change in a British factory.
3. An IPRA project initiated and sponsored by the European Council, carried out Johan Galtung and reported by him as "Co-operation in Europe". (Doc. 2363, Appendix, Council of Europe, Strasbourg 1968)

These three projects are all examples of applied or "oriented" peace research. They are directed to decision-makers and they contain policy suggestions. The three cases have been selected as representative examples of peace research, both in the sense of being typical and in the sense of being different from each other so that they together reflect some of the dispersion within peace research.

Case 1: Peace Research as Research for Pacification in Vietnam.

It is pointed out that the intention of the volume is to apply peace research findings and skills to a particular critical problem, that the volume is directed to US foreign policy decision-makers, that the intention is to increase the possibilities for a peaceful solution to the conflict and that, finally, the editor of the volume takes it to be neutral and symmetric in the sense that peace is a common interest to all involved.

The volume contains 13 contributions.

Ithiel de Sola Pool in a paper on "Rural Pacification and Insurgency" applies wellknown social science theories to the following problem: How shall the Saigon regime be able to establish its legitimacy in the eyes of the villager?

Samuel Popkins ("Village Authority Patterns") says that "the central problem of pacification is how to translate economic resources and military power into village control" and proposes "the development of an effective, hierarchical system of government."

Ralph White approaches the Vietnam conflict with "a pluralistic minorities-in-conflict conception of government in a society wherein a majority of the population is apathetic to any government". As the "dove" in the company he suggests that careful consideration before intervention is valuable, since intervention involves "costs and very great risks".

David Schwartz proposes that the development of "theories of revolution" must be given priority and argues that the "Vietcong" as all other revolutionary movements recruit mainly criminals (also called "terrorists"). The contributions by Robinson/Jackson and Brickman/Shaver-Archibald assume that US foreign policy is to a significant degree determined by US public opinion, especially the opinions of the intellectuals, but on the whole they are more concerned with things like attitudinal consistency, clustering of attitudes etc than with the contents of the opinions and their underlying determinants.

To Robert Strausz-Hupé Vietnam is an arena of the big powers. He suggests a settlement because "the United States is bogged down in an immensely costly war in Asia which strains US commitments in Europe and the Middle East, and erodes the US defense budget for the development of strategic weaponry".

Allan Goodman emphasizes that any agreement must protect the reactionary part of the population by means of US bases at Da Nang and Cam Ranh, and presumes that the UN can provide the peace keeping machinery "to maintain strategic presence to assure peace".

Nigel Howard, Thomas Schelling and Walter Isard discuss the Vietnam war in terms of the prisoner's dilemma game, thus assuming the Vietnam conflict to be symmetric and "tit-for-tat" policies applicable. Neither in other respects are they much concerned about the realities of the Vietnam situation. They build up the most incredible constructions in order to squeeze reality into their models.

Milstein/Mitchell writes about a computer simulation technique tested on useless data from Vietnam as a helpful device for - according to the "doves" at the conference - "the more efficient (optimal) use of their resources for destructive purposes".

The editor, Walter Isard, presents all this as objective peace research on the basis of the theory that

"through exchange of findings, methodology, theories and ideas we are able to chart out more thoroughly and systematically the alternatives which participants in conflict situations might adopt. Through such exchange we are able to spell out more comprehensibly and accurately the implications of each alternative under different possible contingencies. Accordingly, we are able, certainly in the long run, to decrease the probability that poor decisions by good-intentioned leaders and policy-makers - as has characterised the foreign policy of the US and many other nations - will be avoided and increase the probability that wise actions will be taken. It is this long-run orientation involving the constant accumulation of knowledge, analytic technique and methodology, theory and ideas, which lies behind the conferences and activities of the Peace Research Society (International).

.....
It is in this spirit that the Peace Research Society (International) offers these papers for the enlightenment of either those with the curiosity to know more about the complicated behavior of world society, or, more important, those who must make decisions which affect the structure, function, and viability of this society."

During the recent European conference of the PRS(I) in Copenhagen, a number of people raised a discussion about the Vietnam volume. In many respects this discussion was highly illuminating. Kenneth Boulding, one of the pioneers of peace research, most actively defended the PRS(I) and he came out very clearly indeed.

Case 2: Peace Research as Research for Industrial Pacification.

The management of a firm - which in the succeeding months was likely to go through a number of "conflicts and upheavals" due to the introduction of a new bargaining system and a new management policy - contacted Oppenheim. Presumably because he was known to be a peace and conflict researcher they expected him to be able to say something about how "conflicts and upheavals" could be kept at a minimum.

A consultant firm was appointed to collect data on productivity, workers attitudes, etc. The workers were paid £ 1 to attend a meeting where the new policy was presented. A ten day wild cat strike took place in a part of the factory where the workers belonged to a minority union. Increased "communication and participation in decision-making" eventually led to decisions about which the workers were informed during a series of meetings. These are the major features of the process studied by the authors.

The attentive reader of the report will notice that the implementation of the new policy took place under considerable resistance on the part of the workers. Some of them are reported to have "had difficulty in adapting to 'committee procedures'" and "the further one went away from this group (the union leaders) the less apparent were the shared attitudes....the rest of the factory was more inclined to see the major issues in value terms", etc.

"....one of the shop steward workers pointed out that in the past the role of the union had been to protect workers from management and try to get a bit more for everyone; now they were talking about hiring and firing and keeping other workers out."

The authors, however, are happy about the changes. In the end they report "the new system to be working well" and "genuine co-operative efforts".

Then three of Oppenheims assumptions are documented and discussed.

1. Workers and management (owners) have basically common interests.

Conflict is seen as conflict behavior and attitudes and conflict resolution as the elimination of such attitudes and behavior. Such an elimination is in the interest of all parties since there is no structural incompatibility of interest. The authors - and according to them also the actors - see the new productivity bargain as "in everyone's interest; it would lead to the gradual elimination of slow workers."

2. Industrial conflict is caused by the workers.

Since conflict is seen as existing only when manifested in behavior and attitudes, it is logical that the authors see conflict as caused only by the workers, because the management never strikes or engages in similar old, hostile" behavior. The authors list the following reasons or functions of conflict in industry: conflict as a game, conflict as a ritual, conflict as catharsis and conflict as display. Obviously they do not think of the management when they talk about the need to "blow off the steam after long weeks of arduous, monotonous work" or about "their sense of worth and independence".

3. Strike is an outdated and deplorable kind of behavior.

The strike is a relict from the era of "authoritarian relationships" and an expression of "expressive behavior", based on "black-and-white" and "win-and-lose" thinking. Strikes generally are seen just as peace researchers use to see war: "Wars and strikes are both forms of communication, if rather primitive ones." And "Wildcat or unofficial strikes might be similar to terrorist raids."

Throughout the report the authors employ a management perspective ("the firm had been a difficult year in its labour relations") by focussing on the factory as one social system. To identify with this system as a whole necessarily means to identify with its decision-making nucleus.

The authors do not mention the concept of class. Instead they have a section on "the caste system" (referring to attitudinal and behavioral distinctions).

The policy implications - drawn from the "criss-cross theory" and other peace research theories - all suggest manipulation of the workers.

Yet, between the lines it is possible to get at the main features of a sociologically extremely instructive process, which has not been understood at all by the authors: a process of co-optation leading towards a corporative structure. In the end the senior shop stewards "have virtually become part of the Personnel Department and to some extent deputise for the Personnel officer." They function in their new roles as conflict solvers and peace makers on the shop floor, and as such they are likely to be more efficient than any old type management representative, in the short run at least.

Case 3: Peace Research for Pacification in Europe.

The sponsor of this study - the European Council - was founded in 1949 as a move in the cold war. It has only Western members. Not even communist MPs from Western countries are eligible as representatives. Instead (?) there is a refugee "Committee of Non-Represented Nations" which has acted as a spearhead against the East. Also more generally the Council has been a centre for ideological manifestations against the East (the Korean war, Hungary 1956, the "German problem", etc).

One may ask why is this organisation interested in peace research for European co-operation? A quote from the report may give a hint:

"It is also wellknown that a certain competitiveness bordering on jealousy exists between some of the organisations with regard to obtaining contacts in the East, which after the decline of the cold war is regarded to some extent, as 'open territory'. It is felt that the total co-operation potential in the East is limited, for political reasons and for reasons of resources, and that it matters who gets there first and gets most. The question is what this 'co-operation offensive' looks like to the other side, to the East. The impressions can be summarised as follows:

The 'co-operation offensive' not only comes from multilateral organisations but also from individual nations in the West, making the total co-operation pressure and offer considerable.....there is an impression that the West, avoiding CEMA, wants to establish links that are basically asymmetric since they involve an organisation in the West and a nation in the East.....there is a fear of Western intentions behind such offers. The theories seem to be that there are three kinds of unmentioned motives behind them:

- (a) To isolate the Soviet Union and East Germany.....
- (b) To isolate the smaller countries in the East from each other....
- (c) To create internal changes in the Eastern countries.....In short, it was felt that...the basic motive or one basic motive was to demoralise the East in one, two or all the three ways indicated above, that this was tantamount to 'continuation of the cold war with other means' ".

One may also wonder why IPRA and Galtung accepted to do the study, especially as Galtung admits that there is "considerably more than a grain of truth" in these Eastern perceptions.

However, Galtung seems to have hoped to be able to solve the problem by insisting on a symmetric study of the East-West relations. The central theme

of his study could be called "the problem of symmetry in an asymmetric world". Symmetry in the report is seen (1) as a value in itself, (2) as a methodological device and (3) as a peace-making factor, and the third of these is most predominant.

Four ways of getting out of the dilemma of symmetry in an asymmetric world are found in the report.

1. Using a Formalistic Conception of Symmetry.

The problem is made more manageable by reducing it to a problem of forms: "equal rights and duties", "one part, one vote", "Symmetric participation: equal votes, quotas in the secretariats, rotating Secretary Generals, even rotating the location of the organisation" etc. When the author says, for instance, that symmetry "must also be built into (the) relations between North and South", he must have this formal conception of symmetry in mind. Galtung thinks that "the formal equality offered by participation in an international organisation is one of the most significant ways in which real equality may be achieved", but sometimes the difficulties seem to exhaust him. "the 'formal' equality inside the international organisations clashes with the 'real' inequality in the world outside. But, then, who is to say what is formal and what is real?"

2. Using an Idealistic Approach to the Study of Society.

The indifference to economic and material realities is one of the most striking characteristics of the report. Galtung, like Boulding in the Copenhagen discussions, seems to think that what really matters is ideas and images. In the introduction he states that the feeling of being European will be used as a basis for European integration in his approach, and the East-West asymmetry is not seen as caused by socio-economic differences, but by subjective reactions and perceptions. Galtungs view of conflict is precisely the same as Oppenheims. Hence, the problem is how to create trust and confidence, rather than how to cope with structural incompatibilities, such as those, for instance, between a market economy and a planned state economy. Through this approach Galtung reduces the problem of symmetry to a problem of perceptions.

3. Accepting Symmetry.

But the author also has to accept some asymmetry in order for his problems to be manageable. For example, after having pointed out the asymmetry between developed and underdeveloped countries, he continues: "Such asymmetries may greatly benefit both parties, but if confidence and trust between them are less than perfect" it does not work so well. (Emph. added) This was pointed out also in my earlier article on this topic: as long as the slave has trust and confidence in his slavemaster, the system is peaceful and beneficial to both within the frame of a subjectivistic conflict definition.

Galtung's willingness to accept asymmetry if trust and confidence is there instead, makes one suspect that the symmetry as a value is subordinated to the values of peace, order and system preservation. And indeed: "But the system can stand some asymmetry: it is only when the dominance becomes too extreme, too explicit and too naked, that the system disrupts" and one will have to introduce some symmetry in order to maintain it. And as far as Europe - his research object - is concerned Galtung rather accepts asymmetry than having contacts and co-operation cut down.

4. Assuming a Theory of Convergence.

The author's fourth way out of the dilemma is to assume a "natural" development and to guess that only increased co-operation is compatible with "the general trend of development" and "the logic of our time". Galtung describes this "logic" in a strange way: " ..postindustrial or neo-modern societies are global societies, encompassing most of the world if not all of it. As social orders they are indivisible in general, and particularly by nation-states, it is only that they have arrived a generation or two (or three or four) before a world political order" etc. If "postindustrial or neomodern" was changed into "imperialist" the description would have been all right, except for the fact that China, North Korea, Cuba and Vietnam have demonstrated that imperialism is divisible.

The author goes on to outline the convergence theory as describing a necessary trend in East-West relations. Concretely, in order to speed up this convergence, he suggests: in the East decentralisation of the economy, de-ideologisation, decentralisation in decision-making, bypassing central bureaucracies in business deals, co-production with the West and eventually "new types of economic systems"; and in the West an expansion of the public sector.

This certainly sounds a bit "asymmetric" and it is difficult not to believe that Galtung somehow finds a market economy much more consistent with a "true peace structure" than is a planned economy. The market economy leaves so much more room for "entropy", "multilateralisation", "criss-crossing relationships", "diversity", "dissociative thinking" etc.

Since the convergence theory is based on totally unscientific assumptions about "the trends of development", "the logic of our time", and "what is in the cards", it is necessary to regard the whole theory as ideology. And this is so much more serious since the theory of convergence in Eastern publications has been called "the most important anti-Marxist and anti-communist concept of modern imperialism" which is also used as "an instrument of psychological warfare" and which has been propagated by people like George Kennan, Walt Rostow, John Kennedy, Willi Brandt, Franz Josef Strauss and others like them.

In other words, it seems as if - objectively - Galtung has joined a company

of Western ideologists and propagandists.

No wonder: Galtung attempts to study the prospects of European integration without analysing Europe's role in the world; without any attempt whatsoever to look into the economic realities of the European situation; without paying attention to the fact that nations are not monolithic units but social systems whose behavior as units can never be understood without a proper understanding of class structure, social and political constellations and economic situation in the nation; without outlining even the major features of the "German problem".

And finally, Galtung has produced the kind of report one would have expected from a Council of Europe project.

Concluding Remarks.

Above most of the theoretical analysis has been cut out in order to give some room for empirical illustrations. Also here some very brief comments will have to suffice.

The most obvious conclusion from the three cases above is that there is a wide gap between the ethics of peace research and the political realities of applied peace research. Therefore a discussion on the values of peace research and peace researchers is not very meaningful - the values obviously do not matter much. Far more urgent is a scientific analysis of why peace research applied tends to become another technique for the preservation of status quo.

While there is this gap between ethics and practise in peace research, there is a logical consistency between the theoretical orientation of peace research and its political consequences. The three cases examined have in common a set of integration theories, first developed by classical European, bourgeois social thought and later diluted and vulgarized by contemporary American sociology. This is where we will have to start if we want to do something about the nature of peace research: a critical examination of our theoretical foundations. Otherwise we will never be able to move from ideology to science.

This also means that the remedy does not lie in the inclusion of new fields and topics as relevant for peace research. To include the study of "internal war" or "theories of revolution" only means an extension of our ideology to new fields. What matters is not really what we study, but how we study it. When we study, say, revolutions, it matters whether we approach it as a clash of incompatible values or as a manifestation of contradictions in the social and economical structure; it matters whether we look on its present manifestations in the light of our hopes for the future, or whether we try to understand the present in the light of history. It matters whether we have a speculative, positive approach or an empirical, critical one. It matters whether we study possibilities or realities.

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THE RELEVANCE OF INTERNATIONAL LAW TO CIVILIAN DEFENCE:

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THE RELEVANCE OF INTERNATIONAL LAW TO CIVILIAN DEFENCE

by Olaf Hasselager

Peace research has shown a considerable interest in the phenomenon of civilian defence. It therefore seems worthwhile to consider this problem from the point of view of the international law of war. This also provides a new perspective on the rules of war, namely how they can assist in carrying out non-military defence.

The main purpose of this paper is to discuss some fundamental aspects of the relevant rules of war. It is meant as a starting point for a further study of the usefulness of the rules from the angle of civilian defence, leading to a sort of manual showing how the rules might protect the defenders and how they can act to take maximum advantage of the propaganda value, which the denunciation of delicts under this regimen seems to constitute.

It is outside the scope of this paper to formulate a definition of civilian defence, but it might be stressed that in this paper civilian defence is understood in its broadest sense. Sabotage against property, for instance, is included in our use of the term.

The basic questions to be discussed are:

- I. The practical importance of the rules of war.
- II. The contrast between the humanitarian and military views.
- III. Whether rules of war prohibit civilian defence.

I. The Practical Importance of the Rules of War

When surveying conflicts in modern times, one may get the impression that the rules aiming at the protection of the victims of war are ineffective and obsolete.

While some of the rules might be obsolete or at least not easily adapted to the standards of modern times, it does not follow that these rules are completely ineffective.

It is quite true that the rules cannot be fully effective in the present system, especially because of the monopoly or near-monopoly of communications which nation states enjoy and their almost inviolable sovereignty.

Furthermore, rules in this category cannot always be applied in a straight forward manner, because in an armed conflict the situation and the personal safety status of the combatants and belligerents change very much and are difficult to ascertain.

As a rule, war crimes are prosecuted only after the cessation of hostilities, and only the defeated are brought to trial. This means that very strong aggressors, on the whole, can have it their way: they are practically free to commit any atrocities whatever. While one is sorry to acknowledge this fact, the origins of which lie not so much in the rules of war but in the fundamental anarchy of international law and the weakness of the United Nations, it is gratifying to note that the rules are not fully devoid of sanctions against the war criminal. The mere fact that the winning state does not prosecute its own forces of war crimes testifies to the fear resulting from the possibility that violation of the rules of war may be used for propaganda purposes by the defeated state.

The rules of war are based on fundamental and widely acknowledged humanitarian principles, and it is obvious that violation of these rules makes good propaganda material to move the masses. The more so

because civilians are presumably more easily moved by atrocities perpetrated against civilians than by the fact that the establishments fight each other in war.

The importance of psychological impact of propaganda denouncing delicts against the rules of war, especially those protecting the victims of armed conflict, seems to appear clearly from modern history.

The atrocities perpetrated by the Japanese Imperial Army during the ever intensifying Sino-Japanese conflict in the thirties certainly did very much to decide the US to enforce economic restrictions against Japan. Even though there may have been other reasons for the Americans to impose sanctions, it is clear that the atrocity propaganda helped very much to escalate the feelings among the American population. The atrocities committed by the French armed forces during the Algerian struggle for independence also show how violations which might be considered a military necessity by the occupying power nevertheless in the long run give the victims or at least the side of the victims the goodwill of third states, in some cases bringing recognition in the wake. The Nigerian-Biafran conflict shows some likenesses to this. Similarly the war in Vietnam shows the immense value of war crime propaganda.

II. The Contrast between the Humanitarian and Military Views

A. The Humanitarian Point of View

The rules of war seem to have evolved concurrently with the growing concern for human rights in European social philosophy. (Other factors have been involved and will be discussed below.)

The development can best be traced from the 17th century, when Hugo Grotius wrote his treatise on "The Rights of War and Peace" as a reaction to the cruelties of the 30-Years War. Emerich de Vattel (1) elaborated these views or rather revised and supplemented them, introducing the concept of wars not fought against the population of a nation but against the State, meaning the establishment. This was a rather natural reaction as the wars during the 17th century seemed to be fought, not so much for the sake of the population and their religions or ideologies, but for the sake of the establishments. These establishments, armies, courts' apparatus etc., which had been introduced as a means to an end, now seemed to have become ends in themselves, as institutions are apt to. The American and French Revolutions stressed the humanitarian aspect.

Likewise we can see the trend through the Lieber Code of 1863 (2) to the Code of Brussels, 1874 (3), and the Hague Conventions of 1899 (4) and 1907 (5) (not to mention the First Geneva Convention of 1864). The Red Cross movement did much to promote this development and indeed instigated the Geneva Conventions of 1949 (6).

Because of the close connection between the rules of war and the ideologies of the principles of human rights, which have had a very high moral value, widely spread among the populations of the world, the violation of these rules leads to a high degree of moral indignation, which in many cases might have great political importance and therefore great impact on the political decision levels.

Another important factor in this respect is that we might find an antagonism between the ordinary citizen of a state and the establish-

ment. Whatever the reasons, the fact remains, and it is important in this paper because it helps to understand the tendency of the civilian populations to be aroused and antagonised by doings of an occupying establishment, even if these might seek justification by the express reference to military necessity as provided for in the rules of war.

The humanitarian view may be substituted for the civilian defence view.

B. The Point of View of the Establishments: Military Necessity

To discuss the concept of military necessity, it is convenient, following Dunbar, to consider three different theories (7). In various epochs one or the other has been held to be correct.

1. The Ultra-Professional View

The military necessity is a denominator of all the circumstances which speak in favour of the use of every available means indispensable for bringing about the submission of the enemy. It thus justifies all measures of violence in such cases, notwithstanding any rules which generally should protect against these measures.

Also this view stands for justifying a war of aggression if the interests of a nation are involved. This view permeates through all decision levels, from the decision for bringing about a war, to the decision to execute civilians suspected of hostile activity without the benefit of fair trial as stipulated by the rules of war.

Indeed this is the "regimen" which used to be in force until the rules of war were put up. It is clear that no protection rules are effective under such a "regimen".

Also this view clashes with the rules laid down in the UN-Charter (Art. 2(4)), which forbids the use of force in international relations, i.e. aggressive war. If this rule cannot be used as

context to the war rules, for example because of exceptions due to which retaliation in self-defence can be legalised, one may at least allow the act of aggression into the country of the former attacker as a reprisal.

This might mean that the context of the anti-aggression rules becomes irrelevant, and so would the absolute need for the rules of war to this context. Nevertheless, one should not allow the former defender to use "military necessity" in retaliation beyond certain reasonable limits.

However, the fact that the reprisal rules in this connection may allow a certain "stretching" of the concept of military necessity does not preclude the assertion that the context of the UN-Charter refutes the ultra-view in general. Also it is often difficult to ascertain who is the aggressor, and in all these instances the context cannot fall away.

It should be very clear from what is mentioned above that this concept, which stands for the most reactionary view opposed to the humanitarian principle, must be absolutely negated as rendering any protection useless and logically unsound as hindering the operation of the war rules, and likewise being in absolute contradiction with the fundamental laws between the nations.

2. The Moderate View

Military Necessity (8) is a common denominator for the exceptional circumstances of practical necessity contemplated by express reservations in several articles of the Hague and Geneva Conventions in regards to acts otherwise prohibited.

The conclusion must be that the rules of war are always binding upon the belligerents and that they cannot be disregarded even in case of Military Necessity.

The fact that military requirements have been taken into account when the rules were formulated strongly supports this concept (9).

Logically too, this concept seems reasonable the more so because it would seem somewhat aimless and contradictory to establish clear rules and to include exceptions, if these exceptions did not eo ipso preclude the use of more general (supposedly) exceptions. Military Necessity has been built into the rules as an exception in several articles. If the high contracting powers had intended Military Necessity to be an overall overriding exception clause, they would clearly not have explicitly included the several special exception clauses which refer to Military Necessity.

This view has been advocated by the Tribunal in the Nuremberg Trials (F.M. v. Mannstein Trial), where the Tribunal remarks that it would have been unnecessary to make a special provision to Necessity of War in Article 23 (g) of the Hague Convention Annex, if this necessity were an overriding consideration to be taken into account in regards to all the articles of the convention (10).

3. The Middle View (11)

The rules of war must ordinarily be respected, but the obligation may be displaced by urgent and overwhelming necessity. "Kriegsraison geht vor Kriegsmanier".

This concept is, if not equally, then at least nearly as dangerous for the rules of war as the "ultra-view" mentioned above.

Firstly all the logical objections may be put forward in the same way as mentioned above.

Again we find support from Nuremberg. In the German High Command Case before the Nuremberg Tribunal, the Tribunal refuted this "middle view" very strongly (12).

It is very clear that it would be dangerous to provide commanders, even low-level commanders, with the possibility of construing the rules when under the stress of action in changing situations and with the ultimate view of winning the war dangling before the eyes.

Of course it is correct to assert that the makers of the conventions could not make a rule for every contingency, and that in times of war situations may arise in which the fulfilment of the belligerent's war aims is dependent upon actions which might violate the rules of war.

But this argument springs from the theory that the nations are free, in the last resort, to use unrestrained force to ensure the fulfilment of their war aims. That theory is not compatible with the UN-Charter. It would be far too dangerous to let the parties themselves decide when a rule is to be broken. Also it is very difficult to decide when such an action would be necessary.

If, hypothetically, one were to accept that a belligerent could, nevertheless, break a rule under certain circumstances, one should at least not deprive the victim of the moral support which the assertion of an un-violable protection rule constitutes. When the propaganda sanction exists, and even if no other sanctions exist, the breaker of the rule will certainly hesitate before committing the delict. This view of the inviolability of the rules of war clearly has a law preserving and strengthening function in so far as "world opinion" is one of the sources of international law.

We may then conclude that the moderate view ought to be valid, and that at least logical and precedential grounds speak for the adoption of this concept, i.e. that the Military Necessity under no circumstances may encroach the rules to the detriment of the humanitarian principle as this is formulated in the conventions with the single exception of explicitly stated situations of Military Necessity.

One may submit that Military Necessity is an institutional view, which takes mainly technical or institution favouring aspects into account.

When evaluating the question of Military Necessity, other factors seem to be of interest.

C. Total War

The Hague Conventions were formulated at a time when total war was not an effective possibility. Communications and organisation did not permit the full exploitation of all of a country's resources, and such modern mobile warfare was not envisaged.

One might then, from a Military Necessity point of view, argue that now that the whole of the population of a belligerent country is drawn into the conflict, either as soldiers or as contributing to the conduct of war by working in industrial plants, in agriculture etc., the invading army ought to have a wider freedom of action than envisaged in 1907.

First this argument might be opposed by the fact that the Preamble of the Hague Conventions, rather than taking provisions for the reduction of the protection, provides for even more far-reaching protection by saying that the civilian population remains under the protection of international customary law as a whole (13), i.e. there may be further protection than that provided by the convention proper.

Secondly, those who drew up the Geneva Conventions of 1949 knew of modern warfare. And the Geneva Conventions have not reduced the protection; indeed, they have increased it.

As to the Law of Occupation, which is the most relevant for CD, the "total war" argument has no relevance. The increased use of civilians in the war contribution might conceivably be invoked in a discussion about the right to bomb undefended cities, but when an area is occupied, the population evidently cannot contribute to the war potential of its own country because of the occupation. Civilians might be compelled to work for the occupant, but this clearly cannot be an argument for increasing the scope of the concept of Military Necessity.

Another point is that there is a greater likelihood that civilians will be placed in situations where they find they contribute to the enemy's war aims. But this clearly is of no relevance when discussing Military Necessity.

Further, however, we find that the parties to the Geneva Conventions did take account of the concept of total war when formulating the rules. Article 51 (2) of the Civilians' Convention stipulates which sort of work the OP may compel the civilians to undertake, restricting the work to that which benefits the occupying army (not the fighting forces of the enemy as a whole) and the civilian (14). The mere fact that the OP may compel civilians to work for the needs of the occupying army seems to be a great concession to Military Necessity. It shows that Military Necessity is taken into account, and that this is the farthest the convention goes.

We also find that the OP may only use the labour in the occupied territory to satisfy the needs of self-defence and fulfil his obligation to take care of the needs of the occupied population.

D. Ideological War

Another characteristic of modern wars is that they seem more or less to include ideological elements in their "motivation".

At least the ideological factor is very prevalent, either as the main cause of the war or as the main incitement to bring the people to fight, whatever the real goal would be.

It has been asserted that ideological (or religious) wars tend to be more brutal and indiscriminate, as the ideologies in themselves confer on their partisans a conviction of a philosophy carrying with it both incitement to, and rationalisation for the extirpation of all those whose ideas are considered "evil" (15).

A very common factor among these philosophies is the tendency to divide the whole humanity according to one polar principle: "Those who are

not for, are against". This may be a necessity in conflict, and its result is that there can be no neutrality. Thus in the situation in which a worker choses not to work for the OP because the work might involve him in a war contribution for the OP, invoking the rules of war allowing for neutrality, his attitude may be construed not as neutralism but as antagonism. This might further provoke reprisals against him. While the assertion that he is not neutral might be right, the Geneva Convention, nevertheless, protects him (14). But this is only the consequence of the assumption that the use of force in international relations is illegal. The fact that the invader possesses the production apparatus shall not involve the civilian in the war contribution at all. If international law could proscribe the forced involvement of civilians in war contribution everywhere, it clearly would do that. But the exclusive jurisdiction of the national states forbids such an interdiction. Now international law has a chance to be effective by stipulating that the population of an area which in fact is under no sovereignty, the original sovereignty being ineffective and the effective occupation only giving a factual jurisdiction suffered by international law, shall not contribute to any potential if they want the full protection by international law. If the rules seem biased in favour of the civilian, this is only the consequence of the concession given to self-defence.

Ostensibly "ideological" wars are supposedly fought, not among the establishments of states, but among the adherents of the different ideologies. While pure ideological wars seem never to have been fought, as the ideologism has often been used only as a cover for or mingled with more obscure motives, nevertheless, the fact that ideology has been invoked tends to weaken the concept of the army as being necessarily the instrument of the government of the state and the need for conferring combatant status to wider groups of the population becomes stronger. This seems to be taken into account by the Geneva Conventions, when it is stipulated in Article 4 of the Prisoners of War Convention that armed resistance movements under responsible command are included in the combatant category privileged by the Prisoners of War status (16) in case of capture. The Article does not

demand that the movement shall belong to the establishment forces of a nation state.

As the Conventions also seem to have taken account of the "ideological military necessity", and because the Conventions, read in the context of the fundamental prohibition against the use of force, seem to support the civilian's right to claim neutrality status, we cannot find support for the "ultra-view" on Military Necessity in the "ideological war" argument.

E. The Motivation for Formulating the Rules of War of the Military Establishments

If we assume that the rules of war have their origins in the reaction to the ideological wars of the 16th and 17th century, culminating in the Thirty-Years War, we might desire two clear points of view: the humanitarian and the military. These views have been discussed above as factors in the evaluation of the jurisprudence as the the rules of war.

Also the issue between the two points of view might be seen as an issue between the typical "civilian" view and the typical "institutional" view.

That the Rights of the Individual are in favour of the civilian population is rather clear.

It might be valuable to trace the "institutional" view through the period after the middle of the 17th century in Europe.

Before and during the Thirty-Years War the civilian population as such had no protection at all by any rules. Warfare was brutal both towards belligerent and non-belligerent.

The lack of discipline hindered the operations and the common use of pillage and reprisals against the population of the combat and occupied areas tended to destroy the discipline of the troops. Thus

from the officers' point of view much time was wasted, and too many otherwise operational units were engaged in fight with the civilians, who of course defended themselves against the troops, whatever side they belonged to.

The pillage also devastated the country, and this was soon observed by the diminishing revenues. So also from the point of view of the rulers the situation was intolerable.

This of course called for a revision of the rules, or rather imposing a minimum of rules.

Imposing the rules was helped by the fact that the nuclei of the officers' corps of many of the countries were mercenary professionals. They often changed nationality, and the enemies of to-day might be the comrades of to-morrow. So step by step a sort of professional code was coming into force.

One result of these rules was that to some extent warfare developed into a kind of game. The professionals on both sides regulated warfare between themselves. Often a treaty was drawn up at the beginning of the war, regulating the conduct of the war and providing rules for the exchange of prisoners, deserters etc.

The armies were small and professional, so the discipline factor was very important. Both the discipline factor and the purely institutional view of maintaining their professional position tended to make the wish of monopoly of warfare for the professional. Civilians would not have the same outlook as the professionals, because for the civilians the question was not whether they came under the sovereignty of one ruler or another, but for them the fight was about their lives and property. So if the professionals had had to fight the civilians, it would have been a costly fight, which would not have suited the professional concept of war as a game and the maintenance of the role of the establishment. Thus the professional system helped to contain the devastations.

At the end of the 18th century the situation changed somewhat. During the French Revolutionary Wars and the Napoleonic Wars most armies became composed of conscripts, i.e. of people without the professional outlook, and also with a strong element of idealism in their motivation to fight. The ideology in this instance happened to be a sort of nationalism. After the French Revolution the officers' corps in fact became professional again. But the new element, the conscript rank-and-file remained.

The conscripts of course did not have the same professional point of view as the old professionals, as many civilians learned at their own expense during the following wars.

The Spanish Peninsular War, 1808-13 showed the new form of warfare particularly clearly. The Spanish guerrillas and the French soldiers fought an unrestricted war, the fighting probably instigated by the French unrestricted use of requisitions. This kind of warfare undermined the precarious discipline of the French Army, making it prey to the much lesser Anglo-Portuguese Army, which took pains to protect the inhabitants of the occupied territory against pillage and requisitions.

One may presume that the professionals (the officers) were facing a dilemma. On one hand they had to use nationalism to increase morale. But nationalism and ideology tended to bring about the unprofessional method of fighting, thus destroying discipline and hindering operations.

And of course there was a need for discipline, because discipline was necessary to ensure the position of the officers' caste. In many countries it was necessary to establish the power of the establishment.

Thus the need for international war rules became evident. The humanitarian principles became necessary for the professionals to establish the rationale for rules protecting the discipline of the armies and providing a sort of monopoly of violence (17).

On the other hand, as the rationale of humanity was only the maintenance of discipline, it should under no circumstances restrict the soldier's freedom of action.

Thus it became evident that the conduct of operations should prevail over the humanitarian rules whenever this was required to reach the ultimate goal, the submission of the enemy (i.e. the ultra-view on Military Necessity mentioned above).

As to the rules for occupation this became clear during the Hague Conferences of 1899 and 1907. A split between small and great nations occurred (18). It was suggested that the population of an occupied territory should be allowed to rise against the OP. Proposals to this effect were presented by Belgium, Holland, Greece and Switzerland, but counter-proposals were presented by Germany representing the view of the great states. It was clearly in the interests of a great state to diminish the number of enemies when invading enemy country. And it is obvious that great states have many more possibilities for being the invader than small countries.

In the end no provisions were made about the legality of popular risings in occupied territory.

The Geneva Conventions made the status somewhat clearer by giving legal status to organised resistance movements under certain conditions. To allow a general right of the civilian population to rise against the occupying power was not possible, however. The UK-delegation argued against such a proposal on the formal ground that the provisions for the conference constituting the Geneva Conventions did not allow a re-definition of the combatant status. In this position the UK was backed up by all the World War II occupation powers except Russia, while small nations as Denmark and Israel, supported by Russia, tried to get a proposal adopted which would confer prisoner of war status to such popular risings (19).

The fact that the parties to the Hague Convention expressly held the question open seems to have escaped the parties in this case.

III. Whether Rules of War Prohibit Civilian Defence

When we have established the moderate view of Military Necessity, the main question becomes what attitude international law requires the civilian population to take.

This question is important because the rules of war do not define the limits for the civilian defender's freedom of action. The nearest we can come is the proviso in Art. 5 (2) of the Civilians' Convention, which mentions "activity hostile to the security of the occupying power".

The civilian defenders might participate by:

1. Activity directed against the OP's war aims in general, not related to the occupation per se.
2. Activity hostile to the security of the OP.
Directed against the occupation establishment only.
3. Activity hostile to the occupation of the territory.
Directed against the actions of the OP without actively endangering the security of the OP-forces, but obstructing enemy war aims.

If we define civilian defence as a method using non-violence in a very broad sense of the word, it is still clear that civilian defence might constitute actions in each of the above named categories.

Examples:

1. Sabotage against industrial plants providing potential for the OP for the conduct of warfare outside the occupied territory.
Collecting or transmitting intelligence on the potential of the OP.
2. Propaganda causing members of the occupying forces to desert.
Sabotage against war material of the occupying forces.
3. Denying guides, denying cooperation, denying labour, propaganda against the occupation or the occupation policies, destroying

means of communication not vital to the security of the OP, but necessary to the aims of the OP. Non-obedience in general.

When we discuss methods 1 and 2, the rules are clear enough.

Art. 5 (2) of the Civilians' Convention provides that the OP may ensure its own security by detaining protected persons which are suspected of, or engaged in activity hostile to the security of the OP. Also it may take actions against spies and saboteurs.

Still the Convention provides rules which demand "fair trial", i.e. that the punishment shall be in reasonable proportion to the degree of danger of the delict, and no retroactive laws may be invoked against the defendant.

The question becomes more delicate when we consider the methods under 3.

Here it might be valuable to consider the whole problem of the status of the civilian population of an occupied territory.

Until about the beginning of the 19th century the general view was that the sovereignty automatically passed into the hands of the OP, so that the civilian population owed an unrestricted allegiance to the OP (20).

Later on, under the influence of the humanist philosophers, the rule emerged which is still valid to-day, that sovereignty can be conceded only after the cessation of hostilities.

At first the rationale was that the civilian population owed a temporary allegiance only. But this theory was very soon abandoned. This was emphasised in the Brussels Code and in the Hague Conventions, Art. 45 of the latter prohibiting the population of an occupied territory to swear allegiance at all to the OP.

Now the prevailing view was derived from the fact that the OP, according to Art. 43 of the Hague Regulations, was to "take all the

measures in his power to restore, and ensure, as far as possible, public order and safety". The assertion was that the civilians in return for this "protection", had to observe strict obedience, especially refraining from committing acts hostile to the OP.

The consequence of this "social contract" was of course that the civilian population, if it did not respect it, would no longer be entitled to the protection provided by the rules of war and could be treated at discretion.

There are many reasons why this concept of duty of obedience is false and unrealistic, at least by modern standards.

It is clear from the Preamble of the Hague Convention as mentioned above that Military Necessity has been taken into account. As the duty of obedience would constitute the price for the concessions to humanity, this duty clearly is a concession to Military Necessity. But then we cannot construe an additional element of Military Necessity into the rules. If the powers which participated in the formulation of the rules had intended a duty of obedience, they would have formulated such a rule. They refrained from so doing.

Even if at the time of the Hague Conference there had been some doubt as to the real status of the civilian population in armed conflict, the tendency in modern times has clearly gone in a direction more favourable to the civilians.

This became particularly obvious after the Second World War, in regards to which it would have been very hard indeed to make the civilians understand that they owed obedience for the so-called "protection" administered by the Axis-Powers.

Also the UN-Charter making aggressive wars illegal makes the theory of duty somewhat precarious. One can hardly imagine international law (i.e. the Hague and Geneva Conventions) on the one hand making aggressive war illegal and on the other hand imposing on the inhabitants

of an invaded area a duty to obey the illegal aggressor, thus making it a war crime not to obey the aggressor war criminal.

During the 1949 Geneva Conference it was argued that prisoners of war rights should be conferred on all civilian combatants because when all nations condemned aggressive war, the population of the attacked country ought to be entitled to rise against the invader, thereby constituting an act of legitimate defence. In this absolute form the issue was turned down, mostly due to formalities, as mentioned previously. But it is evident from the meetings that the concept of illegal aggressive war played a role in determining the concessions to resistance movements. Resistance movements are clearly defensive. They cannot effectively be used outside their territory for organisational and logistic reasons.

One could argue from Art. 5 (2) of the Civilians' Convention that a duty of obedience existed the violation of which would constitute a war crime delict (21). It is clear that the persons envisaged by the article in question cannot claim the full protection provided for by the convention. He may even be shot if the law provides so.

But he is not a war criminal in the sense that the occupying power is obliged to prosecute. Nor are any other obliged to prosecute. The article only provides that the OP, if it prosecutes, does not itself become a war criminal.

It might be said that the OP's ability to enforce respect derives not from international law, but from the superior power compelling obedience. "International law suffers the occupant to legislate, but will not lend its authority or assistance to the enforcement of such legislation." (22)

It is clear that Military Necessity plays an important role in Art. 5, as all the sections in it carry provisos as to Military Necessity.

The concessions to Military Necessity are:

The occupying power may fight the "unprivileged" belligerent, it may submit him to the sanctions imposed against the delict in

question, restricted by the protection as to procedure laid down in Articles 64-78 of the Civilians' Convention.

The concessions to the Humanitarian Principle are:

The actions are not prohibited by the rules, there will be no case of war treason, and thus no permission for the occupying power to retaliate otherwise than by the limited actions against civilians concerned.

Art. 5 simply makes it a duty for the government (if any) of the occupied territory to accept that the OP prosecutes. Thus when we cannot construe a duty of obedience from an article making provisos for the stronger actions, this holds a fortiori for the less strong actions under heading 3.

As was mentioned before, we shall consider the rules of war in context with the fundamental rule that resorts to war is prohibited, especially the action constituting aggressive war. Civilian defence is a very important instrument to strengthen and support this rule. So it becomes clear that the regimen governing the rules of war ought to be construed as far as possible in a way favouring the civilian defence, thereby providing the defender with material for propaganda sanctions against the aggressor.

We may have established that no duty of obedience exists, but does there exist a duty of non-participation?

While there is no doubt that the non-participating civilian is fully protected by the rules, some doubt might remain as to the CD which, while not endangering the security of the occupying forces, still actively counteracts the political aims of the OP.

As the provisos giving the occupying power a right to prosecute only mention "activity hostile to security", the civilian defender cannot be prosecuted on this account, if the action is not made a crime according to the national law of the territory.

So we may assume that the duty of non-participation only goes so far as to prohibit act hostile to the security of the forces of the occupying power.

We may then conclude:

1. That the rules of war can be used by civilian defenders with some effect, at least for propaganda purposes.
2. That in order to achieve consistency with international law in general, Military Necessity ought not to be invoked above the explicit provisos in the rules.
3. That it may be argued that the civilian population of an occupied territory does not owe a duty of obedience, and that even a duty of non-participation extends only to actions which endanger the security of the occupying forces.

Notes

1. Vattel, Emmerich de, : Le Droit des Gens., 1758.
2. Lieber: A Code for the Government of Armies in the Field as Authorized by the Laws and Usages of War on Land, 1863.
3. The Conference held in Brussels for the Regulation of the Laws and Customs of War. (27/7-27/8 1874) was only a preparatory conference. The Conference proper was never actually held, but the rules drawn up were used by the Hague Conference of 1899 as a draft.
4. The First Peace Conference of the Hague, 18/5-29/7 1899.
5. The Second Peace Conference of the Hague, 15/6-18/10 1907.
6. The Four Geneva Conventions of 1949: Of relevance are:
 - III Geneva Convention relative to the Treatment of Prisoners of War of August 12th, 1949 (Prisoners of War Convention),
 - IV Geneva Convention for the Protection of Civilian Persons in Time of War of August 12th, 1949 (Civilians' Convention).

These Conventions were based on a draft approved by the XVIIth International Red Cross Conference at Stockholm in August 1948. In 1929 a Convention relative to the Treatment of Prisoners of War was signed. This and the Hague Convention IV with Annex was the base for the 1949 Prisoners of War Convention.
7. Dunbar: Military Necessity in War Crimes Trials, p.443 ff.
8. Cfr. the Preamble of the Hague Convention IV of 1907, which stated that it was formulated with "a desire to diminish the evils of war, so far as military requirements permit."
9. Dunbar: Military Necessity in War Crimes Trials, p.444.
10. Ibid. pp 444-445.
11. Ibid. p.445.
12. Ibid. p.446.
13. Cfr. Preamble of the Hague Convention IV of 1907.
14. Art. 51 (2) of the Civilians' Convention.

".. the Occupying Power may not compel protected persons to work unless they are over 18 years of age, and then only on work, which is necesar either for the needs of the army of occupation, or for the public utility services, or for the feeding, sheltering, clothing, transportation or health of the population of the occupied country. Protected persons may not be compelled to undertake any work which would involve them in the obligation of taking part in military operations. ... "
15. Baxter: So-called 'unprivileged belligerency. p. 323, quot.

16. Art. 4, A (2) of the Prisoners of War Convention.

"Members of other militias and members of other volunteer corps, including those of organised resistance movements, belonging to a Party to the conflict and operating in or outside their own territory, even if this territory is occupied, provided that such militias or volunteer corps, including such organised resistance movements, fulfil the following conditions:

- (a) that of being commanded by a person responsible for his subordinates.
- (b) that of having a fixed distinctive sign recognizable at a distance.
- (c) that of carrying arms openly.
- (d) that of conducting their operations in accordance with the laws and customs of war.

17. In this context it is interesting to note following commentary to the section 31 of the Soviet Military Criminal Code, as rendered in an article by Bernard A. Ramundo in the Am. Jorun. of Int.Law, 1963, p.79(quot.):

"The proscription of violence against the population is said to be necessary in order to eliminate conduct which
 a) weakens the combat effectiveness of troops and
 b) in violating the interests of the peaceful population, can undermine the authority and prestige of the Soviet Armed Forces in the Area of Operations."

Mr. Ramundo cites: "scientific and practical Commentary on the Law of Criminal Responsibility for Military Crimes" by Maj.Gen. of Justice, A.G.Gornyi, Chief Military Procurator, Moscow 1961. (in Russian).

While I cannot submit to the tendency in the Article by Mr. Ramundo, this extract if correct is interesting as a support of the assumption that the military establishments stress the discipline-factor very much.

18. Graber: The Development of the Law of Belligerent Occupation. p. 83 ff.

19. Final Record of the Diplomatic Conference of Geneva of 1949, Vol. II, Sect. A. Committee II, Special Committee.

20. Baxter: The Duty of Obedience to the Belligerent Occupant. p. 235 ff,
 also
 Graber: Op. cit. p. 70 ff.

21. Art. 5 (2) of the Civilians' Convention.

".. Where in occupied territory an individual protected person is detained as a spy or saboteur, or as a person under definite suspicion of activity hostile to the security of the Occupying Power, such person shall, in those cases where absolute military security so requires, be regarded as having forfeited rights of communication under the present Convention. ..."

22. Baxter: The Duty of Obedience to the Belligerent Occupant. p.243(quot.)

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THE POLITICAL FUNCTIONS OF SOCIAL RESEARCH
WITH SPECIAL REFERENCE TO PEACE AND CONFLICT RESEARCH

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Introduction.

A discussion of the present activities as well as of the assumptions of peace research was provoked from inside the research community by the critique by Herman Schmid in his paper: "Politics and Peace Research" in Journal of Peace Research, 1968, No. 3. The present paper was provoked by a recent event in the history of the movement; the publication of the proceedings from the conference on the Vietnam issue, which was arranged last summer by the Peace Research Society (International), the PRS (I), (1). This publication corroborates some of the more sinister implications in Schmid's paper; that the international ethos of peace research is operationalised in an identification with the interests of those who have power in the international system (and as such negates the value of internationalism), and that even the commonly accepted concept of negative peace becomes negated (2). That this was the case can be seen from the fact that the Vietnam Conference proceedings were openly dedicated to the American decision makers. Further the scientific undertakings included in the proceedings were only attempts to develop techniques which could help US decision makers in various areas of their policy towards Vietnam, be it negotiations, rural pacification, impact of different means of the conduct of the war, or how to cope with public opinion at home. Several of the papers could as a practical application well have implied a prolongation of the efforts of the US government and were therefore counter-productive to negative peace. We have elsewhere (3) criticised this publication in detail.

One could argue that this outcome was a regrettable exception partly due to the nearly exclusively American participation in the Vietnam Conference, and that such results can easily be avoided inside the present frame of the peace research movement. One obvious way out of the dilemma is of course not to arrange more conferences on specific international conflicts. (This seemed to be the conclusion Walter Isard drew from our critique of the Vietnam papers.) But firstly this conclusion is contradictory to the ethos of peace research as an applied science, and secondly we do not find any substantial difference between

the research focus, the kind of problems investigated and the quality of the Vietnam papers when compared with the papers usually presented at other peace research conferences. The only difference was that the former papers include Vietnam in the title and the latter do not. We therefore feel justified in concluding that the proceedings from the Vietnam Conference were rather a predictable outcome of the present set up of the peace research movement than is was a regrettable exception.

So far we agree with the analysis and critique of the peace research movement as it was presented by Herman Schmid. But in his presentation Schmid uses a rather abstract analytic scheme to deal with the problems of applied social science, i.e. the problem of who shall apply the results of the scientific undertaking and the relation between this choice and the kind of problems the scientist can deal with. But Schmid's rather formal approach completely leaves out the question of the factual applicability of the present products of peace research. Are ^{the} products relevant for practical purposes at all. The answer is possibly that the main part of peace research until now cannot possibly be applied to anything (4). In so far as we find the latter to be the case, we cannot fully agree with Schmid's characteristic of peace research as an applied science on vertical control in the international system. Where Schmid sees a tiger, is in reality only a paper-tiger. But this leads to the question whether science can serve other functions than practical applications, which we think it can. Often science has served the function of legitimising a policy and lend the prestige of the scientific establishment to serve this policy and therefore directly or indirectly the people responsible for it. The danger of serving such purposes is in our opinion a much more realistic threat to the peace research movement than is the more direct participation pointed to by Schmid.

In the present paper we aim at revealing important internal as well as external factors which can explain the development of the peace research movement in order to enable a conscious control of this development. In the first section we present an analysis of what we

consider the distortion of this once radical scientific movement concentrating upon three factors: the assumption of the movement; the scientific tradition of the movement; and the profit or survival motive. In the second section we discuss the political function of social science with particular reference to peace research. Arguing from a number of concrete examples, we conclude that social science rather produce knowledge and explanations to social phenomena than means of social control, and point to some immediate dangers of political misuse. In the conclusion we draw the implications of our analysis for future activities of peace research.

Section I.

In the first section we want to present and discuss three different factors, which we claim have determined the development of the peace research movement; a. the assumptions of the movement; b. the scientific tradition of the movement; c. the profit or survival motives.

a. The Assumptions of the Movement.

The movement has a pacifist origin. It sprang out of scientists' wish to reconcile their professional work with their ideologies. When the movement gained momentum in the fifties, the Cold War was the dominant issue, and in this situation the value of peace - seen as absence of physical violence - was felt to be a fairly consensual value to which an international scientific effort could be applied and should be applied.

The working hypothesis of the movement has been that positivist scientific work in the tradition of the 'exact' sciences can contribute significantly to the realisation of this humanitarian value. Further the movement - not without much dissenting opinions and much discussion - has assumed as a working hypothesis that it was meaningful to pursue this value alone, disregarding for a while other values. Peace can be pursued as an end in itself and is not perceived as a byproduct of the realisation of other values. This position is illustrated by the slogan "better red than dead" from the fifties.

To realise this end, various institutions have been created. Their formal structures are thus a means to this end. The purpose as defined by the statutes of the Peace Research Society (International) is then one such manifestation of an attempt to formalise rules that could guide scientific efforts to the common goal.

The guidelines for the Peace Research Society (International) ran as follows:

"The Society operates as an objective scientific organisation without political, social, financial or nationalistic bias. Its main objective is to foster exchange of ideas and promote studies focussing on peace analysis and utilising tools, methods and theoretical frameworks specifically designed for peace research as well as concepts, procedures and analytical techniques of the various social and natural sciences, law, engineering and other disciplines and professions.

The Peace Research Society does not participate in activities involving carrying on propaganda, or otherwise attempting to influence legislation or domestic or international deliberations, nor does it participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of any candidate for public office." (5)

The International Peace Research Association was less specific. Art. 3 of its statutes reads:

"The purpose of IPPA is to advance interdisciplinary research into the conditions of peace and the causes of war. To this end IPRA shall undertake measures of international collaboration designed to assist the advancement of peace research." (6)

These rules reflect - as is the case with most other voluntary organisations - the maximum that all participants have been able to agree upon. The discussion at the inaugural conference about definitions of the purpose of IPRA left no doubt that the concept of negative peace was the maximum that all participants were able to agree upon.

Negative peace did not cover all the standards that participants deemed important as a goal for scientific activity in this field, nor did the agreed upon guidelines for scientific efforts towards this goal cover what all participants deemed important. On the contrary the greatest common denominator of negative peace has been under constant criticism for the last years for its insufficiency. Of these critics we will only mention two: Johan Galtung brought forward the concept of positive peace (which vaguely means integration) in order to integrate the movement; Herman Schmid pointed to the value of social justice in order to provoke a clear split of the movement.

Without entering the discussion of philosophy of science, we will here concentrate on the organisational level.

On this level the commonly held value has been negative peace. On this level further the main working hypothesis has been that scientific work primarily in the sphere of international relations can contribute significantly to the realisation of this value. It is further assumed that the realisation of this value can be taken up meaningfully as a separate task, and other humanitarian values can be disregarded in this effort.

Although only very few actually subscribe to these assumptions, this is the only basis of the movement.

b. The Scientific Tradition of the Movement.

The movement is part of a broader development of social and political science in North America and areas under North American dominance towards a blank acceptance and take over of rather superficial characteristics of the natural sciences, especially physics.

The quantitative "hard" positivist social science is "value free". The value of peace is seen as an external value, a common goal of peace which all humans presumably could subscribe to, and science is seen as one among several means to contribute to the realisation of this goal. In the words of Rapoport (7) peace research is

"a programme of investigation aimed at understanding the conditions conducive to war and peace. This tacit assumption, which usually underlies such a programme, is that once these conditions are understood, war can be attacked as a problem similar to other global problems such as disease, poverty, natural disasters, over-population etc."

A scientific debate in this tradition is a technical discussion about technology, and values have no place in it. Values - except for the overall common goal of peace - are only seen as possible sources of biases. Biases cannot be tolerated in science, so therefore, one claims that researchers state their values, in order to facilitate control of the biases or if necessary, to counterbalance the research efforts. But apart from their possible bad effects upon objectivity, values belong to the sphere of privacy.

The conception of social science as a value free technology is well illustrated by a recent attempt to apply game theory to the Vietnam conflict. In our first paper on peace research (8) we criticised this attempt for being both hopelessly impracticable and for avoiding the basic issues of the conflict. Both points were hotly contested at the presentation of the paper. While the first point certainly is debatable - what the term practicability conveyed to the different participants became never very clear - then the second point certainly must be one that could - in principle at least - be decided finally.

A closer scrutiny of this application of the tools, techniques and the know-how of the theory of bargaining and games does not only substantiate the point repeated above, and thus corroborate the main thesis of the paper that this type of institutionalised peace research was counter-productive to its overall goal by yielding tacit support to US interventionist policy, but also does it reveal in detail how and why this is possible.

To avoid irrelevant controversy let us assume that the first point was plainly wrong, and that this application of game theory was optimal. Then we can deal with our second point, which is that the application of this and similar models for conflict resolution unavoidably leads to problems which cannot be solved within the framework of a positivist social science which defines conflicts subjectively.

The game theorist provides his model - his tool - for solving the actual conflict; it is up to the decision makers to accept it or not. The theorist presents an application in the hope that the decision makers thus can be persuaded to use it to bring an end to the 'deadly quarrel'.

In one of its simplest forms the model has two parties, X and Y, who each have two options for action. The two options for action for each party produce together four possible outcomes. The four possible outcomes are then ordered according to the scales of preference of each of the parties. The preference scales are usually transformed into comparable and even mutually substitutable utilities (= money).

With a subjectivistic definition of conflicts the researcher feeds into his model the options for action that the parties see as available to them, their goals as they see them, and their preferences as to outcomes as they state them.

In the Vietnam conflict in its present stage this procedure is impossible. The 10 point programme offered by the National Liberation Front (below referred to as NLF) and the 8 point programme offered by the US government are not symmetrical. The 10 points elaborate the preferred or - as a bargaining offer - acceptable social structure to be built up in Vietnam after the war, while the 8 points elaborate procedures for cessation of hostilities and lay down of arms. The 10 points briefly mention complete withdrawal of foreign troops from Vietnam as a condition for discussing peace settlements. To put it extremely brief the US government only proposes procedures for negotiating peace without mentioning the outcomes of the conflict that the US government aims at or could accept, while the NLF only proposes what outcomes of the conflict it could accept as a part of peace settlement. Thus the parties are talking besides each other, and there are obvious historical reasons for this.

The Vietnamese liberation movement has twice accepted procedures for negotiating peace settlements, and twice they have seen themselves as cheated. Having laid down arms, the agreed upon procedures (after the Second World War French withdrawal and after the Geneva Agreements general elections) were for various reasons never started. With this perception of the two former attempted settlements, it is not strange that the Vietnamese are reluctant to lay down arms before the final agreements have been settled.

The two programmes that have been offered by the two parties, thus function as bargaining strategies regardless of whether the parties admit it or not. If the mobilisation time differs between the two opponents - as it does between a popular guerrilla army and a technologically refined mobile expeditionary army - then the bargaining strategies are determined by this fact. The party which needs long time to build up its force - the guerrilla army - cannot lay

down arms until a settlement is implemented, while the party which can throw in its force on the spur of the moment - the marine corps for example - must strive for demobilisation and mutual lay down of arms before negotiating on reality, as it then will be able to enforce physically its solution upon the other party.

We need not discuss whether this is the conscious strategy behind the US government proposals; we need only observe that they function so.

Applying game theory as a tool for resolving the conflict defined subjectively then is impossible as one cannot feed into the model other options, goals and preferences than those which empirically can be deduced from the verbal or actual behaviour of the parties. In this particular case it leads the researcher to feed into the model only the options etc. that both parties refer to, i.e. negotiation procedure. Thus that study became an investigation of how the protracted bargaining strategy of the US government most effectively is implemented. The application falsifies reality as the NLF openly has stated its objectives. The only way out of the dilemma is to feed into the model the goals that the US must have in order to contrapose them with the goals that the NLF must have.

But not even in the cases where the stated options, goals and preferences of the parties fit such or similar conflict resolution models, is it permissible to use a subjectivistic definition of the conflict.

The two preceeding attempts to resolve the Vietnam conflict of liberation demonstrate this point. In these cases the stated interests of the foreign powers and the Vietnam liberation movement have been brought to a convergence point where both could agree upon a negotiation procedure. The subsequent cessations of mutually hostile behaviour have only superficially frozen the underlying real conflict.

This example from reality disrupts the subjectivistic definition of conflict, as it is demonstrated that in this case the simple juxtaposition of the subjectively defined goals etc. of the parties to the

conflict necessitates an investigation of the real interests of one of the parties. By implication this necessitates an investigation of the real interests in any conflict. Thus the concept of conflict must be redefined as one cannot tolerate exceptions to definitions. Further the concept of real interests or structurally inbuilt conflicts that Schmid points to (9) is therefore not an alternative as he suggests, but an imperative.

This argument does not imply that subjectivistic elements of conflicts are unimportant, neither does our argument imply that we claim to be able to define real interests, but rather that the above exposition of the structurally inbuilt bargaining strategies may serve as a demonstration of the possibility of using the concept.

In practice real interests are not investigated. It is contrary to the conception of social science as value free technology, even if it - as here - can be demonstrated to be a necessity. The scientist as a technician cannot probe into and question the motives of those he must persuade to use his cost reducing (costs in sufferings from physical violence) tools, techniques, know-how etc.

c. The Profit or Survival Motives.

These factors, which are operative in distorting all other non-profit organisations, are also operative here. We will not argue, however, that these factors are sufficient to cause a distortion of the peace research movement, as the moral indignation, which triggered off the movement, indicates the opposite. One cannot argue that peace researchers or other dedicated scientists cynically calculate in terms of prestige and money which type of effort brings the largest profits, but on the other hand both at the individual level and at the organisational level peace research must get funded from the existing sources. In the US more money is available for research on the military budget than from any other single source. Some sponsorships have been sought from the international institutions, which generally, however, are dominated by Western governments. Scientific institutions have to be part of the existing science and education system to prosper. Profes-

sional careers have to be pursued within the existing structures of Western societies. These factors are seldom decisive alone, but the sheer lack of funds will inevitably impede or hinder some efforts, while affluency will - in some cases - speed up others. In cases where no important human standards may guide the judgment of the individual researcher, the simple profit motive may be decisive.

The economic factors described here become much more important when they materialise themselves as in the formal financing system through contracts which dominates all research in the US and which is spreading rapidly in Europe. Research tasks are contracted by consumers of science with scientific firms or institutions. Not only are the specific costs of a specific research project borne by the outside sponsor, but in most cases the wages of the researcher as well as the running expenses (overheads) of the scientific institution to which the researcher is attached are being financed through contracting scientific labour. Not only do "independent" research outfits (as Hudson Institute, Rand etc.) finance themselves this way, but also universities in the US finance their research activities partly or totally this way.

In Europe universities and other centers for scientific inquiry have had a long tradition for financial independence or semi-independence. Research was made by scientists in often life long university positions, and the research was sponsored by regular yearly budget appropriations directly to the users or was sponsored by foundations which to a large extent were controlled by members of the scientific community. Oversimplifying the issue, one may say that the typical outcome of scholarly research in this tradition was in the form of essays and treatises of theoretical and often even speculative nature, while the typical output from the contract system is in the form of numerous shorter papers where the researcher is expected to state policy implications of his efforts, this being warranted or not from the nature of the specific scientific work. One may debate whether science in the European tradition had any real independence, but the notion that science had an obligation towards society as a whole, and not to individual consumers of scientific work has been widespread. The spreading contract system puts some

effective constraints upon the researchers, as the output shall be of some use to the contractor of the research. We will not argue that the traditional European system is "better" than the contract system; is has its own shortcomings, especially its inherent resistance towards change.

Peace research has had to rely much on contracting work also in Western Europe, both because it has tried to innovate political science and international relations and therefore has had to combat the conservatism in these newly established disciplines, and because the explicit aim of peace research of avoiding nationalistic dependence, which involved a risk of nationalistic bias, made it preferable to balance the financial contributors and to have many small rather than few big. In sociological jargon this way of gaining independence is called criss-cross (10).

Ad a, b and c.

Above we have outlined three factors which we claim have been operative in shaping the development of the peace research movement. The first factor is specific to peace research, the second specific to the main stream of modern North American social science, and the third is specific to science in modern private capitalism.

Section II.

On the Political Use of Social Science.

In Schmid's conception (11) science aims at control of human environment, and social science is no exception. The fact that social science deals with a system of which scientist is a part makes for some important differences, but it also aims at control. Schmid distinguishes between social control from the top of the society and social control from the bottom of the society.

We will question this conception of science. It may be true that science aims at control, but we hold that this is not its only aim. Science also aims at understanding and describing the reality which is its subject matter. Even if one accepts the conception of science as aiming at control which obviously peace research does, it does not necessarily follow that control is achieved. On the contrary we will claim that the majority of peace research yields very few and insignificant means of social control. The impracticability of most of peace research is recognised and has not infrequently given rise to papers pointing to the desperate need for a technology of peace (12). So we hold that this needs no documentation. In so far Schmid's idealistic conception of science leads to the belief that peace research produces means of control, we must claim that this is misleading. His subsequent critique of peace research for being inherently conservative therefore collapses because its premises are wrong; it can only be applied consistently in so far as peace research actually produces means of control.

We will claim, however, that this is a very insignificant aspect of the critique that can be raised against peace research and other branches of contemporary social science. We will illustrate this by pointing to the actual uses of social science. Social science, or more generally knowledge about the ways societies function, is used both as means for manipulation and as justifications for particular policies. The latter use of it or function we hold to be of high importance, and, as it has been overlooked in this debate, we will devote our attention to it.

To clarify this point we will first give a historical example which shows how a partial description and explanation of a specific social phenomenon served as a justification and legitimation of some severely criticised inhumane enterprises conducted by a special power group in the European societies at that time.

The European slave trade from the West Coast of Africa - now the Ivory Coast, Ghana, Togo, Dahomey and Nigeria - to the plantation owners in America had its heydays around 1800 (13). The slaves were never taken by Europeans, they were all sold by their fellow Africans. The European trading companies sold guns and alcohol. These products were only sold in exchange of slaves, so that these goods could only be procured by the local population through sale of slaves. The local tribes were habitually fighting each other, and slaves for local agriculture were provided by this tribal warfare. Once guns were introduced in this local warfare, even if only as a possibility, every chief of a tribe necessarily had to sell as many slaves as possible to defend himself and his tribe from being caught by other tribes and sold to the Europeans for guns. Under the vastly expanding tribal raids were also caught a great number of people who did not fulfil the standards of European slave trade, children, elderly people and physically less fit people, who could neither be absorbed by local slaveholds in agriculture as hitherto because of their increasing number and who could not either be set free. These people were executed at religious rituals, funerals etc. Thus the slave trade provided its own justification against occasional moral criticism against it in Europe. The slave trading companies could only refer to the fact that the Africans did sell their own brethern, refer to the cruelty of the ritual executions of children and elderly people and to the rather total social and cultural corruption which accompanied the expansion of slave trade and the excessive consumption of alcohol. Finally, when rather late the Danish government wound up its slave trading company, which was running with a deficit, and after much external and internal public pressure forbade slave trade from its colony in Ghana, this was met with a flat refusal by the powerful king of the Ashianti (14). Now we are able to recognise that the essential decisive factors in this development were the European

monopoly on guns and gunpowder coupled with the need of European capital for cheap slave labour in the colonies in the Americas. But the contemporary public was effectively mystified and deceived by the cultural aspect and the tribal conflict perspective. These factors were important elements in this development, but not the essential elements in the explanation of how European slave trade reached so huge proportions. The function of the former types of explanation was to provide justification and legitimation of the European slave trade, and it was used by the slave trading companies as a defence and in their propaganda, which for long periods silenced the critique.

A contemporary example of the political function of partial explanations is illuminated by Franck's (15) critique of contemporary sociology of development. We assume that our readers are familiar with the debate, and we therefore only recapitulate Franck's argument that the various schools of development sociology by concentrating upon cultural, ethnic and other factors in the underdeveloped societies fail to see that the more basic cause for underdevelopment is the exploitation by the capitalist developed nations of the surplus generated in the underdeveloped nations, and further that the cultural, traditional and psychological barriers against development and modernisation that these schools focus upon are produced by colonial and neo-colonial exploitation. Now evidently the criticised theories can be contained within the theory Franck advances, and cultural, traditional, psychological and other factors in the underdeveloped societies are presumably important elements in the process of underdevelopment and in attempts to reverse this development. But the political function of these partial explanations and narrow or middle range theories focussing upon factors in the underdeveloped world is to direct attention away from the essential factors of private Western capitalist exploitation in these countries. Indirectly this type of theories justifies a continued expansion of Western capitalism in the underdeveloped world, as the local population has to be changed and educated in the "entrepreneurial spirit" to break the barriers against modernisation and become receptive to development.

Fanon's (16) work on psychiatric disturbances among Algerians under colonial rule led him to reject contemporary French psychiatric studies and theories about the psychic characteristics of Algerians, and led him to formulate a theory of psychiatric disturbances being caused by or released by external social factors such as colonial rule. The criticised theories played an important role in the formation of widespread myths that it was necessary to retain French authority in Algier to curb innate Algerian impulses towards violence.

In the recently published "Vietnam: Some Basic Issues and Alternatives" (17) we have in the field of peace research a nice demonstration of this tendency. Pool (18), former advisor on rural pacification to the Kennedy and Johnson administration characterised, in striking contradiction to the evidence he cited, revolutionary as criminal behaviour. This approach was accepted by all contributors to the volume, The appointed discussant of Pool's paper at that conference Schwartz writes: "All revolutionary movements recruit from among previously criminal and/or deviant groupings; indeed at some stages and/or places most such movements disproportionately recruit from among such elements." (19) No substantiation was attempted for this allegation; it was simply a dogmatic point of departure, and its function was precisely to justify the US policy of disregarding the wishes of the Vietnamese people. With this view it is only natural that the researchers advocate "law and order" programmes, and that they see the social reform programmes implemented by the National Liberation Front, the effects of which they admit, as clever schemes by these criminal communists, and they advocate reform programmes only as counter-measures to outwit the opponent (20).

The three examples given illustrate how research into social conflicts can be used in the interests of the ruling classes in their policy of exploitation. Their prime value to this group which finances the research is not the tools it provides, but the justification it yields to policies of oppression. The contract system facilitates this use of social science, as the contractor of scientific work has a recognised right to determine what aspects shall be studied. Even when for example

particular conflict is studied from both the ethnic conflict aspect and from the aspect of imperialism, the results of the research are the property of the contractor, who has the right to determine its use. Still, even when the researchers have a right to publicise their work, one cannot expect the scientifically fruitful to survive. The idea which seems to be implied in many arguments for a pluralistic approach to conflict studies⁽²¹⁾ is some kind of belief in survival of the fittest. To believe that the market mechanism will publicise and utilise the most fruitful scientific theory is naive. This belief misses the central point that the main value of social science to the consumers of social science is to provide justification for their policies. Therefore this fact is more likely to determine which theory is likely to survive; the theory which justifies best is going to be the one backed up by affluent research grants, promotion and publication in the centrally controlled mass media.

Relating the political use or maybe even misuse of social science in general and peace research in particular to the determinant factors outlined in Section I, we can see how these produce such science as a result. The external factors, the profit or survival motives and especially the contract systems enable the consumers of science to determine what shall not be studied. Those aspects on reality on which effective justificatory ideologies can be built are promoted by affluency, while those aspects which serve as basis for critique of the preferred policies of the ruling elites in the Western developed societies are impeded and hindered. The conception of social science as value free technology and the subjective definition of conflict form the normative basis for letting the consumers of science not only exclude effectively certain research topics, but also for letting the consumers of science determine what the topic of research shall be. Thus the aggregated effort of the knowledge producing sector of the Western developed societies can become a distortion of reality, a popular myth which serves the function of legitimising the preferred policies of the ruling elites.

The working hypotheses of the peace research movement become in this setting elaborated by the following additional hypotheses: peace can be promoted by feeding peace research into decision makers, and the more powerful they are, the more effectively is peace furthered; decision makers will not be convinced that they can use the peace research technology if they have reason to believe it is not effective. From these two hypothetical statements are then deduced the following guideline for peace research: no piece of peace research must be criticised by other peace researchers (22).

Of course the exclusion of critique is a most effective hindrance to any progress of this or other disciplines, therefore we will hold that these guidelines for peace research are likely to cause the peace research movement to defeat its own ends.

In this section we have brought forward a "negative" critique and have focussed only upon actual and potential misuse of social science and especially peace research. We find it more important to deal with what is wrong and to explain how this can come about than to express our respect for the peace research which has been properly conducted.

Winding up this section, it must be noted that even the most peaceful of studies are sponsored by the same powerful consumers of science that sponsored the Camelot project. The US Navy, Army and Air Force and the NATO sponsor studies in humanities and letters, and they sponsor studies into non-violence and civilian defence as alternatives to military defence. They are tolerant and do not care too much about the relevance of each particular research topic, and as can be seen from available listings of research sponsored by these organisations; they seem to be as catholic in their tastes as the small and big European princes who patronised universities and centers of higher learning during the renaissance. We will thus not argue our theory so strictly to let it resemble a conspiracy theory. But we will maintain that even with a considerable degree of looseness and a considerable waste of money also these researchers by accepting this kind of sponsorship contribute

to the prestige of these institutions and help them create an image of tolerance and democracy. And if any of these projects could become dangerous, it is always better to have the researcher inside the system, where pressure can be put on him, than outside.

Conclusion.

In this paper we have attempted to outline the contours of a theory of the political functions of social science. The results of its application to peace research demonstrates that this is a fruitful line of inquiry. By studying the functions of social science as determined by the external material constraints upon the process of producing knowledge, one is better equipped for explaining the outcomes of earlier efforts and better able to predict the consequences of future efforts. By studying the internal factors, one is better equipped for assessing whether the working hypotheses were and are realistic statements of what is possible in the framework of the material constraints. The internal factors are at the same time the means for manipulation that are available to the researchers, and thus change of these may in some cases enable the researchers to influence the world in their desired direction.

We conclude from our application of this theoretical frame firstly that the conception of social science as value free technology is grossly misleading as a statement of fact. Further we must conclude that the conception of social science as technology produces distorted or unimportant descriptions of reality when the scattered research efforts are aggregated. (This point obviously needs empirical evidence which is better than the examples that we have been able to give so far.)

In this connection we must give a final critique to Schmid's conclusions. His formal and idealistic model of social science leads him to propose revolutionary research as desirable. This revolutionary research is also seen as technology. This immediately begs the questions of why the researcher should be able to produce tools, techniques and know-how for revolutionary movements when he in most cases is unable to produce such tools for the holders of power. The revolutionary research is faced with the same difficulties as other applied research (23). Further one must imagine that the task of selling scientific technology to the oppressed groups in our world must be immensely more difficult than the task of selling scientific technology to the oppressors. Further if this

technology is publicly available (and of practical value, which we doubt), it may be of more use to the oppressors in preempting revolutions than to the groups to which it is addressed and dedicated. This problem can only be met by classifying these types of research. Then we will agree there would be little if any meaning in conducting such research under the name of peace research.

If we drop the conception of social science as technology - which we believe one should - then one is able to operate with such concepts as revolutionary research, meaning research that is revolutionary in itself. Being well aware of the richness of connotations of the term, we will tentatively define revolution as a qualitative change in the basic parameters determining a social system. Scientific revolutions occur when the empirical finding of phenomena which cannot be explained and understood within the existing theoretical frames necessitates a rejection of these frames and their replacement with new theoretical frames. In this process the unexplainable empirical findings are explained by ad hoc explanations, and the scientific revolution has taken place when the old frames have been rejected and replaced with new that explain these hitherto inexplicable phenomena.

Understanding scientific development in this way, we must evaluate the research efforts within inherited theoretical frames as important as the reformulation of theoretical frame. In the history of science the sudden and drastic changes which are seen as the land marks of scientific progress usually will be connected with the researchers who formulate the new theories. History then often overlooks that the piling up of unexplainable findings is as necessary to scientific development (24). We will argue a fundamental change in the field of peace research. The present status of peace research is in reality pre-theoretical, it is the era of groping in the dark, where everything is seen as equally important; it is the time of heuristic devices and the "towards a pre-theory" of this or that. We will argue that the time has come for being less eclectic, for giving priorities to certain research tasks before others. The first step towards the theoretical

stage of peace research is exactly to claim that some aspects are more important than others. The concern with this critical task will determine if peace research shall become a society for mutual complimentary art or a cumulative scientific enterprise.

The lesson of the Vietnam War has been that stable peace cannot be achieved by attempts to solve the conflict between the US and the National Liberation Front. The papers given at the Vietnam Conference, much referred to in this paper, which dealt with a part of the reality of the Vietnam conflict, imperatively posed the questions of why the US fought the war against the Liberation Front. These imperative questions were and are: which are the interests pursued by the US in developing countries? How does the internal structure of the US function to involve the US in this type of warfare? The questions can be summed up under its usual denotation: how does US imperialism function?

We will claim that there are good scientific reasons for studying the problem area usually denoted by the term imperialism. We will further claim that there is good empirical basis for claiming that imperialism - vaguely defined, as it is in most current writings on the subject - is one of the major obstacles to achievement of stable peace in the developing world, and the three examples given in Section II point in the same direction, too. Thus we can claim that the peace research movement in order to fulfil its programme of investigation of the conditions conducive to war and peace must study imperialism. This field of study and the scientific means of study will form a break with the dominant research tradition of the movement, though there are some examples of studies of this area within the movement (25).

The study of imperialism, which we deem imperatively imposed by the programme of peace research "to study the conditions conducive to war and peace", does not exclude other fields which have been of value in the peace research movement. The conflict between the underdeveloped and the capitalist developed world does not make the problems of arms-races and terror balance obsolete.

Scientific revolutions in social science may have a bearing upon social revolutions. In so far as the popular myths which justify and legitimate certain policies conducted in the interest of the ruling elites can be exposed as misleading descriptions of reality, the possibility exists for a new policy. This does not result in social revolutions per se of course, but in some cases it necessitates social revolutions, again meaning basic change in the parameters determining the social structure. For example the exposure of the irrationality of strategic thinking has not necessitated any revolution per se; it has necessitated a change in policy.

A realistic assessment of what types of research are feasible in the present Western societies points out studies of imperialism as clearly controversial. They are not going to be backed up by the strong consumers of science. The peace research movement and the institutions created to implement its programme have therefore a well defined duty to back up the claim of scientists to be allowed to study the problem areas and find empirical answers to the problems and questions which are posed by their own research.

Relating this proposed scientific programme of the peace research movement to the goal of removing the conditions conducive to war, one needs a political philosophy of how this is done. It is clear that studies of imperialism conducted in the Western world cannot become immediately technologically oriented. Rather they will be of relevatory nature, the kind of research we have described as aiming at description and explanation. They will not be tools for changing the world, but in themselves they form the basis for political action. In this context we will hold that this type of studies must be conducted in the Western world and especially in the US for two reasons. Firstly because it is best studied from its own base, and secondly because knowledge and subsequent political action are most needed there, if the war producing effects of imperialism are to be curbed.

In presenting this paper containing a description of external factors and internal factors determining the development of peace research, we will finally make our standpoint clear with respect to the term determinants.

The factors labelled determinants are only seen as determinant in so far as they explain a historical development. Of these three factors the external factor is obviously the most stable one. Therefore we advocate change of the internal factors, the hypotheses of the peace research movement and the conceptions of social science. By manipulating these, we will claim that the researchers have a possibility for manipulating their environment of which they are integral parts and society at large into their desired direction. This working hypothesis is of course to be subjected to criticism for its practicability, and we will claim that we have provided a frame for this assessment. The ultimate test of this working hypothesis is praxis. Therefore we submit this paper to the Third IPRA Conference in order to induce IPRA to include the subject of imperialism as the presently most pertinent subject of study among the possible conditions conducive to war.

Post Scriptum: It follows from the view on scientific development, which is the basis for our concluding remarks, that we must regard the notion of continuous revolution to be disastrous. When we argue for fundamental change, we argue for a specific change, and the change consists partly in specification of the new theoretical frames that are to replace the old. Once this change takes place, the old frames are rejected as such, but at the same time one must claim that the theoretical frame that is taking its place is a scientific theory, and this means in particular that exceptions and ad hoc explanations are to be avoided. We hold it to be unfruitful to speculate about possible future fundamental changes. If, and only if, the empirical study of reality disproves or invalidates the new theoretical frames, can we start formulating new theories (26).

Notes.

- (1) See Peace Research Society (International), Papers, Vol. X, 1968, Cambridge Conference, June, 1968, "Vietnam: Some Basic Issues and Alternatives", USA, 1968, which contains the proceedings of the conference.
- (2) See Schmid, Herman: Peace Research and Politics, Journal of Peace Research, 1968, p. 229.
- (3) See our The Vietnam Conference Papers, 'A Case Study of a Failure of Peace Research.' Paper presented at the Sixth European Conference of the Peace Research Society (International), Copenhagen, August, 1969, mimeo.
- (4) This is discussed by Boserup, Anders, in Power in a Post-Colonial Setting: The Why and Whither of Religious Confrontation in Ulster, Studies in Progress, No. 2, Institute for Peace and Conflict Research, Copenhagen, September, 1969.
- (5) Quoted from the cover of Peace Research Society, Papers, *ibid.*
- (6) Quoted from Proceedings of the International Peace Research Association Inaugural Conference, Assen, 1966, p. 13.
- (7) Quoted from Rapoport, Anatol's introduction to von Clausewitz' On War, Penguin Ed., London, 1968, p. 40.
- (8) *Ibid*, pp. 8-11.
- (9) *Ibid*, pp. 224-229, esp. p. 227.
- (10) We doubt, however, whether this is a conscious strategy or an after-rationalisation.
- (11) *Ibid*, p. 218: "All science aims at control".
- (12) Several papers by Galtung deal with the need for a technology of peace, see esp. Galtung, Johan: Peace Research: Science or Politics in Disguise, Prio Publication 23-6, Oslo, 1967, mimeo. At the last IPRA conference two papers dealt exclusively with this need, see Pontzen, Théodore: The Missing Link: A Technology of Peace, and Lentz, Theodore F.: Towards a Technological Orientation for Peace Research, Proceedings of the International Peace Research Association Second Conference, Vol. 1, pp. 50 and 60 resp., Assen, 1968.
- (13) An outstanding and well documented historical account of Danish slave trade is given in literary form by Thorkild Hansen in his Slavernes Kyst, Copenhagen, 1969, see esp. pp. 26-33, on which our account is based.
- (14) See Hansen, *op.cit.*, p. 154.

- (15) Franck, André Gunder: Sociology of Development and Underdevelopment of Sociology, Cataclyst (State University of New York in Buffalo), No. 3, Summer, 1967.
- (16) Fanon, Franz: The Wretched of the Earth, Penquin Ed., London, 1969, Chapter V.
- (17) We refer to the three papers by Ithiel de Sola Pool, Samuel L. Popkin and David C. Schwartz, op.cit, pp. 23, 36 and 46 resp.
- (18) Ibid, p. 24, and Pool, I. de S.: Village Violence and International Violence, Peace Research Society, Papers, Vol. IX, 1968, p. 92.
- (19) Op.cit., p. 58.
- (20) This is the policy advocated by Popkin and by Pool, op.cit.
- (21) This view is what seems implied in the arguments by Boserup, see Boserup, Anders: Case Studies of Social Conflicts: A Note on Methodology, Institute for Peace and Conflict Research, Copenhagen, 1969, mimeo.
- (22) It is our impression that this holds for most branches of North American social science, though we have only heard these principles pronounced explicitly within the peace research movement.
- (23) Practicable theories of revolution and revolutionary fighting seem only to have been formulated by active participants and leaders such as Mao, Lenin, Giap, Guevara.
- (24) In an oral report on a research project by John Vovodsky at the recent meeting of the Peace Research Society (International) in Copenhagen, August, 1969, war was described as an orderly process in terms of reciprocal losses of the opponents, mutual force employment etc. After having observed the striking regularities of the relationships, one was struck by some sharp discontinuity, to which only an ad hoc explanation could be given. A closer examination of the graphs reveals (private communication from Vovodsky) more minor discontinuities and the striking fact that the discontinuities had a tendency to coincide with presidential elections in the US. (The wars studied were the wars in which the US had participated.) The obvious next research task is then to study how the internal political system of the US government can account for changes that in the model presented, which operated with nations as discrete entities, could only be described as discontinuities with ad hoc explanations.
- (25) One obvious reference is to Kawata, Tadashi: "International Solidarity" and Economic Inequality, Proceedings of the International Peace Research Association Second Conference, Vol. II, p. 152. One may even claim that the main topic of the second IPRA conference: "Poverty, Development and Peace" was an attempt to raise

these questions, which, however, partially failed because it was premature in relation to the theoretical development of the movement.

- (26) This view of scientific development is also the strategy of the present paper. Though we have been much inspired by the presently on-going debate about Marxist sociology and philosophy, we have deliberately avoided specific references and quotations to back up our argument, and have been content with exploring the inconsistencies in the research traditions in which we have been brought up, and tried to use only this tradition as our vocabulary. In so far we have been able to explore this research tradition in its own terms, we owe gratitude to those who we regard as our teachers, especially Johan Galtung, though he obviously bears no responsibility whatsoever for what we have used it for.

Draft for discussion.

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PEACE RESEARCH: PACIFICATION OR REVOLUTION?

Notes on an Intra-Peace-Research Conflict.

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Introduction¹

Central in the discussion among peace researchers and about peace research are the conceptions of "violence" and "conflict resolution". Some apply these conceptions as if the choice were to be either for them or against them. A far more fruitful - and scientifically more relevant - attitude would be to discuss what these conceptions may signify.

So what is violence? How to understand what causes it? What is conflict resolution? What are the conditions for conflict resolution? What does a revolution imply? On what grounds can it be argued that such a thing as a revolution is relevant for peace researchers?

These basic questions are all too often met by superficial and simplistic answers even within the new discipline which has begun to root itself at our universities and academies under the name of peace and conflict research; at the same time the scientific foundation of the discipline is being questioned more and more intensively by an increasing number of young peace researchers.

In these notes, through discussing the above questions, I shall try to illuminate the conflict between what I think can be called the established conventional or conservative peace research (Pc) and the young, radical or revolutionary conflict research (Pr), also called "militant" peace research by its adversaries.

Now, what is the difference between peace research and militant peace research? Is it at all possible, does it make any sense, to use the term "militant peace research"? Does one speak of militant political science? Or militant economics? Is it a special duty of peace research to be non-militant? Must peace research be pacifistic in any absolute sense of the word? Why would this be of an advantage - and to whom?

The "conventional" peace researchers are shocked by the new tendencies in peace research that the younger "revolutionary" peace researchers advocate and the latter are highly dissatisfied with the conservative tendencies in peace research which the former group defends. Supporters of (Pc) characterise supporters of (Pr) as "persons that are considered to be peace researchers, but to whom pacifism has been replaced by Marxism, con-

flict resolution by class-struggle, "peace" by revolution, and if necessary bloody revolution".² I would say that this characteristic is essentially correct, but the surplus meaning often implied in it, namely that the young radical peace researchers at the universities, and particularly certain groups in the Scandinavian countries, should have developed into unrestrained worshippers of violence, maybe even thirsting perversely for blood, is most certainly not correct.

Part of the criticism against (Pr) seems to indicate that because of their appearance on stage, peace research could no longer claim to be a scientific activity with such goals and contents, that those willing to sponsor it, with the idea hereby saving lives and freeing resources now tied up in military armaments, can do so unquestionably.

Peace in the sense of absence of violence would not any longer be the common goal of all peace researchers. This is the accusation. (Pr) peace research is also said to be bad as science, or even non-scientific.

Here I will maintain the opposite thesis, namely that the criticism against the new radical conflict research is actually in itself ideological and thus unscientific. I am of course fully aware of the fact, that by maintaining this thesis I am on my part aiming a very serious accusation at the prevailing traditions in peace research. But nevertheless, I intend to aim another - and perhaps even more serious - accusation at the adherents of the conventional traditions in peace research. The accusation that the allegation of these (Pc)-adherents that "peace research could no longer claim to be scientific activity with such goals and contents, that those willing to sponsor it with the idea of hereby saving lives ...etc." is true and that it is they themselves who confirm this.

Furthermore I will maintain that it is just through a profound and thorough analysis of the basic concepts of "violence" and "conflict" resolution, that the new revolutionary tendencies in peace research have spread. Thus, it is actually not an ideological trend towards a more revolutionary attitude that constitutes the new tendencies in peace and conflict research, but rather a deepened scientific insight into the character of the violence in the world of today and the thereupon resting possibilities of reaching conflict resolution.

A Brief Historical Background

In its early childhood some ten years ago peace research was imprinted by the Cold War and the threat of a Super Power conflict hanging like evil thunder-clouds over the world. Pacifists and sensible persons all over the world at first formed action groups and marched against the use of nuclear weapons and later moved into the universities, where peace research was developed as a scientific discipline based on more or less pacific values. Many of those who joined were physicists suffering from a bad conscience. Johan Galtung of Norway became one of the most outstanding and luminous promoters. Later on SIPRI - the International Peace Research Institute in Sweden - was founded.³

The peace researchers developed a science which aimed at control and integration of the international system. They forgot, or just did not seem to realize, the obvious fact that integration is always carried out on somebody's conditions, and that somebody always has to inflict the control. Furthermore they overlooked the fact that the power-dimension always tends to be determinant - that integration always tends to demand particular consideration to the conditions of the stronger party, and that control always tends to fall in the hands of the power-holders, i.e. the stronger party. By overlooking these facts - the reason for which I think is to be sought rather in the ideological assumptions of traditional peace research than in sheer misfortune - peace research became both unrealistic and idealistic. In the shadow of the East-West conflict, the perspectives of peace research also tended to be limited to symmetrical conflicts.

The fundamental idea of peace research was to serve the decision-makers with knowledge and suggestions in such a way that it could be accepted by the politicians and thus, as was the hope, contribute to a more "peaceful" world.

Behind this attitude towards the problems, which characterises what I have here called the (Pc)-tradition in peace research, lies a basic assumption of harmony and irrationality : that the parties of a conflict, in the final stage, always have a coinciding interest in avoiding open, violent confrontations, for instance war. This is a basic ideological (liberal) assumption. However, should the parties still steer into open fights, then it is considered as accidents mainly due to lack of insights into the situation in which the parties are to behave. Thus, within the

the frames of this model it becomes the object of the peace researcher to correct misconceptions and to fill gaps in knowledge, hereby fulfilling his high mission to save lives and keep peace.

The sixties brought us new experiences and new knowledge. We have witnessed another kind of confrontation than the one we feared ten years ago, and we have seen how USA and the Soviet Union with slogans like "peaceful coexistence" and similar catchy phrases, tacitly agreeing with one another, have divided the world into "spheres of interests". The wars of liberation, and the Vietnam War in particular, has led to new protest marches and also to new analyses and new knowledge. Peace research is no longer what it used to be; it has learnt from experience. Therefore when in fact the opinion is brought up by the traditional and established peace researchers that this is not as it ought to be, I fail to see this as anything but a dogmatic standpoint interlocked with conservative ideological attitudes.

An Example

By looking at the history of a recent confrontation between the "old" conservative peace research and the "new" revolutionary peace research I hope to be able to throw some light on the differences between the two approaches.

During the last days of August this year the Sixth European Peace Research Congress was held in Copenhagen, it was arranged by the Peace Research Society International. Present were such internationally reputed scientists as Professor Walter Isard and Professor Kenneth Boulding from the U.S.A, a large number of the "new generation" of North European Peace Researchers were also present. In his opening address Mr K.Helweg Petersen, the Danish Minister of Culture and Disarmament, stressed the need for closer contacts between politicians and Peace Researchers - the role of the latter being to advise the politicians on the resolution of international conflicts. In avoiding the issue of the loyalties of the Peace and conflict researchers he made the problem seem little more than one of communication. As the conference got under way it soon appeared that for the younger peace researchers anyway the issue was much more complex. The previous year the P.R.S.I had held a "Vietnam Conference" in Cambridge, Mass. U.S.A. The proceedings were published in a volume entitled Vietnam: Some Basic Issues and Alternatives

(Peace Research Society International, Papers Vol.X, 1968) These papers are in substance typical of what I have called the "conservative" trends in contemporary Peace Research. In their search for "alternatives" they are explicitly policy oriented and as such fulfill Mr Petersen's requirements for fruitful peace research activities. The critique of the whole orientation of these papers (c f in particular Jarvad and Olsen: "The Vietnam Conference Papers: a Case Study in the Failure of Peace Research", Copenhagen Institute for Peace and Conflict Research) provoked a major conflict within the conference itself. The "Vietnam Dossier" exemplifies in an extreme manner a tendency which is characteristic of Peace Research in general. To gain acceptance for policy proposals - which is an admitted goal - peace research must of necessity accept the broad frames of reference of policy makers. This necessarily precludes peace researchers from using other frames of reference - leading to a biased - that is ideological - viewpoint. Thus science is openly corrupted.

The idea of "more information and more understanding", as Professor Isard put it, is at best based on the assumption of a basic underlying harmony of interests. Conflicts are seen as resulting from misperception and misunderstanding. Hereby

the peace researcher avoids to take into account any notions of conflicting interests, thereby believing to rest safely upon "scientific neutrality and objectivity"⁴. Apart from being naïve this is profoundly mystifying. The establishment of "peace in the sense of absence of violence", as it were, again becomes the same thing as pacification, and peace research becomes its technology. Although not intendedly, but implicitly, peace research based on this assumption will serve the interests of status quo. Again it becomes conservative ideology dressed up in "scientific" clothing.

In rejection to this open and disguised tendencies of peace research to serve the interests of the power-holders the majority of the participants at the Congress in Copenhagen signed a declaration that clearly opposed the viewpoints held in the traditional, conventional peace research (The declaration is added as an appendix to this paper).

Discussion

It might well be said that no adequate theory of conflict and conflict behaviour so far exists and I will certainly not try to develop one in this paper.

I will here only maintain that one has to make a very clear distinction between conflict as such and conflict behaviour. Conflicts are here conceived as incompatible interests and conflict behaviour as somehow openly violent behaviour. They are of course interrelated but should nevertheless be conceived as logically independent. Incompatible interests are here defined objectively i.e. by the observing scientist according to his theory and is independent of the actual subjective consciousness of the actors involved. This means that incompatible interests are conceived of as structural (actor independent), the structure defined according to the theory of the scientist. Conflict behaviour on the other hand is defined through the actual behaviour of the conflicting subjects. Taking the existence and non-existence of incompatible (basic conflicts) and conflict behaviour as the logically possible instances and plotting them against each other we have the following cases:

Table I

		Incompatible interests	
		yes	no
Conflict behaviour	yes	(A)	(B)
	no	(C)	(D)

The (A) case could be referred to as "manifest conflict", the (B) case as "mystified conflict", the (C) case as "latent conflict" and the (D) case as "resolved conflict". The respective cases then imply the following states: (A) implies "realistic war", (B) implies "unrealistic war", (C) implies "unrealistic peace" and (D) implies "realistic peace".

This might need little clarification. The (A) state denotes the situation when the conflicting parties are involved in violent behaviour over basic (according to objective criteria) incompatible interests. This would be the case when, according to Marxist theory, workers and capitalists confront each other in open class struggle.

The (B) state denotes the situation when there is subjective conflict behaviour over an issue that objectively (according to the theory the scientist applies) does not involve incompatible interests of the adversaries. Here we could imagine two different types of cases:

- i. the conflict behaviour simply goes on (due to social inertia) after the basic conflict has been resolved (rather than mystified this could more precisely be called "inertal conflicts").
- ii. an existing and unresolved basic conflict produces conflict behaviour over issues that are not relevant to the solution of the basic conflict. These "second order conflicts" are then seen as epiphenomenal to a certain conflict regarded as basic according to the applied theory (rather than mystified this could more precisely be called "displaced conflict").

An instance of (B)_i would be the former slaves fighting the former slave owners after the abolishment of slavery. An instance of (B)_{ii}, e.g., be noticed in the confrontation between black and white labour in Britain, assuming that the issue being security of work and therefore - according to theory - the basic conflict being the general one being one between labour and capital.

The (C) state denotes the situation when two parties have objectively incompatible interests while no conflict behaviour between them is manifested. This is the "peaceful coexistence" between the oppressor and the oppressed.

The (D) state denotes the situation when ^{a/}particular conflict has been resolved through the removal of the incompatibility of interests that previously constituted it and when the conflict behaviour over the particular issue has stopped. An instance here would be the post-revolutionary relations between former latifundistas and share-croppers both parties having ceased to exist in these capacities.

In this context the basic conceptions to peace research, "violence" and "conflict resolution", should be illuminated. When many of the conventional peace researchers and other supporters of the establishment speak of "violence" in connection with peace research, they mean wars or revolts. Although not always being pacifists themselves, they seem to think that other peace researchers ought to believe strongly in pacifism and thus do their absolute utmost to develop conflict resolution techniques to avoid "violence".

Thus the basic criteria of peace research is the presence or non-presence of violence in the situation. This criteria can be used to characterize the conditions defined in table I within the same frame of reference.

It should be noted, that the concept of "violence" in the (Pc) tradition of peace research was almost exclusively used in the meaning of "open violent behaviour". This is above all what conventional, conservative peace research, considers its duty to control and prevent. However, within the new peace and conflict research (Pr) one tends to stress that violence does not necessarily have to be palpably carried out by somebody against somebody else. Violence may be built into the very relationship between two parties so that for instance one's

possibilities for development may be limited by the other's ever so "peaceful" presence. Violence - in the sense of value-deprive of one party by the other - is said to be based on the structural conditions. This kind of structural "silent" violence may then have much more destructive and disastrous consequences than the open, palpable violence. The biological existence of most people in the Latin American slums and black ghettos of the U.S. are not harmed by bullets or napalm, but by exploitation.

By 'violence' we shall here refer both to "open" violent behaviour, i.e. hitting, shooting, bombing etc., and "silent" violence, i.e. oppression and exploitation. The four conflict states are characterized in the following way:

- A. Manifest conflict - implies open violence
- B. Mystified conflictⁱⁱ - implies open violence
- C. Latent conflict - implies silent violence
- D. Resolved conflict - implies freedom from open and silent violence

The conflict states here discussed should be interpreted dialectically. The concept of level has to be introduced. By the level of a conflict we refer to that what the conflict goes about in terms of incompatibility^{ti/} of interests. It might thus well be that when a conflict between two parties is resolved at one level they find themselves involved in a conflict at another (sometimes called 'higher') level with the same, or more likely, another adversary. Peace in this model is established relative to a specific conflict, but does not exclude the possibility of conflict or conflict behaviour with respect to other incompatible interests (different level).

Given this and in order to elucidate somewhat the concept of conflict resolution we shall very briefly look into the transition possibilities involved i.e. a) the general techniques for transforming one conflict state into another - sometimes called the conflict management techniques b) the general implications of such operation and c) what it leads to. This gives a set of postulates that of course in each case should be applied and tested against empirical evidence. Summing this up we may get the following table:

Table II

A. manifest conflict →

B. mystified conflict →

C. latent conflict →

D. resolved conflict →

A.	B.	C.	D.
-	1)	2)	3)
4)	-	5)	6)
7)	8)	-	9)
10)	11)	12)	-

1) Transferring a conflict from

A to B

is conceivable through

displacement

this implies

false consciousness

and leads to a state of

unrealistic war

an example is

scapegoating

2) Transferring a conflict from

A to C

is conceivable through

pacification

this implies

domination

and leads to a state of

unrealistic peace

an example is

imperialism

3) Transferring a conflict from

A to D

is conceivable through

class struggle

this implies

structural changes

and leads to a state of

realistic peace

an example is

revolution

4) Transferring a conflict from

B to A

is conceived through

raise of consciousness

this implies

reveiling the basic contradictions

and leads to a state of

realistic war

an example is

"black and white unite and fight"

5) Transferring a conflict from

B to D

is conceivable through

procedure 4)

followed by

procedure 3)

6) Transferring a conflict from

B to C⁵

is conceivable through

pacification

this implies

dominance

7) Transferring a conflict from
C to A

is conceivable through
reveiling of contradictions
this implies
polarisation
and leads to a state of
realistic war
an example is
liberation wars

8) Transferring a conflict from
C to B

is conceivable through
displacement
this implies
false consciousness
and leads to a state of
unrealistic war
an example is
pogroms

9) Transferring a conflict from
C to D

is conceivable through
procedure 7)
followed by
procedure 3)

10) Transferring a conflict from
D to B

is not conceivable
on one and the same level

11) Transferring a conflict from
D to A

is not conceivable
on one and the same level

12) Transferring a conflict from
D to C

is not conceivable
on one and the same level

We have not included the dialectics of the inter-level transformation of conflicts, i.e. the predispositions created for a conflict at another level as consequence of a transition of the conflict from one state to another at a certain level. (E.g. class conflict on the national level is resolved through revolution (A to D ; procedure 3) thereby creating a new conflict on the international level) neither do we believe that it is fruitful or even possible to include dialectics in fourfold or sixteenfold tables. The point, however, in putting up tables as the ones above is precisely to get some first ideas and insights from where to start the discussion on the problems and implications of conflict resolution - not in its abstract as seems to have been much of the case in previous research - but rather in its concrete relation to the different possible conflict states derived from table I .

From table II we derive in principle 12 conflict management techniques , three of them being immaterial, three combined of the others and some of the remaining very similar. It appears that at least two principal and sharply

distinguished remain. These could be called conflict resolution proper in contrast to conflict control. The first implies a removal of the incompatible interests, whereas the second doesn't imply this but instead the manipulation of the conflict at the subjective level, i.e. manipulation of the attitudes and overt behaviour of the involved subjects. Galtung has provided a useful analogy with two basically different ways of attacking a disease. One way is to try to eradicate its symptoms, while the underlying disease itself is not tackled, an example being to try to "cure" small pox by sticking-plaster. This would nowadays be regarded an unscientific approach. But it is basically the way conflict control works, and I would say, this is also what characterises the ambitions of prevailing (Pc)-type peace research. Hence the allegation that it is unscientific. It has, due to its ideological bias, so far been more interested in reaching what I have here called unrealistic peace than realistic peace.

This implementation of unrealistic peace has its counterpart in a certain strategy for conflict resolution, pacification, whereas the implementation of realistic peace, which would correspond to the scientific approach to cure small-pox as a disease at its roots, has its counterpart in a quite different strategy to resolve the conflict - a strategy according to table II contained in following dialectic sequence:

Table III

technique / implication
(for conflict resolution)

Conflict at level 1.		
Phase 1	raise of consciousness	/ reveiling of contradictions
Phase 2	polarisation	/ class struggle
Phase 3	demands for structural changes	/ revolution
Conflict at level 2.		

The differences between the pacification strategy and what I will here call the revolution strategy for achieving peace (unrealistic vs. realistic) is thus, of course, mirrored in peace research itself, where we find those working according to the pacification strategy - those peace researchers (Pc) earlier labeled conventional and conservative, and those working according to the revolutionary strategy - the (Pr)researchers. It is evident according to the definitions that the pacification strategy for conflict management is unrealistic qua conflict resolution. In praxis this strategy merely aims at "freezing" conflict behaviour and mystifying conflict attitudes while conserving the conflict as such and thus e. g. a state of oppression and exploitation. When the liberation movements ("the instigators of violence") have been pacified, the exploitation (the structural

violence) can continue.

If it is not always true that (Pc)-researchers sponsors its technique par préférence pacification it is still largely dwelt in the pheres of unscientific imagination. Conceiving of conflict basically as misconceptions and leaving the incompatibility of objective interests aside, it has turned out idealistic and unrealistic: according to the scheme above (the relevance of which of course could and should be questioned) direct transitions of conflict from latent or mystified states to resolved states are not possible. The underlving conflict must first be manifest (which probably, if not necessarily due to the vested interest^{s/} the conflicting parties will result in an open and more or less violent confrontation) and be resolved as such. But insofar as the (Pc)-researchers at all have dealt with the problem of turning, say, latent conflicts into resolved conflicts, as when they tackle the problem of "underdevelopment", their efforts have - and I don't think I am overstating it - almost in all cases turned out as complete failures⁶. Basically their approach has been to press for "aid" and to try to influence the decision-makers to take a more generous and benevolent attitude towards the underdeveloping countries. According to their basic ideological assumption of harmony they have failed to perceive incompabile interests in the situation (the idealistic failure) and have very often instead concentrated on smart lobbying to "smuggle" the conflicts over the borders between (C) and (D) or (B) and (D) (the failure of lacking realism), to use the signifiers in table I.

Conclusions.

Some of the points which I have argued in this admittedly sketchy outline can perhaps be simplified in the following diagram based on the logical distinction between type of behaviour and implication of behaviour. Under each category two main types are separated which gives us four separate conditions within the same frame:

Table IV

		<u>Type of behaviour</u>	
		"openly violent"	"peaceful"
<u>Implication of behaviour.</u>	"value depriving"	example: war	example: exploitation
	"not value depriving"	example: expressive acts	example: peace

I have here maintained that conventional, liberally based peace research either overtly and consciously takes the manipulative conflict perspective of the established power-holders (this would be the case of, e.g. Itzhel de Sol^e Pool in the Vietnam dossier of the Peace Research Society (International) I have been referring to), or does so tacitly and unconsciously (this would be the case in most existing peace research), and that it for this reason naturally concentrate on problems that fall into the category of "openly violent behaviour". This is regarded as dysfunctional for the system which the peace researchers with their technology endeavour to maintain.

Essentially two points of criticism against this tradition within peace research have been put forward:

1. That it is based on an ideological fixation which precludes any scientific analysis that bursts the liberal framework.
2. That, accordingly, peace research tends to become a tool of the Super Powers to minimize frictions which arise in their repression of the greater part of the people of the world. It becomes the "scientific" rationalisation of this repression. Founded on liberal ideological assumptions, it becomes status quo oriented. Stability - concern about the prevailing international power relations - becomes its goal in praxis rather than social change in an attempt to have these power relations restructured. Peace research evolves into Pacification Research

If, on the other hand, one does not start off the analyses within the liberal and subjectivistic frame of reference, but rather takes a structural or a objectivistic starting point, one tend to reach the conclusion that openly violent behaviour as such is not the only, or even not the main, cause of physical harm to Mankind as a whole, but that the conditions that people are forced to live under (the structural "silent" violence contained in the existing structural conditions) may be even more damaging - this is evidently what now an increasing number of independent peace and conflict researchers seem to recognize. To these researchers, what falls under the category " value depriving relationships" therefore catches the main interest. Contrary to what conventional peace research prescribes, it is maintained that in order to achive its basic goal, a world characterised be less violence (in the full sense of the word), peace research must do precisely the opposite to pacification research, that is primarely to develop means for abolishing (undermining, overthrowing) those structural power-relations that make for the violence, and for restructuring of the situation. This then becomes no less than peace research for subversion and revolution, Revolution Research.

At this point many otherwise sensible peace researchers are deceived by the assumption favoured by all power-holders (those who have a vested interest in preventing revolutions) that a "revolution" in itself is dangerous and unacceptable, that it is violence for the mere sake of violence. But no theorist on revolution and no revolutionary has ever realised revolution to be of such nature. A revolution is a complicated but necessary method - involving a lot of "peaceful" organisation and educational work - to obtain a qualitative change in the established power structures. And as the established power-holders are not usually willing to give up this position without any struggle, one can foresee that open violence will be applied. Being a revolutionary, one must be prepared to meet

such violence and defeat it. Being a peace researcher claiming to be honest and scientific, one must be aware of the fact that violence is already built into the structure, and that in certain situations an open confrontation may be the most effective, or rather only way, to bring about liberation from this structural violence. The analogy of curing diseases in medicine might well be applied again. The scientific method to escape a greater harm (small-pox infection in the example) is precisely to accept and use cleverly a smaller amount of that harm (vaccination). Similar in certain situations "revolutionary violence" may be the necessary means to obtain conflict resolution proper. This is more or less, I think, the reason why so many young peace researchers consider it quite compatible with, and even imperative to the role of peace research to actively support e. g., the NLF in Vietnam in its struggle for liberation.

The new generation of peace researchers have now seriously begun react against the corruption of traditional and "establishment" supporting peace research. They turn against the idea of peace research being a research of and for control, integration and pacification, and they demand that it takes up research of and for liberation, polarisation and revolution. This is found to be the necessary way to eliminate at its roots the violence in the world with all that it contains of exploitation, brutality and deformation of lifes and societies.

Peace research, to fulfill its scientific task which is to resolve conflicts (promote realistic peace including freedom/^{from} oppression and exploitation) rather than to play around trying to find techniques for keeping its symptoms down, must turn to the now (on ideological grounds), overlooked procedures 3), 4) and 7) summed up in Table III, in order to improve these techniques to resolve conflicts. This is the scientific insight with which a new peace and conflict research, or revolution research, will confront the ideological blindfolds of traditional peace research.

Postscript.

Having stated a theory or recommendation scientists are faced with their momento de la verdad. Will it work? Is it applicable? Praxis is the only generator of truth. I have here argued that on the whole peace research so far has studied and promoted the transition of manifest conflicts into latent conflict states, characterised by what I somewhat provocatively have labeled "unrealistic peace". I have also more or less openly stated that this is as immoral as unscientific and that therefore something else should be done. What should most urgently be done, as I see it, is to find ways of studying and promoting the transition of states of latent conflict into states of realistic peace, i.e. procedure 9) in Table III. By developing a frame of reference such as hinted at in the discussion contained in these rather scattered notes, I maintain that it should be possible to study such transitions meaningfully, and to gain insights for subsequent applied research along the (within peace and conflict research) now overlooked or even doomed lines of revolution research. And if this cannot be done within the accepted framework of peace research we will simply have to change them or go outside them.

Notes

- 1) This article is triggered off by the debate (or should one say crises?) within peace and conflict research which have arisen out of Herman Schmid's article "Peace Research and Politics" in Journal of Peace Research 1968:3

The concepts and arguments put forward in the present article are of course nourished by common scientific knowledge in the field, but precisely because of the fact that they will sometimes carry resemblance to ideas put forward by, e.g. Lewis A. Coser, Johan Galtung, Herman Schmid and others, I would already in the outset like to ask the reader not to compound them with these - that would just cause confusion and misunderstanding.

It should also be said at the outset, that according to the conventional rules of scientific discourse there is maybe a slight lack of concrete exemplifications to the general propositions put forward. This is simply due to the fact that the author, at this stage of the work, not regarded it as absolutely necessary to present detailed references. However this should not preclude the reader from using the frame given to seek for himself. To provoke this was one of the motivating ideas of putting together the observation set forth in this paper.

- 2) quotation from Kjell Goldmann's article "Militant fredsforskning" in Dagens Nyheter, 1/9 1969.
- 3) It deserves mentioning that among the members of the present Scientific Council of SIPRI is Henry A. Kissinger, also known as President Richard M. Nixon's special adviser on international affairs.
- 4) For recent discussions on the implications and applicability of such concepts as "scientific neutrality and objectivity" in the context of social conflicts cf. Anders Boserup, "Case studies of social conflicts: a note on methodology" (Paper submitted to the Eighth Pugwash Symposium, Elsinore, Denmark, Sept. 1969) and Lars Dencik (ed.), "Scientific Research and Politics", Studentlitteratur, Lund, 1969.

- 5) The transformation of a conflict from a mystified (inertial or displaced) state to a latent state may be harder to conceive than the other transition processes in the table.
- i. If it is the question of an inertial conflict, no transitions at all are possible (this thus also applies to the processes 4) and 5)) according to the definitions. A conflict once resolved is resolved.
 - ii. If it is the question of a displaced conflict a transition is conceivable. This would be through the control (pacification) of overtly violent behavior between groups over a "false" issue (relative to a certain set of incompatible interests). By serving as a (falsely) functional alternative to the parties, the open violence can well reach such magnitudes that it must be held down by outer force. This is the case when the police moves into the ghetto to stop (pacify) intra-ghetto rivalry. Actually to provoke such intervention might be a useful tactic to the conscious revolutionaries in the ghetto. By the intrusion of the police the basic contradiction (between the white establishment and the black communes) might be demonstrated and revealed, thereby supposedly raising consciousness within the black society and demystifying their internal confrontations.

A final word should be said to this. Whereas the content of Table I was states of conflicts at a specific level, what is denoted in Table II is conflict processes, i.e. the transition of a specific conflict between the different possible states. These processes, although possible to illustrate by examples, in several cases still lack comprehensible and apt labels or catchy words. But when they are once caught in an appropriate frame of reference, they will certainly soon be coined. To do so might be a useful first step to reach understanding of these problems.

- 6) For a profound and well-documented analyses of this cf. Andre Gunder Frank, "Sociology of development and underdevelopment of sociology", Catalyst, 1967:3. (Reprinted as Zenit Reprint 1, Zenit, Stockholm, 1968.)

APPENDIX

Statement

At a time when the number of intellectuals is increasing constantly and their role becomes radically different from what it was in the past on the plane of science and technology, production and management, education and communications, and also cultural creativity; at a time when the fate of intellectuals is linked more and more to that of the working classes and of the movements of national liberation - a fact of which scientists all over are becoming increasingly conscious; at a time when U.S. imperialism poses a universal threat to the future of culture and to the future of mankind itself:

We, peace and conflicts researchers from several countries assembled in Copenhagen for a congress of the Peace Research Society (International), August 26 - 28, 1969, want to express our deep concern about the present international situation. Increasingly the world is dominated by the super-powers. In Vietnam and elsewhere the U.S. suppresses the people, fights the national liberation movements and supports fascists or otherwise reactionary puppet regimes: In the East-European countries the U.S.S.R. by military force or latent threats of military force denies the peoples their right to self-determination and their right to find their own way to a socialist society. These two super-powers increasingly develop common interests in international stability and status quo. Under the slogan of "peaceful co-existence" they divide the world into "spheres of influence" and openly or tacitly support each others "pacification" policies.

As scientists in the field of peace and conflicts research, we see as our responsibility to proclaim our active solidarity with the peoples struggling against imperialism and super-power supremacy, particularly with the heroic people of Vietnam.

We recognize the tragic fact that due to their enormous financial resources, the super-powers and particularly the U.S.A. are able to carry out their ideological and cultural penetration with the help of propaganda agencies disguised as scientific or even peace research institutions.

We have considered the so-called Vietnam conference of the P.R.S.I. and the subsequent publication of the papers in the series of proceedings and as a book. Whereas any peace researcher must support the intention of the editor to move from an exclusive concern with abstract model building and empirical research of marginal policy relevance, the execution of this intention is extremely deplorable in this case.

The basic perspectives of all the papers are American perspectives: "What are options for the US on the conditions x, y, z, ... ?" Furthermore, several papers are of a doubtful scientific quality.

Although it is important to encourage discussion of the many political assumptions (explicit or implicit) in the various papers, an equally important consideration for P.R.S.I. is that conferences like the one on Vietnam will only serve to discredit peace research as a discipline and to reduce peace research to an unwitting tool of American policy.

Imperialism seeks, by the most varied techniques of indoctrination, to insure social conformity and political passivity. At the same time, a

systematic effort is made to mobilize technicians, men of science and intellectuals generally in the service of capitalists and neocolonialists interests and purposes. Thus, talents and skills which could and should contribute to the task of progress and liberation become, instead, instruments of the commercialization of values, the degradation of culture and the maintenance of the capitalist economic and social order.

It is the fundamental interest and imperative duty of intellectuals to resist this aggression and to take up, without delay, the challenge thus posed to them. What is required of them is support for the struggles of national liberation, social emancipation and entrance in the political struggle against conservative, retrograde and fascist forces, to demystify the oppressors' ideologies and to attack the structures upon which these rest and the interests they serve.

This is why, after a confrontation of ideas marked by a freedom of expression which is as essential for the struggles and the tasks of today as it is for the creation of the new world which will tomorrow be their outcome, we call upon writers, men of science, artists, teachers and students to join and intensify the fight against imperialism, and to take up the part which is theirs in the struggle for the people of the world.

(Signed by the majority of the participants of the Sixth European Conference of the Peace Research Society International) , Copenhagen , Denmark).

41
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POWER IN A POST-COLONIAL SETTING:

THE WHY AND WHITHER OF RELIGIOUS CONFRONTATION IN ULSTER

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POWER IN A POST-COLONIAL SETTING: THE WHY AND WHITHER OF
RELIGIOUS CONFRONTATION IN ULSTER⁺

by

Anders Boserup

1. Methodology

The logical starting point of this paper, and therefore its first aim, is the presentation of the elements of a theory of how racial, tribal and sectarian divisions might be perpetuated in a post-colonial situation. The second, but more important aim is to apply the concepts so introduced to the understanding of current conflicts. The religious conflict between Catholics and Protestants in Northern Ireland is the case we shall consider in more detail.

To gain such understanding as is likely to be of any help in attempting to predict the course of a particular conflict or to intervene in it, it is essential to study the role and "function" of that conflict in the social system within which it unfolds - or, at the very least, to enquire whether there might not be such a function. Indeed it would appear that from the point of view of conflict theory the most fruitful starting point in studying a protracted conflict is the hypothesis that the antagonistic relationship is not only the key to understanding the social system within which it occurs and the exchange relationship on which it is based, but that it is also the prerequisite for understanding the very nature of the antagonists as social entities. Only when this has been tried and has failed is it commendable to make the opposite assumption and study the conflict as though it were no more than a passing convulsion of an otherwise well-integrated system.

+) I gratefully acknowledge support in various phases of this work from the Carlsberg Memorial Fund for Brewer J.C. Jacobsen and from the Nordic Co-ordination Committee for International Politics, including Peace and Conflict Research. Figures from the survey of "Opinion in Ulster" (NOP/2577, unpublished) are quoted by kind permission of the Belfast Telegraph and the National Opinion Polls Limited (London).

Hence, if one were to study, say, the current conflict in Vietnam he would first consider the general relationship between industrialised and non-industrialised countries (or, if he prefers it that way, between anti-communist and communist countries). He would investigate to what extent it is an inherently antagonistic social relation (I add the word social to avoid confusion with a strategic relation which is antagonistic by definition); that is, he would try to clarify and to assess the limitations of the complementary concepts of "imperialism" and "subversion" (or the nature of the confrontation between capitalism and communism as the case may be). Then he would try to ask to what extent this conflict in the larger (world) system structures the antagonistic blocs themselves. Altogether this would lay a foundation for understanding what the conflict is about and hence for predicting its general evolutionary trends and designing strategies, whether for the actors in the conflict or for the habitual "deus ex machina".

The best known example of this approach is of course Karl Marx' theory of the industrial conflict. That conflict, which was no less manifest in his day than are today the conflicts in Ulster or in Vietnam, he tried to interpret as being the defining and dynamic principle of the society as a whole within which it took place and the determinant of the nature of the antagonists⁺. Opinions differ as to the validity, or the continued validity, of his results but the methodology is obviously the most appropriate starting point for conflict analysis. Consequently, the third purpose of this paper has to do with the methodology of applied conflict studies.

To conform with the remarks above we must therefore in this paper try to deal, not with theoretical constructs and empirical facets which, however correct, are nevertheless marginal to the course of events. Instead we shall have to consider the key factors (if any) which determine the situation. In the case of Ulster the key factor, I believe, is the inherent weakness of her post-colonial polity, institutions and ruling class and the consequent need for privileges and sectarianism to uphold the political system.

⁺) For an example of the opposite (piecemeal) approach, see Vietnam: Some Basic Issues and Alternatives, Volume X, Papers of the Peace Research Society (International), 1969.

Although this is written while the first death-casualties in Belfast are making the headlines, and events have only started to gather momentum there would be little point in vindicating the usual right to be wrong for lack of historical distance. When we launeced peace and conflict research as a scientific discipline we claimed that we would be able to foresee, and hopefully to affect, the course of conflicts while they were still in the making. This is one opportunity for proving or falsifying that claim.

The limitations imposed by the brevity of a "paper" are a more suitable cause for indulgence, as are those resulting from my own inability to look into a number of questions of fact which I believe to be of crucial importance. The two main gaps should be stated at the outset: the lack of any analysis of the economic structure of Northern Ireland and its relation to the British economy - attributable to lack of time and skill, more than to lack of data - and the absence of a detailed survey of the structure of the ruling elites in Ulster - principally caused by the lack of sources.

The role of Britain raises serious problems in this analysis. The interconnections between the Unionist leaders and the Conservative Party in Britain, the interests, economic or otherwise, of Britain as a whole, and of particular British groups in various sections of Ulster society, the role of Irish labour in Britain as well as the nature and strength of purely sentimental ties are all of them unknown factors. Two assumptions are possible: that British interests in Northern Ireland are marginal and mostly of a negative kind, namely to avoid trouble and nothing more; or that some substantial interests are involved. We have no reasonable grounds for choosing between these alternatives, except that the latter might require the parallel analysis of two inter-related conflict situations, one involving Britain and Ulster and one involving Catholics and Protestants within Northern Ireland. We have consequently opted for the "null-hypothesis" for reasons of convenience only - well aware, however, that if indeed it holds this would be the first time in the long history of Anglo-Irish relations.

It has not escaped my attention that this assumption, if it were to prove false, could completely invalidate the conclusions but it would still be necessary to conduct an analysis of the internal conflict in Ulster along lines not too different from those used here.

2. Weakness of the Elite and Sectarianism

The first theme I wish to develop here is the absence of any firm domestic power structure in Northern Ireland.

The parliament at Stormont is on a number of essential points more like a provincial council than a national parliament and has little freedom to fashion Ulster's policies, and particularly her economic policy, according to her needs. Finance and credit are heavily dependent upon conditions in Britain and most taxes and duties are Reserved Revenue, controlled by the parliament of the United Kingdom. Policies in these areas are evidently determined primarily with British needs in mind.

Ulster's domestic market is very small and her main trading area, Britain, which takes an estimated 55% of her GNP (foreign countries taking another 15%; N.I. Economic Report, 1968) is completely outside the control of Stormont and even cannot be regulated via tariffs or monetary policy. The main tools at the disposal of the government for promoting local enterprise appear to be direct subsidies and, to a much lesser extent, its long-term influence upon transport and production costs.

A rapidly growing part of the industry consists of subsidiaries of British firms and the largest Belfast paper is British-owned. All matters of foreign policy and defence policy are conducted from Westminster and the fatal political weakness of a country with no regular army has been vividly demonstrated when the government recently had to rely upon British troops. Other means of social control like the courts, the educational and electoral systems etc. are also either directed from Britain or they are mere copies of similar British institutions, only slightly adapted, if at all, to the particular requirements of the Irish scene (with some notable exceptions of a purely repressive kind: the Special Powers Act, the antiquated franchise system, the volunteer corps of the B specials, etc.).

Nor does there seem to be much by way of a powerful ruling elite. Reference is often made to the landed aristocracy of Ulster but it is clear that whatever power the proprietors of the large estates might have retained after the Land Purchase Acts around the turn of the century which enabled tenants to buy out the land they occupied, they are sure to have lost as a result of the steadily

declining share of agriculture in Ulster's economy (in 1966 agriculture contributed only 9.4% to G.D.P.; N.I. Economic Report, 1968). From its ownership of land the aristocracy of Ulster is more likely to derive social prestige than the more tangible economic and political power it formerly had.

This class, however, is closely intertwined with the present industrial elite. It was responsible for the early industrialisation of Ulster, first by creating the linen and later the shipbuilding industry, both of which are still among the main manufactures of Ulster, with shipbuilding accounting for 10% of all industrial employees and the textile industries for 23%. Corresponding figures for the United Kingdom as a whole are 3 and 6% respectively (McCrone, 1969). It seems reasonable to assume that this "traditional elite" holds the better part of the many small family-owned companies which are a characteristic feature of Ulster's economy (Isles and Cuthbert, 1957, ch. VIII).

To what extent the modern commercial and industrial elite associated with the rapidly expanding new corporate industries in Ulster has economic interests which diverge significantly from those of this traditional family-based elite is not clear. Moreover this is an important issue to investigate because there appear to have been profound divisions within the leadership of the Unionist party in recent years. The fact that the "traditional elite" provides most of Ulster's top politicians should at least not be taken too literally as it might well reflect more on the traditions of Unionist politics than on any real distribution of power. At any rate the policies pursued in the economic field with large subsidies to new industries while the traditional ones are given insufficient assistance to keep them alive do not point to such a predominance of the traditional interests.

Nor should too much reliance be placed on an analysis of the recent divisions among the Unionist leadership on the occasion, first of the elections in February and then again in April during the cabinet crisis. The apparent coalitions changed considerably during those two months and one would also have expected that disagreement on how to deal with the current crisis or simple political tactics played a larger role than the long-term material interests of the various groupings.

In discussing the various outcomes of the present crisis a clear picture of the composition of the ruling groups in Ulster as well as their relation to the middle- and lower-middle class becomes crucial, but for the present it suf-

fices to note that even though a new owning and managerial elite may have developed in Northern Ireland a large part of the new industries are "foreign" as far as Ulster is concerned.

A situation similar to that in Northern Ireland seems to have arisen in many of the new countries after they gained formal independence. There is little by way of a local bourgeoisie and where a bourgeoisie exists the basis of its former power, the land estates, are now of decreasing importance, economic resources are largely foreign-controlled and the political, educational and legal institutions are often mere replicas of the corresponding institutions in the mother country instead of having evolved gradually from the power struggles of opposing domestic classes. For this reason they only represent and protect the national interest groups and their mutual power relations very imperfectly.

One way of coping with the resulting political instability is the military takeover, familiar from Latin America and now rapidly spreading over Africa, Asia and southern Europe. The thesis here advocated is that maintaining discrimination and promoting sectarianism is just another way of adapting to what is essentially the same problem: an oligarchic rule with insufficient backing and insufficient means of social control.

In their study of Ghana during the Nkrumah era Fitch and Oppenheimer provide an illustration of a situation which is apparently analogous to that which exists in Ulster: When in 1956 the Convention People's Party was forced to go to the polls it had already lost its popular appeal and completely lacked any significant power base. As a result it revived and exploited local and tribal disputes during its electoral campaign despite its official and loudly proclaimed opposition to tribalism (Fitch and Oppenheimer, 1966, pp. 76-77).

The two main parties in Ulster, the Unionist party and the Nationalists are formed on exclusively religious ^{likes} and only the relatively small Labour and Liberal parties are to any significant extent inter-denominational. Both Unionists and Nationalists have come to group all the diverging opinions and interests existing within each community and as a consequence they are incapable of putting forward any clear social or economic programme (the latest Unionist declaration of principle, for instance, only contains the vaguest and most uncontroversial generalities about furthering economic progress and social welfare; see Ulster at the Crossroads, 1969). Instead, the parties have to revive the nationalist issue at each successive election (Barritt and Carter, 1962, p. 44). Religious divisions have

always played a dominant role in Ulster but this does not imply that they constitute the fundamental issues, only that party leaders on either side know that religious prejudices, especially where there exists a substratum of economic competition, are most easily exploited.

The idea that "Ulster Unionism is basically sectarian and that it keeps itself in power by keeping alive religious division and prejudices" is by no means new and a recent pamphlet by the Ulster Unionist Council, Northern Ireland: Fact and Falsehood, devotes a page to repudiate it. The main argument which is brought forward is, however, simply that the Nationalists are doing the same, which few would deny.

The disappearance of class distinction as a significant factor in politics appears to a casual observation to be a fairly general feature in ethnic conflicts of which the Unionist party in Ulster is but one illustration. In Belgian Flanders the dominant party, the Social-Christian Party, similarly groups all social classes as does the Democratic Party in the American Deep South.

It is of course not enough to show that there might be a need for the rulers to foster sectarianism and grant privileges in return for political support. One must consider in more detail the way in which it is done, the relative importance of attitudinal and purely material factors in maintaining cohesion, the institutional framework which makes an exchange possible and the rationalisations by which the system is made morally acceptable to its perpetrators.

We shall return to this presently but first we shall have briefly to clarify the relation between, on the one hand, the theory here advocated according to which sectarianism in Ulster, far from being a local idiosyncrasy added on top of a typical western-type democracy is in fact the base principle of Ulster society, the background against which all other features of that society must be understood, and, on the other hand, two theories of the origins of ethnic conflict which we refer to in terms of their associated attitudes as the theories of race prejudice and of intolerance.

3. Race Prejudice and Intolerance.

"Probably the clearest distinction between intolerance and race prejudice is that the intolerant group welcomes conversion and assimilation, while the race-prejudiced group is antagonized by attempts to assimilate. ...Anti-Semitism is an attitude directed against the Jews because they are Jews, while race prejudice is an attitude directed against Negroes because they want to be something other than Negroes. The Jew, to the intolerant, is an enemy within the society; but the Negro, to the race-prejudiced, is a friend in his place." (Cox, 1959, pp. 393-394).

The race prejudice theory has been developed by the marxists and particularly by Cox (1959). It holds that racialism arose with capitalism, is inseparable from it, and was (and is) a device for creating a readily exploitable sub-human class; further, that by fostering divisions among the workers it also serves as a means of subordinating the major proletarian struggle to artificially intensified minor cultural conflicts. The prejudice of the victimised groups (against their oppressors or against other victimised groups) is held to be a secondary defensive or adaptive reaction. There is considerable supportive evidence for this theory if it is taken in a broad historical sense (Cox, 1959).

The intolerance theory simply holds that it is normal for societies to be intolerant of culturally divergent groups which, like the Jews, refuse to be assimilated. The feelings aroused and the persecution of the minority group of course become particularly violent if the group is believed to threaten the status quo or to be in collusion with an external enemy and if its members hold positions of some power within the society. Thus intolerance - which is often reciprocated - serves both to protect the in-group and to enhance its social solidarity (Coser, 1956, chap. V).

Both of these theories have obvious applicability to Northern Ireland.

I would suggest, though on admittedly insufficient evidence, that a straightforward interpretation of religious conflict in Northern Ireland in terms of the economic interests, the exploitation of Catholics by Protestants or the exploitation of both by domestic (Northern Irish) or foreign (British) capital can at best supply part of the explanation.

It is plain and on the whole undisputed that the exploitation of Ireland by Britain in past centuries and its relegation to the status of supplier of cheap labour and food to the British market without competing with its industries has been the key determinant of the whole economic, social and political development in the south as well as in the north and that the origin of the communal strife must be understood in that light. At present, However, these factors are clearly of diminishing importance, one illustration of which is the fact that it is precisely the new industries in Ulster and those which are subsidiaries of foreign firms which are least prone to practice discrimination (Barrit and Carter, 1962, ch.VI).

The kind of theory here advocated owes much to the marxist analysis of classes and of the function of ethnic conflict in a more general sense. Our analysis cannot be conducted without adopting a sort of class perspective on society because its very base is the assumption that "objectively" diverging interests of one kind or another are temporarily bridged over by sectarian strife. Ethnic conflict, on this view, cannot exist in isolation and necessarily interacts with one or several other dividing lines and it is only by considering these conflicts as well, that the perpetuation or the break-up of a given ethnic confrontation can be discussed. In our terms the ruling class, however, (Whether foreign or domestic) is not necessarily characterised by its ownership of the means of production. That is normally an accessory factor, the specific importance of which must be determined in each particular case. The class concept used here is therefore closer to that of Dahrendorf (1959, p. 193 seq.) for whom classes are defined by their relation to the exercise of authority (see also Allardt, 1965, p.124 seq.).

The importance of intolerance as defined above, that is to say of the feeling of embattlement in both communities in Northern Ireland cannot be doubted. Among the protestant lower middle and working class in particular, stories abound of Catholic atrocities perpetrated on Protestants, often in outlandish places, and since they circulate within a fairly closed group their truthfulness, it seems, is never effectively challenged. The pages of the "Ulster Protestant", the Orange Order weekly, provide many examples of this and of the way in which world events are normally interpreted as instances of the great struggle of Roman Catholicism against the reformed churches. I have found in discussions with Protestant workers that these facts and interpretations are held to be unquestionably

true and demonstrable to quite the same extent as are every-one else's beliefs on similar second-hand information, i.e. they are not simply convenient rationalisations.

The militancy and religious fanaticism often ascribed to them as a general category are not found among Catholics if one is to judge by surveys (Opinion in Ulster, 1967; Boserup and Iversen, 1968; Rose, 1969) or by journals and papers. In particular, most Catholics appear to have reconciled themselves to the existence of the Border, in which the better material conditions available in Ulster as compared with the Republic, probably plays no small part.

Among the upper middle class Protestants on the other hand, these strongly distorted views of Catholicism are of course not found, or not to that extent. There it is more common to simply deny that any discrimination exists or to claim that it is on its way to disappearing (see for example: Northern Ireland: Fact and Falsehood, 1969) or, finally, to refer to "The tendency, which is worldwide, for people to prefer to give jobs to their own 'sort'" (Ibid. p. 7).

To sum up: the question is not which theory is true in an absolute sense, since all three we have considered here are perfectly compatible. The theory of race prejudice has undisputed historical importance and quite conceivable some validity even today; while the intolerance theory is the theory subjectively held by part of the population (whereas it is objectively false, at least in its most extreme versions). The question is simply which theory will give the simplest and the most complete picture of those aspects of the situation we are most concerned with. In broad terms it would seem that if all were equally applicable, a theory of the economic interests behind prejudice would provide the best long-term projections of inter-group relations and some of the constraints on the short-term developments as well; the theory of intolerance is useless from the point of view of application because it is entirely static, unless supplemented with a theory of how perceptions change; and the theory of political cohesion here advocated would provide the simplest guide to the short-term strategic considerations of the parties concerned and to the feasibility and effects of various political measures. This latter approach is therefore a convenient starting point, subject to modifying it by additions if need be.

4. The Pillars of Protestant Rule *)

The key to understanding the political setup in Ulster is the institution of the Loyal Orange Lodge, the Orange Order, and the way they have come to group wholly divergent class interests under the Protestant loyalist banner. Historically this institution arose in the countryside as a peasant organization aimed at protecting Protestant tenant's interests against Catholic competition. As other secret societies of the time (the Oakboys, the Hearts of Steel, etc.; see Connolly, 1967, ch. IV) it seems to have been largely directed against the landowners, even though at the same time it was formed on a sectarian basis. Connolly quotes Archbishop Whatley to show that Irish politics and divisions turned primarily around questions of property and only nominally around questions of religion. Says Whatley: "Many instances have come to my knowledge of the most furious Orangemen stripping their estates of a Protestant tenantry who had been there for generations and letting their land to Roman Catholics... at an advance of a shilling an acre." (Quoted in Connolly, 1967, p. 34). At the end of the eighteenth century the Orange Order was used for the first time to uphold the social order by crushing Wolfe Tone's United Irishmen, a secret society with a programme not too different from that of the French revolutionaries. Tone had achieved considerable support among the urban middle-class, Catholic tenants in the North, and, to a lesser degree, the Protestant tenants. The Orange Order, however by "defending the British Crown, shoulder to shoulder with the royal troops" (Dewar, 1965, p. 14) evidently left peasants divided. The political alliance of the Lodges with the Protestant landowners probably dates back to this period. Until partition at the beginning of this century the cement of the Orange Order and other Protestant societies was probably^{not} only, or not even primarily, a community of interests in opposition to the Catholic peasantry of Ulster but rather the divergence of interests between predominantly Protestant Ulster with its relatively advanced industry and cash crops on the one hand, and on the other, predominantly Catholic Munster, Leinster and Connaught with industry almost non-existent and a vital need for protective customs barriers if any was to develop.

*) Parts of this section draw heavily on Gibbon's analysis, especially his pp. 26-27.

The specific "miracle" of Orangeism therefore appears to have two components: its transmission to, and survival in the growing urban environment of Ulster, and particularly its integration of a section of the Protestant industrial workers, and secondly, its survival after partition had, I should think, largely undermined its *raison d'être*.

The traditional values and the intense religious feelings of the peasantry which became the Belfast lower middle class and working class were maintained in this new environment by the Orange Lodges which established themselves in the towns and became "congregationally-based urban centers of political and cultural life" (Gibbon, 1969, p.26;), paralleling in their functions for the urban middle- and working class the Working Mens Clubs and Friendly Societies in England. They came to comprise the political, leisure and religious activities of their members, in keeping with the precepts of the Presbyterian, Calvinist or Welsleyan faiths (Ibid.).

The Lodges finally came to serve more directly the interests of their members as a result of "the capture by the landed and business elite of two senior Orange institutions, the Apprentice Boys of Derry and the Royal Black Preceptory...The local Lodges had previously maintained a cultural continuity for the Protestant urban poor without providing them with a direct political expression or link with the ruling groups. Through the intervention of the officers of the Apprentice Boys and the Preceptory, Protestants could now find access to housing, employment and social promotion, and the historical separation of differentiated education and residence was confirmed. In return, all that was demanded of the poor was their political allegiance." (Ibid.p.27).

Although several of the trade unions in Northern Ireland are effectively segregated by religion by virtue of the different occupations held by the two communities (see Barrit and Carter, 1962, p.103 and ch. 9) the unions have nevertheless often taken a stand against sectarianism and they are one of the very few institutions which have provided a place of meeting and common action for Protestants and Catholics. Protestants were (and are) mainly found in the craft industries and as such they were in opposition to the unskilled Catholics, organised by the turn of the century into the new mass unions under Larkin's and Connolly's leadership. These were initially succesful in

getting some support among the lower paid Protestant workers and at the dockers strike in Belfast in 1907 Green and Orange banners were paraded side by side. But as Conolly changed his stand on the nationality issue and took part in the Easter rising in 1916 which was later to result in the partition of Ireland, the unity of the industrial workers was effectively broken for a long time to come as he had himself anticipated: "The effect of such exclusion (i.e. partition) upon labour in Ireland will be...disastrous. All hopes of uniting the workers, irrespective of religion or old political battle cries, will be shattered, and through North and South the issue of Home Rule will still be used to cover the iniquities of the capitalist and landlord class. I am not speaking without due knowledge of the sentiments of the organized labour movement in Ireland when I say that we would much rather see the Home Rule Bill defeated than see it carried with Ulster or any part of Ulster left out". (Forward, 11/4 1914, quoted in: Barritt and Carter, 1962, p. 139). (On this period and the break-up of the anti-Unionist front in Belfast see also: Boyle, ch.XII in Beckett and Glasscock, eds., 1967.).

It was the common opposition to Home Rule which finally fused all these diverse elements and interests into the "Orange Bloc", politically represented by the Unionist party, held together by the Orange Lodges and ideological/^{ly} unified by Protestantism or, more precisely, by opposition to "Romanism". Unionist and Protestant, Nationalist and Catholic had become synonyms.

Mansergh describes as follows the development since the Act of 1920: "The Unionists have remained in office in Northern Ireland for more than forty years. No government in Europe, is the boast, has been so stable. In this respect, therefore, the calculations of 1920 (regarding the appropriate size of Ulster if it were to retain a Unionist majority) have proved well founded. In a province where political parties are founded on differences in creed,... a floating vote does not exist. A party that has a majority retains it, for at the least threat of disaffection, the old party cry is raised and every issue of political or social reform is subordinated to the chill hand of sectarian prejudice. As a result the Unionist majorities at successive elections have remained virtually unchanged. ... The forms of democracy remain, but its spirit can scarcely flourish in a political atmosphere so frozen that up to 70 per cent of the seats have been uncontested at a general election." (1965, p. 211).

However obvious, it must be said that in describing Unionism as the main perpetrator of sectarianism in Northern Ireland I am trying to expose the key factors, not to distribute the blame. The Nationalist Party which Gibbon calls "The miserable Catholic obverse of the Unionist Party - miniature and mirror of it" (1969 p.28) similarly survives largely through its constant appeals to sectarianism and antiquated divisions. Nevertheless, the difference is important, not only because the Nationalists never have been and never will become the ruling party, but mainly because they control only a third of the Catholic electorate as compared with some 80 per cent of Protestants which support the Unionists. (Opinion in Ulster, 1967) The Catholic pendant to the Orange Order, The Ancient Order of Hibernians, never succeeded in gaining a firm foothold in Belfast, partly because of the strength of the predominantly Catholic unions, partly because there was no substantial Catholic middle class and no ruling group with which to link up and with which a fruitful exchange could take place.

The main political function of the Nationalist Party has undoubtedly been that of a convenient scarecrow to keep the Unionists together, the fourth pillar of Protestant rule. It does not seem unlikely that if the Catholics in the Nationalist Party had not also felt embattled (this time, however, within Ulster, not Ireland as a whole) and had not also exploited the Border question as a means of keeping together its diverse followers, it would have been much more difficult for the Unionists to avoid fragmentation, as the experience of Tone in the late eighteenth century and of Larkin and Conolly in the twentieth had shown. Thus the two parties and their associated organisations stand in a perfect polar relation to one another: they are made of the same sectarian cement, they are one another's opposites and yet neither could exist in isolation.

5. Precipitants of the Present Crisis.

To determine in detail why a particular historical event like the eruption in Ulster in 1968 took place at that particular moment rather than at any other is presumably an impossible task. Nevertheless we shall try to point to a few factors which appear to have been particularly important, mostly in order to ascertain whether these disturbing factors are of a permanent or of a transient nature.

A proper place to start what might otherwise become an infinite regression is at the increasingly audible protests of the Catholic professional strata in the mid-sixties. One organisation, perhaps not the only one, was the Campaign for Social Justice, a small group which tried to attract the attention of British politicians and newspapers by issuing pamphlets and writing personal letters to them. The solidly upper middle class basis of the Campaign is unmistakably clear from any of its publications, the composition of its Committee or the type of discrimination which apparently it was most concerned about. A very large part of the material published by the Campaign deals with discrimination against Catholics in top positions within the civil service, on public boards and so forth; another major topic is gerrymandering.⁺) Why that particular type of political activity emerged in the mid-sixties must, I believe, be seen within the general context of the economic development of Northern Ireland since the war. It is a widespread but untenable myth that the economy of Ulster has by and large been stagnating. There was a temporary depression in the late fifties after the post-war expansion due to reconstruction had subsided - as in so many other parts of Europe - but during the sixties production has been growing rather faster than in Britain. As already pointed out (section 2, *supra*), this growth must be seen against the backdrop of a rapid decline in the most important labour-intensive industries. As a result the new jobs in the subsidised foreign industries, which were coming into being, more or less balanced the new vacancies in the declining sectors. Unemployment changed fairly little during the last decades.

⁺) See: The Plain Truth, 1964 and 1969.

Thus the lower classes and particularly the unskilled Catholic workers and the small farmers have probably not witnessed much improvement in their position over the years, and the increase in wealth must have primarily accrued to the upper middle class, the managerial groups and the professional strata. Moreover, as the new foreign employers tended to discriminate less than the old domestic Protestant ones, it seems that the very top among the Catholics have been facing fast improving opportunities in the private sector during the sixties when the growth of the foreign industries gathered momentum. In comparison with this their limited opportunities in public positions and political roles gained a saliency which they had not had previously.

The political means at the disposal of this Catholic elite were, however, rather limited. Our own survey in 1966 showed a widespread passivity among the Catholic poor (Boserup and Iversen, 1967) and little or no expectation that the future would bring any improvement over the present. Besides, as the nature of its activities showed, the Campaign did not really think in this direction but concentrated upon influencing opinion in Britain and elsewhere.

This could probably have gone on for ever but for the change of government in Britain at the end of 1965. Prior to the election the coming Prime Minister had pledged a Labour Government "to do everything in its power ... etc." (The Plain Truth, 1969, inside flap). Whether or not anything was done, I do not know. Nor does it matter for it is clear that the Campaign and its likes now had an audience in Britain, the mere existence of which would force the Government of Northern Ireland either to liberalise or, at least, to pretend that it was in the process of doing so. Once again, true intentions are largely immaterial, for as we have said already, and as we shall discuss further in the next section, liberalisation is the only policy which the Unionist Party cannot survive. Consequently, the mere rumour of reform would create a reaction from the Protestant middle and working class in the form of Paisleyism, a movement which in the Spring of 1966 had still appeared like the rumble of a distant drum. By the end of 1967, 20 per cent of the Protestant middle class and almost 40 per cent of the Protestant working class found that they "usually agreed with what the Rev. Ian Paisley said" (Opinion in Ulster, 1967).

Social misery in itself has apparently never bred revolt, and I would think that the rise of the Civil Rights Movement and its capture of a section of the Catholic working class is partly the result of the fluid situation as the Protestants polarise the conflict, and partly a simple reaction of fear as it clearly was in some of the recent riotings.

Returning now to our original problem, that of the permanence of the factors responsible for the "recent disorders", as the Government calls them, three points may be noted: first, that the push by the Catholic elite can hardly be stopped now, but second, that in itself it plays a secondary role and can achieve nothing without first provoking a real or imagined pressure from Britain, and finally, that the Protestant backlash is constantly available.

So much for the disturbance of the "peace". From a political point of view an essential factor is the organisational structure and the strategic guidance available through the combination of the students from Queen's and the Catholic poor of Derry. Together, there is at least the prospect of a political movement, while separate, the former are powerless and the latter an amorphous group, merely reacting in self-defence. Gibbon points out the particular role of the students in Northern Ireland: "It is important to emphasise that Queen's University, Belfast, is one of the very few unsegregated institutions of any description in Ulster. This meant that it provided a natural base from which an attack on sectarianism could be launched. Moreover, Queen's University is decisively not a regulative institution of entry into the Ulster ruling class. The children of this group are sent to English schools and thence to Sandhurst, Oxbridge or Trinity College, Dublin. Queen's students, on the other hand, are overwhelmingly middle and petit-bourgeois ... Accession to the university potentially separated them from their political and religious backgrounds ... The preconditions for political radicalism thus existed." (1969, p. 34.)

We shall consider in a moment the political options, constraints and likely strategies of these groups. For the time being, it suffices to note the coincidence between the student revolts in Paris and elsewhere in the Spring of 1968 and Ulster's hot summer the same year. Once again, to quote Metternich, France sneezed and Europe caught cold.

6. Liberal Reforms

Turning now to a consideration of the prospects for the future and the available political options let us begin by considering the likelihood of effective liberal reforms in Ulster being carried through.

Successive governments have pledged themselves - in more or less vague terms - to various measures of political reform aimed at admitting Catholics as full members of the society. From what has been said so far it should be plain that in our view such reforms are simply not possible within the present political system in Ulster. This is so because any substantial reduction of the difference of opportunities offered to Protestants and Catholics would destroy Unionist cohesion at its base: the Unionist party would break up long before reforms had become effective. In other words, a parliamentary majority cannot exist to carry them through. Considered within the sole frame of Northern Ireland, i.e. as a voluntary act by its government, reforms would be stopped at this point, if not long before.

As we have seen it was precisely the prospect that the previous government would actually carry out the reforms it had promised which led to its fall. To ask whether the present Prime Minister, or his successor, is personally more or less in favour of granting equal rights to Catholics is completely irrelevant as it counts for nothing in determining the policies actually being implemented. The forces which count are the centrifugal forces in the Protestant coalition and the real or imagined pressure from Britain.

A considerably less ambitious programme for pacification is the co-optation of the Catholic middle-class. Baran and Sweezy (1968, ch. 9) refer to this policy as "tokenism" when describing the increased social opportunities now available to middle-class Negroes in the United States. In their view this social promotion reaches only an infinitesimal part of the Negro community and merely serves to detach its political and intellectual elite from its masses, the continued exploitation of which is thus assured.

Leaving aside the question of the practicability of such a policy in the United States, we can assert that it would not be practicable in Northern Ireland. This is so for two reasons: The first is that the abyss in social distance between the "black bourgeoisie" and the overwhelming majority of the Negroes in the black

ghettos of the United States is not matched by a comparable distance between upper and lower class Catholics in Northern Ireland. Co-optation might conceivably work in the United States because the recruitment to the black bourgeoisie from below is small and could be stopped if need be, but in Northern Ireland upward mobility within the Catholic community could probably not be prevented because in this case the middle rungs of the social ladder are not so depleted. Furthermore, middle-class Catholics are much more numerous in relative terms than are middle-class Negroes in the U.S.. Opening up for the top stratum of the Catholics would therefore mean admitting many more than the system might be willing to absorb.

The other reason, which alone would be a sufficient one, lies in the different functions which discrimination serves in the two instances. If we assume unquestioningly (since it is at any rate immaterial to the issue at hand) that Baran and Sweezy are right in claiming that unskilled Negro masses are needed for economic reasons, the only problem in the U.S. would be to prevent excessive upward mobility. In Ulster, however, we hold that the function of discrimination is a political one. It is the maintenance of the social distance as such which matters, and this social distance has to be maintained in all strata. Co-optation of middle class Catholics while excluding the rest would not silence Catholic grievances and it would alienate the Protestant middle-class by depriving them of both status and material benefits (the latter being probably more imaginary than real). The Protestant middle-class is precisely the most aware and the most vocal among those Protestant groups which would be threatened by a general Catholic emancipation, and it is for this reason that it is the most fertile soil for Paisleyism.

Tokenism in another sense, namely the granting of concessions (such as an extension of the franchise for local elections), which do not significantly affect the real distribution of power between the communities could perhaps be carried through (and even that is by no means certain) - provided their token-character is absolutely plain to everyone concerned. Such measures can of course do no more than postpone events but it does not seem unlikely that actually granting a few such token-reforms and promising more substantial ones (which, as we have seen would not be carried out) could for some time create enough confusion among Catholics and create divisions about strategy among them so that the present system could survive a little longer.

All this does not mean that effective liberal reform is not possible in Northern Ireland, only that it would have to be imposed from outside. To do so would be to destroy the Unionist party and the Protestant bloc in general, and as this would become clear long before the process was completed it seems unlikely that this forced liberalization would be carried through to its end unless this particular consequence had been foreseen and were actually accepted as a necessary cost or actively pursued as a goal in itself.

The first group to split off is of course precisely that one which is already threatening to do so, the group around the Rev. Paisley. Its violent opposition would entail a very definite danger of an armed Protestant uprising and a political turn towards fascism or something similar. This fascist danger, to which we now turn, would provide an opportunity, and a very reasonable motive perhaps, for shelving any reform programme.

Two sections belong here which have not yet been written:

Section 7 deals with the Protestant middle and working classes and the possibility of an alternative of a fascist or military type by considering the structural and institutional facilitants of such a development.

Section 8 deals with the feasibility of two types of alliance, the Catholic middle and working class coalition on the one hand, and the inter-denominational working class coalition on the other, their potential stability and their effectiveness in changing the system.

9. A Thought Experiment: Constitutional Reform

I have claimed - or rather it has been understood throughout - that the religious conflict in Ulster is an artificial conflict in the sense that the relationship between the two communities is no longer a necessarily antagonistic one, and only the social institutions make it remain so. I have further claimed that contrary to appearances not so long ago, the institutions by which sectarianism is maintained in Ulster are in fact extremely vulnerable and are probably now verging on collapse. It should follow from this that it might not be so difficult to assist "the forces of history" a little.

Let us therefore consider what kind of approach Britain might adopt on the assumption (entirely gratuitous) that she has no particular interests in Ulster save that of finding a long-term solution to the problem. Those sceptics who learn from history, and from Irish history in particular, may take the following as a mental exercise.

The one institution which has dismally failed in the past is Stormont-parliamentarism. Only one proposal by the opposition has ever been accepted by the majority and it has to do with wild-bird life. It is also clear that a parliament where one party has a permanent absolute majority and votes never shift from one party to another is worse than no parliament at all, because it merely provides a democratic varnish to the dictatorship of the majority. If either condition is relaxed there will be some motivation for the majority to anticipate future needs and seek the cooperation of the minority.

Another obvious observation is that it is hardly a durable solution to patch over the conflict, but on the contrary that if one recognises it, formalises it and establishes an institutional frame within which it can be fought as a clear-cut power struggle this is likely to defuse the powder-keg. A well-known example of this is the ritualisation of the class-struggle which has been achieved by means of the organised wage negotiations.

One may therefore consider replacing the Senate and the House of Commons at Stormont by a new bicameral parliament, one elected by Catholics and one by Protestants, and requiring a majority in both houses for certain types of legislation. An example might be the location of highways for which a delay in decision is bearable, yet costly to all involved. This constitutional device alone, which reproduces the fictitious equality of the parties to a wage negotiation,

would force the representatives of the two communities into dialogue and mutual concessions.

To give Catholics a real say in matters concerning them, and to give Protestants a reasonably larger share of the total budgetary resources, each house would need to have a separate budget which it can dispose of on its own. This might cover the most sensitive areas like subsidies to housing, schools, hospitals and new industry. It would again force the two houses into a minimum of cooperation, or coordination at least, of their programmes, but the more important effect to be sought is the redirection of some of the grievances "inwards" towards one's own community.

The separation of Catholics and Protestants into two communities which vote for separate parliaments would have as a major benefit the immediate break-up of the Unionist and Nationalist parties because there would no longer be any electoral advantage in remaining as a bloc. Protestants may go on discriminating in favour of Protestants but this would no longer be a cement to Orangeism. Political fragmentation in turn would lead to the manifestation of the divergent interests of classes and other political groupings and result in a more fluctuating electorate and a greater likelihood of political alliances crossing the religious barrier on particular issues.

There is a large body of legislation which cannot be dealt with in these ways and which would have to come before a joint session of the two houses. Although this would probably have a Protestant majority (a Labour + Catholic majority is also quite conceivable) the Catholics would have to be listened to, because their cooperation is needed in other contexts.

The executive would obviously need the confidence of both houses and this would create a pressure from above, not only on the parliaments but also on the electorate towards less sectarian attitudes, once more, presumably, a complete reversal of the present situation. Finally, the Protestant fears of being "out-breed" would become less tenable in a system where the minority had extensive veto-rights.

This "homeopathic" approach to "solving" ethnic conflict of this particular nature is very far from the "All-Irish Worker's Republic" which some demand, but it is also far from the "Protestant Country for a Protestant People" of others. It is probably as impossible of execution as either of these. The aim in

bringing it up is of course not to present a blue-print for anything (many other types of reforms would have similar effects and some, no doubt, would be more easy to operate in practice). The aim is simply to point out that the problems may not be incapable of solution if the simplistic dichotomy between integration and polarisation is dropped, and one realises that in real situations where a number of different conflicts interact with one another, these two concepts are more complementary than contradictory.

The atmosphere of irreality surrounding this last section arises, I think, not primarily from the crudity of argument and opposition, but from the optimistic assumption that disinterested, yet powerful, actors exist. The latter being said without particular reference to Britain.

10. Prospects for the Future.

So far there is little to suggest that any among the principal actors has any particular interest in doing much about the situation in Northern Ireland, except restore "law and order." Probably this applies even to the Catholic middle class which, having seen the considerable forces which it itself unleashed, both on the Protestant right and on the Catholic left, might not be hard to convince that tolerating the present situation is preferable to both available alternatives.

Breaking the system "from below" through a coalition of the Belfast workers on an inter-denominational basis, whether through the trade unions, the Northern Ireland Labour Party or the People's Democracy, appears to be in the long run the most likely way out of the deadlock. Nevertheless, as the dockers' strikes in Belfast in the late fifties showed, this alternative is extremely vulnerable to a revival of sectarianism. At any rate, recent riots have presumably polarised the relation between Catholic and Protestant workers still further and, for the time being, postponed any such development.

We have seen that the forces which press for change and bring the conflict to the surface are likely to continue to operate in the foreseeable future. One reason for this is that the activation of the conflict does not require any mass movement by the Catholic middle class but can be provoked by quite small groups within it. Hence we should expect a long period with governmental instability - each successive government balancing uneasily between the need to show the outsider its willingness for reform while appearing to Ulstermen to be firmly conservative ^{and} -/with a succession of violent outbursts, interspersed with periods of "armistice" in which the Catholics wait for promised reforms to become effective. As the credibility of the reform programmes declines over the years, periods of relative quiet may come to result increasingly from sheer police repression.

Whether or not that day will come when international, and particularly British opinion will be ripe for accepting a "temporary" regime based on physical strength is impossible to tell, but it should be clear that there can be no simple peaceful settlement under the present conditions, for if there appeared to be, if the Catholics appeared to have accepted their inferior

position, the Protestants would have to reactivate the conflict in order to maintain their unity. Such is, according to this analysis, the delicate balance upon which the social structure of Northern Ireland is based.

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12

DEVELOPMENT OF THE SYSTEMS OF INTERNATIONAL ORGANIZATIONS*

A Diachronic Study

by

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1. Introduction

The rapidly increasing number of international organizations of all kinds is often noted in text books in international relations, but very little systematic research has been carried out that could give us a better understanding of this development process. There is a tendency to exclude from the analysis most of the about 2,500 international organizations in the world today and concentrate on some thirty big intergovernmental organizations that admittedly are very important, but nevertheless only a fraction of the total picture. Moreover, the history of international organization is often equal to the sum of histories of international organizations, disregarding the fact that there is much inter-organizational activity so that many clusters of organizations may be considered social systems in their own right and with their own history.¹ This report represents an effort to remedy some of these shortcomings. Both the concepts used and the diachronic data available leave much to be desired at the present time, but some new insights are hopefully gained.

2. Basic Concepts and Dimensions.

General systems theory² seems to give us a useful approach to our problem. A system is a number of interrelated units, and a social system consists of social units - actors - that are interrelated in interaction. The simplest social actor is the individual. A number of individuals may be so integrated as to form a new and more complex actor usually labeled group or organization. Groups and organizations may form superorganizations, etc. Social actors are very different both in terms of the total number of individuals integrated in them - there may be only one - and in terms of the number of levels in the intra-actor structure. We shall call these two dimensions size and complexity respectively. In the international relations literature the most frequently encountered actor is the nation state that in most cases scores high on both dimensions. The corresponding social system is called the nation state system.

The actors or system units we shall be concerned with here vary considerably on both dimensions. The smallest and simplest of them consists of little more than a dozen individuals usually devoted to some cause or with some other shared interests. The largest and most complex is composed of big national and/or international organizations and/or nation states. For easy reference, those international organi-

zations whose major members are nation states will be called IGOs (intergovernmental organizations) and the remaining INGOs (international non-governmental organizations). A better term is transnational organizations,³ but the abbreviation of it is less appealing than INGO. Common to both categories is the trans-, multi-, or extranational composition of the membership.

One social system or set of social systems may function as a channel of interaction for other social systems and vice versa, largely depending upon one's perspective. In our case, the international organizations may be considered as bonds or links between nation states or at least between various elite groups in different nation states. This approach makes most sense in the case of IGOs. INGOs may have members that are not at all representative of their respective nation states. But to the extent that international organizations tie nation states together they serve as indirect bonds between them. A direct bond would for instance be an alliance. In this case no third actor is involved.

Conversely there are direct and indirect bonds between international organizations. Direct bonds are for instance exchange of information, observers, money and cooperation in programs. If we only take into consideration the direct relationships, we will end up with several systems of international organizations plus a number of isolated units. Many of the organizations have no direct contact and may not even be aware of each other. Indirect bonds go for instance through representatives from the same nation states, from the same business corporations, universities, etc. Again this makes more sense in the case of IGOs as many states attempt to coordinate their activities in various international organizations while such indirect bonds through third partners in the case of INGOs seem to be more accidental.

In this report we shall use the second perspective with international organizations as the system unit but without neglecting the relationship between the systems of international organizations and the nation state system. One of the most important questions to be asked is how one system maps on the other. Let us imagine two extreme situations. In the first case, one unit in one system has all the connections with the units in another system. In the second, there is a uniform distribution of connections with units in another system. If we define the first system as the social space in which the second system operates, we would say that in the first case the entropy of

the second system was zero, while in the second case there was high negative entropy. If two systems map in a similar way on a third system, they are isomorphic with respect to that system. In our case, an IGO system and an INGO system may or may not be isomorphic with respect to the nation state system.

The notion of development of a social system is extremely difficult to operationalize. Below is a list of dimensions we feel are important. "Importance" presupposes a sociological theory and an ideological goal. These problems will be dealt with to a larger extent in a subsequent report. For the time being it suffices to state that the dimensions seem to be relevant for the evaluation of the peace (or conflict) conduciveness of the systems of international organization. Development is changes on these dimensions, not specifying the direction of change.

Domain. Domain is defined as the number of actors in a system. If the actors are individuals, there is no problem. Domain is in this case equal to size as defined above. We, however, deal typically with very complex actors and large systems that are not sufficiently integrated to be called an actor. The concept of domain should always correspond to the level of analysis. The domain of the system of international organizations is the number of international organizations, and the domain of IATA is the number of air-line companies on the membership list. Consequently, the domain of a research group is the number of researchers participating. The size of a system is the number of individuals actively contributing to its functioning.

Scope. By scope we mean the number of functions a unit performs. There is, however, no function unit and that makes the concept very difficult to use empirically despite its theoretical attractiveness.

Intensity. This is simply the rate at which the functions are carried out.

Political implications. Some functions have far reaching political implications, others definitely have not. It is of course very difficult to rank classes of functions according to their impact on political decision-making, but in some cases it is quite clear that functions of international organizations have to do with the allocation of consensual, important, but

scarce values such as security, economic development, freedom, etc. In other cases the organizations function to promote aims that are irrelevant to most persons, groups or states.⁴

Interconnectedness. By this we mean the number and frequency of positive interactions between the actors in the systems. Another important variable in this dimension is the relevance of the interactions to the goals of the actors. In other words, a system is more interconnected the less trivial the content of the transactions are to the actors.

Entropy. Galtung discusses how much peace theory can be organized around the concept of entropy.⁵ A very simple peace theory is that high negative entropy correlates with a high degree of conflict absorbing ability of a system. We do not know how realistic this proposition is, but as it reoccurs in various connections, the dimension will be important for the testing of several theories.

Isomorphism. This dimension is defined above. With our present data we are only able to distinguish between two categories of international organizations, not between several systems. We do not have diachronic information on inter-organizational relations or interconnectedness as defined above. We assume, however, that there are more connections within the categories than between them.

On these dimensions we shall try to describe the development of the system of international organizations. Increase on the dimensions domain, scope, intensity, interconnectedness, and possibly political implication shall be defined as growth. We should be able to get some idea of the growth of the systems of international organizations in an absolute sense, but we will not be able to compare this growth with the growth of other systems on similar dimensions. A very interesting hypothesis is that the INGO and IGO systems grow more than the nation state system. If that is true, the world of tomorrow will be qualitatively different from the world of today. In this report we shall not pursue that further.⁶

3. Data

Most of the data used are taken from International Associations, a periodical published by the Union of International Associations in

Brussels. Besides we were generously given some unpublished material in addition to the tables in the periodical. None of the tables appear in their original form as we have split and regrouped data. The most important problem is the relatively high percentage of missing information on some variables, but in general we think that this source is very reliable. In addition to the secondary analysis of this statistical material, we used data from the Yearbook of International Organizations, 1964-65 and 1968-69, and from a questionnaire mailed to Secretaries General of international organizations in the fall of 1967. Another good source of information on IGOs was an as yet unpublished study by Michael D. Wallace and J. David Singer.⁷ The tables based on their material may be slightly revised as the number of IGOs to be included in their list is not fixed once and for all, but it will certainly not affect the main trends.

4. Domain

This section is split into two parts. First we shall be concerned with the systems domain or the number of organizations, then with the average domain of the system units.

In an historical perspective the phenomenon of multilateral, permanent and formally organized international cooperation is quite new. The first INGO - the Rosicrucian Order - is claimed to have fitted our definition of an international organization since 1693. The first IGO - the Central Commission for Navigation on the Rhine - was founded in 1815.⁸ Both these organizations are still in existence. Diagram 1 shows that the number of IGOs increased very little before the turn of the century. There was a boom after the first world war, a decline during the second, and a new boom afterwards. Unfortunately we do not have correspondingly reliable data on INGOs so far back in time, but Diagram 3 shows the development since 1951. In 1968 altogether 1899 INGOs were recorded not counting 16 national organizations having consultative status with ECOSOC and being generally international in character, nor the 273 European Common Market and EFTA business and professional groups. The latter group has its own trajectory from 1962. At the same time there was 229 intergovernmental organizations including the 28 members strong UN family. We have also drawn the curve for the number of international meetings these organizations arrange, but since the definition of an international meeting has changed the minor ups and downs of that curve should not be considered

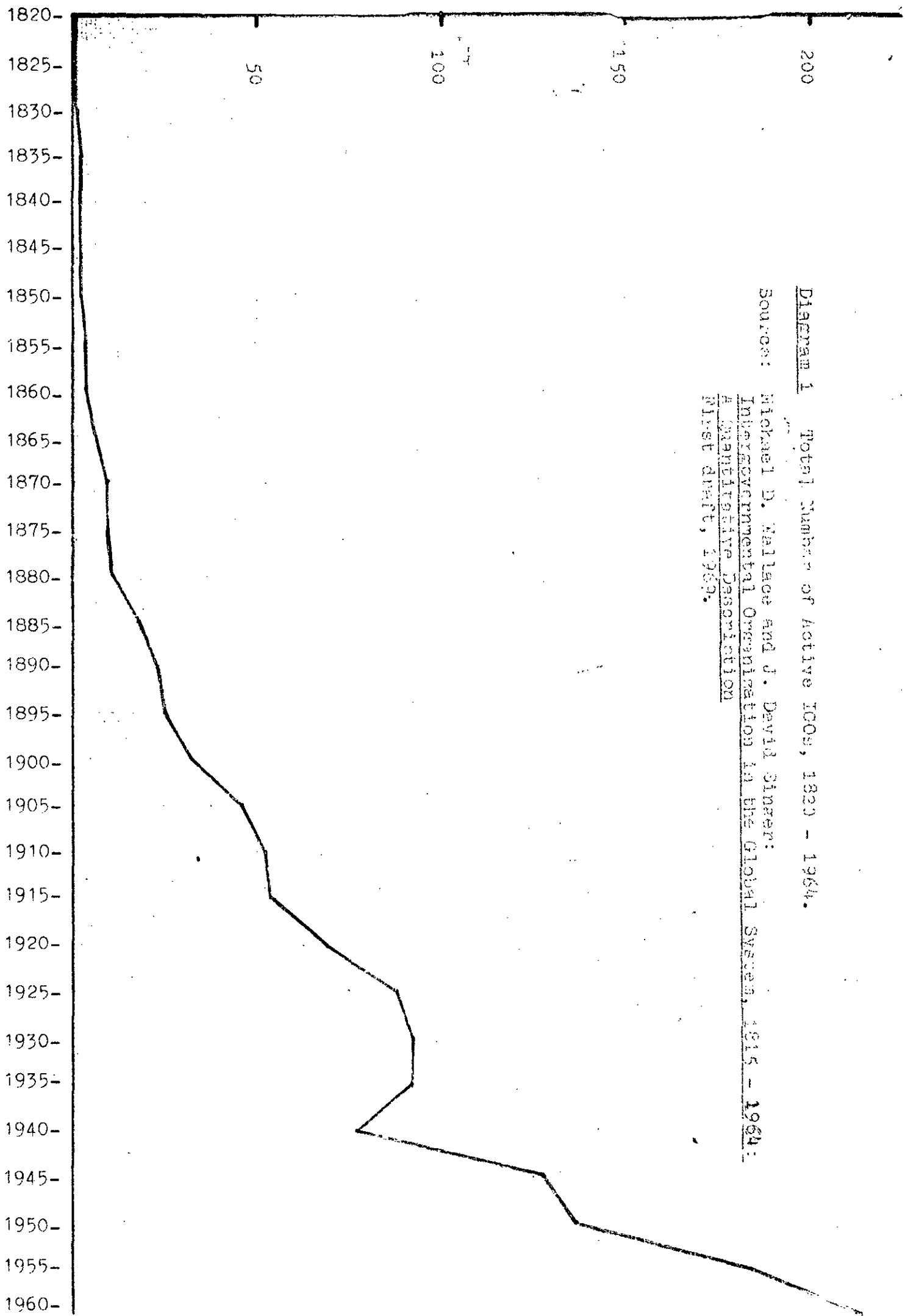


Diagram 1 Total Number of Active ICOS, 1820 - 1964.

Source: Michael D. Wallace and J. David Singer:
Intergovernmental Organization in the Global System, 1815 - 1964:
A Quantitative Description
First draft, 1969.

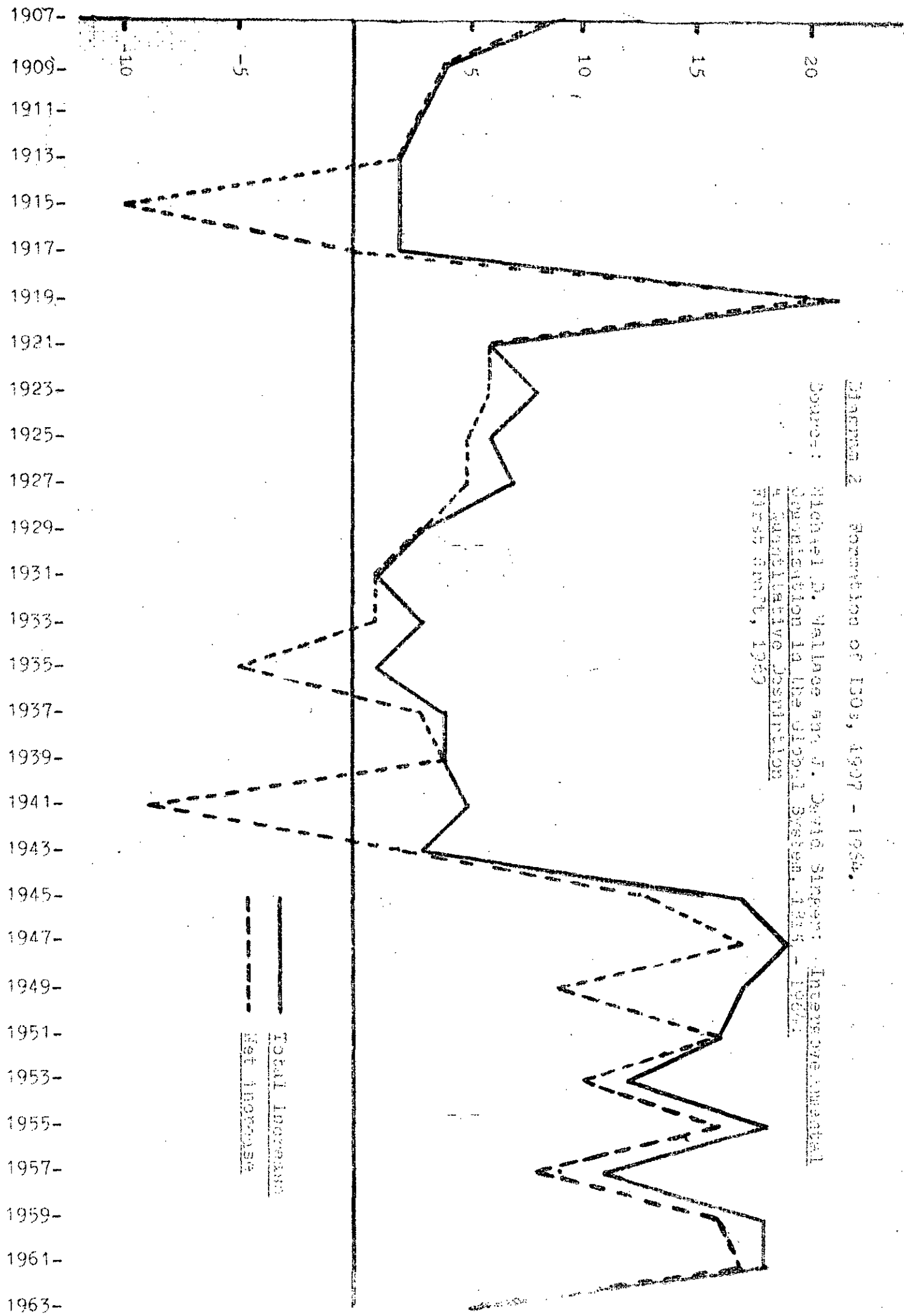
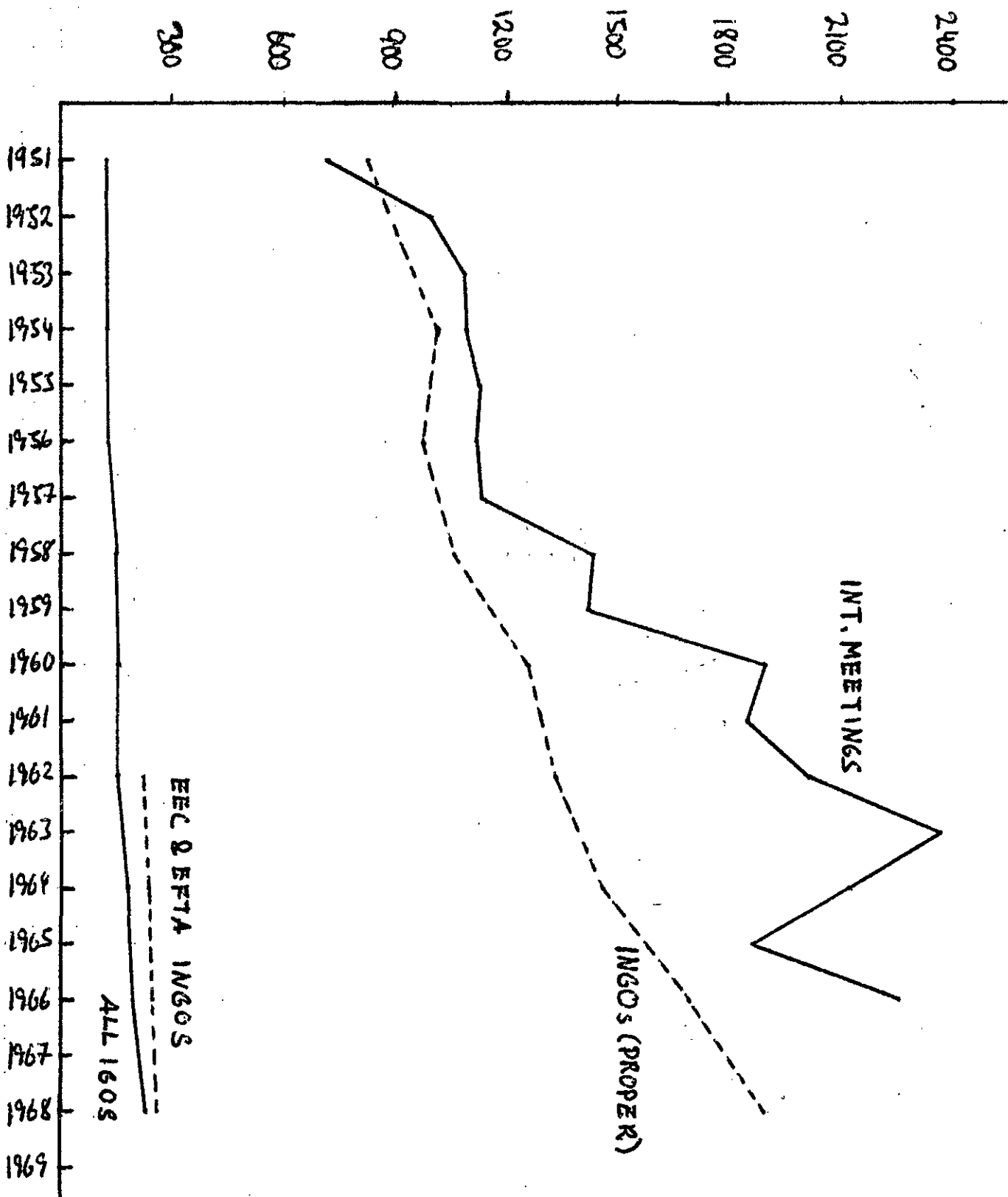


DIAGRAM 3

NUMBER OF INT. ORG. AND INT. MEETINGS



NUMBER OF INTERNATIONAL MEETINGS OF 160'S AND 1960'S BEFORE W.W.II

Source: International Associations, no. 1, Jan. 1949, page 6.

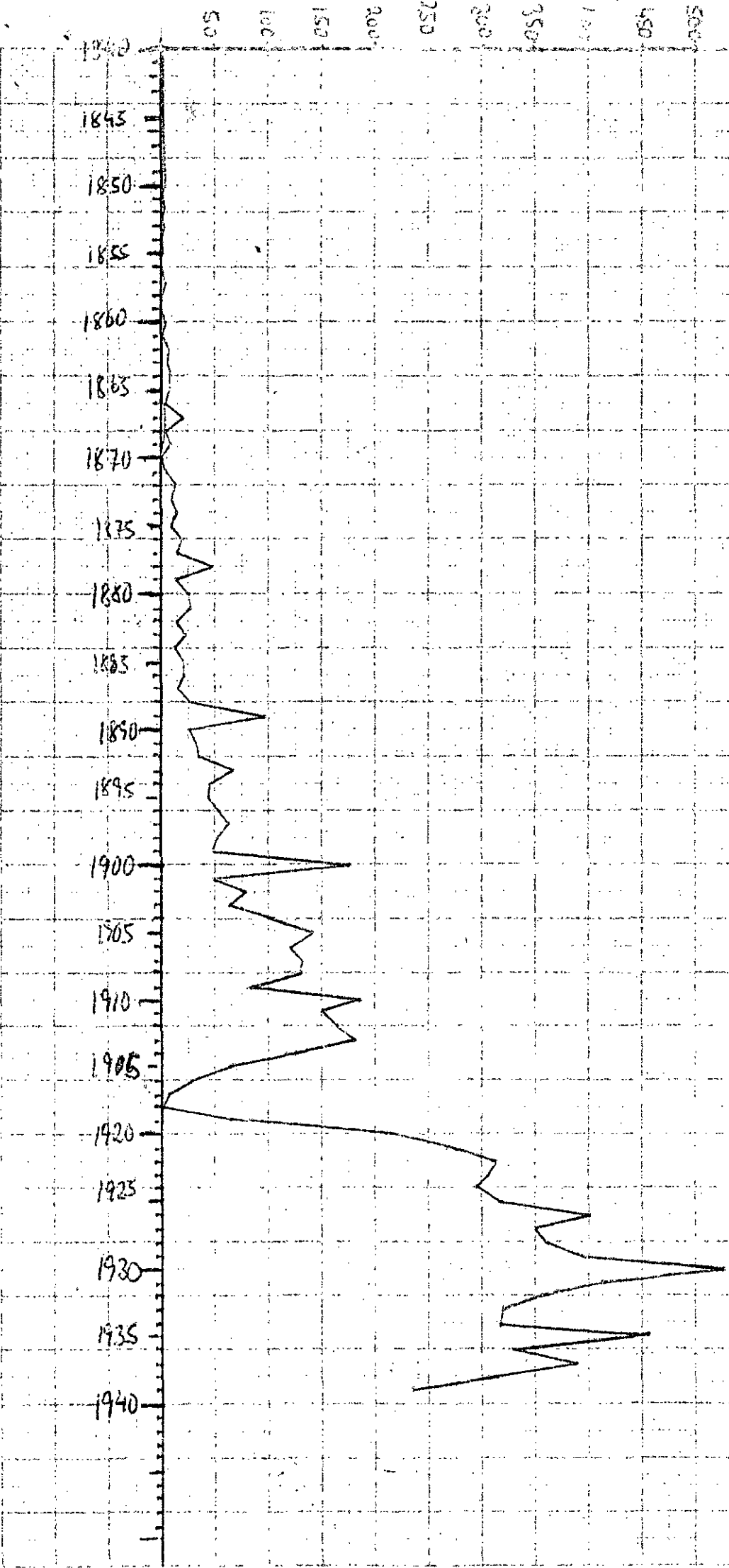


Diagram 5

Total Increase of IGOs, 1850 - 1954

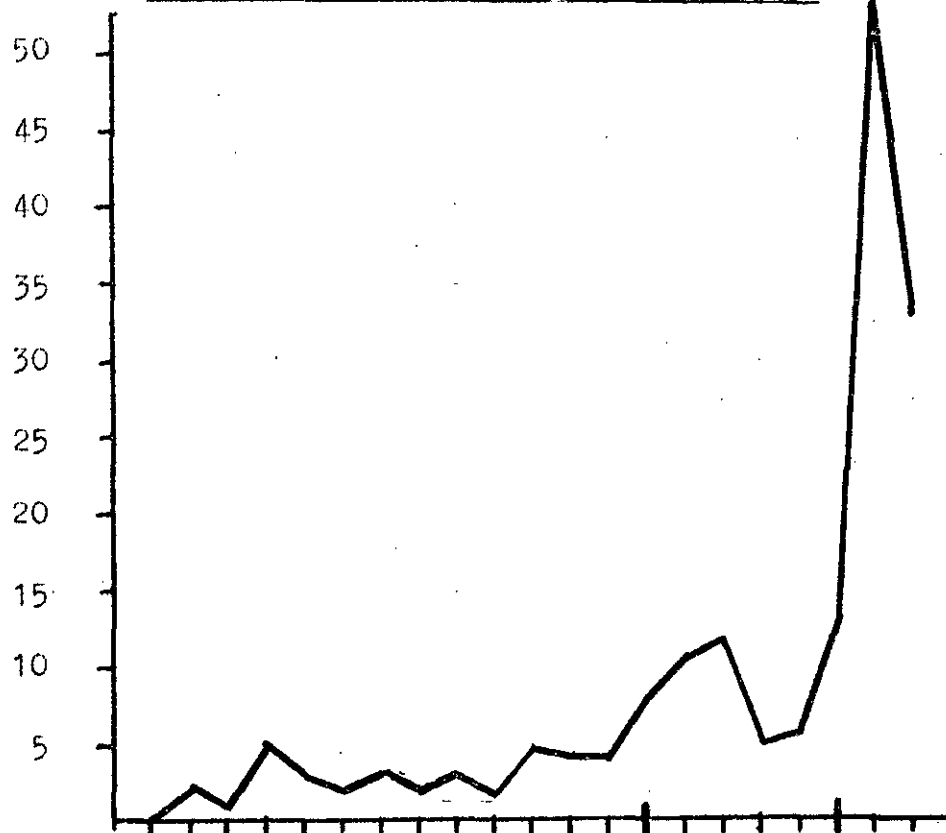
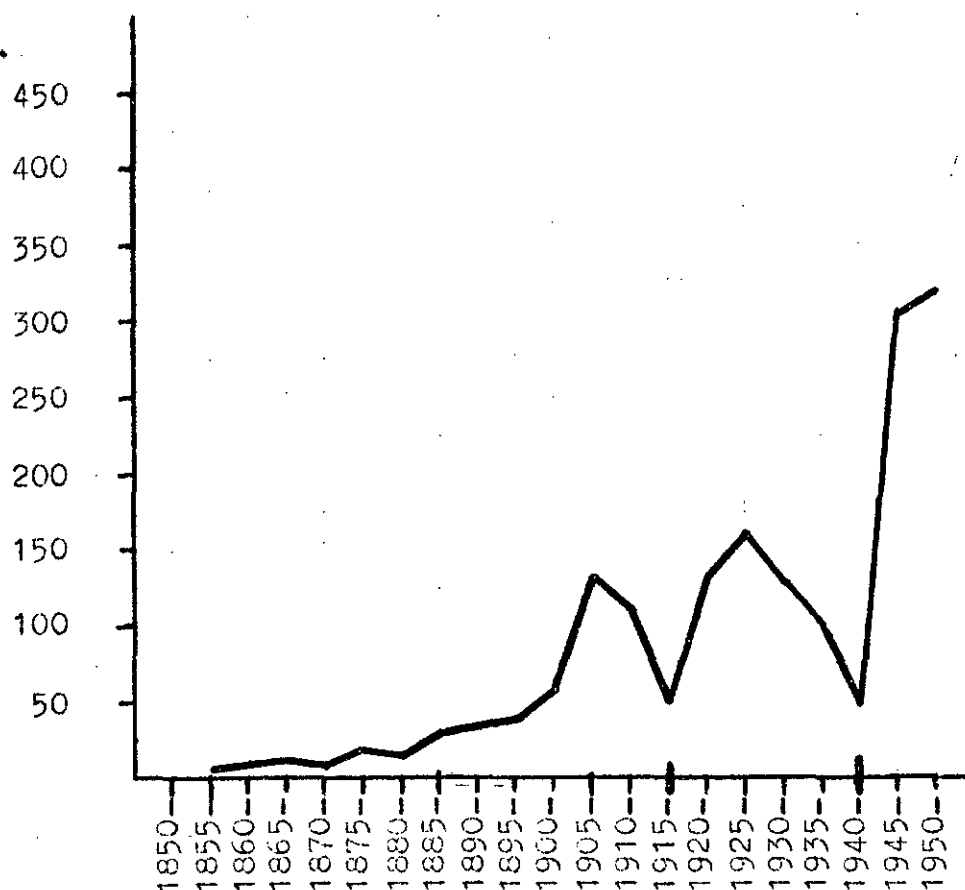


Diagram 6

Total Increase of INGOs, 1850 - 1954



Source: Speeckaert, G.P.: The 1,978 International Organizations Founded Since the Congress of Vienna - A Chronological List, Table 1, p. VIII.

significant.⁹ Table 1 below gives the percentage change for each period of numbers of organizations.

Table 1. Growth Rates in the Total Number of IGOs and INGOs from 1954 to 1968

Period	IGOs	INGOs
1954 - 1956	4.8	-3.7
1956 - 1958	14.6	8.8
1958 - 1960	3.4	18.4
1960 - 1962	-2.6	5.5
1962 - 1964	19.3	11.0
1964 - 1966	11.2	14.6
1966 - 1968	15.1	12.7
Average for all periods 1954 - 1968	9.4	9.6
Average per annum	4.6	4.7
Average for periods 1962 - 1968	15.2	12.8
Average per annum	7.4	6.2

The growth rates are on an average high and increasing, mostly for IGOs, but in general the relationship between the two groups is very stable. There are about nine INGOs for every IGO. Projections of these trends into the future are shown in Tables 2 and 3:

Table 2. Projected Increases in the Number of INGOs (1966 - 2000)*

Year	Slower increase 3.5%	Current increase 5.0%	Faster increase 6.0%	Much faster increase 8.0%
1966	1 935	1 935	1 935	1 935
1975	2 630	2 860	3 110	3 850
1985	3 700	4 650	5 600	8 300
2000	6 000	9 600	13 400	24 000

*Included here are national organizations with consultative status with ECOSOC and the EEC business and professional groups but not the corresponding five EFTA organizations.

Table 3. Projected Increases in the Number of IGOs (1966 - 2000)

Year	Slower increase 3.5%	Current increase 4.5%	Faster increase 5.5%
1966	199	199	199
1975	270	290	320
1985	380	450	545
2000	635	855	1 215

Sources for Tables 2 and 3: A study by Compagnie Generale d'Economie Appliquee: Les associations internationales et leurs congres, Paris, CGEA, 1968; as reported in a paper by A.J.N. Judge: Classification of International and National Organizations and the Relationships Between Them with Special Reference to International Non-Profit Organizations, Brussels 1968, U.I.A., Exhibit 13.

The growth rate of numbers of organizations may be influenced by mergers or splits that take place, and to get an impression of the frequency of this we present a table based on our questionnaire data:

Table 4. Percentage Organizations Having Experienced or Expecting Splits or Mergers

Org. Type	Time	Splits	No change	Mergers	Total	N
INGO	Past	3	92	5	100	739
	Future	2	89	9	100	739
IGO	Past	0	94	6	100	52
	Future	2	94	4	100	53

In most cases there has been no change of this kind nor is it expected, but for the rest mergers seem to be more frequent than splits. The growth rates of international organizations are not artificially high due to splits; they are rather a little low. For INGOs this may be even more true in the future, although future of course is a very unprecise concept for the respondents.

Diagram 1 raised the suspicion that great international conflicts influence the growth of the system of international organizations. Paul Smoker has shown this in more detail and given a theoretical interpretation of it. In his terminology, particularly the system of INGOs, is a global integrative subsystem.¹⁰ During international crises the integrative subsystems decay. In the postwar period covered in Table 1 there have been two major periods of crises, namely in 1956 (Hungary - Suez) and in 1961-62 (Berlin - Cuba). Both these periods

are clearly reflected in the growth rates. The pattern is most easily interpretable in the case of INGOs. It looks as if INGOs recover more slowly than IGOs.

Wallace and Singer's data gives us the possibility of tracing total and net gain for every two-year period since 1907 for IGOs, Diagram 2. Again we observe deep ditches on both curves in the beginning of the two major conflict periods. Wallace and Singer record the actual life of organizations and consider an organization dead from the period after the period of its last meeting, disregarding the date of any formal termination. There is consequently a time lag of about two years between the beginning of a crisis and the dip of the curve according to the theory. The IGO data do not exactly comply with this hypothesis.

The first low point on both curves is exactly at the beginning of the first world war. In the between war period, there is a general decline in the increase of the number of IGOs, but the new upward trend starts during the second major crisis. We now compare these findings with interpretations of Diagrams 5 and 6. The definition of IGO used here is different from Wallace and Singer's, but still we find the same trends. The deepest dips are found before the crises and there is modest increase in the formation rate during the crises. INGOs show a different pattern much more complying to the hypothesis. Unfortunately it was not possible to calculate net increase for INGOs.

How should these differences be interpreted? The increases of the number of IGOs during periods of crises or shortly afterwards may be part of the general alliance formation in such situations. Nation states are strengthened both internally and externally (within an alliance system) relative to other types of social actors.¹¹ The general increase of transnational cooperation between secondary groups is for many obvious reasons temporarily halted.

Diagram 4 shows the number of international meetings year by year up to the second world war. We are not able to split the meetings of IGOs and INGOs, but despite this and other liabilities¹² this measure of activity of international organizations clearly illustrates the close correlation between crises and amount of international cooperation.

Table 5. Intergovernmental Organizations, 1815 - 1965

	No. of nations	No. of organi- zations	No. of member- ships	Average no. of member- ships per nation	Average no. of member- ships per org.	Average percentage univer- sality per org.
1815-	23	1	6	.3	6.0	26.1
1820-	23	1	6	.3	6.0	26.1
1825-	25	1	6	.2	6.0	24.0
1830-	23	1	6	.2	6.0	21.4
1835-	31	2	17	.5	8.5	27.4
1840-	35	2	17	.5	8.5	24.3
1845-	38	2	17	.4	8.5	22.4
1850-	40	2	17	.4	8.5	21.9
1855-	43	3	22	.5	7.3	17.0
1860-	45	3	21	.5	7.0	15.6
1865-	40	6	54	1.4	9.0	22.5
1870-	35	8	79	2.3	9.9	28.2
1875-	34	9	113	3.3	12.6	37.1
1880-	35	11	135	3.9	12.3	35.1
1885-	38	18	214	5.6	11.9	31.3
1890-	38	23	290	7.6	12.6	33.2
1895-	41	25	324	7.6	13.0	31.7
1900-	43	32	469	10.9	14.7	34.2
1905-	45	46	700	15.6	15.2	33.8
1910-	44	52	788	17.9	15.2	34.5
1915-	51	54	903	17.7	16.7	32.7
1920-	61	77	1486	24.4	19.3	31.6
1925-	64	88	1713	26.8	19.5	30.5
1930-	65	92	1759	27.1	19.1	29.4
1935-	66	91	1927	29.2	21.2	32.1
1940-	67	87	1719	25.7	19.8	29.6
1945-	78	127	2434	31.2	19.2	24.6
1950-	84	152	2855	34.0	18.8	22.4
1955-	92	184	3634	39.5	19.8	21.5
1960-	124	214	4908	39.6	22.9	18.5

Source: Wallace, Michael D., & Singer, David J.: Intergovernmental Organization in the Global System, 1815 - 1964, mimeo 1969, first draft. Tables 2 and 3.

The main inference one can make on the basis of these curves is that the system of international organization, whether separated into a governmental and non-governmental part or not, is by and large a post World War II phenomenon. One half of all the INGOs in existence in 1966 were founded after 1950 and as much as 25% of them were no more than seven years old. IGOs statistics show corresponding figures. This should be borne in mind when we below will present data mainly from that period and to a certain extent only from the last decade. The reason for this limitation is not selectivity, however, but non-availability.¹³⁾

From system domain we proceed to a discussion of system unit domain. In principle this is simply the number of members of international organizations. In practice the members may be so different in size and complexity that it is not sensible to add them together. Individuals, national and international secondary groups as well as nation states may have memberships in the organizations included in this study. Some organizations admit membership status to actors of very different complexity, for instance individuals and groups or groups and nation states. The most prominent example of the latter combination is the I.L.O. A possible solution to this difficulty is to use the concept of size instead of domain adding up all the individuals that directly or indirectly are members. But one soon realizes that this is to go too far. For one thing, individuals at the grass root level in a hierarchy may not even be aware of the fact that their national association has transnational affiliations.¹⁴⁾ On the contrary, if there is direct individual membership these individuals are likely to have important positions in governmental or non-governmental national hierarchies and indirectly represent much more than their own private interests. It is generally assumed that for instance national interests often are well taken care of by the respective national subjects or groups regardless of whether they are government appointed or not. We consequently have much better statistics on national representations in international organizations than on domain and size as defined in this report. Ideally one should study domain at all levels and the connections between the levels and hopefully arrive at a formula for something to be called "total" domain of an organization. Increase in the total domain dimension would mean a larger number of persons, groups and nation states involved in international cooperation. For the time being we have to be satisfied with something less.

Table 5 column 5 gives the average number of memberships of nation states in IGOs for the last one and a half century. There was an almost monotonous increase up to the period starting in 1940. We notice that the world war did not only influence the number of organizations but also the average number of memberships. The set-back was not recovered before 1960. Another interesting finding is that the level of average "domain" have changed very little since the first world war. May be about twenty is an optimum level. Both the number of nations and the average number of memberships per nation have increased considerably during the same period, so this is not an indication of little growth in the system.

Table 6. Average Number of National Memberships in IGOs and National Representations in INGOs, 1951-1966.

Org. type	INGO			IGO		
	Average	Total no. of org.	NA	Average	Total no. of org.	NA
1951	21.0	823	240	-	-	-
1956	22.3	973	76	20.1	132	12
1964	23.7	1470	12	25.5	179	2
1966	25.7	1685	269	26.1	199	20
Sources: Cfr. Table .						

Table 6 makes it possible to compare IGOs and INGOs on this variable, but only for one decade. There is also much missing information. It looks as if IGOs expand a little faster than INGOs, but the difference is not great. The difference is easily explained by the relatively higher involvement of new nations in the IGO system, cfr. page 29. The figures above are a little higher than those in Table 5, partly because we have included many more nations and territories in our analysis than Wallace and Singer and partly because they also register bilateral organizations.

It is a pity that we do not have data for more years, but as a substitute we shall present a table based on data from our questionnaire in 1967. The organizations were asked about past and future (expected) gains and losses of "regional branches". The term "regional branch" is an unfortunate one but we have reasons to believe that most respondents in this context have equated it with "national branch";

Table 7. Percentages
Past and Future Losses and Gains of "Regional Branches"

		Loss	No change	Gain	Total	N
INGO	Past	4	41	55	100	728
	Future	2	37	61	100	723
IGO	Past	2	78	20	100	54
	Future	2	67	31	100	51

Keeping in mind that "past" and "future" are very imprecise terms, it is still worth notice that more gains are expected than experienced. The biggest difference is once more found in the IGO group. Very few organizations ever loose branches. The surprising thing about this table is that IGOs report less gain in the past and expect less in the future, and this is contrary to our expectations from Table 6. There are many possible explanations to this, both statistical and substantial, and we shall only present two. The expansion of IGOs may be more unevenly distributed on the number of organizations. This means that few IGOs increase the number of memberships, but those that do, have large increases. Most IGOs have a regional orientation and that support our hypothesis. In addition new IGOs may on an average have more national representations than new INGOs and that is not unlikely either.

Closely connected to the unit domain dimension is the universality-regionality dichotomy. In the case of IGOs the number of national memberships is an adequate indicator of domain. A universal organization is one having (almost) as large domain as possible. Organizations with a smaller domain are of two different kinds. If all members come from the same region, it is regional. In the opposite case we may simply call them non-regional for the lack of a better label. The last column in Table 5 gives the average percentage of nations being member of each IGO. From 1880 to 1935 there were unsystematic fluctuations and then a monotonous decline as there was a boom in the number of nation states. This raises the suspicion that much of the increase in the number of IGOs is due to more regional organizations. Robert C. Angell found that this at least was the case for INGOs between 1956 and 1964.¹⁵⁾ Our data too confirm this hypothesis for INGOs, Table 8.

Table 8. Distribution of Regional INGOs in Percentage per Region
+ the Total Percentage of Regional INGOs, 1954-1962

<u>Region</u>	<u>1954</u>	<u>1956</u>	<u>1960</u>	<u>1962</u>
Europe	55.1	60.7	65.0	61.1
America	33.5	28.0	24.6	25.5
Africa	6.3	4.8	4.6	7.0
Asia	5.1	6.5	5.7	6.4

TOTAL	100.0	100.0	99.9	100.0
N	158	186	280	298
% of all INGOs	13.9	18.2	24.2	25.0

Sources: International Associations

The question of what constitutes a region must be temporarily postponed, but we find that the number of regionally oriented organizations is relatively higher at least for the regions in the above list. The share of each region is rather stable except that the relationship between Europe and America is changing a little in the favor of Europe. Some words of caution are necessary here. We tried to classify organizations ourselves, and it is very difficult in many cases. It is for instance hard to put Arab organizations in any of the categories used in the table, and we definitely think Arab organizations qualify for a separate general regional category. Another problem is that there is not always correspondence between the orientation expressed in the name of an organization, whether regional or universal, and the actual membership distribution.

Fortunately we have a slightly different classification of regions that has been used for the distribution of both IGOs and INGOs, and we want to see whether this gives us different trends. Data for only two years, 1960 and 1962 are available.

Table 9. Distribution of Regional and Universal Organizations in Percentages per Region and of the total Number of Organizations, 1960 and 1962

<u>Region</u>	<u>INGOs</u>		<u>IGOs</u>	
	1960	1962	1960	1962
Africa	3.1	3.6	5.5	11.1
America	18.7	20.0	24.2	21.2
Asia	4.4	5.1	5.5	5.1
Commonwealth	4.4	4.7	4.4	5.1
Western Europe	62.1	56.7	28.6	26.3
Pacific	1.6	1.5	3.3	5.1
Scandinavia	2.8	2.5	2.2	1.1
Miscellaneous	2.8	5.8	26.4	25.3

TOTAL	99.9	99.9	100.1	100.3
N	251	275	91	99
% of all org.	20.0	20.8	59.1	58.2

Source: International Associations, 1963, no. 11, pp. 694-695.

For INGOs the change between 1960 and 1962 is small and exactly equal to the corresponding one in the previous table. Except for the two categories "Western Europe" and "Miscellaneous" there are no significant changes as expected for such a short period, and we suspect that the exception is due to inconsistent classification. The percentage regional IGOs is almost three times as large as the percentage regional INGOs. The sizeable rest category makes cross comparisons almost impossible, but still it is hard to explain away the big increase in the African share between the two time points. It seems also safe to conclude that in Western Europe there are relatively more regional INGOs than regional IGOs.

The percentage of regional INGOs increased from 1954 to 1962, but it did not increase evenly every year. Actually the increase in general became less towards the end of the period:

Table 10. Yearly Increase in the Percentage of Regional INGOs, 1954-1962.

<u>Period</u>	<u>Per cent increase per year</u>
1954-1956	2.2
1956-1960	1.5
1960-1962	.4

This concludes the discussion of unit domain. We do not expect a much higher average number of national representations in the future neither in IGOs nor in INGOs, partly because of a ceiling effect on the number of nations variable and partly because very large domain puts heavy stress on the operation of an organization, cfr. the U.N. We do expect, however, at least in the case of INGOs, a relatively less increase in the number of regional organizations. Whether this holds for other and perhaps more realistic definitions of regions than used in the above tables, is an open question.

5. Scope. We have no diachronic information on this dimension, probably because it is so difficult to define just what a function is. For practical purposes and with a limited sample of relatively similar organizations it should be possible for instance by paired comparisons to get a measure of the relative scope of the organizations. Our complex universe of international organizations of the most diverse kinds requires better methods.

6. Intensity. The variety of organizations is so great that no single variable could possibly tap this dimension alone. The nineteen categories in Table give a good indication of the problems.

If each organization was to put up a good criteria for the measurement of its efficiency, there certainly would be large number of different variables suggested. We have only a few that do not tell the whole story of activities of international organizations, but that we think are reasonably highly correlated to the amount of output.

The size of the budget is intuitively a good indicator, but unfortunately most organizations do not report data of this kind. The figures in Table 11 must therefore be interpreted with extreme caution but we claim that they are more reliable in diachronic than synchronic analysis. The patterns are strange

Table 11. Average Size of Budget in U.S. \$1000, 1951-1968.

Org.Type:	INGO			IGO + UN-family		
Year	Average	No. org.	% answers	Average	No. org.	% answers
1951	134	315	38	274	42	41
1954	710	327	32			
1958	610	477	45	2776	61	47
1960	587	521	42	1529	52	39
1964	629	417	28		(67)	(42)
1968				7679	67	33

Sources: International Associations, Nov. 1953, pp. 450-451;
Oct. 1958, pp. 682-683; Dec. 1960, pp. 734-735

Yearbook of International Organizations, 12th edition

indeed as one would expect with so much missing data. IGOs have much higher budgets than INGOs. There is^{also} a very clear increase in the IGO-category, much more than could be explained by inflation alone. In both cases 1960 seems to have been a relatively low point. In fear of overdoing the analysis of this table, we turn to another variable that in our 1964 data are very highly correlated to the average size of budget¹⁶⁾ namely the average size of the paid staff of international organizations, Table 12. The percentage answers is very low here too, but it should be pointed out that the samples of responding organizations are not identical with the ones in the previous table. Very often they give information on only one of the variables.

Table 12. Average Size of Paid Staff

Org.Type	INGO			IGO + UN-family		
Year	Average	No. org.	% answers	Average	No. org.	% answers
1958	12.5	478	45	12.5	55	42
1960	8.3	491	39	15.0	60	45
1964	9.0	615	42	140.0	65	41
1968				158.0	67	33

Sources: International Associations, Oct. 1958, pp. 682-683 and
Dec. 1960, pp. 734-735

Yearbook of International Organizations, 12th edition

Our data show no expansion of the average size of the INGO staff but considerable change in the IGO group from 1958 to 1964. The IGO trend is identical with the one found for the average size of the budgets. Very many INGOs do not have paid personnel and make up a

...the general impression is that fields related to production and economy gets an increased relative number of international organizations - trade unions being the only exception. It is difficult to give a common denominator for areas showing no change or decrease, but several of them seems to be little related to politics.

very large portion of the NA category. Actually the average size of INGO staffs is much lower than shown in this table. We do not know whether this holds for IGOs too, but large IGOs are more apt to give official information on such matters.

In spite of this there must have taken place a very significant increase in the size of the IGO secretariats. It does not necessarily mean that IGOs are more effective than INGOs. Many INGO officials seem to hold the opposite position. But it does mean that several times as many people are now making their living in international organizations than was the case in the beginning of the fifties. This is not less true for the U.N. system, excluded from the above tables.

Increase in the bureaucracy does not imply higher activity at the grass root level. One possible but not all too good indicator of the latter is the frequency of the assembly meetings in the organizations. General assemblies usually discuss the general policies of the organizations. Table 13 cover a brief time span, but still the lack of change is noticeable, particularly if one compares the IGO category with the corresponding columns in Table 12. Internationalism has become professionalized and bureaucratized. In the INGO category there is a slightly opposite trend, but the differences are too small to warrant rigid conclusions.

Table 13. Frequency of Assembly Meetings of IGOs and INGOs, 1960-64.

Organization type	IGO		INGO*		
Year	1960	1964	1960	1962	1964
<u>Frequency</u>					
Annual and more often	69.4	65.7	40.9	41.6	43.2
Every two years	11.6	16.7	22.8	22.4	22.9
Every three years	4.1	5.3	20.5	21.7	21.7
Every fourth years	4.1	5.3	9.4	9.6	8.8
Every five years	7.4	5.3	5.8	4.1	2.8
Every six years and less often	3.3	1.8	.5	.5	.5
Total	99.9	100.1	99.9	99.9	99.9
N	121	114	823	603	750
Total no. of org.	154	179	942	991	1096
Per cent answers	78.6	63.7	87.4	60.8	68.5

* For some reason four categories of INGOs were excluded from the tables in our sources, namely: Health, Education, Arts and Sports. We have compared the full list of INGOs to the incomplete list used here for the year of 1964, and found very minor differences on this variable. Inferences for all INGOs can therefore safely be made from the above table.

Source: International Associations, 1960, no. 12, p. 735.

7. Political implications. The political implications of the activities of international organizations is one of the main problems in the field. The term means approximately the same as spill-over or secondary priming used by theorists of integration.¹⁷⁾ The main idea is that success in influencing more or less important political decisions taken by national leaders will encourage and strengthen the international group or organization that is the source of this influence. There may also be an indirect and unintentional political effect of the regulating and standardizing functions of many organizations in less politically relevant fields. Regulation in one field may necessitate international regulation in another field of activity and so piece by piece a cooperative network is developed that eventually leads to cooperation in political and contested area. We do not intend to judge the soundness of these theories or should we say, political ideologies, but look at the fields in which there are international organizations and find out where the largest increases take place.

Table 14 gives the percentage of various types of organizations founded in the period prior to World War I, in the between-war period and in the period after World War II, respectively. Many of these organizations do not longer exist, but the death-rate is claimed to be approximately equal for the largest categories.^{17b} Going down the list, we notice that both "Philosophy-ethics-peace" and "Religion" are on decline. On the contrary, the category "Economics-Political economy-Finance" is sharply moving upwards and this is striking as many of the activities of the organizations have not only economic but also political implications. The "Labor" category shows an opposite trend. Labor movements very early organized internationally, but there is also a small increase in the latest period. "Commerce-Industry" goes up as well as "Engineering-Technology" and "Agriculture-Domestic Science". "Transport" is usually considered the field in which international cooperation started, but our data cast some doubt on this. The percentage is lowest in the first period. Another surprising trend is found for "Pure science". We would have expected it to follow "Engineering-Technology", but it is going down. "Sports" seems to be an area saturated with international organizations already in the between-war period. The general impression is that fields related to production and economy gets an increased relative number of international organizations - trade unions being the only exception. It is difficult to give a common denominator for areas showing no change or decrease, but several of them seems to be little related to politics.

very large portion of the NA category. Actually the average size of INGO staffs is much lower than that of NA staffs.

Table 14. Distribution of IGOs and INGOs Founded in Percentages per Chapter, 1693-1954.*

Period Chapter	1693- 1914	1915- 1944	1945- 1954
General - press - documentation	6.3	3.5	5.6
Philosophy - ethics - peace	7.1	5.0	4.0
Religion	5.3	3.8	2.9
Social science	1.8	1.2	2.1
Economics - Political economy - Finance	3.3	9.5	12.5
Labor	8.6	3.0	5.2
Law - Administration	10.0	9.2	8.6
Relief - Education - Youth and women's movements	8.6	11.6	12.1
Commerce - Industry	5.7	8.3	9.2
Philology - Languages	5.5	2.0	.9
Pure science	10.6	6.5	4.9
Medicine - Health	9.4	10.5	9.6
Engineering - Technology	2.9	4.1	4.6
Agriculture - Domestic science	4.9	5.1	6.0
Transport	2.0	4.5	4.5
The Arts	2.0	5.6	4.7
Sports	5.1	5.0	1.7
Literature	.0	1.2	.2
Geography - History	.8	.9	.7
Total	99.9	100.5	100.0
N	509	666	803

* About 400 organizations did not give a formation date. Most of these are not in existence now. Cfr. International Associations, 1952, p. 247.

Source: Speeckaert, G. P.: The 1,978 International Organizations Founded Since the Congress of Vienna - Chronological List, Brussels, 1957, Table II, p. XIII.

We turn now to the post World War II era and use shorter time-cuts. The variable is also different, namely the percentage of organizations in existence at various time points counting INGOs only, Table 15. The categories are invented by the Union of International Associations and the variable "organization type" is clearly on the nominal scale level. On the other hand, some of the categories of organizations are in our opinion more politically relevant than others.

Table 15. Percentages of INGOs per Chapter, 1954-1968.

<u>Organization type</u>	1954	1956	1958	1960	1962	1964	1966	1968
Bibliography, documentation, press	2.9	2.7	3.1	2.7	3.1	3.7	3.4	3.6
Religion, ethics	8.3	7.5	7.5	6.9	6.5	5.9	5.5	5.4
Social sciences, humanistic studies	3.9	5.8	5.2	4.5	4.3	4.6	4.7	4.7
International relations	8.5	6.4	6.7	7.3	7.5	7.2	6.6	6.6
Politics	1.2	1.1	1.3	1.4	1.1	1.0	.9	1.2
Law, administration	3.3	3.0	2.8	2.9	3.2	3.1	2.8	2.8
Social welfare	5.1	5.1	5.0	4.5	4.8	4.8	4.5	4.6
Professions, employers	5.4	6.9	6.3	5.8	5.7	5.3	5.6	5.5
Trade unions	4.9	4.9	4.6	4.3	4.1	4.0	3.8	3.7
Economics, finance	1.5	1.5	1.5	2.1	2.3	2.2	2.1	2.1
Commerce, industry	11.7	12.6	12.6	13.0	12.1	11.4	12.6	12.3
Agriculture	3.2	2.8	3.1	3.7	4.2	4.4	4.5	4.4
Transport, travel	2.8	4.1	4.2	4.5	4.3	4.3	4.3	4.0
Technology	3.4	3.7	4.7	4.8	4.8	4.8	4.9	5.4
Science	7.9	7.0	7.3	6.6	6.9	8.0	8.7	8.0
Health, medicine	10.1	10.2	9.8	9.8	10.0	10.2	10.3	11.3
Education, youth	5.4	5.8	5.8	5.4	5.4	5.6	5.4	5.5
Arst, literature, radio, cinema, TV	4.1	3.6	3.2	4.5	4.3	4.4	4.2	3.9
Sport, recreation	6.6	5.2	5.2	5.2	5.4	5.2	5.3	4.9

TOTAL	100.2	99.9	99.9	99.9	100.0	100.1	100.1	99.9
N	1012	975	1060	1255	1324	1470	1685	1899

Source: Yearbook of International Organizations, 5th - 12th edition.

particularly International Relations, Politics, Trade Unions, Economics & Finance, and Commerce & Industry. There is an ordinal element in the variable. We encounter several difficulties in using the indicators in Tables 14 and 15. First of all the classification of organizations itself is difficult and involves a certain degree of arbitrariness, but as the job has been done by a limited number of persons in cooperation, we trust that at least the diachronic reliability is high. There are more serious liabilities. For one thing, we do not take into consideration that the amount and scope of activity of the organizations vary. Again this is less serious in a diachronic perspective. More important is that there may have taken place changes

in the nature of the activities within each category that are not revealed because of the very crudeness of the measure. For instance, social welfare organizations may have turned from pure relief work to pressure group activity for social legislation and development, and that change makes the whole category of organizations more politically relevant. It is also a real disadvantage that we know nothing of the changes of domain within each group. For a study of the integrative effect of the systems of international organizations it would have been much more satisfying to have diachronic data on number, scope, relevance, and intensity of the organizational connections between each pair of countries in the world. For the time being that is not possible and we return our attention to Table 15. EEC and EFTA business and professional groups are excluded, and the frame of reference here is the world as a whole since we have included both universal and all kinds of regional organizations.

The distribution on the nineteen categories is remarkably stable in the post-war period. We find no significant trend of relative increase in the number of organizations in more politically relevant categories. The only striking change is the decreasing percentage religious organizations, possibly a consequence of the much noted general secularization of modern society. In our context this finding is less relevant. Technological organizations have increased their percentage all the time, but this group we are inclined to characterize as not very politically relevant. In short, this table does not indicate any dynamic changes in the system, but leave all questions about regional differences unanswered.

organizations

8. Interconnectedness. The bonds between \wedge are of several different kinds. INGOs and IGOs may join in superstructures, super INGOs and IGOs or organizations with mixed memberships. There is joint participation in programs, exchanges of observers, consultative status with other organizations, joint secretariats, informal contacts on an individual basis, etc. When international organizations enter into relationships of this kind they act as institutions in their own right not only as fora of consultation of national delegations. The number of bonds consequently is a measure of the cohesiveness of the systems and their strength relative to other kinds of systems. For this important dimension there exist no diachronic data.

9. Entropy. A definition of entropy useful for our purposes is given on page 2. High negative entropy in the systems of international organizations corresponds to an equal distribution of memberships and other connections with the organizations on the nation states. The number of nation states is too high for separate analysis of each single one, and they must therefore be grouped into categories usually referred to as regions. In general region simply means proximity or similarity or location within a specified range on a variable. This definition is very liberal and very general and permits one to choose a variable and range that is relevant for one's problem. Difficulties arise when not only one variable seems to be relevant and the several relevant variables do not place the units within the same regions. It gets still more complicated when some of the variables seem to be of an entirely different nature. In the literature we have discovered two basically different approaches. One possibility is to use one simple variable, namely geographical location.¹⁸⁾ A little more sophisticated attempt along the same lines would be location in the communication network, for instance using airline connections as the variable. Another possibility is to apply several cultural, economic and political variables.¹⁹⁾ Factor analysis is a possible solution to the problems of using several criteria.

For our purposes it is not necessary to go into a detailed discussion of the problem. We only want to point out that cultural similarity and geographical proximity seems to be moderately correlated and that cultural differences are probably more of an obstacle to positive interaction than geographical distance in large parts of the world today. We therefore do not require that regions should be territorially contiguous. On a purely subjective basis we defined seven such categories of nations plus a rest group. The seven corresponds rather well to clusters found by empirical methods:²⁰⁾

North West	Includes North America and Western Europe plus Israel, Turkey, Cyprus, Australia, New Zealand, Japan and South Africa. The reason for the addition of very distant countries to the core area nations is that the former economically are similar to the latter and more connected to that group than any other in terms of joint participation in IGOs and INGOs.
Latin America	All states in the Americas except Canada and the U.S.
Arab countries	All members of the League of Arab states plus Iran. Iran is clearly a borderline case but seems to have more affinity to the Arab group measured by co-memberships than with typically Asian nations.

Western Asia	The label is not a good one for a very mixed category of nations in Asia not ruled by communist parties.
Communist Asia	China, North-Vietnam, North-Korea and Mongolia. Mongolia has been the most active of the four in terms of number of memberships in international organizations.
Eastern Europe	The Warsaw Treaty nations plus Albania and Yugoslavia. Albania does not add much to the statistics, while Yugoslavia is the most active country in this category. She is also a borderline case, a little more oriented westward than eastward in the IGO system and vice versa in the INGO system. The main reason for referring her to "Eastern Europe" was that "North West" already was very large.
Black Africa	All sub-Saharan states that not are ruled by white elites or still under colonial rule (in 1969).
Rest	All African states not covered by the previous labels plus more or less sovereign islands in the Pacific.

The "North West" region accounts for so much of the total activity in international organizations that it is useful to distinguish some subregions:

North America	Canada and the U.S.
Northern Europe	the members of the Nordic Council
EEC-group	The six members of the European Economic Community

A complete list is given in Appendix A.

The classification above may of course be discussed ad infinitum, but it is sufficiently meaningful for our purposes. Two regions are developed, namely "North West" and "Eastern Europe", two are socialist, namely "Eastern Europe" and "Communist Asia". The four other regions are all less developed and probably generally less homogeneous too.

The simplest indicator of involvement in the IGO and INGO systems is the number of memberships or national representations. Table 16 gives data for IGOs back to the Congress of Vienna in 1815 that meant the inauguration of the era of intergovernmental organization. The regions defined with reference to the situation in 1969 are not meaningful for most of the century and a half, but we have used them to facilitate comparison. Intergovernmental organization was exclusively a European phenomenon until the 1865. Eastern Europe had a moderate share of the total number of memberships up to the Second World War. From then on it drops rather much but this is partly due to the increased share of the new nations. The Latin American trend resembles

the "Eastern European" except that the total level is higher and that the peak was reached five years later, and the subsequent drop is even more dramatic. The "North Western" share was rather stable from 1915 to 1959 and then newcomers brought the percentage down. The region is still very overrepresented even if we control for the number of nations. The Arab countries have increased their share since the turn of the century but this trend also reflects the increased number of Arab nations. "Western Asia" improved their percentage after the war, but have not been able to progress further, while there is a tremendous boom for "Black Africa" in the last period. "Communist Asia" is almost unrepresented in the system. In later years "North America" and "Northern Europe" show minor fluctuations while the "EEC-group" trend is steady decrease. In conclusion, the system moves towards a higher degree of entropy, but there are still gross difference particularly if we control for the size of the population in the regions.

Data from the Union of International Organizations make us able to analyze more carefully the development in the post World War II period. The percentages in Table 17 correspond well with those in the previous table. The most remarkable change is accounted for by "Black Africa" that cannot only be explained by the increased number of African states since many of them were considered as independent units before their respective dates of liberation. The average number of memberships per country must also be higher relative to some other regions. The Latin American share drops considerably as already noted and "Western Asia" is rather stable. Comparing "Eastern Europe" and the "North West" we see that the communist developed region does relatively a little better than its capitalist counterpart, but not as well as "Northern Europe" compared to the total "North West" region. In short, we retain our conclusion based on the previous table.

The IGO system and INGO system are compared by simultaneous analysis of Tables 17 and 18. "Black Africa" moves upwards on the INGO variable too but at a somewhat slower pace. "Eastern Europe" and "Latin America", "Western Asia" and "Arab countries" change very little while the "North Western" share decreases. The total change for all regions is clearly less than in the case of IGOs, but there is some development in the direction of more even distribution. The developed regions have higher percentages on the INGO than the IGO variable. This means that less developed areas are relatively more involved in the governmental organisation network.

Table 16. Membership in IGOs in percentages per region, 1815 - 1964*

REGION	North West	Latin America	Arab countries	Western Asia	Communist Asia	Eastern Europe	Black Africa	Rest		SUBREGION	North America	Northern Europe	EEC-group
Year									TOTAL	N			
1815-	100.0	-	-	-	-	0	-	-	100.0	6	0	0	50.0
1820-	100.0	-	-	-	-	0	-	-	100.0	6	0	0	50.0
1825-	100.0	0	-	-	-	0	-	-	100.0	6	0	0	50.0
1830-	100.0	0	-	-	-	0	-	-	100.0	6	0	0	50.0
1835-	94.1	0	-	-	-	5.9	-	-	100.0	17	0	0	23.5
1840-	94.1	0	-	-	-	5.9	-	-	100.0	17	0	0	23.5
1845-	94.1	0	-	-	-	5.9	-	-	100.0	17	0	0	23.5
1850-	94.1	0	-	-	-	5.9	-	-	100.0	17	0	0	23.5
1855-	90.9	0	0	-	0	9.1	-	-	100.0	22	0	0	27.3
1860-	90.5	0	0	-	0	9.5	-	-	100.0	21	0	0	38.1
1865-	87.0	0	5.6	-	0	7.4	-	-	100.0	54	1.9	9.3	37.0
1870-	84.8	3.8	3.8	-	0	7.6	-	-	100.0	79	3.8	11.4	29.1
1875-	76.1	18.0	3.5	-	0	12.4	-	-	100.0	113	3.5	8.8	26.6
1880-	74.8	10.4	3.0	-	0	11.9	-	-	100.1	135	3.0	7.4	29.4
1885-	72.4	13.1	1.9	.9	.9	10.7	-	-	99.9	214	3.7	6.0	29.4
1890-	64.5	23.1	1.4	.7	1.0	9.3	-	-	100.0	290	3.4	5.9	26.2
1895-	64.8	21.6	1.9	1.2	.9	9.6	0	-	100.0	324	4.0	7.1	25.9
1900-	61.4	26.0	1.5	1.3	1.3	8.5	0	-	100.0	469	3.8	8.1	23.0
1905-	59.9	26.4	1.1	1.1	1.0	10.1	.3	-	100.0	700	3.9	8.6	22.1
1910-	57.0	28.6	1.3	1.3	1.0	10.7	.3	-	100.2	788	3.4	8.8	20.4
1915-	48.0	34.9	1.4	1.6	1.3	12.6	.2	-	100.0	903	3.2	8.1	17.1
1920-	50.8	28.9	.8	1.1	1.3	16.4	.7	-	100.0	1486	4.0	9.6	15.8
1925-	48.8	29.7	1.1	1.5	1.4	16.9	.8	-	100.2	1713	3.6	7.8	15.3
1930-	48.9	29.9	1.0	1.3	1.3	16.9	.8	-	100.1	1759	3.9	7.5	13.9
1935-	47.3	30.8	2.0	1.2	1.1	16.9	.7	0	100.0	1927	4.0	7.3	14.5
1940-	44.3	37.9	2.2	1.3	1.2	12.2	.8	0	99.9	1719	5.0	7.1	12.7
1945-	45.4	31.6	4.7	6.6	.7	10.0	.9	0	99.9	2434	5.1	8.5	13.0
1950-	46.6	28.0	6.0	9.9	.1	8.5	.9	0	100.0	2855	4.8	8.2	13.1
1955-	47.2	24.5	7.8	9.8	.2	9.1	1.4	0	100.0	3634	4.1	7.9	14.4
1960-	38.9	20.8	8.7	9.1	.7	7.4	14.3	0	99.9	4908	3.2	6.4	11.5

Source: Cfr. Table 5.

* (-) means that there was no nation in the region that could participate in the int. system.

Table 17. IGO-memberships in Percentages per Region, 1956-1966*

Year	1956	1960	1962	1964	1966
<u>Region</u>					
North West	45.9	45.4	40.8	37.5	35.8
Latin America	25.2	23.0	21.7	20.6	18.9
Arab Countries	7.6	8.0	8.5	8.2	8.7
Western Asia	11.1	11.7	10.0	10.3	10.6
Communist Asia	.2	.1	.2	.4	.4
Eastern Europe	8.5	8.4	8.2	6.7	6.7
Black Africa	1.5	3.1	9.7	15.7	18.0
Rest	0	.3	1.0	.6	1.0
TOTAL	100.0	100.0	100.1	100.0	100.1
N	2647	3115	3589	4515	4676
Total no. of organizations	132	-	-	179	199
NA	12	-	-	2	20
<u>Subregion</u>					
North America	3.6	3.3	3.1	2.9	2.7
Northern Europe	7.5	7.7	7.0	6.1	6.0
EEC-group	13.9	14.4	13.0	11.1	10.6

Sources: International Associations, 1957, no. 10, pp. 708-709; 1963, no. 11, pp. 688-605

National Participation in International Organizations, Tables from a Study to be Published in International Associations, Circulated in Advance for the Use of the Committee on Non-governmental Organizations of the Economic and Social Council, Dec. 1967, Union of International Associations, Brussels.

Yearbook of International Organizations, 10th edition, 1964-65.

* We have included White Russia and Ukraine in this table.

Table 13. National Representations in INGOs in Percentages per Region, 1951-1966.*

Year	1951	1956	1960	1962	1964	1966
<u>Region</u>						
North West	66.2	63.5	58.3	57.8	54.5	53.5
Latin America	15.5	17.2	16.4	15.9	16.5	16.6
Arab countries	3.5	5.4	4.8	5.2	5.2	5.3
Western Asia	6.6	6.7	8.5	7.4	7.7	8.3
Communist Asia	.1	.4	.3	.3	.5	.5
Eastern Europe	7.9	6.6	7.5	7.7	8.0	7.9
Black Africa	.2	.3	3.5	4.8	6.7	6.8
Rest	0	0	.9	1.0	.9	1.1
TOTAL	100.0	100.1	100.2	100.1	100.0	100.1
N	12249	20027	24144	28827	34486	36341
Total no. of organizations	823	973	-	-	1470	1685
NA	240	76	-	-	12	269
<u>Subregion</u>						
North America	6.0	5.2	4.6	4.6	4.5	4.3
North Europe	12.2	11.3	10.2	10.0	9.3	9.4
EEC-group	20.9	20.0	18.9	18.4	17.0	16.4

Sources: International Associations, 1952, May, p. 215
plus the sources listed under Table 17.

* We have excluded exile groups but included White Russia and Ukraine in this table.

One disadvantage of using the membership variables is that they are somewhat inflated by the large and increasingly larger number of very small nations. Another disadvantage is that we are not able to distinguish between smaller and larger organizations. The distortion due to such factors are much less on the next variable, the number of international meetings held from 1950, Table 19. Unfortunately IGO and INGO meetings are not given separately and the U.N. is excluded, but the advantage is that active organizations carry heavier weight than others.

The "North Western" bias is much more pronounced here. Roughly 80% of all international meetings in the last decade were held in that region, but the relative number is nevertheless decreasing. The "Latin American" trend is characterized by a series of inconclusive ups and downs, while the "Arab countries" can report a very modest increase. The two Asian categories do not contribute to change, but the "Eastern European" increase is notable. It compensates for much of the "North Western" decrease so that the total decrease of the developed regions is very small. "Black Africa" trend culminates in 1962. It does not correspond to the boom in numbers of memberships. Of the three "North Western" subregions, "North America" is most stable and the "EEC-group" least. Except for the 1958 figure, probably to be explained by the World's Fair in Brussels, there is an unmistakable downward trend. Central Europe seems to become less of a center on this as well as on the previous variables.

The next variable in this section is the regional distribution of headquarters of international organizations, Table 20. This is in our opinion a better indicator of the decision-making center of the systems. The nationality of the Secretary General or his equivalent corresponds in most cases to the location of the headquarters, but there are exceptions for instance among the many organizations situated in "international" cities like Geneva, Paris and New York. The North Western bias is larger than on the previous variable and shows a much slower decrease. This is not surprising since headquarters for obvious reasons do not rotate among member nations as do international meetings. On this variable there are almost monotonously increasing "Latin American", "Arabian", "Western Asian" and "Black African" shares, but the changes are far from impressive bearing in mind the high number of organizations founded during the period and particularly since 1950. In the post World War II period "Eastern Europe" does improve its position, but the region still has not reached its percentage from 1906. The EEC subregion follows the general pattern of the "North West", but

Table 19. Distribution of Sites of International Meetings in percentages per region, 1950 - 1966. *)

REGION	North West	Latin America	Arab countr.	Western Asia	Comm. Asia	East. Europe	Black Africa	Rest	TOTAL	SUBREGION	North America	Northern Eur.	EEC-group
Year										N			
1950	90.6	5.0	.6	2.0	0	1.1	.6	.2	100.1	724	9.7	7.3	47.9
1951	87.0	6.8	1.1	3.1	.1	.7	.6	.3	100.0	714	7.0	7.6	44.5
1952	87.7	6.8	1.6	2.3	.1	..7	1.1	.2	100.0	996	10.1	7.6	43.7
1953	87.9	5.5	.5	2.0	0	1.7	1.6	.8	100.0	1086	8.1	7.0	46.0
1954	83.3	9.6	1.3	2.0	.1	2.0	1.4	.4	100.1	1095	12.0	4.8	40.3
1955	84.6	7.2	.8	3.4	0	2 0	1.9	.2	100.1	1125	77.6	4.8	42.7
1956	83.3	8.2	1.0	3.1	.1	2.8	.8	.7	100.0	1120	9.4	5.8	39.5
1957	83.4	6.2	1.3	3.8	0	3.1	1.7	.6	100.1	1130	11.0	5.7	40.4
1958	84.3	5.7	1.4	3.1	.1	3.8	1.5	.1	100.0	1432	7.4	5.5	49.4
1959	80.7	6.6	1.7	3.5	0	5.4	1.8	.2	99.9	1414	9.0	6.2	39.1
1960	77.5	9.5	1.7	3.8	.1	4.6	2.5	.2	99.9	1899	8.4	7.0	36.8
1961	78.0	7.8	2.1	4.0	.1	4.2	3.4	.4	100.0	1845	922	5.5	35.3
1962	76.8	7.9	2.1	4.4	.0	4.6	3.5	.5	99.8	2004	8.6	6.6	36.2
1963	80.4	7.2	1.9	2.8	.0	4.0	3.1	.6	100.0	2366	8.7	6.3	39.1
1964	78.6	8.0	2.1	4.0	.0	4.8	2.2	.2	99.9	2113	10.8	5.3	33.8
1965	79.9	6.4	1.8	3.4	.0	5.9	2.5	.1	100.0	1868	10.3	6.6	33.4
1966	75.5	8.0	3.3	3.2	.0	7.5	2.5	.2	100.2	2226	7.8	5.5	33.3

*) East and West Germany were not treated separately before 1961, and meetings that may have been held in the East were consequently referred to the category "North West". There were probably very, very few such meetings, however.

Sources: International Associations, 1959, June, pp. 444-445; 1962, Dec., pp. 799-803; 1968, Feb., pp. 92-97.

Table 20.

Locations of Headquarters of International Organizations
in percentages per region, 1906 - 1968.

	North West	Latin America	Arab countries	Western Asia	Communist Asia	Eastern Europe	Black Africa	Rest			North America	Northern Europe	EEC-group
Year	TOTAL								N				
1906	97.0	.6	0	0	0	2.4	0	0	100.0	169	.6	1.8	70.5
1912	97.3	.7	.2	.2	0	1.6	0	0	100.0	437	3.4	2.3	72.8
1921	98.4	.6	.3	.3	.3	.0	0	0	99.9	321	5.9	2.2	54.8
1926	98.2	.7	0	0	.3	.7	0	0	99.9	397	6.0	2.5	51.1
1929	97.9	.6	0	0	0	1.6	0	0	100.1	524	4.8	2.3	58.0
1931	97.9	.6	0	0	0	1.6	0	0	100.1	524	4.8	2.3	58.0
1938	96.1	.7	.1	.4	0	2.7	0	0	100.1	705	3.7	3.0	52.5
1950	95.1	2.6	.5	.2	0	1.4	.1	0	99.9	804	11.6	3.9	47.4
1951	93.2	3.5	.5	.9	0	1.7	.2	0	100.0	941	12.9	3.5	42.8
1954	93.2	3.1	.4	1.3	0	1.3	.5	.3	100.1	1198	12.2	3.4	45.5
1958	92.0	3.7	.5	1.5	0	1.6	1.6	.1	100.0	1257	9.8	3.5	46.1
1962	90.8	3.7	.5	1.8	0	1.8	1.2	.1	99.9	1549	11.0	3.1	46.9
1964	89.4	4.4	1.1	1.7	0	1.8	1.4	.1	99.9	1758	10.9	3.2	45.2
1966	88.7	4.8	.9	1.7	.0	2.1	1.5	.1	99.8	2207	10.5	4.6	43.5
1968	87.1	5.4	1.1	2.1	.0	2.1	1.9	.2	99.9	2663	10.4	4.8	42.9

Sources: International Associations, 1954, no. 11, pp. 548-549;
1954, no. 11, pp. 548-549; 1959, no. 6, pp. 446;
1965, no. 2, pp. 86-89; 1967, no. 2, pp. 166-169.
Yearbook of International Organizations, 12th edition.

Table 21. Locations of Headquarters and Secondary Offices of International Organizations in Percentages per Region, 1958-68.

Year	1958	1960	1962	1964	1966	1968
<u>Region</u>						
North West	87.0	84.6	84.3	82.5	82.3	81.1
Latin America	6.2	7.8	6.9	7.5	7.2	7.4
Arab countries	1.0	1.2	1.4	1.8	1.7	1.8
Western Asia	3.2	3.0	3.7	3.5	3.5	3.9
Communist Asia	.1	.0	.0	.1	.1	.1
Eastern Europe	1.5	1.5	1.7	1.9	2.2	2.2
Black Africa	1.0	1.7	1.8	2.7	2.8	3.3
Rest	.1	.1	.1	.1	.1	.2
TOTAL	100.0	99.9	99.9	100.1	99.9	100.0
N	1873	2137	2209	2429	2815	3341
<u>Subregion</u>						
North America	14.8	11.7	11.3	11.4	10.4	10.2
Northern Europe	3.3	3.0	2.9	3.1	4.0	4.2
EEC-group	37.2	40.8	41.7	39.5	39.8	39.5

Sources: Cfr. Table 20.

Table 22. Locations of Secondary Offices of International Organizations in Percentages per Region, 1958-68.

Year	1958	1962	1964	1966	1968
<u>Region</u>					
North West	76.6	68.9	64.4	58.9	57.5
Latin America	11.2	14.2	15.8	15.9	15.2
Arab countries	2.1	3.6	3.3	4.8	4.6
Western Asia	6.5	8.2	8.0	10.2	11.2
Communist Asia	.2	.2	.3	.3	.3
Eastern Europe	1.3	1.5	1.9	2.3	2.1
Black Africa	1.9	3.2	6.1	7.4	8.7
Rest	.2	.2	.1	.2	.1
TOTAL	100.0	100.0	99.9	100.0	100.0
N	616	660	671	608	678
<u>Subregion</u>					
North America	25.2	12.0	12.7	10.2	9.6
Northern Europe	2.8	2.6	3.0	2.1	1.8
EEC-group	18.8	29.5	24.7	26.5	26.4

Sources: Cfr. Table 20.

"Northern Europe" seems to reverse the trend in later years. "North Africa's" percentage drops slowly from 1951.

Further comments are unnecessary, for this variable, except that it does not distinguish between larger and smaller organizations. If we assume that larger organizations in general are more apt to have secondary offices, then the total number of headquarters and secondary offices is a better indicator of regional distribution of international decision-making, Table 21. The trends are not different, however, but the bias towards the "North West" smaller.

Looking at the distribution of the two kinds of offices separately,* one discovers great differences between the regions. The North West has relatively a much greater share of the headquarters than the secondary offices. The opposite is the case for all other regions except Eastern Europe that is pretty even on the two variables. An organization may of course have headquarters and secondary offices within the same region, but we presume that in most cases secondary offices are located elsewhere. If that is true, traits of a colonial structure are found in the system of international organizations too. Three modifying factors should be mentioned. The number of secondary offices is low and decreasing, from about 33 per cent of the total number of offices in 1962 to about 20 per cent in 1968. Most regions follow this pattern except Black Africa that has definitely lagged behind.** The other modifying factor is that some organizations with headquarters in the developing regions have secondary offices in the North West. Third, the lesser developed communication systems in the former regions may be an impetus for more intraregional secondary offices than for instance in Europe. Correspondingly the decreased total percentage of secondary offices may reflect the general improvement of communications in the world. More regional and more small organizations probably contribute to the same trend.

The data presented in this section are summed up in Table 24, that gives the percentage of involvement of the "North West" at various levels of the internal structure of international organizations at various time points.

The "North West" is the topdog region also in the systems of international organizations, and the main contribution to a higher degree of negative entropy would be a reduction of the topdog monopoly

* Tables 20 and 22.

** Table 23.

Table 23. Percentage Secondary Offices of the Total Number of
Offices of International Organizations per Region,
1958-1968.

Year	1958	1962	1964	1966	1968
<u>Region</u>					
North West	29.0	24.4	21.6	15.6	14.4
Latin America	59.5	61.8	57.9	47.5	41.9
Arab countries	68.4	75.0	51.2	59.2	50.8
Western Asia	67.8	65.9	64.3	62.6	58.0
Communist Asia	*	*	*	*	*
Eastern Europe	28.6	54.2	28.9	23.0	21.9
Black Africa	63.2	53.8	62.1	57.0	53.6
Rest	*	*	*	*	*
TOTAL	33.5	29.9	27.6	21.6	20.3
<u>Subregion</u>					
North America	55.8	31.7	30.7	21.2	19.0
Northern Europe	27.9	26.2	26.3	11.4	8.5
EEC-group	16.7	21.2	17.3	14.4	13.5

Sources: Cfr. Table 20.

of connections with the systems. We see it useful to differentiate between various levels in the structure of international organizations. The closer one is to the top level, the greater influence one presumably has. The order of the levels corresponds roughly to the order of the variables printed to the left in the table. Four differences as to the degree of entropy can now be made:

- The IGO system shows a higher degree of negative entropy than the INGO system and the difference is largest at the bottom level.
- For both categories of organizations the negative entropy is lowest at the top level.
- On all levels there is a general trend towards higher degree of negative entropy.
- The changes in the degree of negative entropy are greatest at the bottom level.

Table 24. Percentages of the "North Western" Involvement in International Organizations, 1951-1968.

Year		1951	1954	1956	1958	1960	1962	1964	1966	1968
Variable	Org.type	-----								
Place of publication*	INGO		93.3			91.3				
	IGO					89.6				
Location of H.Q.	Both	93.2	93.2		92.0		90.8	89.4	88.7	87.1
Nationals on executive organs	INGO					88.4				
	IGO					80.5				
International meetings	Both	87.0	83.3	83.3	84.3	77.5	76.8	78.6	75.5	
Location of secondary offices	Both				76.6		68.9	64.4	58.9	57.5
Memberships	INGO	66.2		63.5		58.3	57.8	54.5	53.5	
	IGO			45.9		45.4	40.8	37.5	35.8	

Sources: Previous tables plus International Associations, 1953, no. 12, pp. 505-507
 1959, no. 10, pp. 704-710
 1967, no. 5, pp. 354-355

* Data from 1953 and 1959 are placed under 1954 and 1960, respectively.

10. Isomorphism. As noted many times already, the IGO and INGO systems map differently on the nation state system. We wonder whether this difference is changing, in particular whether the IGO system becomes relatively more popular among developing regions than the INGO system.

A very crude measure of isomorphism is the sum of absolute percentage differences between pairs of entries in Tables 17 and 18, added up columnwise. In Table 25 we have shown the figures for the two most distant time points.

Table 25. Differences of the Percentages of Memberships in the INGO and IGO systems in 1956 and 1966.

Year Region	1956	1966	Difference 1966-1956
North West	17.6	17.7	.1
Latin America	7.9	2.3	--5.6
Arab countries	2.2	3.4	1.2
Western Asia	4.4	2.3	-2.1
Communist Asia	.2	.1	- .1
Eastern Europe	1.9	1.2	- .7
Black Africa	1.2	11.2	10.0
Rest	0	.1	.1
TOTAL	35.4	38.3	2.9

The degree of isomorphism is a little higher in 1966 than in 1956, but the increase is not due to considerable change in the percentage differences on part of the two developed regions. "Black Africa" changed its pattern most. The difference between the percentage differences was 10 per cent. Then follows "Latin America" and "Western Asia" that also modified their patterns but in the opposite direction to a more equal engagement in the IGO and INGO systems. We suppose that the African trend will be reversed in the future as the region hopefully develops economically and socially. High INGO activity depends among other things upon structures of relatively strong secondary groups and African nations do not have that as yet. But compared to for instance "Western Asia" there is a high degree of involvement at the government level.

11. Summary. In this paper we have tried to give a quantitative description of the development of international organizations using concepts from system theory, namely domain, scope, intensity, political implication, interconnectedness, entropy and isomorphism. We called these dimensions. On all the dimensions we had diachronic data we found strong increases in the post World War II period, the only exception being the average intensity of INGO functions measured by size of paid staff and size of budget. A very important trait was the general increase in degree of negative entropy. The theoretical and political implications of this development of a system based on a new type of social actors will be discussed in a subsequent report.²¹⁾

N O T E S

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1) A very thorough collection of information on Intergovernmental organizations has been done by Michael Wallace and David Singer in connection with the "Correlates of War" program at the University of Michigan. Cfr. their report: Intergovernmental Organization and the Global System, First Draft, 1969.

2) For a good introduction, cfr. Ludwig von Bertalanffy: General Systems Theory, Foundations, Development, Applications, George Braziller, N.Y., 1968.

3) Cfr. Rosenberg, Andrea: International Interaction and the Taxonomy of International Organizations, International Associations, 1967, no. 11, pp. 721-729.

3) The IGO category in this chapter includes all intergovernmental organizations listed in the Yearbooks of International Organizations, that means the UN-family, the European Committees organizations and all other. The INGO class excludes EEC and EFTA business and professional groups and national organizations in consultative status with UN, altogether 289 organizations in 1968. The definitions of organizations we use are identical with those explained in Yearbook of International Organizations, 12th edition, pp. 11-12.

4) Cfr. the definition of politics by Robert A. Dahl in "Modern Political Analysis".

5) Cfr. Galtung, Johan, Entropy and the General Theory of Peace, Proceedings of the International Peace Research Association, Second Conference. van Gorcum & Comp., N.V. Assen, 1968.

6) Cfr. Galtung, Johan, A Structural Theory of Integration, Journal of Peace Research, no. 4, 1968.

7) Cfr. Wallace and Singer, op.cit. They use a different definition of intergovernmental organization than does the Union of International Associations. The main difference is that they include bilateral organizations, while the U.I.A. require members from at least three different states.

8) Speeckaert, G.P., The 1,978 International Organizations Founded Since the Congress of Vienna - A Chronological List, Union of International Associations, Brussels, 1957, p. 1.

- 9) Personal communication from Assistant Secretary General of the Union of International Associations, Mr. A.J.N. Judge.
- 10) Smoker, Paul: Nation State Escalation and International Integration, Journal of Peace Research, no. 1, 1967, pp. 67-75.
- 11) I am grateful to Per Olav Reinton, PRIO, for this point.
- 12) Year to year trends of international meetings are distorted by international exhibitions. Cfr. Genevieve Devillo: "Les Reunions Internationales en 1958", International Associations, 1959, no. 6.
- 13)
- 14) Cfr.: The Role of Non-Governmental Organizations in International Intellectual Cooperation. Report of a Seminar Sponsored by The American Council of Learned Societies and The United States National Commission for UNESCO, April 28-30, 1964, Gould-House, New York.
- 15) Angell, Robert C.: An Analysis of Trends in International Organizations, Peace Research Society (International) Papers, Vol. III, 1965, pp. 185-195.
- 16) The gamma correlation between size of paid staff and size of budget was .88 for INGOs in 1964.
- 17) Cfr. Etzioni, Amitai: Political Unification, Holt, Rinehart and Winston Inc., N.Y., 1965, pp. 53-54, and Haas, Ernst: The Uniting of Europe, Chapter 8.
- 17b) Cfr. Speeckaert, op.cit., p. XIV.
- 18) Cfr. for instance Nye, J.S.: The Problem of Regionalism, in Chapter I in: Regional Organizations and World Politics, Harvard University, forthcoming.
- 19) Mainly cultural and interactional variables are used by Russett, Bruce M. in: International Regions and the International System: A Study in Political Ecology, Rand McNally & Company, Chicago, 1967.
- 20) Cfr. Russett, op.cit.
- 21) The major theoretical contribution in this field is made by Johan Galtung. Cfr. for example his article: "A Structural Theory of Integration" (see footnote 6), and "Non-Territorial Actors and the Problem of Peace", First Draft, International Peace Research Institute, Oslo, 1969, mimeo.

APPENDIX A

Regional Classification of Nations and Territories. (Based on PRIO list of Nations and Territories)

North West

Andorra, Australia, Austria, Belgium, Canada, Cyprus, Denmark, Faeroe Islands, Finland, France, German Federal Republic, Gibraltar, Greece, Greenland, Iceland, Ireland, Israel, Italy, Japan, Liechtenstein, Luxembourg, Malta and Gozo, Monaco, Netherlands, New Zealand, Norway, Portugal, San Marino, Spain, South Africa, Sweden, Switzerland, Turkey, United Kingdom, United States, Vatican.

Latin America

Antigua, Argentina, Bahama Islands, Barbados, Barbuda, Belice, Bermuda, Bolivia, Brazil, Canal Zone, Cayman Islands, Chile, Colombia, Corn Islands, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Falkland Islands, Grenada, Gaudelope, Guatemala, Guiana - British, Guiana - French, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, St. Kitts-Nevis-Anguilla, St. Lucia, St. Pierre and Miquelon, St. Vincent, Surinam, Trinidad and Tobago, Turks and Caicos Islands, Uruguay, Venezuela, Virgin Islands (UK), Virgin Islands (US).

Arab countries

Aden, Algeria, Bahrain, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Muscat and Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Trucial Oman, Tunis, United Arab Republic, Yemen.

Western Asia

Afghanistan, Bhutan, Bonin Islands, Brunei, Burma, Cambodia, Ceylon, Hong Kong, India, Indonesia, Kashmir, Korea - South, Laos, Macao, Malaysia, Maldive Islands, Nepal, New Guinea, Pakistan, Papua, Philipines, Portugese Timor, Ryukyu Islands, Sikkim, Singapore, Taiwan, Thailand, Vietnam - South.

Communist Asia

China, Korea - North, Mongolia, Vietnam - North.

Eastern Europe

Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Rumania, U.S.S.R., Yugoslavia.

Black Africa

Bechuanaland, Burundi, Cameroon, Central African Republic, Chad, Congo - Brazzaville, Congo - Kinshasa, Dahomey, Ethiopia, Gabon, Gambia, Ghana, Guinea, Equatorial, Ivory Coast, Kenya, Lesotho, Liberia, Madagascar, Malawia, Mali, Mauritania, Mauritius, Niger, Nigeria, Rwanda, Senegal, Sierre Leone, Somalia, Swaziland, Tanzania, Togo, Uganda, Upper Volta, Zambia.

Rest

Angola, Canton and Enderbury Islands, Cape Verde Islands, Christmas Islands, Cocos Islands, Comoro Islands, Cook Islands, Fiji Islands, Guinea - Portugese, Gilbert and Ellice Islands, Guam, Ifni, Jogjston Island, Midway Islands, Mozambique, Nauru, New Caledonia, New Hebrides, Niue, Norfolk Island, Padific Island, Pitcairn, Polynesia - French, Reunion, Rhodesia, St. Helena, Samoa - American, Samoa - Western, Sao Tome and Principe, Seychelles, Solomon Islands - British, Somaliland - French, South West Africa, Spanish North Africa, Spanish Sahara, Tokelau Islands, Tonga, Wake Islands, Wallis and Futuna Islands.

Subregions:

North America

Canada, United States.

Northern Europe

Denmark, Faeroe Islands, Finland, Greenland, Iceland, Norway, Sweden.

EEC- Group

Belgium, France, German Federal Republic, Italy, Luxembourg, Netherlands.

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A TEST OF COGNITIVE BALANCE THEORY
IN A FIELD SITUATION: A FACTOR-
ANALYTIC STUDY OF PERCEPTIONS IN
THE CYPRUS CONFLICT.

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1. INTRODUCTION

The 'image' held by participants in a conflict has been the subject of considerable research attention particularly since Boulding's (1955) discussion. The first half of Kelman's (1965) compendium presents a representative collection of major studies.

In a previous paper, Lumsden (1968) made a game-theoretic analysis of the perceptions of the situation held by two samples of Greek Cypriot high-school students, using Cantril's (1965) Self-Anchoring Striving Scale as a measure of the utilities of several hypothetical outcomes to the Cyprus conflict.

In this paper a test is made of several hypotheses regarding the perceptions that the actors have of each other using Semantic Differential ratings (Osgood, Suci & Tannenbaum, 1957) collected at the same time (Lumsden, 1965) and from the same respondents.

The major hypothesis is that the participants in a conflict will strive to achieve cognitive balance (Heider, 1958). In its simplest form this implies that if A believes he is both right and good, then B, with whom he is in a conflict, must be wrong and bad.

Such forms for misperception in conflict situations have been examined in more detail by Ralph K. White in his studies of Soviet-American relations (1965) and of Misperceptions in the Vietnam war (1966, 1968a; see also 1968b). White specifies 6 types of misperception: Selective inattention, military overconfidence, absence of empathy, a virile self-image, a moral self-image, and a diabolical enemy image. The three latter types will be examined here.

If there is a stress towards balancing perceptions, this should, of course, influence both parties. Thus Bronfenbrenner (1961; see also White, 1961 and Osgood, 1960) has proposed that participants in a conflict will develop a mirror-image of each other: That is, each will see the other as the opposite of himself. It was hoped to test this hypothesis here but in the event data was only returned from one of the parties.

The theory of cognitive balance (Heider, 1958) becomes more interesting however, when a third party is present, which is exactly the case in Cyprus. Cognitive balance theory will be shown to have serious implications for the role of a third party, such as the United Nations Force in Cyprus (UNFICYP).

Doubts are occasionally cast on the usefulness of 'public opinion' research in international relations, as its role in the determination of political decisions remains obscure. (See, for example, Kelman's (1965) discussion). In the present context it must be pointed out that, in common with other ethnic conflicts (which, even in Europe, are the cause of current concern), the 'public', rather than the political elite, have engaged in open hostilities. The young, who provide the present data, are frequently much involved in the fighting (See Lumsden, 1966). The damping of local incidents, relatively unimportant in themselves, has in practice proved to be one of the major tasks of UNFICYP, since such episodes can lead to a larger conflict, involving the central authorities. Thus the 'image', is not so much an abstraction presiding in faraway capitals and public opinion institutes, but a phenomenological reality directing everyday face to face relations.

The research reported here is part of an ongoing research programme into cognitive factors in conflict situations. Insofar as there are elements of decision in political and social actions, then the cognitive processes leading to these decisions are a relevant factor in the study of conflict.

In this paper, the focus is upon the attempt to balance the perceived relationships between social groups. To study this we must measure the 'perceptions' that these groups have of each other, where by perception we mean connotative evaluations or meanings. (The term has long been disputed but continues to be the most current).

2. THE SEMANTIC DIFFERENTIAL (SD) AS A MEASURE OF INTERGROUP PERCEPTIONS

The complexity of person and intergroup perceptions has led to the advocacy of a number of measurement techniques. Beach & Wertheimer (1961) recommend recording the free responses of the subject and then applying systematic content analysis, rather than predetermined scales. Doob (1962, 1964) in his studies of nationalism in South Tyrol, used a number of techniques - confronting the respondent with a set of statements on cards to which they should comment; a sentence completion test; and essays written by elementary school pupils. The topics covered (which were much wider than the perceptions of the ethnic groups involved) were selected on the basis of considerable prior interviewing, newspaper reading and intensive discussions with a small number of intellectual leaders (methods used here in the field study in Cyprus).

Bannister and Fransella (1966) have used a form of person perception, employing the grid test, to study schizophrenic thought disorder. The patients are asked to rank (twice) eight photographs (four of men, four of women) on six constructs: Kind, stupid, selfish, sincere, mean and honest. The constructs are selected by the investigators, and so do not necessarily reflect dimensions important to the subjects. Other investigators have used the Adjective Check List (Leary, 1957).

The problem in each case is to find indicators of the attributes which people perceive in others. Such attributes are likely to vary from person to person, and culture to culture; consequently so will the efficiency of the indicators in detecting the underlying dimensions. Probably the best general method in research is therefore to start with a 'free response' method, derive the most important dimensions, use these in the next stage of the research process, and refine them on the basis of the further results. That is, an 'Inductive-Hypothetico-deductive spiral' (Cattell, 1966) seems the most appropriate way of conceiving of the problem. If one is interested in measuring perceptions in a variety of social

situations and cultures, then it is difficult to rely on a free response method, since the categories employed in the subsequent content analysis will probably vary. Similarly there are problems beyond those of simple translation in using an adjective check list, or an arbitrarily-selected set of constructs. In each case one must first resolve the question of the comparability of meaning systems.

For these reasons the Semantic Differential has here been employed. Not only does the SD provide measures of a rather sensitive kind, but it represents the most thorough attempt to determine the global dimensions of semantic space. It offers the possibility of a sophisticated psychological instrument which can be objectively applied in any culture, in a variety of situations, with a minimum reliance on the arbitrary choices of the investigator. (Not all studies employing the SD have lived up to these claims, including that reported here).

The Semantic Differential became widely known with the publication of The Measurement of Meaning (Osgood, Suci & Tannenbaum, 1957). By now it can claim to be one of the most widely researched tools available to the psychologist. While one of the original studies used the SD to measure the perceptions of political figures, the method is intended to measure the dimensions of general semantic meaning. The SD consists essentially of a set of scales of the type:

good :__:__:__:__:__:__:__:__:__: bad
warm :__:__:__:__:__:__:__:__:__: cold

Usually these scales are seven-point, as shown, and may be coded 1 to 7, or +3 to -3. The adjective poles are determined by initial free-response methods. Respondents are asked to rate on these scales a set of concepts (e.g. mother, hand, thief, egg, horse, punishment, sun, knowledge). The results are then subjected to factor analysis, to give the underlying dimensions: that is the scales are found to group themselves together, in a limited number of groups, where such a group of scales has a high inter-correlation, or 'loading' on a factor. An impressive number of studies have indicated three

basic dimensions of meaning: Evaluation (good-bad), Potency (strong-weak) and Activity (active-passive). These three dimensions have been the basis of many subsequent applications of the Semantic Differential, and are assumed in several major studies of international relations (e.g. Holsti, 1962).

MacLay and Ware (1961) reviewed the literature on the cross-cultural results, showing the same or similar factors in Japanese, Korean, and a number of American Indian cultures. Triandis and Osgood (1958) have shown similar factors in Greek culture (our justification for using the SD in Cyprus). Burke and Nennis (1961) found three factors, accounting for 86% of the variance, in a study of changes in perception of self and others in a human relations training programme. Many studies have therefore taken these factors for granted and have not carried out a factor analysis, but have rather selected a few scales regarded as being heavily loaded on these three dimensions.

The importance of the Semantic Differential has been greatly increased by the subsequent researches of Osgood and his associates (see Miron & Osgood, 1966). In an attempt to make a systematic investigation of the generality of these dimensions some twenty languages, representative of all the major language groupings were selected. In each language qualifiers, eventually to be used as scales were chosen, entirely intra-culturally, to avoid biases from a predetermined set. (This is in contrast to the studies mentioned above, where the scales chosen were based on the original American studies). The 60-70 most frequently used, diverse and independent qualifiers were presented to each of ten judges proficient in the language who were asked to say the antonym, (for the selection criteria, see Miron & Osgood, op. cit.) The 50 most clear-cut pairs were then expanded into seven-point scales like those above.

By similar procedures of selection 100 readily-translatable concepts were chosen, each to be rated on each of the 50 scales in each of the 20 language communities (using male high-school students as subjects). A 'pan-cultural' factor analysis, with varimax rotation, gave strong support to three-dimension structure.

While this is the situation for 'general' meaning (i.e. where the concepts are single, unrelated nouns, drawn from a Thesaurus), evidence for an interaction between scales and concepts comes out when special sets of concepts are used. Thus in Suci's study of political concepts (Osgood, Suci & Tannenbaum, 1957) only two factors appeared ('Benevolence' and 'Dynamism'). A study by Osgood, Ware and Morris (1961) of Morris' 13 'Ways of living' showed the usual three dimensions collapsing into a single Successfulness dimension. Miron and Osgood (1966) suggest that the Activity dimension coalesces with the Potency dimension whenever 'activity' is not well represented in the set of concepts.

Indeed, Osgood et al. (1957) felt justified in concluding that "the more evaluative (emotionally loaded?) the concept being judged, the more the meaning of all scales shifts towards evaluative connotation" (p. 187). Thus while 'strong' and 'active' may be unevaluatively (non-emotionally) applied to some concepts (e.g. bulldozer), they may be very emotionally-laden when applied to others (e.g. our war heroes), thus causing the adjective scales to emerge as a single factor from the factor analysis.

On the other hand doubt as to the generality of the three-factor structure has been cast by Kashigawa (1965), who applied a geometric vector orthogonal solution instead of a varimax rotation to some Japanese data of Sagara. In this study the Evaluative factor seemed to split into a 'Moral Correctness' and a 'Sensory Pleasure' factor. Ware (see Miron & Osgood, op. cit.) had 40 personality concepts judged by 20 pairs of mature male and female subjects and found eight factors after varimax rotation.

One of the problems with the Semantic Differential was that it required a three-dimensional factor analysis (scales x concepts x subjects) and this was not technically possible until recently. The data block was therefore reduced in one way or other to two dimensions, usually by 'stringing out' the subjects x scales. With a three-dimensional analysis it should subsequently be possible to study more effectively the groupings of concepts, and even the groupings of subjects

(which so far have usually been homogenous groups such as high-school males). It is obvious from the results above that where we wish to use the SD for special purposes, as in studies of person perception or political concepts, special analyses must be carried out.

Kashigawa's study showed that different methods of factor analysis and rotation should also be born in mind. By Cattell's (1966) standards three factors are very few, and it is surprising that only these factors should have resulted from so many studies, where only an orthogonal varimax rotation is typically used. If more complex factor structures are indicated in future research in 'special' situations, oblique rotation may be important in reducing the factors to maximum simple structure.

If people have a more (or less) differentiated semantic space depending on the nature of the concepts rated, it is conceivable that there are differences between cultures and individuals after all. In evaluating stimulus persons, values, or political concepts different dimensions may be utilized in different cultures, which may not be obvious from a factor analysis of 100 general concepts. It may be more than a coincidence that the ratings of Morris' 14 Ways (reflecting various values) factored essentially to Successfulness in the United States sample, whereas Kashigawa and Sagara find that Moral Goodness and Sensory Pleasure are important factors in Japan. (Successful-unsuccessful was employed as a scale in the present study, but there turned out to be no direct translation in Norwegian, a fact which may seem incredible to an Anglo-Saxon). As yet there appear to be no good cross-cultural studies of the dimensions of meaning of specific sets of concepts such as persons.

Clearly cognitive similarity or dissimilarity, as reflected by dimensions of meaning, are important for communication between language and culture communities and their representatives. Rommetveit (1955) argued that acquaintance with the other person's dimensions was necessary to permit communication. Triandis (1960) gives support for the importance of cognitive similarity in communication in dyads.

Mushakoji (1967) had Americans and Japanese as negotiators in a simple international simulation and showed that the Americans were more issue-oriented, specific and universalistic whereas the Japanese had a more empathic, diffuse and particularistic style. Where the two interacted there was a much longer 'learning' period, and much more uncertainty and unpredictability in the pattern of responses. One could imagine that, even if they shared the same dimensions for evaluating people, the participants' perceptions of each other would probably be different, if not mirror-images. If they had different dimensions, the differences in perception might be totally incomprehensible to each other, making communication impossible. The results of Osgood's 'pan-cultural' studies are optimistic from the point of view of international communication at the level of the most general meanings, but the interaction of scales and concepts means that much more work remains to be done when the meanings of specific sets of concepts, such as perceptions of people, values and political concepts, are the focal point of communication between nations and cultures. The full Semantic Differential technique presents the possibility of carrying out such systematic studies.

3. PERCEPTIONS OF PEOPLE IN CONFLICT:

A FIELD STUDY

The intention of using an instrument such as the Semantic Differential was that it could be applied in social situations in different cultures, yet have a rationale based on laboratory experimentation. This represents something of an ideal which is some way from being achieved, but in the field study of Cyprus an attempt was made to use the same set of Semantic Differential scales which were used in the laboratory to investigate the perceptions that the major groups involved in the Cyprus conflict had of each other. Of particular interest was the United Nations' 'peace force' in Cyprus. In theory (but not entirely in practice) this might be imagined to be a new group in such a situation, so that there was no previous experience on which to base perceptions and expectations. If a measure such as the Semantic Differential could be used in such a conflict it could conceivably act as a 'thermometer', which could be 'dipped' into the local population at regular intervals to give a continuous measure of how the force was being perceived. If there is something in the social distance theory, for instance, one would imagine that the UN force should be rated in a neutral position between the conflicting parties, by both parties. Regular measures might show whether the force was being seen as moving more to 'our' side or more to 'their' side. It might be hoped to make the same measures of the perceptions that the UN soldiers have of the local population, to see whether they had a more favourable impression of one side of the other. Just as in the experiment differences in behaviour may effect the perceptions created, so it may be imagined that different 'strategies' of peace-keeping, as well as the general behaviour of the troops, effect the perceptions created. These perceptions might be of crucial importance to the success of failure of the peace-keeping mission. This at least was the reasoning behind the present study.

Procedure.

Sixteen scales of the semantic differential were selected from Osgood, Suci & Tannenbaum (1957), supposedly loaded on the evaluative dimension and 4 each on the Potency and activity dimension. These were used as a measure of the perceptions that two groups of Greek Cypriot high school students had of themselves and five other groups directly or indirectly involved in the Cyprus conflict: The Turkish Cypriots, Scandinavians (Swedes, Danes and Finns are in the UN force), the United Nations' Force in Cyprus (UNFICYP), the British and the Americans. These groups were presented to the subjects one at a time, without them knowing which was coming next. Their own group was presented last. The tests were introduced with standard instructions.

For practical reasons the pairs of words making up the SD scales were written on the blackboard by the teacher, the words having been previously translated into Greek. The fact that the scales were chosen to be on various dimensions was explained to the translators to assist in determining shades of meaning. The subjects made their judgement on sheets of paper containing sixteen scales of the type:

1. :__:_:_:_:_:_:_:_:_: 1.

The number at each end of the scale referred to the word pair which was written on the blackboard.

As mentioned previously, even after initial permission was received from the Turkish Cypriot authorities, it did not prove possible to get the tests carried out.

Results.

Results were obtained from a sample of thirty-four high-school students in Limassol and forty-three in Nicosia. Table 1 shows the mean ratings of each of the six groups on each of the sixteen scales. It is obvious (and expected) that many of the scales are intercorrelated. The question arises

as to whether there is a smaller number of independent (uncorrelated) dimensions which can adequately describe the data matrix. A factor analysis by the principal axes method resulted in three factors, by two different criteria (Kaiser's test and Cattell's Scree test (1966)). Diagram 1 shows the relative size of these factors in terms of the latent roots and the percentage of the total variance accounted for.

Table 2 shows the factor loadings of the scales after Varimax rotation. Inspection of the table makes it clear that 8 scales are highly loaded on the first factor, which is obviously what Osgood et al. (1957) have called a potency factor. 4 scales are loaded on the second factor (an activity factor) and 1 on the third (an evaluative factor). In the present context the connotations might be more appropriately indicated by the labels virility, temperamentality (ill-tempered-even-tempered) and morality. The second factor discriminates the groups least.

Several points should be noted about this result. Firstly,, it is unusual for the evaluative factor to come out third. However, in this investigation, the nature of the concepts rated makes it clear that there is a high degree of evaluation (emotional investment) in all the factors. It is nevertheless interesting that, in this conflict situation and from the viewpoint of the dominant party, the potency factor accounted for by far the largest proportion of the variance.

Secondly, the factor analysis shows that the factor structure differs from that assumed a priori, which was the basis for scale selection. This emphasizes the importance, when employing the semantic differential, of carrying out a factor analysis because of the specific interactions between the scales and the concepts rated.

Table 3 gives the deviations from the mid-point of scale for each of the 6 groups rated, taking the means over the scales highly loaded on each factor. This provides a convenient measure of the Greek Cypriots' images of themselves and the other groups.

It is immediately obvious that Factor I is equivalent to White's virility and Factor III to his morality and the Greek Cypriots rate themselves by far the highest on both factors. This may be taken as support, for two of White's six sources of misperception. The Turkish Cypriots on the other hand are seen as being bad, egoistic, cruel and dishonest - that is the Greeks have a diabolical enemy image, the third of White's types of misperception. In general the Turks are seen as the opposite of the Greeks on all dimensions. (While no systematic data was obtained from the Turks, informal interviews and Turkish propaganda, emphasizing Greek bestiality, certainly indicated a mirror-image).

It is noteworthy again from Table 3 that the greatest discriminations are made on the 'virility' dimension - not, as might be expected, on the 'morality' dimension.¹⁾ (It is possible, of course, that a formal analysis of equivalent Turkish data might have reversed the order: The 'under-dog' might perceive itself more in terms of a just cause, whereas a 'top-dog' might perceive itself more in terms of power relationships, able to put down the upstarts who dare to challenge the dominance hierarchy. This is an interesting thought in relation to conflicts involving superpowers).

Of particular note here are the perceptions of third parties. The data indicate that the United Nations' Force in Cyprus was perceived as low on potency, low on activity, and low on evaluation. On the first two factors the UN Force rates lower than any other group except the Turkish Cypriots, though the ratings are considerably less extreme than those of the Turkish Cypriots. While the morality rating is rather low

1) THIS MAY BE SPECIFIC TO GREEK CULTURE. A DESCRIPTION OF THE GREEK SELF-IMAGE IN MEAD (1955) INCLUDES THE FOLLOWING: "FOREMOST IN THE GREEK'S VIEW OF SELF IS HIS SELF-ESTEEM. IT IS IMPOSSIBLE TO HAVE GOOD RELATIONS WITH GREEKS UNLESS ONE IS AWARE OF THIS, THE GREEK PHILOTIMO .. ON THE PHILOTIMO ALSO RESTS GREEK NATIONALISM .. A GREEK .. HEARING HIMSELF OR HIS WAY OF LIFE DESCRIBED IN OBJECTIVE SCIENTIFIC TERMS IS GREATLY OFFENDED .. THERE IS NO REFERENCE TO SOFTNESS .. THE BELOVED IS .. SLIM, STRAIGHT, TALL, HARD, RESISTANT .. FIRMNESS AND STRAIGHTNESS ARE EXTREMELY DESIRABLE PERSONAL QUALITIES ... HOTNESS MEANS A LACK OF CONTROL, UNTHINKING RESPONSE .. FORTITUDE AND HARDIHOOD, FIRM WILL .. ARE COMMON TRAITS". (P. 60ff).

the rating of the Americans is slightly lower. All the ratings of the British and Scandinavians are moderately positive, but the Scandinavians are seen as slightly more 'good' than 'strong', whereas the British are seen more as 'strong' than 'good'. These relationships are illustrated in diagram 2. The signs of the ratings on the third factor, evaluation or morality, will be taken as indicative of the perceived links between the groups and analyzed from the point of view of cognitive balance theory.

4. COGNITIVE BALANCE THEORY

In the last two decades a great deal of research has been carried out into cognitive balance (Heider, 1958), cognitive dissonance (Festinger, 1957) and congruency (Osgood & Tannenbaum, 1955). The term 'psycho-logic' was introduced by Abelson and Rosenberg (1958) to refer to these and other processes. Overviews of these theories as related to foreign policy may be found in Osgood (1962), and their current status and research findings are reviewed by Zajonc (1969).

The basic principle of cognitive balance is the old tenet 'A friend of my friend is my friend; the friend of my enemy is my enemy', etc. This is another way of emphasizing that the perceptions the parties have of each other in part determine the form of their interaction.

The theory of n-person games makes certain predictions about the formation of coalitions based on the payoffs available to the various possible coalitions. According to the theory, n-person games reduce to 2-party games between coalitions. However, each coalition may then be unstable, at least where side-payments are allowed. For example, in a 3-man game, the odd man out can offer a larger percentage of the payoff to one of the coalition partners to join him in a new coalition.

Cognitive balance theory, on the other hand, would predict that the players would act so as to balance their subjective interpretation of the structure of inter-relationships. Thus in a 3-party game, once a coalition between two players had formed, this should be stable. ("The enemy of my friend is

my enemy"). On the other hand, the possibility is opened for a joint co-operative strategy between all three players ("The friend of my friend is my friend"), which is a balanced structure and the ideal end-result of the peace-maker).

It is no doubt possible in certain circumstances to 'buy loyalty', that is, to induce others to change coalitions, though in spite of game-theoretic applications to international politics, few examples can be pointed out. It is probably a question of involvement of self-identity, which has been demonstrated in a number of experimental studies. In politics such identities are in addition public; sides can only be changed insofar as allies and voters can be prevented from realizing that they are being 'sold down the river'. True, changing sides is more accepted in some cultures and political systems than others. In game theory, changes are purely a question of 'power' (as reflected in the distribution of payoffs and the degree of control over them). It would probably be a mistake, however, for Americans to believe in a quick change for Roumania, since the self-identity remains socialist. In balance theory changes would only occur in converting an unbalanced structure to a balanced one.

The theories of cognitive consistency refer not only to relationships between individuals or groups but also to attitudinal elements. Thus when a purchaser finally decides between two makes of cars (the traditional North American example) several studies have shown that he then reads the advertisements for the chosen car more often than those for other cars, in order to give further cognitive support to his choice. Such post-decisional behaviour may also involve other factors, such as self-identity, since the new car-owner may now more closely identify with the ideal individuals portrayed in the advertisements - a major moment in modern advertising).

The extent to which post-decisional dissonance affects more important significant decisions is as yet unknown. There are important implications for decision-making, since what the theory says in effect is that, once having decided between the alternatives in a given payoff matrix, the decision-maker then alters the utilities so as to post-justify his choice. The theory

has derived from one-shot, no-strategic situations. Gaming experiments, on the other hand, usually allow the possibility of choosing between the same set of alternative over as many as three or four hundred trials. Neither situations reflects political reality, since, while there are usually many opportunities to act, each action may change the structure of the payoff matrix at the next choice-point.

Several other predictions result from these theories. If, for example, a disliked person makes a desirable choice, dissonance results. The dissonance may be resolved by

- (a) coming to like the person;
- (b) denying that the choice was desirable;
- (c) denying that the disliked person really made the choice;

Since the first two possibilities involve injuring one's self-esteem and public standing, the third may be the more likely. Thus, John Foster Dulles, on being informed that the Russians were demobilizing troops and laying up warships, commented: "I would rather have these men standing around doing guard duty than making atom bombs". (Quoted in Fleming, 1961).

5. COGNITIVE BALANCE PROBLEMS IN THE CYPRUS CONFLICT

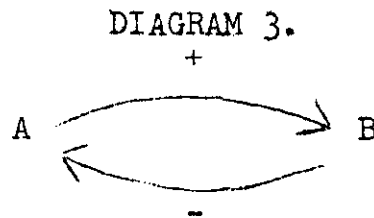
The Cyprus conflict can for many purposes be usefully regarded as a two-party conflict into which a third force has been injected. This third party is not freely-acting but joins the 'game' only with the agreement of the two primary parties, and under strict terms: It may not use force except in self-defence; it may not seek to ensure any particular political solution; it does not stand to gain any particular payoff, other than assisting the two parties in obtaining a peaceful outcome, at which point it can itself withdraw from the scene¹⁾.

In spite of these reservations about the third party, each of the three controls military forces which are the focus of the conflict. For the Greek and Turkish Cypriots, these forces are drawn from the local populations, though both sides had in addition forces from the 'mother' countries. The third forces, on the other hand, were entirely ex-patriate, drawn from Ireland, Canada, U.K., Finland, Sweden and Denmark, with in addition civilian police units from Sweden, Denmark, Australia, New Zealand and Austria, and a military field hospital from Austria.

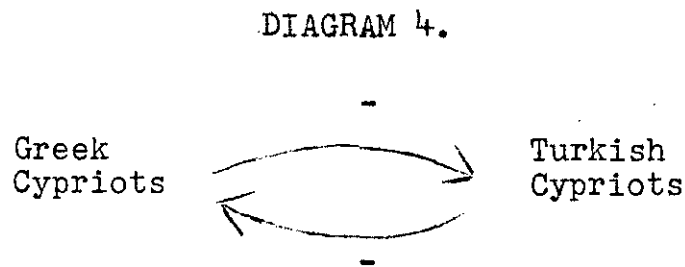
1)

THESE CONSTRAINTS ON A PEACE-KEEPING FORCE CLOSELY RESEMBLE THOSE ON INSTITUTIONALIZED PEACE-RESEARCH, POINTED OUT BY JARVAD, (1969). THE PEACE-KEEPING FORCE'S ONLY LEGITIMATE GOAL IS NEGATIVE PEACE (ABSENCE OF OPEN FIGHTING), AS OPPOSED TO POSITIVE PEACE (HARMONIOUS INTEGRATION OF THE CONFLICT PARTIES (SEE GALTUNG), AND IGNORES OTHER VALUES SUCH AS SOCIAL JUSTICE AND PROGRESSIVE CHANGE, THE ABSENCE OF WHICH MAY BE MAJOR FACTORS IN THE CONFLICT; LIKE PEACE RESEARCH, THE UN FORCE, IS SUPPOSED TO BE UNCOMMITTED IN THE CONFLICT, A FACT WHICH IS NOT ONLY DIFFICULT FOR THE CONFLICT PARTIES TO COMPREHEND, BUT IS EXTREMELY DIFFICULT IN PRACTICE; THIRDLY, PEACE-KEEPERS AND PEACE-RESEARCHERS SHOULD NOT ADVOCATE PARTICULAR POLITICAL SOLUTIONS, THE NET EFFECT OF WHICH, IF ANY, MAY BE A TENDENCY TO STABILIZE AN EXISTING SITUATION RATHER THAN REALIZE A NEW ONE.

It is conventional to map out the pattern of inter-relationships with signed diagraphs (directional graphs (Harary, Norman & Cartwright, 1965)). Thus if A likes B, but B dislikes A, this would be illustrated (diagram 3):



In the Cyprus conflict it is trivial to begin by pointing out that both signs between the Greeks and Turks are negative (diagram 4):



The present data (Table 3) confirm this for GC-TC edge, though data was not available for the 'return' relationship. On the assumption that it is also negative, then Graph 2 is balanced. It shows what Newcomb (1953) and others have called 'symmetry'.

A considerable amount of research indicates that as far as dyadic relations are concerned, attraction or repulsion (e.g. Newcomb, 1956, 1961) tend to be mutual (Bronfenbrenner's mirror image effect). We shall assume this is the case here, and use the simpler graphical conventions of Flament (1963), where a solid line indicates a positive symmetrical relationship, and a dotted line a negative symmetrical relationship.

Thus diagram 2 becomes simply:

DIAGRAM 5.

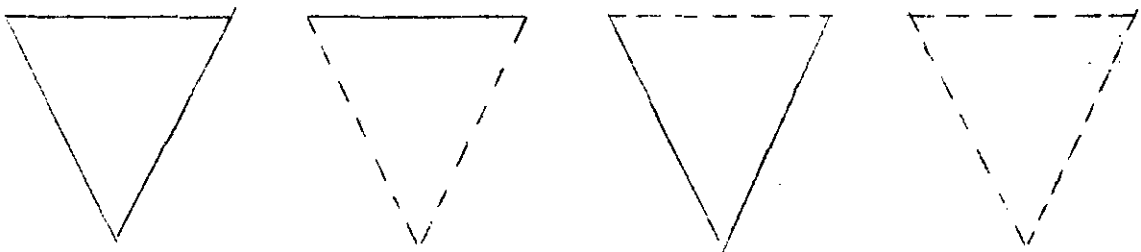
GC - - - - - TC

We should note in passing Heider's (1958) warning (definition): "A balanced state is a situation in which the relations amongst the entities fit together harmoniously; there is no stress towards change". (p. 201, my emphasis).

The introduction fo the UN Force requires a triangle to illustrate the relationships between the three parties. Using the sign rule of classical algebra (two pluses give a plus; two minuses give a plus; a plus and a minus give a minus), we may define balance in a triangle as those combinations of positive and negative relations (edges in the graph) the product of which is positive (see Flament, 1963, p. 92). That is, a triangle, is balanced if and only if it has zero or two negative edges, and is unbalanced if it has one or three negative edges (diagram 6).

DIAGRAM 6.

Examples of balanced and unbalanced triads.



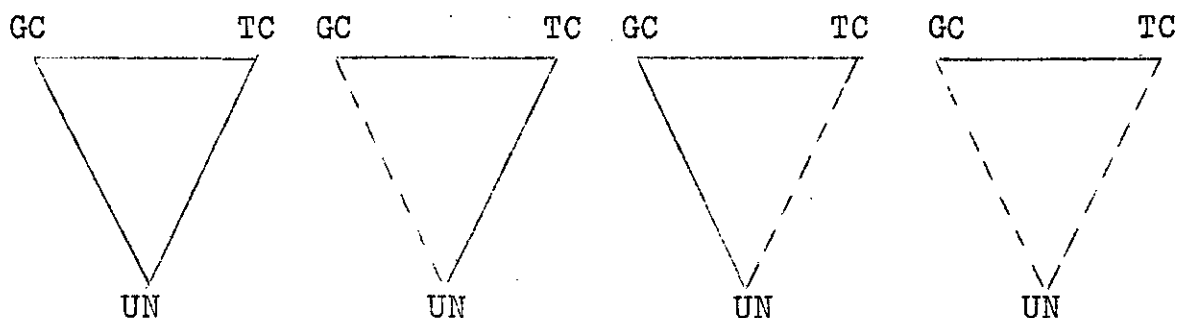
Balanced

Unbalanced.

So long as there are negative relationships between the Greeks and the Turks in the Cyprus conflict, therefore, the following hypothetical triangles can be ruled out (diagram 7):

DIAGRAM 7

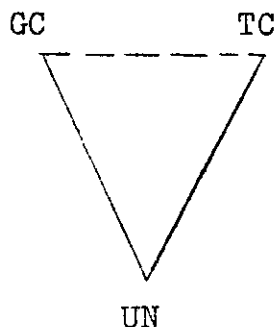
Untenable triads in the Cyprus conflict.



Crucial to the analysis now are the relations between the UN Force and the Greek and Turkish Cypriots. The ideal of a UN Force is to have good relations with both sides, as shown in diagram 8.

DIAGRAM 8

Graph Ideal relations of third party in a conflict situation.

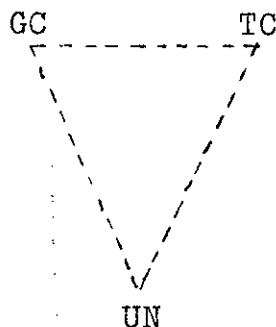


This structure is unbalanced. According to the theory of cognitive balance, there will be cognitive pressure to balance the structure. Arguing from the Greek Cypriot viewpoint (since that is where we have data from), a negative relationship with the Turks is not compatible with a positive relationship with the UN Force if the UN Force at the same time has a positive relationship with the Turks. (The same would hold from the Turkish viewpoint).

Two ways of resolving this imbalance are available to the Greek Cypriots: Developing a positive relationship with the Turks (the ideal from the point of view of the third party), or developing a negative relationship with the UN Force. The data indicate the latter (Table 3).

DIAGRAM 9

All-negative (unbalanced) triad.



The perception of a negative relationship between the Turks and the UN Force in addition (diagram 9), while symmetrical, is unbalanced. Thus, the mechanism would be, "If you are not for us, you are against us" (i.e. for the other side). Since a UN Force is ⁱⁿ theory prevented from being for either side, it may, especially in the early days of suspicion and ignorance as to its role, be perceived negatively, greatly inhibiting its peace-keeping and peace-making capability.

A number of factors worked to reinforce this perception in Cyprus. In several unfortunate incidents members of the UN Force were caught smuggling arms to the Turks. Secondly one of the most public activities of the UN Force was maintaining the 'Green Line' border between the Greek and Turkish areas of Nicosia; since the Turks were attempting to secede into their own areas, this structural position of the UN appeared to support the Turks more than the Greeks, who regarded the Turks as rebels to be put down by force (Lumsden 1965, 1966 b). (Cf. Congo/Katanga - where the UN - eventually - did help to put down the rebels; and the present conflict in Nigeria/Biafra, where some might like to send a UN Force).

6. ADDITIONAL COMMENTS ON BALANCE THEORY

The finding of a tendency for the Greeks to form a negative perception of the UN Force, rather than a positive perception of the Turks, could have been easily predictable if the notion of salience, or degree of investment of self-esteem in a relationship, were more explicitly incorporated into balance theory. Heider himself used the concept of unit formation to refer dyads which formed a unit in relation to an outsider. Osgood and Tannenbaum's congruency theory hypothesizes that the more polarized of two associated concepts exerts relatively more influence on the less polarized; for example in a situation where liked person A makes a disliked statement B, if A is liked more than B is disliked, then the statement will be rated more favourably. Here we are reverting to Heider's approach in suggesting that what is important is not only the 'value' ascribed to the cognitive element, but 'also the strength' of the relationship between the elements. Thus, the reference person or group, p, will have more salient relationships (positive or negative) with some elements than with others. Under the stress towards balance, the least salient relationships will be modified in the direction of balance. A number of recent experiments involving explicitly the importance of

the bonds give support to this notion (Jordan, 1966, Zanjone & Burnstein, 1965 a, 1965 b). As an example, in the present study the Greek Cypriots' relationships to Scandinavians may be less salient than those with British and Americans.

It may be noted that most of the experimental studies have involved positive relationships, where the general interest has been in the extent to which admired leaders can gain the acceptance of disliked policies without losing allegiance. In a conflict situation the primary relationship is by definition negative. Newcomb (1953) believed that balance theory only applied where the primary relationship was positive; the discomfort of the negative relationship, he believed, was more disturbing than the imbalance resulting from the disliked other person liking something liked by p. Rodrigues (1966) has in addition proposed that for important issues, agreement seems to matter more than balance.

While some notion of salience, particularly of negative relationships, is of paramount importance in the study of conflict, it must be concluded that research to date has been lacking on this point.

The present study also shows that intergroup perceptions are multidimensional. To what extent are these independent and to what extent is there stress towards making the dimensions congruent? Osgood et al. indicated that in more salient relationships the latter tendency was potent, causing correlations between the underlying dimensions.

On the other hand, if the dimensions are independent and not affected by congruency, an outgroup, o, may be negative on some dimensions and positive on others, e.g. the Americans in this study, who were seen as bad but strong. Does balance only affect the 'good-bad' dimension, or does it affect all? If the latter, how is balance achieved where the ratings of some elements are not congruent on several dimensions?

It may be simply that complete balance can never be achieved, but that only between the most salient relationships is balance attempted.

The saliency of a relationship may perhaps be measured from data such as that used here by the degree of polarization of the ratings. If the perceived object or group is non-salient, ratings will be randomly distributed around the mid-point of the scale, giving average deviations around zero. If a relationship is salient, then ratings will tend to polarize towards the positive or negative pole, since there will be a systematic 'bias' in one direction or the other. Table 4 sums the absolute values over the three factors for each group rated to give such a measure of salience. If this measure is justified, it is interesting that the US rates slightly more salient than the UN force. (It is of course common knowledge that it was the US intervention, not the UN, that prevented a Turkish invasion of the Island some 9 months before the data were collected).

On the other hand, the slightly higher rating of Scandinavians than British casts doubt on the soundness of the measure.

7. FURTHER APPLICATIONS OF THE THEORY TO THE ROLE OF THIRD PARTIES

The prediction from balance theory (and finding of the present data) of a tendency to perceive the third party negatively is perhaps not surprising, though disappointing for the prospective mediators. The importance of the attempt to forge a positive (at least non-conflict) link between the two conflicting parties sometimes leads to two variants of the saliency hypothesis being proposed.

(i) A UN Force (or other representative of international opinion or world authority) should have sufficient military might to compel the conflicting parties to make peace. (This tends to be a unthought-out derivative of the theory of military might to compel an opponent to 'make peace' - i.e. submit). The threat of force, greater than that wielded by the conflicting parties, thus serves to make the relationship to the third party more salient. Each side would therefore seek to form a positive link

TABLE 4.

Polarization as a measure of saliency
of intergroup relations.

Greek Cypriots	3.51
Turkish Cypriots	4.79
UNFICYP	1.68
British	0.92
Scandinavians	1.09
Americans	1.83

In order to achieve balance of the salient relationships, congruency between the perceptual dimensions must first be sought; that is, on the salient relationships, there is a stronger tendency for dimensions to correlate and thereby coalesce into a dominating first factor. This we may test empirically with the present data. A measure of congruency is indicated by the proportion of the total variance accounted for by each of the first two factors as expressed as a ratio of the two. The more dominant the factor, the higher this measure.

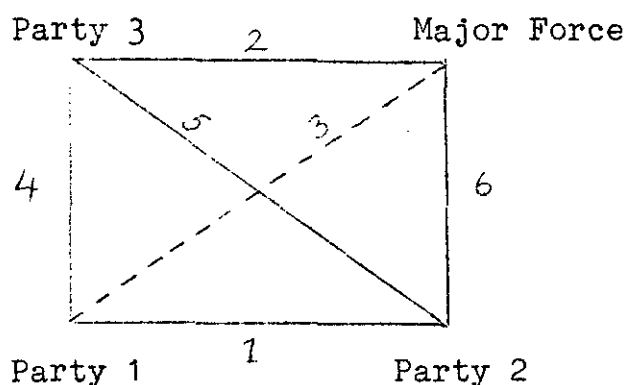
with the third party, which (since the triangle would then be unbalanced) would use its influence to 'encourage' the parties to form a positive link between themselves. Alternatively, the third party would be then so hated by both parties, that they would unite to combat it.

- (ii) That the third party should have large positive means of making its relationship to the parties salient - such as an offer of a massive development scheme (irrigating the Sinai, as a 'new Palestine', etc.). This appeals to the more pacifistically inclined, while retaining a certain modernity.

Both of these approaches could no doubt be analyzed game-theoretically, taking account of the comparative utilities if these utilities could be measured. However, no serious attempts have yet been made to measure utilities in such situations. (See, however, Lumsden, 1966, 1968). The saliency theory proposed above, however, stated specifically the need for the involvement of the self-image to be taken into account. According to this theory, both the above proposals would 'dishonour' the self-image, and in conflicts in which self-esteem was highly involved (i.e. in all serious conflict), this fact would override apparently rational (to outside non-involved observers) utility calculations. The psychologic might take the following form:

Case (i) (diagram 8): Party 1 and Party 2 have the primary conflict relationship (1). Party 3 enters with a positive relationship to the concept 'Party 3's military might' (2). This force is directed against Party 1 and it is therefore viewed negatively (3). To balance the triangle of relationships between Party 1, Party 3 and Party 3's military might, Party 1 must view Party 3 negatively (4). As a consequence, to balance the triangle P1, P2, P3, Party 3 must be seen as having a positive relationship with P2 (5). Finally, therefore, to balance the triangle P2, P3, P3's might, the relationship between P3's military might and P2 is seen to be positive (6).

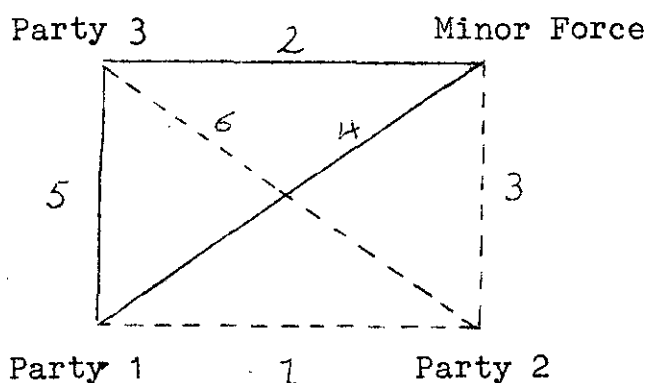
DIAGRAM 8



In other words, third party intervention with military might would be seen to work in favour of the enemy and therefore be opposed as totally unacceptable.

In the case of a UN Force, which typically, as seen in Cyprus, has forces much smaller than either of the conflict parties, the use of these forces is clearly ambiguous to the parties. Thus interviews with leading politicians on both sides gave evidence of a psycho-logical process starting with the hope that the link between the UN's military force and the opponent was negative: In this way the link with the UN could be positive (diagram 9). Both sides accepted the UN Force, both sides hoped that it would be employed more, but against the other side. Since the UN Force was not directed unequivocally against the other side, the positive link with the UN was difficult to sustain.

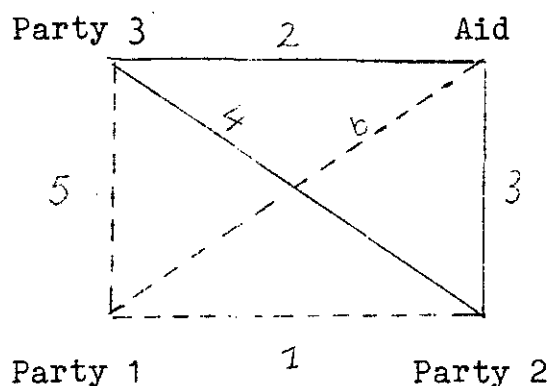
DIAGRAM 9



Case (ii) (diagram 10). In this case P3 has a positive link with 'massive aid' (2). The point of the aid is not only to help P1, but also P2 (i.e. positive link between P2 and aid (3)). As a result, the link between P2 and P3 is seen to be positive (4). Since P1 has already a negative relationship with P2, the link between P1 and P3 will be seen as negative (5). Finally, therefore, the link between P1 and the aid will be negative (6).

Thus although the sequence of the logical steps may be different, the end result is the same: The third party and his aid are unacceptable.

DIAGRAM 10



According to the theory suggested here the only way to make third party intervention successful is to start with a situation where the relationship between the third party and each of the conflict parties is positive, salient and primary (i.e. existing prior to and independently of the conflict situation). This relationship must be at least as salient as the parties to each other. This is (supposedly) the case with the institution of Law in civil cases; with the mutual friend, doctor or priest in whom marriage partners confide, etc.

At the international level some cases are successfully solved by the International Court of Justice. The Russians were successful at Tashkent. The United States prevented Greece and Turkey (both NATO members) going to war over Cyprus.

8. BALANCE PROBLEMS OF THE THIRD PARTY

The question of balance affects all the parties, each from their own view-points. As shown in diagram 6, so long as the two parties are in conflict, for the third party to see itself as positively linked with both is unbalanced. (The same applies ^{if} it is negatively linked with both). One would predict, therefore, that members of UN Forces and other third parties would tend to 'like' one side and 'dislike' the other.

In general the UN has attempted to solve the problem by the policy of maximum non-interaction between the UN Force and the local population - a policy, perhaps, of "in the conflict but not of it". Balance theory, since it cannot cope with degrees of participation in the conflict any more than it can cope with degrees of liking and disliking, makes no statement about such a policy. However, it becomes clear exactly what the UN policy implies: Not just neutrality in the sense of liking and disliking each side equally, but neutral in the sense of neither liking nor disliking (i.e. indifference to each side equally). That is, in the terms used here, relations to each side could be equally non-salient and perceptions equally non-polarized.

While this is an interesting hypothesis worthy of further investigation it is difficult to believe that anybody involved in a major conflict could understand that a third party - who was actually (and at great cost) intervening - could remain indifferent. Secondly, this 'subjective' theory is complemented by the 'objective' fact that probably very few cases have been recorded where third parties have in practice been indifferent. This is a function not only of the complex of emotions aroused by the conflict situation (to which indifference might easily spill over into callousness and brutality¹⁾, but by the social

¹⁾ THIS IS ILLUSTRATED MOST SHOCKINGLY BY THE WHITE MERCENARIES IN THE CONGO IN THE STATION COLOUR REPORTAGE FILM AFRICA ADDIO.

cultural, political and historical origins of the third party, as an institution, and its members as social beings.

Thus it would not be surprising if progressive African leaders recalled the fate of Patrice Lumumba and rejected the institution of UN intervention in Africa; nor if Western members of such forces, for example, reflected the dominant attitudes expressed in their political culture and gave support to Katanga, Israel and the Turkish Cypriots.

We would therefore hypothesize that, rather than remaining indifferent to the conflict, a third party, such as a UN Force, would be perceived, and its members would perceive themselves, as helping one side against the other. Which side the members of the force would tend to help would be determined by the political and social prejudices they took with them into the conflict situation, reinforced by selective inattention making expectancies self-confirming.

In this way, without being required to modify their basic world-view, third parties can achieve cognitive balance in an essentially dissonant situation.

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TABLE 1.

Mean ratings of groups on
each semantic differential
scale. (N = 77)

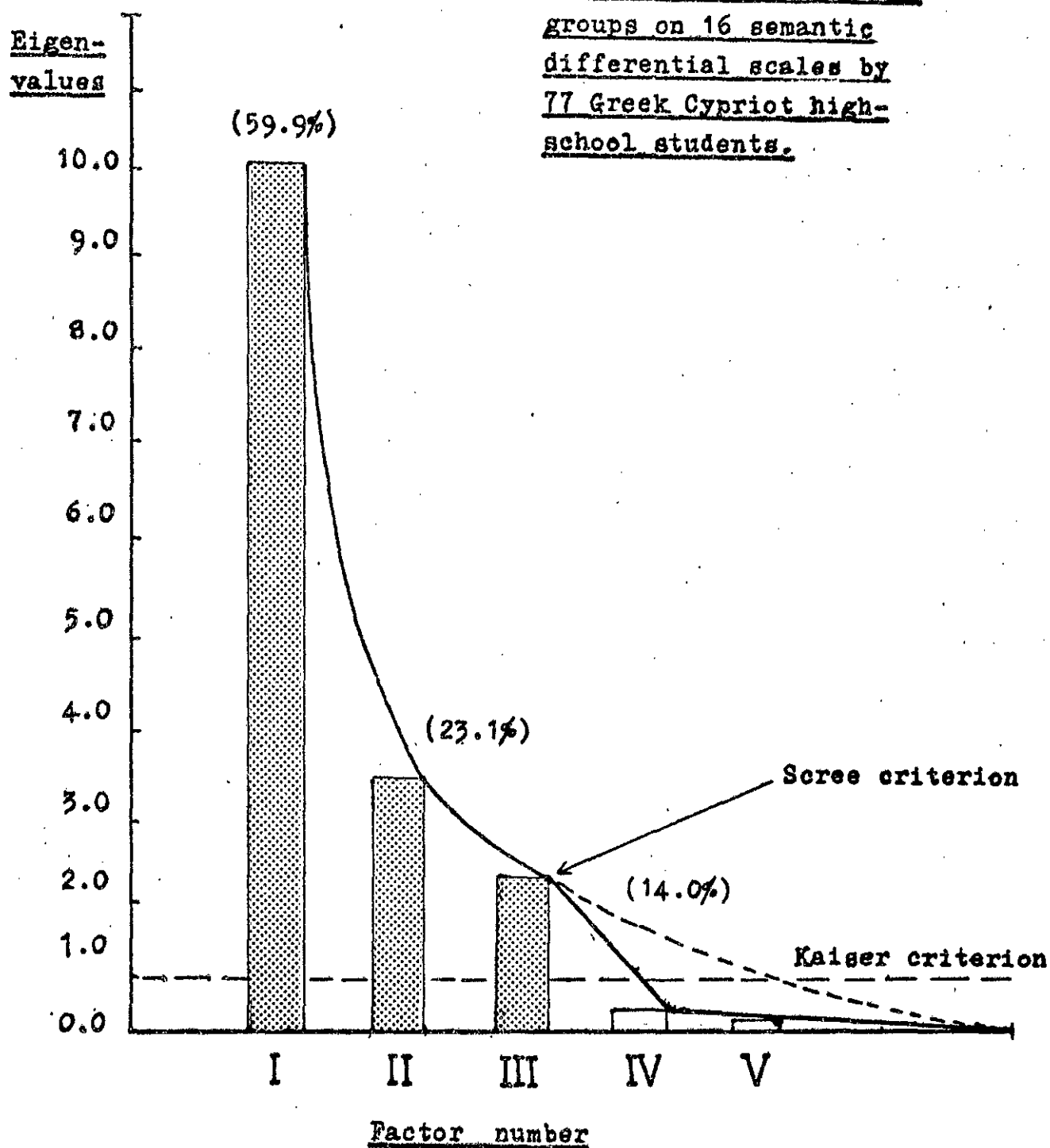
<u>Scale</u>	<u>Group</u> ¹					
	GC	TC	UN	UK	SK	US
successful-unsuccessful	3.2	5.9	5.5	3.2	3.9	3.2
intelligent-unintelligent	2.0	5.2	4.1	2.8	3.0	2.9
strong-weak	3.3	5.3	3.9	3.0	4.1	2.1
severe-lenient	3.1	4.1	4.7	3.7	4.4	3.9
brave-cowardly	1.3	5.5	4.6	4.2	3.9	3.8
active-passive	2.2	5.3	5.0	3.1	3.7	2.9
deliberate-unintentional	2.3	5.1	4.9	3.2	3.7	3.0
difficult-easy	3.1	4.3	4.5	3.8	4.7	3.4
sociable-unsociable	3.3	6.2	3.6	2.3	2.6	3.1
congenial-quarrelsome	4.5	6.2	4.5	4.0	3.6	4.9
masculine-feminine	1.4	3.7	4.7	4.8	4.5	4.2
excitable-calm	2.8	3.0	4.0	4.7	4.4	3.6
good-bad	2.7	5.1	5.0	3.9	3.0	4.7
altruistic-egoistic	3.8	5.1	5.0	4.7	3.6	5.6
kind-cruel	2.9	5.9	4.1	2.5	2.5	4.2
honest-dishonest	2.3	5.8	5.2	3.9	3.7	5.2

1. GC = Greek Cypriots
 TC = Turkish Cypriots
 UN = UN Force in Cyprus

UK = British
 SK = Scandinavians
 US = Americans

DIAGRAM 1.

Kaiser and Scree¹ tests for
number of factors: factor
analysis of ratings of 6
groups on 16 semantic
differential scales by
77 Greek Cypriot high-
school students.



1. Cattell (1966).

TABLE 2.

Factor loadings after Varimax
rotation on 16 semantic
differential scales.

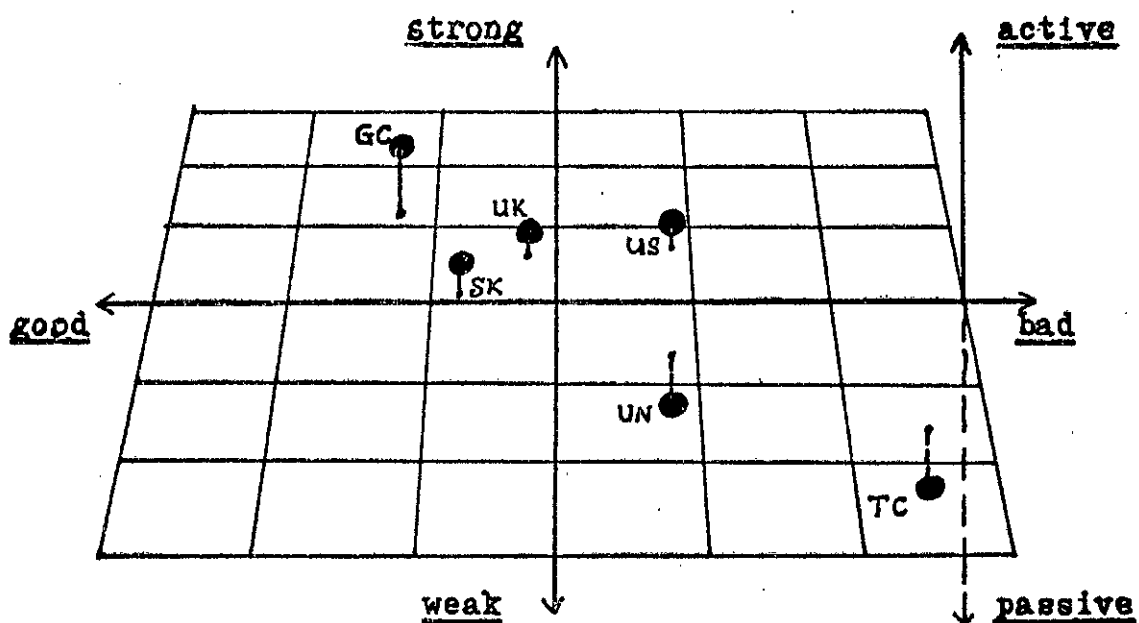
<u>Scale</u>	<u>Factor I</u>	<u>Factor II</u>	<u>Factor III</u>
successful-unsuccessful	.88	-.29	-.29
intelligent-unintelligent	.80	-.27	-.53
strong-weak	.89	-.37	.14
sever-lenient	.76	.44	-.30
brave-cowardly	.67	.21	-.66
active-passive	.90	-.08	-.41
deliberate-unintentional	.90	-.02	-.42
difficult-easy	.91	.39	-.03
sociable-unsociable	.55	-.75	-.36
congenial-quarrelsome	.26	-.77	-.56
masculine-feminine	.35	.78	-.50
excitable-calm	.09	.97	.01
good-bad	.36	-.07	-.92
altruistic-egoistic	-.08	-.07	-.99
kind-cruel	.42	-.61	-.66
honest-dishonest	.46	-.02	-.88

TABLE 3.

Mean deviations from mid-point
of ratings of 6 groups on the
3 factors: semantic differential
data from 77 Greek Cypriot high-
school students (Spring, 1965).

<u>Group</u>	<u>Factor</u>		
	I (Potency)	II (Activity)	III (Evaluative)
Greek Cypriots	+1.44	+1.00	+1.07
Turkish Cypriots	-2.53	-0.78	-1.48
UN Force in Cyprus	-0.65	-0.20	-0.83
British	+0.62	+0.05	+0.25
Scandinavians	+0.07	+0.22	+0.80
Americans	+0.85	+0.05	-0.93

DIAGRAM 2. Representation of Greek Cypriot perceptions of 6 groups in a three-dimensional space.



GC = Greek Cypriots

UK = British

TC = Turkish Cypriots

SK = Scandinavians

UN = UN Force in Cyprus

US = Americans

THE DIVIDED NATIONS IN THE INTERNATIONAL SYSTEM: SOME
ASPECTS OF THEIR POSITION IN THE NETWORK OF DIPLOMATIC RELATIONS*

by

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*To be presented at the Third Conference of the International Peace Research Association, Karlovy Vary, September 21-23, 1969.

Summary

A distinction has been made between the impact of the East-West conflict and the impact of a "divided nation factor" on the position of the divided nations in the diplomatic network. Two main sets of hypotheses about the effect of this factor has been developed. A preliminary test made of some of the hypotheses seems to support them.

1. The Concept of "Divided Nation"

We shall not attempt to give a formal or legal definition of the concept but define it extensionally as denoting the following four pairs of nations:

East Germany (The German Democratic Republic)
West Germany (The Federal Republic of Germany)

China (The People's Republic of China)
Taiwan (The Republic of China)

North Korea (The Democratic People's Republic of Korea)
South Korea (The Republic of Korea)

North Vietnam (The People's Republic of Vietnam)
South Vietnam (The Republic of Vietnam)

All pairs are characterized by the fact that external and internal forces have created and maintain two units where originally only one existed, and that neither of the two units have accepted the new state of affairs as a permanent arrangement.

2. The Problem

The presence or absence of a diplomatic connection between a pair of countries is related to the following three very general factors:

- a. whether or not the nations have recognized each other as legal actors in the international system;
- b. how "important" the nations are for each other. The importance is heavily linked to economic and political aspects of the relationship between them;
- c. if there is a conflict between them, the intensity of the conflict.

Factor c. is related to such well-known phenomena as rupture of diplomatic relations, or abstention from the establishment of new ones that may seem natural as judged by criteria a. and b. This points to the double function of diplomatic relations: the instrumental one related to the goals associated with b., and what might be called the expressive one (which of course may be instrumental for other types of goals) related to conflict behavior.

These three factors, a., b., and c., are interrelated, but we will not here try to specify the nature of this interrelationship.

The position of the divided nations is connected to all three factors, but we want to focus our attention on factors a. and c. as being of particular importance and interest. For our purpose we will treat these two factors as one single conflict factor. That conflict influences interaction is well known from all levels of social organization, and the nature of this influence will be dealt with later in this paper.

Our thesis is that the effect of this conflict factor on the position of the divided nations in the diplomatic network can be decomposed into two components, the first one being associated with a major international conflict - the East-West conflict - and the second one being what we have termed a "divided nation effect", related to being one of the two parts of a divided nation. The two are closely related to each other. No attempt will be made, however, to link the findings with theories of peace and conflict, and thus no policy implications will be discussed.

3. The East-West Conflict

Our choice of the East-West conflict in this connection does not imply a general judgement of the "importance" of this conflict compared to other and more asymmetric types of conflict carrying the labels of the North-South conflict,¹ colonial and neo-colonial conflicts, conflicts related to imperialism etc. Indeed, it can be argued that the problem of the divided nation to a large extent is related to asymmetric conflicts.

Leaving the question of asymmetric versus symmetric aside, we shall only make the following remark: Diplomatic relations are formal links between governments - the official decision-making centers of nations - and as such they seem to be more influenced by the East-West conflict than by the other conflicts mentioned. To the extent the latter influences diplomatic relations between nations it seems to be along the East-West dimension as we later shall define it. This points to a possible relationship between the East-West conflict and other international conflicts² and indicates that the East-West conflict is still an important one for the international system.

4. The Division of the World

We will divide the world into three groups of nations: East, West

and Non-aligned. For this division we have adopted the definition given by Kurt Jacobsen:³ Western countries are countries participating in military alliances having the United States as a member (NATO, CENTO, SEATO, the Rio Pact, and bilateral defence agreements with the United States).⁴ This group consists of 45 nations. (For a list of the nations included in the different groups, see the Appendix). Eastern countries are countries allied with the Soviet Union (the Warsaw Pact and other defence agreements). 9 countries belong to this group.⁴ All other nations, totalling 73, are put in the non-aligned category. Thus, according to our definition, West Germany, Taiwan, South Korea and South Vietnam all belong to the West. East Germany belongs to the East, and China, North Korea and North Vietnam are non-aligned.

5. The Data

The diplomatic exchange data are based on diplomatic lists for 104 countries. The diplomatic list is an official publication put out by the foreign ministry of a country and contains information about the foreign diplomats accredited to the country. Almost all the lists collected are from the period 1966-67. Since there seem to be no major changes in the diplomatic network in this relatively short period⁵ we will assume the data to be synchronic.

Our universe of independent nations comprises 127 nations⁶ which means that for 23 nations we have no data about received diplomats. However, the diplomats sent by these 23 nations to the 104 for which we have such data is reflected in the diplomatic lists of the latter. This gives us two 127×104 matrices of diplomatic exchange data.

1) A 0.1 -matrix indicating the presence, (1), or absence, (0), of a diplomatic connection (= embassy or legation) in the pair of nations. Note that the pairs are ordered. In principle diplomatic connections are symmetric, i.e. if nation A has an embassy or legation in nation B then B has an embassy or legation in A. In practice this is for various reasons not always so.

2) A many-valued matrix giving the number of diplomats in the ordered pairs, i.e. the "strength" of the connections.

In our analysis we shall mainly focus on the horizontal rows of matrix 1, not the columns, which means that we are interested in the diplomatic activity of the nations as senders of connections and not

in the diplomatic attention paid to them by the international system.

6. The Diplomatic Activity of the Divided Nations

Two different indicators are presented in the Table.

Table 1.

	Number of connections	Rank within the pair	Average number of diplomats per connection	Rank within the pair
West Germany	82	1	7.9	2
East Germany	9	2	17.7	1
Taiwan	48	1	6.5	2
China	37	2	11.5	1
South Korea	26	1	8.5	1
North Korea	15	2	8.3	2
South Vietnam	16	1	6.3	2
North Vietnam	13	2	7.0	1

At least two aspects of the Table may be commented upon.

One is the consistent tendency for the western part of a divided nation to have more diplomatic connections than the other part. The tendency is extreme in the case of East and West Germany. Correcting for the positive relationship found between the size of a nation and the number of connections⁷ the tendency only becomes more pronounced for the last three pairs. If we assume that the potential economic and political importance of a country for another one is positively related to its size, we may conclude that the tendency observed is probably caused by factors a. and c. mentioned on page 1, or, to be more specific, by the conflict factors we are going to study.

If the nations in each pair are ranked according to number of connections and average strength of the connections the ranks are not concordant in three of the four pairs and the difference between the nations in fourth is reduced when we pass from looking at connections to looking at "strength". Since the general tendency for the whole system is a positive relationship between the number of connections and the strength of the connections,⁸ this lack of concordance may be interpreted as a symptom of the same conflict. We may also note that

although the western nations, as we have defined them, represent only 45 nations of a total of 127 they seem to serve as the main legitimizers of the international system.

7. The East-West Profile

We will start with a definition:

Density of diplomatic connections is defined as the actual number of diplomatic connections divided by the theoretical maximum number of connections.

Example: West Germany has a diplomatic station in 41 of the 56 non-aligned countries for which we have diplomatic lists. The density for West Germany among these non-aligned countries is $41/56 = 0.732$.

If a nation has a density with East, non-aligned, and West of respectively x, y, and z, we call the vector (x,y,z) the East-West profile of the nation.

We will now look at the East-West profiles of the four pairs of divided nations.

Table 2. Density*

	East	Non-aligned	West
West Germany	.143 (1)	.732 (41)	1.000 (40)
East Germany	1.000 (6)	.054 (3)	.000 (0)
Taiwan	.000 (0)	.304 (17)	.756 (31)
China	1.000 (7)	.418 (23)	.171 (7)
South Korea	.000 (0)	.143 (8)	.450 (18)
North Korea	1.000 (7)	.143 (8)	.000 (0)
South Vietnam	.000 (0)	.107 (6)	.250 (10)
North Vietnam	1.000 (7)	.107 (6)	.000 (0)

*The numbers in the parentheses indicate number of connections.

The Table shows quite convincingly for each of the four pairs of divided nations how differently the two nations in the pair are located on the East-West dimension. The four western nations all show a strong western preference with no connections with the eastern countries, except for West Germany (with the Soviet Union).⁹

Similarly, East Germany and the three non-aligned countries are connected to all eastern countries, with no connections to the western countries.

With the important exception of East and West Germany the similarity with respect to degree of representation in the non-aligned countries is high. The striking difference between East and West Germany and the almost total diplomatic absence of East Germany outside the eastern countries¹⁰ support very well our intuitive notion about the weak international position of East Germany relative to West Germany. This may point to asymmetries and problems in this pair which are not present to the same degree in the three other pairs.

The rather trivial conclusion that the East-West conflict is important in determining the number and the direction of the diplomatic connections of the divided nations leads to the question of whether it is possible to distinguish between a "divided nation effect" and a "pure" East-West effect when we want to explain the difference in diplomatic behavior in a pair of nations. By "difference in diplomatic behavior" we then mean the distance between the East-West profiles, for instance as measured by means of the Pythagorean theorem, or - as we have chosen here - by the sum of the absolute values of the differences between the components. The last measure gives us values ranging from a theoretical minimum of 0 to a theoretical maximum of 3.

This question may seem meaningless since it can be argued that the phenomenon of divided nations is an artificial creation of the East-West conflict, and that the continuation of the conflict is the basis for the continuation of the division. The question may be meaningful, however, if it implies a comparison of our data with what we would have expected if the divided nations had been "normal" nations everything else being constant.

We will assume the East-West profile of a nation to be related to the following four factors:

- A.1. The geographical position of the nation,
- A.2. The "size" of the nation,
- A.3. Block membership,
- A.4. If the nation is one of the two parts of a divided nation we will expect an additional effect of this.

It may correctly be objected that diplomatic relations are closely related to political and economic relations not mentioned in the list. We assume, however, that the latter two types of relations to a large extent are functions of the four factors mentioned, especially since we have chosen an economic definition of "size" - the size of the gross domestic product. Of course, for any nation a great number of other factors may influence the East-West profile of that particular nation, but believe the first three factors to be more important for explaining the general tendencies in the data. Factor 4 is a much less general one, whose impact we will try to study separately.

Some comments about the assumptions 1, 2, and 3.

About 1. There is a vast number of studies supporting the hypothesis that there is a negative relationship between the amount of interaction in a pair of social units and the geographical distance between them.¹² This negative relationship also comes out in our diplomatic data.¹³ Controlling for the influence of size and block membership the probability¹⁴ of a diplomatic connection between two countries is a decreasing function of the geographical distance between them. Geographical distance is, however, of much less importance than size and block membership. Since the distance between one nation and the others (eastern, western, and non-aligned) is trivially related to the geographical position of the country, assumption 1 seems quite plausible.

About 2. The hypothesis about the positive relationship between the size of a country and the amount of interaction with other units also has a strong empirical support.¹⁵ When size is operationally defined as the size of GDP the hypothesis is strongly confirmed for diplomatic connections.¹⁶ Given a pair of nations, A and B, the probability that A will have a diplomatic station in B is an increasing function of the size of A. Assumption 2 is thus supported.

About 3. The term "block membership" here refers to belongingness both to the eastern and the western system and to the category of non-aligned countries. With our use of the words "system" and "category" we have already pointed to a difference between the set of non-aligned countries and the two other sets.¹⁷ The last sets are sets with a structure defined by the military relations between the units. All nations are connected with all the other nations either directly

or via one other nation, which in this case is connected directly to all.

Each of the two groups are designed to act as one actor for some types of behavior - especially military behavior - towards the members of the other group. This is closely related to the concept of integration which has been defined as "...the process whereby two or more actors form a new actor."¹⁸

We will expect this "integratedness" with respect to military behavior to be related to some amount of similarity and coordination between the nations within a block with respect to other types of interaction too, including diplomatic relations.

Because of the lack of a corresponding structure among the non-aligned nations there will probably be a much greater variation in diplomatic behavior among them. Nevertheless, and as an overall tendency we will expect some effect of the factor they have in common: they are not regular members of any of the two organized blocks, and for this reason subject to neither of the two quite contrary, homogenizing influences related to membership in them.

Various studies have demonstrated that membership in different blocks tends to inhibit the interaction between two nations.¹⁹ This also holds for the diplomatic data: The probability that nation A has a diplomatic station in nation B is greater if A and B are members of the same block than if they belong to different blocks. This is also the case for non-aligned nations.

About 4. (the divided nation factor). We will distinguish between two cases:

- a. The nation is a member of one of the two military groups. Five nations belong to this category, namely East Germany, West Germany, South Korea, South Vietnam, and Taiwan. In this case we believe the divided nation effect to be a strengthening of the block membership effect. The reason is similar to the one given under b.
- b. The nation is non-aligned. In this category we have China, North Korea, and North Vietnam.

Since 1) there is a conflict between these three and their "opposite numbers", and 2) the latter have all added to their strength by joining the western group, we will expect the former to try to balance this by closer relations with the eastern group. In addition we will expect them to maintain a relatively low level of interaction with the allies of their "opposite numbers".

The conclusion is: We will not expect an increase of the effect of belonging to what according to our definition is an unorganized category of non-aligned nations, but an effect in the same direction as the effect of membership in the eastern group.

To summarize both a. and b.: The divided nation factor increases the polarization between East and West.

8. The Distance Between East-West profiles

From what we have already said about the East-West profile of one nation we will conclude that the distance between the East-West profiles of two nations will be positively related to the values of the following three variables:

- B.1. The geographical distance between the nations.
- B.2. The dissimilarity²⁰ in size between them.
- B.3. That they are members of different rather than the same blocks.

In addition we will expect an effect of

- B.4. The divided nation factor, which will have to be spelt out in more detail.

Given a pair of nations we shall distinguish between six types of pairs:

1. Both nations are members of the western group.
2. One nation is western and one is eastern.
3. Both nations are eastern.
4. One is western and one is non-aligned.
5. Both are non-aligned.
6. One is eastern and one is non-aligned.

Based on our discussion in A.4. we will now give one set of predictions for the types 1, 2, and 3, where no non-aligned nations are involved, and one for each of the others. The general principle behind all is the one of increased East-West polarization as being the essence

of the divided nation effect.

9. Types 1, 2, and 3

The distance between the East-West profiles of the two nations in the pair will increase as indicated by the numbers in the six-fold table (assuming an ordinal level of measurement).

Table 3.

		Block	
		Same	Different
Divided nations in the pair	None	0	0
	One	1	1
	Both	0	2

10. Type 4. (One western and one non-aligned nation)

The distance between the profiles will increase with increasing numbers in the Table.

Table 4.

		Block	
		Same	Different
Divided nations in the pair	None	--	0
	One	--	1
	Both	--	2

11. Type 5 (Both nations are non-aligned)

As for types 1, 2, 3, and 4:

Table 5.

		Block	
		Same	Different
Divided nations in the pair	None	0	---
	One	1	---
	Both	0	---

12. Type 6 (One nation is eastern and one is non-aligned)

Here our prediction will be a little more complicated. Because we believe the divided nation effect to be an effect in the direction of increased bipolarity in the international system we expect the profile distance between the nations in the pair to be influenced by the divided nation factor in the direction suggested by the six-fold table.

Table 6.

		Block	
		Same	Different
Divided nations in the pair	None	--	0
	One	--	+1
	Both	--	0

We get -1 (a decrease of the profile distance) if the divided nation is one of the non-aligned, and +1 (an increase) if the nation is eastern (East Germany). If both members of the pair are divided nations we expect these two conflicting tendencies to neutralize each other.

This can also be illustrated by the following four-fold table:

Table 7.

		Non-aligned	
		Divided	Not divided
East	Divided	0	1
	Not Divided	-1	0

Because of the apparent identity of the predictions in Tables 3, 4 and 5 one might question the necessity of keeping them apart. However, since our predictions are on the ordinal level of measurement only we have no reason a priori to assume that the numbers 0, 1 and 2 in Tables 4 and 5 correspond to the numbers 0, 1 and 2 in Table 3.

13. A test of the assumptions

A direct test of the influence of factors B.1., 2 and 3 has been carried out,²¹ and the following results were obtained:

- The influence of geographical distance on profile distance seems to be very small.
- There was a stronger influence in the expected direction of block membership.

- c. Size turned out to be the most important factor. Keeping the size of one of the nations in the pair constant the profile distance was found to be an increasing function of the difference in size between the two nations.

14. A test of the predictions

Our predictions involve the profile distances of $127 \times 126 / 2 = 8001$ pairs of nations. We regret that we have not had time enough to make a fully satisfactory computer program for a test of the predictions based on all the 8001 pairs. The results obtained so far, however, seem to be positive.

Instead, for this paper, we will only test some of the predictions on a very small propulsive sample of pairs. Well aware of the danger of building verification or falsification into the sampling procedure, we will try to justify our selection in terms of the values of the pairs on the variables B.1., 2, and 3, as well as on other variables that might be thought to influence the profile distance in each specific pair.

We have chosen to test the predictions in Table 3 and for European pairs only. By doing this we have narrowed down considerably the range of variation in a large number of cultural factors that may be important for the profile distance in specific pairs but not for the general tendency. In addition the information about our indicator of size is probably more reliable for European countries than for most other nations. There remains, however, the problem of the comparability of the figures for capitalist and socialist countries, but we shall assume here that they can be compared directly. To repeat the predictions, we have hypothesized that the profile distance in a pair is positively related to the numbers in Table 3.

During the testing we will try to keep the values of the pairs on the variables B.1.-3. constant, only changing the divided nation factor. We must note that the values of the pair along the horizontal axis of the table are identical with their value on B.3., so that the predictions in each column must be tested separately. Horizontal comparisons in the upper two rows may be meaningful, however, if one wants to measure the influence of block membership on profile distance.

For testing the predictions in the right column we have chosen the following three pairs:

1. Czechoslovakia - United Kingdom
2. Czechoslovakia - West Germany
3. East Germany - West Germany

We will assume they are sufficiently similar in all relevant variables, and that only the divided nation factor is subject to variation from one pair to the next. The reasons are as follows:

a. In addition to the fact that the countries are geographically close to each other, geographical distance has been shown to be of minimal importance.

b. We will give the GDP figures for the four countries:

Czechoslovakia	21738 mill. dollars
East Germany	21455 mill. dollars
United Kingdom	85241 mill. dollars
West Germany	97488 mill. dollars

The differences in the pairs we think are sufficiently similar considering the absolute size of the numbers.

c. The nations in each pair belong to different blocks. We have no specific expectations about the influence of other factors.

The East-West profiles of the four countries:

Czechoslovakia:	(1.000, 0.589, 0.512)
East Germany:	(1.000, 0.054, 0.000)
United Kingdom:	(0.857, 0.839, 0.975)
West Germany:	(0.143, 0.732, 1.000)

Computing the profile distances for the three pairs we get (when profile distance is defined as the sum of absolute differences between the components):

Czechoslovakia - United Kingdom:	0.846
Czechoslovakia - West Germany :	1.388
East Germany - West Germany :	2.535

Putting this into our six-fold table we get a confirmation of our prediction for these three pairs of nations.

		Block	
		Same	Different
Divided nations in the pair	None	--	0.846
	One	--	1.388
	Both	--	2.535

Turning to the left column we will not be able to include the cell in the lower left-hand corner, since we have no case of two divided nations in the same block which are both situated in Europe.

For the other two cells we choose the pairs
Netherlands - United Kingdom,
and
Netherlands - West Germany

The GDP for Netherlands is 17039 mill. dollars, and we will accept the two pairs as satisfying our conditions.

The East-West profile for Netherlands is (0.714, 0.661, 0.850), and we get the following profile distances:

Netherlands - United Kingdom: 0.446

Netherlands - West Germany : 0.792

Inserting the results in the Table and summarizing the results, we get once more a confirmation of the prediction

		Block	
		Same	Different
Divided nations in the pair	None	0.446	0.846
	One	0.792	1.388
	Both	---	2.535

15. The "Diplomatic Contact Area" for a Pair of Nations

We will now turn our attention to another aspect of the position of the divided nations in the diplomatic network. To put it briefly, we want to know the extent to which two nations are connected diplomatically to the same nations in their environment, the size of their "diplomatic contact area",²² and how this is related to a hypothesized East-West factor and a divided nation factor. This is analogous to an empirical test of the effectiveness of the Hallstein doctrine, which prevents West Germany from establishing or maintaining diplomatic relations with countries also having diplomatic relations with East Germany. The Hallstein doctrine is nothing but a foreign policy application of a graph-theoretical definition of balance stating that a cycle is balanced if and only if it contains an even number of negative links.²³

16. The measure

Consider the pair of nations A, B, and assume that the total number

of nations is n . Then the common environment of the pair A, B consists of $n-2$ nations. Let nation A have diplomatic stations in a subset U of nations in this environment, and let B have diplomatic stations in a subset V . $T = U \cap V$, the intersection of U and V , is the set of nations connected both with A and B . Let u, v and t be the number of nations in U, V and T respectively. t , the number of nations connected with both A and B , indicated the absolute size of what we have termed the diplomatic contact area between A and B . This number will obviously be related to the size of U and V . The theoretical maximum value of t is determined by the smallest one of the numbers u and v .

In this paper, however, we are interested in a measure whose theoretical maximum and minimum do not depend on u and v . Assuming u and v constant we divide the empirical value of t by the theoretical maximum value of t ; the result is a measure of what we may term the relative size of the diplomatic contact area between A and B , RC . We get the following simple formula:

$$RC = t / \min u, v$$

where RC has its minimum value, 0, in the case when A and B are connected with entirely different sets of nations, and its maximum value, 1, in the case where one of these sets is a subset of the other one.

We have not tried to explore the mathematical relationship between different profile distances and different values of RC , but shall avoid the question by focussing our attention on the degree to which two nations are connected to the same nations among the non-aligned ones. This we also consider to be more interesting for shedding light on the position of the non-aligned nations in relation to the East-West conflict.

We shall assume RC to be related to the same factors as the profile distance in a pair of nations (cfr. B.1.-3.). Some differences in the form and explanation of the relationships should be noted.

C.1. There is a negative relationship between the value of RC for a pair and the geographical distance in the pair. This can be shown to follow mathematically from the negative relationship between the probability of a diplomatic connection between two nations and the geographical distance between them.

C.2. Our assumption about the nature of the relationship between size of the nations in the pair and the value of RC is more complex. Given two nations of the same size and other things being equal we will assume the total number of connections

for each of them to be the same. Keeping the size of one of the nations constant and increasing the size of the other one we will expect the value of RC (if it is not already maximum) for the pair to increase. The increase in size will lead to an additional number of connections, and the probability is that one or more of the additional connections will be with nations already connected to the first one. This should lead to the conclusion that the value of RC is positively related to the dissimilarity in size between the nations in the pair. Since the number of nations is relatively low and the big countries are connected to most of them there is likely to be a ceiling effect limiting the influence of dissimilarity in size.

- C.3. The value of RC will be higher when the two nations in the pair belong to the same block than when they belong to different blocks.

We shall discuss two explanations for this: one multilateral and one bilateral.

a. One possible explanation is that the non-aligned nations are not necessarily neutrals in the East-West conflict, but that one group of them - including among others North Korea, North Vietnam and (which can be debated) China - lean more to the East and another group more to the West. As a consequence there will be a certain tendency for East to concentrate their diplomatic attention on the former group, and for West to concentrate on the latter, thus reducing the values of RC between the blocks.²⁴

This is the same as extrapolating the East-West conflict to some extent into the category of non-aligned nations, and explain the variation in RC between East and West as a result of the difference in density between intra- and intergroup interaction.

The possible division among the non-aligned nations mentioned above may of course also lead to a corresponding difference in the values of RC between these groups. On the average, however, we will expect the value of RC for pairs where both parts are non-aligned to be higher than the values for pairs where one nation is non-aligned and the other is not.

The variation in RC-difference also points to the possible rela-

tionships between the East-West conflict and asymmetric conflicts involving non-aligned nations, and suggests the possibility that they belong to the same underlying conflict dimension. We have, however, no data for exploring the nature of these relationships here.

b. The bilateral explanation is that when nations in a pair belong to different blocks a mechanism - though generally much weaker - analogous to the one that makes for the functioning of the Hallstein doctrine will reduce the probability of a connection between one nation and another nation if the latter is already connected to a nation in another block.

We have no data which may enable us to choose between these two explanations, nor do we know the extent to which they are contradictory. It may very well be that they only describe different aspects of the same mechanism. For the purpose of explaining systematic tendencies in the total network of diplomatic connections we prefer, however, the multilateral formulation.

C.4. The divided nation effect on the variation in the values of RC, we believe, is mostly a Hallstein doctrine type of effect described under C.3b above. The effect is, as is well known, extreme in the pairs where both states are parts of the same divided nation, but we will hypothesize an effect also in the case where only one of the nations in the pair is a part of a divided nation.

We will make the same distinction between different types of pairs as we made for profile distance. The predictions will also be quite similar to the ones developed for profile distance, the only difference being that where profile distance is said to increase we will hypothesize RC to decrease. Instead of repeating the predictions we refer to Tables 3, 4, 5, and 6.

The predictions are derived from the same principle as the one that is assumed to explain the divided nation effect on profile distance, the principle of increased East-West polarization. The mechanisms are already described under C.3.a.

16. A test of the assumptions C.1.-3.

A direct test of the assumptions²⁵ seems to confirm them relatively well, except that total size of the nations in the pair seems to be more

important for the value of RC than the difference in size between them. Both the importance of block membership and geographical distance is clearly demonstrated, geographical distance turning out to be more important for the value of RC than for profile distance.

17. A test of the predictions

We have to repeat the regret that a full test of the predictions for the 8001 pairs has not yet been completed, but the preliminary results obtained seem to go in the right direction.

For the purpose of this paper, however, we will make a partial test using the same sample of pairs as was the basis for the testing of the predictions about profile distance.

We shall not repeat the procedure, only the hypothesis that there is a negative relationship between the value of RC and the numbers in Table 3. The results are given in the following Table and confirm our predictions on this sample.

		Block	
		Same	Different
Divided nations in the pair	None	0.865	0.848
	One	0.730	0.606
	Both	---	0.000

APPENDIX
The western group of nations

<u>Rank</u>		<u>Number of connections sent</u>
1	France	98
2	USA	95
3	United Kingdom	92
4	Italy	87
5	West Germany	82
6	Netherlands	76
7	Belgium	75
8	Japan	73
9	Argentina	64
10,5	Spain	61
10,5	Brazil	61
12	Canada	59
13	Denmark	57
14	Turkey	54
15,5	Taiwan	48
15,5	Chile	48
17	Mexico	47
18	Uruguay	45
19,5	Greece	44
19,5	Pakistan	44
21,5	Portugal	41
21,5	Venezuela	41
23	Norway	40
24	Peru	38
25	Iran	37
26,5	Australia	36
26,5	Colombia	36
28	Panama	34
29,5	Thailand	31
29,5	Ecuador	31
31,5	Phillipines	28
31,5	Dominican Republic	28
33	South Korea	26
34	Costa Rica	25
35	Guatemala	24

<u>Rank</u>		<u>Number of connections sent</u>
36,5	Haiti	23
36,5	El Salvador	23
38	Bolivia	22
39	Nicaragua	20
40,5	Paraguay	19
40,5	Honduras	19
42,5	New Zealand	16
42,5	South Vietnam	16
44	Luxembourg	9
45	Iceland	8

The Non-aligned Group

1	Switzerland	70
2	United Arab Republic	69
3	Israel	66
4	India	65
5	Sweden	63
6	Yugoslavia	58
7	Austria	51
8	Indonesia	49
9,5	Vatican	46
9,5	Finland	46
11	Lebanon	42
12	Ghana	41
13	Cuba	38
14,5	China	37
14,5	Morocco	37
16	Saudi-Arabia	34
18	Syria	33
18	Iraq	33
18	Algeria	33
20	Nigeria	29
21	Ethiopia	25
23	Jordan	24
23	Tunesia	24
23	Sudan	24
26	Burma	22

<u>Rank</u>		<u>Number of connections sent</u>
26	Libya	22
26	Liberia	22
29	Ceylon	21
29	Senegal	21
29	Belgian Congo	21
31	Malaysia	20
33	Ireland	18
33	Kuwait	18
33	Afghanistan	18
35	South Africa	17
36,5	North Korea	15
36,5	Ivory Coast	15
38	Guinea	14
39,5	North Vietnam	13
39,5	Cameroon	13
41,5	Mali	12
41,5	Cambodia	12
44,5	Yemen	11
44,5	Laos	11
44,5	Nepal	11
44,5	Tanzania	11
48	Somalia	10
48	Burundi	10
48	Zambia	10
51	Mauritan	9
51	Uganda	9
51	Dahomey	9
54	Upper Volta	8
54	Niger	8
54	Madagascar	8
58	Central Republic of Africa	7
58	Chad	7
58	Cyprus	7
58	Rwanda	7
58	Kenya	7
62,5	French Congo	6
62,5	Trinidad - Tobago	6
62,5	Togo	6
62,5	Gabon	6

<u>Rank</u>		<u>Number of connections sent</u>
66	Singapore	5
66	Jamaica	5
66	Malawia	5
68,5	Malta - Go.	4
68,5	Sierra Leone	4
70	Gambia	2
71	Mald/Isl	1
72	Rhodesia	0
73	Western Samoa	0

The eastern group

1	Soviet Union	70
2	Poland	61
3	Czechoslovakia	60
4	Bulgaria	50
5	Hungary	47
6	Rumania	42
7	Albania	16
8	Mongolia	11
9	East Germany	9

NOTES

1. Jacobsen (1969), p. 6, concludes from the study of UN voting data that the East-West conflict seems to remain stable, while the North-South conflict is increasing.
2. Jacobsen (1969), p. 6, also points out that the North-South conflict is becoming highly correlated with the East-West conflict.
3. Jacobsen (1969), p. 5-6.
4. Thus Albania is included since she formally was a member of the Warsaw Pact until September 1968 (according to Keesing's Contemporary Archives) while our data are from the period 1966-67.
5. An exception here being the ruptures caused by the Middle East War in 1967 of the connections between Israel and East Europe and of the connections between the United States and some of the Arab countries.
6. Since there appears to exist no consensual definition of the term "independent nation" we have had to rely upon our own judgement using a combination of criteria, the major one being whether they in fact send or receive diplomats.
7. Reidar Kvadsheim (forthcoming)
8. See under 7.
9. Since the data-collection was completed West Germany has also established diplomatic relations with Rumania. This may be interpreted as a softening over time of the effect of the divided nation factor we are studying.
10. The recent establishment of diplomatic relations between the United Arab Republic and East Germany may mark the beginning of a change here.
11. Size is a rather diffuse concept. One may operationalize it in different ways (like area, population, etc.) and the result will probably all go in the same direction. We have chosen an economic indicator, the size of the gross domestic product (GDP), because we believe economic resources to be more important for interaction between countries than other types of attributes for nations. It is important to note, however, that the relationship between the values on the different indicators of size may be important for some types of behavior, namely aggressive behavior. See Galtung (1964).
12. For a bibliography see Gleditsch (1968).
13. See under 7.
14. The probability is defined as a relative frequency. The nations are grouped according to size and the groups are ranked afterwards. Geographical distance are given two or three (or at least a moderate number) values. Keeping constant the rank of sender and receiver, the geographical distance between them and block membership, we define the probability of a connection in one of the pairs as the observed number of connections divided by the theoretical maximum number of connections for all the pairs.

15. For examples from the international system see Galtung (1966) and Gleditsch (1968).
16. See under 7.
17. Galtung (1967), p. 39.
18. Galtung (1968), p. 377.
19. See for example Galtung (1966) and Gleditsch (1967).
20. We prefer the more general term "dissimilarity" because "difference" involves an assumption about linearity which we believe does not hold empirically.
21. See under 7.
22. An example that the diplomatic contact area in fact may be related to diplomatic contact between the two countries are the talks in Warsaw between China and the United States, and the recent negotiations in Stockholm between China and Canada about the establishment of normal diplomatic relations.
23. Cartwright and Harary (1956) as referred in Gleditsch (1968).
24. The groupings obtained by Russett and Lamb (1969) may indicate this. Their groupings are, however, based on the total number of diplomats exchanged in the pairs and not on connections in ordered pairs. In addition they use factor analysis which is based on an entirely different theoretized model from ours.

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FEUDALISM, STRUCTURAL VIOLENCE,
AND THE STRUCTURAL THEORY OF REVOLUTION*

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1. Introduction: the extended concept of revolution.

The New Left has made one (among many) extremely important contributions to social theory and social practice by extending the concept of revolution. There has always been agreement that not any change in the power structure of a society, deemed illegitimate by the former wielders of power, deserves the proud name of a revolution. But the limitation in usage to the one-dimensional axis slave → feudal → capitalist → socialist → communist societies, with special emphasis on the relation between means and modes of production is too narrow again. The New Left has brought into social reality, not only into social theory, a concept of revolution directed against feudal, capitalist and socialist societies on the contemporary scene, attacking political groupings located widely apart on the conventional political spectrum for alleged contra-revolutionary leanings. In so doing they have made the concept of revolution more universal; it is directed against regimes in East and West, in North and South.

They are not alone in this. One finds corresponding trends in for instance many Gandhian, pacifist and generally communitarian oriented circles. Well knowing that there are tremendous differences in basic social cosmology, in the views on the legitimacy of open violence and in the choice of means in general they seem to share much of the same goals: a more egalitarian society with ample decentralization, with less or zero difference between high and low and also a society which does not accept the scale of values found not only in capitalist societies but increasingly in all industrial societies all over the world.

This paper does not claim to account for, to synthesize or even to discuss all these important trends of thought or action. But the point of departure is the same, although perhaps put even more in focus than is often done: we have to know what a revolution is against in order to make it meaningful. The old formula "it is against capitalist society in order to bring about a socialist order" seems to be satisfactory to few below 40 (50). Hence a new conceptualization of the pre-revolutionary order is needed in order to develop a theory of revolutions: only by having a relatively precise image of what a revolution is against can one meaningfully define what it is for.

But this should be done at a relatively general level to be maximally useful as a map to guide theory-formation and social action. Again the New Left has made a lasting contribution by directing attention to revolutions at the micro level, within organizations in addition to revolutions at the national and international levels.

More precisely, a theory is needed that is independent of

1. level of social organization, valid for relations among nations as well as within nations and within organizations,
2. space, i.e. the precise social context and circumstance
3. time, i.e. there should be no doctrine of the final revolution.

Any theory of revolutions within revolutions satisfies the latter criteria even if these criteria contradict the particularizing tendency in much of marxist thinking. Theories satisfying all three criteria would be truly general and would not tie thinking or action to any particular revolution. Another matter is the amount of specification that is needed to derive from general images the concreteness needed to guide action in any specific situation - "specific" meaning level, space and time specific.

But there is also one more reason why this type of thinking seems important. Peace research has been extremely biased towards a search for an understanding of the conditions of overt or personal violence, it has done much less to account for covert or structural violence and its concomitants, not to mention for how to reduce structural violence. Hence it seems appropriate that such tasks are undertaken within a peace research context however much this may smack of efforts towards soft pacifism and class conciliation for some and of efforts to make an opening towards sanguine revolutions for others.

2. The feudal triad: the social amoeba

Since this is a general theory our point of departure has to be general. What we need is some very general terms from the general theory of social systems, such as:

1. Actor, who may be an individual or a collectivity (group or nation) in search of goals

2. Interaction, which we define as exchange of value and/or information between two actors (bilateral interaction) or among more than two actors (multilateral interaction). The interaction may be asymmetric (unequal terms) or symmetric (equal terms), which we shall often refer to as one-way vs. two-way interaction.
3. Social system, $S(A,I)$ which is a set of actors interconnected by relations of interaction
4. Rank, which is a differential evaluation of actors (or of the statuses they occupy in formal systems) in terms of topdogs (T), middledogs (M) and underdogs (U).

For our present purpose here we shall not try to penetrate into all the difficult problems these definitions lead to since we shall use the concepts as basic concepts for what we are about to develop. More particularly we shall not try to define the distinction between asymmetric and symmetric further, but shall assume that asymmetric interaction can only be found in vertical interaction, which we define as interaction between unequals, not in horizontal interaction between actors holding the same rank. Nor shall we explore further the notion of rank (this will also be done in the examples) except by stating that among other things it also has to do with capacity for interaction: the higher the rank the more resources (money, material resources, energy, training, time) available for interaction.

A very basic problem now is to find the number of possible patterns of interaction for systems with various numbers of actors. This problem is easily solved by very simple combinatorics:

Table 1. The number of interaction patterns of various kinds in systems with m actors

<u>Types of interaction</u>	<u>Number of actors</u>				
	2	3	4	5	m
Bilateral, minimum	1	2	3	4	$m-1$
Bilateral, two-way, minimum	2	4	6	8	$2(m-1)$
Bilateral, two-way, maximum	2	6	12	20	$2\binom{m}{2}$
Trilateral	-	1	4	10	$\binom{m}{3}$
Tetralateral	-	-	1	5	$\binom{m}{4}$
Pentalateral	-	-	-	1	$\binom{m}{5}$
Multilateral	-	-	-	-	$\binom{m}{m}$

The minimum number needed to connect m actors, according to general graph theory, is $m-1$. However, if we stipulate that the interaction should be two-way, then the minimum would be $2(m-1)$ - either no link or a double link. However, since we have $\binom{m}{2}$ pairs in general the maximum number that would fill the whole system (as in a small face-to-face group which by definition is strongly connected, everybody interacts with everyone else) is obviously $2\binom{m}{2}$. But to this we have to add all the possible forms of multilateral interaction involving three at a time, four at a time and so on ending up with all m . As an illustration may serve the subdivision of a committee in all kinds of sub-committees, ending up with a meeting of the Committee of All.

Obviously, there are also asymmetric ways of organizing multilateral interaction as we shall see later, but let us disregard that for a moment. The number of possibilities is already considerable: with m actors we get a total of

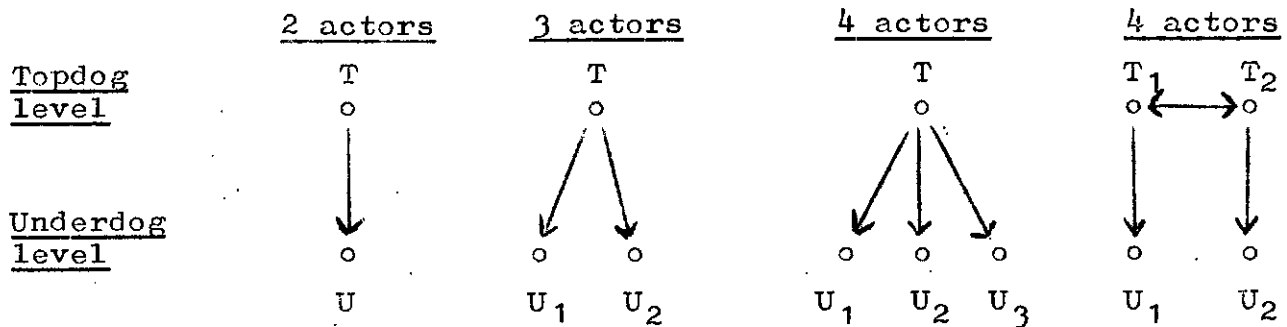
$$N(m) = 2\binom{m}{2} + \binom{m}{3} + \binom{m}{4} + \binom{m}{5} + \dots + \binom{m}{m} = 2^{m-m-1} + \binom{m}{2} = 2^m + \frac{m^2 - 3m - 2}{2}$$

patterns of interaction which increases rather quickly.

Having established the maximum interaction saturation of a system with m actors, obviously the most complex system, let us now return to the other end: the system of minimum complexity. This system is connected by interaction, but that does not determine the system unambiguously for we have not specified whether it is bilateral or some kind of multilateral interaction, and we have not brought in the dimension of rank. We shall now do both and define the system of minimum complexity as the system of minimum interaction cost to the actors. We then assume that it costs more to the underdogs than to the topdogs to interact, without having to specify how much more (in a more general theory this will have to be done).

Since multilateral interaction involves all members of the system as senders, not only as receivers of interaction (a point to be developed further later on) we are in a position to say that it is more costly and hence represents a higher form of organization than the corresponding set of actors connected through one topdog or a set of interacting topdogs only. Hence, if we now assume that each system has at least one topdog and not more topdogs than underdogs then the

least costly forms of organization for systems with 2, 3 and 4 actors respectively would be:



First of all, all patterns satisfy the m-1 rule: there is one link less than there are actors. Second, almost all interaction is vertical and one way, from topdog to underdog, since this is the cheapest form (only one-way needed, and the topdog has most resources). Third, in the case with two topdogs the connection is made at the top since they have more resources. It has to be two-way interaction since it is horizontal, but apart from that it is the solution involving minimum costs. In that sense these are primordial systems, the simplest systems possible.

Since the case of two actors is trivial and the case of four actors is unnecessarily complicated, let us focus on the case of three actors (individuals, groups, nations, regions, globes). The characteristics of this minimal system are:

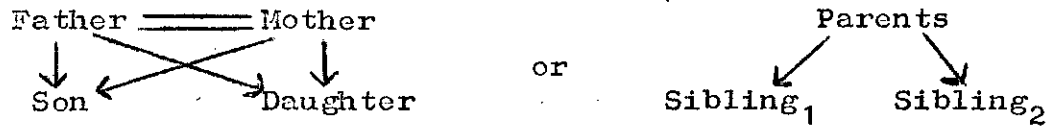
1. interaction one way only (from high to low)
2. interaction vertical only (nothing between the underdogs)
3. interaction bilateral only (only involving two at a time)

We call this system the social amoeba because we conceive of it as a primordial form, as the apex in a genealogical tree from which much more complex social forms can be derived in three ways:

1. by growing without changing the structure
2. by changing the structure without growing
3. by means of both

But we also conceive of it as primordial in at least three other ways, one fairly obvious, one more hypothetical but also more challenging, and a third one which is the basis for much of our reasoning.

First of all, the nuclear family is a slightly modified social amoeba with four actors, or with three actors if we collapse father and mother into parents:



The family is built around two types of interaction: one horizontal and sexual between a man and a woman and one vertical and power-oriented from parents to offspring. In other words, most human beings grow up with two simple social experiences firmly engraved on their minds: there are vertical relations of dominance from high to low, and there are also highly significant horizontal relations, but they are monopolized for the top of the system and even made systematically invisible to the underdogs. Incest taboos against sex relations in the father-daughter and mother-son dyads preserve the social distance between high and low and the third type of incest taboo, against intercourse between son and daughter, serves to monopolize this horizontal interaction for the top of the system. To this should be added the taboos against sexual relations in the father-son and mother-daughter dyads of a mixed anti-incest and anti-homosexuality nature, also preserving the distance between the two classes in the family system.

Of course all this does not preclude a dominance relation between the parents or some horizontal relations between siblings. But from the point of view of the siblings, the parents together exercise one-way authority at least during the first years of childhood (later the eldest son may well prevail over the mother in some societies), and the tie between the parents is at least in very many systems stronger than the tie between the siblings. In other words, it does seem reasonable to hypothesize that most people grow into (and perhaps never out of) a structure with highly pronounced amoeba properties: vertical interaction tends to be from high to low, horizontal interaction is predominantly at the top and there is little multilateralism.

The second hypothesis is more fundamental: it is the idea that we do not come into this world completely neutral where social struc-

ture is concerned, we are not born tabula rasa. There is a structure engraved on our mind, a social structure like there may be a linguistic deep structure (Chomsky) or an innate kinship structure (Levi-Strauss). If that is so, then our guess would be that the amoeba is the social structure prototype, and that what we do after we are born is not only that certain social experiences from the first social environment encountered leave their imprint, but also that we act out what is already engraved in us.

We have not the slightest evidence for this, and it may well be that we only say this because it is a la mode to say something like this. But:

why does this structure seem to be so prevalent, at all levels, at all points in space, at all times?

why do we find the form of the pointed triangle so often in architecture (pyramids, gothic cathedrals), and in more abstract structures (the ideal axiomatic system) deemed to be "esthetic"?

why do so many who try, on paper or in reality, to construct some new organization, conjure up something in the direction of the social amoeba?

All this is perhaps explicable in terms of the first factor above. If that factor, the impact of the family structure, is really significant, then we would also expect considerable variation in the tendency to enter into amoeba-type interaction depending on the variation in family background experience. For instance, there should be considerable difference between the first born and the others since the first born by definition is only exposed to vertical interaction (for a period of at least nine months - multiple births excluded) with no chance of being trained in horizontal or multilateral interaction patterns. There should be considerable difference between people who have grown up in this type of family structure and people who have grown up in other family structures; for instance families where the parents have a highly egalitarian relationship and also invite children to discuss family problems multilaterally. And there should be considerable difference between people who have grown up inside and outside family structures, e.g. in orphanages, although these are usually also modelled after the amoeba.

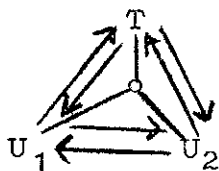
This type of research exists, and the hypothesis that the eldest son tends to be more conservative and authoritarian is generally con-

firmed, it seems. But since this research is not contrasted with hypotheses that may be derived from the other hypothesis (if we had the indicators needed to operationalize it) it is of less value. However, we shall nevertheless draw upon this type of research to some extent, and above all because the nuclear family may itself disappear, even shortly, as a major structural form of procreation and socialization and lead to new patterns of either. Whether these patterns will be less amoeba like remains to be seen.

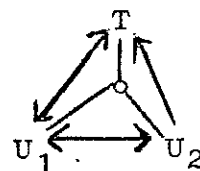
So far we have mentioned two hypotheses, one intra-individual (the pre-programming hypothesis) and one inter-individual at the micro-level (the family socialization hypothesis). But there is also a very important inter-individual hypothesis at the macro-level involving the basic categories of time and space, and the whole idea of cost briefly touched upon above. But in order to develop that hypothesis we shall first contrast the social amoeba with the maximally complex system.

3. The defeudalized triad

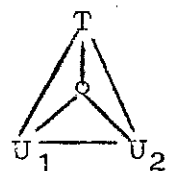
Given three actors, one of them a topdog and two underdogs, an interaction relation and the constraint that the three actors shall be connected we end up with the social amoeba, also called the "feudal triad", as the minimum structure satisfying these requirements. Let us then proceed by building it out completely. What we can do is to add the remaining four possible bilateral interaction relations, two of them vertical and two of them horizontal, and the one possible multilateral interaction relation so that we get:



which we simply
present as



or



In doing so we have not changed the actors directly, but we have changed the interaction structure:

1. by adding interaction from low to high
2. by adding horizontal interaction
3. by adding multilateral interaction

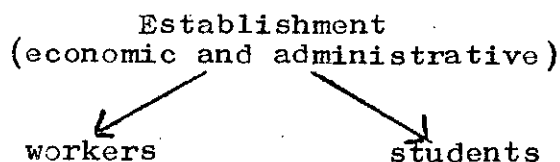
We shall refer to this triad as defeudalized, or as "de-amoeba-ized" to stick to that jargon. It is a much more complex configuration which also soon will give us some cues as to why it may be seen as less primordial. But let us first give some interpretations in order to demonstrate that we are developing a paradigm within which we can discuss important problems:

1. Family relations. It is hardly necessary to add that the difference between the feudal and the defeudalized family structure is an image of the difference between the classical authoritarian family pattern and the more democratic family pattern. In the former the parents hand down decisions taken by the "parents" (often meaning father only) to the children, often handling them one by one. In the latter they would all come together to discuss or "interact" in general, bilaterally both ways as well as multilaterally. Whether this is ultimately meaningful retaining the sexual monopoly on top we do not know but there is no doubt that family budgeting, for instance, can be handled in a less feudal manner than is commonly found today.

2. Bureaucratic relations. Whether in a bureaucracy, in a firm or in an institute the feudal triad is a good picture of most organizations. Orders flow from above, and that is all. Often this one-way interaction simply crystallizes into more or less permanent instructions. When the lower levels talk back, in both senses of this expression, two-way interaction has been introduced between high and low. When they start interacting among themselves the horizontal interaction is added. When open meetings are introduced multilateralization has also been added. Often these three defeudalizing factors exist all the time as an "informal" structure (e.g. as a coffee-break structure), synchronically or diachronically superimposed on the "formal" structure which is then the feudal triad.

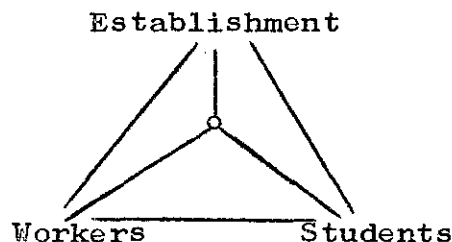
3. Professor-student relations. The feudal triad is a good picture of a professor tutoring two students, or talking with two assistants, one at a time. When the students or assistants start talking back, if only in the form of questions, interaction from low to high has been added. When they start discussing between themselves, even to the extent of forming colloquia, horizontal interaction has been developed. When they all meet together in the form of a seminar multilateral interaction has been added.

4. Intranational relations. Let us present an image of modern society well known from current debate:

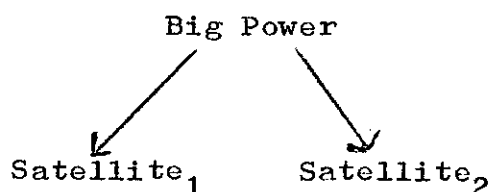


The structure is feudal. Defeudalization consists in more symmetric interaction vertically, direct interaction between workers and students (for instance because "workers and students have common interests")

and finally multilateralization, until one arrives at this pattern.



5. International relations. This image of international society is only too well known:



It is also clear what defeudalization consists in: talking back, direct interaction between the satellites and finally, multilateral interaction.

We cannot add anything about inter-global interaction for the simple reason that Earth has no globe with which to interact. If the moon and Mars are colonized, however, our bet would be that interaction would be via Earth, in other words, amoeba-like. On the other hand, Earth has a peripheral position in a solar system that is in a peripheral position in a galaxy that in turn is in a peripheral position in the universe, so chances are that in any tacit cosmic interaction going on Earth is pretty much on the underdog side. Maybe we are just at the bottom end of somebody's universe-size amoeba, being exposed to truly cosmic manipulation?

It is now important to concretize somewhat the feudal triads by asking the important question: what is it, concretely, that impedes two-way vertical interaction, horizontal interaction and multilateral interaction? It is important to notice that in every single case there are very concrete (at least from the point of view of a social scientist) impediments:

1. Family relations. Parents have a bedroom together, siblings of different sex have separate bedrooms in middle class families all over the world. But there is no doubt much sibling cohesiveness that does not conform to this model, for which reason horizontal sibling relations have to be contrasted to the intensity of the sex relation

on top to make the social amoeba a more adequate model. It is to this type of interaction that the feudal model above all applies, and there are countless small patterns in family life, over and above the incest taboos, that contribute to the structure - e.g. patterns of decency, of nudity and so on.

2. Bureaucratic relations. Here the spatial division is often crucial with secretaries separated in small cubicles and local telephone lines sometimes following the feudal pattern. But even if this is not the case the feudal triad is simply what is known as the organizational chart, for which reason one of the purest cases of the social amoeba to be found is any standard bureaucracy.

3. Professor-student relations. The classical auditorium gives the spatial setting that corresponds to the three norms: don't talk to the professor when the professor talks, don't talk to each other and consequently no multilateralization either. It is not necessary to have students or assistants in separate rooms to obtain a feudal triad. Another way of saying this is that time is segmentalized so that a certain time-chunk, the "class", is given to the professor alone - and then he disappears. Obviously, seminar rooms should all be equipped with round tables or small tables that can easily be organized in symmetric patterns. The classical auditorium is the amoeba translated into architecture.

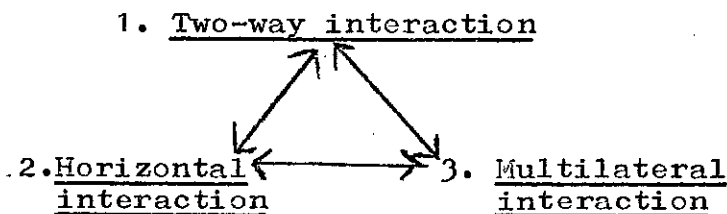
4. Intranational relations. In this case it is a question of institutionalized interaction: workers interact with economic establishments that in turn interact with administrative establishments that interact with students - but there is little or no direct, institutionalized interaction between workers and students. By "institutionalized" we simply mean that if they interact, then it is not qua worker or qua student but in some other status (for instance as members of the same ideological movement or party, or when workers go to evening universities or students have summer jobs).

5. Inter-national relations. One pattern here is economic: economic relations are set up in such a way that big and small exchange manufactured goods in return for primary products but small and small often have the same primary products and no manufactured goods to export, hence no possibility of exchange. There may also be geographical impediments: they may be separated by mountain chains, they may be oceans apart, and so on. And, as in all of these cases: the costs of interaction may be insurmountable for the underdogs, easy for the topdogs, and this means that the resources available to participate in interaction are concentrated on the topdogs.

In all these cases, however, there are also some important common factors: interaction among underdogs is low because 1. the short-term gains in concentrating on topdog interaction appear more attractive and the underdog at the subsistence level has to think in terms of short-term gains, and 2. underdogs are vying for topdog favors and are hence in a competitive situation from which they cannot withdraw for fear that the underdog may benefit from withdrawal, and 3. since they do not trust each other they cannot divert sufficient resources to horizontal inter-

action, and since they do not interact horizontally they do not develop sufficient trust in each other.

It should now be noticed that we have no specific model to suggest when it comes to the time order of these three possible aspects of defeudalization that add up to a transition from a minimal to a maximal triad: there cannot be less interaction than in the feudal triad, nor more than in the defeudalized triad. But when it comes to exactly how this takes place one could imagine starting in any corner in the triangle below, clockwise or counter-clockwise giving a total of six time-order patterns:



1-2-3 is no doubt an important pattern, but 2-1-3 should also be important for the reason mentioned above: the underdogs often have to come to some agreement among themselves before they can change their relations vis-a-vis the topdog. Evidently, 2-3-1 is the more revolutionary strategy: first underdog interaction, then multilateralism and finally symmetric vertical interaction.

But one may also start with multilateralism. Since we define multilateral interaction as interaction where all send and receive together, it is quite possible to combine one-way bilateral interaction from high to low and lack of bilateral horizontal interaction with multilateralism. Multilateralism may not affect bilateral relations at all. It is quite possible that all meet and talk multilaterally, but none of the underlings talks back to their superiors, bilaterally, and they do not address each other when they are alone. Evidently, multilateralism becomes much more meaningful when it is combined with a complete net of bilateral interaction, vertical as well as horizontal, but it is logically as well as empirically independent of the other two. This means that all six patterns are possible, and they all have specific social and political implications.

Since interaction has to take place in space and time it somehow has to overcome both of them. It has to fill a certain amount of time

and to reach across a certain distance - small or big - and since time is scarce and the means to reach across distance likewise interaction costs. The costs may be simple costs of communication and transportation or time taken for meetings that could be used for production, and there may be all kinds of psychological, social and political costs. This is the first approach to the third explanatory hypothesis we have to offer for the prevalence of the feudal pattern, and it will be elaborated below. However, the basis is already presented for a fundamental theorem in the theory of feudal systems: defeudalization is most likely to start at the top of the system for this is where the costs of extended interaction can most easily be met. This will also be developed further below.

4. Defeudalization and the concepts of democratization, revolution and integration

Let us now briefly compare the image given here of what we have called the defeudalization process with what is often called democratization or revolutions to get some basis for understanding better what defeudalization is and what it is not.

Democratization has something to do with equality in rights and more particularly with equality in power, as expressed in the one man-one vote principle. Defeudalization says nothing about that, nor does democratization necessarily say anything about defeudalization. However, an argument can be made and will be made later for defeudalization as a structural basis for a meaningful democracy. Equal votes in a feudal structure gives the topdog excessive structural influence over underdog vote; defeudalization makes for structural or positional equality and hence gives more reality to the formal equality expressed in the one man - one vote principle. One might even say that it is more fundamental: a system of interlocking defeudalized units arriving at consensus may be an expression of a basic structural equality even though there is no machinery available to translate any one man - one vote principle into a guide for political action. There is no party-formation, no elections. Hence, in the theory of defeudalization one may also find a basis for evaluating (African) one-party or no-party systems relative to parliamentary democracies, although it should immediately be added that there is no reason why structural equality

could not be combined with voting equality.

But, the critic will immediately point out, in this model there is still a rank difference, a difference between topdogs and underdogs. This is true, we have not assumed anything about total disappearance of rank differences. However, with defeudalization one extremely important component is taken out of the stratification system: the correlation between rank and central position in the amoeba. Since structural position has been equalized what we might call "structural power" has also been equalized; there is no variation and hence no correlation. This does of course not mean that all kinds of power have been equalized. There may still be unequal access to resources, e.g. to the type of power that "comes out of the barrel of a gun", and there may be personal inequalities not to mention the inequalities in decision-making referred to above. But our assumption is nevertheless that equalization of structural power or defeudalization is a basic category. When that has been obtained the collectivity may decide on collective ownership of power resources and equality where decision-making is concerned. What remains is a personality component that can be reduced by means of rotation. To reduce it to zero one would probably have to introduce some type of genetic control combined with standardized socialization patterns so as to create perfectly similar individuals. If the actors are nations this would presuppose that the nations are not only exactly equal in size and shape and resources, including climate, but also that they are all equidistant so that one nation does not have an edge over the others by having less resistance to overcome in interaction and can accumulate these advantages over time so as to introduce itself on the top of a feudal pattern. Since nations are located on the earth, in three-dimensional space, it is easily seen that these conditions of defeudalization can only be satisfied for exactly equal and equidistant nations. This might work for two nations (trivial), for three nations located on the apexes of a spherical triangle and for four nations located at the corners of a tetrahedron inscribed in the globe. But it does not work for five because they cannot be equidistant in three-dimensional (Euclidean) space; not to mention for 135 nations highly unequal on most dimensions of importance.

In general much, but certainly not all, rank difference can be eliminated by means of defeudalization; how much will be discussed in

the next section. But it is quite clear that defeudalization cannot be identified with democratization as commonly conceived of, and it cannot be identified with revolution either. But the paradigm permits us to distinguish between three precizations of the term "revolution" as that term is often used today:

1. Substitution of one topdog for another: the intra-class circulation found in coups, golpes, retaining the feudal structure.
2. Substitution of underdogs for the topdogs: the inter-class circulation found in most revolutions, retaining the feudal structure. The former topdog can become an underdog, or be eliminated physically (extermination, internation) or socially (banishment, self-exilation); and the former underdog becomes a topdog by definition because of the structural position he obtains. Experience seems to indicate that after some time he also acquires the other paraphernalia of rank.
3. Defeudalization of the structure: retaining the underdogs and the topdogs. Combined with no.2 above this constitutes a recipe for revolution within the revolution, for a structure that may counteract the tendency of the former underdogs to develop into a new class.

Sloganized and superficially, but perhaps more correctly than wrongly, one may perhaps say that 1 is "revolution" in the sense of the present Brazilian leadership, 2 is the Stalinist model and 3 is the model implicit in the Cuban and Red Guard programs. Leaving no. 1 aside as merely semantic one is left with 2 and 3. The present criticism against model 2, expressed in our very simple terms, is that it changes the names and the social origins of the topdogs, it may even change the ideology of the ruling class and hence the ruling ideology and may direct the system towards new goals - but the structure is just the same as before. Plus ça change, plus c'est la même chose. But a corresponding criticism can just as well be leveled against model 3: it changes the structure but the persons are all the same including their background, the ideology may be the same and the goals of the system the same. Hence, a combination of models nos. 2 and 3 might be more satisfactory from a revolutionary point of view: new perspectives brought by new people into all positions in a new structure.

Finally, let us tie this preliminary account of defeudalization to the theory of integration. By "integration" we mean the process whereby there is a fusion of several actors so that one new actor

emerges, by "disintegration" we mean the process whereby there is a fission of one actor so that several new actors emerge. The birth of a (con)federation is an example of the former, the secession of a province an example of the latter, and at the subnational level marriage and divorce may serve as examples. This also serves to underscore that one cannot meaningfully talk about "one" or "several" actors without giving a system reference. Thus, the states or republics in a federation may still be actors at that level but at the international level there has been integration so that foreign policy has been coordinated, just as a couple is one actor in some legal contexts.

Defeudalization is not the same as integration but it may be one way of arriving at integration. As it stands here defeudalization involves some kind of multilateral interaction and the typical model is, of course, the meeting. But a meeting is an association and not yet an actor. It has to be given some permanence, some agreement about common behavior towards other actors (e.g., it has to be a common market, not only a free trade area), and there probably also has to be some actor(s) whose major concern is the relation with the outside (such as the general secretariat of the multinational organizations, whether they are governmental or non-governmental, profit or non-profit).

Hence, defeudalization is not a sufficient condition for integration, and it is easily seen that it is not a necessary condition either. The topdog in a social amoeba may decide to "integrate" it and appoint himself as the face towards the outside, and in so doing may often achieve a more "efficient" integration. This is important for integration theory has for a long time been marred by a much too narrow egalitarian approach as if this were the only or indeed statistically the most frequent way.

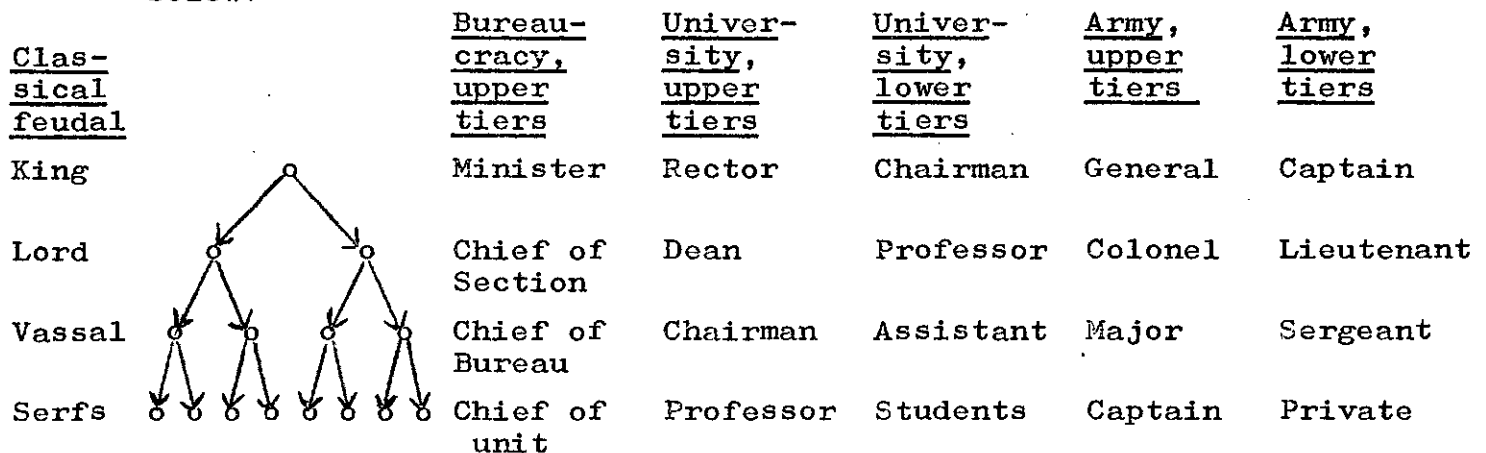
5. The feudal system: the giant amoeba

We shall now proceed further in our explorations by presenting a more complex system. Instead of only three actors distributed on two levels we introduce m actors distributed on n levels. However, for simplicity let us assume that actors at the same level have the

same interactive capacity r_n , that there is only one actor at the top level and that this is level 1. We then get:

$$m = 1 + r_1 + r_1 r_2 + r_1 r_2 r_3 + \dots + r_1 r_2 \dots r_{n-1}$$

For $r_1 = r_2 = r_{n-1} = 2$ we get $m = 2^n - 1$, which for $n=2$ gives us the three actors in the social amoeba, and for $n=4$ gives us the fifteen actors (and hence fourteen interaction links) in the giant amoeba below:



To the left is the original interpretation that carries some of the burden of definition. However, we are not so concerned with whether the system prevailing in Europe in a certain period and in other regions in other periods under the name of feudalism was feudal in this sense or not. Our definition is as follows:

A (pure) feudal system is a system of m actors divided into strata 1 to n so that

1. the interaction is from level i to level $i+1$ (from high to low only)
2. there is no horizontal interaction (vertical only)
3. there is no multilateral interaction (bilateral only)
4. there is one and only one actor at level 1 (system closed at the top) and there is more than one actor at level n (system open at the bottom)

Apart from the last condition this is just a generalization of the characteristics of the social amoeba defined in section 2, and the last condition was superfluous in that case.

Of course, this defines an ideal type system that would hardly be viable at all. Empirical cases are somewhat less absolute. The

interaction relation is highly asymmetric so that influence flows much more from high to low than vice versa and the exchange of value in general takes place on terms that favor higher strata more than lower strata. Further, there is little horizontal interaction relative to the amount of vertical interaction. And, there is little multilateral interaction relative to all the bilateral interaction there is. With these more relaxed definitions the other examples also become somewhat less unrealistic.

However, the idea is of course not that the feudal system is always the best model of systems where those statuses are involved: they may defeudalize. In most such organizations today there is the slogan of team-work and its social structure is if not a completely defeudalized system at least some deformation of the giant amoeba. Thus, typical of the type of military organization known as guerrilla is perhaps a defeudalization of the classical feudal military structure rather than clandestinity, use of certain tactics and strategies compatible with a high entropy in the territorial mixture with the enemy. Typical of industrial democracy is the effort to defeudalize the structure of the enterprise, typical of the student revolution is the corresponding effort at the university, typical of the party democracy found in New Left party groupings (and according to them not in orthodox communist parties) is the two-way communication, the direct contact between lower levels and the multilateralization, and the same is found in the search for congregation democracy in several churches. Exactly the same tendency towards defeudalization is found in institutions managing deviants. These institutions themselves were or are certainly not deviant in the sense that they were not feudal:

hospitals	managing	patients
psychiatric hospitals	managing	mentally ill patients
prisons	managing	delinquents

In other words: to what extent the complete or pure feudal system is a model of an empirical system is in itself an empirical question. But this does not only mean that feudal systems are ideal types that can serve as base-lines so that one can measure the degree of departure from it and announce it as a measure of the degree of defeudalization. We mean that the feudal system is not only present as a base-line but as a latent potential, as a primordial structure to which the system

may regress any time simply by divesting itself of some of the "unnecessary" interaction links. The complete feudal system is the shadow brother of any system, it is always there, and only very concrete mechanisms to be explored later can prevent it from coming into being.

Characteristic of the feudal system, hence, is that all interaction is vertical. We assume, of course, that there is some impulse, some initiative floating upwards in the system, so this means that the correct "Dienstpfad" is always to approach a collateral via lineal ties, via the superiors. By definition all interaction is with or via superiors or inferiors. If we now use the standard graph theory definition of distance as number of links between two actors, we get the following simple conclusions:

1. The shortest maximum distance to others is from the actor at the top level, the system center.
2. The closer to the top, the shorter the maximum distance to others, the further away from the top, the longer the maximum distance to others.
3. The longest maximum distance to others is from actors at the lowest level, the system periphery.

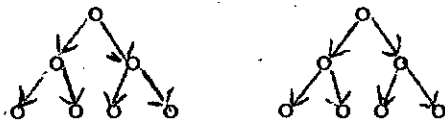
All of this is mathematically trivial, but it is not trivial in its social consequences, which we shall now try to spell out.

6. The feudal system: three canonical variations

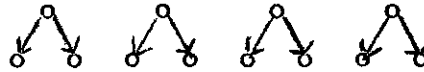
We have now presented some basic aspects of the feudal system in its pure form, and time has come to present three major variations of the system. The logic behind these variations is simple. We retain, of course, the major three characteristics of the feudal system according to the definition in the preceding section, but we relax the fourth condition(s). According to that condition the pure feudal system is closed at the top and open at the bottom. The three canonical variations present us with the other three possibilities: open at both ends, closed at both ends, and the inverse amoeba which is open at the top and closed at the bottom.

1. System also open at the top: the truncated system or the "missing topdog system". In this system one or more of the top levels is removed, leaving us with a set of unconnected feudal systems or blocs:

Removal of one level

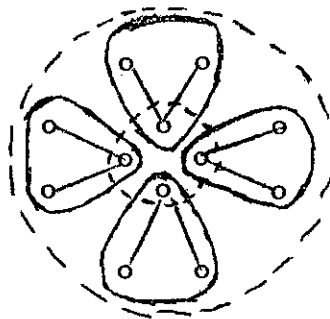


Removal of two levels



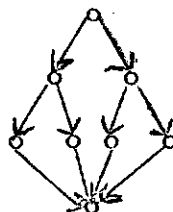
This is an important variation because we still assume the latent presence of the complete system, e.g. as an effort to unite bureaucracies, universities, armies, countries, regions etc., into world bureaucracies, universities, for instance. Again the point is that the failure to close the system has to be explained in terms of forces counteracting this closure. Thus, this is evidently a much better model of the international system today: two superpowers with some middle size powers and some small powers (although that applies better to the NATO than to the Warsaw Pact system - with England and France formerly being the middle size powers, the former with some influence in the Germanic countries - except the Federal Republic - and the latter with some influence in the Latin countries).

For the truncated system with more than two blocs another graphical representation, the daisy model, is sometimes more suggestive:



The four blocs now appear as four petals, with the topdog level as a center and the underdog level as a periphery. Most of what happens in the total system happens in the center field with the periphery as spectators receiving the outputs of various kinds from the center, without having much input to the center.

2. System also closed at the bottom: the shared underdog system. So far we have spoken as if the system always has to extend downwards because one (relative) topdog has several underdogs whereas one (relative) underdog has only one topdog. But we could change this around and introduce the shared underdog in a simple system with four levels often found in offices:



Director (male)

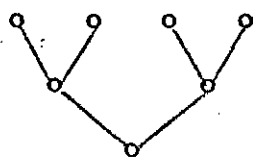
Assistants (male)

Secretaries (female)

Messenger boy (male)

If the system is closed at both ends as here it is also known as a lattice.

3. System closed at the bottom, but open at the top: the inverse feudal system. This is the top heavy system of many organizations:



Researchers

Assistants

Secretary

The system will often be unstable with a tendency to change (perhaps via the two other variations) towards the pure system, because the pure system expresses rank also in terms of centrality and interactive capacity. In the inverse feudal system topdogs even have to share underdogs, often leading to conflicts, and the bottom underdog has the most central position.

These are the three major variations of the feudal theme at this level of abstraction and complexity. Obviously, through variation of r_1 to r_n and by relaxing the assumption of constant r_i for any level i many different shapes of the feudal pyramid can be produced, but these variations are of less systematic importance. The above variations are what seems to matter theoretically.

7. Defeudalization at the top: the amoeba with a head

In section 3 the defeudalized triad was introduced, and after a discussion of the feudal triad in section 2 the logical next step now would be to introduce the defeudalized system. However, defeudalization of the total system, of the giant amoeba, is a highly complex process so we shall start with the simplest case: defeudalization at the top. Moreover, we shall show that far from defeudalizing the amoeba it actually reinforces it by giving the amoeba a head.

In 2 and 3 it was mentioned that defeudalization was associated with costs and hence expected to be overcome most easily at the top which has two advantages: the distance is minimum and the costs are maximum. The two other possibilities, that defeudalization should be evenly distributed in the system and that it should be overrepresented at the bottom are certainly not impossible but much less probable - and in those cases (to be discussed in section 10 below) the feudal system would really be challenged. Here we shall only discuss the case where two-way vertical interaction and/or horizontal interaction and/or multilateral interaction are entering the system at the top.

To see better what this means let us discuss it in terms of the

six illustrations mentioned in the beginning of section 5:

The King has multilateral meetings with the Lords, called a Royal Court,

The Minister has multilateral meetings with his Chiefs, called a Morning Meeting,

The Rector has multilateral meetings with his Deans, called an Academic Senate,

The Chairman has multilateral meetings with his Professors, called an Institute Meeting,

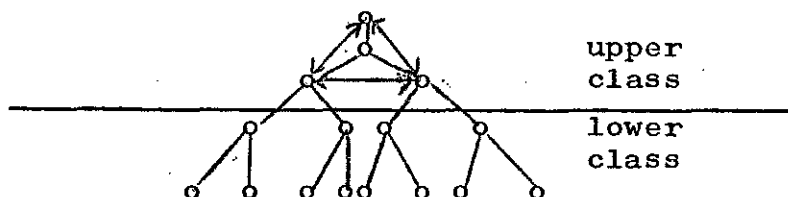
The General has multilateral meetings with his Colonels, called a GHQ Staff,

The Captain has multilateral meetings with his Lieutenants, called a Company Staff.

Of course, others may also have meetings but we are now as always counting only the institutionalized meetings. What we find is simply that there are such meetings and they are above all at the top.

Far from weakening the feudal system it is one of our basic contentions that defeudalization at the top strengthens the system tremendously. Instead of the loneliness of the supreme topdog, isolated by power and by distance to the bottom (although he has the lowest maximum distance of any actor, he has the highest distance to the bottom layer) there is now a collegium of topdogs at the top benefiting from all the liberation of creative energy that is to be expected as a result of defeudalization.

Expressed differently: the supreme topdog decreases his structural power over his immediate underlings, but in return for this the total topdog group increases their structural power over the rest:



The system is much more able to handle underdog resentment and revolt for all the good reason commonly advanced in favor of defeudalization. But the most dramatic demonstration of this is not of the types we have mentioned or of their counterparts in the international system (big power concerts like Security Council was intended to be or executive committees inside alliances a la de Gaulle), but in modern mass

societies.

This pattern is the paradigm of societies with structural democracy on top and structural feudalism on bottom: a democracy of whites exploiting scattered blacks, a democracy of rich, educated etc. exploiting scattered poor, uneducated etc., not to mention the urban sector exploiting the rural sector. The latter example is important for the basic rationale behind urbanization is precisely to cut down the costs of interaction, which means that defeudalization is much more easily obtained in cities than in the countryside, by and large. (There may be class obstacles to overcome with social distance far more costly than spatial distances.)

Hence, as a preliminary conclusion let us state that one of the best ways of preserving a feudal structure is to defeudalize it at the top. The borderline between top and bottom is then often decided by some simple criteria such as race, age, sex, ecology, education, occupation and so on. Depending on the proportion available in the system of these categories defeudalization may be extended to a very small minority at the top only, controlling the rest (as when 4% whites in Rhodesia control 96% Africans), or it may extend downwards in the system leaving only a small feudalized fringe at the bottom to be exploited by the rest. This also applies to the level of organizations where academic or professional staff are often defeudalized leaving the service personnel scattered and unintegrated.

8. The feudal system as the instrument of structural violence

We have so far described the feudal system in positive terms: it is the system that hangs together at minimum interaction cost. At the same time it is congruent with experiences from early socialization, and it is possibly a projection of a deep structure, although this is a highly pessimistic outlook that we would prefer not to accept.

We shall now go more into detail with the consequences of this structure, and we shall focus on the highly negative consequences. However, doing so it is easy to lose sight of the obvious positive consequences. The feudal system is not merely a mechanism of manipulation of the bottom levels. It is also productive: it produces value, outputs that may serve as inputs to other systems - such as decisions,

knowledge, primary, secondary and tertiary products of production processes, and so on. To produce these values time is needed, and since time is scarce and production as well as interaction take time, time used in interaction is often seen as time taken away from production. This is seen very clearly in enterprises where the directors insist that industrial democracy type meetings should take place during lunch-breaks and not encroach on time allocated to production proper. In this specific sense the feudal system is a system that maximizes efficiency; a highly defeudalized system one that has opted for talk in favor of work.

However, the obvious objection to this type of analysis is that it portrays the relation between production and interaction as constant-sum: time given to one has to be taken from the other. There is no room for the idea that the relation may be of the increasing-sum kind: more interaction may release creative and productive forces, with increased motivation as intervening variable. And there is the concomitant idea of the decreasing-sum relation, more evident to those at the top: defeudalization may lead to less motivation, to an accumulation of expectations and grievances that in turn lead to even more decreases in production than can be explained in terms of time taken away in order to interact.

But it is no mere coincidence that systems that are called upon to produce outputs extremely quickly, e.g. a military organization in a battle, has a tendency to crystallize into amoeba-like structures. There is no time available for interaction over and above the minimum needed to connect the system. And even defeudalized systems have a tendency to revert to this form under stress, in conflict, in times of crisis, when maximum attention should be given to produce outputs that are both quick and correct. "When we need it most, we abolish democracy" - and there are many reasons for that. Some of these reasons are best seen by exploring the highly negative consequences in some detail. And in so doing we shall not merely produce a list of all the ills of the world and try to blame it on the amoeba, but try to deduce them systematically from the amoeba.

8.1. The family model

We would like to start by exploiting once more the parallel with the family. In any feudal system as we have depicted it there is a direct relation linking a topdog to some underdogs (we disregard the

canonical variations). One very important point which is implicit in the whole feudal interaction structure should now be highlighted: there is not only absence of horizontal interaction (except on top), but also of diagonal interaction. There is no link between a topdog and the underdogs linked to some other topdog. Hence the underdogs of a given topdog in a pure feudal system become his underdogs, not only because he relates to all of them, but also for the negative reason that no other topdog does.

This means that the basis is laid for a relation of ownership. The pater familias, or any father for that matter, talks about "my children", the minister of "my chiefs of section", the King of "my Lords", the superpower of "my allies", the rector of "my deans", the general of "my staff" and so on and so forth. Basic here is, of course, the family relation as a model. The topdog becomes a father figure, and there is hardly any structure of this type where comparisons are not made with the family structure, for good or for bad - depending on what experiences the person talking this language had with either type of family system. The isomorphism is glaringly evident and fundamental since it is tied not only to socialization but to the phase of the first imprinting onto the human mind (whether that mind is pre-programmed or not).

Within this setting, if the feudal pattern is retained with little horizontal interaction and little multilateral interaction particularism will develop. By this we mean that the topdog will have different patterns of interaction with different underdogs, for there will be no medium (horizontal interaction, multilateral interaction) in which comparisons can be carried out with standardizing consequences. Of course, the topdog sitting at the apex of the system can make such comparisons himself and he may prefer to play the interaction game in a universalist manner, but he is not forced to do so. This gives him a particular lever for the exercise of power: the underdogs all perceive themselves as having special (particular) relations to the topdog and hence will have less incentive to develop relations among themselves.

In the old artisan model of production the relation between master and journeyman, and indeed between master and apprentice, was like this. But the pattern was not only familistic, it was even put inside the family. The journeymen lived with the master as his child-

ren and did not marry before they became masters themselves. Then and only then were they fully adult in the sense of being at the top of some little amoeba, and could establish their own family amoeba in addition.

8.2. The power aspect

Keeping this familistic pattern as a background, the first thing that comes to one's mind looking at the feudal system, and we are now almost always thinking of the version that is defeudalized at the top, is the old adage divide et impera. Let us spell out the precise mechanisms in much more detail:

Table 2. The distribution of some basic power ingredients in the feudal structure

<u>Power ingredient</u>	<u>At the topdog level</u>	<u>At the underdog level</u>
1. Organization for concerted action	easy because of low distance and resources, defeudalization most likely at the top	difficult because of high distance and limited resources, defeudalization least likely at the bottom
2. Decision-making for the system	for structural reasons very easy at the top	for structural reasons impossible at the bottom
3. Flow of information and ideology	originates at the top and flows downward or impinges on the top & is passed on. Almost no information received from below. Topdogs originate and pass on their own ideology and information compatible with it.	since information flows downhill underdogs receive images that originate in or passed on by topdogs (two-step flow of communication). Underdogs internalize topdog ideology; the ruling ideology becomes the ideology of the ruling class.
4. Flow of communication	via other topdogs, hence intra-class	via topdogs, hence inter-class with implications for control
5. Images of participants at the same level	"Pluralistic knowledge"; they communicate and know where they stand so that they know whether they have minority or majority views and act accordingly.	"Pluralistic ignorance"; for lack of communication they may all have the same attitude (e.g. revolutionary) and yet feel completely isolated and lonely and hence impeded from acting.

<u>Power ingredient</u>	<u>At the topdog level</u>	<u>At the underdog level</u>
6. Images of the total feudal system	complete images as seen from the top; how the system functions is obvious	distorted, fragmented images as seen from the bottom; how the system functions is a mystery
7. Internalization of the goals of the system	Maximum: it is <u>their</u> system. Little need for efforts to convert and proselytize, remuneration often unnecessary and coercion completely unnecessary	Minimum: it is <u>not</u> their system. High need for ideological motivation, for remuneration and/or for coercive measures to make underdogs contribute to the system

In short, almost everything is tilted in favor of the topdog level. They can organize and coordinate, they control decision-making, information (both of the one-step and the two-step, originating outside the system, variety) and they can develop clear, realistic images of participants, of the system as well as of the goals of the system. The underdogs are underprivileged by the very structure where all these things are concerned. If one adds to this structural or positional component the resource component as well as the idiosyncratic personality component (of the individual or the nation actor) mentioned in section 3 above, the topdog power becomes so overwhelming that there is little wonder that very small minorities throughout human history have been able to control vast majorities. The vulgar, amateurish way of doing this is by means of resource power alone, particularly of the variety that comes out of the barrel of a gun. The professional, like the British imperialists whom many other imperialists try to imitate, uses structural power.

8.3. The exploitation aspect

We have now to some extent discussed the feudal system as an instrument of power, of control from above, and now turn to a concretization of how that power may be used. This leads us to the highly related aspect of exploitation, and we shall distinguish between three directions of precisation:

- Exploitation₁: interaction as exchange of value is asymmetric, on unequal terms, so that higher levels are able to extract a surplus from lower levels.
- Exploitation₂: higher levels decide alone over the application of surplus extracted from lower levels (e.g. for investment or luxury consumption)
- Exploitation₃: higher levels benefit from differential levels of living relative to the lower levels, and the latter may even be below subsistence standard.

We shall refer to these interpretations as the interaction, marxist and liberal interpretations respectively. Very often the three are combined: interaction is set up in such a way that surplus is extracted, the topdog levels then decide over the surplus and decide to spend it in such a way that the differentials between high and low increase or at least do not decrease.

But there is also a certain lee-way in the system. One can have exploitation in the marxist sense without exploitation in the liberal sense: the upper classes may decide alone, as a concession, to use the surplus to equalize completely life chances. This is often referred to a paternalism; much of what happens under the name of "technical assistance" is of this kind, and is generally rejected today. And one may have exploitation in the liberal sense without exploitation in the marxist sense: decision-power may be completely equalized or put in the hands of the underdogs for that matter, and the decision may be to maintain differences or introduce some new kind of difference. However, in either case the underlying condition is exploitation which then may involve both, either or neither of the other two types of exploitation.

The basic point is now that "work" or rather "production" as the more general terms since there are so many types of output, tends to be vertically organized. It tends to follow the rules of the feudal system, of the giant amoeba, usually equipped with a head. In other words, work and production are organized vertically with interaction between high and low being much more important than direct interaction at the same level because of the feudal structure; it is not the feudal structure that emerges because of any intrinsic properties of work or production as such. Along the assembly line the foremen interact with the workers directly, but the latter interact with each other only indirectly, by way of the products - and correspondingly in a

bureaucracy.

But from the vertical nature of work organization anything follows about exploitation. In general, it is far from easy to operationalize "exploitation" using the more fundamental of the three definitions above, the one based on the concept of asymmetric interaction (the other two are easily operationalized analyzing patterns of power over certain decisions and distributions of indicators of levels of living). The general difficulty is that it is not quite obvious what one shall compare, nor quite obvious how it can be compared. For this purpose the image we have used of interaction

$$A \rightleftharpoons B$$

is not the best one. Much better is

$$A \begin{array}{c} \xrightarrow{A \text{ in}} \\ \xleftarrow{A \text{ out}} \end{array} \textcircled{I} \begin{array}{c} \xleftarrow{B \text{ in}} \\ \xrightarrow{B \text{ out}} \end{array} B$$

because both parties obviously have both inputs and outputs relative to the interaction. Thus, if I is multilateral and A and B governments then the inputs may be the dues and the ideas and the manpower put in by nations, and the outputs may be the services. If I is bilateral and A and B are persons, then the inputs may be messages sent and the outputs may be messages received, and so on.

We can now make the following definitions or precisations of "exploitation₁", assuming that A is the topdog in the relation:

1. Input exploitation: $A_{in} > B_{in}$
2. Output exploitation: $A_{out} > B_{out}$
3. Profit exploitation: $A_{out} - A_{in} > B_{out} - B_{in}$

In the first case A puts much more into the interaction (like the nation contributing most to an IGO) and that nation itself and/or its environment converts this fact into exploitation₂, the power to decide over the sum of all outputs. In the second case A gets much more out of it than B does, and in the third case this is seen relative to what he has put in. In all three cases there is the problem of whether one should measure the four in absolute terms or in terms of what they "mean to the actor", e.g. in proportion of total trade, relative to total value disposed over by the actor, or

according to subjective utility. In the latter case it might become rather difficult to develop invariants on which a definition of exploitation is based. Exploitation should be conceived of as a structural, objective concept independent of the state of consciousness of the actors, not based on volatile sentiments.

We would in general prefer precization no. 3 as it stands without any relativization. If the two terms on either side are divided by some value the denominator on the left is likely to be higher than on the right, which means that the inequality may disappear or even turn around. One thousand dollars is much less relative to one million dollars than one hundred dollars is relative to one thousand dollars, or relative to one hundred dollars, or relative to nothing for that matter. The assumption behind this type of relativization is usually that "although the poor make less what they earn means so much more to them because they are so poor". Although this piece of arithmetic may make complete sense translated into the psychology of utility functions (more complex functions would be needed, though) this is simply a way of building exploitation₃ into a model trying to define exploitation₁, with obvious consequences in masking the whole relation.

But we are still left with the problem of how to carry out these comparisons even if we decide what to compare. Let us look at some special cases as a basis for discussion.

Thus, imagine B is a slave who is flogged and otherwise coerced into production. In that case B_{out} is negative so that the relation is exploitative even if the slave-owner only breaks even, and if the profit is handsome as it so often was in that case, the exploitation was likewise. To this the slave-owner would retort that A_{in} was considerable: the expenses of housing, clothing, feeding, providing minimum security (from anybody but the slave-owner) were high. But profit is profit, it means that the sales value of the production exceeded these investments. B could be willing to enter them positively on his side, yet rank them low relative to the negative utility of the terrible treatment he was exposed to so that B_{out} would still be negative.

Next, imagine B as a volunteer working overtime for the company. The output to B is not negative but not positive either; the power is

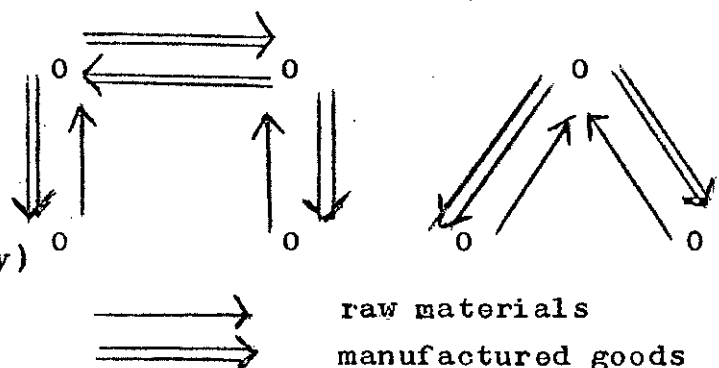
not coercive but normative. His input may be considerable, and the company-owner will still cash in a very handsome profit, even more than the slave-owner because of the costs in terms of money, time and energy in maintaining a coercive machinery. But A will answer, and probably B likewise, that although the non-monetary rewards B received cost little to A (a citation, a diploma, a pat on the back) they meant very much to B and came on top of the internalized rewards, the feeling of doing the right thing, the good thing. It is not easy to reject this argument completely, but what still remains are, of course, exploitation of types 2 and 3.

Next, imagine that B is a wage worker. In this case B_{out} is his salary, B_{in} the work he puts in, A_{out} is the income to the capitalist and A_{in} is his investment so that the difference between the latter two is equal to his profits. It is not always quite clear whether the comparison is with one worker or with all workers, but let us imagine that we compare owners of the means of production per capita, and users of the means of production per capita. If we now keep the A side constant but increase B_{out} (higher wages) and/or decrease B_{in} (number of working hours) it seems to us that the sign of equality would sooner or later have to turn around. However, it seems that according to some interpretations of marxist theory this will 1. never happen empirically (which may well be true), 2. even if it happened there is still extraction of surplus (because it is a more subtle concept) and 3. the power to decide over the surplus would, at any rate, rest with A - which brings us to exploitation₂. But we prefer a definition that makes it possible for the sign to turn around, otherwise the conclusion that "the capitalists exploit the workers" seems rather tautological.

Next, let us consider the standard image of world trade, much like the image of the family presented in section 2:

High productivity countries;
developed countries;
secondary and tertiary
sectors well developed

Low productivity countries;
developing countries;
secondary sector (and tertiary)
badly developed



This is a feudal structure, and if we now make a distinction between the two kinds of trade (with raw materials, and with manufactured goods) and between the five kinds of relations (high to high, high to low, low to high, low to low and diagonal) we get the following chart with some of the traditional reasons why this system is an amoeba:

Type of relation	Trade with raw materials	Trade with manufactured goods
High to high	-they have none or little	+ supply and demand
High to Low	-they have none or little	+ supply and demand
Low to High	+ supply and demand	- they cannot compete
Low to Low	-when distance is low the raw materials are often of the same kind, when they are different the price of transport may be too high	-they cannot compete, they cannot balance this trade in raw materials, there are doctrines of national self-sufficiency, difficulties in agreeing on division of labor
Diagonal	-one general reason: the world is divided by the colonialist pattern into a set of vertical trade blocs with the former or present colonial power trading with "her" countries.	

However, this is an explanation of why the system is feudal, not an exploration of whether the interaction relation we are particularly interested in, from high to low, is exploitative. The countries are trading manufactured goods for raw materials, or rather, they are trading either for money since there has to be some yardstick of relative value involved. Hence,

A_{out} : what A gets of raw materials B_{out} : what B gets of goods

A_{in} : what A pays for it B_{in} : what B pays for it

The relation is obviously exploitative if one can meaningfully say that "A buys raw materials cheaply and re-exports them in a processed form at a high price". Let us for a moment say that this is a meaningful statement.

In that case it seems to us that if the prices of manufactured goods were lowered and the prices of raw materials made higher, then the inequality sign would sooner or later have to turn around. Again we are in the same type of debate: some would not accept this. And then there is the problem of the comparison: where is that absolute yardstick according to which one can say that the raw materials are bought at a "low" price, the manufactured goods at a "high" price? If one man-hour of work is the basic unit, then the differences in productivity lead to different prices - or is it rather that the different prices define differences in productivity? We leave this to the economists of various persuasions to discuss, but reserve here as in the preceding example the right to imagine conditions under which the sign would turn around.

As a next example, in a sense too well known to be mentioned in much detail: this economic structure is repeated inside nations whether they are developed or developing. The metropolis extracts from the satellites; the capital from the provincial capitals, the provincial capitals from the towns, the towns from the villages, the village merchants from the farmers, the farmers from the farm hands or tenants, the tenants from their children and their women and that is where the chain ends unless one brings in animals etc. The losers are the women and the young (and the very old) in the countryside. The communication structure inside nations reflects this with a system of radial rather than peripheral roads, and this is often reinforced by means of natural impediments. Major towns are located where valleys and rivers coalesce; roads across the mountains are poor or non-existing, and so on.

But this combination of the internal and external amoebas, the doubly giant amoebas extracting from the periphery of the world and bringing it to the center, or from the satellites to the metropolis if one prefers those terms, does not only work so as to transport economic value upwards. It has the same function for skills: he who distinguishes himself at a lower level is discovered and transported to a higher level. This is called promotion when it takes place at the initiative of the higher levels within a well-defined, regular network - e.g., a governmental bureaucracy, a trade union with regional, national and international headquarters, or a commercial firm (e.g., a multinational corporation) with branches. It is called brain-drain

when the underdog himself takes the initiative: higher talent seeks higher levels in the amoeba. According to this intermediate levels should receive from below and yield to above, as does Britain receiving scientists from Indian and other Commonwealth countries, sending British scientists to the USA. The theory predicts very little horizontal mobility, and practically speaking no vertical mobility downwards. The type of inverse brain drain, or the "brain filling" at lower levels takes place under the following three conditions: an ideology of volunteerism (peace corps as it was intended), extra remuneration (UN salaries or salaries often offered to entice people to underprivileged regions) or coercion (education offered only on the condition of a pledge to serve a number of years in such areas).

In the case of brain drain the lower levels invest in training and lose the investment, the higher levels have paid nothing and reap the harvest of the investment at lower levels, and this is, of course, the exploitative relation. However, the transaction is not necessarily completed as simply as this. First, the middle levels, exploited from above can exploit downwards and by domino tactics transfer the exploitation to the very lowest levels, who are also the most defenseless. Second, it depends much on what the brain drained or promoted person does at his higher level. He may retain his lower level identification and behave as their envoy. He may send salaries home, he may send knowledge home (even as a spy, complicating the exploitation equation further) and so on. However, very often he is just out for his own gains, acting on behalf of nothing more than himself and his own (nuclear) family - and in that case there is little gain for the lower levels, only loss.

This is perhaps seen particularly clearly in the relations between students, assistants and professors. The assistant conducts a seminar over his own research and the students contribute a number of ideas. The assistant notes them down and uses them, without any compensation in the form of, e.g., written acknowledgment. This is then repeated by the professor when he organizes a seminar for his assistants (or graduate students), and the same thing happens to him when he goes to a conference as a low-status person. The basic rules of the feudal quotation matrix (the "who quotes whom" matrix) are three: never quote downwards, rarely quote horizontally, do quote vertically upwards - particularly if you can add "in a private communication".

In this way the world academic amoeba, which is a combination of the external world amoeba and the internal national amoeba, serves as a mechanism to transport ideas upwards. On the other hand, the high status professor, the low-status professor and the assistant might also add that although they stole some idea they gave a lot in return: their time, their advice, their ideas that exceeded what they got in return both in quality and in quantity. To this the lower levels may answer that they were paid for doing so, and so on.

We let that do as a list of examples. The question is: who is right? Are the underdogs always exploited in the sense that they are by definition exposed to asymmetric interaction, or are they sometimes not? Can the sign turn around?

Our provisional answer is as follows. We think we know what to compare to answer this question, but not quite how to compare it. There is a simple reason for this: since interaction is vertical the two parties, A and B are exchanging value of different kinds. They both have something the other does not have; if they had had exactly the same (compare the international trade example) they would have been at the same level. Even in the academic setting the professor in a seminar with his assistants often exchanges what he has of intra-paradigm ideas for what the assistants may have of extra-paradigmatic ideas (whether that is because they have another paradigm in mind or because they are not well enough trained in any paradigm). Hence it will probably never be possible to arrive at any definite answer within a given context of vertical interaction.

But two things are nevertheless possible and highly meaningful:

1. one may talk about changes in the level of exploitation towards conditions favoring the topdog more, or favoring the underdog more
2. one may talk about the forces opposing these changes, and particularly about forces opposing changes favoring the underdog.

And this is where the feudal system enters. Although the top may decide to engage in less asymmetric interaction and to equalize life chances (exploitation in the first and the third sense) the very structure gives them power to decide. They may decide to keep the exchange rates in the interaction system constant, or to change them, but the point is that as long as the system prevails it is in their power to

decide. Hence the feudal system becomes an instrument for exploitation in all three senses. It is neither a necessary, nor a sufficient condition but experience seems to show that the more feudal it is the more easily is the system used for exploitation of all three kinds.

That makes the feudal system a supreme instrument of structural violence; it is to structural violence what the nuclear bomb is to open violence. And just like the nuclear bomb it has its defenders. The holders of top positions are understandably interested in perpetuation of status quo, become conservatives, and will tend to rationalize their attitude by exaggerating the value of the values that flow downward in the system - such as "law and order". The lower levels have similar interest in changing the system, they become radicals and will tend to belittle the value flowing down and exaggerate the value flowing up or being extracted from bottom to top. There is also the liberal who does not challenge the feudal structure the amoeba, but wants to equalize life chances for all positions. To him the system has no structure, it is a set of detached individuals and he wants all of them to have the same values on indicators of life chances.

9. Defeudalization and refeudalization: four basic types

As a counterpoint to the preceding section let us now proceed by developing further a theory of defeudalization. The start was made with "defeudalization at the top", but it was seen as a mechanism to preserve rather than to abolish the feudal structure. In this type defeudalization and refeudalization coincide.

Total defeudalization would mean the establishment of

1. two-way vertical interaction between actors at different level
2. horizontal interaction between actors at the same level
3. multilateral interaction for any triple, .. n-tuple

This means that we can also develop a very simple index of the degree of defeudalization, based on the ideas developed in section 2 about the maximum and minimum number of interaction relations:

$$\text{Def} \quad \frac{I - I_{\min}}{I_{\max} - I_{\min}}$$

In other words, the excess of the present level of saturation over the minimum level, relative to the maximum excess. When the system is feudal we have Def 0, when it is completely defeudalized we have Def 1. However, this is not a very sensitive index since it presupposes that all interaction count equally, so it should more be seen as an illustration of a way of thinking.

We have said repeatedly that defeudalization can be seen as a problem of overcoming costs, and hence dependent on

1. the price, which varies with the distance to be overcome
2. the resources, which vary with the rank of the actor involved, and consequently with the total rank of the set of actors involved.

Hence, we can formulate this theorem:

The lower the distance between the actors, and the higher their total rank, the more probable is

two-way vertical interaction between actors at different levels
horizontal interaction between actors at the same level
multilateral interaction for any triple, . . n-tuple

The "defeudalization at the top" in the preceding section is one immediate consequence of this theorem since the distance is minimum and the total rank of the actors interacting is maximum. This also indicates clearly the two hopes lower ranks may have if they for some reason want to avoid this top defeudalization which they, rightly or wrongly, interpret as a collusion against them: that the distance may be insurmountable (e.g. because of hatred, conflict etc. at the top, i.e. because of an institutionalization of the truncated pattern), or that the resources may be insufficient (e.g., because of internal difficulties of a political or economic nature). In these patterns we see such well-known phenomena as the poor nations exploitation of the cold war between the blocs of rich nations, called East and West, and the upsurge of lower level defeudalization when the top is in difficulties and cannot devote enough resources to control the system.

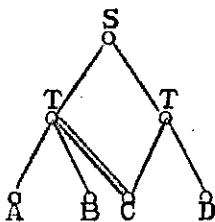
In general we do not know which factor is more important, distance or resources; to know that more information is needed about the particular system. But our assumption is that considerable impediments are needed to prevent defeudalization at the top. At the bottom these

impediments are already built into the system. Since horizontal interaction in the pure feudal system is via topdogs complete bottom level multilateralization means that one has to work against maximum distance with minimum resources - unless, as we shall see, this lack of resources for every single underdog actor can be compensated for by the number of underdogs contributing. Hence relative number becomes an extremely important factor, to be considered more systematically later.

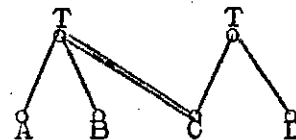
All this does not mean that defeudalization at the bottom is impossible. But it does mean that complete defeudalization can only be carried out by means of increased resources, and if resources are kept constant one will have to renounce on the distance. In other words, one may have to limit oneself to the defeudalization involving other underdogs sharing the same immediate topdog, with or without that topdog. What will happen in the concrete case cannot be predicted from this general theory, specific knowledge is needed.

It should be noted that the basic theorem also takes into account, implicitly, the important possibility of diagonal interaction. So far we have concentrated on vertical interaction with the immediate underdog and horizontal interaction among them. But what about interaction with the "mediate" underdog? For instance:

Complete system



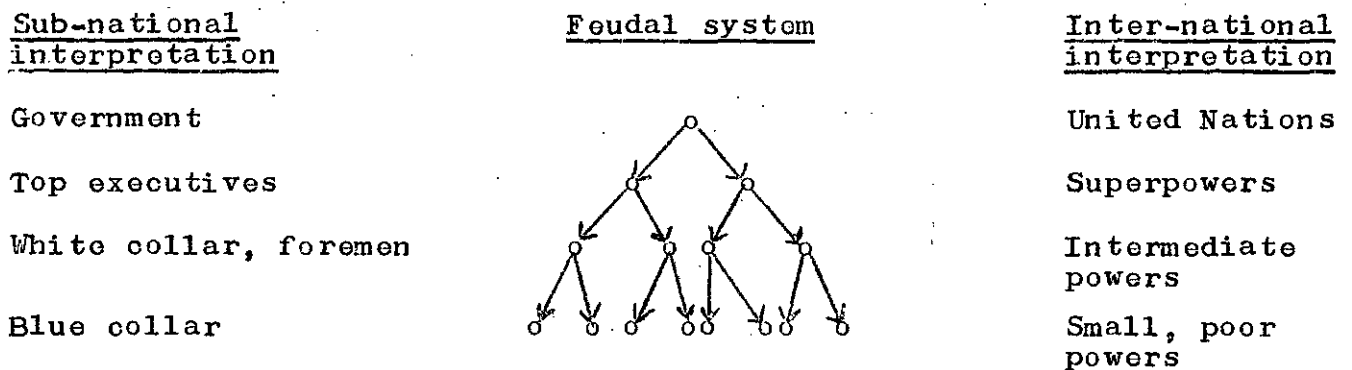
Truncated system



The critical diagonal interaction is shown as a double line. In the first case the distance is 3, which would place it somewhere between the distance from A to B and the distance from A to C or D (2 and 4 respectively). However, the topdog has more resources (even if he is not a supedog, S) and this may or may not make this diagonal interaction more likely than the AB interaction, depending on whether the system is structured mainly according to distance or mainly according to costs. At any rate the TA interaction would be even more easy: the distance is only 1, and the same resources are involved.

Let us then look at the second case. As it is depicted the distance from T to C is infinite (the graph is unconnected) which means that the link would be impossible. However, this only obtains for perfect bloc formation with the world really divided into two spheres of interest with water-tight walls between them (these walls were in the old days of a spatial nature, geographical distance and/or impediments; today they will have to be normative and/or based on a balance of terror with promises of high punishment for any attempt to transgress). But this is an unrealistically extreme case. In practice the distance can somehow be overcome as the Soviet contact in Cuba and the US contact with Rumania show (the former even coincided with detachment from a bloc). In other words, if instead of working with these dichotomous graphs (a link either exists or does not) we had worked with graded graphs (e.g. indicating the strength of a link from 0 to 1, or even from -1 to 1 to include negative relations where negative values are interchanged) we could arrive at more multi-faceted conclusions. But there are difficult technical problems to be solved before such graphs can serve as good models of social relations.

Let us now return to the case of the complete system again, with two concrete interpretations, one of them sub-national and one of them inter-national:



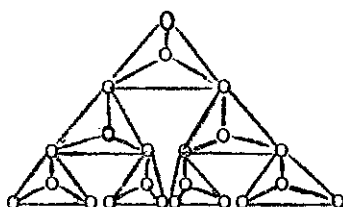
As mentioned before this is not necessarily a model of any empirical system but of the latent feudal structure accompanying empirical systems as a potentiality. The important thing now is to spell out the forms defeudalization can take. By this is not meant defeudalization at the top, known as collusion between government and top executives in the subnational case and a UN dominated by superpower cooperation in the latter. It is interesting to note here that whereas this type of defeudalization at the top evidently has taken place in many nations in the way indicated it has not yet really taken place in the UN, partly because of the long horizontal distance from one superpower

to the other (the cold war) and partly because the link via the UN is weak, which in turn to a large extent is due to superpower concern for their own blocs and for direct relations. Hence the international system offers more possibilities of egalitarian, i.e. real, defeudalization because the top is not successfully defeudalized.

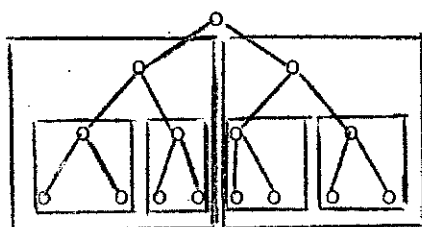
We now turn to the four basic types of defeudalization given in the figure below. Only the last one implies complete defeudalization. In the first one each triangle is defeudalized, the the middle two defeudalization is within vertical and horizontal blocs respectively.

Patterns of defeudalization of a feudal structure

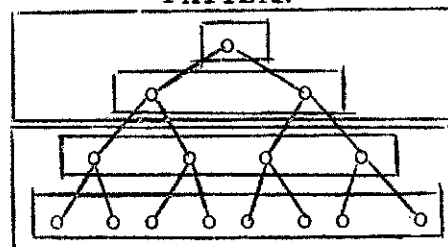
LOCAL PATTERN



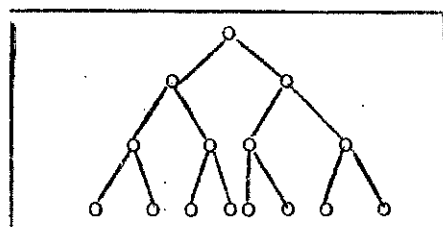
LINEAL OR VERTICAL PATTERN



COLLATERAL OR HORIZONTAL PATTERN



UNIVERSAL PATTERN



The local pattern involves relatively low costs: each topdog joins "his" underdogs in a defeudalized triangle (as mentioned several times we limit ourselves to bifurcation in our diagrams since it leads to triads and hence only to one type of multilateral interaction, tri-lateral interaction. Generalization over and above this is easy, but presentation in the form of diagrams becomes very unsurveyable). In this pattern actors at intermediate levels participate as topdogs in one context and as underdogs at the level above. Hence this can be seen as one model of defeudalizing bureaucracies: students meet, elect a representative who meets at the institute executive level, where one represen-

tative is elected to the top level of the faculty or university; and correspondingly for ministries, etc. In our two examples it would correspond to a pattern of defeudalization at the working section level, with one representative which we here assume to be the foreman participating at a similar meeting at the enterprise level, and finally there is a setting permitting a meeting between the top executives and the government. And in the international case we have to think in terms of UN-Big Power cooperation, with executive councils within both blocs and intermediate powers managing what is then often called a "subregion".

This sounds like a relatively appropriate model of subnational systems but not so much of international systems. If we turn to the lineal or vertical pattern, however, we get a model which is less appropriate for but quite good for some aspects of the international system. Defeudalization now takes in much more of the giant amoeba, but in a vertical pattern. The international interpretation is, of course, the bloc system, and the subnational interpretation is, e.g., the Moral Rearmament approach to industrial relations: class conciliation in large multilateral, cross-class settings. We have also included the possibility of sub-bloc defeudalization and this gives us a model of Japanese trade unionism in some stages of development: there is the local shop involving also the intermediate level of foremen and white collars, possibly split according to branches of the enterprise, and there is the general defeudalization presented by the level of the enterprise as a whole. In the international system the latter would be more important, in the subnational interpretation the former.

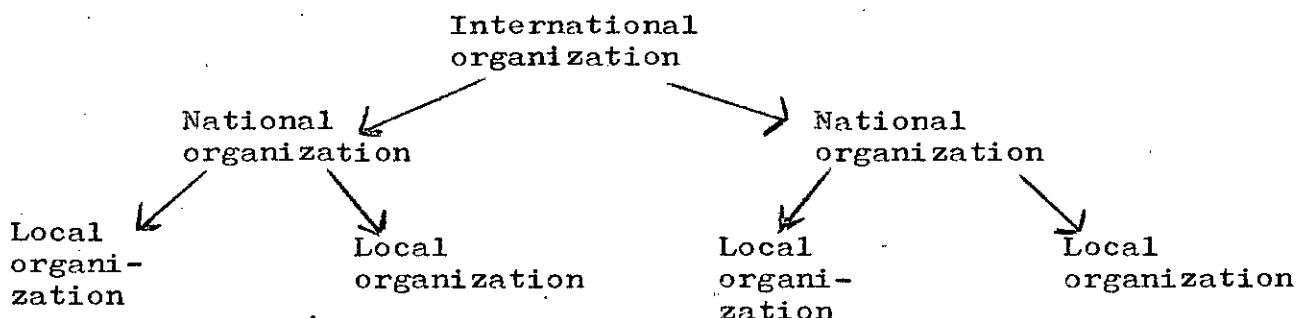
We then turn to the collateral or horizontal pattern, which then fits much better as a description of subnational than of international phenomena. The trade unions are now no longer the vertical company unions but the horizontal, nation-wide trade unions involving all workers in the same field regardless of where they work - as opposed to the type of union involving all workers in the same company regardless of their specialization. This type of organization can then be replicated in an employers' union ("blue"), in a white collar union ("yellow") and so on; there are all kinds of possibilities depending on how many contiguous levels one would like to involve.

In the international system some weak horizontal organizations exist: the Bandoeng-Beograd conferences of non-aligned nations, the Alger group of 77 within the UNCTAD system, the Tricontinental, etc.

But they are weak and meet ad hoc, for reasons to be discussed below. Much stronger is some of the partial defeudalization at the top, for instance between the Western top powers, and particularly between former Western European colonial powers in the form of the Common market (only that Britain did not seem quite to understand that this was the great opportunity to maintain a pattern of dominance when the Rome Treaty was signed in 1957, that Western Germany is a colonial power that lost her status already after the first world war, and that Luxembourg was somehow too small to engage successfully in that game - except via Belgium).

Finally, there is the universal pattern, involving all actors, in principle with complete opportunity to defeudalize fully. The UN and UNCTAD are cases in mind, company mass meetings and the nation-state likewise, but all these examples immediately bring to our mind that even if structural position is equalized, at least as a potential, rank still remains and with that the unequal distribution of resources.

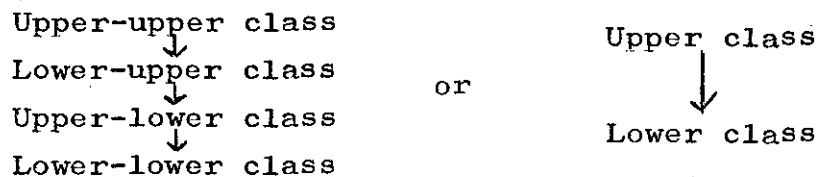
Hence, it is meaningless to discuss these patterns of defeudalization without also mentioning the possibility of refeudalization. Let us recall what defeudalization means: all actors have the same structural position; the structure is symmetric which means that if they changed positions in the structure the result would be the same. But In the local defeudalization type what is gained locally is lost at the macro-level: the topdog participates at a higher level and controls information in and out of "his" micro-system. This is the system of cumulative representation upwards, known from all democratic organizations with local cells, district organizations and national organization, not to mention international level) and what happens is simply that the amoeba reconstitutes itself with these units as actors:



In the vertical defeudalization type the amoeba is actually still present, but in a more Chinese box fashion. The superdog manages two blocs, and when one opens each bloc one finds a topdog managing two

blocs, and so on. Within each bloc there is defeudalization, but with hierarchy of blocs the amoeba is still there, only in a more complex, hierarchical form. Moreover, even if structural position is equalized resources are not so the topdog can always get an edge and smuggle in the amoeba by the back door.

In the horizontal defeudalization type there is equalization of costs within each defeudalized unit since it takes place only for actors at the same level, by definition. On the other hand, at the macro level, involving the whole system, there is still a class difference and the refeudalization may actually take this form:



But there is of course the possibility that there may be interaction both ways due to lower class trade union formation, in which case the class system is defeudalized. However, there is still the problem of who shall be the spokesman and the possibility of refeudalization within the former horizontal groups on that basis.

In the universal defeudalization type one is trying to do everything and may end up doing nothing. First, the number of actors may be prohibitive of real defeudalization, a topic to be explored in some detail in the next section. Second, there is the rank difference with all that implies. In short, the probability of refeudalization seems high, and exactly for the reasons already discussed: limited resources available for the interaction needed to saturate the system completely, this means that some interaction is cut out, and the result is some variation of the feudal system unless defeudalization is protected by strong, institutionalized forces.

Hence, we should rather refer to these four types as approaches to defeudalization than as types of defeudalization. But to see more clearly in what sense they are approaches we need more insight into the dynamism of the giant amoeba.

10. The erosion of feudal systems: three dynamic factors

In this section we shall take a more modest view and talk about erosion of the feudal system rather than about defeudalization. Since

erosion here means putting in more interaction and since interaction depends on costs we have two obvious dynamic factors derived from the beginning of the preceding section:

1. changes in the price to be paid to overcome distance,
2. changes in the relative resources available to the various ranks,
3. changes in the number of actors with whom to interact.

The last point was hinted at in the preceding section and is here brought in for full. It is actually a sub-point under point 1, for with more actors the total distance will increase.

To discuss this we shall see that we are brought to consideration of the factor Marx saw as central in the history of mankind: the possible contradiction between means and modes of production. Far from denying the importance of this factor we shall add to it another factor that we deem to be of at least equal significance: the possible contradiction between means and modes of communication. Actually, we feel that if Marx had witnessed the communication revolution he would have become not only the most insightful commentator on the industrial revolution. He would have added to Das Kapital something about communication - particularly since the steam engine was at the basis of both of them. But the invention made by James Watt was immediately put at the service of industrialized capitalism: it took some time before it was put into ships and engines and even more time before that and other innovations led to a communication revolution.

The point of departure for our speculations is simple: the basic categories of space and time, the categories to which one always has to return in any social science analysis since it is in space and time our social life is located. Social events, like the physical ones, are conditioned by the properties of space and time - and vice versa: just as the time-space continuum changes when matter is brought into it, it also changes when social systems start operating in it.

The basic change from our point of view, throughout history, lies in the circumstance that Man has conquered space, at least at the intermediate, terrestrial level (he is not yet able himself to penetrate into the microcosm of the atom or the macrocosm of the universe), but Man has not been able to do anything with time. Time flows as it has flown, it has not expanded, nor has it contracted. However, this is at the slogan level. It is not so easy to make such statements more precise and meaningful for we are immediately led to the age-old question: what is

"Sticks and Carrots": Theoretical Assumptions Underlying Current
Work on Civilian Defence Strategies

By Andrew Mack

The "sticks" and "carrots" of the title represent two strategic approaches based on very different theoretical assumptions which run through most of the work on non-violence and what is now called Non-Military or Civilian Defence. Essentially the difference lies on the one hand between techniques based on the idea of punishment and denial ("sticks") and on the other those based on the idea of reward and cooperation ("carrots"). That these strategies have their counterparts in conventional defence is obvious: John Foster Dulles was the high priest of big "sticks", while the Eighteen Nation Disarmament Committee in Geneva may be seen as a compost heap of rejected "carrots". That the propagation of "stick" policies may be antithetical to the success of "carrot" overtures is not a new idea either. If A threatens (and uses) "stick" strategies on B, B may well ask whether or not A's simultaneously (or later) proffered "carrot" is not poisonous. History provides many examples where the suspicion would indeed have been justified. Both the Trojan Horse and such much-heralded contemporary "carrots" as the U.S. bombing pause over North Vietnam (which was paralleled by intensified attacks on the South and Laos) are examples which spring readily to mind.

In donkey psychology (from which the metaphor is drawn) the complementarity of "stick" and "carrot" techniques may be valid. People - arguably at least - are different. On the point of this digression is not to open a discussion on contemporary conventional "defence" policies - the contradictions between the two strategic orientations in this area have been pointed out many times before - but rather to note that similar problems exist in the field on non-military defence (to which very little attention has been paid).

There are of course many ways of looking at non-military "defence" and many activities - from such limited-objective tactics as bus boycotts in Montgomery, Alabama, to national policies of "aid and development" - which can be included under the general headings of civilian defence, non-violent defence, non-military defence etc. For no better reason than lack of time and space I propose to limit the field drastically in this paper to the consideration of some of the proposed non-military defence strategies for "developed" nations. I shall make the further assumptions:

- (a) The hypothetical nation in question cannot be said to have a viable military defence capability against potential invasion by other nations which convention labels "probable aggressors".
- (b) That the social system of this hypothetical nation is characterised by a high degree of attitudinal integration in the sense that there is a general consensus as to the legitimacy of conflict resolving mechanisms within the society and that these are used in practice.
- (c) That the society in question is also characterised by a high degree of structural interdependence ("organic solidarity" in Durkheim's terms).

Thus although the argument will be in the abstract, the conditions assumed are arguably characteristic of a number of small European nations today - in particular some of the Nordic countries where some interest is being shown by policy makers in non-military defence strategies.

We follow Galtung (1967) in defining "defence" as "... a collective attempt to preserve or achieve a form of life or a social structure - when that form of life or social structure is threatened from without or within".

Our reason for adopting Prof. Galtung's definition is that his work on non-military defence represents the only attempt in the (English language) literature to provide a comprehensive theoretical basis for non-military defence strategies, and an examination of some of this work will take up a large part of this paper.

As already noted non-military national defence can be examined from many angles, but we note that most of the literature concentrates on defence against occupation. There are several reasons for this. We can divide defence policies into "external" and "internal" strategies - that is to say i) strategies designed to reduce the likelihood of invasion/attack etc. from potential opponents and ii) strategies against occupation/attack etc. when i) has failed.

"External" strategies have positive dimensions (such as increasing good relations, allaying fears of aggressiveness, associative and integrative policies) which shade off imperceptibly into the general area of "foreign policy", and "deterrence" dimensions which are designed to indicate to potential aggressors that "attack will not pay". Much of the existing work on the positive dimensions of externalist "Civilian Defence" is rather naively conceived. For example "foreign aid" and "technical" assistance are lumped in an unthinking way into this category. Unthinking because the rhetoric of donor nations is accepted at face value when in fact gross flows of "aid" are from the underdeveloped nations. This may lead to pacification but not to peace in any positive sense. Unthinking also because it is not considered that the function of foreign aid programmes which were altruistically conceived might be conflict-promoting rather than "peace"-promoting - this has to do with the "revolution of rising expectations" arguments. (From one contemporary perspective in Peace Research this might be the only argument in favour of such programmes.) A much more sophisticated approach is put forward by Galtung (1968) in his paper on European cooperation prepared

for the Consultative Assembly of the Council of Europe. The problem with this approach and others like this is that its workability is dependent on its acceptance by the most powerful actors concerned, and in this case the chances of acceptance do not seem to be particularly high in the near future - especially in the aftermath of the Czech crisis. This is not to say that such approaches should not be followed up, but rather that in the case of our hypothetical small nation other options have to be considered. Another point which should be mentioned is that Prof. Galtung sees the success of cooperative policies of integration and association as dependent on "equality between the parties". Equality, of course, can be defined in many ways (% parity in higher education for example), but we have the feeling that parity in power is the most significant, and here clearly, relationships between our hypothetical nation and any of the great powers - or "second order" powers like Germany, France or Britain - are asymmetric. Amongst the other "external"/non-military defence options is, of course, "deterrence". But the credibility of the deterrent aspects of non-military defence depends on the perceived effectiveness of internal defence strategies - since retaliation strategies are, by definition, ruled out. Not only must the costs of invasion be disproportionately high with respect to potential gains, but they must be perceived as such by potential invaders. This is one reason why there has been so much concentration on defence against, and resistance to, occupation. It is not difficult to see why such emphasis is thought necessary since non-military defence is based on the assumption that the real struggle starts after occupation has been achieved by the opponent, whereas the conventional wisdom is that occupation is equated with the battle being virtually over. Anyone who doubts this should take note of the hysterical American Congressional response to the Rand's Strategic Surrender study - where to even discuss the possibility of occupation was seen as defeatist thinking and thus emphatically rejected.

Before going on to consider actual strategies which are proposed against occupation, two more points should be made about "external" defence. Firstly although retaliation is ruled out by definition, so also is pre-emptive attack based on fear of retaliatory power. Indeed, one might argue that conventional deterrent capability is inversely

correlated with the ability to allay fears of aggressiveness. Secondly some of the proponents of non-violent defence seem to think that non-violence is a virtue per se. This is clearly not the case. Project Camelot for example was a non-violent (in the narrow sense of the term) example of "external" defence, and there is other evidence to indicate that the American military establishment is showing increased interest in "soft" approaches to counter-insurgency. Two admirably frank expositions are found in T. Tackaberry: "Social Science Research, Aid to Counter-Insurgency" in The American Journal of Economics and Sociology, January, 1968, and Charles W. Bray: "Towards a Technology of Human Behaviour for Defence Use" in The American Psychologist.

We now move into the domain where the contradictions between "sticks" and "carrots" become most apparent from a sociological point of view, that of defence against occupation. Should it be objected here that there are other motives for attack rather than occupation, we readily concede. We also concede that there is little that non-military, "internal" defence can do about them either - non-military defence would, for example, be of little use against an invasion carried out with limited strategic objectives (the Israeli occupation of the Golan Heights in Syria, for example), nor against bombing or bombardment in any form. We would simply argue that the last two are not likely since they would serve no rational strategic function. (A possible exception to this is the pre-emptive destruction of facilities which could be used by parties in a wider struggle. But this could be countered by a declared policy of denial of such facilities to any party by a "scorched earth" policy of self-destruction with credibility attained by making this policy as automatic as possible. This would not work in the case of the example given above, nor for strategic occupation of, for example, the shores of the Danish straits nor again for the Norwegian fiords, but since non-military defence is seen as social defence rather than territorial defence, and since such occupations would not affect the social system to any large degree, this is seen as being of lower saliency than in conventional defence. However, all these arguments have been dealt with in considerable detail elsewhere by Galtung (1967) and will not be taken up here.

The metaphor we have used of "sticks" and "carrots" to illustrate the two main strategic approaches in non-military defence can now be elaborated. The distinction has been noted by many writers on non-violence where the terms "conversion" and "coercion" are often used. However, Johan Galtung's work (Galtung, 1959, 1965, 1967) is by far the most comprehensive in its analysis of the two sets of strategies and for this reason will be drawn on to support both argument and counter-argument in the rest of this paper. In "On the Meaning of Non-Violence" (J.P.R., 1965), non-violent action is seen as a form of influence, distinctions are made between positive influence techniques ("carrots") and negative influence techniques ("sticks"), the former being seen as facilitating positive actions from opponents and the latter as impeding the execution of negative actions. It is pointed out that most non-violent action campaigns have been biased towards negative influence techniques, and non-violence has been used for expedient rather than principled reasons. The further development and use of positive influence techniques is urged. In "The Strategy of Non-Military Defence" (PRIO Publication No. 20-6, 1967), which deals specifically with national defence, the same distinctions are made, only the terms positive and negative sanctions are used, and the idea of direct human contact or "fraternisation" is introduced. Most importantly: "... the establishment of a maximum of positive contact with the occupant during the occupation should always be seen as a basic ingredient of non-military defence." (Galtung, 1967, p. 21.)

To digress for a moment - one should note that heavy emphasis on the positive sanctions approach in the literature has been articulated by Naess (1958), Galtung (1959), Bondurant (1963) and Katz and Janis (1959), but that the emphasis in nearly all the current work on "Civilian Defence" (Roberts et al., 1967) is much more directed towards negative sanctions. Prof. Galtung's work (1965 and 1967) may be seen as an attempt to synthesise the two approaches.

To give a better idea of what is meant by the two approaches, examples of typical non-violent tactics are shown below:

Negative Sanctions: Protest, sabotage, strikes, boycotts, ostracism, non-cooperation.

Positive Sanctions: Facilitation of cooperation, contact, conversion, fraternisation.

At the beginning of this paper it was pointed out that the complementarity of "stick" and "carrot" techniques in military defence was highly questionable. The same problem exists in non-military defence and is recognised by Galtung: "... how is maximum contact reconcilable with minimum cooperation?" We will return to Prof. Galtung's answer to this dilemma later, now we propose to argue on theoretical grounds that the two approaches are not compatible. The following two propositions will be considered:

- (i) Positive influence techniques are dysfunctional for negative influence techniques and may also have unintended and undesirable consequences for themselves.
- (ii) Negative influence techniques are dysfunctional for positive influence techniques and may also have unintended and undesirable consequences for themselves.

Our argument is based on the idea that the negative sanction approach is more easily adaptable to social attitudes characteristic of a period of invasion than is the positive sanction approach. Given our hypothetical, attitudinally integrated society, we may expect (following Coser) that group (i.e. national) solidarity will be increased by the existence of an external enemy, and still further increased as a consequence of invasion. However, since the implicit conventional rule (in the West anyway) tends to equate occupation with defeat, invasions in the past have not led to resistance of the efficacy that proponents of non-military defence envisage. Defensive potential has been equated with military rather than with non-military capability. Resistance has not been (with some exceptions) perceived of as a viable alternative to capitulation because occupation has signified that the opponent has predominant power in the "power channel" (physical power) which both sides recognise as the most salient. With a policy of Civilian or Non-Military Defence this would - by definition - no longer be true.

However, it is appreciated that the re-definition of the occupation situation, which is essential to make non-military defence a viable force, forms a cultural barrier of considerable significance - again we would note the outcry in the U.S.A. following the Rand's Strategic Surrender report. But to advocate a positive sanctions approach demands a public re-orientation to the conflict of so great a magnitude that - for example - the concept of "enemy" becomes redundant. This seems unrealistic to expect. Negative sanctions on the other hand still imply that one is engaged in conflict with a concrete enemy and not a set of abstract "antagonisms". Furthermore negative sanctions are potentially comprehensible because they typically characterise conflict strategies at lower levels (strikes, boycotts etc.), and their adoption may be seen as a rational (expedient) alternative to physical force where the latter is unviable.

Positive sanctions typically characterise relationships of friendliness and cooperation. Tentatively one would argue that for positive influence techniques to be effective as intended, there should be a degree of congruence between the intentions of those using the techniques and the perceptions of these intentions by the opponent. Further one would argue that the degree of congruence is inversely related to the degree of hostility which characterises the situation. Thus positive sanctions would be suicidal on the battle-field and obviously appropriate for integrating a social club. Regardless of the intentions of those using negative sanctions they are likely to be perceived as hostile by the opponent and thus reduce the probability that positive sanctions will be seen as other than weakness or trickery or simply not understood at all. Similarly if positive sanctions are emphasised initially and there is some congruence between the intentions behind their use and perceptions of those intentions, then to also use negative sanctions is likely to break down whatever atmosphere of trust/cooperation etc. has been built up.

Thus far I have argued that (a) to advocate policies of positive influence techniques requires a re-orientation to the conflict situation which is so radical as to be unrealistic (especially when

one considers that the negative sanction arguments of proponents of Civilian Defence are considered unrealistic) and (b) that even if defenders could adopt such a radical re-orientation, the success of positive sanctions would depend to a large degree on their not being perceived as either weakness or trickery by the opponent. This in turn would require a similar re-orientation on behalf of the invaders. However, we concede that this could happen in some instances - but one must distinguish between the various groupings in the invading force. There are many well-documented instances of enemy soldiers changing sides - for example in the East German workers' uprising in 1954 and in Hungary in 1956. However, in most instances it seems that fraternisation has been successful between defending groups and the lower echelons of the invading forces. (It should be noted that in the above two instances many of those who joined the resistance were later shot.) The vision of some advocates of Civilian Defence of leaders of an invasion being left stranded by massive defection of their troops remains a pipe dream - which is not to say that it is impossible. However, the dangers with which we are concerned have more specifically to do with interaction between defenders and the upper levels of the opponents' power structure - which is explicitly advocated by Galtung (1967). The point we wish to make is that the main drawback of a mix of positive and negative sanctions does not relate to the effects of mixing such strategies on the opponent but rather to the effects on the defender.

Galtung notes that polarisation is one of the main reasons why positive influence techniques have not worked in the past, for this reason a "de-polarised" view of man is advocated. Positive sanctions require interaction and contact. But solidarity - the transcendence of the manifold criss-crossing conflicts which characterise our hypothetical "organic society" - derives from threats from without. The enemy is the symbol and the reality promoting both solidarity and the polarisation which is its complement. It is this solidarity which is the "psychological power base" for the effective use of negative sanctions. Interaction and contact break down the polarisation and thus threaten the solidarity.

The essence of our argument is as follows: it appears, deplorably perhaps, that the strongest basis for promoting internal solidarity in a group is the existence of an external enemy. This is a social mechanism which we know exists and which requires no manipulation or training to bring into existence. We know that it is an extremely efficacious basis for negative sanctions - for example strikes. We know also that it may be undermined by various other mechanisms - the history of the labour movement is strewn with examples of solidarity broken by co-optation, divide and rule and other tactics. It is not suggested here that those who initiate positive contacts and who interact with the opponent will necessarily be co-opted in the sense of being converted to the opponent's view point - the case of Dubcek indicates that co-optation has many forms. It does not matter that those who utilise positive sanctions are not co-opted, what matters is the belief or suspicion that this might be the case. This may be occasioned by attempts to make contact alone or by an opponent's insinuations as to the result of such contacts. Where efforts to divide and rule and to co-opt are found to have most signally failed, the conditions for their success have also been absent -

i.e. the situation has been characterised by polarisation. When we consider some of the specific tactics advocated by proponents of positive sanctions such as the rejection of secrecy, treating the enemy as an ally, not attacking the enemy where he is weakest etc. (Naess, 1959), it is not difficult to see how these might be dysfunctional for specific negative influence techniques, nor how they might undermine the psychological basis of solidarity.

However, although the positive influence thinkers have been greatly influenced by ethical considerations, their work may also be seen as a response to an awareness of the dysfunctions of the negative sanctions approach. It is obvious from the above remarks that negative influence techniques may be dysfunctional for positive sanctions and vice versa, but, as Galtung and others have pointed out, they may also have consequences which are antithetical to their own objectives. Indeed, many of the tactics of the positive school might be seen as caveats against

the negative sanctions approach - e.g. "do not humiliate your opponent". The negative sanctions approach stresses the power aspect of the struggle, both unity and motivation derive from solidarity in face of the enemy - the more negatively the enemy is perceived, the greater the solidarity in opposition. To take the example noted above, this has the consequence that while humiliation of the opponent gives positive feedback to the resistance - it may result in intense frustration in the opponent and lead to the escalation of violent repression. Perhaps more importantly there may be powerful tendencies towards expressive manifestations of hostility. These may lead to tension release amongst the defenders while being confused with instrumental action. Without undermining the power of the opponent in any meaningful way it may provoke further violence. The importance of face-saving devices which enable the opponent to accept setbacks is also less likely to be perceived with the negative sanctions approach.

As we have noted earlier, Prof. Galtung is aware of the contradiction we have devoted considerable time to elaborating - as his question "... how is maximum contact reconcilable with minimum cooperation?" indicates. He suggests that the problem may be resolved by distinguishing between the antagonism and the antagonist. Thus one can "refuse to transport the enemy officer, yet accept to talk with him or even invite him for dinner" (Galtung, 1967, p. 22). We put forward no argument against this view point since it seems to us to be an essentially volitional perspective and as such unfalsifiable except in praxis. Boserup (1969) notes that: "A volitional theory results when material constraints are ignored and replaced by the subjective wishes of the actor." This is perhaps too strong. However, it seems that prescriptive theories may be arrayed along a fatalism-volitionalism continuum. At the "fatalist" end there is a heavy emphasis on material determinism and little belief that man can significantly change the world by acting on it. At the "volitional" end material, cultural and even physical restraints are largely ignored, and there is an optimistic belief in the "human will" as the agent of change.

It seems clear that the further one shifts along towards the optimistic end of the continuum, the less need one has for sociology as we know it.

Prof. Galtung has in fact pointed out the inherently conservative nature of sociology in its easy acceptance of "invariances" (a classic example of which is the general acceptance of the Davis and Moore idea that inequality is "functionally necessary" in industrial societies) and has advocated "invariance bursting" as a fruitful direction which sociology might take in the future. (These points were made in a series of seminars at Essex University in England during 1969.) This means that the "invariance" upon which most of our argument is based - Coser's proposition relating to the increase of intra-group solidarity in the face of external threat - is one which is implicitly rejected by Galtung's affirmation of the necessity of a de-polarised view of man, and his distinction between antagonism and antagonist. A strong volitional emphasis in approach, it should be pointed out, allows its proponent to ignore or burst "invariances" which run counter to a theory and invoke others which support it.

The model for Civilian Defence which has been implicit throughout most of this paper is more "pessimistic" than Galtung's in the sense that it operates by utilising as closely as possible social mechanisms we already know to exist, it demands far less re-orientation towards the conflict situation than does the approach criticised, and expediency is seen as an acceptable reason for adopting non-violence.

In drawing out the contradiction we perceive between non-military defence "stick" and "carrot" strategies, we have taken up an extreme position. The admitted over-emphasis was felt necessary since in virtually all the current literature on Civilian Defence the contradiction remains either unrecognised or, at best, noted in passing. Prof. Galtung both recognises and ingeniously disposes of it by the antagonism/antagonist dichotomy. However, our position towards the pessimistic end of the fatalism/volitionalism continuum necessarily inclines us to a pessimistic estimate of its workability.

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Strategic Targets for Conflict Prevention

by

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For the purpose of finding strategic targets suitable for conflict prevention, various hypotheses are first put forward, and then attempts at supporting arguments are made.

Hypothesis (1). Wars have causes, i.e. phenomena without the existence of which no war would result.

Supporting argument: The causal aspect has been successfully applied to other social phenomena, including inter-personal and group conflicts. It is therefore likely that also the phenomenon of war has causes.

Hypothesis (2). Wars have more than one cause.

(a) If wars had only one cause, this being the same in every case, it would long ago have been recognized. - (b) Justly well-known scholars have offered different theories on the causes of war.

Hypothesis (3). All wars/the various types of wars have had common causes, even if they have also had special causes.

No supporting argument is given here. The alternative hypotheses will be confirmed or rejected only when the causal relationship has been clarified.

Hypothesis (4). Some of the causative factors of war are (a) constant; others (b) are variable.

Arguments in support can be given by examples.

(a) constant factors: (1) War would not exist if the basic physiological and psychological features of mankind were not as in fact they are. (2) Uneven distribution of certain nature-given production factors has contributed to the waging of wars.

(b) variable factors: Ideologies, constitutions, production techniques, and possibilities of making a living. In the opinion of experts, such phenomena have all contributed to conflicts in certain cases.

Hypothesis (5). In actual life, the variable causative factors are the decisive ones.

Supporting argument: War is a variable phenomenon, in time as well as in location. If one or more of the constant causative factors were decisive in itself, we would live under constant conditions of war everywhere; but this is not the case.

Hypothesis (6). The variable factors may be divided into variables influenced by the phenomenon of war and variables not influenced by the phenomenon of war.

Arguments in support can be given by examples.

Dependent Variables are such factors as chauvinistic excitement; politico-military treaties; armaments; and a policy of autarchy brought about by the military. - All these phenomena influence wars and are themselves influenced by wars. Not all of them belong to the common causative factors, for wars have been waged without their existence.

Examples of Independent Variables are certain technical changes; changes in growth and migration of populations; changes of climate; or of the basis of production.

Hypothesis (7). We must focus our attention on the variable causative factors if we shall have hopes of finding strategic targets for conflict prevention.

Supporting argument: The constant factors are not suitable targets, as they are unchangeable. But there is a chance that some of the variable factors, indeed those conditioned by social aspects, may be changed by intervention. It can be proved that such susceptibility to influence is likely to exist.

Hypothesis (8). Some of the Dependent Variables may be eliminated as being less profitable fields in the search for possible conflict prevention targets.

(a) Unprofitable are such Dependent Variables as are direct results of war, e.g. material destruction; epidemics; loss of national self-respect, etc. Admittedly, these effects may themselves in turn be the causation of wars, for instance through vindictiveness; but when we treat of the phenomenon of war under a sociological angle and are not primarily historically interested in the individual, specific war, we may discount these phenomena as causative of war, as they will disappear with the disappearance of war.

(b) Profitable to a lesser degree are those Dependent Variables which are indifferent collateral factors. A suitable point of departure when examples are to be given, is the inclination of human beings to think and act in conformity with their reference group. The degree of conformity is a phenomenon that varies with the type and mode of the influence. And the concept of ideas underlying what people agree on, may change. The very inclination towards conformity may be considered as a constant feature that is developed in the child through family and group life. On this basis, the grown-ups may become partisans of aggressive or of peaceful ideologies, depending on the type of external influence encountered at the time in question, which influence again depends on various circumstances, especially national events in the immediately preceding period of time, and the situation on the foreign policy scene. Because of the nature of this factor, conformity activities may be regarded as indifferent collateral variables. The conformity of the human being and his acceptance of national aggressiveness may be contributory causes of war if both exist to a high degree - but will lead to peace if the degree of endorsement of peaceful ideologies is high. There is no need to speculate on intervention in the case of these factors. If we succeed in reducing the risk of conflict by means

of intervention at crucial points, the above-mentioned degrees of national conformity and aggressiveness will also be reduced.

(c) Among the Dependent Variables which are not exclusively the result of war and which are not indifferent collateral factors, the variables that exist immediately before the outbreak of war are more difficult to influence than such others as exist at an earlier stage, alternatively than earlier phases of the former.

- The aggressive notes exchanged between governments closely before the outbreak of hostilities, are examples of phenomena that are too close to be influenced. Incidentally, the hypothesis is supported by the often propounded phenomenon called 'escalation of conflict'.

A purely preliminary conclusion: The factors to be examined under a conflict-prevention aspect must consequently be the Independent Variables and the Dependent Variables found more remotely from war, i.e. existing at a relatively early stage of developments, when the feed-back process of war is less pronounced. We shall aim our search-light at such variables when they appear in certain phases, interpreting Hypothesis (4) to the effect that it is specific constellations of such variables in certain phases that make up the common causative factor sought for all wars or for certain types of wars.

By means of a few more hypotheses, we shall further isolate the target on which we intend to play our search-light.

Hypothesis (9). Peaceful conditions, such as they have since long existed in Scandinavia, can be possible also in other places, and would exist there if constellations increasing the risk of conflict did not occasionally arise through the advance into new phases of certain variable factors.

Supporting arguments: The extent to which international division of labour and commercial intercourse is made possible by times of peace, offers the possibility of satisfaction of so many important requirements - primarily for the leaders of production and secondarily for many employees in production - that a strong interest in continued peace will be found in the population. Further, in the case of most countries in Europe, it is true to say that the importance of Royal power, nobility, and armed forces is declining, while the middle classes and now also organized labour have gained in importance. The concentration of power has been slackened. Attention to satisfaction of requirements that thrive under peaceful conditions has grown. But disturbances to this sector of satisfaction of requirements may lead to situations in which the risk of war will increase. Historic examples of this will be given below.

Hypothesis (10). (1) The risk of war increases with the tension between accustomed satisfaction of requirements and possible satisfaction of such requirements as are emphasized in times of peace (requirements for food, clothing, dwellings, furniture, fuel, household appliances, etc.), and the

risk will increase more when the tension is created by reduction of the standard of living in the community in question than were it caused by a rise in or the creation of additional economic possibilities in other communities, possibilities to be effected by actions liable to lead to conflict. (2) The risk of war increases with the degree of concentration of power in the hands of individuals or groups who are particularly interested in the satisfaction of their own requirements for power, prestige, and aggressive activity.

Supporting arguments: Re (1). In the situation described in Hypothesis (9), the social inertia will counteract the emergence of conflicts. Should alterations in economic conditions in other communities increase the tension, this will influence the inclination to start a war less than were such tensions to arise because of a decline in the standard of living in the community itself. "You know what you have, not what you will get". The risk involved by opening of hostilities seem greater when conditions in times of peace are at least tolerable and deterioration seems unlikely. But should the standard of living suddenly decline, internal strife will soon be rife between trades and classes. This will in turn threaten the power of the government; and the chances of settling such strife by directing the flow of aggressiveness outwards may seem greater than the risk of losing the war which is being started. Re (2). The tension between accustomed satisfaction of requirements and possible satisfaction of requirements need not be so great if the government belongs to type (2) above. For such a government will value what may be won through conflict: satisfaction of an urge for aggressiveness, power, and prestige, higher than a government with whom the satisfaction of peaceful requirements ranges foremost.

Hypothesis (11). In all communities, at all times, there will be prospective leaders who are specially interested in satisfaction of their requirements for power, prestige, and aggressiveness and have strong propensity to violence. Chances that they will rise to power increase with the tension which has been treated of under Hypothesis (10) 1), as such a situation will lead first to internal strife and next to a general wish for strong leadership. For this reason, we can limit our attention to the changes which lead to Hypothesis (10) 1).

Supporting arguments: The first part of the hypothesis relies on biological/psychological facts and on historic cases. The second part relies on historic cases. In the last part a practical simplification is made that is thought to be warrantable, considering that especially these historic cases are the most typical in recent times, when hereditary political power is rare in the part of the world covered by the hypothesis.

Hypothesis (12). Increase in urbanization and utilization of previously undeveloped areas means less risk of tension between accustomed and possible satisfaction of requirements caused by new trading possibilities outside the community in question. At the same time, development of military techniques causes a rise in the cost of war. Therefore, we find good reasons for focusing our attention on the possibility that tension is caused by a decline in accustomed satisfaction of requirements.

Supporting argument: The creation of new trading possibilities by forest clearing, cultivation of steppes (in their day feasible because of progress in agricultural technique) has become a bygone stage, first in Europe and later in North America. To some degree the same holds true in the case of the utilization of overseas territories by European states or the U.S.A. The creation and development of national states in overseas territories has materially contributed to the turnabout of the course of imperialism.

Hypothesis (13). With the coming of industrial and transport capitalism in more recent times, the investment in fixed capital has greatly increased, relatively as well as absolutely. This has created a risk of economic depressions, the spreading of which has grown with the propagation and growth of the credit system. Also, during a considerable period of time, the inclination to intervene was rising wherever the object was an undeveloped area where economic interests had been established. The reason was that large capital investments made the obtaining of concessions desirable, indeed financially necessary, and that in turn the concessions, on occasion, required political action for their maintenance. However, this last-mentioned development has culminated together with colonialism.

Supporting argument: Research into economic history and the theory on economic trends support the first part of the hypothesis; and the second part is supported by political history and the theory of imperialism. We ourselves are eye-witnesses to what is said in the last part of the hypothesis.

A somewhat less preliminary conclusion: If it is agreed that the hypotheses set out above have a considerable degree of probability, it will be of interest to examine a list of types of changes that fulfil two conditions. The changes will have to be such as (1) will lead to tensions through drastic and rapid reduction in the standard of living, without the chance of recovery; and (2) are independent of wars or at least are not strongly influenced by wars, cf. page 3.

- (1) Climate changes that reduce earnings.
- (2) Depletion of mines; deforestation; erosion of topsoil.
- (3) Economic depressions.
- (4) Deflations.
- (5) Loss of sources of income in other countries because of the lines of policy followed by these or rival countries, or because of civil war and anarchy where the source of income is.
- (6) Trade policies introduced by other states - imposing restrictions on exports.

Items (1) and (2) are clearly Independent Variables; (5) and (6) are often so, though not always. (3) and (4) may be caused, among other things, by wars but still are not so strongly dependent Variables that they ought to be struck off the list. In recent times item (6) is often motivated by item (3).

It is easily seen how all these changes may lead to tensions of the type we are dealing with.

Not included in the list is inflation. It is usually a result of war. Incidentally, it is generally acknowledged that the active capitalists, the organized factors of production, and the government finances will pull through, so that inflation (except hyperinflation that destroys the monetary system) will not cause high tension. - Under item (6) neither blockades nor sanctions against trade are included - though indeed these may be of great effect - because they are not Independent Variables. Neither does the list include an instance often mentioned: a degree of accumulation of capital greater than the increase in investment possibilities, causing a lower rate of profit. The reason why this instance is not included is that the author has never heard of instances where the magnitude of divergence was sufficient for rapid creation of tension of any importance of the type here mentioned. On the other hand, trends pointing towards a falling rate of profit have most likely motivated extension of economic activity outside the borders of the country in question. In special cases, this has led to extensive investments in real property on foreign ground and thus to financial interests in the continued flow of income from these sources, cf. item (5) above.

Underlying several of the changes set out in items (1) to (6) are changes in production techniques or changes in the availability of production factors. Scholars who have worked on the materialistic concept of history have given good examples hereof. These technical changes have a swift course and are extremely difficult to control. If contribution is to be made to the prevention of conflicts in these cases, the task must be politically to prevent and control the economic effects of these changes, so that the tensions in question will not become too great. The policy needed here requires strict control over the economy, which control again presupposes adjustment of constitutions. Also, such a policy requires international economic cooperation.

The author has tried to make himself acquainted with the economic backgrounds of the France-German war of 1870; the Spanish-American war of 1898; Japan's war against Manchuria in 1931; Italy's war against Abyssinia in 1935, and the Second World War. He has found that economic depressions were decisive or at least of great importance to the historic events that led up to these wars.

This correlation as well as the probability that, in most recent times, some of the other changes (1) - (6) are less important, leads the author to regard economic depressions as the most important strategic target when prevention of war is under consideration. He also finds politico-economical preparedness against threatening depressions to be important and feasible.

International Peace Research Association (I.P.R.A.)
 IIIrd General Conference, Karlovy Vary, September 20-23, 1969.

Research Communication:

CONDITIONS AFFECTING THE EFFECTIVENESS OF SMALL STATE MEDIATIVE FUNCTIONS

Dr. Daniel Frei (University of Zurich / Graduate Institute of International Studies, Geneva)

This research communication refers to a project supported by the Fonds national suisse de la recherche scientifique under grant Nr. 12068. It is still in a preparatory stage - any criticism and suggestion will be very welcome.

1. The neutrals' desire for mediative functions

1.1. General: Public opinion as well as official foreign policy thinking in neutral small (and/or weak) countries tends to develop ideas of mission centering around mediation. "Bridge-building", "active neutrality", "positive neutrality", "active impartiality" etc. are slogans well known in countries like Switzerland, Sweden, and Austria as well as in countries in Africa and Asia pursuing a "nonaligned" foreign policy.

1.2. Motives: It would of course be mistaken to assume that the neutrals' desire for mediating functions simply originates in an overwhelming, idealistic concern for world peace. On the contrary, the motives for that desire are of a much simpler nature; generally speaking four motives or group of motives can be identified (FREI 1969):

- the anxiety of being crushed and whiped out by great power conflicts;
- the will to compensate the arrogant and absolute pretensions made by the antagonists ("Who is not for me is against me.") by a feeling of superiority and of higher wisdom that is not less absolute than the pretensions of the antagonists;
- the use of this idea of mission for stimulating national pride and hence reinforcing national integration;
- the use of this idea of mission as a means for increasing the national leader's prestige and for reinforcing or raising his status within the domestic political system.

1.3. Evaluation: It does not matter whether these motives are good or bad, just as little it matters whether an electric current is good or bad. But as well as an electric current may be skillfully utilized for very advantageous purposes, the "mediative energy" generated by neutral states may be utilized for increasing the chance for non-violent

conflict resolution and thus for promoting international stability. The problem is: How can this be done?

2. The problem

Before answering this question it is necessary to know the scope of action open to mediative activity. Empirical research has been done on patterns and types of conflict resolution (HOLSTI 1967; HANNAH 1968). Furthermore, studies have been done on third-party functions as exercised by the United Nations (YOUNG 1967; etc.). The present project aims at analyzing mediation by single states and/or informal group of states. More precisely, it aims at identifying the independent variables of successful mediation and at raising hypotheses on the correlations between these variables and success in mediation.

3. Two possible research strategies

3.1. Few hypotheses - many cases: The first possible research strategy is to collect data on all cases of mediation occurred within a certain period (collected e.g. in KEESING's). However, that would necessarily cut down the number of variables observed and of hypotheses raised to a very few ones because no or too few quantifiable data are available on more detailed aspects. On the other hand, these hypotheses would have a high degree of theoretical validity. A research project following this type of strategy is presently being worked up by HANNAH 1968.

3.2. Many hypotheses - few cases: The second research strategy consists in analyzing just a very few selected cases on which detailed facts can be described. This procedure yields a very complex and elaborate system of hypotheses which, however, are valid for the cases analyzed only. In this context, rigorous data-making by quantification would neither be necessary nor desirable.

3.3. Combining the two research strategies: The optimum solution seems to be a combination of both strategies: first developing a complex system of hypotheses by means of the type II strategy, then testing as many hypotheses as possible by means of quantitative data analysis of type I. The first phase of research will be done by analyzing the mediative role of Switzerland in a number of cases in the postwar period. In the second phase, a research seminar to be held at Zurich University in summer 1970 will examine as many cases as possible out of the past 150 years and then try to test some of the hypotheses developed in the first phase.

4. The dimensions to be analyzed

Since this project is restricted to the conditions affecting mediative functions, it is not necessary to analyze the intervenor's repertory of practice and the patterns of mediative action (see DAHRENDORF 1963; YOUNG 1967). Nor do the

different degrees of relevance of mediative functions as distinguished in international law (informal diplomacy, good offices, mediation strictu sensu, conciliation, arbitration, adjudication; see KAPLAN & KATZENBACH 1961; DE VISSCHER 1960; IKLE 1964; PROBST 1963) need any further elaboration. We simply start from the criterion of "success/failure", using "success" as the dependent variable. It may easily be operationalized by "formal acceptance by both antagonists".

This is a tentative list of (pre-operationalized) dimensions to be analyzed and to be related to success/failure of mediative actions; most of them are multidimensional themselves and will need further investigation:

- the situation (identity and relationship among the actors in the triadic system)
 - mediator's relative rank with regard to antagonists (objective power and perceived prestige)
 - capability of imposing solution by sanctions (types of sanctions capabilities: control, persuasion etc.)
 - mediator's position as to symmetry/asymmetry
 - dependence/independence from (and influencing of) each antagonist
 - (mediator's interest in conflict resolution: frontier-ness, detachment, brokerage etc.)
 - ideological distance (frames of reference: biases, sympathies, partiality/impartiality)
 - perception of mediator's partiality/impartiality by each antagonist
 - the conflict
 - frame or level (interbloc, intrabloc, interstate etc.)
 - intensity (in terms of relative commitment by antagonists)
 - state of conflict when mediative activity starts (deadlock, stalemate, impending breakdown of one antagonist)
 - initiating mediation
 - Who is to make the first step?
 - intensity of initiative (dramatic appeal, confidential approach etc.)
 - motives for acceptance of mediation (expressed in terms of cost/benefit calculations evaluating utilities)
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Subjectivity in Peace Research

by Dr. Bert V.A. Röling, professor of international law and director of the Polemological Institute of the University of Groningen (Netherlands)

Peace research has been stimulated by anxiety and has grown out of protest against "the international situation".

Protest may lead to a song, it may also lead to a science, the purpose of which is, as in all sciences, to increase man's understanding of, and mastery over, his environment 1). But the very feature of protest explains the distrust against peace research which has been apparent everywhere. In many countries the young science of peace research has been mistrusted and has been attacked. The means of attack can be divided into two types:

1. undermining of the authority of peace research by imputing "intolerable" values and attitudes to it, as e.g. communism, or pacifism. 2)
2. undermining of the authority of peace research by suggesting that it is not a science but a policy, that its findings are "Bekenntnisse" and not "Erkenntnisse", that it is nothing more than a sophisticated technique of propagating values.

The first mentioned accusation is too superficial and too malicious to pay much attention to it. It has ~~as~~ a matter of fact gradually disappeared.

The second accusation has had an impact on peace research. Peace research tried to show that it was a science, that its methods were scientific. Hence a tendency to concentrate on hard facts collected in empirical research, and also a tendency to claim that peace research was "value-free", and that it had only to do with clarification of factual relations.

1) We are talking here about peace research as a science, the science of war and peace, developed through research aiming at a better understanding. As such it is distinguished from peace action, which may be action undertaken by the scholar who wants to change society because as a result of his research, he has come to the conclusion that action is needed, and that he, as a man with special insight in the existing dangers is called upon to play a role in the needed change. One should make a distinction between this action, as a result of research, and the action which is considered necessary for research in some "free universities" and the Institute of Policy Studies. It is the difference between studying the phenomenon of "creative disorder", causing this creative disorder to know better what are its causes and effects, and causing this creative disorder with the aim of contributing to a better world.

2) It should be mentioned here that recently the new "intolerable value" of conservatism and maintenance of the status quo has been introduced (in the writings of Herman Schmid).

As a matter of fact every social science has the same history on this score, e.g. sociology, criminology, political science. Everywhere has been an emphasis in the beginning of the empirical, quantitative approach, value-free research on hard facts, to demonstrate the scientific character and the objectivity of the researcher.

The purpose of this paper is an inquiry into the objectivity or subjectivity of peace research, into the question what role values play in peace research.

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Peace research has its origins in the anxiety aroused by the problem of the modern war, fought with means of mass destruction. These weapons made war unendurable, and therefore the present international system questionable., because this present international set-up of sovereign national states implies the existence of war as ultima ratio. Sovereign national states, in which the national values and the national interests are determined collectively, come into contact with each other on the basis of these values and interests. Mistrust reigns amongst them, and they make themselves strong to promote or defend their values and interests. This has lead in the past to numerous wars, and there is no reason to assume that it will be otherwise in the future if the same system continues.

The price of national sovereignty is an occasional war. That is recognized in international law, in which war has a place^x. This system and this law were acceptable on the presumption of the existence of only limited means of destruction. War is a power contest, to determine who is the strongest. The existing weapons in former periods gave this possibility of determination, without in most cases doing undue harm. With present weapons war may mean mutual annihilation before the power contest has been decided. Technical development demands therefore change in the system, in international morality, in international law.

Through the modern weapons war has become more problematic than ever. In our scientific culture the human reaction when man is confronted with danger is research, the endeavour to know more about the danger, to find out whether the danger can be prevented.

Peace research grew out of anxiety, with the purpose to inquire whether it might be possible to make the world more livable by contributing to the maintenance of peace.

^x Compare Eugene V. Rostow: "Law, Power and the Pursuit of Peace", Harper Colophon Books 1968, p. 2.

The Cold War contributed to the anxiety. Research on Cold War problems belongs clearly to peace research. As does solution of the Middle East conflict or the fighting in Biafra. Peace research partly consists of studies in conflict resolution, the solving of conflicts in the context of the present system, on the basis of the establishment. As such it may be seen as a tool of the establishment: expression of the common interest to prevent that the present world is blown up. With the corrolary that the prevention and solution of the violent conflicts contributes to the maintenance of the present system and the present status quo, and consequently has a tinge of conservatism.

This is one part of peace research. There is also another. If it is true that the international system is not adequate to cope with "the nuclear age", it will be necessary to explore whether other systems are feasible better equipped against the tensions going with the availebility of means of mass destruction. Peace research explores "relevant utopias", utopias which might be realized in the given circumstances, and it explores the roads that may lead to this realization. As such it is futurology, it deals with the future, retrospective and prospective, and with planning for the future. This aspect of peace research is progressive, and may be revolutionary.

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Peace research reacted against the accusation that it was not scientific.

It wanted to demonstrate - with a view to the remarkable amount of scepticism, hostility and apathy - that peace researchers can use rigorous, quantitative methods to examine theoretical questions in the field of world politics. 1). It concentrated on empirism.

This reaction of the new science on this criticism by existing disciplines is easily understood. But it is a dangerous one. The danger is that peace research as a social science might become ultra-empirical, and would become "split into a series of discrete technical problems of social readjustment", to borrow here a phrase from K. Mannheim (Ideology and Utopia, 1936, p.288). Tendency might develop to restrict research to "researchable" relations, to the surface facts which can be measured and quantified. And with it the tendency might develop - all science aims at better understanding of the environment with the purpose to do something with this better understanding - to restrict the use of the result of research to the solution of practical technical problems. This would lead to the solution of small social incon-

1) Compare J. David Singer (ed.): Quantitative International Politics. Insights and Evidence. New York-London 1968, p.3.

veniences on the basis of the existing system. To quote Carr: "But the attempt to avoid generalization and interpretation by confining oneself to so-called 'technical' problems of enumeration and analysis is merely to become the unconscious apologist of a static society" 1).

Restriction to empirical research harbors this danger. In case peace research would be so limited in its scope, the criticism of H. Schmid 2), that peace research is a tool of the establishment would be valid. But peace research is not per se restricted in this way. It knows of other methods of research. It is a study not of society at rest (for no such society exists), but of social change and adaptation. Consequently, it has to do with values, because the significance of change and adaptation are measured against specific purposes. And purposes indicate values. Two values have been indicated already: the short term aim of the prevention of (nuclear) war by the solution of present-day controversies within the existing system, and the long term aim of the prevention of (nuclear) war by the alteration of the present system, such that it is more able to cope with the existence of weapons of mass destruction.

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Let us return to the problem of subjectivity, to the question what role values play in peace research.

The first instance where we are confronted with a value is the motive of the peace researcher to do peace research. As it has been indicated above: the motive of peace research as a new scholarly movement was the desire to prevent (nuclear) war. "The goal of peace research formulated in one sentence is clear: to clarify the conditions of peace, i.e. the factors that facilitate peace and impede war" 3). This goal depends on the attitude of individuals, who are against war for reason that war may mean the end of civilisation or even humanity, or for reason that war is morally unbearable. This attitude rests on the acceptance of values: of humanity and human culture, and humaneness.

1) E.H. Carr: What is History? London 1962, p. 60. In this study of the subjective elements in peace research, I lean heavily on the observations and findings of Carr, which he put together in the lectures "What is History", lectures from which every peace researcher might profit.

2) Herman Schmid: Peace Research and Politics, in Journal of Peace Research 1968, p. 217-232.

3) Johan Galtung: Peace research: science, or politics in disguise? in Internationale Spectator (den Haag), 1967, p. 1573-1603, p. 1574.

These values are pre-scientific, albeit that may be strengthened by scholarly understanding of the factual situation 1). The choice to take up peace research is determined by the wish to contribute to the maintenance of peace. But this subjectivity only determines the field of research, namely the relations between states and peoples in their relevance for peace or war.

The choice of this broad field may be further limited by the subjective attitude of the researcher. He may be especially interested in specific relations as military relations or economic relations. Or he may explore the possibilities of change by doing research on the possible effect of teaching or preaching in case education or spiritual leaders would pay attention to the peace problem. Here again, the subjectivity of the researcher plays a role, but only in determining more specifically the relations he is going to explore. This choice does not imply that the findings as a result of the research would not be objective, in the sense of not being a correct assessment of reality 2). It means only that what is found as the truth about society is only a partial truth, because not all the available facts in society have been considered.

However, subjectivity does not end with the choice of the research-object. It cannot be denied that it has bearing also on the research itself.

I would like to mention some aspects.

1. The peace researcher, who came to peace research because of his interest, his commitment, to peace, will not loose this commitment in his research. His attitude, and consequently his corresponding sensitivity, will have bearing upon his perception. It will contribute to seeing some things

1) Compare Julius Stone: Problems confronting Sociological Enquiries concerning International Law, Académie du droit international de la Haye, Recueil des Cours, 1956, p. 167. "When the simple pursuit of truth in the apparently abstract fields of physics and mathematics may lead mankind to the prospects of global devastation and genetic mutilation, the questions of adjustment between the values of truth, justice and the common weal, and even mercy, scarecely brook further evasion, or confusion, or even forgetfulness".

2) Value-based subjectivity does play a role in determining the research object. It may also play a role in the refusal to do research in a specific field. The scholar who realizes that the result of his research will be used in an unacceptable manner by the political decision-makers, e.g. research to invent means of destruction, or research to manipulate the masses, may consider it his moral duty to abstain.

very clearly, and other things not at all. The standpoint one takes determines more or less the contents of the observation. The peace researcher, as every social scientist, is part of society, which is an ever moving process. The point at which he finds himself, his viewpoint, determines his angle of vision over society.

This subjectivity is characteristic for human perception. It should not be denied, but made conscious. The only remedy is the openness in explaining the research, and the confrontation of the used techniques and the findings with the techniques and findings of others. The remedy of this subjectivity is multi-subjectivity.

2. Related with the subjectivity of the perception is the subjectivity in the judgment which facts are relevant for the research. One might say, with a variant on what Burckhardt said of history: social science is the record of what the scholar finds worthy of note in society. The same applies for peace research. Here again, the confrontation of the research and its findings with the research and the findings of other scholars may mitigate this subjectivity.
3. Subjective attitude, implying emotional involvement, plays a role with respect to the capacity of logical reasoning. Psychological experiments indicate that emotional involvement easily leads to faulty logics. Errors in logical reasoning corresponds with a desired outcome. However, this kind of mistakes are the least difficult to correct. Logic is one of the few purely objective disciplines. The proneness to faulty logic can easily be redressed in open discussion.
4. Related with this is the subjectivity in the evaluation of evidence. It is without any doubt that the attitude of the researcher has bearing upon the question whether specific evidence will convince him of the existence of a specific relation. In peace research the laboratory experiment is only seldom available. As in other social sciences the researcher often lacks the opportunity to do and to repeat experiments until he is convinced of a special relation among variables. Statistics of social facts may indicate the working of specific forces. The question is at what point the researcher feels entitled to assume a generally valid relationship and to consider it as proven. Reasoning by analogy and by generalisation - so familiar to the lawyer - is sometimes the only means for arriving at general propositions. But always will the doubt remain whether the general proposition is valid for similar relations in another part of the world or at

another time 1). Like the historian, the social scientist and the peace researcher are concerned with the relation between the unique and the general. And the peace researcher should be well on his guard that a desired outcome of his research does not seduce him in accepting as proven what others would not consider as based on convincing evidence.

Another guarantee against subjectivity in this area, is that the peace researcher should be required to make full use of such methods, statistics and sources of information as are available. Wherever statistical inference can be used it should be used and if this is not done - for whatever reasons - conclusions should be stated tentatively. Where sources of information are available which may decide an issue the researcher should not be content to rely on his intuition. For example, it was fairly common for historians to state that American public opinion remained favorable with regard to expectations of cooperation with the Soviet Union for several years after the war. Data from public opinion polls which were available all along show that this was not in fact the case. Expectations of cooperation with the Soviet Union, never very high by any standard, dropped steadily after the close of the war 2).

Here again the individual subjectivity might be remedied by confrontation with other, more sceptical colleagues.

5. Subjectivity clearly plays its role in determining the relevance of causal relations, the relevance of specific connectedness. Social science, looking for these relations, is a selective system. The thinking of the social scientist is teleological thinking. He wants to discover social relations because he has a purpose. The purpose of the peace researcher is the furthering of peace. Aware of the future of mankind if it leaves develop-

1) Carr mentions the finding of Burckhardt concerning the growth of the modern state in the sixteenth century: "The more recently power has originated, the less it can remain stationary - first because those who created it have become accustomed to rapid further movement and because they are and will remain innovators per se; secondly, because the forces aroused or subdued by them can be employed only through further acts of violence" (J. Burckhardt: Judgments on History and Historians, 1959, p.34). Carr is inclined to generalize those findings to the present. (What is History, o.c. p.58)

2) William A. Caspary, United States Public Opinion during the Onset of the Cold War. Peace Research Society (International), Papers, Volume IX, 1968, Cambridge Conference 1967, pp 25-46

ments to the blind social forces, he remembers this future in his exploration and imagination of the past and the present 1). He wants fruitful generalisations, and they are fruitful when lessons can be learned from them. The search for causalities in social science is impossible without references to values. From the innumerable causalities which might be disclosed, the peace researcher concentrates on the causal relations relevant to him. Here again, his subjectivity need not cause incorrectness of his general propositions. It only is responsible for the choice made. And if this choice would lead to a too limited selection and consequently a too narrow view, the confrontation with other scholars might provide the needed remedy.

6. In peace research as in all social sciences the object of the investigation is not independent of the investigation itself. Social life changes as it is studied. The peace researcher who is aware of this is liable to avoid conclusions which might effect change in an undesired direction. There is a real chance that his findings may conflict with what we have called his pre-scientific values. If this occurs the peace researcher will be tempted to leave out such findings or to relegate them to a footnote. More likely still, he will consciously or unconsciously make a selection at an earlier phase of his investigation to insure that the dilemma does not arise.
7. The peace researcher does not operate in a social void. This is bluntly stated by Hans J. Morgenthau: "The mind of the social scientist is the meeting place of all the pressures emanating from particular groups and society as a whole, and his own reaction to these pressures will determine the objects, methods and results of his scientific investigations" 2). Experiments have shown that most people are reluctant to take stands on specific issues which are at variance with those of the group to which they belong or in which they are placed. That group pressure may result in perceptual distortion of the individual is an established fact. There is no reason to assume that scientists are immune to this influence. Though the effect of group pressures may vary from one individual to the next depending on his personality characteristics, there is no doubt that in the scientific domain too, social pressure may induce conformity. The rather one-sided treatment which the cold war received at the hands of a host of historians in the fifties testifies to the fact.

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1) I apologize for this variant on L.B. Namier: Conflicts, 1942, p. 70: Historians "imagine the past and remember the future", as quoted by Carr, o.c. p. 117.

2) Hans J. Morgenthau: Scientific Man vs. Power Politics, Chicago 1946, p. 164

It cannot be denied that subjective elements (through value-attachment) play a role in peace research. Sometimes a regrettable one (as in the case where subjectivity influences perception and interferes with the capacity for logical reasoning or the sound judgment in weighing evidence), sometimes an indispensable one (as in the case where value-orientation determines the relevance of social facts and the relevance of social relations).

The question is, whether in view of this, one may still speak of a science.

There has been a period in which the social scientist was out on the discovery of objective, hard, iron laws, the absolute truth. It was the period in which social science was influenced by a natural science which, still untroubled by the identification of subject and object, claimed to discover solid relations in the physical world.

At present over the whole spectrum of sciences a greater awareness of relativity prevails. Scholarly activity is out to obtain, not the absolute truth but hypotheses concerning relations, as a means of understanding, as a means also of ordering facts; as a starting point for further research and as guidance for decision makers. It was the mathematician Henri Poincaré who in 1902 ¹⁾ put forward the thesis that the general propositions enunciated by scientists were hypotheses designed to crystallize and organize further thinking, and were subject to verification, modification or refutation. All scientific thinking requires acceptance of certain presuppositions, based on observations which make this thinking possible, but subject to revision in the light of that thinking. They need verification. These hypotheses may well be valid in some contexts or for some purposes, though they turn out to be invalid in others. The test in all cases is the empirical one whether they are in fact consistent with observation, effective in promoting fresh insights and are adding to our knowledge. Their significance depends on the question in how far the accidental is excluded in favour of the general, in how far the hypothesis has relevance to the end in view, and in how far it is observed to be true. Even the verified "truth" is relative, truth for the time being, its criterion might be that it is accepted as such by the experts. Important is that the social scientist, the peace researcher, applies the right standard of significance.

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1) Henri Poincaré: La science et l'hypothèse.

If it is true that the bias of the social scientist can be judged by the hypotheses which he adopts, and that this bias is socially determined - then it is easily understood that the proposed generalisations and hypotheses will vary according to the part of our unequally developed and divided world from which the scientist stems. Hence the desirability and necessity of national (regional) peace research, which will give an interpretation of society according to the national (regional) bias.

Such national (regional) interpretation is valuable, because the findings of peace research should be understood by the society in which they develop. The peace researcher wants to influence the community in which he lives, and he is the first to be called upon to have this influence. Starting from, and based upon, the national or regional bias the peace researcher will turn his interest to possible developments which are relevant in his society. To give an example: in the Western world the rhetoric is based upon "peace and freedom", which means that the researcher will be especially interested in possible developments relating peace with freedom, self-determination of national and regional groups. But such developments are the very developments which appeal to the society in which he lives, and are consequently relevant utopias because they accord with the mentality of the group in which the peace researcher lives and in which he wants to have influence.

But if peace research is primarily developing in the national or regional setting, it is selfevident that confrontation between "the national versions of truth and justice" is needed.

Hence too, the necessity of confrontation of the different scientific findings (as purported by IPRA), for the hypotheses need constant verification by new facts or newly discovered relations.

This confrontation can be fruitful for the very reason that society not only is a national or regional society, but also a mundial society. Man is not only part of a nation or of a regional group, but also citizen of an interdependent world. So is the social scientist. As citizen of the world he is open to wider vision, he is open to the point of view which makes wider vision possible.

In this connection the question might be put: is peace research defined by its "objective" point of view. Johan Galtung has time and again maintained that this is essential for the peace researcher, that this marks the researcher as peace researcher. According to Johan Galtung: "Peace research

presupposes a symmetrical point of view where the world is not seen in terms of one's own group as against other groups but in terms of values of the total international system" 1). One may agree that this is the ideal to be aimed at, but that it is almost unfeasible in the present time, in which thinking in terms of nationality prevails, in which the value of nationality seems stronger than any other value, religious and ideological values not excluded. To demand the rigorously giving up of thinking in national terms, to qualify as peace research only the research based on the values of universality or humanity, may demand too much. It would exclude quite an amount of scientific thinking which one may not want to see excluded, namely the thinking which has in view the long-term national interest. In an ever-more interdependent world the long term national interest is bound to take into account the other parts of the world. For, these other parts will react on national policy which only serves short-term national interests. The long-term national interest in international peace will bring in this national outlook an international element. It may be a value still distinguished from "the value of the total international system". But the thesis may be maintained that the road to universalism in our present world is the national thinking in long-term prospects. The needed extension in space may be enhanced by the more easy extension in time.

To say the same in another way: it is selfevident that "the point of view where the world is seen in terms of the values of the total international system" is the viewpoint which corresponds with the factual interdependence of the existing political units (the national states) and with the necessity of fundamental change in the present world-order. But social science, including peace research, aims at having influence on the decision-making of present actors in the political field. In using already now the rhetorics of "the world", in circumstances in which the decisions of policy-makers and the opinions of the masses are still dominated by national rhetorics, the peace researcher would put himself outside the thinking of the establishment, and would consequently eliminate himself as factor in the national decision-making.

1) Johan Galtung, Towards a definition of peace research and criteria for the selection of institutions to be included in the Repertory, Introduction to International repertory of institutions specializing in research on peace and disarmament, UNESCO, Reports and Papers in the Social Sciences, No. 23, 1966, p. 5-8. p. 7.

It should be added here that some parts of peace research need "the value of the total international system", namely where peace research is exploring the "relevant utopias" concerning a changed international system. This research is as peace research "avant la lettre" already very old. Especially after devastating wars the peace plans bloomed, proposals for a better organisation of the world, defended with arguments of universal justice. Those arguments, formulated in terms of universal justice were mostly "orationes pro domo", the organisations proposed might correctly be called "organisationes pro domo", because in almost all cases they served the special interests of the country of the proposer. One may refer here to the brilliant lectures at the Académie de Droit International de la Haye by professor J. van Kan 1). It was no wonder that these plans never materialized, but their one-sidedness was not the only reason of their failure. In most cases they were abstract plans, which did not at all take into account the political prospects of the proposal. Unless something is forced upon the world by a dictatorial superpower, international plans only have any chance of success if they start from reality, taking into account power relations, interests and opinions. And a new international system should develop slowly, as it were organically.

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Peace research wants to have impact on society. It has a purpose: to contribute to a more livable world. The general propositions of peace research, concerning the world, can only have this impact in a national society if they are acceptable to this national society. This acceptance will find its expression in the fact that these general propositions are recognized as truths. Not absolute truths. What can be stated as absolute truth has little significance in life. What concerns us is the provisional, tentative truth, the hypothesis "bis auf Weiteres". Significant is that the general proposition is accepted as valid, that it is shared by others.

We are here on the domain of rhetorics, the theory of convincing, which teaches that it is necessary to have a common starting-point, the locus, topos, if one is to agree at all. "Pour disputer il faut être d'accord", namely about the starting point. This is significant for our divided world in which the nations use to cherish their national versions of truth and justice. For in this circumstance it has advantage to speak in the national vernacular, in the national rhetoric.

1) J. van Kan: L'idée de l'organisation internationale dans ses grandes phases, Recueil des Cours 1938, Tome 66 Vol. IV, p. 295-611.

One may object that the reasoning in the terms of national rhetorics in a world-conversation will be equivalent to speaking in an incomprehensible foreign tongue, leading to a Babylonian confusion. We may well live in such a perfect Babel of tongues. It may be assumed that only gradually "loci communes" will develop, shared by the whole world 1), the ideal situation being that such "topoi" are used which might, according to Plato 2) be able to convince even the Gods. As Perelman and Olbrechts-Tylica state: "si l'attitude envers le réel était universelle, on ne la distinguerait pas des vérités" 3). But it will be a long way for mankind before one comes to thinking in terms of humanity instead of in terms of nationality. The growing factual interdependence and the introduction of long-term thinking may contribute to bridging the gaps. In the meantime a dialogue and an argumentation is possible. I may quote here the words with which Perelman and Olbrechts-Tylica conclude their monumental "Traité de l'argumentation":

"C'est grâce à la possibilité d'une argumentation, qui fournit des raisons, mais des raisons non-contraindantes, qu'il est possible d'échapper au dilemme: adhésion à une vérité objectivement et universellement valable, ou recours à la suggestion et à la violence pour faire admettre ses opinions et décisions. Ce qu'une logique des jugements de valeur a en vain essayé de fournir, à savoir la justification de la possibilité d'une communauté humaine dans le domaine de l'action, quand cette justification ne peut être fondée sur une réalité ou une vérité objective, la théorie de l'argumentation contribuera à l'élaborer, et cela à partir d'une analyse de ces formes de raisonnement qui, quoique indispensables dans la pratique, ont été négligées, à la suite de Descartes, par les logiciens et les théoriciens de la connaissance" (o.c. p. 682).

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Forgive me the rather abstract diversion from the main theme of this paper: the inevitable subjectivity of peace research, which follows from the fact that the social scientist is the product of the society in which he lives, and which is related with the purposes he aims at when he tries to understand better his environment.

1) Compare C. Perelman et L. Olbrechts-Tylica: Traité de l'argumentation. Tome Premier. Première Partie: Les cadres de l'argumentation, par. 7 L'auditoire universelle. Paris 1958, p. 40 f.f.

2) Phaidros 273 d-e.

3) O.c. p. 101.

A last question should be answered: what is this purpose? As we saw above, the furthering of peace and the diminishing of war. But such a definition is still unclear. What kind of peace do we have in mind? And what do we mean when we speak of war?

There is almost a consensus that peace research has not only to do with what is called "negative peace" (the absence of war), but also with positive peace. Negative peace may seem to be the easiest concept, albeit that a distinction might be made between passive negative peace (absence of war between nations which have so little relations that warlike relations are also absent, as e.g. between the Netherlands and Nepal), and active negative peace, as being the absence of war as result of purposely arranged dissociation.

The concept of positive peace is more difficult. One can agree with Johan Galtung: "Exactly what one fills into this concept is more unclear - and this is one major short-coming of peace research today" 1). One may think here of an integrated society (in the words of Tönnies a "Gemeinschaft" instead of a "Gesellschaft", a "community" instead of a "society" 2), an accepted order in which the parts live by common standards of justice. But in our divided world the concepts of justice differ. It would be impossible to formulate already now a generally agreed upon definition of positive peace. However, a kind of new world-ethos has been developing after the Second World War. It is defined by the universal recognition of human rights and the outlawry of war as a means of national policy. And it should be emphasized, that under the recognized human rights in the Conventions of 1966 are mentioned before anything else the right of self-determination of peoples (art. 1 in both conventions), that not only the Universal Declaration of Human Rights (art. 22 and art. 25) but also the International Social Charter (art. 11) mentions everyone's right to an existence worthy of man, that the Universal Declaration (art. 28) as well as the International Social Charter (artt. 2 and 11) mentions the right to a government making every effort to guarantee this existence worthy of

1) Johan Galtung: Peace research: science, or politics in disguise?
o.c. p. 1576

2) In this distinction "a community" may be defined as a social group in which behaviour is based on the solidarity of its members, "a society" as a group for the adjustment of diverging interests.

man, and that art. 28 of the Universal Declaration reads: "Everyone is entitled to a social and international order in which the rights and freedoms set forth in this declaration can be fully realized" 1).

Both negative peace as well as positive peace belong to the aims of the peace researcher. In some situations nothing more than negative peace is feasible for the time being, the maintenance of the status quo is then the only possible method of preventing a violent crash which might be the end of both antagonists. Such is the situation at present in the northern part of the world, the technically highly developed part, in which the prevention of a nuclear war between the superpowers has the highest priority. At present this negative peace is brought about by the recognition of sharp frontiers, limited contact, and heavy deterring armaments at both sides. This situation cannot be maintained for long. Negative peace through dissociation is a provisional, temporary solution. In the long run it would break down because it prevents developments, and the tension between the need for change and the artificial immobility would lead to an explosion.

Negative peace is status quo peace without due regard to justice. For that reason it is not a solid basis for lasting peace. Such a lasting peace is only feasible as a relation which assures the realisation of justice, and this means that this relation must be flexible. While negative peace is static, positive peace needs to be dynamic, a process. The urgent need for positive peace is apparent in the world of developing countries, where gradually the tension of the status quo has become unbearable.

It would be incorrect to state that peace research has only to do with positive peace. Both concepts are significant, and the priority will be different in different periods and different places.

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The science of peace and war has not only to do with different concepts of peace but also with different concepts of war. Following the UN-Charter we should avoid the concept of war in the legal, technical sense. What concerns us is the mass-violence, the use of force. Consequently we have not only to deal with the external war, but also with the internal war, not only with open violence, but also with the structural violence hidden in quasi-legal systems.

1) See further B.V.A. Röling: Human rights and the war problem, in Netherlands International Law Review 1968, p. 346-361.

Peace research aims at diminishing violence, consequently it is confronted with dilemmas. For instance, where research would lead to the conclusion that the only effective means to remove structural violence would be through violent revolution. It is, however, not the peace researcher who makes the choice. He will concentrate his research on the conditions of change, and will in specific cases come to the conclusion that revolution cannot be avoided unless drastic changes are introduced. By his attitude, which brings him to peace research, the researcher will explore all realistic means of preventing violence, including the possibilities of tolerance, even tolerance of injustice. But he might discover that tolerance of violent inhumanity has its limits. His purpose is to clarify existing situations, and by that clarification to contribute to peaceful solutions.

Here, apparently, great difference of opinion amongst peace researchers is apparent. Herman Schmid, in his article "Peace research and politics" 1), maintains that peace research should not aim at diminishing "war" in its widest sense of mass-violence, but at eliminating situations of conflict in the sense of "incompatible interests built into the structure of the system where the conflict is located" (p. 226). He realizes, however, that the interest-definition of conflict has the obvious weakness of the difficulty of deciding what the interests are. This difficulty arises when the criterium is rejected of the conflict-attitude and the conflict-behaviour of the parties. I quote Schmid: "How does one decide what the interests are? One cannot rely on what the conflict actors think themselves - that would mean to return to a subjectivistic definition. I do not know of any satisfactory solution of the problem; to me, this is a challenge rather than a reason to abandon the idea of an interest definition of conflict" (p. 227).

The problem is clear: if the opinion of the actors is excluded as the decisive factor, it is the opinion of the peace researcher which comes to the fore: the peace researcher who has his opinion how relations between persons or groups should be, who introduces into the situation his subjective opinion what justice would require. In this way a subjective concept of natural justice is introduced, according to which ⁱⁿ a given situation a latent conflict is present, which latent conflict should be made manifest. Therefor the peace researcher should study the ways how to sharpen conflict relations according to Herman Schmid (p. 228).

1) Journal of Peace Research, 1968, p. 217-232.

The concept of natural justice, with which Schmid operates, apparently is based on the principle of equality (compare the latent conflict between the master and the slave, p. 225). But he would come into insoluble difficulties - as any adept of natural justice could confirm - if he were to apply this standard in practical questions. Equality is a relative concept, changing with the needs of time and place, and dependent on the prevailing opinions in a given society.

Schmid proposes no longer to call the scientific discipline he advocates "peace research" "given the usual connotations of the term" (p. 230).

In the summary of his article it is stated "The article proposes a change of peace research from research for control and integration of the international system, toward research for liberation and revolution" (p. 232). As a matter of fact, it would be misleading to call such research peace research. It is research in the service of the realisation of international justice and morality. As such it might be of great significance for our world which is more and more in danger of losing sight of the demands of justice. But it would be confusing to call it peace research.

Let there be no misunderstanding. It is not my intention to state that peace research has nothing to do with justice. The concept of positive peace is strongly related with the realisation of justice. Whether negative peace will deserve priority, or the concept of positive peace will dominate, depends on the circumstances. The North is in the first place interested in avoiding war between the opposing power blocs. Peace research, in its search for finding the conditions under which negative peace can be maintained here, serves vital interests of humanity. For, let us state openly: this negative peace is not assured by the balance of terror. Too many blind forces are operating, which are creating unbearable tensions, and which will lead to a gigantic explosion in the long run. The maintenance of negative peace - indeed the maintenance of the status quo - may give the needed time in which new elements for a positive peace may develop. Maintenance, for the time being, of the status quo in the developing world would not be possible. Here the concept of positive peace prevails, and we have no need of subjective concepts of natural justice to indicate what we should aim at. The minimum standards of justice may be found, if not in established international law, in the declarations of the General Assembly of the UN.

What we need here is not a theory of revolution but a theory of change.

It might be that research would show that change cannot be brought about without violent revolution. But peace research should explore every way in which needed change might be realized without violence. For this theory of change we might need other methodology than only empirical research on present reality. More emphasis might be given to the reasoning by analogy of systems. The laws of change and development apparent in national systems may indicate possible development of the international system 1), and speaking in this respect of the laws of change, I have in mind not only the laws governing the blind social forces, but also the legal provisions which are the instruments of intentional change.

1) As an example I may refer to my "International law in an expanded world" (Amsterdam 1960), in which I tried to compare national and international socio-economic developments.

The Child's Orientation to International Conflict and the United Nations:
A Review of the Literature and an Analysis of a Canadian Sample*

by

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Introduction

Citizens' involvement with the international system has frequently been mapped out by surveying adult reactions to various foreign policy issues. Research has contrasted adult responses on domestic issues to their responses to foreign affairs, with the repeated findings that the average citizen knows more about domestic than about foreign affairs, and that his interest in the former is well above his interest in the latter.¹

The straightforward survey analysis of distributions of attitudes has recently been supplemented by more sophisticated approaches: theories from social psychology and psychoanalysis have been brought to bear in order to explain the emergence of attitudes to international politics. Psychological variables have, for example, been useful in understanding isolationism-internationalism, as in McClosky's analysis of attitudes toward the international system. Such findings suggest that isolationism can usefully be viewed as a failure in early socialization to transmit international norms. And McClosky finds that isolationism correlates positively with a cluster of traits related to childhood socialization such as authoritarianism, dogmatism, dominance, anomie, etc.²

The psychological approach adds to our knowledge of the way attitudes are linked to each other and the way they operate to mediate between the personality needs of the citizen and the outside environment. Ordinarily, however, application of this approach to the study of attitude development relies mainly upon adults' retrospections. There is insufficient direct investigation of the way attitudes ~~to~~ the international system develop in early years.

The purposes of this paper are two-fold. First, to attempt to summarize the scattered research on children's views of international system with emphasis

on conflict. Secondly, to report the findings of an exploratory study based on the reactions of Canadian children between the ages of 6 to 12 years toward the international system.⁵ In particular, this study attempts to answer the following questions: (1) What do children know about international conflict and the United Nations? (2) When does this information arise? (3) What accounts for variations in such political socialization? (4) What is the theoretical significance and possible policy implication of such findings?

II. Review of Previous Research

The major portion of published research on children and politics has concentrated so far on discovering the child's attitudes toward the national system.⁴ Relatively few attempts have been made to extend political socialization research in order to learn about the extent of the child's attitudes toward world politics, particularly to issues of conflict. In the United States, studies by Jennings,⁵ Sigel,⁶ and Hess and Torney⁷ are among the few exceptions. Although these studies are not intended to deal primarily with the child's involvement with international affairs, they -- and several studies of children in other countries -- report evidence which indicates that the child's orientations to the various levels of government extend not only beyond his immediate environment but also beyond national boundaries.

Jennings' investigation is based on a sample of high school seniors and their parents. The study, which deals with the "Pre-Adult Orientations to Multiple Systems of Government" -- international, national, state and local levels -- reports the rather remarkable finding that pre-adults appear to be aware of international politics to a greater degree than they are of national, regional or local politics. Fifty-three per cent of the students rank international affairs as more

salient than the remaining three types. One might be tempted to suspect the honesty of the children's responses, but it is striking that those children who orient themselves to international affairs (the cosmopolitans), also possess more factual knowledge about world politics, public affairs and have a favourable image of the United Nations.

Cognitive growth and intelligence stand out as the main contributing factors in politicizing the child. Contrary to what is anticipated, the role of the family in politicizing the child seems to be a minimal one, according to Jennings' findings. What emerges from this study is that when compared to their parents, the offspring are found to be more cosmopolitan. This, according to Jennings, is due to generational affects and life-cycle of the parents whereby parental adult socialization might have had some influence in producing a difference in attitudes between parents and offspring. He, for example, points out that in their early adulthood the parents experienced the events of the Second -- and possibly the First -- World War, which undoubtedly affected their orientation to the international system and made them more isolationists.⁸

Sigel's results, like those of the present study, are based on a sample of elementary school children in grades four to twelve. Sigel's main objective was to capture the image children had of President Kennedy soon after his assassination. A sizeable portion of the children -- about one-third of the total sample -- referred to the President's role in terms of his involvement in the international system. Eighteen per cent described him as a peace-maker and sixteen per cent mentioned other foreign affairs of a general nature. The main point of concern is Sigel's observation concerning the child's pre-occupation with

international affairs, mainly with issues of conflict. She says:

Children's concern for peace and sensitivity to the international scene were marked. There is no doubt that young children were aware that they lived in troubled times full of international conflicts and dangers of war. Foreign affairs and peace together were mentioned more frequently than any other issue.⁹

The above observation adds further evidence to Jennings' findings.

One finds, even at an early age, that children manage to form an image of the world around them by recollecting whatever continual conflict is present and attaching importance to the resolution of such conflicts. This could be the result of stereotyped knowledge about world affairs or simply a form of socialization which manifests itself in a concern with international politics. It would be an interesting hypothesis to verify whether or not political attitudes are formed in a hierarchical fashion, with those toward the international system emerging early in life and ranking first.

The limited evidence provided by Hess and Morney from a major U.S. national survey on children between the second and eighth grades suggests further confirmation concerning the child's orientation to the international system. These authors find that as the child grows older, the United Nations becomes more salient to him and he perceives of it as a peace-maker more so than he does of his own country.¹⁰

Apart from the somewhat developed American political science literature, studies bearing directly on the child's evaluation of conflict situations have been carried out in Britain, Japan, Norway and Sweden. The impetus for these studies comes from developmental works published by child psychologists, notably Jean Piaget. We may first note Cooper's British and Japanese study of "The Development of the Concept of War,"¹¹ and then see similar studies in Norway by Alvik¹² and in Sweden

by Rosell.¹³

Cooper's study is based on a sample of 231 English and 115 Japanese children between the ages of 7 and 16. Age in this instance, emerges as the most significant variable in determining the extent of the child's understanding of war and peace as two interrelated concepts and his judgement on issues dealing with conflict. Cooper relies on Piaget's theoretical framework on intellectual development and moral judgement of the child. As he puts it,

According to Piaget, the child's intellectual development proceeds through the formation of operations. Operations are actions which have been internalized into thought: they are reversible and coordinated into systems or schemata which at each stage are in a stage of equilibrium. Each schema has a characteristic structure embracing all these actions and operations related to it, as does each over-all operational system. Operational systems emerge with the formation of invariants whereby the child appreciated the constancy of aspects of his environment and the necessary relations between these aspects. The very young child merely forms the invariants of permanence of objects. Later, other invariants emerge, for example, the invariants of space, time, weight, causality and so forth.¹⁴

Hence, according to Cooper, the younger child, as early as 7-8 years, is able to perceive of war in its concrete form, namely that it involves the use of weapons. At this stage of his development, the child is unable to differentiate in a great detail the participants involved and the consequences of any war, i.e., its more abstract aspects. But as the child matures and especially after the ages of 11 and 12, he begins to react to the consequences of war, as manifested in destruction and killing, to identify the participants, even to express a judgement concerning its morality.

Continuing to draw on Piaget, Cooper suggests that the child's intellectual development is an equally important sequence of his personality development which has direct implications for his future involvement with political events of this kind.

It would be useful to refer in ~~outline~~ brief to Piaget's own discussion of the child's moral development. According to Piaget, the personality development of the child is characterized by the following stages: Firstly, prior to the age of 7, the child is largely egocentric. He learns to use his motor skills in an asocial way, devoid of any sense of obligation and understanding of social codes; he mainly relies on manipulative skills and imitation of adults. The second stage between the ages of 7 and 8, is characterized by unilateral acceptance of rules and obligations. In his dealings with significant others, the ego of the child is still self-centred. In the third and final stage, between the ages of 11 and 12, the child internalizes codes of behaviour, including the learning of right and wrong. His moral judgement is no longer an extension of that of adults. Acceptance of and deference to authority is no longer unilateral, it is accompanied with expectations of reciprocity. His social behaviour, particularly toward the adults around him, is determined to a large measure by the type of reward, punishment or exchange of information which takes place between the child and significant others. As Piaget points out these stages are associated with different approaches to thinking about justice or morality among children.¹⁵

In light of the above remarks, it is possible to summarize the rest of Cooper's findings in the following manner: (1) The younger child, whose ego is self-centred, perceives of war in terms of his own personal and physical insecurity; he lacks a sense of belonging to a social community, by not being able to differentiate

the implication of war on others; (2) Whereas to the younger child wars in general are unjustifiable, the older child conceives of war in relative terms; i.e., as justifiable under certain conditions. In other words, his judgement is based on a verification process which is referred to as reciprocal reasoning; (3) Motive response to the consequences of war increases with age; his ego-centrism is weaker and in contrast the socio-centric orientations are strengthened.

Alvik takes social class as an additional factor in explaining the emergence of political attitudes. Dealing with children from grades two, four and six (ages 8-14, with a total sample of 114), he confirms some of Cooper's findings and comes up with observations that are inconsistent with others. For example, although he finds that Norwegian children are more aware of the presence of war than they are of ways to reduce it and comprehend its implications on society as a whole, they are on the whole more pacifistic than English children. This, according to Alvik, is due to the Norwegian culture which stresses pacifism more than the English culture does. He finds little change between ages 8 to 12 in differentiation of the concrete as contrasted to the abstract aspects of war.¹⁶

Socio-economic status affects the moral judgement of the child who happens to have a high ability for reciprocal reasoning. Within the high ability range, the gap, in terms of knowledge, between the low and high socio-economic brackets, is more significant than it is for the two other ability levels, namely low and ~~high~~ ^{median}. It seems that educated parents who come from upper socio-economic brackets play a "deciphering" role by interpreting political information to their children in order to facilitate its assimilation in their cognitive framework:

Further analyses indicate that ability of reciprocal reasoning as well as type of socio-economic background play an important role in the moral judgement of the war. The relation found, e.g., between equity and the conception of war as being right under certain conditions can thus probably be explained on the basis of both these indices

being susceptible to the influence of intellectual reasoning as well as to information given by educated parents.¹⁷

Rosell who studied 198 children of ages 8, 11 and 14 in effect confirms the findings of Cooper and Alvik. Intelligence and age emerge in his findings as the two independent variables which determine the moral judgement of the child and his perception of conflict situations. Rosell ignores the variable on which intelligence has often been found greatly to depend, namely social class. Hence, while social class was not taken into account by Rosell, its effect is implicit in his intelligence findings.

In discussing the various influences of socializing agents, Rosell finds that the family's influence is not necessarily the greatest. The family's influence as a source of information increases between the ages of 8 to 11 years, and levels off between the ages of 11 and 14. In contrast to this, the influence of the mass media increases with age through the 8 to 14 years span and is greater in its overall contribution than the influence of the family.¹⁸

The above summary shows that the moral judgement of the child with respect to political issues follows a known developmental pattern which is in line with the theory on child psychology. The empirical findings to be presented below focus in the first part of the discussion upon the child's reaction to the Vietnam conflict during one of its high peaks in early 1967. An attempt is made to examine whether or not the above findings concerning the affect of age, social class and intelligence upon the child's perception of conflict hold in the Canadian case.

The second part of this discussion examines the child's understanding of the United Nation's role.

The fact that the sample is a Canadian one has of course some bearing

upon the responses of the children. It is not a far fetched assumption to say that in light of Canada's peaceful image, which is often projected onto the international scene, that aspects of this political culture do filter down to the young. While keeping this fact in mind, the purpose of the discussion is also to put the results into the contexts of what is known about the development of children's attitudes to political issues, in this case to international events.¹⁹

III The British Columbia Sample

The empirical evidence presented in this study was collected during the Autumn of 1967 from three small elementary schools in very close proximity to each other in a semi-rural area in British Columbia, Canada. The main tool of investigation was a pencil-and-paper questionnaire administered to 168 children from eight through twelve years of age.²⁰ No claim is made here that the respondents are representative of either the elementary school children in British Columbia or Canada as a whole. Nevertheless, the study contributes in an exploratory way to opening up an underdeveloped aspect of the fast growing literature on political attitudes of children, and it further serves as a source of hypotheses for future research.

Social class, age and intelligence are the major variables considered. Occasionally, the influence of sex difference is taken into account.

Using parental income as determined by the income of the father, and Blashen's Canadian scale for further check on the occupational grouping, the entire population is divided into three social classes.²¹

thirty-four per cent are of unskilled and semi-skilled background (Class I); forty-five per cent are of skilled and manual background (Class II); seventeen per cent are of professional and managerial background (Class III). Information is not available for the remaining four per cent.

I.Q. results were provided by the school. A score of 110 was used as the point for dichotomizing the sample into groups labelled average and high. Those in the "average" category had a score range from 85-110, with a mean of 105. Those between 110-130+ were classified as having a "high" I.Q. with a mean of 115.

An overall breakdown of the sample in terms of age (grade level), social class, sex and intelligence is presented in Table 1.

Insert Table 1.

IV Findings of the British Columbia Study

(1) The Child's attitude toward International Conflict, Sigel's²² observations mentioned earlier concerning the child's preoccupation with international conflict are verified in the British Columbia findings. The concern with issues of war and peace is reflected even in responses to a question with no explicit political content: when asked to recall an "interesting" news story they had read about, seen on television, or heard over the radio, fourteen per cent of the total sample mention political items out of which 11 per cent recall news items related to international conflicts. Likewise, in an answer to two successive items on the questionnaire -- "Can you think of a news story which made you feel angry?" and "Can you think of a news story which made you feel happy?" -- there

are a number of international answers. Nineteen per cent of the total sample refer to sad news stories, in particular to the Vietnam conflict, and ten per cent report happy news stories which reflect hope for ending international conflicts, especially the Vietnam war. With reference to the Vietnam issue, some of the responses are presented below according to grade and age level.

- (a) A third grader (8 years) refers to a "sad news story" which has to do with "two countries fighting for no reason."
- (b) A fourth grader (9 years) remembers a news story "about a war and some children getting bombed."
- (c) A fifth grader (10 years) would feel happy "when the wars were over."
- (d) A series of quotations for sixth graders (11 years) demonstrate the involvement of the older child with international affairs. As "interesting news stories," the sixth graders report items such as "taking pictures of the North Vietnamese soldiers in Hue," or "a front page story showing the U.S. trying to get back their embassy," or "when Korea accused the ship Pueblo of being in territorial waters." There are those children who conceive of war in terms of participants such as "that war was declared by the U.S." or hoping for "victory for the U.S. in the Vietnam war."
- (e) A seventh grader (12 years) refers to reading stories about "wars and nobody doing much about this or even caring about it." Another seventh grader, says with anger, "Just hearing about wars and fighting and killing made me mad, why no peace???"

These quotations, while they perhaps cannot fully reveal the inner psyche of the child, show a deep concern for international conflicts.

The extent of the child's involvement with the world around him is probed by posing the following question, which also offers no explicit political cues: "If you could change the world in any way you wanted, what change would you make?" Of the total sample, 48 per cent give political answers, revolving around ending wars, poverty and hunger. The distribution is as follows: 31 per cent are for ending all wars, 12 per cent are for ending poverty and 4 per cent for ending prejudices.²³

The tendency to propose political change is somewhat related to sex, age and social class. Of the girls, 56.4 per cent report a desire to change the world in a political sense, compared to 42 per cent of the boys. It is surprising that a higher percentage of girls express political answers than do boys. This is probably due to the inclusion of moral responses in political category answers.

With reference to social class, Table II demonstrates that there is a positive relationship between the political development of the child and his social position. Children from lower or working class families find it difficult to extend their involvement beyond their immediate surroundings. According to Hyman and others, the lower class citizen is restricted by his environment, inside as well as outside the home. Child rearing practices of lower class families foster emphasis on strict discipline, low motivation, and narrow involvement in outside family affairs.²¹

Insert Table II.

In addition to social class, cognitive growth accounts for a large portion of the child's behaviour at this early stage. As we have seen, Piaget and his followers stress that self-centred responses characterize the answers of the low elementary grade pupil. Many at the lower grades prefer no change or as is expressed in the words of some pupils "keep the world as it is." The preference for political change increases almost linearly with age. An almost reversal relationship holds with respect to "Don't know" and "No change" responses, as shown in Table III.

Insert Table III.

On the issue of war, the children were asked three interrelated

questions: first, if they remember a war, secondly, to name the participants involved in it, and thirdly to express an opinion about the war (i.e. "Whose fault is it do you think that these countries are fighting each other?")

As Table IV shows, more than 60 per cent of the entire sample do name actual conflicts, some of them dating back to the First World War. Fifty-two per cent express an opinion as to which country is at fault. With respect to the Vietnam war, which accounts for the bulk of responses, 26 per cent blame both sides, eight per cent blame the United States, seven per cent blame North Vietnam and one per cent blame the National Liberation Front (Viet Cong); eight per cent blame Vietnam in general; one per cent blame China; one per cent blame nobody. The remaining eight per cent mention other wars.

Insert Table IV.

The awareness of the third and seventh graders differs in scope and specificity. Although children from all grades refer to war stories as "interesting" news items, the third grader talks about wars in general, while the seventh grader names specific wars, the participants involved in it and even expresses an opinion blaming one side or the other. Table V demonstrates clearly the connection between cognitive growth and the saliency of war as a topic to remember. A similar observation holds when social class, rather than age, is considered as an independent variable, as is shown in Table VI.

Insert Table V.

Insert Table VI.

One anticipates finding, in light of earlier discussion, that the ability of reciprocal reasoning which is associated with intelligence to be prevalent more among high I.Q. children than low or average ones. The child's ability to move from a general to a more specific perception of the conflict is an expected feature of cognitive development. Hence, it follows that intelligence will play a role in the process of identification by the children of the participants involved.

To make the division of I.Q. and age more meaningful in terms of the developmental theory outlined earlier, the pupils were divided into two age groups. Thus, grades three, four and five, ages 8 to 10, comprise one group whilst grades six and seven, ages 11 to 12, comprise the other. Tables VIII and IX below show that children of high I.Q. within each age group do not necessarily show any greater knowledge in identifying the participants involved. However, a contrast does emerge when the two age groups are compared. Whereas 31 and 23 per cent of the older children give "Don't know" responses or blame Vietnam in general, the percentages among the younger age group are 59 and 55. Age then is evidently a more important factor than I.Q.

Insert Table VII.

Insert Table VIII.

With reference to moral judgement, age stands out as a major contributing factor. The results presented in Table IX are consistent with other findings

related to cognitive development and moral judgement mentioned earlier, e.g., Cooper and Alvik. The younger child distributes the blame equally on both sides to a greater extent than does the older child. There seems to be a point of transition between the ages of 8 to 10 and 10-12 whereby in the latter stage a sense of equity replaces that of egalitarianism, to use Liaget's terminology. This is reflected in the percentages of pupils from the fourth and fifth grades who assign the blame on one of the two participants (15 and 18 per cent, respectively) to those pupils from grades six and seven (42 and 51 per cent, respectively).

Insert Table IX.

While equal percentages from all social classes assign blame on both sides, the upper class child takes sides with the participants involved to a greater extent. Table XI shows that whereas fourteen per cent of each Class I and II express moral judgement by blaming one of the antagonists, the percentage among Class III reaches the 30 per cent level.

Insert Table X.

Finally, the relationship between I.Q. and moral judgement is considered in Table XI. The only meaningful contrast is between, rather than within, the two age groups.

Insert Table XI.

That the older child, irrespective of his I.Q. level is more inclined to take part in expressing his opinion on issues of this nature, adds additional weight to the observation made earlier, namely that although social class is

related to the child's awareness of international conflicts, his moral judgement seems to be greatly determined by his age and cognitive growth.

(2) The Child's Attitude toward the United Nations

A great majority of the children exhibit initial familiarity with the United Nations. Of the total population, 85 per cent responded positively to the question, "Have you ever heard of the United Nations?" Table XII gives the responses according to grade level, social class and sex.

Insert Table XII.

In spite of the minimal role played by the school in formally educating the younger child about such an institution as the United Nations, the responses obtained from the Canadian children reveal a basic understanding of the United Nations as a political entity. In terms of the total population, 24 per cent of the children report having heard about the United Nations by means of the mass media. Nine per cent refer to their parents as the source of information. Fourteen per cent identify both the parents and the mass media as a source of information. Only two per cent identify the school as an influencing factor. When considered in terms of social class, the children consistently and regardless of their class affiliation rank the mass media first, followed by the family, school and peer group.²⁵

An important aspect of the child's understanding of the United Nations is his conception of its role. Table XIV describes the image children have of the United Nations.

Insert Table XIII.

Table XIII suggests a few conclusions: (1) The role of the United Nations as a peace maker increases with age; its role as solely benevolent -- helping hungry children -- decreases with age, in particular when the third grade is compared to the upper grades. (2) Unclassifiable and "don't know" answers decrease with age. (3) Social class has some bearing upon role differentiation, but not in any consistent fashion, except for the two extreme cases (Classes I and III) where there are differences concerning an objective role description (such as "makes peace", benevolence -- with more lower class children describing the United Nations as caring for hungry children -- and "don't know" responses. (4) Differences in responses between boys and girls appear in one area. Twice as many boys as girls describe the United Nations politically, while more girls combine affective and objective description of the United Nations into one (52 per cent compared to 67 per cent). These results correspond very closely in their overall patterns to Hess and Torney's findings on the United Nations cited earlier.²⁶

Finally, an attempt is made to trace the child's perception of the national vs. the international levels of government. The children are asked to evaluate Canada's role vis-a-vis the United Nations by posing the following question to them: "Is Canada a friend of the United Nations?" 93 per cent answered in the affirmative. Hardly any variations exist in terms of age, sex or social class. This cosmopolitan feeling is reflected in the children's acceptance of foreigners in general. For example, 86 per cent of the total group are prepared to welcome newcomers to come and live in their neighbourhood.

Conclusions and Implications

With reference to the child's involvement with international affairs, the present study suggests: (1) as early as 8 years of age, the child is aware of the international system and that conflicts are an integral part of it. This awareness increases with age. (2) Age and social class are directly related to the child's ability to perceive the need for political change as a means toward reducing conflict. (3) While social class, intelligence and age are considered in the literature as determinant of the child's moral judgement, in this study, with reference to the Vietnam conflict, age alone seems to be the major determining factor. (4) Generally, the child reacts favourably to the United Nations. This positive orientation is equally matched by a similar reaction to the national level of government in Canada.

While the evidence presented here is not all that conclusive, the priority given by children in this sample to the United Nations and international conflict supports Jennings' argument that there exists a hierarchy of political attitudes among the young. A central feature of this hierarchy is the early emotional attachment to the international system which is in turn reinforced through the adolescent period. If, as the literature suggests, a feeling of parochialism and isolationism predominates among adults, then the question which is relevant for political socialization theory is this: Under what conditions and stages in the life cycle of the individual are changes likely to take place in the nature of political attitudes? Further research along these lines adds an important dimension to political socialization research, the dimension of change.

This study suggests that, contrary to the simplistic image adults have of children as political beings, the child's world is coloured by political

realities of a complex nature. One has the feeling that the child is struggling to organize in his cognitive framework the tremendous amount of information he manages to acquire as a result of mass media and parental influence. Here one cannot help but agree with those who argue for a more constructive role to be performed by the school as well as the home.²⁷ Early socialization in international norms is one modest way toward future reduction of conflict and an increase in co-operation.

The author wishes to thank Professors Fred Greenstein and Trond Alvik for their most helpful comments on an earlier draft of this paper. Thanks are also due to Professors David Potter and Anthony King.

1. See James M. Rosenau, Domestic Sources of Foreign Policy (New York: The Free Press, 1967) pp. 26-27.; Gabriel A. Almond, The American People and Foreign Policy (New York: Frederick A. Praeger, 1960); V.O. Key, Public Opinion and American Democracy (New York: Alfred A. Knopf, 1964) pp. 131-32, 155-58.
2. Herbert McClosky, "Personality and Attitude Correlates of Foreign Policy Orientation," in James Rosenau, op. cit. pp 51-109; H. Brewster Smith et al, Opinions and Personality (New York: John Wiley and Sons, Inc., 1964).
3. The results reported in this study are based on the material contained in an M.A. thesis titled Political Socialization of Elementary School Children written by this author. (Simon Fraser University, British Columbia, Canada, 1968).
4. See Jack Dennis, "A Survey and Bibliography of Contemporary Research on Political Socialization and Learning, " Occasional Paper No. 8, Wisconsin Research and Development Center for Cognitive Learning, Madison, Wisconsin, 1967.
5. A. K. Jennings, "Pre-Adult Orientations to Multiple Systems of Government," Midwest Journal of Political Science, Vol XI, No. 3, August, 1967, pp 291-317.
6. Roberta Sigel, "Image of a President: Some Insights into the Political Views of School Children," The American Political Science Review, LXIII, No. 1, 1968, pp. 216-227.
7. Robert D. Hess and Judith Torney, The Development of Political Attitudes in Children, (Chicago: Aldine Publishing Co. 1967).
8. According to Jennings, op.cit. Table 6, p 309, The influence of the home is evident only among students who come from homes where the mother has a low educational level. Hence, in this case, low interest in politics among the offspring correlated with the low educational level of the mother.
9. Sigel, op.cit., p 218.
10. Hess and Torney, op. cit. pp 30 and 70.
11. Peter Cooper, "The Development of the Concept of War," Journal of Peace Research, Vol. 2, 1965, pp 1-17.
12. Trond Alvik, "The Development of Views on Conflict, War and Peace among School Children," Journal of Peace Research Vol. 3, 1965, pp 171-195.
13. Leif Rosell, "Children's Views on War and Peace," Journal of Peace Research, Vol 2, 1965, pp 263-276.
14. Cooper, op. cit. p. 1.
15. See, for example, Jean Piaget, The moral Judgement of the Child. (London: Routledge and Kegan Paul Ltd. Fifth Impression, 1968).

16. Alvik, op. cit.
17. Ibid. p. 180
18. Rosell, op. cit. pp 269-273.
19. For an assessment of the rather international orientation of the Canadian public see Michael Schwartz, Public Opinion and Canadian Identity (Berkeley: University of California Press, 1967).
20. The test was administered by me in a classroom setting. Occasionally, I found it necessary to read the questions orally to the younger age groups.
21. The occupational grouping is based on Bernard E. Lishen, "The Construction and Use of an Occupational Class Scale," Canadian Journal of Economics and Political Science, Vol. 24. No. 4. 1958, pp 519-531. The average income of the three occupational groups are: Class I, \$6000 or less; Class II, \$6000-\$10000; and Class III, \$10000+. A chi-square test was carried out to see if intelligence was associated with social class and if so if social class biased the distribution of pupils in the various grades since there were three different schools involved in this study. Both tests indicated insignificant degree of association.
22. Sigel, op. cit.
23. Similar results are reported by Fred Greenstein, Children and Politics. (New Haven and London: Yale University Press, 1965) pp 68-69.
24. Herbert Hyman, "The Value System of Different Classes: A Social Psychological Contribution to the Analysis of Stratification." Class, Status, and Power, S. Lipset and R. Bendix (eds) (Glencoe: Free Press); Fred Greenstein op. cit. pp. 85-106.
25. A preliminary analysis of the parents' responses to issues dealing with foreign affairs and the United Nations reflects types of responses which are in agreement with those of the children's. The parents' responses to two items dealing with the United Nations are as follows. (1) To the question "Is it good to have the United Nations?" 96 per cent answer in the affirmative. (3) To the question, "Do you agree with Canada's image as a peace-maker?" 71 per cent answer in the affirmative. With reference to the last question, the positive image of Canada is not as unanimous as it is among children. The critical evaluation of Canada's role by the parents is obviously the result of adult socialization. But what is significant about the findings is that such a critical outlook is not passed to the children. It is possible to hypothesize that the overall favorable responses parents have of Canada is transmitted in one way or the other to the children. This hypothesis is confirmed to some extent by noting the type of relationship parents have with their offspring. Ninety-five per cent of the entire adult sample answered positively to the question, "Is it alright for children to ask questions about politics?" Eighty-one per cent answered "Yes" to the question, "Do you ever answer questions from your child or children about politics?" Ninety-one per cent said that they would encourage their children to write to public officials

26. Hess and Torney, op. cit. p. 30.

27. Leas Anderson and James Becker, in a recent article stress the role of the school in promoting international education by saying: "This clarification of the structure and objective of international studies is a high priority task of we are to enhance significantly the performance of the schools as organisation agents in international education." "Improving International Education in Elementary and Secondary Schools: A Study of Research and Development Needs." International Studies Quarterly, Vol. 12, No. 3, Sept. 1968. p. 341-349.

TABLE I

BASIC DATA ON AGE, SOCIAL CLASS, INTELLIGENCE AND SEX
COMPOSITION OF THE SAMPLE

Mean Age	Grade	No. of Pupils	Social Class			I.Q.		Sex	
			I	II	III	Av.	High	M	F
8	3	36	29%	22%	4%	23%	21%	26%	17%
9	4	34	24	13	21	20	12	20	21
10	5	38	17	26	21	24	21	22	23
11	6	27	11	21	18	16	19	17	14
12	7	33	19	18	36	17	27	15	25
Total			100%	100%	100%	100%	100%	100%	100%
N =		168	58	76	27	103	58	89	78

TABLE II

RESPONSES BY SOCIAL CLASS TO QUESTION CONCERNING HOW THE
WORLD SHOULD BE CHANGED AND THE TYPE OF CHANGE DESIRED

	Social Class		
	I	II	III
Answered	72%	74%	89%
Did not answer	28	26	11
	<hr/>	<hr/>	<hr/>
Total	100%	100%	100%
N =	58	76	27
 <u>Change</u>			
Political	60%	68%	75%
Non-political	19	13	8
No change	21	19	17
	<hr/>	<hr/>	<hr/>
Total	100%	100%	100%
N =	42	56	24

TABLE III

TYPE OF CHANGE DESIRED BY GRADE LEVEL

	Grade Level				
	3rd (8 yrs.)	4th (9 yrs.)	5th (10 yrs.)	6th (11 yrs.)	7th (12 yrs.)
Political Change	14%	50%	55%	56%	79%
Non-political change	28	12	39	26	12
No change/Did not answer	58	38	6	18	9
Total	100%	100%	100%	100%	100%
N =	36	34	38	27	33

TABLE IV

ABILITY TO REMEMBER AND NAME A WAR

Claimed to Remember a War		Named a Specific War (Of those who claim to remember a war)	
Yes	86%	Vietnam War	56%
No	10	Previous Wars	5
Did not answer	4	Middle East War	3
Total	100%	Did not name any	36
		Total	100%
N =	168	(86% of total)	144

TABLE V

PERCENTAGE OF CHILDREN ABLE TO NAME THE VIETNAM WAR

Grade Level	3rd (8yrs)	4th (9yrs)	5th (10yrs)	6th (11yrs)	7th (12yrs)
Able to remember	14%	56%	66%	65%	84%
Unable to remember	78	30	29	35	12
Did not answer	8	14	5	-	4
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	100%	100%	100%	100%	100%
N =	36	34	38	27	33

TABLE VI

ABILITY TO REMEMBER AND NAME A WAR BY SOCIAL CLASS

Type of Response	Remember a War - by Social Class		
	I	II	III
Yes	78%	88%	96%
No	15	10	-
Cannot remember	7	2	4
	<hr/>	<hr/>	<hr/>
	100%	100%	100%

	Name of War - by Social Class		
Vietnam War	48%	55%	81%
Other Wars	7	8	8
Do not know	45	37	11
	<hr/>	<hr/>	<hr/>
Total	100%	100%	100%
N =	58	76	27

TABLE VII

IDENTIFICATION OF ANTAGONISTS IN VIETNAM CONFLICT BY
6TH AND 7TH GRADERS (11-12 YEARS) ACCORDING TO I.Q.

Name of Antagonists	I.Q.	
	Average (85-110)	High (110-130+)
North vs. South Vietnam	51%	33%
U.S. vs. North Vietnam and Viet Cong	18	33
Vietnam in general/Do not know	31	34
	<hr/>	<hr/>
Total	100%	100%
N =	33	27

TABLE VIII

IDENTIFICATION OF ANTAGONISTS IN VIETNAM CONFLICT BY
3RD, 4TH AND 5TH GRADERS (8-10 YEARS) ACCORDING TO I.Q.

Name of Antagonists	I.Q.	
	Average (85-110)	High (110-130+)
North vs. South Vietnam	25%	16%
U.S. vs. North Vietnam and Viet Cong	16	29
Vietnam in general/Do not know	59	55
	<hr/>	<hr/>
Total	100%	100%
N =	71	29

TABLE IX

MORAL JUDGEMENT ACCORDING TO COGNITIVE DEVELOPMENT

	3rd (8yrs)	4th (9yrs)	5th (10yrs)	6th (11yrs)	7th (12yrs)
Fault of both sides	56%	80%	47%	41%	29%
North Vietnam and Viet Cong	-	5	6	18	29
U.S.	-	10	12	24	21
Vietnam in general/ Do not know	44	5	35	17	21
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	100%	100%	100%	100%	100%
N =	36	34	58	27	33

TABLE X

MORAL JUDGEMENT ACCORDING TO SOCIAL CLASS

	Social Class		
	I	II	III
Fault of both sides	25%	26%	26%
North Vietnam and Viet Cong	5	7	19
U.S.	9	7	11
Vietnam in general/ Do not know	61	60	44
	<hr/>	<hr/>	<hr/>
Total	100%	100%	100%
N =	58	76	27

TABLE XI

MORAL JUDGEMENT BY I.Q. AND GRADE LEVEL

	Grades 3, 4, and 5		Grades 6 and 7	
	I.Q.		I.Q.	
	Average (85-110)	High (110-130+)	Average (85-110)	High (110-130+)
Fault of both sides	30%	17%	21%	26%
North Vietnam and Viet Cong	2	-	24	7
U.S.	3	3	12	19
Vietnam in general/ Do not know	65	80	42	48
	<hr/>	<hr/>	<hr/>	<hr/>
Total	100%	100%	100%	100%
N =	71	29	33	27

TABLE XII

PERCENTAGE OF CHILDREN WHO HAVE HEARD OF THE UNITED NATIONS
BY AGE, SOCIAL CLASS AND SEX

3rd	Grade Level				Social Class			Sex	
	4th	5th	6th	7th	I	II	III	M	F
58%	91%	87%	82%	94%	82%	81%	92%	81%	82%
N= 36	34	58	27	33	58	76	27	89	78

TABLE XIII

THE ROLE OF THE U.N. BY TOTAL SAMPLE, GRADE LEVEL,
SOCIAL CLASS AND SEX

The U.N.:	Total Sample	Grade Level		Social Class			Sex	
		3,4, & 5	6 & 7	I	II	III	M	F
Makes Peace	15%	12%	23%	9%	21%	19%	20%	10%
Makes War	2	5	-	2	1	7	3	2
Helps hungry children and makes peace	61	60	67	75	53	63	57	67
Do not know	22	23	10	14	25	11	20	21
Total	100%	100%	100%	100%	100%	100%	100%	100%
M =	168	108	60	58	76	27	89	78

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This paper, submitted to the Third Conference of the International Peace Research Association to be held at Karlovy Vary in September 1969, represents the personal views of the author and does not purport to state any official attitude of the Truman Center.

THE NATURE AND POSSIBLE PHILOSOPHIES OF PEACE RESEARCH

1. This is essentially a discussion paper for the first topic of the said conference, written on the understanding that the discussion should, in principle, follow the lead of Herman Schmid, "Politics and Peace Research", Journal of Peace Research V/3 (1968), pp. 217-232.
2. Accordingly, an abridged exposition is hereby given of some dissenting views, sharpened, in part, in order to reveal the features that distinguish them from the views of the said article. A more general and moderate exposition will be found in my A Prologue to Peace Research, a forthcoming Truman Center publication.
3. Herman Schmid made important observations as to:
 - a) the possibility and usefulness of tracing inarticulate assumptions underlying ongoing peace research (one could not agree more!);
 - b) the risk that some such assumptions may or do give an undesirable slant to the ongoing research (again one would voice agreement);
 - c) the undesirability of the presumed consideration that this world is good enough to be spared its conflicts or to have its conflicts smoothly resolved; and parallel with this;

- d) the idea that the world is so bad that all conflict should be welcomed and that the promotion of conflict should be regarded as a chance for achieving a better world (whilst in almost total disagreement as to (c) and (d), I agree that these are most worthy topics for discussion).
4. Serious flaws in Herman Schmid's exposition seem to be his neglect of previous peace research (even that in Norway. Is he really unaware of Arne Naess, Bjørn Christiansen or of the work of the Oslo Institute of Social Research before the sixties?) and his disregard for general philosophical peace research problems, some of which have been raised generations ago but some of which relate to philosophical perplexities which deserve to be raised as soon as possible.
5. Another important point of Herman Schmid's exposition deserves full attention (partly in, but even more outside, the discussion of this Conference). He has put into a convincing model for understanding peace research theory (not philosophy I would say) the presumed "ideal" relationship between the peace researcher and the "conflict actors". He shows that there seems to be a kind of consensus about the ideal of a "neutral" or "symmetrical" attitude towards the "conflict actors", (somewhat primitively thought of as merely two actors one on each side of "the" conflicts we find in this world). Such a presumed ideal "symmetrical" attitude towards conflict actors - even if rescued from the primitive simplicity of dual antagonism - may indeed have a most undesirable influence on actual "applied" peace research. Typically, however, I did not receive a clear notion whether he considers this, let us call it dangerous, theoretical ideal of the "neutral conflict observer" a result of or leading to such mistaken philosophical assumptions.
6. Herman Schmid indulges on the one hand in an adoration of the writings of Johan Galtung to such extent that even great admirers, as I am myself, are prompted to sound a word of moderation. On the other hand, to some of his

criticism of those very same writings I would not subscribe. Johan Galtung will surely formulate his own answers his own way, but it is important to note that readers of his works need not and did not at all conclude, that Galtung is defending the world as we find it or considers it so perfect, as to wish to keep it out of the turmoil of all conflict.

7. My general disagreement with Herman Schmid may be summarized thus:

- a) the nature of peace research is not, and can not be (whether philosophically or otherwise) monolithic;
- b) peace research has developed in the last decades without adequate consideration of its possible, desirable or eventually actual basic philosophies (the plural applies here);
- c) the very term is recklessly, one might say irresponsibly, unphilosophical;

Note: It can not be denied that such peace plans as came from the pens of Jeremy Bentham and Immanuel Kant in the 18th century make the impression of unphilosophical superficiality. These plans, however, should not be taken in isolation from the enormous and mostly profound philosophical output of these scholars. Not only did this output antedate those proposals but it is also indispensable for the understanding thereof. Recent peace research seems still largely "in search of" a philosophical output of its adepts;

- d) no peace research makes sense if we are not also agreed or hope to agree as to what kind of world we may eventually achieve or at least aspire for;

e) the art of discussion, the use of several kinds of logic, the ways of bridging the is and the ought, of bridging "field theory" and "atomism", of linking the past, present and future, the attitudes towards religion, utopia, health and education, all these are intimately bound up with possible philosophies of peace research.

8. My specific disagreement relates to the following points:

a) I do not believe that peace researchers must assume that the world in its perfection should not be plagued by "conflicts". In the first place, no peace researcher will dream of obviating all kinds of "conflict" whatsoever. His concern, in so far as he must occupy himself with conflict, is about certain patterns of conflict and conflict proneness, about ways to channel conflict or to prevent disastrous conflicts. There are certain patterns of persecution, tyranny, civil or international war he will indeed want to obviate, but this leaves open the possibility of other forms or patterns of conflict - realization (such as voting, arbitration, compensation, retribution, exchange of territory or population, assistance to migration, re-allocation of resources). In the second place most peace researchers indeed dream of changing the world (through institute formation, through preaching, through education or through a mixture of these approaches).

b) I believe that a person who knows too well (or thinks he knows once and for all) what kind of changed world he desires to construct, is not a good peace researcher any more, but rather a demonstrator, a revolutionary, a politician. I really could imagine Herman Schmid continuing in one of those directions - away from having a common language with peace research - indeed he suggests the possibility himself.

c) I believe that usually a peace researcher does want to change the world as he finds it, although he may not in all details be very precise as to the desired changes. A peace researcher, however, does not want to "smash the world up" in his zeal for reform and he thinks that some kind of wars and revolution involve the risk of such a "smash up" as would mean even the apriori destruction of his planned reformed world.

d) I do not believe that a peace researcher is necessarily a pacifist or a conscientious objector or believer in non-violence under all circumstances. Nor should a peace researcher try out a neutralist ideal towards all ongoing

conflict (probably more neutralist however than extremist conflict actors themselves - but not even that à tort-et-à travers). He should at least occasionally attempt to place himself in the shoes of both conflict actors. No peace researcher should want to play the role of a conflict-monger. (Again one can see Herman Schmid moving into the role of one of those mentioned under 8 (b) rather than into that of a peace researcher.)

9. Whatever philosophical outlook the peace researcher may have, his scheme should be open-ended and unfinished, without any "Closure of the Gates", to use a term borrowed from Islamic jurisprudence (where heavenly inspiration is denied to those following the area of Revelation), and without any pre-deterministic beliefs about the damned or the saved. This means that he may have strong opinions about the course to be preferred and conflicts to be met with all strength in that course. It does not mean, however, that he should welcome, or foster conflicts for their own sake.
10. The peace researcher should be well aware of the fact that issues of war and peace are not simply issues settled by a philosophical debate. People under terror and threat of political and economic conditions or plagued by individual and social anxieties are not in a mood to listen to philosophical analysis. Any call for patience and reflection in those circumstances may even have boomerang effects. N'est pas philosophe qui veut: and many do not wish to be philosophers. For those the remedy does not consist of philosophical refinements and open-minded discussion, but neither does the remedy consist of the acerbation of the prevailing conflict-proneness. The peace researcher should, while fully aware of irrationality and conflict proneness, discount these in his theories and adapt his philosophy to their existence. He need not make the promotion of conflict the goal of his endeavours.

UNITED NATIONS VOTING PATTERNS

by

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The voting record of the United Nations General Assembly is a rich source of information on international political alignments since 1946. While many interactions between states took place outside the United Nations, a significant number of these would be expected to be reflected both in the alignments among nations in U.N. voting, and in the type of issues voted upon. In a study of patterns of interaction, the voting record of the Assembly has the advantage of being quantitatively recorded, and therefore amenable to certain statistical analyses.

A number of previous studies of U.N. voting patterns exist¹⁻¹⁹. Many of these are verbal discussions of political alignments, but some attempt a quantitative analysis. They differ in their definition of a "bloc": there are regional groups (such as are recognized unofficially in voting for the non-permanent seats on the Security Council), interest groups, caucusing groups,^{voting groups.} Many authors simply list some of these groups whose existence is inferred from political observation, without using quantitative criteria. A common quantitative definition of a voting bloc is "any group which consistently votes as a unit on all or particular kinds of issues"² or, more particularly, "a group of 5 or more nations voting as a unit at least 80% of the time on all issues selected"¹³.

Factor analysis as a method for delineating voting blocs and issue clusters has been used only in the various papers by Russett and Alker⁷⁻¹⁰. Wrigley¹¹ used agreement analysis. Rieselpach¹³ proposed bloc analysis,

indices of cohesion and likeness, and Guttman scale analysis. Lijphart¹⁴ criticized certain other mathematical methods and recommended a particular one, the Rice-Beyle method. While a comparative discussion of these methods will not be attempted here, we feel justified in using factor analysis, which is becoming the standard method for discovering clusters in aggregate data.

It seems obvious to us that non-quantitative discussion is inadequate; for example, the Commonwealth is considered a bloc by some writers, on the basis of tradition, U.N. custom, and the fact that they sometimes caucus together. Yet we clearly confirmed Alker and Russett's finding that the Commonwealth shows no trace of voting together. The members of the Old Commonwealth vote with the West or the imperial bloc, the New Commonwealth with the Afro-Asian bloc. The need for quantitative criteria is therefore quite clear.

I.

METHODS AND DATA

Our factor analyses differ from those of Alker and Russett⁹ in the following respects:

1. We studied all regular plenary sessions of the U.N. General Assembly from 1946 to 1963 inclusive, while A. and R. covered only 4 selected sessions from this time period (1947, 1952, 1957, and 1961). We intend later to do the 4 Special Sessions and 4 Special Emergency Sessions up to 1963, as well as the sessions from 1963 onwards.
2. While A. and R. included roll call votes from sessions of the main committees (committees of the whole) as well as plenary sessions, (eliminating the duplications of course), we covered the plenary sessions only.
3. While A. and R. selected "important" roll call votes for the analysis (using criteria stated in their book), we included all roll call votes. With respect to the question whether to include votes taken on separate

parts of a resolution which was voted on in parts, our rules of inclusion varied from those of A. and R. We followed the rules of Wrigley¹¹, whose data cards of the U.N. voting record we used for our analyses.

Factor analysis is a mathematical method used for discovering clusters of related items in a collection of data. In our case, this would mean a) national alignments, i.e. clusters or blocs of nations that tend habitually to vote together, and b) clusters of issues on which the nations tend to align themselves similarly. The type of factor analysis appropriate to obtaining the national alignments is called Q-mode factor analysis, that used for obtaining the issue clusters in R-mode factor analysis. The clusters in each case (nation blocs or issue clusters) are called "factors". Some details of the factor analysis method, suitable for understanding by a non-mathematician, are given in Alker and Russett⁹, pp. 33-39, and in Rummel²⁰.

We carried out a Q-mode factor analysis to discover nation blocs over the whole 1946-63 period, i.e. 18 regular General Assembly sessions. * This was divided for purposes of analysis into 4 time periods of 4 or 5 years, separated in each case by a significant event in the life of the U.N.

Period 1, 1946-50, is termed by Alker and Russett⁹ "the period of the Security Council", in which U.N. member countries tried to operate the U.N. as it was conceived in the Charter. This was the period in which the Cold War began, about half way through it, and ended with a Soviet boycott of Security Council sessions and the outbreak of the Korean War.

Period 2, 1951-55, is designated by Alker and Russett⁹ as "the period of the General Assembly", when the Uniting for Peace Resolution tried to obviate the veto-bound Security Council. It ended with the admission of 16 nations from East and West in a "package deal", thus ending the stalemate in the membership expansion of the U.N. No one has vetoed or rejected by vote a new member's application since (the wrangle about China is not an admission of a new member,

* The criterion for determining the number of factors was that the eigenvalue of even the least important factor should exceed 1. The factors were rotated orthogonally by the Varimax criterion.

but an argument about which government represents an existing member).

Period 3, 1956-60, has been called "the period of the Secretary-General", when Dag Hammarskjold took personal initiatives in U.N. peace-keeping in the Middle East and the Congo. It ended with another great expansion in U.N. membership, with the admission of a large number of newly independent African countries in 1960, which was followed by many more in succeeding years.

Period 4, 1961-63, is the period during which some powers called a halt to this unofficial and gradual reinterpretation of the Charter, and started insisting again on the primary responsibility of the Security Council for peace and security. This period just predates the culmination of the dispute over payments for U.N. peace-keeping, which led in 1964 to a vote-less session of the General Assembly.

The next period 5, which has not yet been analyzed, 1964-1968, would be of great interest, because some new trends are again emerging. These years are a period of decline in U.N. peace-keeping, of tacit U.S.-Soviet agreement in the wake of the traumatic Cuban missile crisis (accompanied by some overt arms control agreements such as the partial test ban and anti-proliferation treaties), which is sometimes resented by the smaller nations, and of limited wars such as Vietnam, not covered by superpower deterrence and not dealt with by the United Nations.*

We also carried out an R-mode factor analysis in order to discover clusters of related issues. In this case, because of the large number of roll call votes taken in each session (30 to 100), we had to carry out the factor analysis separately for each annual session, not over the 4 or 5 year periods as was done with the nation-bloc analysis discussed above, since the computer program cannot handle too large a matrix of data. This work has not been

* It is our intention to tabulate and analyze this period later, if financial resources can be obtained.

quite completed; the gaps in the 1946-63 period are for the following years: 1948, 1954, 1960, 1962, 1963.

II.

RESULTS

Q-mode Factor Analysis of Nations

The results of the Q-mode analysis for nation-blocs for the 4 periods are given in Tables 1-4. Each column of numbers represents a "factor" (in this case a voting bloc of nations) as obtained from the computer calculations. The numbers represent "factor loadings"; they range from -1.0 to 1.0, and indicate how strongly each nation's voting behavior is correlated with each factor or bloc. A high loading (either close to -1.0 or to 1.0) indicates a strong correlation of that nation with that factor, i.e. "membership" in the bloc. (But if the sign of the loading is opposite to that of most of the other high loadings in that column, then that nation tends to vote opposite to that bloc.) Loadings close to 0 mean no correlation with the bloc. Loadings are underlined if they exceed 0.5 or -0.5 or if they are the highest loading for that nation in any column. The nations whose loadings are underlined can then be considered members of that bloc, the more firmly so the higher their loadings. The headings of the columns, i.e. the names of the blocs, were supplied by us after inspection of the bloc memberships. These names are only roughly descriptive. There are some columns without headings; these are spurious "factors", produced by the calculations because the computer program specified the isolation of exactly 7 factors, when perhaps the significant alignments were fewer than 7.

Place Tables 1 to 4 abou here

It is also known from the calculations how much of the data is "explained" by each factor. This is expressed in terms of "percent total variance accounted for", and the sum of these for all factors should come fairly close to 100% if a sufficient number of factors has been used; the remainder up to 100% is "unaccounted for", or random variation. The first factor in each table always accounts for more variance than the others, then the second, and so on.

A summary of the factors (blocs) observed in all the periods, together with their percent total variance (in brackets), is given in Table 5. This gives a quick overview of the changing bloc structure over the years. The numbers are rank order numbers, i.e. "2" means this was the second most important factor in that time period. However, to get a more complete picture of the trends, we also need to know which nations belonged to each bloc in each period and which loaded the highest on it, since this internal structure of each bloc also changes with time. The complete data for this are of course in Tables 1-4. (Note: The nations with the highest loading on a bloc are not necessarily the "bloc leaders" in the political sense, but the nations who voted most often and most consistently with the bloc. They may have been on the receiving end of persuasion rather than the initiating end, i.e. satellites rather than leaders.)

Place Table 5 About Here.

Blocs and Trends

The numerical data presented in the Tables contain far more information than is extracted here; but this is our selection of the trends which appeared most important.

The Western bloc started in Period 1 with a membership of Western Europe, North America, the Old Commonwealth, and a few Latin Americans. (Most of the Latin Americans separately at this time.) The most typical nations in the bloc (i.e. highest loadings) were the Scandinavian countries and Britain - the countries who had Democratic Socialist governments at the time (Australia

and New Zealand had fairly high loadings too). The least typical (marginal) nations in the bloc were the 4 Latin Americans, with loadings below 0.6, and with very high loadings on another factor (Latin American); with the next least typical being Greece and Turkey, on the geographical margins of the West.

In Period 2, this picture changed. The U.K. loading remained high, but the Scandinavian countries' loadings dropped considerably; in fact, they now loaded higher on a separate factor of their own (Scandinavian). The other high loadings in the West tend to belong to the imperial powers (those possessing colonies or recently having possessed them): U.K., New Zealand, Belgium, France, Australia, Netherlands. (There are of course some overlaps between the democratic socialist and the imperial powers, but the dropping out of Scandinavia and the ascendancy of France, Belgium and the Netherlands creates the impression.) Membership in the bloc of Latin America and Israel, as well as Scandinavia, is marginal.

There is a drastic change in Period 3. The Latin American countries have now solidly joined the West (their own bloc no longer exists), and in fact have become the most typical nations in the Western bloc. (Manno's study⁶ shows that the Latin Americans lead the list of nations who are most often on the winning side of U.N. votes.) The Scandinavians have completely dropped out of the Western bloc and their bloc was joined by Ireland and Iceland; but now even the imperial nations have partly or completely dropped out to form their own bloc (Imperial); even the U.K. is marginal, France is gone, and Israel's loading is low. (This is the immediate post-Suez period, but the critical votes on the Suez crisis are not included in the data analyzed; since they occurred in an Emergency Special Session.)

In Period 4, the Latin Americans remain as the most typical nations in the West, but both the Scandinavians and the imperial powers partly rejoin the West. The hold-outs in the case of Scandinavia are Sweden and Finland (they

are not NATO members, rather, "European neutrals"), and in the case of the imperial powers, Portugal, the last nation with large colonial holdings in Africa.

It is interesting to note that the United States is not the most typical nation of the West in any period. Canada is usually between the U.S. and U.K., except in the last period; but these "distances" show up better in the factor plots given later.

The Afro-Asian bloc, which according to Table 5 is second in importance^{*} in all but the second period when it is first in importance, also shows great changes in membership, due mainly to the fact that the Africans were admitted late in the U.N. history, and even some of the Asians were not members in the beginning. In the first two periods the most typical nations of this bloc are the Arab countries; in Period 3 the most typical are South Asian countries such as Indonesia and India and they are still the most typical in Period 4. Many of the African countries (the French-speaking ones) form their own bloc in Period 4 -- the "pro-West neutrals" -- but some Africans, such as Ghana, Mali, and Nigeria, belong to the Afro-Asian bloc in Period 4.

The most significant change is that, in Period 4, there is a partial merger of the Afro-Asian and the Soviet blocs. While the Soviet bloc still loads on their own separate factor, they also load marginally on the Afro-Asian bloc. The significance of this will be illustrated and discussed later.

It is also interesting to note that a group of nations have negative loadings on the Afro-Asian factor: South Africa, France, Portugal, Belgium, U.K. Though primarily members of the West, they appear as the "enemies" of the Afro-Asians; they are the countries of the former Imperial bloc.

The Soviet bloc, third in importance in the first two periods, is a very tightly knit group, with an almost identical voting record for all its member countries. Yugoslavia, however, drops out in Period 2 and thereafter remains.
^{*} "Importance", defined in terms of the amount of variance accounted for, seems to parallel roughly the number of nations in the bloc, i.e. the voting strength.

with the Afro-Asian bloc. In Period 3 the Soviet bloc is joined by the newly admitted nations: Rumania, Bulgaria, Albania, Hungary. In Period 4, Cuba joins the bloc. In Period 4 also, as already noted, a partial merger with the Afro-Asians takes place.

We can only wish that Mainland China had taken part in U.N. votes, so that we could observe the development of the Sino-Soviet rift in our analysis. Albania gives no indication of this, probably because none of the issues voted on were such that a difference of opinion would arise. (If China had been present, such issues might have been raised.) When Period 5 is analyzed, such a difference may appear, owing to votes on non-proliferation.

The Scandinavian bloc showed surprising strength, especially in Period 3, when it accounted for more variance than either the Soviet or the Imperial bloc. Since the Scandinavians are traditionally the "peace-keeping" nations (as is Ireland, a marginal member), we wonder if this reflects a rise in U.N. supranationalism (and a drop in it since 1959). However, unlike Alker⁸, we did not isolate any supranational cluster of issues in our issue analysis (see below). This could be because we did not analyze the Special Emergency Sessions, which were the ones that initiated peace-keeping. The separateness of the Scandinavian bloc may have been accentuated in these sessions, but it is strong enough to appear even in the ordinary sessions.

We have to confess to a certain disappointment at the complete absence of Canada from the Scandinavian bloc. Traditionally a peace-keeping nation, Canada apparently has such strong ties to the mainstream of the West that no supranational tendencies become apparent in the U.N. voting pattern.

The Latin American bloc, as already noted, was separate in Periods 1 and 2, but merged with the West in Periods 3 and 4. The second (smaller) Latin American factor in Period 1 consisted of only five countries, ^{three of which,} Guatemala, Mexico, and Uruguay, joined the Afro-Asians in Period 2. Mexico showed some tendency to remain as a Pro-West neutral when the others joined the West out-

right in Period 3. Cuba defected to the Soviet bloc in Period 4.

The factor plots given later show that the Latin American bloc occupies a position intermediate between the West and the Afro-Asians. When the merger with the West occurred in Period 3, this position became occupied by a group we call the Pro-West neutrals, with an entirely new membership. It is very weak in Period 3, having few members with low loadings, some of them predominantly members of other blocs. It is greatly strengthened in Period 4 by the influx of new African nations; most of the French-speaking Africans voted with this bloc in Period 4, and a few nations, such as Israel, Laos, and Haiti, joined it marginally but are primarily members of the West.

Finally, the Imperial bloc, when present, was always small and ill-defined. The most typical nation in both periods of its existence, Periods 3 and 4, was Portugal. Among its members, South Africa and Luxembourg (a Benelux nation) do not have any overseas possessions, but their presence in this bloc is easily understood on political grounds. In Period 4, this bloc is more prominent as the negation of the Afro-Asian bloc than as a bloc in its own right. The overlap with the West is always so considerable that the group might be considered as merely a sub-bloc of the West.

We might also note some interesting movements and crossings between blocs by some individual countries. The defection of Cuba to the Soviet bloc and of Yugoslavia from the Soviet bloc have already been mentioned. China (Taiwan) voted with the Afro-Asians in Period 1 (before the Communists took over the mainland), formed a factor all by itself in Period 2, then joined the West. Israel, not a member in Period 1, voted with the Latin Americans (who could also be considered pro-West neutrals) in Period 2, along with the Latin Americans joined the West in Period 3, and was mainly with the West and partly with the pro-West neutrals (French-speaking Africans) in Period 4. Bolivia, a marginal Western member in Period 1, crossed over to the Afro-Asians in Period 2, then returned to the West

in Period 3.

The trends and movements described in this discussion are illustrated in the diagram in Figure 1. The blocs are arranged from "left" to "right" according to intuitive political complexions, although this is an oversimplification of the more complex relationships. The width of each "stream" represents the number of countries who belong to it. The right margin contains some world events occurring simultaneously.

Place Figure 1 about here

Factor Plots

Another very useful way to represent the data in Tables 1-4 is by means of so-called factor plots.--(Figures 2-8.) These are plots of one factor against another, with each nation being represented by a point whose coordinates are its factor loadings on the two factors. This produces a sort of a two-dimensional map of national groupings, which shows the relationship more clearly than a one-dimensional (e.g. left to right) visualization as in Figure 1. It should be remembered, however, that even these plots are merely projections of more complex patterns, "slices" through a multi-dimensional model. We did build a 3-dimensional model (cf. Plate 1) to show relationships of three factors, but even this is an oversimplification, since our 7-factor system can be fully represented only in 7-dimensional space, which of course is a mathematical abstraction incapable of visual representation.

Place Figures 2-8 here

In Figures 2-8, the nation blocs appear as "islands" of points, each point representing a nation. With 7 factors, 21 different pairs of factors can be

formed, and therefore 21 plots of factors could be drawn for each of four periods. However, some of the seven factors are nearly "empty" and some combinations are of less interest than others. We have limited ourselves to plotting West against Soviet and West against Afro-Asian blocs for each of the four periods, or a total of 7 plots, since in Period 4 the Soviet and Afro-Asian blocs merged.

A comparison with Alker and Russett⁹ shows some similarities. Their 1947 diagram (p. 54) shows the Western, Soviet, and Arab group, while our diagram for 1946-50 (Figure 3) has the Western, Soviet, Afro-Asian (mainly Arab), and Latin American group. Their 1952 diagram (p. 80) has the separate Scandinavian and Latin American group, like our Figure 5, and a closer approach of the Soviet bloc to the Afro-Asians. Their diagram for 1957 (p. 98) again shows the closer approach of the Soviet and Afro-Asian blocs, and an overlap between the Latin American and Western blocs, which in 1952 were still separate (Cf. our Figure 7). Their 1961 diagram (p. 121) shows the Soviet-Afro-Asian merger, as our Figure 8 does, but still has the Scandinavian group separate. The Imperial bloc does not show up as clearly in their diagrams, although they have a West European and Old Commonwealth group.

Alker and Russett's results, then, while obtained with a different sample of issues, generally confirm our results. Our results are based on more extensive data (18 sessions rather than 4).

If we compare the corresponding diagrams (either West-Soviet or West-Afro-Asian) for the different time periods, the most striking trend observed is the rapprochement of the Soviet and Afro-Asian blocs and the simultaneous alienation between the Western and Afro-Asian blocs. Before we jump to the conclusion that "the Soviets are winning the cold war in the Third World", let us take a closer look at this phenomenon.

The following tests were made:

1. To test if the trend observed in the 2-factor plots is real, or merely an artifact due to neglect of the other 5 dimensions, we calculated

the "distance" in 7-dimensional space between pairs of nations which are representative of their blocs. This calculation can be done in spite of the fact that the 7-dimensional plot cannot be represented geometrically. The calculated distance is the square root of the sum of the squares of the differences between coordinates of the two nations which is a generalization of the formula for calculating the distance between two points in a plane.

2. To test if this trend is due to a change in the type of issues with which the U.N. votes were concerned, we examined the issue cluster results (R-mode factor analysis) to see whether there has been a shift from cold-war issues to colonial issues between the time periods. As the discussion of results below shows, no such shift was observed in our data.

Bloc Distances

To calculate this distance in the manner noted above, we have to choose particular nations as typical of their blocs, since the seven coordinates for the bloc as a whole are not known. This choice of typical nation is somewhat arbitrary: we could choose the nation with the highest loading, or one near the centre of the "island" in the factor plot. We preferred the latter method and made the following choices:

Western bloc - Canada.	Scandinavian bloc - Sweden.
Soviet bloc - USSR.	Imperial bloc - France.
Afro-Asian bloc - UAR or India.	Latin American bloc - Brazil.

Though UAR was more centrally located in its "island", we also calculated the distances using India, in an effort to avoid the criticism that the UAR is known to have more pro-Soviet tendencies than the rest of the Afro-Asians.

(Actually this is more a post-1963 phenomenon.)

The pro-West neutral bloc was not included in this calculation, because its membership shifted too much to make it possible to pick a typical nation.

There are 15 pairs that can be formed between six nations, but only some of these were of interest. The distances between Canada-USSR, Canada-UAR or India, and USSR-UAR or India, three in all (five if we also calculate with India), should be enough to confirm or disconfirm the reality of the movement of the Afro-Asians from the West toward the Soviets. However, because of the intrinsic interest of some of the other combinations, we calculated a total of nine of these 15 distances, and then added the two with India for a total of 11. These are given in Table 6.

Place Table 6 about here

Besides the distances, Table 6 also gives the "correlations"; these are direct measures of the frequency with which the votes of the two countries coincide. As expected, a large distance usually means a low (large negative) correlation. Since the correspondence between the rank orderings of distances and correlations is almost perfect;* either could have been used.

The change in the distance between nation-pairs with time is plotted in Figure 9. This shows clearly that all the distances between any of: the UAR, India, and USSR on the one hand, and any of: Canada, France, Sweden and on the other hand, Brazil/are increasing over the years, while the distances between USSR-UAR, USSR-India, and Canada-Brazil are decreasing. The trend is thus not simply one of the West "losing the third world" but of increasing bipolarization, for

* The rank order correlation coefficients for the four periods are respectively: 0.78, 0.98, 0.99, 0.99

Latin America is approaching the West while the Afro-Asian bloc is approaching the East.* (See note on page 19.)

The large downward dip in the UAR-Sweden curve in Period 3, and a corresponding upward swing of the France-Sweden curve in the same period, coincides with the time in which the Scandinavian bloc was most prominent. This shows that Scandinavia was moving at that time from the Imperial powers to their opposites, the Afro-Asians. In terms of the bipolar trend, this would mean away from the West and toward the Soviets. In the fourth period, however, this trend for the Scandinavian bloc was reversed.

Substituting India for the UAR as a representative of the Afro-Asians had the tendency to diminish the trend away from the West and toward the Soviets, but the movement was still real.

As an alternative way to represent this trend, we plotted the triangular diagrams in Figure 10. Each vertex represents a nation, and each side the calculated distance between them. The bipolarization trend is again apparent, more so with the UAR than with India.

Place Figures 9 and 10 about here

R-Mode Factor Analysis of Issues

As explained above, this was carried out year by year, with calculations not yet completed for some sessions. The complete factor tables are not given, to save space, but the results are summarized in Table 7, which lists the factors (roughly parallel to the number of roll-call votes) for each annual session in their order of importance, along with the percent variance each factor accounts for. The number of nations and the number of issues in each session is also given. The names of the factors were supplied by us, from an examination of the issues which load highly on that factor. The summary of issues on which roll call votes were taken, compiled by Glen Foster²¹

* Jacobsen⁵ also found that in 1947, 1952, 1957, and 1961, East-West conflict dominated over North-South conflict -- a third bloc has not emerged. While our Figures 2-8 consistently show one or more "neutral" blocs between East and West, their membership is not constant and is numerically decreasing.

from the Official Record of the General Assembly, was used to estimate the subject-matter of each roll call vote. It might be desirable to make a more thorough study of the debate surrounding each resolution in order to gain a greater understanding of the context and significance, but the sheer amount of material made this impossible for us at this time.

Place Table 7 about here

An examination of Table 7 shows a great variety of issue factors. Persistent ones which carry through many sessions are, not expectedly, cold war, colonialism, South Africa, and China representation. These are also often among the factors which account for most of the variance.

Time Trends in Issue Factors

The observed trend of the Afro-Asian bloc away from the West and toward the Soviet bloc could be due to a shift in the issues that come up for a vote, from purely cold war issues, on which the Afro-Asians might be neutral, to colonialism issues, on which the Soviet bloc would tend to vote with the Afro-Asians against the West. To test this possibility, we collected in Table 8 numbers on the percent variance accounted for by cold war issues and colonialism issues in every session analyzed. Even with the gaps in our results, this covers most of the years until 1961.

Place Table 8 about here

More than one factor was taken sometimes, when they seemed to fall under the heading of either cold war or colonial issues; e.g. South Africa and Southwest/Africa

issues were counted with colonialism, votes on admission of new members at the time of controversy (1951) with cold war issues. The factors taken into account are noted. The results were then averaged over the time periods corresponding to those over which the nation-bloc analyses were done. A comparison of the 4 cold war/colonialism ratios (right column at bottom) does not reveal any monotonic pattern, but there was an increase in cold-war issues in 1956-59 and an increase in colonial issues in 1960-63, although not enough data were obtained in the latter period.

Perhaps the separation of the Scandinavian and Imperial blocs from the West in 1956-59, and the Soviet merger with the Afro-Asians in 1960-63, is linked with these fluctuations in issues. Jacobsen⁵ also found, by a different method, that East-West conflict in U.N. votes fluctuated: it was 62% in 1947, 52% in 1952, 57% in 1957, 62% in 1961. He quotes Alker and Russett as obtaining the following: 45% in 1947, 51% in 1952, 64% in 1957, 68% in 1961.

III.

CONCLUSION.

The main pattern discovered in the changes in nation blocs with time is a trend toward increasing "bipolarization" (see note on p. 19 for a discussion of the definition of polarization and bipolarization): The Latin Americans joined the West, while the Afro-Asians joined the Soviet bloc. Brief attempts at forming separate Scandinavian and Imperial blocs proved abortive. The pro-West neutral bloc was small and fluid in membership.

Increasing bipolarization is a trend which seems to contradict the observations of political analysts. We have to remember, however, that our record stops in 1963, and the break-up of the blocs which is being discussed nowadays was then barely beginning. Also, mainland China, not being represented in the U.N., does not appear in our calculations. The trend we found may not continue into Period 5, 1964-68, which may show other interesting features, such as an alignment of the smaller nations against the superpowers (on non-proliferation, ocean resources, etc.).

IV.

FUTURE RESEARCH.

Besides filling in the gaps in the analysis of issues, the following needs to be done: 1. Obtain data for, and analyze, the four Special Sessions

and four Special Emergency Sessions up to 1963.

2. Obtain data for, and analyze, the sessions for 1964, 1965-68.

3. Calculate the "factor scores", i.e. the national positions, on the issue factors.

4. Apply these results to devising a workable, equitable and acceptable formula for weighted voting in the General Assembly. Such a formula, to make it acceptable, should be based on the stipulation that each of the major blocs should win at least a certain proportion of the time on the issues which are important to it. If we pick an issue cluster and a pair of opposing blocs who differ on it, e.g. cold war issues and the Western and Soviet blocs, we can find ranges of coefficients in a regression equation for the voting weight on a number of national indicators (population, GNP per capita, etc.) that would satisfy this criterion. We can repeat this for one or more issue clusters and corresponding nation blocs, and perhaps arrive at a set of coefficients that satisfies them all.

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Note on Polarization and Bipolarization.

1. Polarization can be defined as the distance (in the 7-dimensional factor space) between two nations chosen as representative of their blocs. Table 6 and Figures 9 and 10 show the time changes in these distances. The Canada-USSR distance (indicating West- and the USSR-Sweden and USSR-Brazil distances (with Sweden and Brazil also close to the West) Soviet polarization) showed a change between the first and the last period which was not significant by statistical test. Other bloc distances did change significantly.

2. "Bipolarization" is used here to mean an increasing approach to a division of the world into 2 groupings only, with any intermediate group waning in numbers and importance as time goes on. It is in this sense that we claim to observe a trend toward bipolarization, since a merger occurred between the Afro-Asian and Soviet blocs, on the one hand, and between the West and Latin American blocs, on the other hand. The only intermediate bloc left, the pro-West neutrals, is relatively weak.

3. Polarization between the West and Soviet blocs could also mean the positioning of the two blocs on the factor diagram at opposite ends of a line passing through the origin, instead of in such a way that the lines joining the centres of each bloc to the origin form an angle. Figures 2-8 actually show that this angle decreases over the years, showing decreasing polarization in this sense.

What this means physically is the following: If two blocs are on exactly opposite sides of the origin (angle 180°), then the nations belonging to them vote on opposite sides on most issues. The smaller the angle, the more often do the blocs vote together on some issues.

Thus what has happened over the years seems to be the following: While most of the nations in the U.N. have grouped themselves into 2 large groupings, these 2 groupings have shown an increasing tendency to vote together on at least some issues.

One wonders if this apparent convergence is promoted by a force outside the U.N., namely pressure from China, and how the presence of China in the U.N. would affect the voting patterns.

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TABLE 1 -
Factor Analysis of Nation-Blocs, 1946-50

<u>Country</u>	<u>West</u>	<u>Afro-Asian</u>	<u>Soviet</u>	<u>Latin Amer.</u>	<u>Latin Amer.</u>		
Norway	<u>0.94</u>	-0.09	0.13	0.28	-0.05	0.03	0.03
Denmark	<u>0.94</u>	-0.13	0.18	0.24	-0.11	0.05	0.05
Sweden	<u>0.93</u>	-0.11	0.17	0.24	-0.14	-0.06	0.07
U.K.	<u>0.91</u>	-0.05	0.36	0.06	-0.18	0.04	0.06
Canada	<u>0.90</u>	-0.06	0.31	0.15	-0.26	0.05	0.04
Netherlands	<u>0.88</u>	-0.08	0.32	0.05	-0.32	0.08	-0.01
New Zealand	<u>0.88</u>	-0.09	0.26	0.18	-0.28	0.15	-0.13
Iceland	<u>0.84</u>	-0.19	0.27	0.38	-0.16	-0.01	-0.07
Australia	<u>0.83</u>	-0.13	0.22	-0.03	-0.43	0.10	-0.22
U S A	<u>0.81</u>	-0.14	0.35	0.34	-0.30	0.03	0.03
Luxembourg	<u>0.80</u>	-0.09	0.16	-0.12	-0.49	-0.02	-0.27
South Africa	<u>0.79</u>	0.12	0.42	0.01	-0.42	-0.00	-0.09
France	<u>0.77</u>	-0.09	0.11	0.20	-0.35	-0.02	-0.46
Belgium	<u>0.77</u>	-0.04	0.26	-0.15	-0.49	0.03	-0.27
Turkey	<u>0.71</u>	-0.34	0.42	0.29	-0.34	-0.02	0.08
Greece	<u>0.65</u>	-0.27	0.38	-0.04	<u>0.58</u>	-0.01	-0.16
Bolivia	<u>0.56</u>	-0.38	0.18	0.24	<u>-0.66</u>	-0.00	-0.14
Chile	<u>0.56</u>	-0.37	0.15	<u>0.53</u>	-0.47	0.01	-0.19
Panama	<u>0.54</u>	-0.31	0.22	<u>0.56</u>	-0.43	-0.02	-0.25
Thailand	<u>0.54</u>	<u>-0.57</u>	0.33	0.41	-0.22	0.21	-0.14
Nicaragua	<u>0.53</u>	-0.29	0.33	0.23	<u>-0.68</u>	-0.04	-0.13
Uruguay	<u>0.52</u>	-0.27	0.14	<u>0.67</u>	-0.41	0.04	0.16
Domin Repub	<u>0.52</u>	-0.26	0.36	0.31	<u>-0.66</u>	-0.04	-0.04
Peru	<u>0.51</u>	-0.26	0.32	0.07	<u>-0.73</u>	-0.10	-0.13
Venezuela	0.28	<u>-0.52</u>	0.06	0.37	<u>-0.65</u>	0.29	-0.12
Mexico	0.26	<u>-0.52</u>	-0.05	<u>0.70</u>	-0.39	0.07	-0.14
Cuba	0.23	<u>-0.58</u>	0.11	0.45	<u>-0.61</u>	0.11	-0.11
Ethiopia	0.38	<u>-0.65</u>	-0.01	0.29	-0.19	0.17	<u>-0.53</u>
Haiti	0.23	<u>-0.66</u>	0.08	0.46	-0.38	0.26	-0.30
China	0.40	<u>-0.69</u>	0.08	0.34	-0.36	0.28	-0.20
Liberia	0.27	<u>-0.70</u>	0.07	0.27	-0.26	<u>0.52</u>	-0.15
India	0.11	<u>-0.74</u>	-0.33	0.19	-0.05	<u>0.54</u>	-0.03
Philippines	0.23	<u>-0.78</u>	0.13	0.40	-0.31	0.20	-0.18
Iran	0.20	<u>-0.86</u>	0.07	0.31	-0.24	0.11	-0.22

TABLE 1 (continued)

Country	West	Afro-Asian	Soviet	Latin Amer.	Latin Amer.		
Lebanon	0.15	<u>-0.90</u>	0.12	0.13	-0.23	-0.25	-0.10
Afghanistan	0.01	<u>-0.92</u>	-0.13	0.06	-0.17	0.30	0.13
Burma	0.13	<u>-0.93</u>	-0.17	0.00	-0.18	0.21	0.13
U A R	0.16	<u>-0.95</u>	0.06	0.05	-0.15	-0.22	-0.05
Saudi Arabia	-0.04	<u>-0.95</u>	-0.00	0.08	-0.14	-0.25	-0.01
Pakistan	0.05	<u>-0.96</u>	-0.04	0.06	-0.14	0.23	0.07
Syria	0.02	<u>-0.96</u>	-0.04	0.09	-0.16	-0.19	-0.01
Iraq	0.02	<u>-0.97</u>	0.07	0.15	-0.17	-0.11	-0.05
Yemen	-0.09	<u>-0.99</u>	-0.02	-0.04	-0.08	0.04	0.08
Yugoslavia	-0.27	-0.07	<u>-0.80</u>	0.26	0.41	0.10	0.19
Poland	-0.38	-0.03	<u>-0.91</u>	-0.06	0.16	0.00	-0.01
UK S S R	-0.37	-0.04	<u>-0.91</u>	-0.06	0.18	0.02	0.00
U S S R	-0.37	-0.03	<u>-0.91</u>	-0.07	0.17	0.02	-0.00
B S S R	-0.37	-0.03	<u>-0.91</u>	-0.07	0.17	0.02	-0.00
Czechoslovakia	-0.34	-0.03	<u>-0.92</u>	-0.05	0.16	-0.08	-0.01
Guatemala	0.20	-0.23	-0.15	<u>0.93</u>	-0.11	0.04	-0.00
Costa Rica	0.46	-0.07	0.35	<u>0.55</u>	<u>-0.53</u>	-0.08	0.26
Honduras	0.39	-0.40	0.31	<u>0.52</u>	<u>-0.56</u>	0.03	-0.09
Columbia	0.30	-0.49	0.11	0.36	<u>-0.67</u>	0.25	-0.14
Brazil	0.41	-0.49	0.19	0.26	<u>-0.69</u>	0.09	0.04
Paraguay	<u>0.50</u>	-0.35	0.28	0.17	<u>-0.71</u>	-0.05	-0.11
El Salvador	0.38	-0.43	0.33	0.20	<u>-0.71</u>	-0.13	-0.00
Ecuador	0.35	-0.43	0.21	0.25	<u>-0.74</u>	0.20	0.04
Argentina	0.38	-0.28	0.23	0.10	<u>-0.83</u>	0.05	0.15

TABLE 2
Factor Analysis of Nation Blocs 1951-55

Country	Afro-Asian	West	Soviet	Latin Amer.	Scandinavian	China Greece	
Honduras	<u>-0.54</u>	0.25	0.04	<u>-0.79</u>	0.03	0.06	0.13
Haiti	<u>-0.54</u>	-0.08	0.22	<u>-0.77</u>	0.14	0.11	-0.14
Ecuador	<u>-0.56</u>	0.18	-0.04	<u>-0.79</u>	-0.02	0.14	-0.02
Thailand	<u>-0.65</u>	0.22	0.11	-0.47	-0.12	0.49	-0.21
Uruguay	<u>-0.68</u>	0.28	-0.16	<u>-0.50</u>	-0.25	0.35	-0.03
El Salvador	<u>-0.74</u>	0.03	0.04	<u>-0.61</u>	0.14	0.07	-0.24
Philippines	<u>-0.78</u>	-0.05	0.07	-0.47	-0.00	0.39	-0.05
Argentina	<u>-0.79</u>	0.33	-0.11	-0.35	0.20	0.31	-0.04
Burma	<u>-0.79</u>	-0.20	-0.47	-0.13	-0.29	-0.06	-0.08
Bolivia	<u>-0.81</u>	0.07	-0.00	-0.48	-0.03	0.32	0.09
India	<u>-0.86</u>	-0.05	-0.33	-0.02	-0.28	-0.12	-0.22
Liberia	<u>-0.87</u>	0.04	-0.06	-0.40	-0.02	0.26	-0.06
Mexico	<u>-0.87</u>	0.01	-0.06	-0.39	-0.05	0.28	0.00
Indonesia	<u>-0.89</u>	-0.19	-0.39	-0.10	-0.03	0.01	-0.13
Yugoslavia	<u>-0.89</u>	-0.11	-0.33	-0.12	-0.23	-0.00	-0.14
Guatemala	<u>-0.92</u>	-0.02	-0.18	-0.30	0.03	0.16	-0.07
Iraq	<u>-0.92</u>	0.05	-0.02	-0.30	-0.14	0.19	-0.05
Afghanistan	<u>-0.93</u>	-0.20	-0.26	-0.07	-0.07	0.13	0.08
Pakistan	<u>-0.93</u>	0.02	-0.06	-0.27	0.05	0.20	-0.06
Ethiopia	<u>-0.94</u>	-0.01	-0.07	-0.23	-0.16	0.14	-0.13
Lebanon	<u>-0.94</u>	0.09	-0.02	-0.23	-0.02	0.21	0.12
Yemen	<u>-0.94</u>	-0.17	-0.25	0.02	-0.04	-0.12	0.08
Syria	<u>-0.94</u>	-0.16	-0.22	-0.05	-0.12	-0.14	0.07
Saudi Arabia	<u>-0.94</u>	-0.17	-0.21	-0.04	-0.08	-0.16	0.08
Iran	<u>-0.95</u>	-0.06	-0.06	-0.26	0.10	0.07	-0.02
U A R	<u>-0.97</u>	-0.12	-0.16	-0.07	-0.01	-0.11	0.05
France	0.15	<u>0.96</u>	0.19	-0.06	-0.09	0.09	-0.05
U K	0.15	<u>0.96</u>	0.13	-0.19	0.05	0.08	-0.02
New Zealand	0.10	<u>0.96</u>	0.14	-0.17	-0.16	0.02	0.05
Belgium	0.18	<u>0.95</u>	0.20	-0.10	0.04	-0.10	0.07
Luxembourg	0.14	<u>0.94</u>	0.17	-0.25	0.07	0.01	-0.02
Australia	0.18	<u>0.94</u>	0.17	-0.23	0.05	0.05	0.02
Canada	-0.02	<u>0.92</u>	0.14	0.23	-0.22	0.16	0.05
Netherlands	0.17	<u>0.91</u>	0.18	-0.24	-0.21	-0.00	0.02

TABLE 2 (continued)

<u>Country</u>	<u>Afro-Asian</u>	<u>West</u>	<u>Soviet</u>	<u>Latin Amer.</u>	<u>Scandi-navian</u>	<u>China Greece</u>	
Turkey	-0.07	<u>0.83</u>	0.24	-0.46	-0.02	0.19	0.00
South Africa	0.31	<u>0.77</u>	0.28	-0.17	0.26	0.04	-0.37
Denmark	-0.15	<u>0.73</u>	0.02	-0.03	<u>-0.66</u>	0.07	0.00
U S A	0.11	<u>0.72</u>	0.21	<u>-0.53</u>	0.20	0.30	0.11
Sweden	-0.09	<u>0.69</u>	-0.06	-0.07	<u>-0.71</u>	0.06	0.02
Norway	-0.19	<u>0.68</u>	-0.01	-0.11	<u>-0.70</u>	0.04	0.02
Columbia	-0.11	<u>0.65</u>	0.28	<u>-0.62</u>	0.05	-0.14	-0.29
Peru	-0.31	<u>0.64</u>	0.27	<u>-0.60</u>	-0.08	0.14	0.18
Iceland	-0.33	<u>0.61</u>	-0.01	-0.40	-0.44	0.40	0.10
Israel	-0.12	<u>0.58</u>	-0.19	<u>-0.66</u>	-0.34	0.15	-0.21
Brazil	-0.24	<u>0.56</u>	0.28	<u>-0.71</u>	-0.18	0.10	0.07
Domin Repub	-0.23	<u>0.56</u>	0.25	<u>-0.69</u>	0.06	0.03	-0.31
Czechoslovakia	-0.33	-0.29	<u>-0.89</u>	0.15	-0.01	-0.03	0.00
B S S R	-0.32	-0.28	<u>-0.89</u>	0.15	-0.01	-0.02	0.00
U S S R	-0.32	-0.28	<u>-0.89</u>	0.15	-0.01	-0.02	0.00
Poland	-0.32	-0.28	<u>-0.89</u>	0.14	0.00	-0.01	0.01
UK S S R	-0.32	-0.28	<u>-0.89</u>	0.14	0.00	-0.01	0.01
Venezuela	<u>-0.50</u>	0.49	0.18	<u>-0.57</u>	0.13	0.38	0.05
Costa Rica	-0.48	0.32	0.05	<u>-0.69</u>	-0.07	-0.01	0.44
Chile	-0.44	0.30	-0.09	<u>-0.76</u>	0.01	-0.06	-0.35
Cuba	-0.33	0.24	0.19	<u>-0.81</u>	-0.10	0.32	-0.15
Nicaragua	-0.15	0.48	0.13	<u>-0.84</u>	-0.09	0.02	0.09
Panama	-0.21	0.47	0.04	<u>-0.86</u>	-0.04	0.01	-0.04
Paraguay	-0.22	0.24	0.23	<u>-0.88</u>	-0.05	0.15	0.19
China	-0.39	0.30	0.12	<u>-0.47</u>	-0.20	<u>0.68</u>	-0.14
Greece	-0.48	0.41	0.02	<u>-0.49</u>	0.06	<u>0.59</u>	0.12

TABLE 3
Factor Analysis of Nation Blocs, 1956-59

Country	Lat. Amer. & West	Afro- Asian	Scandi- navian	Pro West Neutral	Soviet		Imperial
Jordan	<u>-0.50</u>	-0.42	-0.48	-0.26	0.21	<u>-0.47</u>	0.06
France	<u>-0.51</u>	0.43	0.17	-0.16	-0.33	0.02	<u>0.63</u>
Belgium	<u>-0.54</u>	0.38	0.19	-0.19	-0.26	0.03	<u>0.66</u>
Australia	<u>-0.58</u>	0.35	0.24	-0.16	-0.24	-0.09	<u>0.63</u>
Ethiopia	<u>-0.59</u>	<u>-0.73</u>	-0.02	-0.26	0.08	-0.18	-0.11
Luxembourg	<u>-0.61</u>	0.40	0.23	-0.15	-0.24	0.01	<u>0.58</u>
South Africa	<u>-0.62</u>	0.40	0.12	0.02	-0.27	0.05	<u>0.60</u>
Lebanon	<u>-0.63</u>	-0.34	-0.30	<u>-0.45</u>	0.24	-0.36	0.04
Malaysia	<u>-0.65</u>	-0.28	0.01	0.05	-0.13	<u>-0.69</u>	-0.09
Cuba	<u>-0.66</u>	0.20	0.43	-0.50	0.09	-0.26	0.07
U K	<u>-0.67</u>	0.18	0.19	0.14	-0.38	-0.10	<u>0.55</u>
Mexico	<u>-0.70</u>	-0.15	0.02	<u>-0.67</u>	0.16	0.12	0.04
New Zealand	<u>-0.71</u>	0.06	0.45	0.04	-0.32	-0.31	0.28
Pakistan	<u>-0.74</u>	0.02	0.24	<u>-0.54</u>	0.01	-0.29	0.13
Iceland	<u>-0.74</u>	-0.04	<u>0.55</u>	-0.28	-0.17	-0.18	0.06
Canada	<u>-0.75</u>	0.15	0.36	-0.11	-0.28	-0.30	0.33
Iran	<u>-0.75</u>	-0.39	-0.16	-0.40	-0.17	-0.26	0.09
Netherlands	<u>-0.75</u>	0.25	0.26	0.02	-0.32	-0.05	0.45
Venezuela	<u>-0.76</u>	0.14	0.27	<u>0.54</u>	0.04	-0.17	0.06
Italy	<u>-0.76</u>	0.28	0.27	-0.04	-0.26	-0.03	0.44
Spain	<u>-0.78</u>	0.14	0.11	0.02	-0.32	-0.01	<u>0.51</u>
Liberia	<u>-0.79</u>	-0.41	-0.03	-0.24	-0.19	-0.34	-0.03
Japan	<u>-0.80</u>	-0.10	0.13	<u>0.07</u>	-0.09	<u>0.57</u>	0.01
Israel	<u>-0.80</u>	-0.06	<u>0.50</u>	0.18	-0.19	0.12	0.16
Domin. Rep.	<u>-0.81</u>	0.17	0.19	0.15	-0.32	0.01	0.39
Haiti	<u>-0.81</u>	0.01	-0.14	<u>-0.53</u>	-0.02	0.11	0.16
Turkey	<u>-0.82</u>	0.14	0.25	-0.11	-0.19	-0.26	0.36
China	<u>-0.83</u>	0.31	0.27	-0.28	-0.10	-0.06	0.23
Austria	<u>-0.83</u>	-0.07	0.44	-0.14	-0.18	0.02	0.24
Greece	<u>-0.87</u>	-0.34	-0.11	-0.29	-0.12	0.07	0.09
Philippines	<u>-0.90</u>	-0.10	0.14	-0.16	-0.14	-0.35	-0.04
Peru	<u>-0.90</u>	0.08	0.18	0.11	-0.25	0.16	0.24
Laos	<u>-0.90</u>	-0.23	0.24	-0.03	-0.19	0.00	0.21

TABLE 3 (continued)

<u>Country</u>	<u>Lat. Amer. & West</u>	<u>Afro- Asian</u>	<u>Scandi- navian</u>	<u>Pro West Neutral</u>	<u>Soviet</u>		<u>Imperial</u>
U S A	<u>-0.90</u>	0.05	0.21	0.06	-0.24	-0.06	0.27
Nicaragua	<u>-0.90</u>	0.09	0.17	0.10	-0.25	0.01	0.26
Guatemala	<u>-0.92</u>	-0.17	-0.21	-0.27	-0.05	0.11	0.01
Bolivia	<u>-0.92</u>	-0.24	-0.11	-0.12	-0.27	-0.03	-0.03
Brazil	<u>-0.93</u>	0.10	0.18	0.05	-0.24	0.12	0.14
Honduras	<u>-0.93</u>	0.06	0.15	0.13	-0.20	0.05	0.22
Argentina	<u>-0.93</u>	-0.02	0.19	-0.02	-0.23	-0.17	0.13
Columbia	<u>-0.93</u>	0.04	0.22	0.07	-0.19	-0.03	0.20
Panama	<u>-0.93</u>	-0.08	0.06	-0.30	-0.07	-0.14	0.02
Chile	<u>-0.94</u>	0.05	0.24	0.08	-0.14	-0.11	0.13
Paraguay	<u>-0.95</u>	0.01	0.20	0.08	-0.17	-0.14	0.08
Thailand	<u>-0.95</u>	-0.09	0.10	0.02	-0.22	-0.14	0.06
El Salvador	<u>-0.96</u>	-0.06	-0.04	-0.26	-0.10	0.05	0.02
Costa Rica	<u>-0.96</u>	-0.14	-0.02	-0.04	-0.21	-0.12	-0.05
Uruguay	<u>-0.96</u>	0.02	0.06	-0.18	-0.14	0.14	0.07
Ecuador	<u>-0.96</u>	0.01	0.13	-0.21	-0.07	-0.05	0.03
Tunisia	-0.37	<u>-0.53</u>	-0.00	<u>-0.73</u>	0.20	-0.07	-0.03
Libya	-0.13	<u>-0.62</u>	-0.25	<u>-0.63</u>	0.38	-0.02	0.09
Iraq	-0.11	<u>-0.65</u>	-0.05	<u>-0.67</u>	0.33	0.07	0.00
Morocco	0.23	<u>-0.66</u>	0.07	<u>-0.60</u>	0.36	0.08	-0.06
Nepal	0.04	<u>-0.76</u>	0.25	<u>-0.50</u>	0.31	0.14	-0.01
Yugoslavia	0.20	<u>-0.79</u>	0.04	-0.09	<u>0.57</u>	0.03	-0.07
Cambodia	-0.38	<u>-0.79</u>	0.42	-0.16	0.12	0.07	-0.09
Saudi Arabia	-0.23	<u>-0.83</u>	-0.25	-0.10	0.37	-0.19	-0.09
Ghana	0.09	<u>-0.85</u>	0.25	-0.05	0.25	-0.28	-0.26
Sudan	0.13	<u>-0.86</u>	0.10	-0.25	0.39	0.07	-0.11
U A R	0.06	<u>-0.93</u>	-0.01	0.01	0.34	-0.03	-0.11
Yemen	0.04	<u>-0.94</u>	0.02	0.01	0.31	-0.00	-0.15
Afghanistan	-0.03	<u>-0.95</u>	0.10	0.00	0.26	-0.05	-0.13
Burma	-0.08	<u>-0.95</u>	0.20	-0.16	0.13	0.01	-0.02
India	-0.02	<u>-0.96</u>	0.15	0.07	0.21	-0.05	-0.06
Ceylon	-0.14	<u>-0.96</u>	0.19	0.05	0.11	-0.01	-0.01
Indonesia	-0.02	<u>-0.98</u>	0.08	0.01	0.18	-0.00	-0.08

TABLE 3 (continued)

<u>Country</u>	<u>Lat. Amer. & West</u>	<u>Afro- Asian</u>	<u>Scandi- navian</u>	<u>Pro West Neutral</u>	<u>Soviet</u>		<u>Imperial</u>
Norway	-0.38	-0.29	<u>0.85</u>	0.03	-0.14	0.00	0.18
Denmark	-0.42	-0.29	<u>0.83</u>	0.08	-0.18	0.02	0.11
Sweden	-0.35	0.40	<u>0.82</u>	0.07	-0.14	-0.08	0.11
Finland	-0.13	- <u>0.50</u>	<u>0.80</u>	-0.02	0.09	0.00	0.29
Ireland	-0.44	-0.26	<u>0.71</u>	- <u>0.47</u>	0.09	0.04	0.10
Romania	0.30	-0.41	-0.07	-0.08	<u>0.84</u>	0.01	0.14
U S S R	0.30	-0.42	-0.07	-0.08	<u>0.84</u>	0.02	-0.12
Bulgaria	0.30	-0.42	-0.07	-0.08	<u>0.84</u>	0.02	-0.12
Albania	0.30	-0.42	-0.07	-0.08	<u>0.84</u>	0.02	-0.12
Czechoslov	0.30	-0.42	-0.07	-0.08	<u>0.84</u>	0.01	-0.12
B S S R	0.30	-0.43	-0.07	-0.09	<u>0.84</u>	0.01	-0.12
UK S S R	0.31	-0.42	-0.08	-0.08	<u>0.84</u>	0.02	-0.13
Poland	0.31	-0.43	-0.07	-0.08	<u>0.83</u>	0.03	-0.11
Hungary	0.37	-0.38	-0.01	-0.08	<u>0.82</u>	0.00	-0.20
Portugal	-0.49	0.11	0.38	0.09	-0.32	0.12	0.69

Table 4
Factor Analysis of Nation Blocs, 1960-63

Country	West + Lat. Amer.	Afro- Asian & Soviet	Pro- West Neutrals	Scandi- navian	Soviet		Imperial
Finland	<u>-0.59</u>	-0.20	-0.04	<u>0.77</u>	0.10	0.05	0.02
Pakistan	<u>-0.62</u>	-0.46	-0.23	0.03	0.10	<u>-0.58</u>	-0.03
Portugal	<u>-0.64</u>	0.42	0.00	0.08	-0.16	0.11	<u>-0.61</u>
Laos	<u>-0.64</u>	-0.37	<u>-0.62</u>	0.08	-0.03	-0.22	-0.09
Sweden	<u>-0.67</u>	-0.07	-0.04	<u>0.72</u>	0.15	0.00	0.03
South Africa	<u>-0.69</u>	<u>0.54</u>	0.11	0.02	0.19	-0.01	<u>-0.43</u>
Israel	<u>-0.69</u>	-0.01	<u>-0.64</u>	0.26	0.14	-0.14	-0.01
Malaysia	<u>-0.73</u>	<u>-0.50</u>	-0.23	0.09	0.19	-0.32	0.13
Cyprus	<u>-0.74</u>	<u>-0.51</u>	-0.33	-0.01	0.11	-0.25	0.06
Denmark	<u>-0.75</u>	0.05	-0.11	<u>0.64</u>	0.11	-0.05	-0.06
Norway	<u>-0.75</u>	0.05	-0.12	<u>0.63</u>	0.11	-0.06	-0.07
Haiti	<u>-0.76</u>	-0.05	<u>-0.54</u>	-0.20	-0.05	-0.26	0.17
U K	<u>-0.76</u>	0.40	-0.00	0.33	0.21	-0.13	-0.31
Iran	<u>-0.79</u>	-0.34	-0.28	-0.18	0.12	-0.34	0.12
France	<u>-0.80</u>	<u>0.53</u>	-0.10	0.06	-0.02	0.06	-0.24
Spain	<u>-0.81</u>	0.38	0.01	-0.09	0.21	0.06	-0.38
Philippines	<u>-0.82</u>	-0.00	-0.46	-0.06	-0.01	-0.33	0.06
Iceland	<u>-0.82</u>	0.13	-0.15	0.49	0.16	-0.15	-0.04
Netherlands	<u>-0.84</u>	0.33	-0.12	0.28	0.17	-0.09	-0.24
Belgium	<u>-0.84</u>	0.41	-0.14	0.10	0.08	0.06	-0.29
Luxembourg	<u>-0.84</u>	0.36	-0.21	0.17	0.17	-0.04	-0.24
Australia	<u>-0.85</u>	0.35	-0.07	0.25	-0.17	-0.16	-0.21
U.S.A.	<u>-0.85</u>	0.33	-0.12	0.25	0.11	-0.15	-0.24
Thailand	<u>-0.85</u>	-0.01	-0.33	0.03	0.13	-0.37	-0.06
New Zealand	<u>-0.87</u>	0.24	-0.17	0.32	0.10	-0.14	-0.16
Mexico	<u>-0.87</u>	-0.27	-0.15	-0.06	-0.04	0.22	0.30
Ireland	<u>-0.87</u>	0.07	-0.07	0.46	0.11	0.01	0.05
Venezuela	<u>-0.88</u>	-0.29	-0.19	-0.13	0.10	0.13	0.23
Austria	<u>-0.88</u>	0.07	-0.14	0.43	0.11	-0.03	0.03
Greece	<u>-0.89</u>	0.23	-0.13	0.16	0.13	-0.18	-0.26
Italy	<u>-0.89</u>	0.27	-0.16	0.13	0.15	-0.07	-0.24
Turkey	<u>-0.89</u>	0.17	-0.04	0.20	0.15	-0.24	-0.22
Bolivia	<u>-0.90</u>	-0.04	-0.36	-0.06	0.11	0.17	0.15

TABLE 4 (continued)

Country	West + Lat. Amer.	Afro- Asian & Soviet	Pro- West Neutrals	Scandi- navian	Soviet		Imperial
Canada	<u>-0.90</u>	0.25	-0.11	0.27	0.15	-0.11	-0.12
China	<u>-0.90</u>	0.19	-0.28	-0.04	0.03	-0.14	-0.23
Uruguay	<u>-0.90</u>	0.08	-0.37	-0.14	0.08	0.03	0.15
Columbia	<u>-0.90</u>	0.21	-0.35	0.11	0.01	-0.00	0.02
Japan	<u>-0.91</u>	0.10	-0.20	0.19	0.15	-0.22	-0.12
Ecuador	<u>-0.91</u>	-0.20	-0.27	0.12	0.06	0.14	0.12
Chile	<u>-0.91</u>	-0.05	-0.36	0.03	0.09	0.05	0.13
Nicaragua	<u>-0.92</u>	0.24	-0.22	0.09	0.20	-0.07	-0.02
Paraguay	<u>-0.92</u>	0.15	-0.33	-0.01	0.14	0.03	0.03
Honduras	<u>-0.93</u>	0.21	-0.28	-0.04	0.07	-0.00	0.11
Panama	<u>-0.93</u>	0.15	-0.30	0.08	0.10	0.03	0.07
Peru	<u>-0.93</u>	0.16	-0.27	0.01	0.06	0.05	0.14
El Salvador	<u>-0.94</u>	0.14	-0.25	-0.02	0.18	0.01	0.06
Guatemala	<u>-0.94</u>	0.11	-0.27	-0.03	0.13	-0.07	0.10
Costa Rica	<u>-0.94</u>	0.10	-0.30	-0.02	0.10	0.01	0.04
Brazil	<u>-0.94</u>	0.08	-0.27	-0.09	0.03	0.14	-0.01
Argentina	<u>-0.95</u>	0.08	-0.28	-0.06	0.03	0.11	-0.01
Domin. Rep.	<u>-0.96</u>	0.19	-0.15	0.02	0.09	0.06	0.06
Liberia	<u>-0.50</u>	<u>-0.56</u>	<u>0.46</u>	-0.16	0.13	-0.41	0.12
Hungary	0.36	<u>-0.65</u>	-0.03	-0.08	<u>-0.66</u>	0.02	0.05
Czechoslov	0.34	<u>-0.66</u>	-0.04	-0.10	<u>-0.66</u>	0.03	0.04
Poland	0.36	<u>-0.66</u>	-0.03	-0.08	<u>-0.65</u>	0.01	0.04
Romania	0.35	<u>-0.67</u>	-0.03	-0.08	<u>-0.65</u>	0.02	0.03
U S S R	0.35	<u>-0.67</u>	-0.02	-0.08	<u>-0.65</u>	0.02	0.03
B S S R	0.35	<u>-0.67</u>	-0.03	-0.09	<u>-0.65</u>	0.02	0.03
UK S S R	0.35	<u>-0.67</u>	-0.02	-0.09	<u>-0.65</u>	0.02	0.03
Bulgaria	0.35	<u>-0.67</u>	-0.02	-0.07	<u>-0.65</u>	0.02	0.02
Albania	0.33	<u>-0.71</u>	-0.04	-0.09	<u>-0.61</u>	0.04	0.02
Cuba	0.39	<u>-0.73</u>	0.00	-0.10	<u>-0.54</u>	0.03	0.08
Jordan	-0.25	<u>-0.76</u>	-0.23	-0.48	-0.01	-0.26	0.09
Togo	-0.18	<u>-0.78</u>	<u>-0.50</u>	0.05	-0.03	-0.20	0.24
Lebanon	-0.33	<u>-0.82</u>	-0.12	-0.38	0.04	-0.16	0.16

TABLE 4 (continued)

Country	West + Lat. Amer.	Afro- Asian & Soviet	Pro- West Neutrals	Scandi- navian	Soviet	Imperial
Somalia	-0.07	-0.86	-0.45	-0.09	-0.08	-0.17
Nigeria	-0.08	-0.88	-0.44	0.10	0.10	-0.15
Cambodia	0.01	-0.90	-0.37	0.15	-0.44	0.11
Tunisia	-0.16	-0.91	-0.19	-0.00	0.06	-0.33
Libya	-0.06	-0.91	-0.17	-0.30	0.09	-0.15
Mali	0.31	-0.91	-0.10	0.00	-0.24	0.05
Guinea	0.29	-0.92	-0.08	-0.02	-0.24	0.07
Ethiopia	0.17	-0.94	-0.05	0.11	-0.06	-0.11
Yugoslavia	0.26	-0.94	-0.11	-0.01	-0.19	0.07
Ghana	0.21	-0.94	-0.19	0.12	-0.08	-0.08
Saudi Arabia	0.09	-0.95	-0.04	0.27	-0.11	-0.09
U A R	0.27	-0.95	-0.09	-0.05	-0.15	0.01
Afghanistan	0.20	-0.95	-0.12	-0.03	-0.22	0.00
Morocco	0.22	-0.95	-0.05	-0.07	-0.19	0.07
Iraq	0.25	-0.95	-0.09	-0.06	-0.15	-0.00
Indonesia	0.22	-0.96	-0.15	-0.00	-0.09	0.04
Burma	-0.06	-0.96	-0.09	0.23	0.02	0.08
Yemen	0.16	-0.97	-0.04	-0.09	-0.15	0.04
Nepal	-0.07	-0.97	-0.09	0.17	0.05	0.05
Sudan	0.09	-0.98	-0.11	-0.08	-0.08	-0.03
India	-0.02	-0.98	-0.03	0.12	0.05	0.14
Ceylon	0.07	-0.98	-0.05	0.15	-0.00	0.08
Congo-Leop	-0.36	-0.35	-0.79	0.04	-0.06	-0.32
Cameroon	-0.47	-0.10	-0.86	0.03	0.05	0.14
Senegal	-0.21	-0.43	-0.87	0.10	0.01	-0.10
Congo-Braz.	-0.37	-0.22	-0.89	0.04	-0.05	0.12
Madagascar	-0.40	-0.15	-0.89	0.01	-0.02	-0.13
Chad	-0.32	-0.31	-0.90	0.03	0.01	-0.04
Gabon	-0.39	-0.13	-0.90	0.01	-0.07	-0.01
Upper Volta	-0.23	-0.33	-0.91	0.10	-0.04	0.02
Ivory Coast	-0.33	-0.23	-0.91	0.00	0.02	-0.01
Dahomey	-0.35	-0.17	-0.92	-0.03	0.07	0.06
C A R	-0.31	-0.15	-0.94	0.02	0.02	0.02
Niger	-0.29	-0.14	-0.94	-0.00	-0.07	-0.02

TABLE 5

Summary of Factors

Periods	West	Afro-Asian	Soviet	Scan.	Pro-West neutral	Latin Amer.	Imperial	Total Variance Explained
1946-50	1(43.87)	2(15.23)	3(5.55)			4 & 5 (7.52)		71
1951-55	2(26.73)	1(33.21)	3(7.37)	5(2.76)		4(3.57)		72
1956-59	1(41.34) (merged with L.A.)	2(22.17)	5(2.80)	3 (6.58) (more members)	4(4.83)	(merged with West)	6(2.47)	79
1960-63	1(38.94) (merged with L.A.)	2(24.65) (merged with Soviet)	5(2.92) (mainly with Afro-Asian)	4(3.52) fewer members)	3(5.62)	(merged with West)	6(1.83) (mainly as opposite to Afro-Asian)	80

TABLE 6

Distances Between Some Nation Pairs - Variations With Time

Significance
test *
*

	1946-50		1951-55		1956-59		1960-63		
	Dist.	Cor. Coeff.	Dist.	Cor. Coeff.	Dist.	Cor. Coeff.	Dist.	Cor. Coeff.	
Canada-USSR	1.487	-0.561	1.678	-0.364	1.777	-0.497	1.795	-0.547	not sig.
USSR-UAR	1.420	-0.103	1.020	0.430	0.763	0.662	0.583	0.765	sig 0.001
Canada-UAR	1.227	0.217	1.486	-0.103	1.641	-0.266	1.741	-0.419	sig 0.001
France-Sweden	0.598	0.533	0.764	0.591	1.228	0.168	0.9598	0.377	sig 0.05
Canada-Brazil	0.8117	0.497	0.6585	0.583	0.5540	0.641	0.5241	0.684	sig 0.001
UAR-Sweden	1.178	0.220	1.326	-0.011	1.193	0.254	1.530	-0.103	sig 0.001
UAR-France	1.177	0.183	1.613	-0.254	1.799	-0.527	1.849	-0.581	sig 0.001
USSR-Sweden	1.564	-0.423	1.493	-0.098	1.530	-0.104	1.638	-0.310	not sig
USSR-France	1.581	-0.323	1.724	-0.427	1.837	-0.610	1.805	-0.516	sig 0.01
India-USSR	1.6309	0.195	0.9045	0.445	0.9327	0.510	0.88	0.516	sig 0.001
India-Canada	1.34	0.104	1.42	0.035	1.524	-0.107	1.57	-0.167	sig 0.001
USSR-Brazil	1.481	-0.373	1.693	-0.348	1.763	-0.488	1.663	-0.322	not sig
Canada-Sweden	0.2523	0.709	0.6092	0.651	0.9072	0.462	0.6302	0.675	not sig

* The differences between the correlation coefficients in 1946-50 and 1960-63 were tested for significance by the z' transformation method (Edwards, A.L., "Statistical Methods for the Behavioral Sciences", Rinehart, New York, 1954, pp. 304-7.)

Factor Analysis of Issues

Factors			Issues							
			1	2	3	4	5	6	7	8
1946	1	43 res. 51 nat. *	Trustee- ship & Procedu- ral 37.58	Indians in S. Africa Human Rights 10.60	Anti- Fascist pro- Soviet 7.37	Proce- dural (Sec. Council) & ECOSOC 6.17	Post W.W. II 4.10	Hurry procedure 4.06	Non- Self Gov. Terr. Conf. 3.17	- 3.09
1947	2	32 res. 58 nat.	Colon- ialism & Human Rights 44.21	Cold War 15.23	Spain & New members 9.40	U.N. in Europe 5.73	Geno- cide 4.00	Korea 3.30	- 2.71	S. Afr. & Trustee- ship 2.38
1948	3	97 res.		1						
1949	4	64 res. 59 nat.	Cold War 39.78	Pales- tine 17.65	Colonial- ism & S.W. Africa 9.63	Social welfare 4.27	Welfare in Trust Territ. 3.49	- 2.95	- 2.21	- 2.04
1950	5	53 res. 60 nat.	Cold War (Korea, disarm) 36.44	S. Afri- ca Col- onial. Human rights 20.36	- 7.54	Trustee- ship 6.57	Korea & China 3.95	Spain 2.86	Place of next Ass. 2.62	- 2.39
1951	6	25 res. 60 nat.	Colon- ialism & Human rights 43.45	Cold War 22.68	Admit members 5.71	Tension reduc- tion 4.73	Status of women 4.15	Defini- tion of aggres- sion 3.14	Indians in S. Africa 2.59	Moroc- co 2.20
1952	7	49 res. 60 nat.	Cold War 40.98	Colonial- ism 19.49	Popula- tion & race 7.14	Colonial- ism 4.11	- 3.15	Rights of women 2.78	Pales- tine 2.69	Moroc- co 2.09
1953	8	26 res. 60 nat.	Colon- ialism (Tunisia, Morocco) 48.21	S. Afri- ca & race 16.59	Cold war 11.13	Rights of women 4.29	Rights of women 3.46	Colonial- ism (pro- cedure) 2.48	- 2.38	- 1.99
1954	9									
1955	10	37 res. 60 nat.	Admis- sion of West. states 32.45	Cold War? 20.77	Colonial- ism 13.92	Admis- sion of Comm. states 8.77	Somali- land 3.50	Sec. Council election 3.26	Unloc. 3.25	World Court 2.59

* res. = resolutions

nat. = nations

TABLE 7 (continued)

Factor Analysis of Issues

Factors			Issues							
Assembly & Year										
1956	11	45 res. 79 nat. (half non loc)*	Cold War 41.71	Colonial- ism 14.27	Pales- tine 7.04	5.63	4.38	Admit members 3.70	Rights of women 3.36	2.37
1957	12	35 res. 82 nat.	Cold War 47.53	Colonial- ism 12.56	- 6.68	China Repres. 5.07	South Africa 4.31	Commit- tees 3.09	Sec- ret- ariat 2.79	Admis- sions 2.38
1958	13	33 res. 81 nat.	Cold War 46.39	South Africa 17.43	Law of the Sea Conf. 9.78	Algeria 5.07	Develop- ment aid 3.43	China repres. 3.07	Spec- ial Fund 2.42	Colonial- ism 1.65
1959	14	54 res. 82 nat.	Algeria & Fr. nuc. test 44.45	Trustee- ship Council reorgani- zation 13.57	Cold War 8.48	China repres. 4.17	South Africa & Develop- ment 3.09	Came- rooms plebis- cite 2.74	Land Reform 2.49	Trustee- Council reorgani- zation 2.24
1960	15	102 res.								
1961	16	75 res. 103 nat.	Colon- ialism 48.47	Cold War 11.11	China repres. (non- inter) 5.90	Colon- ialism 4.43	Pales- tine & West Iran 3.16	Ruanda- Urundi 2.28	- 2.04	Congo expenses 1.72
1962	17	44 res.								
1963	18	30 res.								
1964	19									

* Half the issues were reported "non-locatable" by Foster²¹ and were not included in the analysis.

Change in Issues With Time

Cold War			Colonialism		
Issues	% total vote	variance	Issues	% total vote	variance
1946		0	F 2		10.69
1947	F 2	15.23	F 1, 8		46.59
1948	Not done				
1949	F 1	39.78	F 3		9.63
1950	F 1	36.44	F 2		20.36
1951	F 2, 3	28.39	F 1		43.45
1952	F 1	40.98	F 2, 4		23.60
1953	F 3	11.13	F 1, 2, 6		67.28
1954	Not done				
1955	F 1, 2, 4	65.25	F 3		13.92
1956	F 1	41.71	F 2		14.27
1957	F 1	47.53	F 2, 5		16.87
1958	F 1	46.39	F 2, 5, 7, 8		24.93
1959	F 3	8.48	F 5		3.09
1960	Not done				
1961	F 2	11.11	F 1, 4		52.90
1962	Not done				
1963	Not done				
Ave. 1946-50			Ave. 1946-50		
30.48			21.82		
Ave. 1951-55			Ave. 1951-55		
37.44			37.08		
Ave. 1956-59			Ave. 1956-59		
36.03			14.79		
Ave. 1960-63 (not enough data)			Ave. 1960-63 (not enough data)		
(11.11)			(52.90)		
Ratio			Ratio		
Cold war/colonial			Cold war/colonial		
3/2			1/1		
5/2			1/5		
10/1			10/1		

Cold war/colonial
Ratio
Approx.

Change in Issues With Time

TABLE 8

Cold war		Colonialism	
Issues - % total vote variance		Issues - % total vote variance	
Ave. 1946-50	30.48	Ave. 1946-50	30.48
1951-55	37.44	1951-55	37.44
1956-59	36.03	1956-59	36.03
1960-63 (not enough data)	(30.48)	1960-63 (not enough data)	(30.48)
1964	36.44	1964	36.44
1965	38.39	1965	38.39
1966	40.98	1966	40.98
1967	11.13	1967	11.13
1968	62.25	1968	62.25
1969	41.71	1969	41.71
1970	47.23	1970	47.23
1971	46.39	1971	46.39
1972	8.48	1972	8.48
1973	41.71	1973	41.71
1974	47.23	1974	47.23
1975	46.39	1975	46.39
1976	8.48	1976	8.48
1977	41.71	1977	41.71
1978	47.23	1978	47.23
1979	46.39	1979	46.39
1980	8.48	1980	8.48
1981	41.71	1981	41.71
1982	47.23	1982	47.23
1983	46.39	1983	46.39
1984	8.48	1984	8.48
1985	41.71	1985	41.71
1986	47.23	1986	47.23
1987	46.39	1987	46.39
1988	8.48	1988	8.48
1989	41.71	1989	41.71
1990	47.23	1990	47.23
1991	46.39	1991	46.39
1992	8.48	1992	8.48
1993	41.71	1993	41.71
1994	47.23	1994	47.23
1995	46.39	1995	46.39
1996	8.48	1996	8.48
1997	41.71	1997	41.71
1998	47.23	1998	47.23
1999	46.39	1999	46.39
2000	8.48	2000	8.48
2001	41.71	2001	41.71
2002	47.23	2002	47.23
2003	46.39	2003	46.39
2004	8.48	2004	8.48
2005	41.71	2005	41.71
2006	47.23	2006	47.23
2007	46.39	2007	46.39
2008	8.48	2008	8.48
2009	41.71	2009	41.71
2010	47.23	2010	47.23
2011	46.39	2011	46.39
2012	8.48	2012	8.48
2013	41.71	2013	41.71
2014	47.23	2014	47.23
2015	46.39	2015	46.39
2016	8.48	2016	8.48
2017	41.71	2017	41.71
2018	47.23	2018	47.23
2019	46.39	2019	46.39
2020	8.48	2020	8.48
2021	41.71	2021	41.71
2022	47.23	2022	47.23
2023	46.39	2023	46.39
2024	8.48	2024	8.48
2025	41.71	2025	41.71
2026	47.23	2026	47.23
2027	46.39	2027	46.39
2028	8.48	2028	8.48
2029	41.71	2029	41.71
2030	47.23	2030	47.23
2031	46.39	2031	46.39
2032	8.48	2032	8.48
2033	41.71	2033	41.71
2034	47.23	2034	47.23
2035	46.39	2035	46.39
2036	8.48	2036	8.48
2037	41.71	2037	41.71
2038	47.23	2038	47.23
2039	46.39	2039	46.39
2040	8.48	2040	8.48
2041	41.71	2041	41.71
2042	47.23	2042	47.23
2043	46.39	2043	46.39
2044	8.48	2044	8.48
2045	41.71	2045	41.71
2046	47.23	2046	47.23
2047	46.39	2047	46.39
2048	8.48	2048	8.48
2049	41.71	2049	41.71
2050	47.23	2050	47.23
2051	46.39	2051	46.39
2052	8.48	2052	8.48
2053	41.71	2053	41.71
2054	47.23	2054	47.23
2055	46.39	2055	46.39
2056	8.48	2056	8.48
2057	41.71	2057	41.71
2058	47.23	2058	47.23
2059	46.39	2059	46.39
2060	8.48	2060	8.48
2061	41.71	2061	41.71
2062	47.23	2062	47.23
2063	46.39	2063	46.39
2064	8.48	2064	8.48
2065	41.71	2065	41.71
2066	47.23	2066	47.23
2067	46.39	2067	46.39
2068	8.48	2068	8.48
2069	41.71	2069	41.71
2070	47.23	2070	47.23
2071	46.39	2071	46.39
2072	8.48	2072	8.48
2073	41.71	2073	41.71
2074	47.23	2074	47.23
2075	46.39	2075	46.39
2076	8.48	2076	8.48
2077	41.71	2077	41.71
2078	47.23	2078	47.23
2079	46.39	2079	46.39
2080	8.48	2080	8.48
2081	41.71	2081	41.71
2082	47.23	2082	47.23
2083	46.39	2083	46.39
2084	8.48	2084	8.48
2085	41.71	2085	41.71
2086	47.23	2086	47.23
2087	46.39	2087	46.39
2088	8.48	2088	8.48
2089	41.71	2089	41.71
2090	47.23	2090	47.23
2091	46.39	2091	46.39
2092	8.48	2092	8.48
2093	41.71	2093	41.71
2094	47.23	2094	47.23
2095	46.39	2095	46.39
2096	8.48	2096	8.48
2097	41.71	2097	41.71
2098	47.23	2098	47.23
2099	46.39	2099	46.39
2100	8.48	2100	8.48

3.08

8.48

1958

22.90

11.11

1959
1960
1961
1962
1963

Not done
F 2
Not done
Not done

F 1, 4

FIGURE 1

Time Changes in Nation-Bloc Alignments

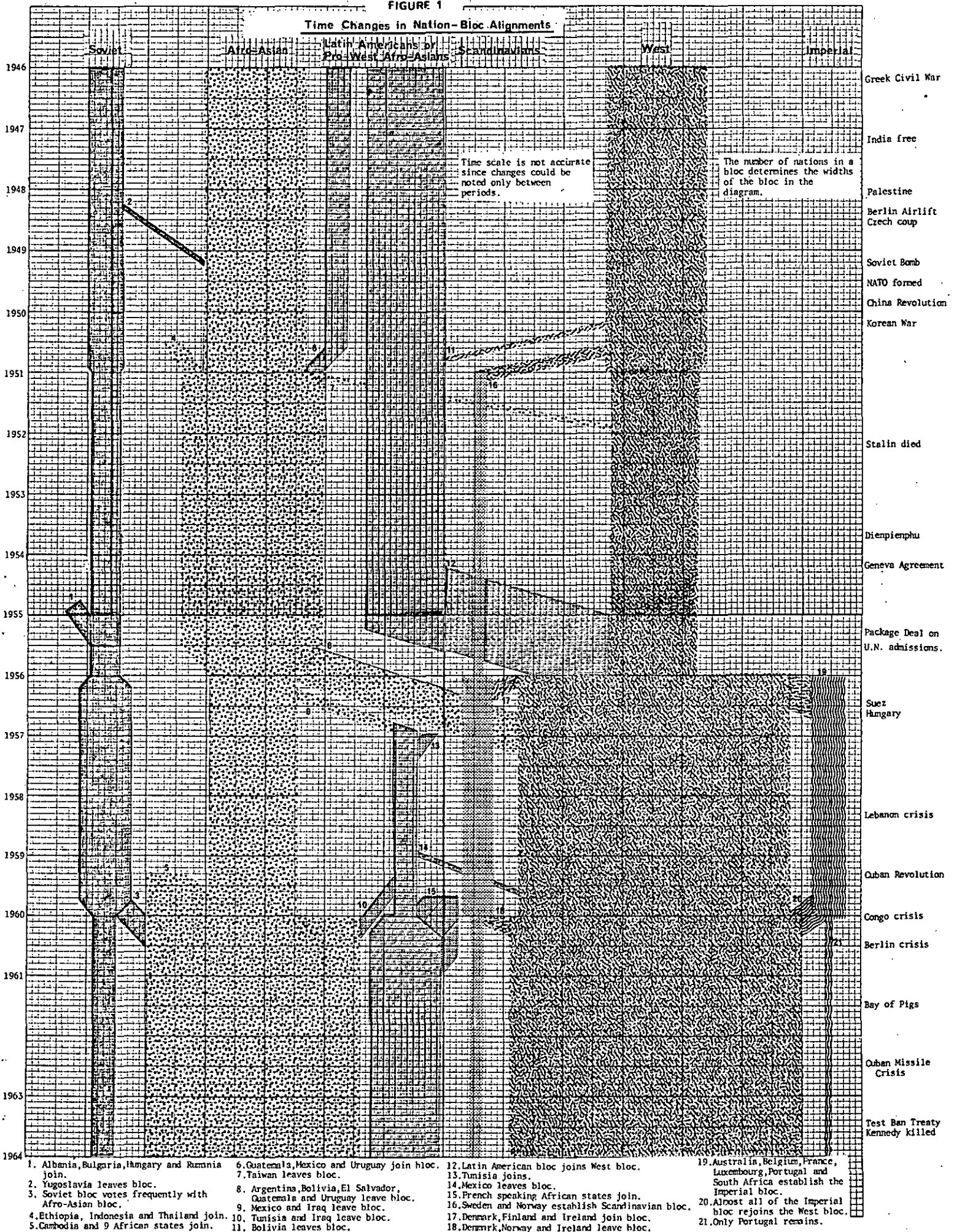


FIGURE 2

Factor Analysis of Nation-Blocs in United Nations Voting, 1946-50

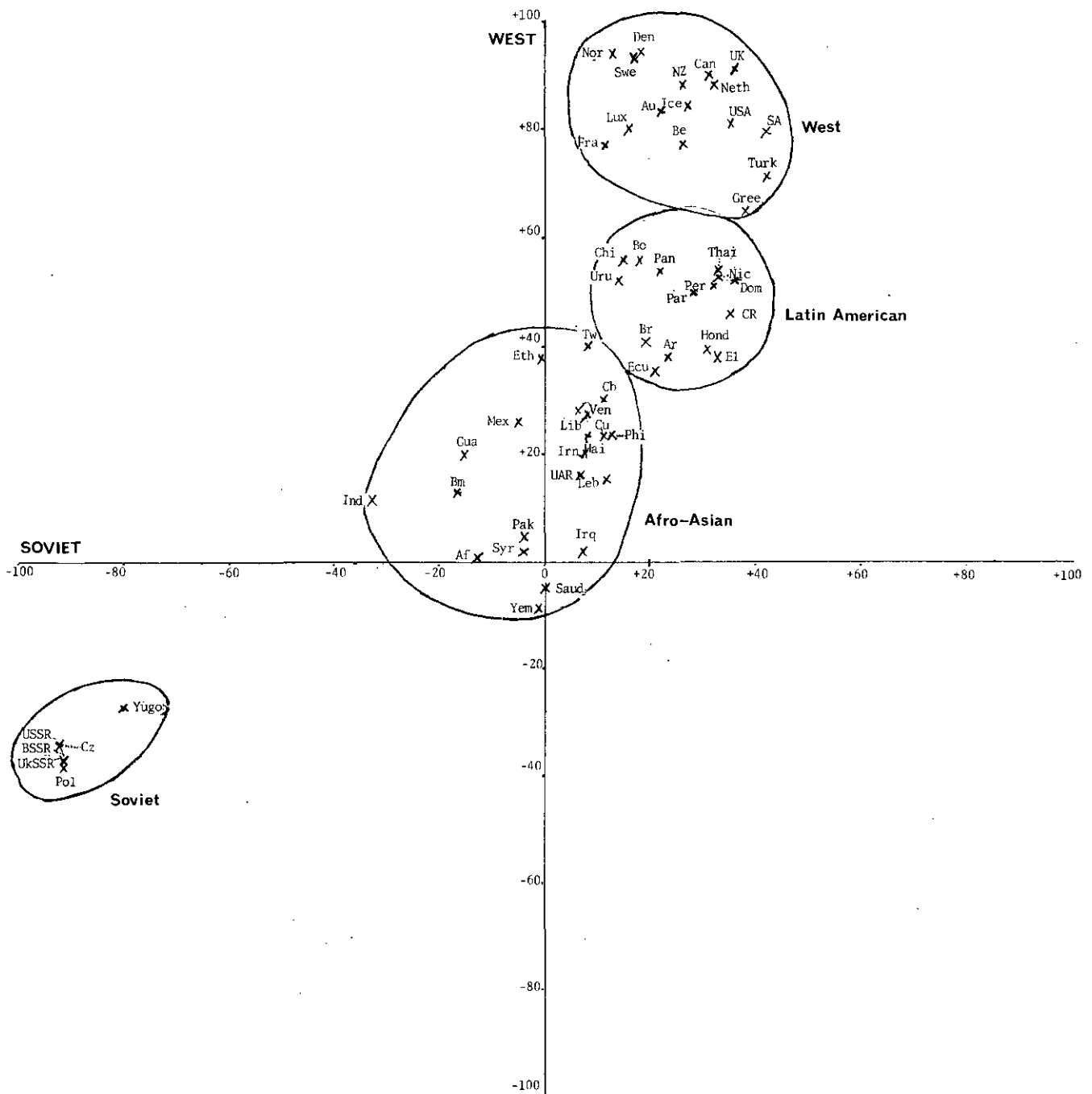


FIGURE 3

Factor Analysis of Nation-Blocs in United Nations Voting, 1946-50

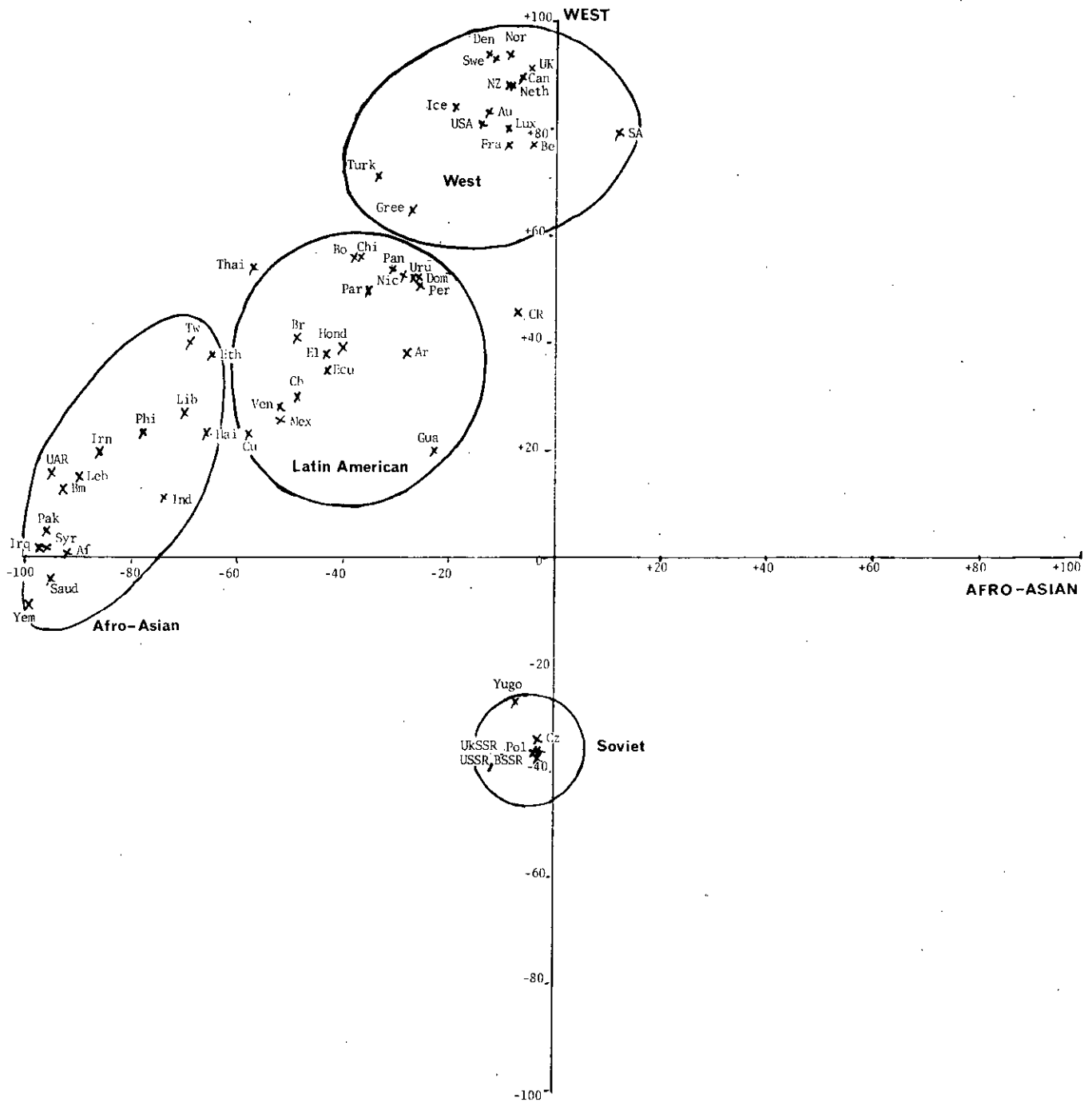


FIGURE 4

Factor Analysis of Nation-Blocs in United Nations Voting, 1951-55

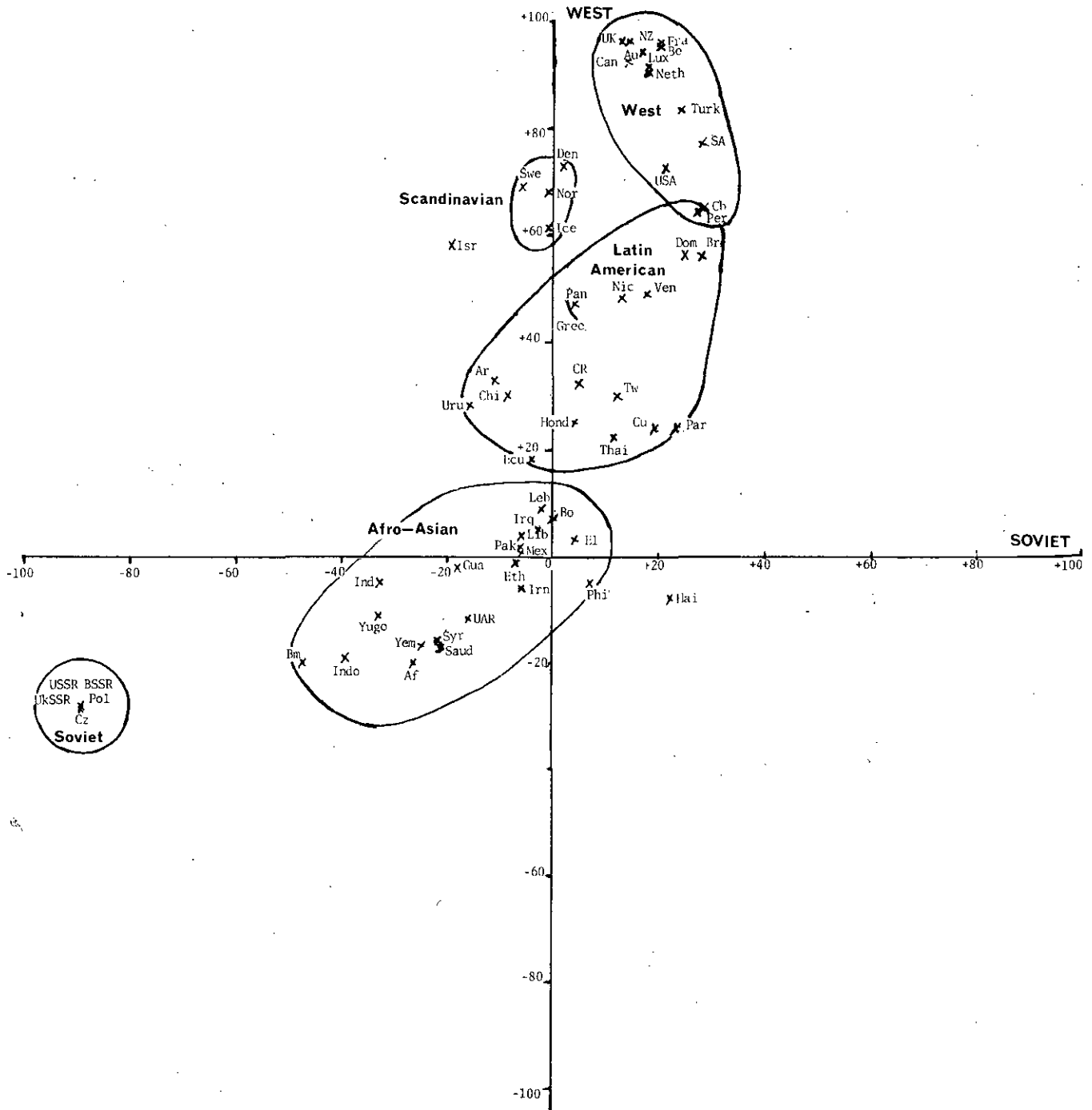


FIGURE 5

Factor Analysis of Nation-Blocs in United Nations Voting, 1951-55

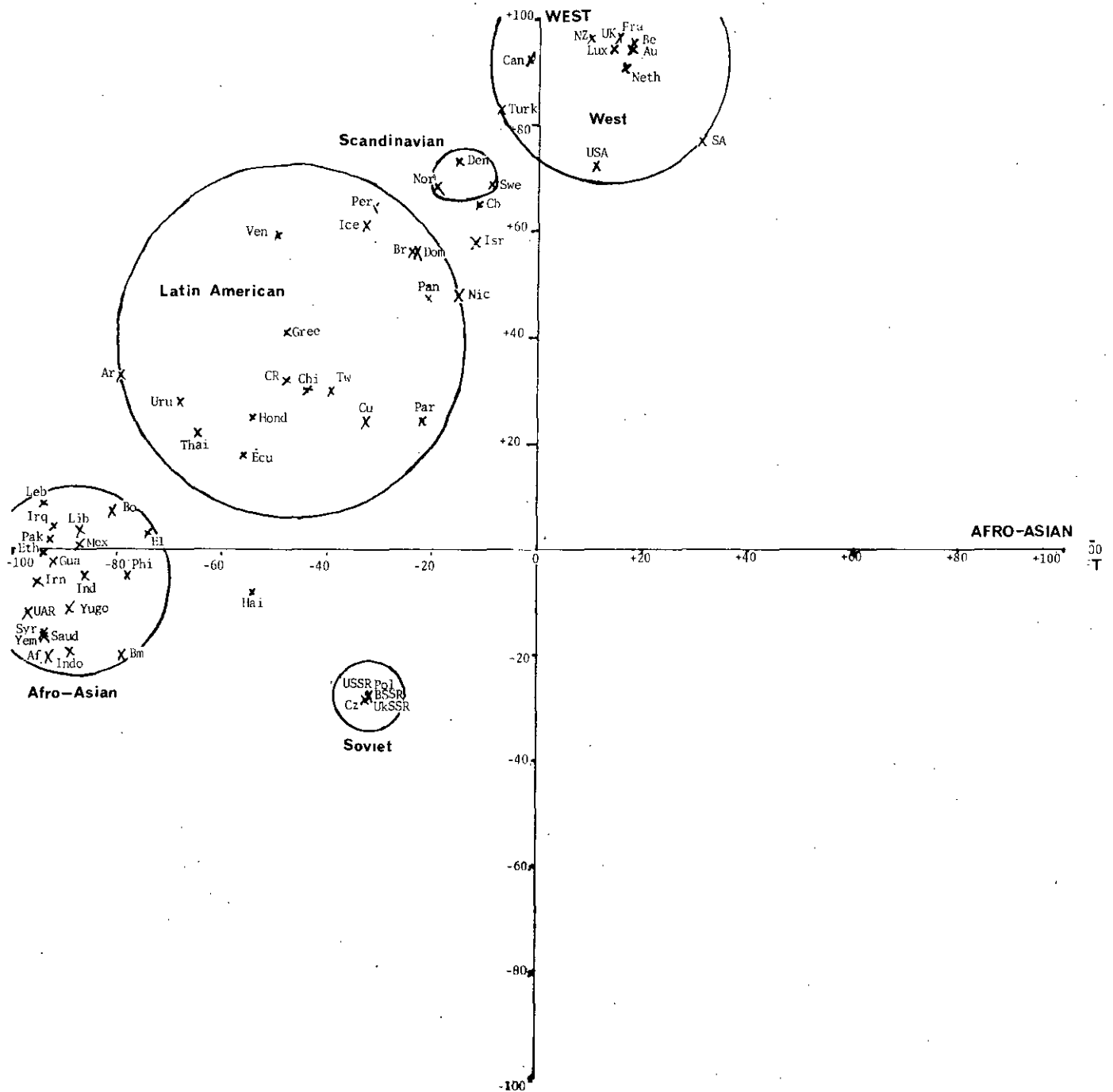


FIGURE 6

Factor Analysis of Nation-Blocs in United Nations Voting, 1956-59

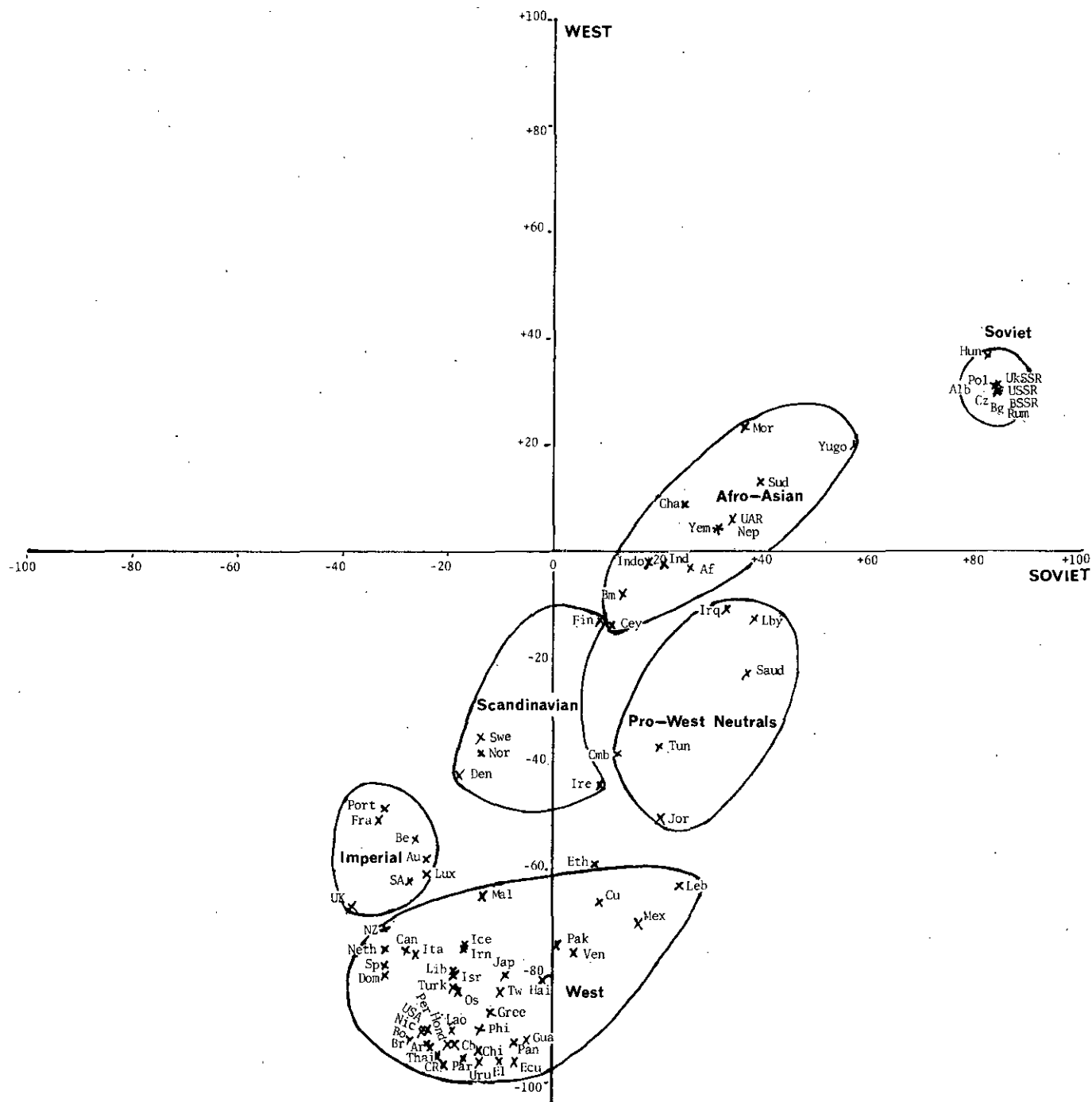


FIGURE 7

Factor Analysis of Nation-Blocs in United Nations Voting, 1956-59

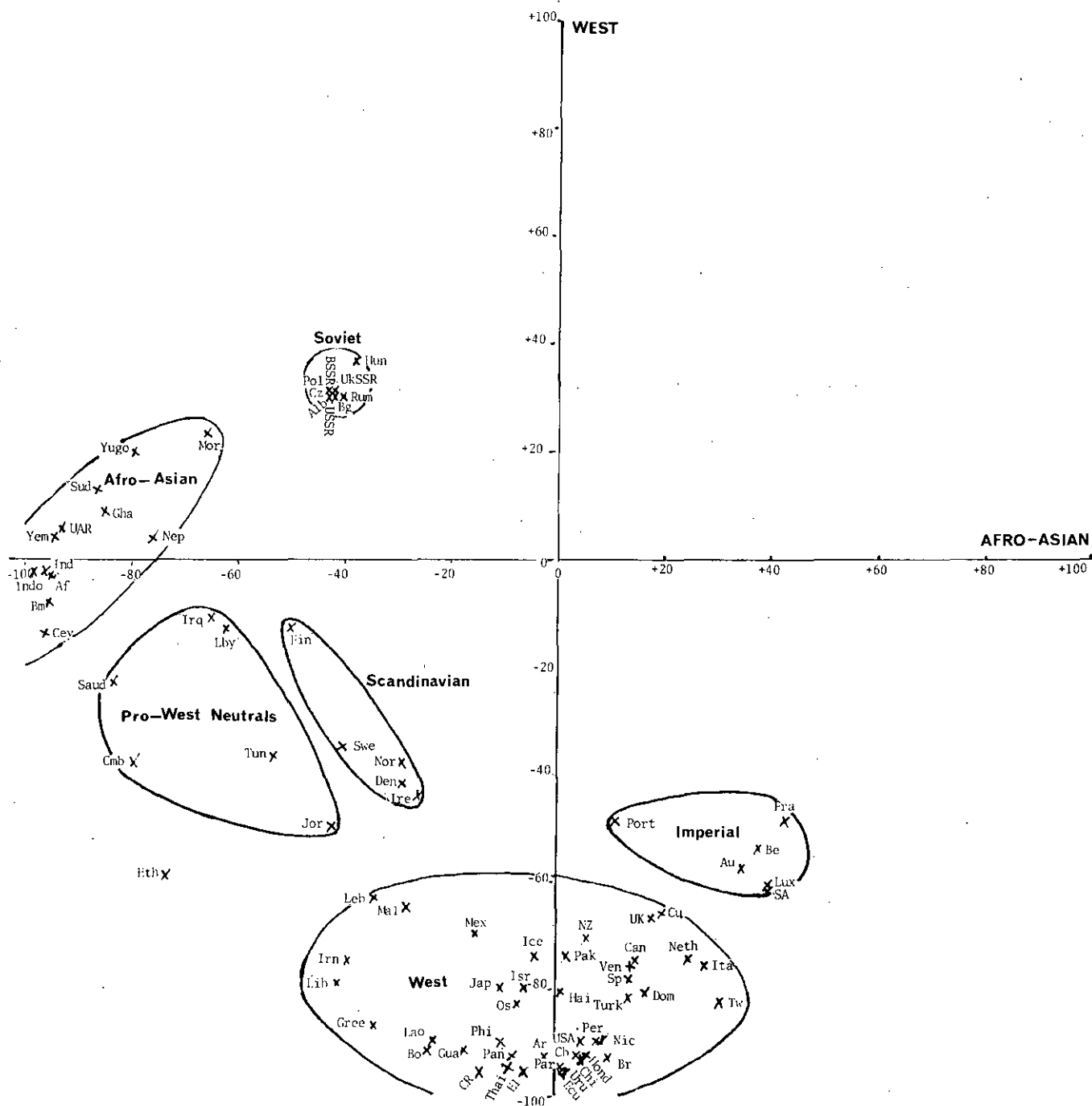


FIGURE 8

Factor Analysis of Nation-Blocs in United Nations Voting, 1960-63

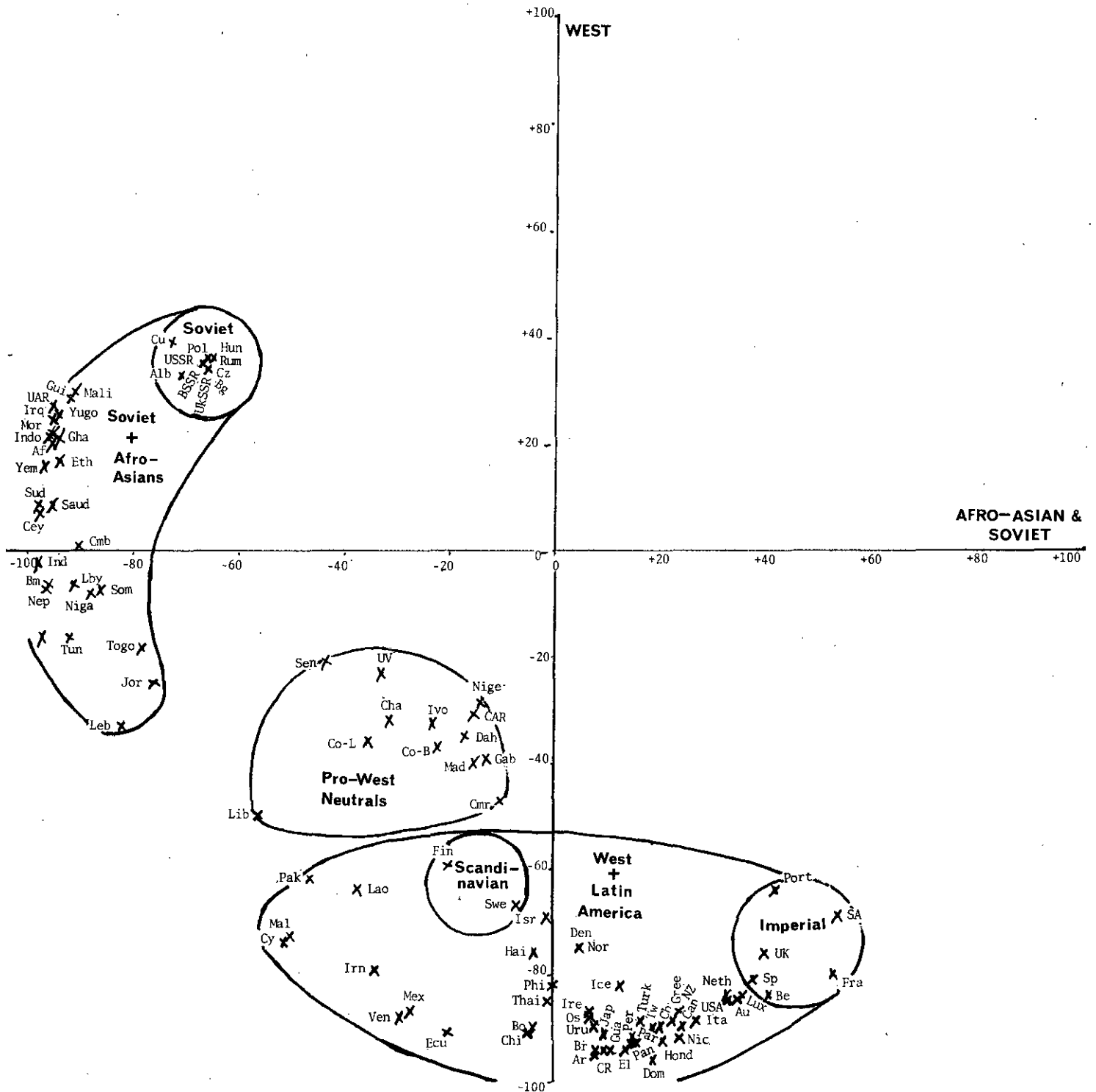


FIGURE 9

Variation of the Distance between some Pairs of Countries with Time

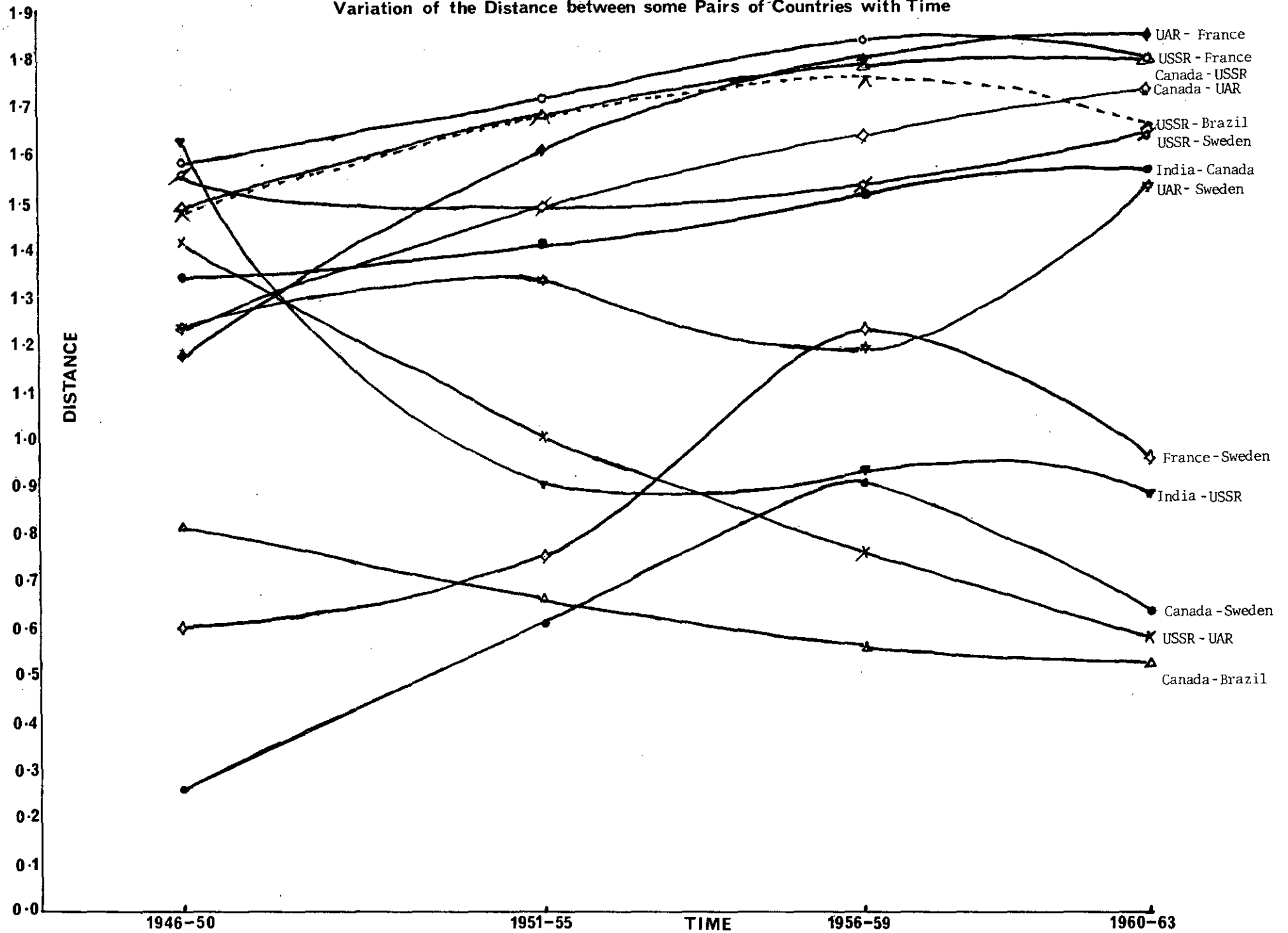
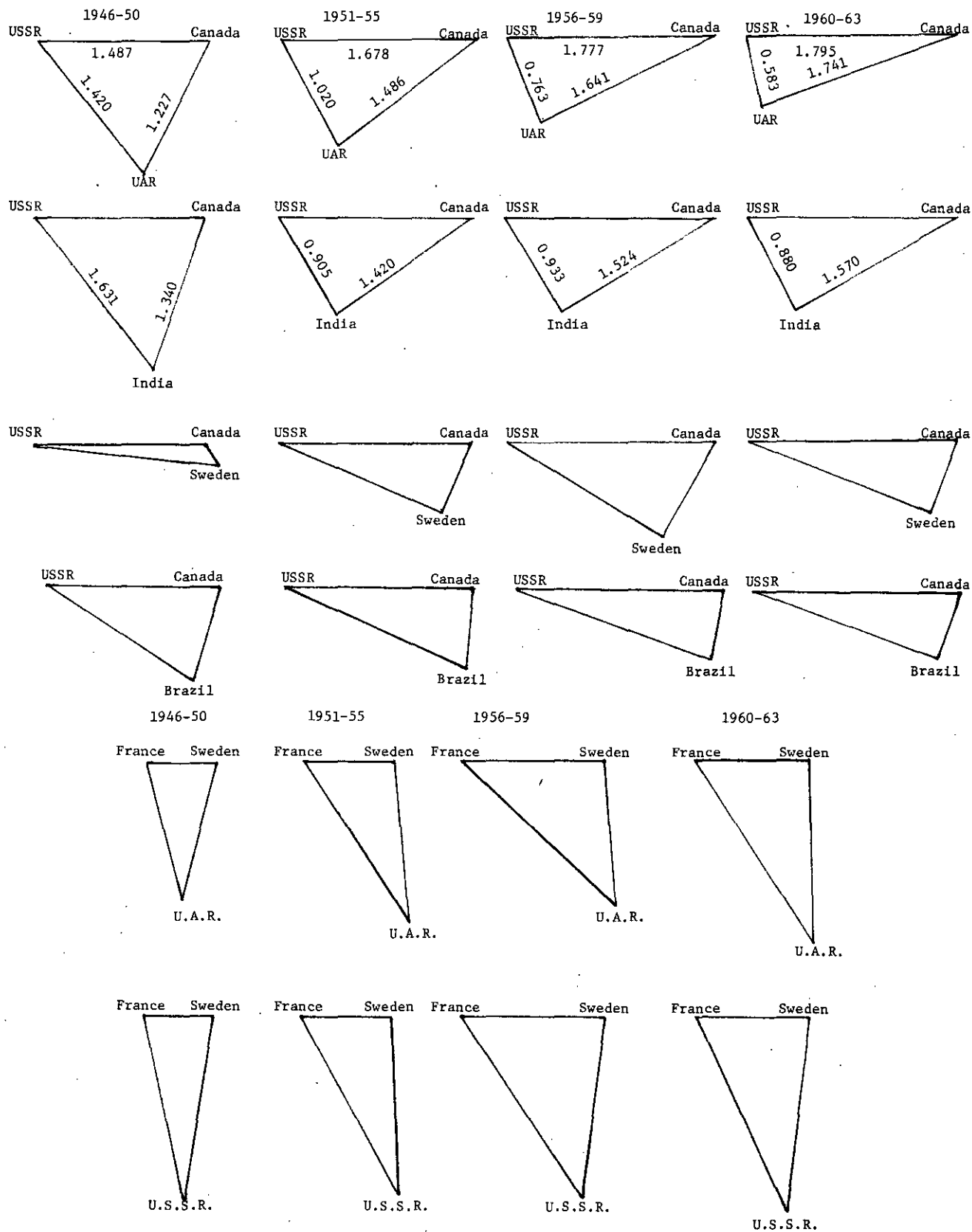


FIGURE 10
Distances between some Nation Triads in different periods



Institute for Peace and Conflict Research
Copenhagen, September, 1969

ECONOMIC IMPACT OF THE RHODESIA SANCTIONS.

by Jørgen Rasmussen

Introduction

Both the Covenant of the League of Nations and later the Charter of the United Nations placed great hopes in economic sanctions as a means for maintaining international order through concerted action by the entire community of nations. Nevertheless, there are only two instances in which economic sanctions have in fact been implemented by these bodies. The first was when the League imposed sanctions on Italy to bring the war with Ethiopia to an end. This case is generally held to have been an almost complete failure.

The second instance is the application of sanctions against Rhodesia by the United Nations in continuation of the sanctions originally enacted by Britain. These sanctions are still ongoing. Both the sanctions enacted by Britain and those of the U.N. were intended to bring "...the minority regime in Southern Rhodesia to an immediate end". This has not happened so far, and the following analysis is an attempt to find some of the reasons for this. In addition to economic effects the sanctions were also expected to bring political and psychological pressure to bear on the government: "Concerted U.N. action on these measures {the economic sanctions} would outlaw and isolate the illegal regime and compel its leaders to realize that they had inflicted grave damage on the trade, economy, and currency of their country." (Foreign Secretary, Michael Stewart, in the U.N. Security Council, November 12th, 1965)². The following analysis concentrates on economic factors only, but this is not to imply that "the rebellion" could not have been brought to an end as a result of political and psychological effects alone. Apparently, however, the main effect of the sanctions so far, ignoring

economic ones, has been to rally support around Ian Smith and the Rhodesian Front.

The analysis is based on data from 1965. This is because more recent reliable data are not available. On the basis of these data alone it can be seen that reasonable doubts about the effects of the sanctions could have been raised already at the time when the British Prime Minister, Harold Wilson, according to the expert advice available to him, believed that the cumulative effects of the economic and financial sanctions might well bring the rebellion to an end within a matter of weeks rather than months".³

The analysis and calculations below clearly indicate that the sanctions were bound to fail in their proclaimed objective of damaging the Rhodesian economy. The main reasons for this are on the one hand that the Rhodesian economy is fairly diversified and not too dependent on foreign markets, and on the other hand that trade relations would not be broken with the surrounding countries, first of all South Africa, which predictably, would either not participate in the sanctions, or if it did, would not show much zeal in applying them. Not only can Rhodesia maintain its trade with these countries, but it can also maintain its trade with the rest of the world in those commodities which cannot be readily identified as destined for, or originating from Rhodesia, Rhodesia's trade with the rest of the world has always passed through the surrounding countries, and since many Rhodesian firms are subsidiaries of South African ones, the sanctions in many cases mean little more than the typing of an additional invoice.

This does not mean that the sanctions have had no effect at all. Indeed, they have contributed to a change in the economic structure, detrimental to agriculture but favorable to the development of Rhodesian manufacture. The aggregate effect on national income appears to be very small indeed.

The first part of the paper analyses the development in the structure of the Rhodesian economy up to 1965. In the second part some "reasonable" assumptions are made about substitution in the Rhodesian economy and about the behaviour of Rhodesia's neighbours, and on this basis a quantitative evaluation is made of the effects of the sanctions on various sectors of the economy. Finally, the results of the calculations are compared with whatever meagre data are available on actual economic trends since 1965. This comparison suggests that the calculations using pre-sanctions data do in fact reproduce the main features; not only do they show correctly that the sanctions would not work the way, the British government claimed they would, but they also seem to reproduce fairly well the structural development in the Rhodesian economy since the sanctions were enacted.

I. Resources, Production and External Trade.

Before engaging in an analysis of the structure of the Rhodesian economy a brief summary of the most important products and production sectors of the "European" sector might be useful.⁴

Agriculture.

Rhodesia has always had some export of agricultural products. Originally the main crop was maize, primarily produced for the domestic market, but always with a minor surplus for export. The maize export was severely hit during the depression in the 1930's, and the whole sector was sheltered under public subsidy.

Tobacco has been grown in the area since the original European settlement, but was neither quantitatively nor qualitatively important before the end of the 1920's. The attempts to step up tobacco production reached a climax in 1928, but the crop's quality was poor, and therefore unmarketable. After this the output dropped sharply. A recovery came after the introduction of the Empire Preference System,⁵ and the industry's output increased. The most important expansion has come since the Second World War, due to the Sterling Area's dollar exchange controls. Since 1934 tobacco prices have generally risen, as a consequence of, among other things, improved quality.

Two factors have contributed to the expansion in the output of tobacco: the substitution of tobacco for maize on the established European farms; and, the expansion in acreage under cultivation with an increase in the number of farm units. In the 1930's the former was the more important where tobacco expanded at the expense of maize, due to the collapse in maize prices. The post-war expansion in production has been largely accomplished through an increase in the number of producers.

Agriculture is still one of the most important contributors to the national income. Rhodesian agriculture produces a broad variety of products, tobacco, maize and sugar being the most important contributors to income, but the country is self-sufficient in meat, hides and dairy products. The main crop in the African sector is maize.

Rhodesia is self-sufficient in tea and produces some cotton for export. Until a few years ago it was necessary to import sugar to cover domestic demand, but a domestic sugar industry has been set up, and the country is self-sufficient in this product. Some of the sugar is used locally by distilleries and for other manufacturing needs. Other Rhodesian agricultural products are groundnuts, vegetables and some coffee.⁶

Mining.

Mining has always been one of the most important economic sectors in the Central African Countries, indeed the geological riches of the area provided the main rationale for European settlement and enterprise. Historically mineral production has been directed almost entirely to export. But the economic importance of the different mineral outputs has altered appreciably over time due to changing economic conditions, both domestically and on foreign markets.

Originally the mining sector concentrated on gold. The early settlers had high expectations for the possibilities of this mineral, but the Rhodesian deposits were not as rich as in other areas of Africa, e.g. South Africa. Rhodesian deposits were scattered and the quality of the ore was seldom high. These factors precluded large-scale workings, and the industry has therefore consisted of a small number of medium scale and a large number of small-scale operators. However, in recent years, there have been some attempts to concentrate on bigger units.

Asbestos has become Rhodesia's most valuable mineral export. Production has generally been dominated by two large mines, although some small workings have come and gone. When the market broke in the early 1930's, output was sharply curtailed. Although prices more than doubled between 1935 and 1947 output has remained virtually static since the 1930's. However, in the end the general upward trend in prices attracted several new firms which began to expand the output in 1949.

Six new ventures were incorporated for work in the territory in 1950 and 1951 alone, all of them largely financed by external capital. Two of the new organizations, however, had suspended operations by 1954. Assisted by the contribution of the new entrants to the industry, output had risen since 1950.

A third important mineral product is chrome ore. The production of this mineral has to some extent been affected by transport bottlenecks in the Rhodesian economy. As a high bulk and low value commodity, chrome ore is low on the scale of priorities set up by the Rhodesian Railways. As well as internal transport difficulties, inadequate ore-loading facilities at the port of Beira has further restricted exports. Relief has been afforded in recent years through the construction of an alternative rail-link to Lorenzo Marques, and through the establishment of a local plant for the processing of the ore into ferro-chrome.

The Rhodesian demand for coal is covered by the country's own mines. At the moment only one of the deposits is being exploited, but 13 other areas are known to have considerable deposits of various qualities of coal. During the years up to 1965 there was a decreasing demand for coal, mainly because of the advent of the Kariba power plant, and the increasing use of diesel engines by the railways.

In recent years the production of copper and tin has gained importance.

Manufacture.

The development of manufacturing has taken two forms; firstly the processing of many locally produced raw materials, and secondly, the supply of the internal market. Development in the sector is comparatively recent with the most rapid growth occurring during the post-war years, particularly between 1953 and 1962, when the growing local market (which then included the whole of the former federal custom area) began to be utilized. Originally this manufacturing was on a small scale basis, mainly in the form of processing agricultural products and of repairs. The manufacturing outside the agricultural sector was mainly based on the production of consumers goods of low quality and investment goods for the construction sector. The market for the low quality consumer goods was mainly the domestic African population.

This slow industrial development may be due to lack of protection. The Southern Rhodesian government mainly favored "free trade". One of the factors working against an industrial development in Rhodesia was a preference agreement with South Africa. The trade relations with South Africa on the other

hand had some indirect effects on the direction of industrial development. An example of this is India's severance of trade relations with South Africa after independence. After this the South African demand for import of Indian textiles and hessian was covered by imports from Rhodesia. Part of the Indian goods came in via Rhodesia, and part was produced in Rhodesia utilizing imported Indian raw materials.

In addition to setting up the Federation in 1953, a protection policy aimed at industrialization was adopted. The Southern Rhodesian government initiated an active industrialization policy in the form of protection, by setting up publicly owned factories, and through investment in the infrastructure needed for manufacture. (E.g. the Karibadam) This process of industrialization also benefited from the bigger home market when Zambia and Malawi were included in the Federal Custom Union.⁷ It should be noted that Southern Rhodesia got the "lion's share" of the Federation's public investments. In the federal government's plan for the period 1957-1961 the Kariba Dam took £ 75 million and the Rhodesian Railways £ 29 million out of the total budget of £ 122 million. During the six year period up to 1959, Malawi only received £ 10 million out of the Federation's total budget of £ 261 million. The construction and location of the Kariba Dam seems to have been determined only for the benefit of Southern Rhodesia, the power plant having been placed on the southern bank of Lake Kariba in the Southern Rhodesian territory.⁸

It can be seen from Table 1⁹ that manufacturing has not only increased its contribution to the national product, but that it has also become more diversified. This is illustrated by the decreasing importance of the food industry and the increasing importance of manufacture of textiles and machinery.

External Trade.

The above mentioned industrial development in Southern Rhodesia is also reflected in the composition of the external trade. From Table 2 it can be seen that the imports are largest in the sections where machinery and other means of production are registered. The import of machinery and transport materials amounted to £ 38 million in 1965. Tobacco contributes over 1/3 to exports. However, the export of various manufactured goods (Sections 6,7,8) with £ 45 million is almost as important as the tobacco export. After this

Table 1.

Value added in manufacture	1938-65		factor prices					
	1938		1953		1960		1965	
	£ m.	%	£ m.	%	£ m.	%	£ m.	%
Food and beverages	0.90	39	8.0	31	10.8	24	14.9	23
Textile and clothing	0.05	2	3.1	12	5.4	12	9.9	15
Wood manufactures	0.12	5	1.6	6	2.0	4	2.9	4
Non-metallic mineral products	0.16	7	2.3	9	3.8	8	2.4	4
Chemicals and rubber	0.13	6	1.5	5	4.6	10	8.8	14
Metals except machinery	0.2	8	3.9	15	7.2	16	10.6	16
Machinery and repair	0.44	19	3.4	13	5.8	13	9.3	14
Paper and printing	0.25	11	1.6	6	4.0	9	5.3	8
Other	0.07	3	0.6	2	0.7	2	1.3	2
Total	2.3	100	26.1	100	44.5	100	65.3	100
% of Gross Domestic Product	8.4 ^{x)}		19.5 ^{x)}		15.8		17.8	
Gross Domestic Product	27.4 ^{x)}		133.6 ^{x)}		282.4		367.7	

^{x)} The figures from 1938 and 1953 are "Net geographical product" and not comparable with figures from 1960 and 1965

Source: 13th Report on the Census of Industrial Production, Salisbury 1955

National Accounts 1965

William J. Barber: The Economy of British Central Africa, Stanford 1961.

comes the export of food at £ 15 million, and the export of various mining products, asbestos heading the list with £ 19 million. The export of gold (not shown in the Table) is about £ 7 million.

Table 2.

Rhodesia's External Trade Classified After SITC

1000 £

		import (f.o.b.)	export (f.o.b.)
Section 0	Food and live animals	9.344	14.654
"	1 Beverages and Tobacco	3.480	49.805
"	2 Crude materials, inedible, except fuels	4.890	19.392
"	3 Mineral fuels, lubricants, related materials	5.911	9.489
"	4 Animal and vegetable oils and fats	1.303	316
"	5 Chemicals	13.450	4.576
"	6 Manufactured goods classified by materials	31.067	25.585
"	7 Machinery and transport equipment	38.010	8.584
"	8 Miscellaneous manufactured articles	11.280	10.020
"	9 Commodities and transactions, n.e.s.	1.054	1.501
		119.789	142.455
		=====	=====

Source: Annual Statement of External Trade 1965

Table V and VI

The importance of imports as a source of supply to Rhodesian production is also reflected in Table where imports are disaggregated according to final use. It can be seen from the table that only about £ 22 million of the total import of about £ 122 million is used in consumption. The rest is machinery, raw- and auxiliary material. Some part of the means of transportation is, however, used in private consumption..

Table 3.

Import of commodities, classified after final demand.

(f.o.b.)

1000 £

Consumption

1) Non-durable goods for consumption	18.634
2) Durable goods	3.381
Machinery etc.	14.246
Transport equipment	18.692
Construction	5.837
Raw and auxilliary products	58.993

Total	119.789
-------	---------

Source: Annual statement of External Trade 1965 Salisbury

Table III

Rhodesia's trade partners are made up partly by the Western industrial countries, and partly by the country's African neighbours, the most important trade partners being shown in Table 4. The countries shown in the table take nearly 80% of Rhodesia's exports and almost the whole of its re-export. Furthermore they contributed 75% of Rhodesia's imports. The composition of the trade is not the same for the single countries. The Western industrial countries mainly bought Rhodesia's export of primary goods and delivered mainly manufactured goods for production and consumption. Rhodesia's trade with its African neighbours reveals the opposite picture. From Rhodesia these countries mainly buy manufactured goods, and they mainly sell primary goods. The South African Union is a kind of an intermediate case between these two groups of countries. In addition to this the trade with African Countries, excepting South Africa, is characterized by a big re-export from Rhodesia and a Rhodesian export surplus to these countries.

This is also shown in Table 5 where the trade with the most important African trade partners is disaggregated on the commodities' S.I.T.C.-classification.

Table 4.

Rhodesia's Trade with selected countries. 1965

	1000 £		
	export	^{+) re-export}	import
	f.o.b.	f.o.b.	f.o.b.
Great Britain	31.151	288	36.355
South Africa	12.795	1.642	27.461
Zambia	36.090	9.825	4.320
Malawi	7.738	1.733	1.397
G.F.R.	12.808	104	4.865
Japan	7.400	5	6.606
U.S.A.	3.494	34	8.120
Others	30.976	1.810	30.665
Total trade	142.455	15.441	119.789

^{+) Commodities of Rhodesian origin.}

Source: Annual Statement of External Trade 1965. Table XIV

Table 5.

Rhodesia's External Trade with Selected Countries, by
S.I.T.C. section, 1965

	1000 £					
	Zambia		Malawi		South Africa	
	export	import	export	import	export	import
	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.	f.o.b.
0 Food and live animals	3,721	344	1.362	636	539	3.338
1 Beverages and tobacco	921	2.200	556	431	1.523	197
2 Crude materials, inedible, except fuels	351	285	-	146	3.606	909
3 Mineral fuels, lubricants, related materials	8.333	97	104	-	187	868
4 Animal and vegetable oils and fats	13	-	15	41	-	73
5 Chemicals	2.897	1.011	556	13	299	3.747
6 Manufactured goods classi- fied by material	7.393	-	2.379	131	2.518	8.851
7 Machinery & transp. equipm.	5.309	35	904	-	1.513	6.175
8 Miscellaneous manufactured goods	7.152	348	1.862	-	2.620	3.254
Total	36.090	4.320	7.738	1.397	12.795	27.412

Source: Annual Statement of External Trade 1965.

In addition to manufactured goods, energy is an important part of the export to Zambia (cf. Section 3). In 1965 this export was slightly over £ 8 million, more than half of this being electrical power, and the remainder coal and coke. The most important single commodity imported from Zambia was raw-tobacco which amounted to a little over £ 2 million. The trade relations with Malawi show a big surplus on the export side, mainly consisting of manufactured goods, while imports are mainly primary goods and fewer manufactured goods. The trade relations with South Africa show the inverse pattern. For this country Rhodesia has a large import surplus and both export and import are highly diversified.

This particular trade pattern, whereby Rhodesia exports manufactured goods to countries with lower incomes, and primary goods to countries with higher incomes, may be a consequence of the structure of the Rhodesian economy.

The principal feature of this structure is the division of Rhodesia's population into two clearly differentiated groups, characterized, among other things, by different income levels. The high-income level comprises the European population, employed mainly in the money economy, while the African population constitutes the low-income group.

One hypothesis in the theory of international trade,¹⁰ which has been put forward recently, may explain the above-mentioned "dual" structure of Rhodesia's external trade. According to this hypothesis, one of the prerequisites for a country developing an export in manufactured goods is that there is also a domestic demand for these commodities. The export is then determined by the structure of demand on the home market and is exported to those foreign markets which have the same demand structure. One of the decisive factors determining the structure of demand is the level of income, and hence the trade partners for manufactured goods will be those countries which have the same income level. The manufacturing which grew up in Rhodesia was mainly based on sales to the low-income groups,¹¹ and the exports accordingly became composed of the types of commodities used by the African population. The most likely trade partners for these commodities are, therefore, the neighbouring African countries. This characteristic structure is illustrated in Table 6 . The prices of the external trade in clothing and footwear have been calculated from the information in the external trade statistics (where both exports and imports are calculated on a f.o.b. basis and, therefore, are comparable). The table shows the type of commodities where the statistics give information on both volume and value, for exports as well as imports.

Table 6.

Footwear and Clothing

	export f.o.b.			import f.o.b.		
	number	£	£/unit	number	£	£/unit
shirts	2.326.029	1.018.965	0,44	107.285	113.591	1,06
pull-overs	1.434.149	594.079	0,42	378.792	435.014	1,15
singles and vests	3.927.264	370.920	0,09	166.664	29.327	0,18
men's footwear	701.250	753.817	1,07	219.290	376.250	1,72
ladies' footwear	169.698	125.433	0,74	394.206	506.315	1,28

Source: Annual Statement of External Trade 1965.

The import of these commodities comes from the Western industrial countries and the price level is about double that of the same goods exported to the surrounding African countries.

An attempt at evaluation of the importance of external trade for the Rhodesian economy is made below.¹² Firstly the dependence of the production on imported raw and auxilliary materials and the importcontent of consumption and investment is analysed. Secondly the possibilities for substitution of imported goods with commodities of domestic production e.g. with former exported goods are investigated. Thirdly the role played by countries not participating in the sanctions is analysed.

In Table 7 imports are disaggregated by their various uses. In this Table the imports are calculated in the same way as in the national income-statistics, and this means that they include both commodities and services. Further it is calculated on a c.i.f.¹³ basis which means that transport and insurancecosts are included. It can be seen from the Table that imports for production purposes amount to nearly 45% of the total demand for raw and auxilliary materials, and further, that a little over 1/3 of the fixed capital investments came from imports, while only a little over 1/10 of the goods used in private and public consumption were imported.

Table 7.

Rhodesia's importstructure 1965 (factor prices), money economy only.
million £

	import	total	%
Raw-materials	77,3	178,0	43,4
Private and public consumption	35,3	263,9	13,4
Fixed investments	15,8	45,0	35,1
Stock changes	8,4	5,3	
Exports	12,4	180,5	
<hr/>			
Total	149,2	672,7	

Source: National Accounts Table 59.

Imports were thus particularly important for production purposes, while the imports for consumption were of minor importance. However, this way of estimating the importdependence of the production does not take into account the possibility of substituting imported goods by the same type or near substitutable goods of domestic production. This process might take place in different ways: through the substitution of imported commodities by others which are easier to import; through the replacement of imported goods by domestically produced goods; and finally, by new domestic production. The analysis concentrates here on the case where imported goods of the same type¹⁴ are already produced in Rhodesia. Imports are divided into goods which compete with domestic production and goods which do not. Imported goods were considered competitive if the corresponding item in the classification also appeared in the production statistics.¹⁵

Table 8 shows the distribution of the "competing import" in its various uses. It can be seen that only about 23% of the total import could not be produced domestically. This figure must, however, be treated with caution¹⁶ both because the capacity of the domestic industry may not be sufficient for complete substitution and because the same entry in the commodity classification may include commodities which are not identical. On the other hand, the fact that a given commodity is not produced in domestic industry does not necessarily mean that it cannot be.

Table 8.

Imports divided on "competing and non-competing" with domestic
industry. 1965

(factor prices)

	(million £)	Import	
	(1) Total	(2) "non-competing"	(2)/(1)×100
Re-export	12.4	2.7	22
Raw-materials	77.3	24.1	31
Private and public consumption	35.3	3.9	11
Fixed capital investments	15.8	2.7	17
Change of stocks	8.4	1.6	20
Total	149.2	35.0	23

Table 9.

Manufactured goods	"Competing" import	export total	"non-sanction countries"	Zambia
Food and beverages	7.1	17.4	3.2	4.1
Textiles	14.7	3.4	1.7	1.4
Footwear and clothing	4.9	7.3	3.8	3.3
Wood and furniture	2.4	2.5	0.4	1.1
Paper and printing	5.2	1.9	0.4	1.3
Rubber and chemicals	13.1	8.3	1.3	3.6
Non metallic mineral products	1.2	1.5	0.4	0.8
Metal products	11.0	10.0	2.7	2.8
Machinery incl. electrical	15.3	5.3	2.0	2.3
Transport equipments	15.8	7.6	0.7	3.0
Other	5.0	1.5		
Total	95.7	62.7	16.6	23.7

Source: National Accounts 1965. Annual Statement of Foreign Trade. 1965

One of the most important methods of substituting is the replacement of imported goods by former exported goods and this is also one of the simplest countermeasures against the sanctions. Table 9 lists the "competing imports" for various manufactured goods compared with the corresponding exports. It can be seen from the Table that while substitution for imported goods is not able to offset exports in each commodity group, production in the manufacturing sector as a whole is not necessarily hit by substituting home produced goods for formerly exported goods because in this sector "competing imports" exceeded exports by £ 33 million. On the other hand, the result of this process would be an unsatisfied demand for imports of this size. Some industries finding the domestic market too small to replace the export market, might be forced to diversify while others would be forced out of production. Other branches of manufacturing would find themselves in the opposite situation, and might not have sufficient capacity for meeting the demand for their products. It can be seen from Table 9 that relatively few branches are in the first situation, those most severely hit being the clothing and footwear, the tobacco, and the textiles industries which face a drop in demand.

The importance of the export of manufactured goods to countries which do not participate in the sanctions against Rhodesia is apparent from the column headed "non-sanction countries" in Table 9. The countries are South Africa, South-West Africa, Mozambique, Angola, Malawi and Bechuanaland.¹⁷ The Table also gives the figures for trade with Zambia. Although this country has stated its intention to participate in the sanctions, it does not seem likely on the basis of the 1965 figures that this policy can be carried out, because Zambia is economically so dependent upon Rhodesia. Table 9 shows that the "non-sanction countries" imported for £ 17 million manufactured goods from Rhodesia. In addition to this Rhodesia should be able to keep at least part of the £ 24 million export to Zambia for some time.

It can also be seen from the Table that the export was high to "non-sanction countries" in precisely those commodity groups where the total export exceeded the "competing import".

For agricultural products imports were small in comparison with exports. Hence there was little possibility for remedying a decline in agricultural exports by substitution. Export of raw-tobacco, the most important export product from the agricultural sector, amounted to about £ 47 million, meat products to £ 7 mil-

lion, and sugar to £ 4 million. Nearly all exported tobacco was sold to the Western industrial countries, especially to Great Britain. This market also bought 1/3 of the exported sugar and meat products, while Zambia took another third. The rest was exported to Rhodesia's other neighbours. The likelihood seems small that the export of agricultural products can be retained by increasing export to "non-sanction" countries.

In the long run a decrease in the export of agricultural products might be remedied by an increase in the sales to the domestic market. This could happen in two ways. One is to increase the internal demand for food, for instance by raising the income of the African population. This would require replacing production of tobacco by food production. Another possibility is to increase cotton production to substitute for the previously imported product.

The export of mining products is shown in Table 10 . Export of these products amounted to a little over £ 33 million. Only a minor part, about 10% of these products, was exported to "non-sanction countries". These countries bought a little under 10% of the asbestos export, 1/4 of the export of various ores and 1/6 of the export of coal.⁸ The export to these countries of the other mining products was small, especially because South Africa itself has considerable exports in these commodities. As the import of mining products into Rhodesia is very small, there are few possibilities for using them domestically.

Table 10.

Exports of mining products. Rhodesia 1965.

	£ 1000 (f.o.b.)
Asbestos etc.	11,461
Metalliferous ores	5,328
Non-ferous metals	7,271
Coal etc.	2,922
Gold	6,794
<hr/>	
Total	33,776
<hr/>	

Source: Annual Statement of External Trade 1965.

The most important economic sectors for export, manufacture, agriculture and mining, have been analyzed with regard to the possibilities for substituting exports for imports, and for keeping exports to "non-sanction countries". These two possibilities were open to the manufacturing sector, while the agricultural and the mining sector had to face difficulties in selling their products. However, on this point, the possibilities Rhodesia has for increasing its export to countries which do not participate in the sanctions have not been analyzed. An increase in exports to these countries may come about if they start importing from Rhodesia what they used to buy elsewhere. Furthermore, it is likely that these countries allow Rhodesian goods to pass through their area, and in this way come out on the world market. These countries can also increase the export of some of their own products and letting Rhodesian goods fill the resulting gap on their domestic markets. A quantitative evaluation of this is attempted more fully below¹⁹ but some of the decisive factors can be mentioned here. The Rhodesian export of manufactured goods is mainly to the surrounding African countries. The smaller of the "non-sanction countries" may not be able to increase their imports of commodities of this type from Rhodesia but South Africa which had an export surplus to Rhodesia before 1965 and which is a big market compared to Rhodesia, could substantially increase its imports of manufactured goods from Rhodesia. South Africa is itself a big exporter of mining products, and this might make it less likely that it can increase its imports for domestic use. However, the export of these types of commodities from South Africa is in nearly all cases so large that the Rhodesian mining exports could be exported through South Africa to the world market without attracting much attention. Such possibilities are not open to the same degree for the export of agricultural products, particularly for tobacco, because Rhodesia is the only country in Africa having tobacco exports of this size.²⁰

II. The Effects of the Sanctions: An Attempt to Quantify.

Up to this point only the economic background of the sanctions has been analyzed. Rhodesia's dependence on its external trade in general has been evaluated, and this analysis suggested that the dependence was not large for those commodity groups and markets, where the sanctions had some possibility of working. A quantitative evaluation, however, has not yet been made. The simplified input-output system published in the National Income Statistics for 1965²¹ can be used for this purpose. This system covers only that part of the Rhodesian economy which belongs to the money economy. Some of the items appearing below are therefore not comparable to the complete national income statistics.

The input-output analysis is well suited for analysing how changes in external trade affect the economy; it more or less suggests itself. Actually, the model is used by Curtin and Murray²² to study the effects of the first limited sanctions against Rhodesia. These authors tried to determine the effects of the U.N. resolution measures. Assuming that all countries would participate in the sanctions they simply subtracted the volume of Rhodesia's trade in embargoed goods from its total trade. A summary of their results is given below.

The present analysis takes another point of departure. Since the original sanctions were enacted, more and more types of commodities have been included; early in 1968 all economic transactions with the country were finally forbidden. The question will therefore be put the other way round: What types of trade is Rhodesia able to keep? This analysis will also take account of the effects of violation of the sanctions, by some of Rhodesia's neighbours.

There are a number of advantages in using input-output models instead of more aggregated models. The main advantage is that it is possible to treat the sectors one by one. Changes in exports from the agricultural and manufacturing sectors are not likely to have the same effects.

The basic idea is that the productive system is subdivided into a number of "sectors" or "industries". The output of each sector is measured by its value in a base year, (in this case 1965) and thereafter treated as a homogeneous "commodity". The inputs into this industry of the various "commodities", each of which is the output of one other industry, are again measured by their values in that base year. The ratios of the various inputs to the output of any one industry are computed and are thereafter used as if they were technical

input-output coefficients, specific to the method of production of that industry. This method is treated as the only process available to that industry, subject to variation only in the scale of application - that is, proportional variation in all inputs and in the unique output.

The assumption of constant relative prices is also implicit in the model. If the relative prices change substitution might be expected from the commodities which have increased in prices relative to others.

The structure of the Rhodesian economy is shown in Tables 11 and 12 . Imports are divided into two main categories. One category consists of commodities which compete with domestically produced goods, the other of those which do not. The distinction between "competing" and "non-competing" commodities has no absolute meaning. The classification is based on commodity groups which were imported in 1965 and produced domestically in that year. All commodities to which these criteria apply have been classified as "competing" whatever the volume produced. Some potentially competing commodities are not included since the sanctions may have affected relative prices in such a way that new commodities become competitive.

The columns for each sector show the value of commodities which were used by each of the others sectors. These columns can therefore be interpreted as production functions. As an example the mining sector used a total of £ 8.4 million from all domestic sectors, including £ 3.9 million from the manufacturing sector and £ 1.8 million from the sector el & water. The sector imported £ 3.6 million and has paid £ 0.6 million in indirect taxes. The value-added represents the difference between the above-mentioned components and the total output, since total input is by definition equal to total output. The value-added consists of wages, salaries profits, dividends, etc., i.e. payment to the primary factors of production.

It is possible to calculate the GDP from the input-output table. It is the sum of the value-added for all sectors. Furthermore, it is possible to calculate the balance of trade because exports are shown in the final-demand category and imports appear as the sum of imports used as input in production and of imports which go directly to the different categories of final demand. It is further possible to calculate the relative importance of the various sectors for the economy, according to their contribution to GDP. Given certain assumptions it is also possible to calculate how changes in final demand affect employment.

Each column is now divided by its total output in order to obtain the technical coefficients shown in Table 13. The interpretation of the columns as production functions now becomes clear. The assumptions that the production functions are linear implies that whatever the level of output of the manufacturing sector 14,26% of the input is taken from the agricultural sector. But this is only the direct effect. In order to deliver to the manufacturing sector, the agricultural sector needs input from other sectors, which because of this increased demand need additional input from the agricultural sector. These indirect effects are included in the model.²³

Given alternative compositions of final demand it is now possible to calculate the total output from each sector. The constant production functions are used to calculate the import, the value-added, the demand in various sectors for other sectors' commodities and so forth.

As mentioned above the linear input-output model does not take structural changes into consideration, i.e. changes in the technical coefficients. Following the theory of international trade, such changes must however be expected to occur, at least when changes in trade are more than marginal. Accordingly, the input-output model must be combined with a model for "structural changes".²⁴

The linear input-output model and international trade models are built on assumptions which are incompatible. While the input-output model assumes constant relative prices, the foreign trade model assumes that the relative prices will change. The input-output model does not operate with the possibility of substituting, but it is one of the fundamental assumptions in the theory of external trade that substitution does take place. In principle it is possible to build some of the assumptions of the theory of external trade into the input-output model. This, among other things, would require more accurate data than are available. The analysis below therefore follows a more modest procedure.

Another question is how long time the substitution process may take. At first domestically produced goods of the same kind are substituted for previously imported goods, while in the longer run the substitution process will also include products not formerly produced. It is a substitution model of the former type which is used below.

The substitution of imported goods by domestically produced goods takes place in two different ways: The demand for investments and consumption goods

Table 11. Input Output Model for Rhodesia 1965 Million £

	Intermediate Demand					Final Demand									
	Agri- cul- ture	Mi- ning	Manu- fac- ture	Con- struc- tion	El and Wa- ter	Trans- port and Dis- tribut.	Go- vern- ment	Ser- vices	Ex- ports	Pri- vate- Con- sump- tion	Govern- ment Con- sump- tion	Fixed Ca- pital For- mation	Stock Chan- ges	Total Final De- mands	Total Out- put
Agriculture	-	-	23.7	-	-	-	-	-	38.7	9.7	1.8	0.5	±1.5	49.2	72.9
Mining	0.2	-	2.7	-	0.1	0.5	-	-	32.8	1.1	-	0.4	±2.0	32.3	35.8
Manufacture	12.8	3.9	-	8.0	0.7	5.0	-	0.3	64.5	63.1	1.9	5.7	0.5	135.7	166.4
Construction	0.4	-	-	-	0.2	6.7	-	1.0	-	-	5.4	18.4	-	23.8	32.1
El and Water	0.7	1.8	2.5	0.2	-	0.7	-	-	4.4	4.5	1.8	0.1	-	10.8	16.7
Transp. & Distrib.	4.4	2.0	8.7	2.9	0.4	-	-	0.7	25.4	54.8	2.9	4.1	±0.1	87.1	106.2
Government	-	-	-	-	-	-	-	-	0.2	0.5	15.7	-	-	16.4	16.4
Services	0.2	0.7	3.1	0.7	0.3	4.5	-	-	2.1	53.2	12.2	-	-	67.5	77.0
Total Industry	18.7	8.4	40.7	11.8	1.7	17.4	-	2.0	168.1	186.9	41.7	29.2	±3.1	422.8	523.5
Imports	2.8	3.6	56.6	4.7	0.7	4.2	-	4.7	12.4	33.3	2.2	15.8	8.4	71.9	149.2
Indirect Tax etc.	1.3	0.6	2.8	0.4	0.1	4.0	-	4.1	-	11.9	-	1.8	-	13.7	27.0
Value added	50.1	23.2	66.3	13.2	14.2	80.6	16.4	66.2	-	-	-	-	-	-	332.2
Total Supply	72.9	35.8	166.4	32.1	16.7	106.2	16.4	77.0							

Source: T. Curtin and D. Murray: Economic Sanctions and Rhodesia. London 1967

National Accounts and Balance of Payments of Rhodesia 1965, Table 59.

Table 12. Imports of the Rhodesian Economy 1965 Million £

	Intermediate Demand								Final Demand					
	Agricul- ture	Mi- ning	Manu- fac- ture	Con- struc- tion	El and Wa- ter	Trans- port and Dis- tribu- tion	Ser- vices	Ex- ports	Pri- vate Con- sump- tion	Go- vern- ment Con- sump- tion	Fixed Ca- pital For- mation	Stock Chan- ges	Total Final Demands	Total
Competitive:														
Agriculture	0.1	-	2.4	-	-	-	-	0.3	1.1	-	-	1.1	2.4	4.9
Mining	-	-	0.6	-	-	-	-	-	-	-	-	-	-	0.6
Manufacture	2.2	1.4	32.6	3.5	0.3	3.3	0.2	9.2	23.2	0.8	13.1	5.7	52.1	95.5
El. & Water	-	-	-	-	0.4	-	-	-	-	-	-	-	-	0.4
Distribution	-	-	-	-	-	-	-	-	0.4	-	-	-	0.4	0.4
Services	-	0.2	0.6	-	-	0.9	4.6	-	5.5	0.6	-	-	6.0	12.3
Non Competitive	0.5	2.0	20.4	1.2	-	-	-	2.7	3.1	0.8	2.7	1.6	10.9	35.0
Total Imports	2.8	3.6	56.6	4.7	0.7	4.2	4.8	12.2	33.3	2.2	15.8	8.4	71.8	149.2
Competitive	2.3	1.6	36.2	3.5	0.7	4.2	4.8	0.5	30.2	1.4	13.1	6.8	60.9	114.2

Table 13. Technical Coefficients 1965

[illegible]

shifts from import to domestic production, and so does the demand for raw and auxilliary materials. The first substitution effect will work its way through the final demands and can be calculated by moving the relevant type of commodity from the import category to the comparable domestic sector. The second substitution process, on the other hand, alters the technical coefficients and therefore also the inverted matrix. It is assumed here, as did Curtin and Murray, that 50% of the import competing with domestic production can be substituted by domestic production.

To calculate how much of the "competing" import can be substituted by domestic production, say in 1966, the rate at which substitution takes place must be known and so must the utilization of capacity within each sector. The rate of substitution is presumably different from sector to sector. It is probably easier for diversified branches and sectors to substitute than for the strongly specialized. The estimate of 50% substitution in all sectors during the same period is therefore rather crude. A qualitative correction is, however, possible ex-post because the effects of a bias on one of the coefficients can easily be determined.²⁵ A more refined substitution model would have required a re-calculation of the inverted matrix, while the matrix used by Curtin and Murray²⁶ can be used as basis of calculation by accepting a substitution effect of 50%. The altered technical coefficients thereby obtained are shown in Table 16 .

Curtin and Murray's analysis.

Curtin and Murray based their calculations on the sanctions originally enacted by the U.N. in 1966²⁷. These sanctions were imposed on 12 products. To this they added the sanctions which Zambia had imposed in order to reduce demand for Rhodesian commodities and services. The calculations are based on the assumption that the sanctions would be effective in the sense that the export of the products included under the sanctions would stop completely. A summary of the export of the affected commodities is given below.

Mining.

The export of asbestos was in 1965 £ 10.8 million, the export of chrome £ 3.8 million. The export of iron-ore and copper was estimated at £ 6.0 million.

Manufacturing.

Export of pig-iron etc. was estimated at £ 2.5 million. The export value of hides, skin and leather, and manufactured meat products was in 1965 £ 5.6 million. The export of tobacco consists of two elements. One part is the £ 33 million export of raw-tobacco, included in the export from the agricultural sector below. The rest of the tobacco, £ 5.6 million, is manufactured domestically, and is, therefore, included in the export of manufactured products.

Agriculture.

In addition to the export of raw tobacco amounting to £ 33 million, the sanctions also hit the sugar export of £ 3.5 million.

The zambian sanctions are estimated to reduce the export of mining products by £ 3.0 million (mainly coal), the export of manufactured goods by £ 20 million and the export of the transport and distribution sector by £ 11.1 million.

Furthermore, Curtin and Murray take account of the Rhodesian government's buying up and stockpiling of the tobacco. The idea behind this policy is that the tobacco is still produced, thus preserving the demand from the agricultural sector for the products from the other sectors in the economy. The results of these calculations are shown in Table 15 . It can be seen that the effect of the sanctions is a decrease in GDP of only £ 13 million.

Table 15.

Value Added after the Original Sanctions

(Million £)

	1965	After Sanctions
Agriculture	50.1	51.0
Mining	23.2	8.2
Manufacturing	66.1	72.3
Construction	15.1	14.7
El and Water.....	14.3	13.7
Transport and Distribution	80.6	72.0
Government	16.4	16.4
Services	66.3	71.2
Total	332.2	319.5

Source: T. Curtin and D. Murray, Op.cit., pg. 45.

The Effect of the General Sanctions.

More and more types of commodities have been included since the original sanctions were enacted. Furthermore some of Rhodesia's neighbouring countries made their attitude to the sanctions clear already from the beginning. Some of them declared the sanctions illegal while others stated that it was necessary for their economies not to participate. It is, therefore, reasonable to pose the question the other way round. How much of its initial trade can Rhodesia retain?

The first assumption in the analysis below is that Rhodesia cannot be prevented from importing as long as trade relations exist with South Africa. The only constraint on import is then lack of foreign currency. Thus possibilities for import depend on exports and on the possibilities for obtaining credits abroad. The analysis concentrates on the export. Moreover, it is based on the results obtained from the analysis of Rhodesia's dependence on external trade. (cf. pg. 6ff).

Table 16. Technical Coefficients with 50% Import Substitution.

[illegible]

The agricultural sector.

The possibilities for increasing export to "non-sanction countries" or for clandestine export to traditional markets are small. The export of these products has to be cut with the amount estimated by Curtin and Murray.

The mining sector.

The export of gold of £ 6.8 million, and of metal-ores etc. of £ 12.6 million can presumably be transported through South Africa as this country already has large exports of these commodities. The "non-sanction countries" bought 10% of the export of asbestos, i.e. £ 1.0 million. Thus the total export of mining products is estimated at £ 20.4 million.

The manufacturing sector.

The export from this sector to "non-sanction countries" totalled £ 16.6 million in 1965. Presumably, Rhodesia will be able to maintain about half of its exports of manufactured goods to Zambia. These goods are especially adapted to the Zambian market and it may be difficult to cover demand for these commodities from other sources. In 1965 the export to Zambia of manufactured food and of other manufactured consumption goods was £ 1.9 million and £ 3.6 million respectively. The exports of machinery to this country was £ 2.6 million. It is further assumed that Rhodesia can compensate the loss to the Zambian market for manufactured products by increasing its sales to South Africa. This is so because Rhodesia already has a market for the same type of commodities in South Africa, has an import surplus in the trade with South Africa, and because of South Africa's political willingness to back Rhodesia. This gives a total estimate of the export from the manufacturing sector of £ 28.3 million.

Electricity and water.

The export of electricity to Zambia is assumed to remain at its 1965 level of £ 4.4 million.

The transport and distribution sector.

Changes in the export of different commodities, presumably do not affect the transport sector in the same way. However, because of lack of data, the estimate is based on the assumption that the export of transport services varies in proportion with the total export. This gives an estimate of export from this sector of £ 13 million.

The export column in Table 11 is now replaced by the figures obtained from the estimates made above. In addition, the technical coefficients are changed according to the 50% substitution effect (shown in Table 15). Using the inverted matrix based on the new technical coefficients the effects of the changes in imports and exports are calculated. The result is shown in Table 16.

Table 16 compared with Table 11 (the original input-output table) shows that exports have dropped from £ 168.1 million to £ 75.0 million, imports

Table 17. Input output Table. Assumed Impact of Sanctions. Million £

	Agri- cul- ture	Mi- ning	Manu- fac- ture	Con- struc- tion	El and Wa- ter	Trans- port and Dis- tribut.	Govern- ment	Ser- vices	Ex- ports	Pri- vate Con- sump- tion	Govern- ment Con- sump- tion	Fixed Ca- pital For- mation	Stock Chan- ges	Total Final De- mands	Total Out- put
Domestic Industry:															
Agriculture									2.1	10.2	1.8	0.5	32.2	47.0	74.4
Mining									20.4	1.1	-	0.4	-2.0	19.9	23.9
Manufacture									32.8	74.7	2.3	12.2	8.9	130.9	164.8
Construction									-	-	5.4	18.4	-	23.7	31.3
El and Water									4.4	4.5	1.8	0.1	-	10.9	16.5
Transp. & Distribution									13.0	55.0	2.9	4.1	-0.1	74.9	93.7
Government									0.2	0.5	15.7	-	-	16.4	16.4
Services									2.1	55.9	12.5	-	-	70.6	80.5
Total Industry:	20.2	6.1	46.8	13.5	1.8	17.2	-	2.2	75.0	202.0	42.4	35.7	39.1	394.3	501.5
Imports Competitive:															
Agriculture									0.1	0.5	-	-	0.5	1.2	
Mining									-	-	-	-	-	-	
Manufacture									4.6	11.6	0.4	6.5	2.8	26.0	
Construction									-	-	-	-	-	-	
El and Water									-	-	-	-	-	-	
Distribution									-	0.2	-	-	-	0.2	
Service									-	2.7	0.3	-	-	3.0	
Non Competitive Imp.									2.7	3.1	0.8	2.7	1.6	10.9	
Total Imports	1.7	1.8	42.3	2.9	0.3	1.9	-	2.5	7.5	18.1	1.5	9.2	4.9	41.3	94.6
Indirect Tax	1.3	0.4	3.1	0.4	0.1	3.5	-	4.4	-	11.9	-	1.8	-	13.6	26.9
Value Added	51.2	15.5	72.6	14.7	14.2	71.1	16.4	71.3							327.0
Total Input	74.4	23.9	164.8	31.3	16.5	93.7	16.4	80.5						449.2	501.5

from £ 149.2 million to £ 94.6 million, so that the export surplus in Table 11 has become an import surplus. If this surplus cannot be covered by foreign currency reserves or new credits abroad it will have to be reduced. This can be brought about by a total stop on imports for private consumption, but that would result in a cut in the supply to the domestic market of consumption goods. This again may lead to inflation, unless the government is able to control domestic demand, either via the Budget or by introducing a rationing system.

Under the assumptions made above, the effect of the sanction on the GDP is a decrease of £ 5.2 million, or about 2%. This figure, however, may underestimate the loss, because the value added of the agricultural sector is overestimated (cf. pg.25 above). This change in the GDP may, however, not be significant, if allowance is made for errors in the statistical material.

More significant than the change in the GDP, is the change in the relative importance of the different economic sectors, as a result of the substitution process. The manufacturing sector has increased its relative contribution to the national product and so has the service sector. This has happened at the expense of the mining sector and of the agricultural sector, when allowance is made for the declining prices of tobacco. Not surprisingly, the effect of the substitution process is a move from the primary sector to the manufacturing and service sectors.

Table 18. Predicted effects of the Sanctions

	Value Added / £ million.	
	<u>1965</u>	<u>After sanctions</u>
Agriculture	50.1	51.2
Mining	23.2	15.5
Manufacturing	66.1	72.6
Construction	15.1	14.7
El & Water	14.3	14.2
Transport & Distrib..	80.6	71.1
Government	16.4	16.4
Services	66.3	71.3
Total	332.2	327.0

The predicted effects of the sanctions on individual sectors are summarized in Table 17. The assumption behind the calculation is that parts of the imports can be substituted with domestically produced goods, and that the capacity problem created hereby is partly compensated for by the decrease in export. If the conclusion is justified that it is possible to substitute within existing capacity the resulting transformation of the economy need not lead to inflationary tendencies.

The predicted effect of the sanctions on the total foreign trade is that exports will go down from £ 168,1 million to £ 75,0 million (f.o.b.) i.e. by 55%, while imports are expected to decrease from £ 149.2 million to 94.6 million (c.i.f.), or by 37%.

Data on the Economy since UDI.

Only few and scattered data are available on the Rhodesian economy and its relations with the surrounding world after the sanctions were enacted. The following is an attempt to put some of this information together, and compare the picture of the economic development which this gives with the results arrived at in previous sections on the basis of data which refer to the situation as it was prior to U.D.I. and the beginning of the sanctions.

National income, external trade and balance of payments: According to information provided by the Rhodesian government in July 1967,²⁸ the Gross National Product decreased by 2.1% in 1966, the first year of the sanctions, while the drop in Gross National Income was 1.9%. In the Rhodesian "Economic Survey" from April 1968, however, it is said that in 1967, the second year of sanctions, the Gross National Product increased by no less than 8,6% in current prices. If one is to believe this figure it is the highest since 1956, although in fixed prices the increase in 1967 was only 2% higher than it was just before U.D.I. in 1965. According to the same source, the export fell from £ 95.4 million in 1966 to £ 94.6 million in 1967 (as compared with £ 164.7 million in 1965) while imports increased from £ 85 million in 1966 to £ 94 million in 1967 (£ 119.8 million in 1965). The balance of payments showed a deficit of £ 1.6 million in 1966 and £ 0.7 million in 1967.

Prices: The European consumer price index increased from 107.5 in 1965 to 110.2 at the end of 1966 according to the Rhodesian Quarterly Statistical Summary, April 1967. The same source reports that the consumer price index for the African population increased from 100.8 in the end of 1965 to 103,1 at the end of 1966, (1962 = 100).

Employment: According to the data, there is no sign of increased unemployment. The Quarterly Statistical Summary reports an increase in employment outside the agricultural sector from 351.000 to 352.000 from 1965 to 1966. In the same period the employment of European labour decreased slightly, from 84.600 to 84.500. These figures may, however, hide some tendency for unemployment because the population is increasing. No information is available on employment in agriculture, but according to the information given by the Rhodesian government in July 1967,²⁹ the employment of African labour in agriculture decreased by 9.000 from 1966 to 1967.

Migration: The Quarterly Statistical Summary shows a dramatic increase in net immigration, from 2.750 in 1965 to 15.970 in 1966. This figure is the result first of all of a decrease in immigration, from 24.890 in 1965 to 14.910 in 1966, enhanced by a modest increase in immigration from 27.640 in 1965 to 30.880 in 1966.

No official information is given concerning individual sectors of the economy. The above-mentioned information from the Rhodesian government says that the volume of manufacturing increased by 5% in 1966. On the other hand the Index of industrial production given in the Quarterly Statistical Summary, which includes mining and el. production in addition to manufacture shows a decrease from 118.4 in 1965 to 110.3 in 1966 (1963 = 100). This indicates that production in the mining sector has gone down. The index of the value of retail trade decreased from 100,0 in 1965 to 91.0 in 1966. No information is available on construction.

All sources agree on the fact that the agricultural sector faces serious problems, and the sector is now heavily subsidized; the Rhodesian government is buying up the tobacco for stocks. The Salisbury Correspondent of the Sunday Times³⁰ reported that about one third of the farmers have changed from tobacco to wheat, cotton and maize as the main crop. The production of these products is less labour intensive than tobacco, and this is claimed to have caused the unemployment of 10.000 African agricultural workers (or approximately 4%). The correspondent further reports that the income of the tobacco farmers has decreased by 60% as compared with the pre-sanction level.

In summary, the available information gives the impression of a slight (and temporary) fall in Gross National Product in 1966, a decrease in foreign trade, a stable development in prices and only uncertain signs of unemployment,

(with some indication of unemployment of the African population, however). The available data seem to indicate a decrease in production in agriculture, mining and distribution, while manufacture has increased its production. Given the inaccuracy of the data, this conforms rather well with conclusions from the previous section. Both for exports and imports the figures given in this section are calculated on a f.o.b. basis, and they are, therefore, not comparable with the figures used in the input-output model above where imports are calculated on a c.i.f. basis (this different basis is the reason why the figures calculated and the actual values for imports after the sanctions are so different). Assuming, however, that the freight and insurance costs vary in proportion to the total trade (which, of course, is not quite true as both are likely to have increased as a result of the sanctions), it is possible to compare the changes predicted by the input-output model with the actual changes. In this way it can be seen that the changes predicted by the model are considerably overestimated. Because of the linearity of the input-output model it follows that our calculations must have also overestimated all other changes in the economy resulting from the sanctions. In particular, even the very limited effect of the sanctions on national income, which the model led us to expect is probably an overestimate.

Conclusion

The purpose of this paper has been to find out why economic sanctions were bound to fail the objective of hurting the economy. It was shown that one reason why they failed this objective, is that the economic development in Rhodesia since World War II has resulted in an economic structure, which is more related to the surrounding countries, than it is to countries overseas. Furthermore, this could have been foreseen when the sanctions were enacted. This result may lead one to ask two sets of questions. One relates to the impact of the sanctions as a specific event in the ongoing economic and political development in this part of Africa.

The sanctions are both a consequence and a determinant of the economic and political development in Rhodesia. Originally the Central African economies were based on primary production, almost all of it being directly exported. The Rhodesian government has therefore traditionally been following a free trade policy. But, as a result of World War II, domestic manufacturing grows up besides the original extractive industries. At the beginning it was principally construction and repairs, but later it became also the production of cheap consumer goods. When the Central African Federation was created the domestic manufacturing sector had grown strong enough so that the original free trade policy was changed into an active policy of protection, at first with regard mainly to low-quality consumer goods. This policy was backed up by public investments to develop manufacturing. While the domestic manufacturing was the economic basis for the growing European population it was relying on the African population both for markets and labour.³¹

Southern Rhodesia was the only area inside the Federation where this sector was important. The situation was therefore very different in the three parts of the Federation when the pressure for independence came from the African leaders. The international mining companies operating all over Central Africa were probably largely indifferent to independence as long as they would not be constrained in their operations, and majority rule would not be an essential threat to them, all the more so since they paid wages to the African labour which were already leading in the area. Domestic manufacturing in Southern Rhodesia was not opposed to independence, only to majority rule. To this sector independence would be a way to preserve its economic base, while majority rule would have threatened it.³² The pressure for independence and majority rule lead to a split of the Federation, Malawi and Zambia gaining independence and the problem remaining unsolved in Southern Rhodesia.

Simultaneously with the growth of domestic manufacturing the demand of the European population for high-quality consumer goods like motorcars, T.V. sets e.t.c. was growing. This demand brought in a new group of international companies, different from those which had traditionally been operating in the area. While the traditional companies produce in Rhodesia for overseas markets, the new have their production based overseas and it is mostly as a market that they are interested in Rhodesia. This competition prevents the domestic manufacturing from expanding into the market for high quality products. (The other way to expand would be to increase the income of the African population, but this would mean raising the costs of production in the short run and would therefore undermine their competitive position in the short run.)³³

This structural basis is reflected in the structure of the foreign trade. The primary sectors of the economy are traditionally exporting to the overseas markets and the domestic manufacturing has its main export market in the surrounding African countries. The surrounding countries in turn supply primary goods, while import of high-quality commodities comes from overseas. Because the sanctions have mostly affected trade with overseas countries, not with the surrounding countries, their main effect has been to make domestic manufacturing more competitive on the home market and thus for some time to help solve some of the problems of the Rhodesian economy. On the other hand the sanctions have brought hardship to the agricultural sector and have thus primarily hit the African population if one is to judge by the ratio of African to European employees in each sector.

The question which remains is why, in the first place, were economic sanctions chosen in preference of other means of influence. The analysis above cannot answer this. In his study of the background for the decisions to use sanctions against Italy and against Rhodesia Frederik Hoffmann says:

"when sanctions are used, the manifest goal will probably not be attained, because the very decision to apply sanctions probably indicates that the motivation of the sanctioning country is relatively low. The decision to apply sanctions, then, indicates that the political motivation is not sufficiently strong to cope successfully with the great difficulties involved."³⁴

Appendix The inverted matrix with 50% import substitution

	Agriculture	Mining	Manufacture	Construction	El & Water	Transport & Distribution	Services
Agriculture	1.0344	0.0236	0.1732	0.0542	0.0100	0.0145	0.0017
Mining	0.0073	1.0035	0.0217	0.0072	0.0075	0.0066	0.0003
Manufacture	0.2070	0.1423	1.0436	0.3265	0.0607	0.0875	0.0101
Construction	0.0108	0.0054	0.0061	1.0081	0.0142	0.0648	0.0141
El and Water	0.0144	0.0536	0.0212	0.0135	1.0019	0.0090	0.0004
Transport and Distribution	0.0637	0.0678	0.0735	0.1146	0.0300	1.0130	0.0113
Services	0.0090	0.0284	0.0298	0.0367	0.0216	0.0514	1.0011

Source: Timothy Curtin & David Murray: op.cit.

Notes.

This paper is a much revised version of a graduate thesis in economics at the University of Copenhagen. The Danish Conflict Research Group has contributed towards financing the study.

1. Resolution of U.N. Security Council. 19/11 1965. Keesings 65/66 pg. 21133.
2. Keesings 65/66 pg. 21132.
3. Keesings 65/66 pg. 21198.
4. The following is mostly based upon W. Barber, Op.cit., pg. 119 ff.
5. Barber, W., Op.cit., pg. 143.
6. Barclay's Bank, Economic Survey of Rhodesia, 1964, pg. 13.
7. Keatley, P., Op.cit., pg. 365.
8. Barber, W., Op.cit., pg. 258.
9. On the concept "Net Geographical Product". See Barber, W., Op.cit., pg. 103.
10. Linder, S. Burenstam, Op.cit., pg. 87.
11. Barber, W., Op.cit., pg. 141.
12. Below pg. 18.
13. The value of the import, when it crosses the Rhodesian border.
14. i.e. with same commodity classification as in the trade statistics.
15. This is problematic because of the "dual" structure of the economy.
16. Oil is almost indispensable, if not as a fuel then as a lubricant. Rhodesia's total export has to drop to £ 6 million (The value of the oil import in 1965-1966) before the consumption of oil need be cut down, since it can safely be assumed that as long as foreign currency is available it will always be possible to find a seller. Whatever happens, Rhodesia's ability to pay for imports is very unlikely to fall below £ 25 million, since exports to South Africa in 1965 were £ 17.2 million, and the production of gold is marketable everywhere. In 1965 the gold export was about £ 7 million. An export of about £ 30 million would be enough to cover the import of oil at its 1965 level, but this would only leave a narrow margin for the import of other means of production compared with the 1965 figure of £ 93.1 million. (See Curtain Murray. Op.cit. pg. 24)
17. Keesings 65/66 pg. 21130 ff.
18. Annual Statement of External Trade, 1965.

19. C.f. below pg. 18.
20. In addition to these possibilities for substitution in production and markets to evade the effects of the sanctions on the European population group, two further factors can be mentioned. One is the possibility of withholding capital which under normal conditions would have moved out of Rhodesia. The Sunday Times' Salisbury correspondents report on the 13/10 1968 that the amount of dividends etc. withheld was at that time estimated to £ 45 million. The other possibility is economic discrimination against the African population.
21. National Accounts, Table 59.
22. Curtin, T. and D. Murray, Op.cit.
23. P. Nørregaard Rasmussen Op.cit. pg. 31 ff.
24. Rasmussen, P. Nørregaard, Op.cit., 1956 pg. 128.
25. Waugh, F.V., Op.cit.
26. Curtin, T. and D. Murrey, Op.cit.
27. Curtin, T. and D. Murrey, Op.cit.
28. Keesings 67/68 pg. 22163.
29. Keesings 67/68 pg. 22163.
30. The Sunday Times, 13/10 1968 pg. 37.
31. Keatly, P., Op.cit., pg. 365 ff.
32. For a presentation of the situation as seen by the Europeans in Rhodesia see Kenneth Young, Op.cit.
33. W.J. Barber, Op.cit., pg. 146.
34. Hoffman, Frederik, Op.cit., pg. 155.

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THE STANFORD STUDIES
OF THE 1914 CRISIS:
Some Comments

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The Stanford Studies⁽¹⁾ of the 1914 crisis: Some comments.

Perhaps the most exciting advance in political science in recent years has been that concerned with the collection of data. The initial attempts to collect data by Richardson and Wright were pioneering efforts, but the sophistication employed by more recent data collectors has been equally exciting. By far the most all-encompassing and rigorous of these data collection programmes has been that carried out by the Stanford group under the directorship of Robert North.

The data is taken from the documents collected from the prewar crisis of 1914 by means of content analysis.⁽²⁾ When the group was formed contemporary researchers felt that there was some need for a method of indicating and measuring international tension. By designing, processing and standardising the content analysis technique, the Stanford group have obtained for the intending researcher a most useful technique for extracting an index of hostility from documents. Now that it is computerised, this technique can be adapted to extract data from any historical document. In doing this the group have also provided excellent data with which to test hypotheses concerning the prewar crisis of 1914 and more generally, the behaviour patterns of decision makers in crisis situations.

However, in testing such hypotheses with the data, the Stanford group have been less rigorous and as a consequence much of the good work achieved in the generation of the data has been invalidated. The comments produced, and the tests carried out here are an attempt to demonstrate how the invaluable work of collecting the data can be supplemented by adequate and rigorous statistical testing.

What follows is divided roughly into four parts. The first part will consider the interaction model and discuss the hypotheses. The second part will involve some consideration of the statistical tests used and the measures involved. The third, and largest part, is a complete breakdown of the studies, with comments on the inadequacies. There will also be suggestions on how to improve the studies. In the majority of cases where the data is fully published, the suggestions are tested. The final section is a summary of the major points of the paper.

I

It has been remarked by Jervis⁽³⁾, in a 'traditionalist' comment on the Stanford studies, that contrary to the norm, the hypotheses tested by the group have been far from trivial or peripheral. A list of the hypotheses support such a view.

The higher the tension (i) the more time will be seen as a salient factor (ii) the more the decision makers will be concerned with the immediate rather than the distant future (iii) the more the decision maker will perceive that his own range of alternatives is restricted (iv) the more he will perceive the alternatives open to his adversary to expand (v) the heavier the overload upon the channels of communication (vi) the more stereotyped will be the information content of messages (vii) the greater the tendency to rely on extraordinary or improvised channels of communication (viii) the higher the proportion of intracoalition - rather than intercoalition - communication.

The majority of these hypotheses have used hostility as an independent variable. Other, no less important hypotheses, have also been tested.

These include (ix) a state may go to war not because it thinks it can win but because its perception of hostility is high, that is, its decisions are based on psychological effect rather than military capacity. North, the director of the group, has written that 'it was thought that newer methods ought to be combined with older methods; that content analysis should be paralleled, supplemented or cross-checked by other techniques; and that data could and ought to be analysed in different ways.' (4)

Basically, three different kinds of study have been carried out,

(a) studies using 'tension' or 'hostility' as the independent variable,

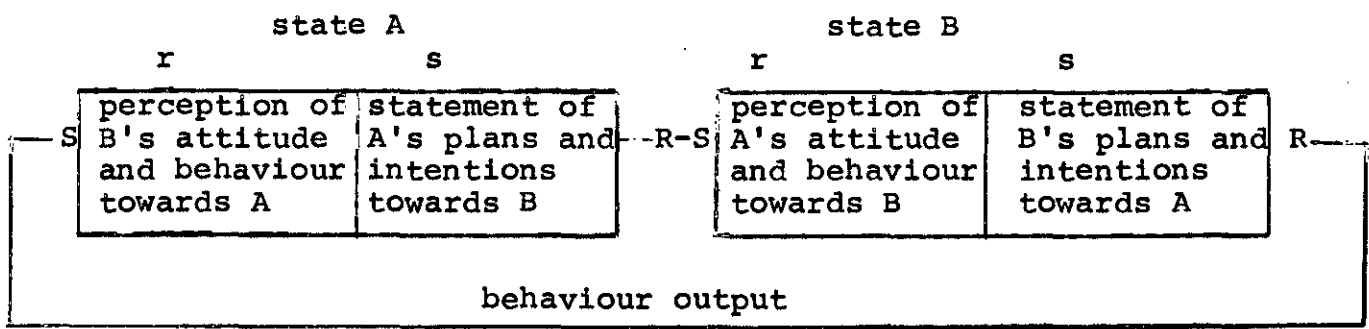
(b) across-the-model tests of the variable S-r:s-R without testing for the sequential patterns,

(c) across-the-model tests, with added tests for sequential patterns.

We shall look at these studies later, but before we do, we shall refer to the general technical mistakes that they contain.

There have been comments about the usefulness of the interaction model around which much of the data collection revolves. The mediated-response model (Diagram 1) allows measurement at four crucial points in each state of a dyadic system.

Diagram 1. The Interaction Model.



Measurements are taken :-

(i) immediately outside the information receptors of the nation states, these being the stimuli (S) to the decision group,

(ii) just inside the decision group, monitoring the perception (r) of the stimuli (S),

(iii) inside the decision group, monitoring the group's perceptions of their own attitudes and intentions (s) towards the opposing state,

(iv) immediately outside the nation state, monitoring the action responses (R). This acts as a stimuli to the opposing state.

In the studies, the general rule is that the perceptual data (r) and (s) are taken from the coded documents and that the action data are taken from various other sources. In one study, the action data are taken from the mobilisations of the different armies, in others the action data are taken from any military act. Some researchers have expressed the view that the variables are vague,⁽⁵⁾ they seem confused by the different forms of measures used by the group as action data. North has replied to this allegation that the group had tried many forms of data for (S) and (R) and had found that none of them were entirely suitable.⁽⁶⁾

The perceptual data has enjoyed far less criticism. The method of extracting this data is well documented and can be re-applied at will. There appear to be some conceptual difficulties in lumping attitudes and intentions under the same variable. As for operational difficulties of extracting the data, there are some where variables overlap. For example, where a decision maker makes a public speech. This could be viewed as an action variable, or it could be coded as a perceptual variable, in terms of attitude etc., or it could be both. Apart from this, the operational use of the model has been sound. Had more time been spent on describing the action data the confusion mentioned above may not have occurred.

The Stanford group saw the need for a model that would be general in its application enabling comparisons to be made of different crises. The mediated-response interaction model fits this role adequately.

II

The Stanford group has fallen down badly in the statistical processing of their carefully collected data. The remainder of this paper puts forward criticism which is formidable, and to a large extent, unanswerable. Errors range from those of judgement of which tests to apply, to those of simple miscalculation.

There will also be other criticism regarding the suitability of some of the measures used. These criticisms have appeared elsewhere and are only included here for completeness.⁽⁷⁾ The misuse of measures has led to occasions where the natural meaning of the measure has been distorted for operational purposes. For example, in one of the earlier studies of the data⁽⁸⁾ the following opposing hypotheses were tested. 'A state will not go to war...if it perceives its power as "significantly" less than that of the enemy...' and the opposite hypothesis, 'if a state's perception of injury to itself is "sufficiently" great, this perception will offset perceptions of insufficient capability.' The study then goes on to find in favour of the second hypothesis, largely on the basis that there were 482 perceptions of hostility against 128 perceptions of capability. To use the total number of perceptions of each category as some measure of importance, appears questionable. In a reply to this particular criticism North has written, 'It is doubtful that the studies in question ever proceeded far on the assumption that if perceptions of intent outnumbered those of capability, decision makers would pay more attention to the former.'⁽⁹⁾ Despite this, the test of the hypothesis did include a straight count of perceptions of capability and hostility.

A more damaging example occurs in the testing of the hypothesis, '...The higher the stress in a crisis situation the more stereotyped will be the information content of the messages.'⁽¹⁰⁾ To operationalise a measure of 'stereotyped content', a count of the number of words per message was used, on the 'premise that richness of information...(is)

more characteristic of longer documents.' The usefulness of the test is invalidated by the use of this measure. Stereotype, as defined by Webster, refers to 'fixed or conventional expression, notion or mental pattern'; it is unlikely that any measure involving the length of a message has anything to do with the natural meaning of this concept. For length of message to be used as a measure of stereotype there needs to be some empirical links between the two. This would only be possible if a measure for 'stereotyped content' was available. But if it was, this problem would never arise anyway.

In the same paper, there is the arbitrary use of the measurement concepts of 'immediate future' and 'distant future' in hypotheses concerning perceptions of time in crisis situations. No effort is made by the Stanford group to show how these two categories were distinguished, and although it seems possible, it is difficult to decide how such an operational category could be constructed.

It appears that much effort and care went into the establishment of a rigorous measure of the affect variables within the model, but far less attention was paid to the measures used as the dependent variable. It may be that good arguments can be put for testing hypotheses which only involve variables within the model.

A second, more general, criticism of the Stanford studies, concerns the interplay between frequency counts of hostility statements and intensity scaling of hostility statements. In one of the initial studies relating the across-the-model variables, the Stanford group test a hypothesis about conflict spirals.⁽¹¹⁾ At first the intensity measure was used, when the hypotheses were refuted. The group then turned to the frequency measure where the hypothesis was supported. They did not show how the measures were related and made no attempt to discover why one measure refutes the hypothesis while another supports it.

Using the data provided in that study, it is possible to combine

the two individual measures to form one composite measure. This composite measure is formed by multiplying the two individual measures, and the total amount of hostility that this produces is then used as the measure. The testing of this composite measure demonstrated its efficiency; the tests will be shown later.

In processing the data for these studies, the Stanford group have, in all cases, found it necessary to aggregate. The reasons for this are in the nature of the dyadic interaction model and the data.

The model can only consider two entities at one time. Because of this, what was a five-nation interaction has to be converted into a dyad, particularly in across-the-model tests. Consequently, the most obvious split is that involving the alliances existing at that time. Basically, this is concerned with the level of analysis problem that has beset political science. Concerning this problem, the Stanford group argue⁽¹²⁾ that, '...The choice of a unit of analysis for studying international relations is entirely arbitrary. Each level of aggregation or organisation - for example, nation states, populations, or decision making groups - can be considered potentially useful but for different research tasks. Each alternative, moreover, carries with it potential advantages and disadvantages and its own peculiar set of assumptions which the analyst must adopt with his choice of research focus.' The common sense of this approach is compelling, but nevertheless the researcher is failing in his duty if he does not consider and document the possible effects of aggregation. In statistical studies particularly, a statement of the statistical effects of aggregation is expected. Nowhere in the Stanford studies are there any such statements.

In all of the studies the data is pooled in terms of alliances. But before this there is an aggregation at the lower level by pooling together each decision maker to form the nation state group. So at the alliance level, the data has been aggregated twice.

It is difficult to predict the effect of aggregation, but it would seem sensible to collect the data in terms of alliances, if the level of analysis is to be at this alliance level. This would seem more preferable than a policy of collecting data at a lower level of analysis and then aggregating up to the alliance level.

In many of the studies (all except those by Dina Zinnes) there has been a second form of aggregation, to a large extent due to the condition of the data. For many of the initial days of the crisis there is very little hostility monitored. Consequently, large gaps appear in the data. To get around this problem the documents were divided into roughly twelve amounts, so that some measurement was obtained in each period. Because of this, all the resulting time periods are of different lengths. Six of the time periods involve one day, two periods involve two days, one period involves four days, two periods involve five days and the remaining one fourteen days. This obscure method of aggregating data does not permit the subsequent data to be used for time based tests - surely such tests of the data are the most interesting? A more reasonable aggregation would have been to collect the data in terms of three day intervals, which would have still produced twelve time periods. There may be periods of zero hostility, but zero hostility is relevant. This strategy would not have excluded time series tests of the data. Earlier comments regarding the responsibilities of the researcher to predict the effects of aggregation apply equally to this time aggregation.

Bearing all these general criticisms in mind, we shall now look at the Stanford studies individually.

III

At the beginning of this paper we saw that there were three different kinds of studies of the 1914 data. These were (i) studies using the affect variable 'hostility' as the independent variable,

(ii) across-the-model tests of the relationships between the variables S-r:s-R and (iii) across-the-model tests including some time dependence. However, two of the earliest studies do not fit into any of these categories so we shall deal with them outside the framework.

A paper by Zinnes, North and Koch⁽¹³⁾ attempted to test the following alternative hypotheses.

- (i) A state will not go to war if it perceives its power as 'significantly' less than that of the enemy at the time when such a decision must be made.
- (ii) If a state's perception of injury to itself is sufficiently great, this perception will offset perceptions of insufficient capability, making the perception of capability much less important a factor in a decision to go to war.

To test these hypotheses, four measures were developed. These were based on the frequency of the following perceptions :-

perceptions of capability
perceptions of hostility
perceptions of coalition
perceptions of significance of conflict

The table 1 shows the frequencies.

Table 1. Frequency of Perceptions for Five Nations : 1914 crisis.

	Austria	England	France	Russia	Germany	Total
perceptions of capability	26	16	18	28	34	122
perceptions of hostility	179	32	26	50	138	425
perceptions of coalition	54	35	27	34	88	238
perceptions of significance of conflict	6	25	2	14	22	69

We have mentioned earlier (page 8) the limitations of using frequency of perceptions as a measure. It is questionable to conclude that since there are approximately four times more perceptions of hostility than capability, this implies more concern for psychological injury than for military capability. The authors support this doubtful evidence with anecdotal evidence from the documents. This seems a misjudgment, since the whole statistical approach to international relations has been motivated by a need to get away from such traditional anecdotal evidence.

In this initial attempt to study the data, there was great reliance upon visual displays of data rather than on statistical testing. Hypotheses were supported or rejected exclusively as a result of straight comparison of the frequencies of these arbitrary measures. Perhaps the most disquieting feature of the paper is that the totals for the individual perceptions do not add up to the totals provided by the authors. A frequent assertion in the study is that there were 128 perceptions of capability, 482 perceptions of hostility and 283 perceptions of coalition. The totals shown in Table 1 are considerably less than this. It would seem that some of the data or nations included in the count could not have been included in the analysis.

The second study follows on in many ways from the "Capability..." study.⁽¹⁴⁾ The hypotheses tested were basically the same and, as with the previous study, relied completely upon visual display. The Stanford group, perhaps realising the inadequacies of the original frequency measures, developed the following operational indices.

index of persecution = $\frac{\text{units of hostility as target (r)}}{\text{units of hostility as agent (s)}}$

index of rejection = $\frac{\text{units of friendship as agent (s)}}{\text{units of friendship as target (r)}}$

index of injury =

$\frac{\text{units of hostility as target} + \text{unit of friendship as agent}}{\text{units of hostility as agent} + \text{unit of friendship as target}}$

Using these measures the following results were obtained (Table 2)

Table 2. Indices values by nation.

	AH.	Ger'y	GB.	FRANCE	RUSSIA
index of persecution	2.47	2.25	0.6	6.3	0.59
index of rejection	1.69	5.04	4.63	1.59	6.20
index of injury	2.21	2.73	2.07	2.70	1.80

It is extremely difficult to imagine what these measures represent. Because of this it is also difficult to assess the reliability of the findings; it would seem intuitive that the indices of the majority of people would be greater than unity since people generally believe that they are more friendly than everyone else they interact with. We see that the only interesting results are those of Great Britain and Russia who appear to have an index of persecution less than unity.

Both of these earlier studies were obviously exploratory. No attempt was made to carry out a statistical analysis of the data. Inferences were obtained from visual arrangements of the data. The measuring units were highly contrived affairs, and this was reflected in the results. The Stanford group were experimenting with different measures (hostility, friendliness)⁽¹⁵⁾ but still depending largely upon traditional anecdotal evidence. The content of the studies is far from scientific although by having hypotheses, data, graphs and tables, each of the studies has a scientific aspect.

The first category of tests, those using 'hostility' as the independent variable, are exclusively collected and published in a

paper called 'The 1914 Case'.⁽¹⁶⁾ In all there are ten basic hypotheses tested although the points we shall make include only eight of these. Most of the hypotheses are 'As tension rises... etc.' To simplify the testing of the hypotheses, the whole crisis period has been divided into two periods: up to and including July 28th (low stress period) and from July 29th until August 4th (high stress period). The outbreak of war between Austria and Serbia is taken as the dividing point. Statistical comparisons over the whole period show that the two periods are statistically different. It can be shown that any dividing point taken after the 19th of July will give significantly different data because until this time the process is stationary, but afterwards it is not, containing at least a second order trend.⁽¹⁷⁾ However, this is not too important a point with these tests, although July 19th would have been more preferable from both a statistical and a historical point of view, as it was on this day that an article by von Jagow appeared,⁽¹⁸⁾ implying some possibility of aggressive action by Austria.

The first two hypotheses are concerned with perceptions of time.

- (1) As stress increases in a crisis situation time will be perceived as an increasingly important factor, and
- (2) as stress increases in a crisis situation, decision makers will become increasingly concerned with the immediate rather than the distant future.

The Mann-Whitney test,⁽¹⁹⁾ supports the first hypothesis. With the second of these hypotheses, however, there is no indication of how the researchers distinguished between immediate and distant future, and although the hypothesis is supported, it is difficult to estimate the relevance of the finding. The omission prevents an assessment of the validity of the measure.

Another set of hypotheses dealt with decision makers' perceptions

of alternatives.

- (1) In a crisis situation decision makers will tend to perceive their own range of alternatives to be more restricted than those of their adversary, and
- (2) In a crisis situation decision makers will tend to perceive their allies' range of alternatives to be more restricted than those of their enemies.

The following categories of decision latitude were constructed to test these hypotheses.

choice - all statements in which more than one course of action is perceived

necessity - all statements indicating that the author sees only one possible course of action

closed - all statements indicating that one particular course of action is not possible.

The testing of the hypotheses involved the most unnecessarily, complex series of tests. For example the test shown in Table 3 was carried out.

Table 3. Germany

	choice	necessity		choice	closed
self	10	109	self	10	19
enemies	21	3	enemies	21	0
chi-squared= 73.6			chi-squared = 22.2		
p < 0.001			p < 0.001		

Although this test gives significant support for the choice/necessity categories and the choice/closed categories, there is no test of the necessity/closed. If the Stanford group had adopted the test below instead, they would have obtained essentially the same results (in terms of support for the hypothesis) and all the categories would have been tested simultaneously (Table 4.).

Table 4. Germany 2 x 3 matrix.

	choice	necessity	closed
self	10	109	19
enemies	21	3	0

chi-squared = 69.5 (see note 30)

$p < 0.001$

For the other four nations the results obtained by using the 2 x 3 matrix instead of the two 2 x 2 matrices are as follows :-

Austria-Hungary chi-squared = 1.4 not significant

Russia chi-squared = 9.5 $p < 0.01$

France chi-squared = 20.8 $p < 0.001$

England chi-squared = 46.1 $p < 0.001$

The support that these results give is similar to that given by the Stanford group tests.

The second hypothesis was also tested in this complex manner. In this case, though, it was perhaps more critical in the sense that for the Triple Entente there is no significant difference between the choice and closed categories, although there is between the choice and necessity categories. The adoption of a 2 x 3 test resolves this inconclusiveness. (Table 5)

Table 5. Contingency Table for testing alliance alternatives.

Dual Alliance.

	choice	necessity	closed
allies	13	20	3
enemies	21	6	0

chi-squared = 12.7

$p < 0.01$

Triple Entente.

	choice	necessity	closed
allies	30	17	7
enemies	39	6	3

chi-squared = 8.0

$p < 0.05$

The next set of tests involved the patterns of communication.

Four hypotheses were proposed.

- (i) The higher the stress in a situation the heavier the overload of communication channels.
- (ii) the higher the stress in a crisis situation, the more stereotyped will be the information content of the messages,
- (iii) the higher the stress in a crisis situation, the greater the tendency to rely on extraordinary or improvised channels of communication.
- (iv) the higher the stress in the crisis situation, the higher the proportion of intra-coalition - as against inter-coalition - communication.

To test the overload proposition, the number of messages and the number of words were counted. The hypothesis was tested using both of these measures and the Mann-Whitney U-test. The results were encouraging when the volume of documents measurement was used, but inconclusive when volume of words was used as a measure. We shall return to this result shortly.

The hypothesis concerning stereotyped messages has been discussed before. The measure was shown to be entirely unsuitable because its use implied some empirical relationship between length of message and stereotype message. The existence of such a relationship would negate

the need for the derived measure. The support that the data gives this hypothesis is more suited to a hypothesis concerning the rise in tension and the length of a message.

Such a result is related to the previous result. We have obtained evidence that as tension rises, the number of documents in the system increases and we also have evidence that as tension rises messages get shorter. Since the total number of words flowing in the system is some function of the product of these two measures, it appears reasonable to expect support for the hypothesis that 'the number of words in the system remains constant throughout the crisis'. Such a hypothesis was not tested but its alternative was tested in the hypothesis concerning the overload of communication. This occurred when using the volume of words measure. The results of the test were inconclusive (only 6 out of 15 tests were significant); this result lends some support for the alternative hypothesis that 'the number of words in the system remains constant throughout the crisis'. This relationship between the hypotheses was not seen by the Stanford group.

The hypothesis concerned with the improvised communication channels was tested quite satisfactorily. Of the 2780 inter-state messages, 1530 occurred in the low-stress period. Of these 1530, only 74 were direct communications between decision makers. A direct communication between decision makers is taken as an extraordinary channel. In the later period of high stress, 116 out of 1250 messages were sent straight to decision makers by-passing ambassadors. This change is significant at the 0.001 level when subjected to chi-squared test.

The final hypothesis concerning the proportion of inter-coalition messages was also tested using chi-squared. Of the 1530 messages in the early, low-stress period 700 were between alliances (45.7%); in the later, higher stress period this ratio increased to 53.6%. This

change is significant at the 0.001 level.

The hypotheses tested in this section have been far from trivial. In many cases the tests employed were inconclusive. In some cases this was due to the measure applied, in others to the statistical test. Throughout the whole of the tests, the data was aggregated over alliance and over time. The effects of this research strategy were never considered by the Stanford group.

The most obvious weakness of the studies so far is the inability of the Stanford group to develop dependent measures which match the hostility measures in terms of reliability and homogeneity. This argues for a series of tests across-the-model and within the interaction model, where the data has these properties.

There have been four major studies of this kind and the first to be considered concerns some propositions about hostility spirals during crisis. (20)

The data for (S) and (R) were taken from the mobilisation levels of the armies. The perceptual data (s) and (r) were taken from the coded documents. A series of Pearsonian correlations were then carried out in an attempt to show the spiral relationship between the perceptual variables (r) and (s). The perceptual variables were measured in two ways; one was a frequency count of the perceptions of hostility, while the other was an intensity scaling. Using the intensity scaling, there was inconclusive support for the spiral hypothesis (Dual Alliance: $r = +0.87$, 10 d.o.f., $p < 0.001$; Triple Entente: $r = 0.33$, not significant). However, using the frequency count, significant support is given to both alliances, (Dual Alliance : $r = 0.78$, 10 d.o.f., $p < 0.005$; Triple Entente : $r = 0.86$, 10 d.o.f., $p < 0.001$). Although these results are not consistent, the Stanford group make no attempt to explain the differences in the data that caused the inconsistencies.

It can be shown, however, that the two measures do not correlate very well. The results below show the correlations of the measures over both alliances and both variables. (Table 6.)

Table 6. Correlation of intensity scaling and frequency measure.

	variable r	variable s
Dual Alliance	0.56	0.62
Triple Entente	0.82	0.24 (n.s.)

The Triple Entente correlation of the variable (s) is not significant and this would account for the discrepancy between the spiral correlations when using the different measures.

It is possible to develop a more consistent measure by multiplying the two measures together. The product will be the total hostility perceived in the time period. This measure was correlated with both the original frequency (F) and intensity (I) measures and the results are shown below. (Table 7)

Table 7. Correlations between the composite measure and the original measures.

		F - frequency measure	
		I - intensity measure	
<u>Dual Alliance</u>		<u>Triple Entente</u>	
	r	r	s
F	0.76	0.85	0.42
I	0.97	0.99	0.98

The composite measure correlates with the other individual measures far better than they do with each other. The spiral correlations of (r) and (s) were tried with the new measure. Both of the alliances showed significant correlations (Dual Alliance: $r = 0.76$, $p < 0.01$; Triple Entente: $r = 0.63$, $p < 0.05$).

Correlations, aimed at detecting conflict spirals, were also performed for the variables S-r and s-R for both alliances. However, the most glaring errors were made in the selection and processing of the action data (S) and (R). The Stanford group unaccountably include in the mobilisation levels, those of the peripheral nations; Serbia, Montenegro, Belgium and Turkey. None of these nations are included in the document coding to obtain the perceptual variables. It is difficult to imagine why this action data was included since tests show that they have little effect on the statistic.

A second, more serious, error concerns the accumulative process used by the Stanford group. The mobilisations within a particular alliance are added to the level of mobilisation existing. This gives a running total of the number of men at arms for a particular alliance. This accumulative process disallows the use of the Pearsonian product-moment correlation test because the individual readings are not independent; an important assumption.

In Table 8 the data is set out showing this accumulation for both action variables in each alliance. The figures on the left are those produced by the Stanford group, those on the right are those which do not contain the peripheral nations, and which are not accumulative.

The spiral hypotheses of S-r and s-R were tested using the revised action data. The results were not convincing (Table 9). This result is opposed to that found by the Stanford group who used the original data. However, the correlations obtained by the Stanford group are unusable because of the violation of the independence assumption in using the correlation test.

Table 8. Stanford Action data and the revised action data.

Time Period	Dual Alliance				Triple Entente			
	S		R		S		R	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.2	0.2	0.0	0.0	0.18	0.0
5	0.18	0.0	0.2	0.0	0.2	0.2	0.18	0.0
6	0.18	0.0	0.2	0.0	0.2	0.0	0.18	0.0
7	0.18	0.0	0.2	0.0	0.2	0.0	0.22	0.0
8	0.22	0.0	0.2	0.0	0.2	0.0	1.02	0.8
9	1.02	0.8	0.2	0.0	0.2	0.0	5.12	4.9
10	5.12	4.9	0.74	0.54	0.2	0.0	5.31	0.0
11	5.31	0.0	5.04	4.0	0.74	0.54	6.4	1.09
12	6.4	1.09	5.04	0.0	5.04	4.00	6.82	0.47

The figures on the left of each column are the Stanford figures, and those in the right column are the revised data.

Table 9. Results of Spiral Correlations using revised data.

Dual Alliance	S - r	r = 0.48	0.05 < p < 0.1
	s - R	r = 0.36	not significant
Triple Entente	S - r	r = 0.01	not significant
	s - R	r = 0.66	p < 0.025

The poor results may be due to the action data. There is little reason to suppose that mobilisations were the only stimuli which produced perceptions of hostility. It was pointed out earlier that several types of action data were tried, but none were entirely

suitable. It may be the case that no action data, collected haphazardly, will give good results when processed with the rigorously-collected perceptual data. This would imply that the most useful studies would incorporate the perceptual data only. As a final, general comment, the data was averaged over both alliances and time, without any consideration of the possible effects.

A second paper, related to the first, was produced about the same time although it was not published until 1968.⁽²¹⁾ Although the papers are related, there are significant differences in the data. There will, of course, be differences in the action data between the two studies because in the second study all military actions are coded as data while in the first, only mobilisations are coded. However, there are discrepancies in the perceptual data. In both studies the methods described for obtaining the data are identical and from this one would expect that the data would be identical. Since the techniques of extracting the data are similar and the document universe is similar it is only to be expected that the data should match. The two sets of data are shown in Table 10. The data from the first paper are headed I and those from the second paper are headed II. Notice that only intensity measures are used in the second paper.

Table 10. Comparison of data in two different studies.

Time period	Dual Alliance				Triple Entente			
	r		s		r		s	
	I	II	I	II	I	II	I	II
1	4.23	3.98	3.62	3.55	3.67	2.67	-	0.0
2	3.88	3.93	4.03	3.39	4.22	0.00	-	0.0
3	4.04	4.08	3.42	2.92	-	0.00	4.00	3.67
4	4.20	4.45	3.87	3.66	4.25	0.00	4.20	0.00
5	4.98	4.87	4.15	3.89	4.82	6.00	5.67	0.00
6	4.15	4.10	4.25	3.97	5.31	0.00	4.75	0.00
7	5.12	5.16	4.21	4.42	5.08	0.00	4.82	7.33
8	4.88	4.89	5.02	4.79	6.18	5.33	4.08	3.40
9	6.03	6.62	5.03	4.25	5.85	5.33	4.93	4.89
10	5.46	5.48	6.38	6.29	5.98	6.43	4.96	5.00
11	7.08	7.00	7.20	7.19	6.27	6.19	4.18	3.97
12	6.59	6.50	5.67	5.70	6.28	6.98	5.61	6.17

Correlation tests show that only two of these sets of perceptual data correlate. For the Dual Alliance the (r) data does not correlate and for the Triple Entente the (s) data does not correlate. This throws some doubt upon the data collecting technique, and more seriously upon the validity of the measure. An attempt by the Stanford group to link these papers would have helped to avoid these difficulties.

The basic assumption of the study is that the Dual Alliance was highly-involved in the crisis and that the Triple Entente was low-involved. Using this assumption, the Stanford group examine hypotheses concerning parties who are high- or low-involved in crisis situations. One can argue that this approach leads to two basic weaknesses in the reliability of the findings.

The first point is that the Triple Entente was not low-involved for the whole of the crisis. It seems reasonable to suggest that their interest was relatively low during the early stages, but not in the later period (after 19th July when fears were aroused by the von Jagow article). Consequently, the more reasonable research strategy would have been to test the hypotheses with data up to and including the 19th July. (In fact, when the tests are reconstructed later in this paper, July 28th is used as the dividing point. This is done because in all the Stanford studies where a split is used, July 28th has been chosen. In another series of tests⁽¹⁷⁾ July 19th is taken as the dividing point.)

This, however, would not have eliminated the other weakness, which concerns the number of variables present. Unless we are happy to work under an assumption that decision makers' personalities differ from one man to the next, the research design should remove this variable. Table 11 shows the arrangement of these variables.

Table 11. Arrangement of Variables.

	Triple Entente	Dual Alliance
involvement	low	high
decision maker	set A	set B

The tests are designed to show differences between the high- and low-involved alliances. If differences are shown, this may be because of the different set of decision makers rather than the fact that they were high- or low-involved.

By adopting the following test design it is possible to eliminate both of the weaknesses described above. Using only the data from the Triple Entente we test the early period (up to and including 28th July) against the late period (29th July to the outbreak of war). In this way high-involved is tested against low-involved, and in both categories we have the same decision makers.

In testing the data the Stanford group has used non-parametric tests in all cases. There are no technical reasons why such tests should not be used, but it is puzzling that parametric tests were not used. The data is in an interval scale and the parametric tests that this allows are, in general, more powerful than their non-parametric counterparts.

The first hypothesis tested in the study is :-

The correlation between input action (S) and policy response (R) will be better in a situation of low-involvement than in one of high-involvement.

There appeared to be some confusion regarding the results of this first test. Using the Spearmann Rank test⁽²²⁾ to determine the correlations

between (R) and (S) for both of the alliances, the Stanford group inexplicably obtained results of $r_s = 0.463$ and $r_s = 0.678$ for the Triple Entente and the Dual Alliance respectively. It is then asserted that this supports the hypothesis, which it does not. After reprocessing the same test the following results were obtained.

Triple Entente $r_s = 0.743$ $p < 0.005$

Dual Alliance $r_s = 0.495$ p slightly greater than 0.05

This result does support the hypothesis, with the reservations made previously regarding the wisdom of using these alliances as high- and low-involved participants.

Having cleared up this confusion, the hypothesis was tested with the early-late model suggested earlier. Both the Pearson product-moment test and the Spearman Rank test were used. The hypothesis, interpreted in terms of the early-late model, would predict that there would be a higher correlation between (S) and (R) in the early period than in the late period. The results are shown below.

	Spearman	Pearson
early	0.438	0.477
late	0.500	0.660

None of the correlations are significant. The hypothesis is therefore not supported.

The second hypothesis tested in the original paper states :-

In a situation of low-involvement, policy response (R) will tend to be at a lower level of violence than the input (S), whereas in the high-involvement situation, the policy response will tend to be at a higher level of violence than the input action.

The implication of this hypothesis is that in the early-late model the relationship (S-R) will be positive in the early period and

negative in the late period. The Stanford group adopted the Mann-Whitney U-test, which is inappropriate. The data is shown below.

Table 12. Distribution S - R for early and late Triple Entente.

<u>period</u>	<u>early</u>	<u>period</u>	<u>late</u>
1	-0.13		
2	1.67	8	0.99
3	0.38	9	0.04
4	-1.45	10	-0.40
5	1.70	11	0.40
6	0.42	12	-0.15
7	1.19		

The Mann-Whitney U-test is the non-parametric equivalent of the Student's t-test, whose ability is limited to testing to see whether the mean of two distributions are significantly different from each other. This hypothesis, however, asks more than this. It asks whether the two different distributions are negative or positive in character. This cannot be shown with either of these tests. So that these tests can be used it is essential to return to the original data to see whether the distributions (S) and (R) are different and then to determine whether their individual means are either positive or negative.

The revised test is shown below (Table 13). The showing of the whole test will only occur in this case although the same misuse of tests occurs in all of the Stanford tests remaining in the study. The statistical policy followed throughout the remainder of this review is (i) to determine whether the means of the distributions are positive or negative, (ii) to determine whether the pairs of distributions are significantly different from one another by (a) using the Mann-Whitney U-test on the original distributions and (b) using the Student's t-test on the original distributions. In this way we shall provide a facility for comparing parametric and non-parametric tests.

Table 13. The Mann-Whitney U-test of the early-late. This is to test a hypothesis that the distribution (S - R) is positive in the early period and negative in the late period.

Early period.

<u>S</u>	<u>Rank 1</u>	<u>R</u>	<u>Rank 2</u>
4.25	6.5	4.38	9
4.25	6.5	2.58	1
3.00	4	2.62	2
2.83	3	4.28	8
5.38	13	3.68	5
5.37	12	4.95	11
5.87	14	4.68	10
	<u>59</u>		<u>46</u>

$$U = 49 + 28 - 59 = 18 \quad (p = 0.228)$$

$$\text{mean (S-R)} = +0.54$$

Late period

6.06	9	5.07	3
4.64	2	4.60	1
5.10	4	5.50	5
6.30	10	5.90	7
5.88	6	6.03	8
	<u>31</u>		<u>24</u>

$$U = 25 + 15 - 31 = 9 \quad (p = 0.274)$$

$$\text{mean (S-R)} = +0.18$$

The hypothesis is not supported when using the Mann-Whitney U-test. The Student's t-test, using Bessel's correction for small samples, ⁽²³⁾ corroborate this negative result.

	early	late
	mean = +0.54	mean = +0.18
Mann Whitney	U = 18, p = 0.228	U = 9, p = 0.274
Student's t	t = 0.9342, n.s.	t = 0.4298, n.s.

The hypothesis has not been supported.

The Stanford group now tested a hypothesis concerning the perceptual distortion of the incoming stimuli. This hypothesis states that :-

In the low-involvement situation, r will tend to be at a lower than (S) , whereas in the high-involvement situation, (r) will tend to be higher than (S) .

Using the corrected tests on the original distributions the following results were obtained:

	early	late
	mean = +3.18	mean = -0.456
Mann-Whitney	$U = 7, p = 0.013$	$U = 7, p = 0.155$
Student's t	$t = 3.226, p < 0.01$	$t = 1.018, n.s.$

The hypothesis would have predicted a positive mean for the early period and this is found to be significantly supported. For the late period the prediction of a negative mean was supported but not significantly.

The third hypothesis concerned the perceptual variables (r) and (s) . This stated that :-

To the extent that there is a difference between the perceptions of the other's policy (r) and statements of own intent (s) perceptions of hostility in (r) will tend to be higher than (s) in both the high and low-involved situation.

This hypothesis would predict that both for the early and late period the two distributions would be significantly different and that the mean of the joint distribution $(r - s)$ will be positive. The results are shown below.

	early	late
	mean = 0.33	mean = +1.3
Mann-Whitney	U = 23.5, not significant	U = 2, p = 0.016
Student's t	t = 0.2378, not significant	t = 2.3831, p < 0.05

The hypothesis is only partially supported. This may be due to the data. In the early period, of the 14 available readings (2 pairs of 7), 11 are zero. Any results based on such data must be viewed with suspicion.

The final hypothesis tested by the Stanford group concerns the variables (s) and (R). The hypothesis states :-

In a situation of low involvement statements of intent (s) will tend to be higher than action responses (R) whereas in the high-involved situation (s) will tend to be lower than (R).

This would predict significant distributions in both the early and the late data, but a positive mean in the early period and a negative mean in the late. The results are shown below.

	early	late
	mean = 2.31	mean = -0.734
Mann-Whitney	U = 9, p = 0.027	U = 7, n.s.
Student's t	t = 2.011, p < 0.05	t = 1.35, n.s.

The results do not support the hypothesis.

This completes the set of tests of across-the-model variables in this study. Because of the difficulties of following the hypotheses and the results of the tests, a table has been prepared (Table 14).

The results show that when the hypotheses are tested under the more rigorous early-late model, they are rarely supported. This is surprising since all of the hypotheses appear to be reasonably intuitive. One must always be careful not to exaggerate expected results, but results that are not expected provide motivation for further testing. The results in this case may be due to the data. The variables (r) and (s) are homogenous data when combined in tests. The interval scale of the two measures will be the same and the scaling is done from the same universe so that the data is comparable. This is also true of the action data. However, when the action variables are tested with the perceptual variables there is a non-homogenous mix, as the scaling is not from the same universe. This puts severe limitations on the kind of test applicable to relationships between the two sorts of variable. The two previous studies that we considered showed that correlation tests between action and perceptual variables support reasonable hypotheses. Such tests are both possible and valid between the non-homogenous data. However, when relationships involving absolute levels are tested, it is not wise to use this data. Most of the hypotheses tested in this paper involve tests of absolute relationships. This may account for the surprising results. The consistent agreement between the results of the parametric and non-parametric tests should also be noted.

Table 14. Showing comparison of tests using the Stanford model and the early-late model

1 - using data of Triple Entente versus Dual Alliance

2 - using early-late model for the Triple Entente

Hypothesis	Original tests	Present tests	
		Non-parametric	Parametric
1 data results	1 (incorrect calculation) support when corrected	2 no significant support	2 no significant support
2 data results	1 significant support	2 no significant support	2 no significant support
3 data results	1 significant support	2 partial support only	2 partial support only
4 data results	1 no significant support	2 partial support only	2 partial support only
5 data results	1 no significant support	2 no significant support	2 no significant support

Except for the initial confusion over the calculation of the results of the first hypothesis, errors appear at two distinct levels. At the technical level, the adoption of incorrect tests resulted in the inaccurate testing of the hypotheses. The hypotheses two to five suggest that one or other of the variables of the interaction model is larger than the other. This implies either positivity or negativity if the variables are combined in any additive relationship. The Stanford group used the Mann-Whitney tests on data derived from the

original data. This technique was shown to be wrong. The problems involved when processing non-homogenous data, have also been discussed.

At the research strategy level, the Stanford group made errors in the selection of which data to process. There were two weaknesses. One is that the Triple Entente was not a low-involved alliance for the whole of the crisis and so the testing of data on this assumption does not lead to correct results. Secondly, while testing high-involvement/low-involvement in this way, any variability due to the different sets of decision makers is not processed out. By using a comparison of the early period of the Triple Entente against the late period of the Triple Entente when retesting the data, these weaknesses were avoided.

Again a general remark concerns aggregation, which was done over alliances and over time. Remarks made earlier concerning this practice refer also to this study.

Two more studies can be fitted into the category of studies of across-the-model variables. They are both by Dina Zinnes and are clearly the most competent efforts.⁽²⁴⁾ The first of these concern hypotheses about the expression and perception of hostility.

Four basic hypotheses are tested :-

- (i) if x perceives itself to be the object of hostility then x will express hostility, this is represented by,

If xP then xE

Unlike the remainder, hypothesis (i) is non-directional.

- (ii) If x perceives that x is the object of y's hostility, then x will express hostility to y, or

if xPy then xEy

- (iii) if x expresses hostility to y then y will perceive this, or

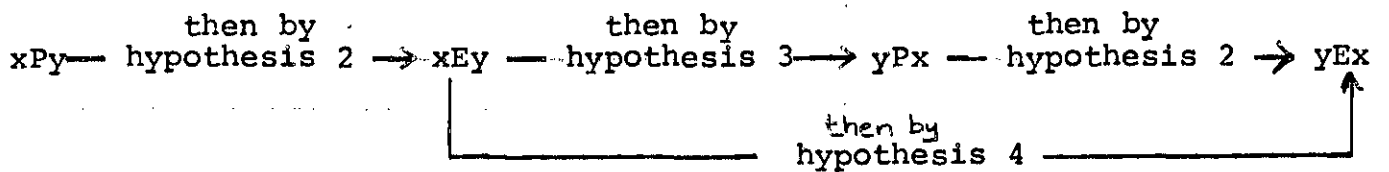
if xEy then yPx

(iv) if x expresses hostility towards y, then \bar{y} will express hostility towards x, or

if xEy then yEx .

Some of these hypotheses overlap as the diagram 2 shows.

Diagram 2. Expression and perception hypotheses.



To test these hypotheses, three basic models were employed, each allowing for different memory capabilities.

(1) no memory model - the events of the previous day have no effect on day n. That is, in terms of hypothesis (ii)

$$(xEy)_n = A(xPy)_n$$

(2) imperfect memory model - the memory span was assumed to be four days, so that in terms of hypothesis (ii)

$$(xEy)_n = \frac{A(xPy)_n + B(xPy)_{n-1} + C(xPy)_{n-2} + D(xPy)_{n-3}}{A + B + C + D}$$

(3) perfect memory model - all previous days effect the behaviour of the decision maker on day n,

$$(xEy)_n = \frac{(xPy)_n + (xPy)_{n-1} + \dots + (xPy)_1}{n}$$

In addition and in order to allow for any lags that may occur in the passage through the system, the following lag-memory models were designed.

(1a) no memory-lag

$$(xEy)_n = A(xPy)_{n-1}$$

(2a) imperfect memory-lag model

$$(xEy)_n = \frac{A(xPy)_{n-1} + B(xPy)_{n-2} + C(xPy)_{n-3} + D(xPy)_{n-4}}{A + B + C + D}$$

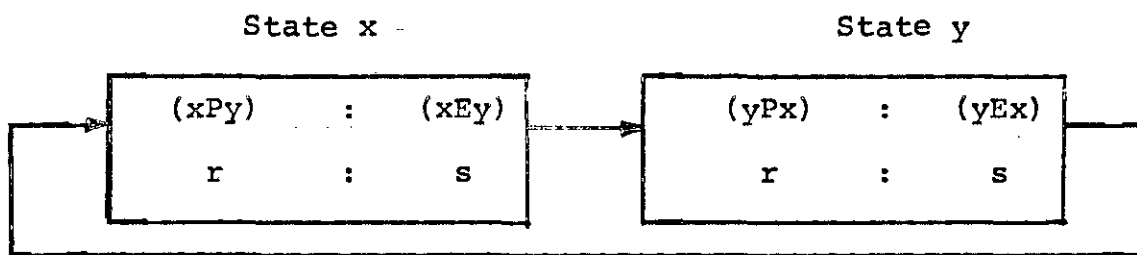
(3a) perfect memory-lag

$$(xEy)_n = \frac{(xPy)_{n-1} + (xPy)_{n-2} + \dots + (xPy)_1}{n-1}$$

In all the equations, the equality sign represents a correlation function. All the statistical tests are Pearsonian product-moment, correlating the left hand side of the equation with the right hand side. The coefficients represent the weightings given to each component.

At the same time, six different data conditions were generated. Referring to the interaction model (modified in diagram 3.), the data is taken from the perceptual variables only.

Diagram 3. Modified interaction model.



This modified interaction model is not explained in the Zinnes paper, despite it being the most acceptable use of the data since it only uses homogenous perceptual variables.

The six data conditions are below :-

- (1) Frequency count of all statements
- (2) Frequency count of threat statements only
- (3) Frequency count of action statements only
- (4) Intensity score of all statements
- (5) Intensity score of threat statements only
- (6) Intensity score of action statements only

The distinction between action statements and threat statements is that the former refer to the past while the latter refer to the future. The generation of these six data conditions, combined with the six models, gives thirty-six different ways of testing each of the four hypotheses.

But in the majority of cases the results failed to support the hypotheses. Holsti⁽²⁵⁾ has suggested that, '...One interpretation of these findings might be that in crisis "actions speak louder than words"; that is, in the hypotheses one and two, x's perceptions are probably based on y's actions as well as y's expressions. Hypotheses three and four, however, are concerned only with the relationship of expressions of attitude, and perceptions of these attitudes. Thus Zinnes' study suggests the limitations of working solely with perceptual data, to the exclusion of action data.' The point expressed is an essential argument of what must be theoretically included in the interaction model. But the use of bad data is counterproductive. Action data must be as rigorously collected and scaled as any other data in the model, and one feels that this is not so with the data used as action data by the Stanford group.

To a large extent, the poor results may be due to using the individual measures of frequency and intensity. We have seen earlier that a composite measure combining these two gives more satisfactory testing.

It is also possible to suggest a more realistic memory model. This model would allow for a sliding scale of memory so that days nearer the day of perception t would have a greater effect on that perception, while days further away would have increasingly less effect

$$(xEy)_t = e^{-at} (xPy)_t + e^{-a(t+1)} (xPy)_{t-1} + \dots + e^{-a(t+m)} (xPy)_{t-m}$$

The lag sophistication could also be included in this model.

This study was the first of all the Stanford studies to consider the problems involved with aggregation. It was observed that⁽²⁶⁾

'...It is possible to question the assumptions inherent in pooling the data over six states. Explicitly, this procedure assumes that the states exhibit similar behaviour, or that they would exhibit similar behaviour if we could observe them for an unlimited period of time. Whether or not these assumptions are valid must in part depend on the results - if we obtain good results, we would consider the assumption warranted, if not, we might wish to revise it.' This is a rather arbitrary criteria, but at least an acknowledgement of the fact that problems are involved when data is aggregated.

Despite not publishing the original data, it is felt that this study is the most soundly structured of those seen so far. The models are carefully thought out and the various combinations of lag-memory models are extremely productive. Had a composite intensity/frequency measure been used, the results may have been more rewarding.

The final paper to appear in this group (across-the-model) comes from the same author.⁽²⁷⁾ In this paper Zinnes attempts to compare the data produced by content analysis with that produced by the Brody/Driver n-nation simulation. Thirteen separate hypotheses are tested. The intensity scaling measure was used with impressive combinations of parametric and nonparametric tests. In the majority of cases significant results were obtained. In many ways the study

was an extension of the previous one and there seems little point in providing a detailed critique of it as all the relevant points have already been made.

The last category that we shall cover concerns tests of across-the-model tests, but with the added sophistication of establishing time series characteristics within the data. Only one study that fits this category has come from the Stanford group.⁽²⁸⁾ This was produced by Zinnes, and has the same stamp of competence about it.

Although it is not documented as such the study involves two models :-

$$r_t = f(a_1 r_{t-1}, R_t)$$

and

$$s_t = f(b_1 s_{t-1}, r_t), \text{ where } r \text{ and } s \text{ are defined as in the interaction model, and } R \text{ represents the reception of a hostile message.}$$

Verbally, these models propose that :-

(a) a hostile perception on day t is some function of the hostile perception on day t-1 combined with the reception of hostile message on day t.

(b) a hostile expression on day t is some function of the hostile expression on day t-1 combined with a perception of hostility on day t.

In testing these models the data was divided into two states. For example, the perception data was divided into (i) no perception and (ii) positive perception. A similar division was made in the expression data. This allowed the generation, for perceptions, of the transition probability matrices in diagram 4.

Diagram 4. Transition probability matrices : perceptions.

	R = 0			R = positive	
	r = +	r = 0		r = +	r = 0
r = positive	a	b	r = positive	e	f
r = zero	c	d	r = zero	g	h

The probability (a) is that of moving from a positive perception of hostility on day t to a positive perception on day $t + 1$, given that there is a receipt of a hostile message on day t . The probability (f) is that of moving from a positive perception on day t to no perception on day $t + 1$, given that there is no reception of a hostile message on day t . Similar techniques are used in the Perception/Expression model.

The results that Zinnes obtained were good as far as they went, but the arrangement that she adopted was the simplest possible. The major consideration was that the statistical sophistication needed to compare the matrices is inproportionately complicated by any movement away from the 2×2 format.

The data available is not in a condition to support a large matrix, but is possible to increase from a four-cell matrix to a nine-cell matrix by using the first difference of the data. For example, the first difference from a series of data can be in three states. It can be positive, zero or negative. This trichotomy generates the nine-cell matrix (Diagram 5). It also allows some testing of hypotheses of escalation and de-escalation.

Diagram 5. Transition probability matrix : perceptions : 9 cells.

$R_t = 0$			$R_t = +$				
$P_{t+1} = + \quad P_{t+1} = 0 \quad P_{t+1} = -$			$P_{t+1} = + \quad P_{t+1} = 0 \quad P_{t+1} = -$				
$P_t = +$	a	b	c	$P_t = +$	a'	b'	c'
$P_t = 0$	d	e	f	$P_t = 0$	d'	e'	f'
$P_t = -$	g	h	i	$P_t = -$	g'	h'	i'

In the diagram P_t is the first difference of r_t such that,

$$P_t = r_t - r_{t-1}$$

This matrix has been produced elsewhere and tested using the same data.⁽¹⁷⁾ The same transition matrices can also be produced for the Perception/Expression model.

A further improvement upon this study can be obtained by introducing closed models as well as open models. It may be useful to test a general hypothesis that perceptions on day t are some function of perceptions on previous days, and only on such previous perceptions. This would be testing the model :-

$$r_t = f(a_1 r_{t-1}, a_2 r_{t-2}, a_3 r_{t-3}, \dots, a_m r_{t-m})$$

The data is unlikely to support such a general equation but it might support a more limited model :-

$$r_t = f(a_1 r_{t-1}, a_2 r_{t-2})$$

By using such a model it may be possible to determine the sequential aspects of the data. These improvements are carried out elsewhere.⁽¹⁷⁾ Similar arguments can be put for the expression of hostility behaviour patterns.

Although in this study the data has been aggregated over alliances, the effect is not so pronounced as the data was collected in terms of alliances. The study is statistically competent, as are all those produced by Zinnes.

IV

The Stanford group invested much time and money in the attempt to measure indices of tension. They succeeded in developing a good method of extracting reliable data from historical documents and fitting it into a most usable interaction model. The methods of obtaining the data and structuring it into the interaction model are extremely generalised and capable of fitting most crisis situations. This has been the most significant contribution that the Stanford group have made to political

science.

In many ways the advance on this contribution has been spoiled by the slipshod manner in which they have used the data to test the hypotheses. Mistakes range from those of calculation to those of which tests to apply.

Difficulty has been caused by the operational measures chosen by the group. Those outside the perceptual framework, such as 'stereotype' etc., have not been at the level of sophistication of those inside the framework and this has seriously reduced the power of the tests. Within the framework, the constant switching from an intensity scaling measure to a frequency measure has also created difficulties. There is much to be said for a composite measure made up of these two individual measures.

Because of the nature of the interaction model and the data, it has been necessary for the Stanford group to aggregate the data. Much has been said of this because it is such a crucial point. Aggregation affects the statistical analysis, and for this reason alone, the possible effects must be considered. The Stanford data, and the possible effects of aggregation into alliance formations has been tested elsewhere.⁽¹⁷⁾ The results show that aggregation into alliances is statistically acceptable.

The inadequacies of the Stanford studies are the opposite to those normally encountered in empirical studies in the social sciences. In economics and international relations,⁽²⁹⁾ the most questionable data have been processed by extremely powerful statistical tests. The results are as questionable as the data.

The Stanford group have provided a rich data gathering technique and an extremely useful interaction model that allows comparison over different crises. The hypotheses tested will also prove to be important to any general theory of crises. It is essential that these hypotheses are tested adequately.

My thanks go to Dr. Michael Nicholson of the Centre for the Analysis of Conflict, London, whose guidance and criticisms throughout this project have been extremely helpful. My thanks also to Dr. Richard Brody, one of the Stanford group, whose comments on an earlier draft of this paper have also shaped the ideas expressed here.

NOTES

- (1) All references to the Stanford studies or the Stanford group are of The Studies in International Conflict and Integration at Stanford University.
- (2) The major reference for this technique is, North, R.C., et alia, Content Analysis - A handbook with applications for the Study of International Crisis, Northwestern University Press, Evanston, 1963.
- (3) Jervis, R., 'Scientific Study of Politics', International Studies Quarterly, vol 11, 4, 1967.
- (4) North, R.C., 'Research Pluralism and the International Elephant', International Studies Quarterly, vol 11, 4, 1967.
- (5) See Jervis op. cit.
- (6) See North op. cit.
- (7) See Jervis op. cit.
- (8) Zinnes, D.A., North, R.C., Koch, H.E., 'Capability, Threat and the Outbreak of War' in James Rosenau (ed.) International Politics and Foreign Policy, The Free Press, 1961.
- (9) See North, 'Research Pluralism and the International Elephant'.
- (10) Holsti, O.R., 'The 1914 case', American Political Science Review, vol LIX, 2, 1965.
- (11) North, R.C., Holsti, O.R., Brody, R., 'The Conflict Spiral', Peace Research Society, Papers L. 1963.
- (12) Holsti, O.R., North, R.C., Brody, R., 'Perception and Action in the 1914 crisis', in David Singer (ed.) Quantitative International Politics, The Free Press, 1968.
- (13) See Zinnes, North and Koch, op. cit.
- (14) Holsti, O.R., North, R.C., 'The History of Human Conflict' in E. McNeil (ed.) The Nature of Human Conflict, Prentice Hall, 1965.

Notes (2)

- (15) The Stanford group found that hostility was the best predictor of Foreign policy behaviour. See North, Holsti, Brody, note 12.
- (16) See Holsti op. cit. note 9.
- (17) Hilton G.T., Unpublished doctoral thesis, Lancaster University, 1969.
- (18) Geiss, I., July 1914, Batsford Publishers, London, 1967, page 142.
- (19) Siegel, S., Nonparametric Statistics in the Behavioural Sciences, McGraw-Hill, London, 1956, page 116.
- (20) North, Holsti, Brody, op. cit. See note 11.
- (21) Holsti, North, Brody. op. cit. See note 12.
- (22) Siegel, S. op. cit. page 202.

- (23) Bessel's correction for small samples. Suppose we have two samples 1 and 2, such that variances are S_1^2 and S_2^2 , respectively and the sample sizes are N_1 and N_2 . Also let the variates of the samples be x and y respectively. Then :-

$$S_1^2 = \frac{N_1 \sum x^2 - (\sum x)^2}{N_1 (N_1 - 1)}$$

$$S_2^2 = \frac{N_2 \sum y^2 - (\sum y)^2}{N_2 (N_2 - 1)}$$

$$\hat{\sigma} = \sqrt{\frac{(N_1 - 1) S_1^2 + (N_2 - 1) S_2^2}{N_1 + N_2 - 2}}$$

$$t = \frac{\frac{\sum x}{N_1} - \frac{\sum y}{N_2}}{\hat{\sigma} \sqrt{\frac{1}{N_1} + \frac{1}{N_2}}}$$

$$\hat{\sigma} \sqrt{\frac{1}{N_1} + \frac{1}{N_2}}$$

- (24) Zinnes, D.A., 'The expression and perception of hostility in prewar crisis : 1914' in David Singer (ed.) Quantitative International Politics, The Free Press, 1968.
- (25) Holsti, North, Brody. op. cit. See note 12.

Notes (3)

- (26) Zinnes, op. cit. See note 24.
- (27) Zinnes, D.A. 'A comparison of hostile behaviour of decision makers in Simulate and Historical data.', World Politics, XVIII, 1966, page 474.
- (28) Zinnes, D.A., Zinnes, J.L., McClure, R.D., 'Markovian Analysis of Hostile Communications in the 1914 crisis.' Mimeo. Indiana University, July 1967.
- (29) In international relations the Dimensions of Nations project uses an extremely sophisticated Factor Analysis technique on data of questionable usefulness.
- (30) Throughout the whole of this paper chi-squared tests will be performed using the method prescribed by Woolf in 'The Log Likelihood ratio test (G-test)', Annals of Human Genetics, 1957, 21, page 397. A simple explanation of this method can be seen in C.A.B. Smith, Biomathematics, vol 2, London, Griffin, 1969, page 461. I am grateful to Professor Smith for suggesting this method to me.

Georges R. T A M A R I N

DIALECTICS OF PRESTIGE AND HUMAN COEXISTENCE

III IPRA. GENERAL CONFERENCE
Karlovy Vary, 1969 ,September

Georges R. T A M A R I N
University of Tel Aviv

D I A L E C T I C S O F P R E S T I G E A N D H U M A N C O E X I S T E N C E

War will exist until that distant day when the conscientious objector enjoys the same reputation and prestige that the warrior does today.

J.F. Kennedy, Notebook

Like among the beasts, among men too power is the unique measure, and the cult of power dominates the human artistic expressions from its beginning. Art reveals that men like to bow before the stronger, and so they kneel the ones before the other during centuries, being rather indifferent towards the death of their fellow-men, especially if it brings them gain.

M. Krleza: Podravski motivi

Those who propose this arrangement of the return of the refugees hope that Jordan will obstruct its realization, despite the suffering of the unfortunate people, - out of prestige.

From the Press, September 1967

The bases on which various people raise prestige claims, and the reasons others honor these claims include property and birth, occupation and education, income and power - in fact almost anything that may invidiously distinguish one person from another. In the status system of a society, these claims are organized as rules and expectations which regulate who successfully claims prestige, from whom, in what ways, and on what basis. The level of self-esteem enjoyed by given individuals is more or less set by this status system.

C.W. Mills: White Collar

It is easier to give examples for the Chinese "FACE", than to define this face. For instance that official from the capital city who may race with his car at a speed of 60 miles, when the speed limit is 35" gains enormously in face. If his car hits someone, and he, without a word presents his visiting-card to the traffic-officer, which disappears with a friendly smile, he will "get an even greater face". (...) One can neither translate, nor define this word of "face". It is similar to honour but not identical. One cannot buy it with money, and nevertheless it gives a concrete decorum to persons. It is an empty word, but men fight and women die for it. It is invisible, but it can exist only if it is presented to the public (...)

Lin-Yu-Tang: My country and my people

In Jammu City you will see them collecting filth from the street with their bare hands. This is the degradation the society requires from them, and to this they willingly submit. They are dirt; they wish to appear as dirt. (...)

.....

And the cadet of the Indian Administrative Service, when asked why he had joined the service, replies after some thought: "It gives me prestige". His colleagues, who are present do not disagree. It is an honest reply; it explains why, when the Chinese invade, the administrative in Assam will collapse.

V.S. Naipaul: An Area of Darkness

Credulity must sometimes be ignored, credulity deliberately cultivated for the sake of prestige and edification is indefensible.

M. Gaffin: Some Reflexions on Superstition and Credulity

ARROGANCE is the habit of despising everybody, except oneself. (...) He will never make the first approach to anyone. (...) if he passes you on the street he will not speak to you, but keeps his head bent down, or when he chooses, looks up in the air.

.....
PETTY AMBITION will be familiar as an undignified craving for marks of respect. (...) when asked out, sets great store by sitting next to the host himself. He takes his son off to Delphi for his ceremonial haircut. He takes trouble to have a black slave to attend him on the street.

Theophrastes: Characters

I prefer to hunger with my family, but I am not willing to do manual labor. I suffer enough from the shame inflicted on us to have to live in the quarter inhabited by North African immigrants.

A Patient

You will never "downgrade" me again with your ironical remarks! Next year, when I'll have my PhD, I won't have any need for you and I will throw you to the dogs!

A Patient to her lover

Child A.: My Daddy is a head taller than yours.

Child B.: But mine is a belly fatter than yours

E.

SOME THOUGHTS ABOUT PRESTIGE

Few words appear so frequently on the pages of newspapers and often enough also in those of books dealing with quite different subjects as "prestige".

I quote at random from books I happened to read lately -- an investigation in the field of peace research emphasizes recent changes in the composition of defence establishments due to the enormous increase of the prestige of science; an anthropological study mentions the fact that one of the important reasons for migration of Polynesian aborigines was the unsupportable sense of loss of prestige if defeated; and in another one I read about "a Brahman who murdered his wife's lover for daring to enter the house by the front door instead of sneaking in through the back"; a historical treatise analyses the respective prestige of Constantinople and Rome in the eyes of medieval Christianity; measures of prestige of professions comprise ten's of pages in a textbook of sociology; in a recent work on the diplomacy of the Vatican, the letter of Paul VI to Mao-Tse-Tung is quoted, stressing "the prestige which China now rightly enjoys" and in a modern novel the sentence appears: "Animal hunt for protein, we hunt for protein and prestige". And in newspapers, as mentioned

who killed three policeman before being overpowered, and the efforts of the delegate of a East-European country at the UN, seeking a face-saving solution, after the defeat of his proposition in the plenum.

This ubiquitous and generalized striving of individuals and groups to secure and increase prestige (for the time being we shall equate it with its everyday usage, suggesting: esteem, social standing, regard revealed by one's fellowmen, influence, object of honour...but also honour itself, etc) appears to be a fundamental trait and driving force in man, and thus one is tempted to approach the subject under a somewhat oldfashioned (18 century styled) heading of "AN ESSAY ON HUMAN NATURE". But, immediately, a second idea imposes itself: since prestige is bound to some traits and/or positions (virtues, powers, achievements, values, professional or national identity, etc) which the others, those who admire the one bestowed with prestige do NOT POSSESS, it is quite evident that the analysis of our subject has to evolve in the frame of reference of the (19 century styled) theme of HUMAN INEQUALITY.

Why only human? All we know about animal psychology and social life, in relation to the "respect" some species enjoy in the eyes of others and the prestige of the powerful and/or wise individual in the crowd, making him its leader, could suggest a beyond-human biological-social dynamism regulating relations and "values".

The HIERARCHICAL aspect, when prestige is more or less synonymous with STATUS (though the two notions overlap but are not totally identical: eg. the minister of a small country gains in prestige, but no increase of status following the visit of a representative of a big power; it is usual to speak about prestige-suggestion, but not status-suggestion, the first concept evoking more the connotation of "force", while the second rather of position, although, if one thinks about suggestion as a high degree of influence it is clear that the status of the source of command is... suggestively influential)--i.e. prestige conceived as a reflection of SOCIAL STRATIFICATION is the presently prevalent usage of this term in (at least American) SOCIOLOGICAL texts. "This hierarchical ordering we may call prestige, which is the relative esteem in which an individual is held in an ordered system of differentiated evaluation"--states T. Parsons ("The Social System"), and his words, as also those of C.W. Mills quoted in the motto, clearly show that the emphasis is more on the formal, "objective" (as to consensus) and positional and less on the subjective-psychological and psychodynamic or the philosophical-reflective aspect of the phenomenon. Such a conception of "Sozialprestige" (as originally used by Leopold) does at least partial justice to the claim of Kluth, requesting an elaboration of this notion from a functional-structural standpoint.

If the link between status, power and prestige, and also the fact of the relativity of PRESTIGE INTERESTS and its criteria in different social strata, moulded by fashion and convention (M. Weber: "Gesammelte Schriften zur Wissenschaftslehre") are the predominantly social frame of our subject; the problem of PRESTIGE SEEKING, its dynamic role in individual and group life, the FEELING OF PRESTIGE conferred by possession of talents even if unrealized (M. Weber, op.cit.), the relationship of PRESTIGE-SELF ESTEEM and PRIDE on the one hand, and of LOSS OF PRESTIGE-SHAME and DEPRESSION (a relationship to be elaborated) on the other, and especially the RATIONAL and IRRATIONAL (destructive, self-destructive) determinants and results of prestige-seeking, seem to be its predominantly PSYCHOLOGICAL dimensions.

Needless to say, this distinction is rather theoretical, in most of its practical manifestations "prestige" is to be investigated on a socio-psychological as well as socio-philosophical background.

An illustration of this is the INDUSTRY OF PRESTIGE, on its collective-official level (education, propaganda) and individual-inofficial level (advertisement, the industry of deception built on the manipulation of SNOB-APPEAL), on the one side, and criminal and psychopathological phenomena (the impostor, pseudologia phantastica) on the other side ...all of them aiming to make it appear that someone's (or something's) value and standing are greater than they really are (because he possesses such and such a car, or such and such a grandfather, etc). A vast domain of social life is characterized by FAKING of values, showing off facades and overstressing appearances...in order to increase prestige. The recent development enabled by mass communication, when a politician can buy an IMAGE in order to impress voters, is certainly less criminal (in the technical sense) than the outright buying of votes, but whether it is less dangerous for society and its supposedly democratic rules of the game is at least questionable.

(There is probably a link between the gradual disappearance of the former distinction between LEGITIMATE and ILLEGITIMATE prestige and the actual prevalence of the norm of SUCCESS at any price in the democratic-competitive societies, when any means --also of pretension, faking, etc --are de facto considered as legitimate in order to climb the MOBILE social ladder).

But certainly no industry could have been built on snob-appeal if the tendency to pretension and to the display of (non-existent) superior traits were not somehow preexisting and deeply anchored in "human nature", and, it seems, even independently of the type of social organization. (Display of FALSE HUMILITY --when the latter is an estimated value -- is evidently a special case, when content and structure diverge; however at least Tartuffe's example seems to prove that humility is hardly an original "drive" in man).

We repeatedly emphasized the components of fakeness, display, show off and trick as means of impressing others (and as intermediate categories one can mention acting, playing, theatricality in general). Here we encounter the older, today nearly forgotten meaning of prestige, derivating from PRESTIDIGITATEUR, the illusionist, the "magician" displaying by tricky art supernatural powers and thus achieving extraordinary effects on his credulous public.

However...where are the exact limits between conscious make believe and true persuasion, between play and magical-technological activity, the display of the juggler and the ritual art of the "true" sorcerer, between the TALENT to impersonate and the prestigious VIRTUES of "superior" powers? Here, an additional dimension of prestige reveals itself: the FASCINATION of the naive by the suggestive art of the actor and juggler, and also that of magical and religious experience -- a person possessing prestige is supposed to have CHARISMATIC powers, or he is even the source of the SACRED.

Finally, when reflecting about prestige and prestige-seeking, a third essay imposes itself: a philosophical-satirical treatise on the HISTORY OF HUMAN FOLLY.

Observing with an impartial and detached regard and meditating (in the oldfashioned sense of WISDOM) on the tremendous efforts, the irrational activities, the disproportionate RISKS and often DESTRUCTIVE and SELF-DESTRUCTIVE methods men are ready to choose and

endure in order to increase or to save prestige, to build up an empty facade, to pretend a fake identity, to maintain what is felt to be honour (which may a generation later appear ridiculous, cruel and nonsensical)...one cannot but wonder about the unreason of *Homo sapiens*.

Innumerable examples, from antiquity (Aesop's frog "competing" with the ox is as illustrative as some of Theophrastus's characters) up to modern times (for instance "le bourgeois gentilhomme" of Moliere) and our very recent days (dictators sacrificing their armies and social climbers their own health and the happiness of their families) are tragi-grotesque documents of distress and disaster caused by obsession with prestige.

Human coexistence is regulated and...endangered by this fatal ambition. Because, if group--pride and national prestige become involved, there is every chance that even the mature, the rational and the wise will forego sound deliberation and renounce clear judgment. The same persons who will with scorn and contempt condemn the arrogant bickering (leading eventually to bloodshed) of obstinate drivers, unwilling to let the other to cross a narrow bridge first, and treat as dangerous psychopaths young thugs solving "disputes of honor" in the pub with knives or firearms, may find war as the only honorable issue in order not to lose prestige in a border conflict concerning a few square miles of land, and to approve investing billions to have their national A-bomb to augment LA GLOIRE, instead of investing them in public health and education.

Analysis of human co-existence, meaning also the study of the possibility of peaceful coexistence of human groups, has necessarily to concentrate on the investigation of the "social philosophy" of these groups in relation to prestige.

III.

A DEFINITION AND A SCHEME OF PRESTIGE

For the sake of brevity (and more or less ignoring here the prestige of OBJECTS, eg. of famous cities) we will define prestige as the ESTIMATION OF (ONE'S) IMPORTANCE, EMANATING FROM AND ESTABLISHED BY THE VALUATION OF OTHERS.

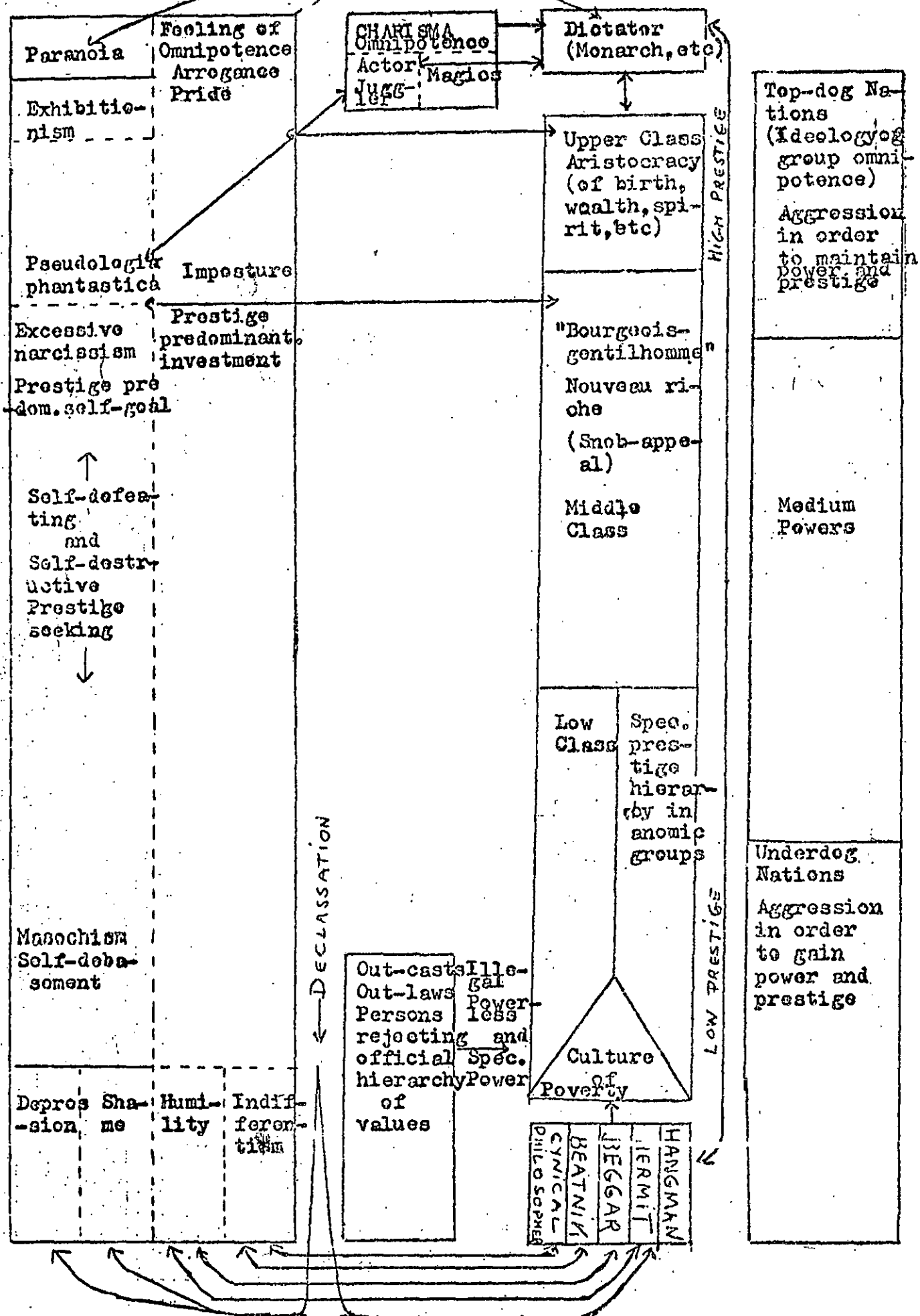
We do not pretend that our definition of prestige is necessarily more accurate than some others. We wanted to emphasize the DEPENDENCE ON OTHERS, the unfreedom of the individual (prestige-seeker) even if his "prestige-forces" are among the strongest.*

*The relationship of the prestige-seeker towards the others (by whose appraisal he is dominated and dependent) is by no means a simple one: he tends to be a heteronomous, but often a social (and even narcissistic-autistic) personality, who, though despising "common people" helplessly depends on them for his narcissistic libido supply. Only transcending radically the limits of the "normal" becomes the prestige seeker "free" from the others, in his delusion of grandeur he will himself fix his (divine, etc) prestige. (Cf. here a much discussed commentary of Rabbi Shimon Bar Jochai, of the biblical passage, when God says to the people of Israel: "you are witnesses of the words of God, and I am God", meaning possibly: if you are not my witnesses, so I am not God).

As to the relationship SENSITIVITY ("It is easy to hurt me")-OTHERDIRECTEDNESS ("Public opinion is very important for me") and PRESTIGESEEKING: most of my sensitive patients (and those of two of my colleagues) confirmed the relation among this triad; while the first two variables are selfevidently interrelated, the third one is not in a logically binding way linked to them. Only viewing prestige through our definition, and also taking into consideration the slightly paranoid element of all of the three variables, becomes this empirical finding also theoretically explicable. An experimental study we are engaged actually, tries to clarify additional points.

PRESTIGE - SCHEME

Personality traits. Psy. mechanisms and Pathology Power-Prestige Social Structure



This dependence on others is inherent in human (co)existence and is a force of cohesion of ordered social systems in general. The "out-cast-group" (see Schema) is the only exception, where, either voluntarily or involuntarily, the hierarchy of official values is rejected...or reversed. But even here, and even disregarding the well-known, rigidly binding codex of values and prestige of their own of anomic groups, the question arises, whether in one form or another the valuation of the (imaginary, interiorized, etc) "others" is not indispensable in order to be able to play one's role.

The story of the hermit-candidate (A. France) who willingly consents to every deprivation and suffering, but when warned by God that children will not know about his hardships and widows will not weep on hearing of his martyrdom, sighs: Lord this is too hard! - suggests that it is almost impossible to break completely with the world-order and norms of our fellow-men.

As to the complex relationships and structures presented in the Schema, they are, at least so we hope, clear enough, and need only a few comments.

The link between the "highest" and "lowest", the monarch and the hangman, is given not only by the "pragmatic" element (the usual excessive employment of the latter by dictators), but also by a more general socio-psychological structural motif; we refer to the stimulating observations of R. Caillois* about the similarity in the "outlaw" (or above-law) position of both, whose interaction is necessary to the ordinary functioning of the social body regulated by law. Moreover, concerning the (specific, frightening, infamous, fascinating) prestige of the outlaws, we want to draw attention to another text by the same author**: the gain of SUPERNATURAL power through TRANSGRESSION and violation of the fundamentals of the established order, becoming a (tabooed) outlaw; as, for instance, the African chieftain who before parting in war has sexual intercourse with his sister. The Gigante's and the biblical Nephilim are another example.

Again, the perhaps at first glance surprising link between the actor (and impostor) and the dictator becomes less strange if one thinks about the theatrical element and showmanship in the roleplaying of every tribune and dictator, as stressed for Cola di Rienzo and Mussolini by Barzini***, and one could possibly generalize Silone's thesis concerning the dictators of the modern world: they are failed artists.****

III

FACETS OF PRESTIGE: SELF-GOAL AND "INVESTMENT", ITS FURTHERING AND SELF-DEFEATING (SELF-DESTRUCTIVE) FORMS.

If many cases of prestige-striving impress us very much as chapters in the history of human folly" because of the price and risk involved and since apparently no gain beyond the prestige itself is visible, in other cases one cannot deny that increase of prestige bring additional gain of a material or other kind...further increasing the prestige.

*Cf. R. Caillois: "Bburreau et Souverain" (in: "La communion des Forts". Etudes Sociologiques).
 **Cf. R. Caillois: "L'homme et le sacré".
 *** Cf. "Cola was Italian. He spoke eloquently, wore handsome clothes, invented flags, staged the most tremendous feats and ceremonies of his days, sent elegant letters to all and sundry, put his trust in fragile juridical formulas and historical precedents, but neglected to build a real republic(...) He never for a moment suspected that it was not enough to build a life-like persuasive facade. The facade and reality, for him too, were one and the same thing" (in: L. Barzini: "The Italians")
 ****Cf. I. Silone: "The School of Dictators".

Of course, except in extreme cases (especially of the self-destructive sort) one can hardly draw a clearcut line between cases that one could designate as "self-goal" prestige versus those of "investment" prestige; nonetheless these two aspects of prestige seeking are distinguishable.

As an example, a magazine article I have just been reading, could illustrate the point. It tells about the current fashion of gymnastic courses where young men spend many hours a day in order to develop an athletic body; the highlight of their life becoming the hours on the beach, where they display their statue-like torsos, admired by members of the other sex. In some cases the prestige of the attractive male body is an excellent "investment" facilitating the seduction of the admiring girls. In other cases, however, there is no such intention whatsoever. On the contrary, the muscular Apollo will resist any seduction, being affraid that the effort involved in the love affair could be detrimental to his perfectly shaped muscles. Here, the athletic body and the prestige it lends is a SELF-GOAL assuring nothing beyond the prestige itself. This last statement is too categorical: there is the gain of being admired i.e. a kind of exhibitionistic pleasure. However, the "self" -element is present, since exhibitionism is a form of AUTO-erotic activity, the pleasure it gives is predominantly a narcissistic one.

In those cases where prestige is equivalent with power, it is mostly also "investment" (the prestige of a victorious army paralyzes the potential enemy). When it is equivalent with SOCIAL STANDING it depends on the particular case, and the price paid for it, which of the two forms is prevailing. In most cases higher status (occupations, etc) is linked with more reward, though in some occupations a job linked with higher social prestige may mean a decrease in income in comparison with the one (say blue-collar work) which the person gave up; here the prestige is self-goal. The extreme example in this sense would be of those Indian chiefs, whose honor is ruinous, since the task of being the "provider" (of feasts, gifts, etc) is the most essential element of his position. The same is true in most cases where the sacrifices and deprivations needed to attain or maintain status are out of any reasonable proportion, for instance in the case of the impoverished noble family (in one of Zola's novels) where mother and daughter live in self-imposed privation, in order to be able to give a reception once a month. Here, one could however assume some hypothetical variations, which could change the "nature" of their strenuous efforts. Supposing there is a fair chance that the daughter will meet a suitable fiancé during such an occasion, the prestige-upholding could be a more or less sound investment. If on the contrary, beyond the fact of enduring sacrifices for entertainment, clothing, food, etc, spending all the money on reception means renouncing the possibility of schooling which could enable the girl to attain a well paid profession and this CAUSES real DECLASSATION. We are dealing not only with an irrational gesture in maintaining an empty facade, prestige as self-goal, but also with a SELF-DEFEATING tragi-grotesque endeavour. Another question could, however, be whether this facade was not a safeguard against an emotional breakdown due to downward social mobility. The relation between status seeking and achievements - and emotional strain is not an unambiguous one, as might appear at first glance. One of the prices to pay for successful social climbing is the strain of the CHANGES, the intense efforts to keep up appearances in living according the new style, is

emotional strain and not so seldom nervous breakdown*;(the specific details of this relation being outside the scope of our text).

The price paid for prestige seeking may rend the exertions and labour not only irrational and self-defeating but even SELF-DESTRUCTIVE, if the RISK involved is too great (eg. endangering life) or the objective investment out of proportion to the gain which can be expected.

This is especially true for cases where prestige is equivalent to HONOUR**, when group-norms lend such value to its maintenance that life seems worthless and degraded if this "virtue" is lost. (Battlefield- "champ d'honneur")

It depends of course on the specific culture whether this unconditional MUST will be participation in an especially dangerous sportive competition, challenging someone to duel because of an offensive remark, the obligation to commit suicide of the aristocrat if he was unable to pay his gambling debt (debt of honour') within 24 hours or of the "dishonoured" girl (who had sexual relations before marriage), or even of someone who only "lost face" (according to Lin Yu Tang: she was seen naked by a stranger); the obligation of the brother to kill his beloved deviant sister in order to save family honour-prestige (and may afterwards suffer in bereavement all his life) or to respond according to the Samurai code, to a slight insult by committing suicide at the doors of the person who injured his honour, instead of assaulting him...all are suitable examples of the SELF-DESTRUCTIVE nature of prestige-valuation and of human folly embodied in some of its ~~ideals~~.

*Cf. V. Packard: "The Status Seekers", especially chapter : "The Price of Status Striving".

A few lines from this text, as an illustration: "Many socially declining or downward-mobile people turn to alcohol or drugs for support. (...) The people who succeed in moving up the class scale in a conspicuous way must typically pay a price, too. As we have indicated, they feel impelled to take on new habits, new modes of living, new attitudes and beliefs, new addresses, new affiliations, new friends - and discard old ones. The resolute striver is a lonely man making his way on a slippery slope. (...) His family resolutely tried to prove its gentility. For one thing, Mr. Starr thought to make his parents seem upper class, too, by disinterring their remains in the city's lower class cemetery and reburying them in the city's upper class cemetery".

Concerning the NOUVEAU RICHE or NOUVEAU NOBLE in a totally different social frame, his insecurities and strivings, I want to quote G. Tillion ("Le harem et les cousins"): "Le notable CHA-T-DIYA est assez bon mouton pour espérer de la considération, pas assez pour l'obtenir à coup sûr, - d'où l'acharnement qu'il déploie quand il s'agit de son prestige; plus que les autres il fera grand étalage de dévotion et bouclera hermétiquement ses filles et ses femmes.

Nous avons connu en France des cas analogues d'ascension pénible, assorties de prétentions

**Honour has at least three dimensions, though in all of them the social-narcissistic ego supply derives from the honouring of the others. It may be positional, honour given to status, title (regardless whether achieved or ascribed); it can be a super-ego function (character trait) if one acts ("exists") according to the social codex: (eg. paying the debt of honour which payment can not be enforced by law; by resisting libidinal impulses, etc) but also an "object". If a girl is dishonoured, losing her virginity, regardless whether she succumbed to her id-impulses ("feeble" character) or if she was raped, so in the second case honour-prestige is almost an impersonal capital-object, having its price-value but independently from one's moral personality.

One more remark, concerning honour-prestige-nobility. Among the many penetrating observations of G. Tillions beforementioned book, I want to draw attention to the distinction between "noblesse Averroes et noblesse Ibn Khaldoun". Prestige is nearly always based on hierarchy and comparison. But in the case of Ibn-Khaldoun type nobility of almost total endogamy (family) prestige is non-hierarchical --or, the only one is "pure" versus "mixed" ...and every comparison is objectionable.

IX.

PRESTIGE, POWER AND IDENTITY (FACE). LOSS OF PRESTIGE (FAILURE-SUBMISSION), SHAME AND DEPRESSION.

In spite of all his foolishness (and Homo Sapiens is indubitably, at the same time a fundamentally unreasonable being; the reasons he is ready to risk unnatural death for, as we have elsewhere pointed out, seem to be a convincing proof of a partial degeneration of his instinct of self-preservation*), - no father would probably kill his beloved daughter who dishonoured family-prestige, no middle class businessman would overwork himself risking coronary infarct in order to buy a new and superfluous car "to keep up with the Joneses", no Japanese student candidate would commit suicide because he failed at the entrance-examination, and maybe even statesmen would not risk the lives of ten's of thousands of their soldiers, delaying peace-talks because of prestige, if this "EMPTY WORD", or more exactly the qualities and relations it stands for, were not somehow coupled with the sense of one's identity, the sense of integrity and intactness of one's self in its personal and transpersonal dimension and/or if it were not at least a relic of functional regulatory mechanisms of a previous social system.**

The intimate link between individual identity and prestige is expressed by its usual figurative designation (in many languages) of FACE (the equivalence of face and individuality, again, is well known in psychology), and also by its overlapping with STATUS (meaning "belonging" as well as "power"). One of the dimensions of my identity-definition (I am a...) relates to the belonging to a formal or informal group (to the French nation, the medical profession, to the category of successful drivers, etc).

Therefore, every threat to prestige, meaning a degrading and humiliating change, is a threat to identity itself. This applies to one or both senses: of group-belonging (instead of a high ranking official one becomes a subordinate, instead of a call girl one descended to the class of streetwalkers); and/or power-possession, in all its possible meanings (instead of a wealthy merchant a poor one; instead of a talented writer, one whose creative capacities are questioned; instead of the irresistible seducer, a failure and impotent, etc) and finally also to my self-definition (and self-esteem) and my definition by others as a HONORABLE man (super-ego-ego harmony).

Increase in prestige means additional narcissistic supply, engendering pride and ego-elation***, while loss of prestige (besides the reaction of shame and depression, to be mentioned shortly) means humiliation and ego-restriction, accompanied by feelings of worthlessness and impotence.

It is relatively unimportant in this context, that, since prestige is assured by the esteem of the others, the crucial point is their BELIEF and FAKING of virtues is often legitimate and even an element of the rules of the game, provided the make believe is convincing. It is the belief of his tribesmen which gives the sorcerer his supernatural power and makes the prestigious persons (rulers, etc) ABOVE-laws.

Besides the relatively rare cases of persons endowed with spiritual charisma, in most socio-

Cf. our: Le suicide, la conscience et l'organisation sociale. (Ann. Med. Psych. 1958, oct)

* As an example for the functionality of the jealous guarding of virginity (and its prestige, as well as of having many children) in the Mediterranean socio-cultural frame see Tillion, op. cit. esp. chapters III and V.

** Cf. our: "Man's Most Dangerous Myth"-Today. IPRA II. Ge. Conf. 1967

ties until a short time ago, and in some aspects even today, physical (MUSCULAR and SEXUAL POWER) is certainly the chief source of prestige...and historically maybe also the foundation of the ruling class. The number of (legally) murdered enemies, as stated in another text*, is a measure of prestige, from the number of scalps the Indian wore on his belt, up to the number of lines drawn on the tail of one's plane, indicating the number of enemy planes knocked down in our mechanized forms of belligerency. Similarly, up to the last generations, and in many societies also today, the number of children, especially male-children, was a measure of potency and prestige**, both in the sense of "ego-strength" (to use this expression of ego-psychology indicating that degree of prestige power is equivalent with healthy and self-secure identity) and of honour.

(In a recent divorce case in Israel, when the mother temporarily secured guardianship of the seven children, the Arab husband exclaimed in pain and incredulity: Judge, but this is not possible, they are part of my HONOUR!)

As said before, loss of prestige (declassification, failure, submission) result in SHAME and DEPRESSION.

When will the first ensue and when the second reaction, is a problem still to be studied, having no decisive significance for our discussion, since both are ego-deflating and eroding processes. Tentatively, one could remark that ACUTE shame may turn into a chronic state of feeling of humiliation and/or depression; that being observed nude does provoke only shame but not depression; a mixture of both may ensue where beside failure (submission) the individual is also guilty for his act, and/or responsible of his collective's loss of prestige as well.

The intrinsic relation between loss of prestige and shame can be better understood if we remember that shame appears especially as a reaction to being seen NUDE (in the physical and spiritual sense), which means also POWERLESS, when being DEMASKED (i.e. when the facade turned down, the lie exposed, etc) and in most cases of FAILURE (not living up to the expectations) and even more in case of submission. (Being vanquished after fighting till the bitter end, but not capitulating, however may evoke admiration).

A few remarks are appropriate in this context:

The more or less instinctive reaction to shame (even more than hiding the denuded genital parts), is burying one's FACE*** in one's hands. Similarly the more elaborate posture of

* Cf. our: The Autoportrait of Contemporary Man. (Izraz, 1961, jan).

** Concerning POTENCE one is reminded of Freud's remark as to the etymology of ZEUGE (in English: TESTIMONY, from testicles).

If impotence in the male is today still a subject of derision, while his donjuanistic successes one of admiration and source of prestige (analogous successes of the woman provoke varied reactions) - having many children is in modern societies no more a source of pride and prestige. To the contrary, such a person is a slightly comic figure, because in a time of family planning (mostly precondition for social elevation, fair upbringing of the children and of the possibility that the wife too should have a profession) the father of a very large family appears as a failure - not knowing contraception.

*** Cf. the passage in Erikson (Growth and Crises of the Healthy Personality): "Shame is an infantile emotion insufficiently studied. Shame supposes that one is completely exposed and conscious of being looked at - in a word self-conscious. One is visible and not ready to be visible; (...) Shame is early expressed in an impulse to bury one's face or to sink, right then and there, into the ground. This potentiality is abundantly utilized in the educational method of "shaming" used so exclusively by some primitive peoples, where it supplants the often more destructive sense of guilt to be discussed later. The destructiveness of shaming is balanced in some civilizations by devices for "SAVING FACE". Shaming exploits an increasing sense of being small, which paradoxically develops as the child stands up as his awareness permits him to note the relative measures of size and power.

Too much shaming does not result in a sense of propriety, but in a secret determination to

submission (in the animal world) includes bowing the head and partially burying in the body; again, the expressionless face in the extreme form of depression (melancholy) the "Larven-gesicht" reflects loss of INDIVIDUAL features.

The feeling of "being small" is dominant, both in shame and depression.

The "instinct of submission" (Vierkandt) has a clear survival value in the animal world, promoting the victorious opponent to cease fighting; its (partial) disappearance in the human realm (due to super-ego norms and prestige-valuation) could be an additional proof of the degeneration of the instinct of self-preservation.

Shame as a reaction to BEING DEMASKED seems to prove further that the FACADE (of any kind, clothes, lies, suggesting superior qualities, etc) are an indispensable ego-shield, the nude ego is powerless in its (cooperative but also basically hostile) surrounding; devices of simulation and dissimulation, some of them prestige building, are a precondition of survival in competitive human coexistence. *Belonging to the group, having its protection is one of the basic forms of ego-shielding, thus becoming an outcast or even only a declassé means loss of the protection emanating from ego-group-identity. (For the same reason, as stressed by Lewis, even the "cast" of the "outcasts" in a caste society gives more protection, than the lack of belonging in the "cultures of poverty").

V.

THE FACADE (PERSONA) - (IMAGE) - (AS IF) - FACE SAVING - APPEARANCES AND THE SOCIAL CONTRACT OF CONVENTIONAL LIES.

Upholding or restoring prestige by FACE SAVING is a manipulation based on some kind of make believe by the person involved, but sometimes also with the consent and even cooperation of the partner-opponent, or the whole community, where two basic issues are decisive

1) The "arrangement" or lie enables retreat with dignity; and by tacit consent to such an arrangement the organization (system of social equilibrium) is spared too violent clashes and disorganization. The (pretended) APPEARANCE is accepted as if it were true, moreover it may be a norm that the appearance (i.e. the empty facade) meaning the FACE VALUE of the structure is more important than its real content.

2) This face-saving, as part of the rules of the social game, as said, prevents drastic actions of an often extremely aggressive or suicidal nature WITHOUT CHANGING THE NORMS, which would simultaneously oblige the person or the group to act if his failure (ridicule, etc) were made explicit, the violation of the mores loudly proclaimed or the de-classation became for-

(Cont.) try and get away with things when unseen, if, indeed, it does not result in deliberate SHAMELESSNESS".

One should note in this context: shamelessness in the meaning of impudence reads in Croatian bareFACEDNESS, in Hungarian EYELESSNESS, in Hebrew: HAUGHTY-FACED.

I tend to disagree to a certain degree with Erikson, as to the greater destructiveness of guilt than shame. True, the others can declare me guilty as well as shame me, but shame has more the character of a "rape", of being denuded by force and ridiculized; since I will feel guilty only if I accept the norm of guilt, but I can be destroyed by the ridicule. The punishment of the pillory (where the scorn and laughter of the hostile collective is an essential part of it) is illustrative of this deadly exposure. Suicide as a reaction to shame is not seldom in primitive societies.

*If some decades ago E. Cassirer rightly stated (in: The Myth of the State) that actually myth's can be fabricated in an industrial way, like any other commodity, today an industry of prestige-"images" exists. For instance, presently an American and a British public relation agency are engaged in selling an appropriate image for the fascist military junta in Greece.

mal(or conscious)

Social stability is at least partially based on similar conventional lies. By safeguarding the appearance of the prestige-component of identity, upholding the nominal rank and restricting anomie, that necessary degree of elasticity (of norms, laws and ideals) is assured which is indispensable for the more or less intact functioning of collective life and reducing violence, self-hate, depression and vengeance.

This is the case in the halfhearted duel in "Rashamon". A man feeling momentary impotence goes, complains of a headache or suddenly "remembers" an urgent appointment and his disappointed but tactful partner pretends to believe him, enabling a "honorable retreat" without shame or subsequent neurosis*, and possibly the continuation of the liaison at other occasions (of course it would be much simpler if such indispositions were avowed as a normal occurrence not involving prestige problems); it is the case in innumerable cases of "diplomatic illnesses"; in the tacit agreement of the conservative environment to accept a person's pretense that he believes that his wife is visiting Dr. X because of medical reasons, since to acknowledge before himself or others (or to become fully conscious, there are different degrees of belief) that the Doctor is her lover would oblige him to kill her to save his honour or (especially if he is despised and ridiculed by the community) to feel burning shame and worthlessness for not doing so. We give the old, somewhat senile president of the corporation a honorary title, instead of proclaiming that the old fool may endanger the interest of the collective and ousting him purely and simply.** Instead of shaming him and probably causing depression an acceptable solution is found. Last but not least, the opponent is given a face saving opportunity to cease resistance, since the demand for UNCONDITIONAL SURRENDER would totally destroy his prestige and force him to fight to the bitter end, or, because of the unbearable humiliation, leave him obsessed by an impulse of revenge.

Both expressions, of FACE-saving and of an HONORABLE way out indicate the involvement and safeguarding of ego-integrity, enabling compromises. Such compromises based on conventional lies form a regulatory system, playing a mitigating role in interpersonal and intercommunitary relations, enabling conflict resolution and simultaneous norm (ideal)-preservation

However, if face saving as a mitigating process has its positive aspects, some dangers inherent in it should not be overlooked:

a) The PERSONA ("IMAGE") part of the individuality may become its most valued dimension, FORMALISM a supreme virtue, unnatural mannerism the domineering way of life***, and the FACADE the most appreciated part of reality. Potemkin villages are applauded and corrupt practices tolerated, provided they are done in the accepted way.****

b) Formal prestige tends to increase so much in value that it becomes not only a self-goal causing petrification of values, but also a deep resistance to envisaging REALITY in general and to accepting the idea of absolutely necessary SOCIAL CHANGES (implying also changes in values'); in which case, in the long run (as for instance in the case of the Mbaya or the feudal lords in the Southern-European countries who refused to be engaged in occupations "incompatible with their standing") prestige upholding will become self-defeating and even self-destructive.

*Cf. Freud's famous case of obsessive neurosis, whose symptomatology originated in the repressed memory of pouring red ink on the bed sheet to hide the impotence of the husband on the nuptial night.

**In primitive societies one would, out of "rational" deliberations, kill the old chief who lost charisma, not to endanger the life of the tribe.

***Cf. in C. Levy-Strauss' book, to be quoted, the Mbaya's horror of the natural ("naked") as the explanation of the abundant tattooing of faces in this tribe obsessed with prestige.

****Cf. "Battles were lost and empires sacrificed, since the generals were preoccupied not with military tactic, but bargained to accept defeat under a honorable title or in an innocent manner. (Lin Yu Tang, op. cit.)

c) Acknowledgment of the LEGITIMACY of maintaining prestige (of rulers, states, etc) as absolute necessity in international conflicts, can have disastrous effects for world peace.

VI.

THE ANTI-MIDAS OR THE PATHOLOGICAL OBSESSION WITH PRESTIGE.

In two of our papers ("The Narcissistic Personality and its Relationship to the 'Absolute' and 'Narcissism, Orality, Gravidity'") we described psychodynamic relations in patients obsessed with success, and their restless activity to be the first, and if this is not possible "at the top", unwilling to recover from a depressive state, in order to be "first" at the bottom.

The breakdown and prolonged periods of paralysis in creative work usually ensued after a totally insignificant loss of prestige and/or the success of a rival. Compulsive rivalry was the central motivating force of their behaviour. Shortly after achieving a brilliant career, they would leave their working place, to start anew and vanquish again all the rivals on the way to the top. No concrete and definite goal was conceivable, which would satisfy the pathological success-seeking and in a sense these patients became a "function of the rival": their aims being determined not by themselves but by the careers of the others. Total inability to make compromises and demanding the "absolute" (unlimited, unrestricted and undefined) turned them into Sisyphuses of prestige-seeking; mirroring an unconscious (impossible) attempt to achieve a RESTITUTION IN INTEGRUM of being AB-SOLUS, the only child (a Wunderkind), who enjoys the undivided love and admiration of his parents.

In the meantime another (highly gifted and successful) patient of this category, revealed, in his semi-conscious, desperate and greedy seeking "of the absolute", experiences, which could be designated as those of an "anti-Midas". Besides being frightened by the idea that by marrying some girl he would be obliged to renounce the possibility of contracting a MORE perfect marriage, if he afterwards met a more charming woman, he also became disinterested in any woman the moment he possessed her (more exactly, already the moment she was willing to become his i.e. when he could "enter her on the invisible bank-account of his successes", just as it was also sufficient if some famous person accepted his invitation to dinner; neither the pleasure of the sexual intercourse nor that of the pleasant food and conversation had any importance, -moreover, it was not only all important to be seen and envied when he was with women of outstanding beauty, but...he had the painful impression that the moment the girl became his she turned into something ugly, dull and worthless, while those of his friends seemed charming and sophisticated. "The pasture on the other side of the fence is greener" appeared to him in a monstrously augmented manner, since, if everything Midas touched was transmuted into gold, everything he himself touched became filth. (From the standpoint of satiating hunger there is no practical difference). The grotesque situation arose, that several times in succession his fiancée appeared to him to be ugly and boring while with him, but glamorous (and to be reconquered) the moment they broke up, and she became friendly with someone else.

Also, he repeatedly had the impression of being an impostor, that all his (very real!) professional and social successes are FALSE and that one day he would be demasked and humiliated.

He was the offspring of a DECLASSE, a once rich and highly esteemed patrician family, and suffered all his childhood by making comparisons between himself and his peers, deeply ashamed of his parents. (He loved and "protected" the weak, unsuccessful father, but unconsciously despised him, and hated the aggressive, somewhat primitive and domineering

mother. Among the worst memories of his childhood are scenes in the bedroom, the father supplicating his wife, and she refusing him).

All his agitated, restless striving was determined by an obsession to overcome (the once real, but certainly exaggeratedly felt) socio-economic and emotional devription.

His obsessive prestige-seeking and accumulation of honours was not only self-defeating in the psychological sense (since he fought against imaginary misery) but also self-destructive, because he could not attain his undefined goal of "being happy", and moreover had to pay with a sort of slave-labour... the attempt to reach a QUIET family life.

One of the serious difficulties of the therapy was, that such vast layers of shame* (and flight from the threat of shame) dominated his inner life, that it was almost impossible to reach the layer of guilt-feelings, which engendered the self-punishing impulses, aroused by his hate towards the "miserable" parents.

VII.

THE SOCIAL PATHOLOGY OF GROUP VALUATION AND PRESTIGE-SEEKING. DANGERS INHERENT IN THE GOALS OF THE "ARISTOCRATIC" TOP-DOG NATIONS AND OF THE HUMILIATED UNDER-DOG NATIONS. NUCLEAR WEAPONS AS PRESTIGE-SYMBOLS.

Although group-narcissism, the delusion of grandeur of the collective and prestige-seeking (maintainance) are revealed in various forms (of caste, race, national, etc-prestige), it is in all its manifestations more uncritically dangerous and pathological than the obsession with prestige of the individual.

It may emphasize beliefs of intra-or inter-national superiority, being more of a primary or secondary (overcompensatory) character**. In some cases the sacred myth of the group suffices to "prove" its chosenness and confirm status and values, while in others there may exist some more tangible and objective criteria (wealth, etc) and even a kind of international consensus in prestige allocation. It may manifest itself chiefly in isolationism and conservative resistance to change (caste societies, ghetto Judaism, feudalism at its decline, etc) or, on the contrary, in an aggressive expansionist trend (colonialist powers, Nazism, etc).

A striking example of the isolationist tendency, causing social atrophy and thus self-destructive to an extreme degree, is the Mbaya tribe of the Caduveos, whose very simple and therefore most "convincing" myth of origin assures their role of rulers and oppressors***. C. Levy-Strauss ("Tristes Tropiques") notes concerning this prestige-obsessed society:

"On racontait alors qu'une femme blanche n'avait rien à craindre de sa capture par les Mbaya, nul guerrier ne pouvant songer à ternir son sang par une telle union. Certaines dames Mbaya refusèrent de rencontrer l'épouse du vice-roi pour la raison que seule la reine de Portugal eut été digne de leur commerce; une autre, fillette encore et connue sous le nom de Dona Catarina, déclina une invitation à Cuiba du gouverneur du Mato Grosso; comme était elle déjà nubile, ce seigneur, pensait-elle, l'aurait demandée en mariage

*One more remark concerning (absurd and murderous) society and the shamed individual unable to grasp what his guilt is; the last sentence in Kafka's "The Trial" reads: "WIE EIN HUND SAGTE ER, ES WAR ALS SOLLTE DIE SHAM IHN UEBERLEBEN".

**It is quite difficult to determine when a conception of chosenness is primary, and when secondary, as for instance Th. Reik ("Der eigene und fremde Gott") presumes that a collective narcissistic trauma engendered the myth of the chosen people in Judaism.

***At creation, when all occupations were already distributed to various tribes, a deity discovered the ancestors of the Mbaya at the bottom of a bag; and no other occupation remained for them disponible but to rule and subdue the others.

et elle ne pouvait se mesallier ni l'offenser par son refus(...) Quant au dame-noble, elles entretenaient des sigisbees qui, souvent étaient aussi leur amants sans que les maris daignassent manifester une jalousie qui leur eu fait perdre la face.(...) Les Mbaya étaient divisés en trois castes; chacune était dominée par des préoccupations d'étiquette. Pour des nobles, et jusqu'à un certain degré pour les guerriers, le problème essentiel était celui de prestige. Les descriptions anciennes nous les montrent paralysés par le souci de garder la face, de ne pas déroger, et surtout de ne pas mesallier. Une telle société se trouvait donc menacée par la ségrégation. Soit par volonté, soit par nécessité, chaque caste tendait à se replier sur elle-même aux dépens de la cohésion du corps social tout entier. En particulier, l'endogamie des castes et la multiplication des nuances de la hiérarchie devaient compromettre les possibilités d'unions conformes aux nécessités concrètes de la vie collective. Ainsi seulement s'explique le paradoxe d'une société rétive à la procréation, qui, pour se protéger des risques de la mesalliance interne, en vient à pratiquer ce racisme à l'envoyé que constitue l'adoption systématique d'ennemis ou d'étrangers.(...)

The fanaticism of upholding uncompromising segregation necessarily results in SOCIAL ATROPHY and DISFUNCTIONS OF COLLECTIVE LIFE. It seems, that a dream about a more natural and rational way of life did exist, but it could find expression only in a disguised manner... in art.

"Ils n'ont donc pas eu la chance de résoudre leur contradiction, ou tout au moins de se les dissimuler grâce à des institutions artificieuses. Mais ce remède qui leur a manqué sur le plan social, ou qu'ils se sont interdit d'envisager, ne pouvait quand même leur échapper complètement. De façon insidieuse, il a continué à les troubler. Et puisqu'ils ne pouvaient pas en prendre conscience et le vivre, ils se sont mis à le rêver. Non pas sous une forme directe qui se fut heurtée à leurs préjugés, sous une forme transposée et en apparence inoffensive: dans leur art.

The primitive "feudalistic" group-narcissism and prestige-seeking of this Indian tribe had predominately self-defeating effects, the RACISM and IRRATIONALISM of the highly industrialized German society, when dominated by the theory of the "Uebermensch" (and the "inferior" races whose task is to serve the master race) was not only (nationally) SELF-DESTRUCTIVE but DESTRUCTIVE for tens of millions of innocent people.

There has arisen... blood against formal reason; race against purposeful rationality; honour against profit; unity against disintegration; martial virtue against bourgeois security; the fold against the individual and the mass" (E. Kriek, quoted by F. Neumann: "Behemoth")

For A. Hitler, instruction and science had to be "a means for promoting national pride" and "No boy or girl must leave school without having been led to the knowledge of the necessity and nature of the purity of blood" ("Mein Kampf"); a direct line leads from this paranoid conception of the master nation to ruthless exploitation and genocide.

It is hard to say that the post-Auschwitz and post-Hiroshima generation learnt the lesson of the consequences of glorification of national prestige and of militaristic values. The prestige-seeking and exaggerated pride of the (yesterday exploited, shamed and humiliated) nations of the Third World may be psychologically understandable*, but it is by no means more rational or progressive than that of their former rulers, the present day top-dog nations. True, it is the antagonism of the Great Powers, implying exorbitant expenses not only for nuclear armament, but also for the space-race (the latter having the character of prestige competition) which directly endangers the survival of man and impedes a rational aid program for the underdeveloped world. But the prestige-seeking of the medium-powers, aiming at nuclear arms in order to become members of the Atomic Club, the fact that while trying to prevent the proliferation of nuclear arms the Great Powers are generous providers

*The common past of humiliation and exploitation is perhaps the most important link among among the members of the so-called "neutralist block" and the reason of their alignment with the Soviet block. Their unity (at least as to voting in the UN) disappears (as pointed out by K. Jacobsen ("Some Aspects of UN Voting Patterns, II IPRA GEN.CONF. 1967) the moment the West does not vote in a unified way.

of conventional ones to their allies*, and ruinous military expenses of the small nations (often solely to foster national pride and prestige) are only relatively and only for the time being less catastrophic than the competition of the giants of "World War Industry" (K. Boulding).

Reasons of REALPOLITIK or of misplaced guilt-feelings tend to prevent not only politicians but also many researchers from judging objectively and without complicity inhuman and reactionary manifestations of the chauvinism and inverted racialism of the emerging nations. This attitude is scientifically false and humanly indefensible. The massacre of hundreds of thousands of national minorities and political enemies (as in Indonesia) and genocide of ethnically different neighbour-groups (as in Rwanda, Sudan, Biafra) are by no means more justifiable if perpetuated by African or Asian (sometimes Socialist?) nations, than by white fascist, colonialist or neo-colonialist top-dogs. It is high time that this should be unambiguously said (as did R. Dumont, in his "L'Afrique noire est mal partie", concerning another context of the problem); decolonization, while undoing one of the most abject forms of human exploitation in history, by simultaneously giving birth to new but already obsolescent nation-states, engendered all the evils of new nationalisms, with all the antihumanistic and reactionary trends inherent in them.

To disguise this simple truth, to condone the paranoid pride of the new nations, their falsified histories and invented national mythologies, and moreover to present this as a REVOLUTIONARY ACT is objectionable from scientific and humanistic reasons as well. And such an approach in the context of peace research seems to me outrightly nonsensical.**

The nation-state and nationalism (of whatever social or racial pattern) is inseparable from xenophobia and militarism. In the very axiomatics of the nation-state is the obligation of the citizen to commit war-murder, as part of the NATION ARMEE, led by the high-prestige caste of technicians of warfare.

*It is a sad phenomenon, that while the help of developed nations as food and know how providers are often resented as threatening national independence and prestige, powers providing arms are greeted and appreciated as "comrades in arms".

** I am referring here to the article of W.H. Truitt: "Ethos, History and Ideology as Formative Factors in the Revolutionary Movements of the Emerging World" (Peace Research Interdisciplinary, Vol. V, 1-2) where the author in a spirit of APOLOGETICS describes tendencies, in spite of his knowledge that they are modeled on the "Blut und Boden"-myth, and as revolutionary the attitude as considering people as enemies NOT because of their present position, but because of the role of their forebears.

"In the first instance, it may be anticipated that in an emerging nation in which borders are amorphous (loosely defined or disputed) and/or in which there is relative cultural heterogeneity, the immediate objectives of revolution will be 1) explicit definition of territorial boundaries and territorial consolidation, 2) linguistic homogeneity and 3) cultural-religious-philosophical solidarity (and in some instances racial homogeneity). (...) In the second instance, we must take full account of the meaning of "received national history". It is especially important in this regard to AVOID historical "objectivity". As curious as it may sound it is an essential point in understanding the revolutionary objectives of any struggling people. (...) The enemies of any revolutionary movement will be identified by the participants not exclusively on the basis of current complicity and/or opposition, but very largely on their historical role, relative to the country and institution in question. (...) This phenomenon we will designate the DRIVE FOR SECURITY FROM AND RETRIBUTION AGAINST THE HISTORICALLY DEFINED ENEMY".

If such an ideology is revolutionary and socialist, I am certainly at lost to grasp what fascism is.

The fundamental drama of contemporary mankind is, that it entered the Atomic Age, in spite of all the revolutionary-technical changes, with quite unchanged static patterns of international community; and although the legitimacy of wars is formally denied and its rationality questioned (when interested military circles do their best to redefine the notion of "rational use of force"), wars (conventional, popular, civil and "punitive expeditions") ravage the world over; education in all the nation-states continues to extol the glorious, prestigious war-lords of the national past, and the power of military pressure groups, even if they are not the openly ruling junta** have gained unprecedented dimensions, in the old as well as in the new states. And even where the power of the military is not yet overbearing, the intermingling of the conception of national honour and military prestige-symbols increases dangerously.

A striking example is India. Perhaps in no culture is the value of non-violence so deeply ingreaned. The struggle for national liberation of no other people was so much influenced by non-violent principles as that of India. But only a few years after achieving independence, hysterical masses demonstrated in its capital, with placards: We want OUR A-BOMB!

And to reiterate what was said concerning the Middle Eastern conflict: obsession with face saving and national honour*** (which reads: annihilation of Israel) is one of the fundamental obstacles, beyond all the objective difficulties, to find a reasonable solution of compromises. The tenor of Radio Cairo, declaring a few days before the Six Day War (25.V. 1967): "The Arab people is firmly decided to erase Israel from the world and to restore Arab honour in Palestine" is echoed today with autistic obstinacy... reinforcing the intransigence not only of Israeli extremists, but also of many moderates.

Inflated national prestige-valuation is not lacking also on the much more rational Israeli side (though here rational thinking is primarily impaired by neo-biblical mysticism). Discussing with M. Dayan, whether the war could have been prevented, the reporter ("Maariv" 30.IV. 1968) asks: "My question does not refer of course to a situation implying renouncement of vital interests or national prestige". He said OR; i.e. national prestige is not identical with vital interests... but it IS an "EMPTY WORD" people are ready to die for.

And in Viet-Nam, though peace talks did start, villages are destroyed and children burned by napalm, since (as stated in *Nouvel Observateur*, Sept. 1968): "(...) et selon les dernieres analyses de Washington, le prestige historique de Johnson n'est pas compatible actuellement avec les concessions sans lesquelles les Vietnamiens ne transigeront jamais."

* "The destruction expected in the application of this technology is so enormous that it has become very difficult to conceive of modern war being waged with a view of achieving some specific political or strategic advantage. Hence the people who think of international relations predominantly in terms of power struggle were faced with a choice between a) abandoning the notion that war can be conceived an instrument in conduct of foreign policy and b) redefining the notion of rational use of force so as to escape the conclusion that organized violence is but a peculiar (possibly fatal) aberration afflicting the human race. Those who have made the latter choice now find themselves in the rank of principal strategic advisers to policy makers of the Great Powers" (A. Rapoport: Two Views on Conflict: The Cataclysmic and the Strategic Models". IPRA I.GEN.CONF. 1965)

** In the period between June 1965 and April 1967 alone 35 military putches were executed the world over. It is unnecessary to stress here the influence of the "hawks" in various regimes and the connection between defence spending and class-and prestige interests of the military.

*** Here gain, as in other context, HONOUR has other meanings too. In a recent research concerning Palestinian refugees, it became apparent, that in some places on the West Bank of the Jordan, their economic situation is not worse at all, than of the local population. However, since they do not possess LAND, their status is low even in the eyes of those of much lower income than they. If a theft occurs, they are the first to be suspected, and to their protest, there are also indigeneous thieves enough, the answer is: "You have no land, no HONOUR... the thief is among you". (Communication Dr. Shamir).

THE CONTEMPORARY DIOGENES UNDER THE SHADOW OF THE ATOMIC MUSHROOM.
REVOLUTION TODAY MEANS: RETHINKING ALL CATEGORIES AND CONTESTING ANA-
CHRONISTIC VALUES AND PRESTIGE-OBJECTS.

The prestige-seeking of the individual means his being dominated by the others on whom his self-esteem depends, and especially so if his self-esteem derives from group-belonging. Prestige-seeking of collectivities means their being dominated by the relationship towards the groups they attempt to dominate or to segregate from. In both cases one deals with a fundamental relation of unfreedom.

"Free" from this overwhelming and subduing dependence on organized society and its values are only the various outcasts (represented on the bottom of our Scheme); voluntary and involuntary outcasts who refuse and/or are refused the norms and hierarchical location of society (whether they have or do not have their own norms). So far one can only be free OUTSIDE society. Nonetheless if one rejects the rules of the game of societal valuation one has assured at least a minimum of personal inner freedom and independence from having one's self-esteem regulated by others.

The cynical philosopher and the beatnik (in order not to complicate issues with the low-prestige beggar and the sometimes high-prestige holy hermit) could serve as examples of such a refusal of the rules of the game.

The classical paradigm of such a philosophical viewpoint is indeed Diogenes. When answering Alexander the Great's question concerning a wish he would fulfil: "Please, only don't take away that which you are unable to give" - since the prestigious conqueror cast a shadow about him; pointing out the "weakness" of the omnipotent ruler he forcefully expresses his rejection and depreciation of accepted powers and values.

Diogenes and his school, in seeking ABSOLUTE freedom, by being independent not only from society at large, but also from one's family and one's own needs, situates himself of course in an extreme and necessarily a-social and practically unviable frame of human condition. A contemporary Diogenes would however find it difficult to realize even such an a-social existence, already having trouble to find a place (which would not be private or public property) to put his barrel. And today it is no longer the "natural" shadow of a potentate that beclouds the sun over the philosopher, but the atomic mushroom of prestige-seeking nations; there is hardly a place, even in the remotest desert where he would be free from being poisoned by strontium, while most of his philosopher colleagues today became orderly systematized university bureaucrats docilely accepting the ordained system of salaries and prestige valuation.

But no philosopher and no intellectual is worthy of the name if he is not able to free himself from the values of his bureaucratic society at least so far as to be able to recognize with a detached and removed regard the relativity, the fake and the destructive folly in the striving of his fellow-men, and to have the courage as a heir of Diogenes, Erasmus and Voltaire to cry out against the criminal lunacy of group-idolatry and group-fanaticism.

"You shall know, poor human creature", answered the genie from the interplanetary spaces. "But first of all you must weep".

He began with the first pile. "These, he said, are the twenty-three thousand Jews who danced before a calf, with the twenty four thousand who were killed while lying with Midianitish women. The number of those massacred for such errors and offenses amounts to nearly three-hundred thousand.

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In the other walks are the bones of the Christians slaughtered by each other in metaphysical quarrels. They are divided in several heaps of four centuries each. One heap would have mounted right to the sky, so they have to be divided".

"What" I cried. "Brothers have treated their brothers like this, and I have the misfortune to be of this brotherhood."

"Here", said the spirit, "are twelve million Americans killed in their native land because they have not been baptized."

"My God" why did you not leave these frightful bones to decay in the hemisphere where their bodies were born, and where they were consigned to so many different death? Why assemble here all these abominable monuments to barbarism and fanaticism?"

"To instruct you."

(Voltaire: Philosophical Dictionary)

Little has changed, and that perhaps, for the worse, since the massacres mentioned by Voltaire. And it is questionable, whether in some decades, at a time when science will have enabled man to become himself an interplanetary being, Voltaire's genie from the interplanetary places will find humans on our Earth, or only a planet-cemetery moving among the inanimated celestial bodies.

A late heir of Voltaire, G. Steiner, noted recently (VI Israeli-American Dialogue, Rehovot, 1968):

"Nationalism and tribalism - its atavistic spectre - are the nightmare of our age. In their hollow name human beings have visited, and are visiting, lunatic ruin on one another. In the wake of a coloured piece of cloth nailed to a stick, over the matter of fifty miles of stony ground, men otherwise rational are prepared to perpetrate any measure of violence. The REASONS for this lunatic parochialism, for this recrudescence of tribal savageries which the eighteenth century had in significant measure overcome, are difficult to make out. The passionate desire of men to be only with their own kind even where such localism is economically suicidal (in Belgium, in the Alto Adige, in Nigeria) may embody a desperate reaction to the splintered, intellectually fluid character of modern technological civilization. Unable to cope with the world we cling to our village. But whatever the deep causes, the CONSEQUENCES are getting plainer and plainer: armed with modern weapons of mass destruction and manipulated by the "neo-primitivism" of electronic hysteria, nationalism may bring on final wars, wars with no calculable aftermath. This crisis, this "barbarism of blind loyalties" must lead one to rethink this whole matter of "belonging" and "treason". There may be a sense in which the act of treason is a premature but prophetic image of sanity. It may well be that we shall not survive unless a number of men and women - few at first, more by force of example - free themselves from the myths of nationalism and proclaim that whereas trees do indeed have roots, human beings have legs with which to move freely among each other. It may be that our only way out from the present tunnel of mutual hatreds is to assert that passports are bilateral contracts covering certain obligations and safeguards, no mystical instruments binding a man to some legacy of collective clichés. Perhaps the darkest commission of treason is to yield one's intelligence, one's moral uncertainties, one's instinct into the hands of the nation-state*."

*The nation-state with its egoistic and deeply immoral RAISON D'ETAT (eg. Castro's recent condoning of the occupation of Czechoslovakia) is not only a menace to humanity given the antagonistic inter-state relations; its inherent despotism tends to enslave its own citizens whose rights it supposedly protects. Illustrative is the bickering of the representatives formulating the International Covenant of Civil and Political Rights (cf. R. Cohen: Int. Cov. of Civil and Pol. Rights, Int. Problems, 1968, Oct) and especially the steps to curtail the right of INDIVIDUAL PETITION.

"Those delegations which opposed the inclusion of the right of individual petition in the Covenant argued that it compromised the principle of national sovereignty; (...) that the first concern of a developing nation was the protection of the State and not the individual; (...) that many States would not be able to ratify the Covenant if such a provision were included in its text. (...) The delegate of TANZANIA said: "You cannot build human rights on the ruins of a State".

My contention is: ONLY on the ruins of states will a distant day become possible to build human rights.

We may add, education for national prestige-seeking is today treason against humanity, committed deliberately or out of ignorance, motivated by passion or inertia of thought. One has to repeat and to repeat again, only by a REVOLUTIONARY change in thinking (as was stated by Einstein, Boulding and others) and by contesting the legitimacy of perhaps all the norms and values, embodied in present-day laws and ideologies, can we safeguard human existence.

Are there indications that such a contesting and revolutionary change of mind is occurring in the masses of our mass-societies?

Superficially, one could conclude that we live in an age of revolutionary social convulsions and re-appraisal of values. Convulsions, yes, but whether all the self-entitled revolutionary movements are really a progressive mutation indispensable for the survival of mankind, is at least doubtful.

The actual gulf between the generations is certainly such a dramatic novelty. C. Levy-Strauss (op.cit) is right in stating, that while today distances in space have disappeared, an unprecedented distance in time (the distance between generations) has become apparent, as proved by the anomie of youth.

However, analysing the various (violent and non-violent, political and apolitical) phenomena of anomie of the rising generation, one can discern, that while some of them express (though often in a diffuse, socio-pathological and "stychic" way) a fundamental rejection of prevailing social norms and values, others again, though understandable and maybe also morally justified in their violent negation of the oppressive regimes of the exploiting nations (races, classes, etc) do basically contest only the codex, but not the philosophy of inequality, violence and hate of primitive tribalism and power-idolatry.

So for instance, the outlaws of the blackshirt-type, committing their hair raisingly brutal crimes, are deviants against the social order only in the sense that their violence committed in UNIFORMED COLLECTIVITIES is committed not against the enemy designated by the state, but their acts and the prestige of their cruel leaders are only a caricature of the ideals (commando fighters, etc) glorified in innumerable textbooks and films.

The violence of "les damnés de la terre" (F. Fanon), the guerrilla upheavals of the hungry and oppressed people, living under conditions when "even Christ would take arms" (Father Thorres), the riots of the humiliated Negroes in the USA, etc, are natural reactions against inhuman societies. But, even disregarding the question whether revolutions on an international scale are still a realistic conception, one can hardly say that INVERTED RACIALISM of the Black Power movement or nationalist antagonisms present even among Guevarra's guerrilleros embodies a REVOLUTIONARY ideal...if revolution means progress towards a JUST COMMUNITY OF MEN.

Contrarywise, in spite of all the amorphous, naive and unarticulated elements in the students anti-authoritarian extraparlimentary oppositionary movements the world over (against neo-capitalist and socialist-bureaucratic alienating technocracy) and maybe also the psychopathological phenomena of the desperate L-S-D-religion of the hippies (desperate because there is an intuition that technological society cannot be transformed by revolutions, thus the flight into the contemporary "opium of the people"?) reveal a more basic contestation of the fundamentals of our technocratic, tribalist, obsolescent nation-states headed towards catastrophe. "Make love and not war" is a slogan of LIFE, and the day when Soviet poets will be free to paraphrase the beatnik A. Ginsburg: "USSR fuck yourself with

your H-bomb", without risking being deported into slave-camps for "re-education"...humanity will make a great step forwards towards freedom and chance of survival.

IX.

COEXISTENCE -- INEQUALITY -- PRESTIGE OF GROUPS -- EXISTENCE

It is futile to ruminate in abstract reprobation about the sad state of human inequality and the stupidity and self-destructiveness of prestige-seeking competition of individuals and armed collectivities. But it is unworthy of thinking human beings to bow in conformistic acceptance to the irrationality and danger of fostering national prestige and militaristic ideals.

No society is yet known where equality for all its members ever existed (P. Sorokin) and it could be that it is an utopian vision that it will ever exist. The Marxist founders of modern Socialism, visionaries of a classless society ridiculed the abstract moral indignation about Greek slavery, which disregarded the fact that without such a differentiation and division of labor of antique societies, no progress would have been possible.

One could here, moreover, venture a brutal idea: there were TWO major dates in the development of primitive man: first, when he succeeded in domesticating animals, and second, when he succeeded in "domesticating" man (slavery), exploiting the most intelligent of animals, able to perform work which no other animal is apt to do. The inequality of the powerless (in juridical sense) slave and his powerful master is probably the source (or at least one of its dimensions) of power-prestige and a model of the later more differentiated group-prestige relations.

But exploitation of man (and human groups) in its classical forms, beyond being morally unjust have lately become progressively unproductive and self-defeating; otherwise decolonization would have not been accomplished by such relative easiness.

Nonetheless, the competitive ideals of domination and other manifestations of prestige-seeking follies are far from being overcome. Neither has inequality disappeared nor the admiration of the powerful, and it is probable that in foreseeable future, in the society of tomorrow (if there will be one) the follies of group-ideals will not yet be cured.

But if this should mean, to quote Kennedy's formula once again, that the conscientious objector will never attain the same reputation and prestige as the warrior has today, there is every chance that there will be not that distant day when war will disappear

...it will be humanity which will disappear.

Only values, which are more individualistic, more cosmopolitic, more future - rather than past-bound (i.e. emphasizing national past, glories, humiliations and duties of vengeance), the prestige of those contesting and not those confirming can assure human coexistence...and existence.

Some passages of this text were a short time ago presented at the X. Congress of the Israeli Psychological Association. The author regrets that the collection "Honour and Shame" (ed. J. Peristiany) came to his attention after he finished this essay, since many penetrating analyses relevant to our subject can be found in those studies.

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Some Notes About the Operationalisation in Peace Researches

by

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I would like to offer my apologies to the conference for the English in which my paper is written. I am not at all expert at writing English and I hope that the conference will not encounter as much difficulty in reading the paper as I did in writing it.

Summary

The aim of this paper is to demonstrate the importance and the difficulties of the use of indicators in P.R.. They use today to mathematize our thinking and to speak in terms of numbers and formulas. But it is not easy to achieve this ideal because it is necessary before to introduce direct or indirect metrics. Hence the use of indicators. But as regards the Peace Research we must consider that this process of operationalisation of the theories is not so easy as in physics. Here the bridgmanian axiom "concept = set of operations which define it" is only approximatively possible to achieve. But in social researches this equivalence is not so easy and possible. In fact the concepts in social theories are not generally univocally defined and uniformly used. The common language has still a great importance. Therefore we speak about the dimensions of the concepts following the theory builded.

After defined the indicators, a simple conflictual model as example and the rôle of indicators introduced in this model, are discussed. It is useful to remember now that peace researches can be of two kinds. The first one considers the interaction among nations. The dimensions of this interaction are treated in our model and a discussion about the problem of the measure of this interaction is presented. Principal component analysis is remembered as useful technique for the syntesis of many indicators. Regarding the aspects of interaction among nations, the second kind of peace researches concerns public opinion polls. The problems of this kind of research are not treted into detail in this paper because public opinion surveyes are a common subject of analysis in sociological methodology.

The paper is completed by a brief discussion on the forecasting power of peace researches following what we have said about the choice of indicators as a tool of interpretation of the theories on the reality and as a means of validation.

Introduction

The aim of this paper is pointing some questions about the operationalization in Peace Research. As in physics also in social science the need of operationalizing some or all the concepts of a theory, is usually accepted by researching-workers in the context of validation, that is in validating some theory by a proper set of data, specifically collected and processed.

But there are some differences between physics and social sciences (Peace Research, as we shall subsequently show, is a branch of social sciences). We therefore cannot tout court assume the brigmanian concept of social research, as until now we know it. Hence we shall show these differences and how operationalisation is actually carried out. For this end we shall take into account an outline of a conflictual model under given hypothesis and we shall show the possible difficulties.

It is well-known that Peace Research endless stroves to theorize the several aspects of interaction among nations as war, diplomatic exchanges, commerce exchanges, and so on. Besides these questions, Peace Research also considers the public opinion about these above questions. Therefore we can find peace Research surveys designed following typical sociological techniques.

In order to summarize we must say that the Peace Researches are scientifically well established but they must pay attention to the validation techniques, particularly in the choice of indicators and in scaling techniques.

In the following pages we shall try to treat these questions.

1 - THE SCIENTIFIC SYSTEM AND PATTERNS OF RESEARCH

Before analysing the specific questions of conflictual model, it is necessary to spend a few words on the structure of a scientific system because the considerations about the operationalization are depending on the problems peculiar to the scientific modus operandi. In this brief note it is not possible to deep all the problems but we shall strove to make systematic our statements, as well as possible.

It is well-known that in the scientific modus operandi there are two distinct steps: the first one named the context of discovery and the second one named the context of validation. The first fase is not interesting for us as methodologist, but it is fairly interesting for the psychologist of the scientific discovery. Therefore we shall consider only the context of validation.

If we consider the work of a scientist we can observe that the main aim pursued is to ascertain a scientific law. A scientific law essentially consists in a rational ascertaining of the systematic appearance in space and time of a relation between two or more events or classes of events. This aim is difficult in achieving and chiefly it is impossible to reach the Truth. But if we are pragmatist in our thinking we must be ready to accept this trumbling condition. There are some fields of study as physics in which it is possible to ascertain a law. There are other fields as sociology in which it is difficult, if not impossible, to ascertain a law. Nevertheless it is for me that a means of overcoming this essential difficulty is to introduce the concept of model. Now therefore we relenquish the hope of understanding the "secrets of nature". Hence the model is as regards the "scientific laws" in an inferior standing. We can say that a model is "suitable", indeed, or not, subduing it to a process of wasting away, because the experiences progressively compel the research-workers to neglect the previous models and then to build more suitable new ones following the new observations.

We must now consider the scientific system and the rôle of the models. A scientific system can be conceived, as a general rule, as a set of operations on symbols and objects. A sketch of the operational structure of a scientific system can be pictured as in the following table 1 (pag. 5)

A few words of explication are necessary now. As you can see we are in face of 6 steps in the process of the scientific procedure, 5 of which are validating steps. We shall call the set of these 5 steps a scientific system. We call also 'theory', steps $A_1 + A_2 + A_3 + A_4 + A_5$; 'deductive system', we shall call steps

Sketch of the scientific procedure

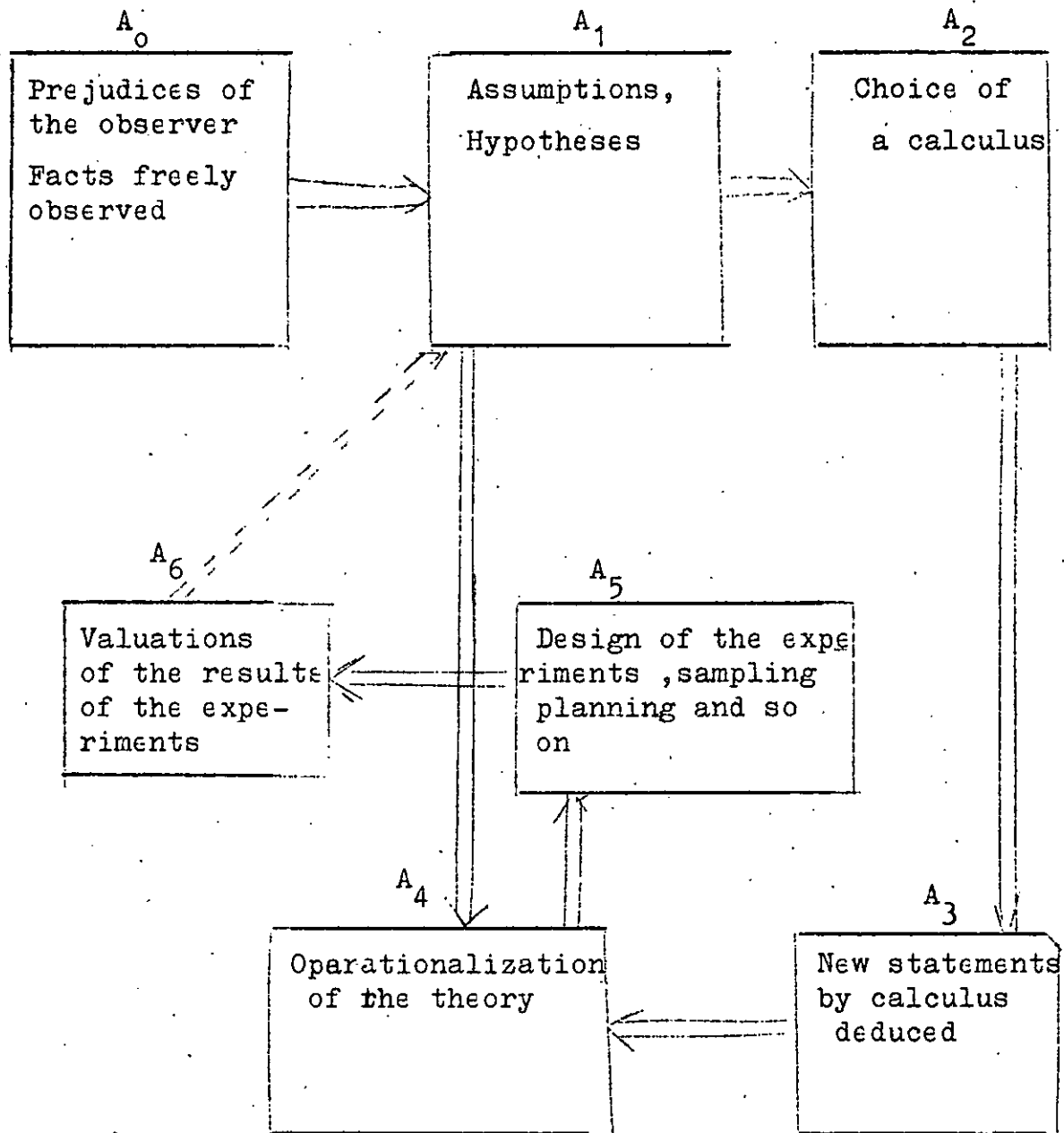


Fig. 1

$A_1 + A_2 + A_3$; we shall call 'model' steps $A_1 + A_2$. Furthermore we shall call A_1 a 'basis for a theory', A_2 a 'calculus', A_3 as 'deduction', A_4 as 'operationalization', A_5 as 'experiments', A_6 as the 'feed-back'. Therefore the procedure of a research-worker is the following one: being over the step '0' which is called the 'context of the discovery', the research-worker enunciates a set of hypotheses, internally structured, that is a set of statements formed by some theoretical concepts; these concepts are all primitive concepts that is concepts not further on analysable or definable in terms of other concepts. Besides the concepts and the hypothesis it is necessary to assume as true, statements which belong to previous theories, until now well accepted. In summary in step 1 we have:

- 1) Primitive concepts C_1, C_2, \dots, C_n
- 2) Not demonstrable assumptions or axioms for the theory, (A_1, A_2, \dots, A_s)
- 3) The terms of the logical vocabulary (and, not, or, and so on)
- 4) The hypotheses (H_1, H_2, \dots, H_m)

These bricks are not sufficient. It is necessary a motor for moving the whole. Indeed the scientist must adopt a calculus, that is a formal means which allows to combine primitive concepts, axioms and hypotheses. If we denote with K_i a particular calculus, then a new statement S_j can be conceived as a function of $(C_1, C_2, \dots, C_n; A_1, \dots, A_s; H_1, \dots, H_m)$ that is

$$(1-1) \quad S_j = K_i (C; A; H; S_{j-1}, \dots, S_1;)$$

where $C = (C_1, C_2, \dots, C_n)$ or a proper subset of it;

$A = (A_1, A_2, \dots, A_s)$ or a proper subset of it;

$H = (H_1, H_2, \dots, H_m)$ or a proper subset of it;

$S_{j-1}, S_{j-2}, \dots, S_1$ are the previous statements by this means deduced.

Likewise for the new concepts. We shall denote the new concepts

$$\bar{C} = (C_{n+1}, C_{n+2}, \dots, C_t)$$

Until now we are in face of a formal theory with none empirical relevance.

1 - 1 THE PROBLEM OF THE OPERATIONALISATION OF A THEORY

As known, a theory without concret validation, that is without those links between theoretical concepts and propositions and the reality of the concret events, is an empty box. On the contrary a theory is a means for explicating the reality and therefore for forecasting new events.

Therefore, considering the new propositions well deduced, for validating a theory or, it is the same, for testing the original hypothesis, it is sufficient to control the forecasts. Strickly speaking it is necessary to remember that usually it is not possible to control the original hypothesis. We shall debate this question as regards the social researches and more particularly as regards the peace researches in subsequent paragraphs.

Considering the application of a calculus K , we arrive, for instance, at a statement $S_n \rightarrow S_1$. The form of this statement may be whichever you want. We can have a mathematical formula

$$Y = f(X_1, X_2, \dots, X_s)$$

in which the form of the f can be or not specified, or we can have a formal implication

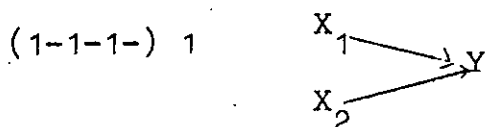
$$\forall x (Px \rightarrow Qx)$$

where P and Q stand for a given Property and \forall is "for all"

Moreover this statement can be deterministic or probabilistic, in terms of words or in terms of mathematical symbols. However it is not interesting for us, the form of these statements. What it is interesting for us is the fact that we have at our disposal one or more controlable statements.

1 - 1 - 1 - THE USE OF INDICATORS

Let us consider now that we have a statement which links a given class of events to other classes of other events. We can summarize this fact in this manner:



where X_1 and X_2 are "factors" or "causes" and Y is the "effect" or the "consequences". Today mathematics is a usual tool for every scientist. Not only physics make use of mathematics but also biology, psychology and other sciences as sociology, and so on. Now mathematical models in social research, as for instance in Peace Researches, are actually used. These models can be deterministic or stochastic. Therefore it is usual to speak of variables or of variates. The possibility of using mathematical or statistical techniques allows indeed to benefit by the powerful tools furnished by these doctrines. We cannot obviously remember in this paper all the mathematical and statistical tools at our disposal and we put off interested students to the suitable books of mathematics and statistics. Of course the use of mathematics in social sciences is neither more nor less than only a powerful tool. Therefore it is only for this reason that we use mathematics or statistics. In summary it is necessary to think in terms of "as if....."

But it is not easy to change all the concepts in measurable concepts. This fact is particularly true in social researches. Therefore the effort is towards the measure tools because in this case it is possible to make use of mathematics and statistics. If we must verify, for instance, the model M_1 (formula (1-1-1)-1) we can write a system of equations of this type:

(1-1-1)-2

$$\begin{array}{l} X_1 = e_1 \\ X_2 = C_{21} X_1 + e_2 \\ Y = a X_1 + b X_2 + e_3 \end{array}$$

where e_i ($i = 1, 2, 3$) is a random variable and X_i is expressed in terms of deviation from the expected value, that is $X_i = x_i - E(x_i)$, where x_i is the actual variable; C_{21} , a , b are the partial regression coefficients.

In this case it is necessary to verify that $C_{21} = 0$, that is

the simple correlation coefficient R_{x_1, x_2} should be zero. Therefore we must calculate this correlation coefficient and verify it on empirical data.

In any case it is necessary to collect suitable data, in terms of number expressed and therefore it is necessary to measure y-concept, x_1 -concept and x_2 -concept.

Having accepted the necessity of the transformation of the empirical concepts into measurable concepts, it is necessary to spend some words about the problem of measure operation. We have seen that when new statements are deduced and new concepts are introduced it is necessary another step, that is the binding of these empirical concepts with the observable events. We consider a measure operation as this bond. Now as you can see, it is necessary to speak about measure operation. We distinguish:

- 1) Direct Measure : a measure is direct if it is possible to find an instrument which associates in a suitable manner to the empirical observable event a number that we can read on a suitable scale. Conditions for direct measure:
 - a) The scale really measures what we like to measure
 - b) The instrument does not affect the event
 - c) there is only a manner for associating event and instrument
 - d) If the observer repeats the association, obtains the same number
 - e) If two observers measure the same event with the same instrument, they should obtain the same number.
- 2) Indirect Measure: a measure Y is indirect if it is not possible to find an instrument which possesses properties a), b), c), d), e), but if it is possible to bind Y with the direct measure of other observable events (x_1, x_2, \dots, x_k) and we can write :

$$Y = f(x_1, x_2, \dots, x_k)$$

In this case we must know the form of the function or we must assume it. In some cases it is possible to know the form of the function, for instance when the theory gives explicitly indications. In other cases principal component analysis is a useful technique for knowing the new variable Y. In these cases we are in front of a linear combination of the variables (x_1, \dots, x_n) with suitable coefficients. It is necessary to pay a great attention when we adopt these technique. Effectively the new variable could not be suitable for the concept that we will measure indirectly. Obviously if the variables x_1, \dots, x_n are not measurable

directly, it is necessary to solve the same problem just now discussed. Therefore we have:

$$Y = f(x_1, \dots, x_n)$$

$$x_i = g_i(x'_1, \dots, x'_m)$$

$$x_j = g_j(x''_1, \dots, x''_k)$$

and so on until we can reach a set of indicators (h_1, \dots, h_n) directly measurable. This procedure is obviously always possible. A problem of direct measure must be solved for instance when we are in front of a concept with many dimensions. In this case it is necessary to synthesize many dimensions in only one dimension. Useful technique is in this case partial correlation coefficient. We shall not deep in this paper these technical problems, as previously indicated. It is sufficient for our purpose to arrange only the whole matter.

It is time now to explain how these abstract considerations are actually valid in problems of peace research. In subsequent paragraph we shall discuss a simple example, that is a conflictual model. We shall discuss the problem of forecast of a possible conflict under particular conditions and we shall show how it is possible to operationalize an abstract model. The model consider firstly a decisional aspect under optimal behaviour and subsequently the operational aspect of measure effectively on the reality the parameters of the model. If we shall encounter the values of the parameters as we have assumed in the model, then we can forecast something with a given probability.

1-1-2 An example of forecast of conflict. The model.

Let us consider now a country C which can choice between two alternative courses of actions, A and B, for instance to choice war or to choice peace, with suitable strategy. We shall develop our model formally in advance. We shall put events A and B with $\Pr(A) + \Pr(B) = 1$, where $\Pr(A)$ and $\Pr(B)$ are the probability of the choice of A or B, mutually exclusive events. Now we have: if C choice A then obtains x_1 ($0 \leq x_1 \leq \infty$) or x_2 ($0 \leq x_2 \leq \infty$) with probability respectively $\Pr(x_1/A)$ and $\Pr(x_2/A)$. Since x_1 and x_2 are conditional events it is more clean to write respectively $\Pr(x_1/A)$ and $\Pr(x_2/A)$. Of course we have $\Pr(x_1/A) + \Pr(x_2/A) = 1$. If C choice B then obtains y_1 and y_2 ($0 \leq y_1 \leq \infty$ and $0 \leq y_2 \leq \infty$) with probability respectively $\Pr(y_1/B)$ and $\Pr(y_2/B)$ so that $\Pr(y_1/B) + \Pr(y_2/B) = 1$. We can represent this situation with the following graph:

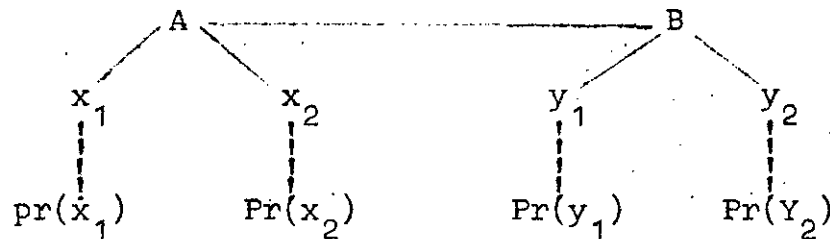


fig. 2

Obviously we have $\Pr(x_2) = 1 - \Pr(x_1)$
 $\Pr(y_2) = 1 - \Pr(y_1)$

If we calculate $E(x)$ and $E(y)$, where E stands for the expected value of the variable x and y , we shall obtain

1-1-2)-1
$$x_1 \cdot \Pr(x_1) + x_2 \cdot \Pr(x_2) = X$$

$$y_1 \cdot \Pr(y_1) + y_2 \cdot \Pr(y_2) = Y$$

Now if $Y > X \Rightarrow B \succ A$, where \succ stands for "is preferred". Obviously Y and X are $E(y)$ and $E(x)$ and it is easy to see

that we are in face of a typical decision criterion. Consider now

$$\Pr (x_1) = a = \text{constant}$$

$$\Pr (x_2) = b = "$$

$$\Pr (y_1) = a' = "$$

$$\Pr (y_2) = b' = "$$

$$X = c = \text{constant}$$

$$Y = c' = \text{constant}$$

and consider that x_1, x_2, y_1, y_2 are now variables. Then we have a system of two linear equations. We also put in this case $x_1 = y_1$ and $x_2 = y_2$. Therefore we obtain

$$\begin{array}{l} 1-1-2)-2 \\ \left\{ \begin{array}{l} a x_1 + b x_2 = c \\ a' x_1 + b' x_2 = c' \end{array} \right. \end{array}$$

$$\begin{array}{l} \text{where obviously we have} \\ a + b = 1 \\ a' + b' = 1 \end{array}$$

Therefore we can deduce that

$$\begin{array}{l} 1-1-2)-3 \\ \left\{ \begin{array}{l} a x_1 + (1 - a) x_2 = c \quad (\text{straight line } r_1) \\ a' x_1 + (1 - a') x_2 = c' \quad (\text{straight line } r_2) \end{array} \right. \end{array}$$

and then in reduced form :

$$\begin{array}{l} 1-1-2)-4 \\ \left\{ \begin{array}{l} x_1 = - \left(\frac{1-a}{a} \right) x_2 + \frac{c}{a} \quad (r_1) \\ x_1 = - \left(\frac{1-a'}{a'} \right) x_2 + \frac{c'}{a'} \quad (r_2) \end{array} \right. \end{array}$$

In order of giving a graphical representation we put (r_1) and (r_2) in canonical form:

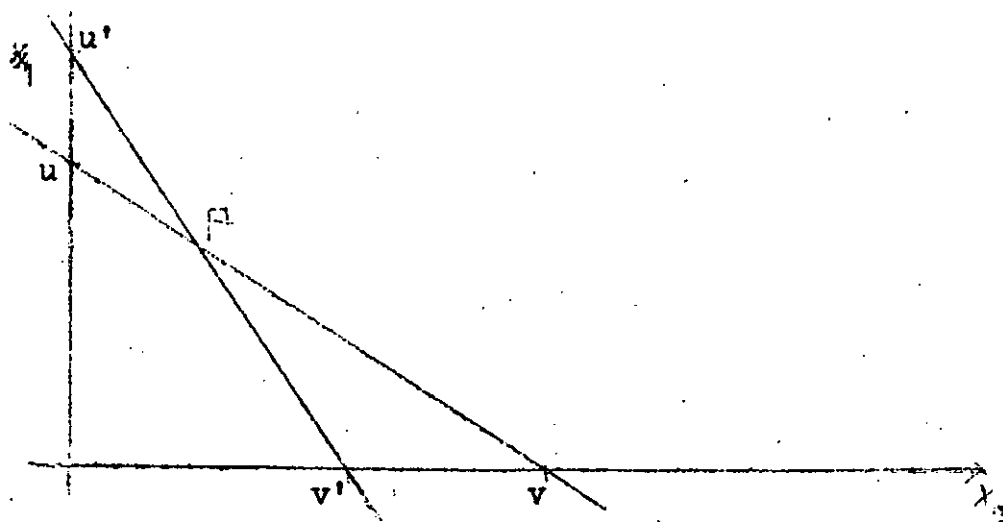
$$1-1-2)-5 \begin{cases} \frac{x_1}{\frac{c}{a}} + \frac{x_2}{\frac{c}{1-a}} = 1 & (r_1) \\ \frac{x_1}{\frac{c'}{a'}} + \frac{x_2}{\frac{c'}{1-a'}} = 1 & (r_2) \end{cases}$$

$$\varepsilon-1-2)-5' \begin{cases} \frac{x_1}{u} + \frac{x_2}{v} = 1 \\ \frac{x_1}{u'} + \frac{x_2}{v'} = 1 \end{cases}$$

where $u = \frac{c}{a}$; $v = \frac{c}{1-a} = u \cdot \frac{a}{1-a}$

$$u' = \frac{c'}{a'} ; v' = \frac{c'}{1-a'} = u' \cdot \frac{a'}{1-a'}$$

and graphically we have the two straight lines r_1 and r_2 whose point of intersection is indicated as P.



Graphic 1

We shall call P as point of " indifference ". It is easy to deduce the coordinates of P. We have :

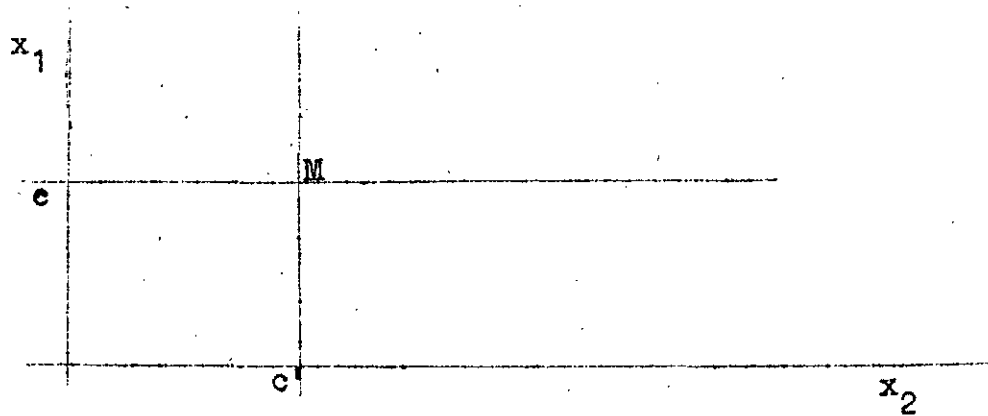
$$x_1 = \frac{-(1-a)c' + (1-a')c}{a(1-a') - a'(1-a)}$$

1-1-2)-6

$$x_2 = \frac{c'a - ca'}{a(1-a') - a'(1-a)}$$

now if we put $a = 1$ and $a' = 0$ we shall have

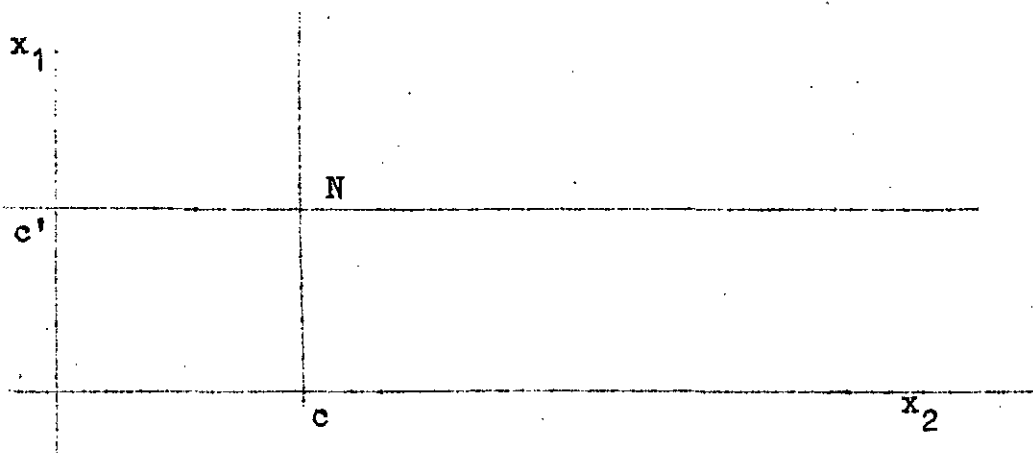
1-1-2)-7 $x_1 = c$ and $x_2 = c'$ (see graph.2)



Graphic 2

If we put $a = 0$ and $a' = 1$ we shall have

1-1-2)-8 $x_1 = c'$ and $x_2 = c$ (see graph.3)



Graphic 3

If we consider $a = 1$ and $a' = 1$, then we shall have

$$x_1 = \frac{0}{0} = \text{indeterminate form}; \quad x_2 = \frac{c - c'}{0} = \infty$$

If we consider $a = 0$ and $a' = 0$, then we shall have

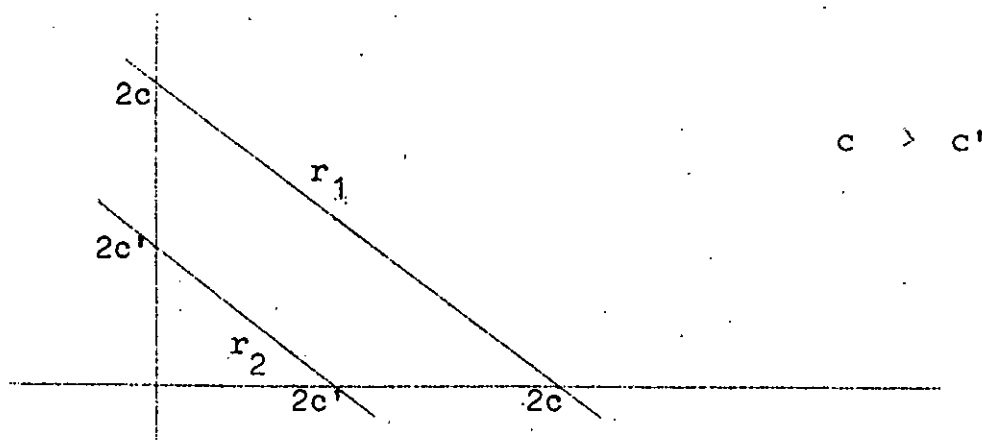
$$x_1 = \frac{c - c'}{a - a'} = \infty; \quad x_2 = \frac{0}{0} = \text{indeterminate form}.$$

Obviously we can consider the two straight lines r_1 and r_2 for all the possible values of a and a' , in the plane (x_1, x_2) .

For instance : $a = a' = 0,5$, we shall have

$$\begin{aligned} u &= 2c & u' &= 2c' \\ v &= 2c & v' &= 2c' \end{aligned}$$

and graphically we can see:



Graphic 4

that is two parallel lines. If $c = c'$, then we shall have $r_1 = r_2$, the two straight lines are overlapping and the choice of A or of B is obviously indifferent.

In subsequent paragraph we shall consider a particular value of a and a' following the interpretation of the model. Now we must only remember that u, u', v , and v' are dependent from a and a' , and that the two lines represent the two choices.

It is now time to introduce some axioms

- 1) $A \succ B$ if and only if $c > c'$
- 2) $A \sim B$ if and only if $\Pr(A) = \Pr(B)$
- 3) $A \prec B$ if and only if $\Pr(A) < \Pr(B)$

where ' \sim ' means that the choice is indifferent.

Theorem : If $A \succ B$ then $\Pr(A) > \frac{1}{2}$.

indeed if $A \succ B$ then $\Pr(A) > \Pr(B)$
 but $\Pr(A) = 1 - \Pr(B)$
 then $\Pr(A) > 1 - \Pr(A)$

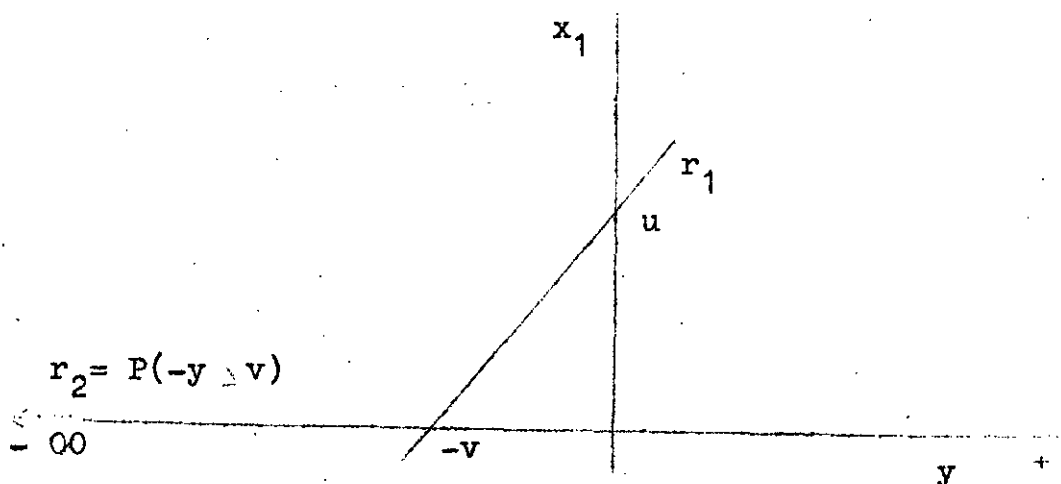
therefore
endly

$$\begin{aligned} \Pr(A) + \Pr(A) &> 1 \\ 2 \Pr(A) &> 1 \\ \Pr(A) &> 0,5. \end{aligned}$$

Let us consider now the values $x_2 \in r_2 > x_2 \in r_1$ and $x_1 \in r_1 > x_1 \in r_2$ then, for $a' = 0$ (and therefore $1 - a' = 1$) and overall $a > a'$, then we shall have a very particular situation on the plane (x_1, x_2) . In fact the two straight lines are:

$$\begin{aligned} r_1) \quad a x_1 + b x_2 &= C \\ r_2) \quad x_2 &= c' \end{aligned}$$

and if we consider $x_2 = -y$, as a loss, we have that $c > c'$ and therefore, considering theorem previously demonstrated, we have $A > B$ and $\Pr(A) > 0,5$. It is important to consider that we take into account only the probability, that is the values of a and a' . Graphically we have:



Graphic 5

As you can see $x_2 = c' = P(-y)$ is always at the left, on the $-y$ axis, of the intercepting point of r_1 on y -axis.

1-1-2-1 Interpretation of the formal model.

Let us consider now an interpretation of this model so abstract. Let us consider:

- A = Peace Choice with given political strategy
- B = War choice with given military strategy
- $x_1(A) = \text{Profit from peace or happiness or gain}$
- $x_2(A) = \text{Sufference or loss from peace choice}$
- $x_1(B) = \text{Profit from War (nuclear)}$
- $x_2(B) = \text{Loss from nuclear war}$

Empirical situation :

- 1) They use the nuclear weapons and I C B M
- 2) Deterrent menace ,that is second strike is as much destroying as the first one.
- subcondition 2') There are not technical solutions against I C B M that is the reliability of an A B M system is near zero.

- Consequences :
- 1) It is possible to destroy wholly the enemy
 - 2) Country C can wholly destroyed considered
 - 3) Therefore the loss is ∞ , if @ choice B.
 - 4) The loss or the gain in a strategy of peace is never a priori ∞
 - 5) The probability of the loss in a nuclear war under previous conditions is near 1

Putting empirical situation and consequences in terms of variable we have :

- 1) a and b $\neq 0$
- 2) $x_1(A) \neq \infty$ and $x_1(B) \neq \infty$
- 3) $a' = 0$ (therefore $b' = 1$)
- 3') $a > a'$ obviously
- 4) $x_2(B) = -y(B) = -\infty$
- 5) $x_1 \neq \infty$

Graphically we have the situation of graphic 5 . Here we have the straight line r_1 always at the right of the straight line r_2 which is reduced to the point $P(-\infty; 0)$. The meaning of this situation is clear. In fact for r_1 the loss is never ∞ . Of course the gain is determined. Therefore the choice of r_1 and therefore of A is too obvious in this context. Formally:

$$1-1-2-1) - 1 \quad \begin{array}{l} r_1) \quad a x_1 - b y(A) = c \quad (c \text{ surely finite}) \\ r_2) \quad a' x_1 - b' y(B) = c' \end{array}$$

and therefore we have

$$r_2 - b_1 y (B) = c'$$

$$c' = -\infty$$

and then

$$c' > c$$

A few words are necessary at this point. We put two questions:

- a) Is the empirical situation near the reality?

It is necessary to remember what we have said in paragraphs 1 and 1-1. Effectively the relation between empirical reality and our models is not unique. That is, it is possible to conceive many models for the same empirical situation following the choices that put on our perception of the complex reality. A model is always a simplification of the reality and the forecast is therefore never exact. To sum up, if the empirical situation is not well reproduced in our model, it is possible to build another model, model more complex and then we can have a succession of models M_1, M_2, M_3, \dots that we think never convergent to the reality M , that we do not know. Therefore it is not possible to fix a measure of the error $M_i - M$ in a direct manner but only indirectly by the error in our forecast and it is not possible to link this indirect measure with the unknowable direct measure. Therefore even if we obtain a good forecast, we cannot say that we know the reality in her essence.

- b) Are we in front of a good translation into numerical terms of the empirical condition?

Our answer is obviously 'yes'. In fact we have supposed an extreme situation. Our duty now is the check of the points 1), 2), 3), 4), and 5). But how can we verify that conditions 1), 2), 3), 4), 5), are really true? It is necessary to define some indicators. In fact until now we have only developed a theoretical model. We shall discuss these questions in subsequent paragraph.

1-1-3- Operationalization of the model previously discussed

In last paragraph we have indicated five conditions and following the model we have a forecast, that is that $\Pr(A) > 0,5$. We must assume the axioms and verify the conditions. These conditions are presented in a theoretical language. therefore it is necessary to introduce an empirical language and to furnish some indicators for evaluating operationally the parameters. At this point there are many possibilities. Let us consider before:

- 1) a, b, a', b' , are probability
- 2) $x_1(A), x_2(A), x_1(B)$ and $x_2(B)$ are gains or losses.

The probabilities previously mentioned are conditioned probabilities. In fact we have:

$$a = \Pr(x_1 / A \text{ choiced})$$

$$a' = \Pr(x_1 / B \text{ choiced})$$

and so on.

Theorem on conditional probability gives:

$$\Pr(A \wedge x_1) = \Pr(A) \cdot \Pr(x_1 / A) \text{ wher } \wedge \text{ means 'and'}$$

It should be interesting to know $\Pr(A \wedge x_1)$, (that is the probability of the choice of A and the subsequent success x_1). But must know $\Pr(x_1 / A) = a$ and so on.

We can consider empirically a, a', b , and b' as the results of the calculus of the political and military managers of the country C. This calculation is grounded on informations (i_1, \dots, i_m) and on the importance attributed by the same managers to these informations. Informations are grounded on a global analysis of interaction among the country C and its enemies. Consider now two countries, C and N. As previously indicated the problem of the political and military managers is of evaluating the parameters a, a', b . The informations are the following:

z_1 = Reliability of e I C B M system of N.

z_2 = Reliability of e I C B M system of C

z_3 = Reliability of A B M system of N

z_4 = Reliability of A B M system of C

z_5 = % of the whole capability of fight of N, destroyed by a first strike of C.

z_6 = % of the whole capability of fight of C, destroyed by a first strike of N.

z_7 = % of the whole capability of fight of N, destroyed by a second strike of C

z_8 = % of the whole capability of fight of C, destroyed by a second strike of N

z_9 = % of the population of C surviving the first strike of N

z_{10} = % of the population of N surviving the first strike of C.

z_{11} = % of the population of C surviving the second strike of N

z_{12} = % of the population of N surviving the second strike of C.

These indicators are all with range (0 -- 1) and also the parameters a, a', b, b' , are with range (0 -- 1). The choice of these indicators is obviously arbitrary but we think that interaction between C and N, in this particular case, can be measured by these variables. Obviously we can choose other variables and obviously we shall have, it may be, other results.

In this case we have 12 direct measures, that is we are in front of simple estimates. If we must measure really $z_1 \dots z_{12}$ we must consider other just carried research works on this particular problem. Our aim now is to know the estimate of a, a', b, b' , and therefore evaluate the link of these parameters with $z_1 \dots z_{12}$ as we can find in the mind of the political and military managers of C. In fact we want not to choose war or peace, but only forecasting war. Therefore we can have:

$$a = f (z_1 \dots z_{12}; c_1 \dots c_k)$$

$$a' = g (z_1 \dots z_{12}; c'_1 \dots c'_h)$$

$$b = 1 - a$$

$$b' = 1 - a'$$

where c_i ($i=1 \dots k$) and c'_j ($j=1 \dots h$) are parameters of the functions

At this point it is necessary to specify the parameters c_i and c'_j , that is specify the form of the two functions f and g . If we have not at our disposal a suitable theory we can choose this strategy of research.

Let us consider a sample of n managers and ask for ordering the 12 variables. There are available many techniques for reaching this aim and we shall suppose that we can weigh the 12

$l_i(a_j)$ and $l_k(z_j)$ are the subintervals builded for $a(z_j)$ and z_j ; $n_{ik}(j)$ are the numbers of the pairing in the sample of n individuals. Now we can calculate simple regression coefficients with suitable correlation coefficients (squares) as measure of goodness of fitting the straight lines. Therefore we have for any z_i and for a and a' 24 tables of this type

	$l_1(a_j)$	.....	$l_i(a_j)$	.....	$l_k(a_j)$	Tot.
$l_1(z_1)$	$n_{1,1}$	.....		.....		$n_{1,o}$
			
			
$l_k(z_i)$		.....	$n_{ik}(j)$	.....		$n_{k,o}$
			
			
$l_2^k(z_j)$		.....		.....		$n_{2^k,o}$
			
Tot	$n_{o,1}$		$n_{o,i}$		$n_{o,2^k}$	n

Fig.3

It is possible to eliminate some indicators. For instance we can consider that the pure reliability of a country can be considered as a new variable

$$0 = z_1 = z_1 \cdot (1 - z_4) = 1$$

or

$$z_{11} = f(z_5, z_3)$$

$$z_5 = g(x_3)$$

and so on. Otherwise we can reduce some indicators by statistical devices.

At this point we can evaluate the 48 coefficients of the linear relations and evaluate a weighted mean value of the $(2^k)12$ values of the 12 variables as previously calculated and then estimate the various possible values of a or of a' . We can also plot the graphic of the function

$$a = f(z_1, \dots, z_{12})$$

or

$$a' = f(z_1, \dots, z_{12})$$

Therefore we can know for what combination of values $\bar{z}_1, \dots, \bar{z}_{12}$ we can look forward the particular value of a and a' which enable us to forecast $\text{pr}(A) > 0,5$ and so on. We can also evaluate $\text{Pr}(A \wedge x_1)$. It is necessary to point that we are not in front of a problem of optimal choice, but only in front of a problem of forecast.

1-2- Power of forecast of these types of research

In this paper we have presented an outline of an explicative research. We have followed the plane in the first paragraph indicated and we have demonstrated how to go on. We have shown the rôle of the indicators introduced and therefore how can we operationalize our procedure. The operationalization is so important because a good forecast, (and we know that explication is equal forecast) is essentially dependent on a good choice of the same indicators. We have also said that the choice of indicators does not follow the same procedure as physics where it is possible a narrow link between concept and physical operation.

Unfortunately in Peace researches it is not possible to achieve this result but it is necessary to be satisfied of the availability of the data and of the good knowledge of the empirical problem. To convince oneself it is sufficient to give a look at the papers issued in the Journal of Peace Researches or in the Journal of Conflict Resolution. This arbitrary choice influences the goodness of forecast, neither it is sufficient the use of tests techniques (χ^2 , t , or F). No statistical device can obviate a bad choice. Thus the forecast can be confirmed or not confirmed. But if we have a bad forecast it is impossible to locate the sources of the error. We must remember that in our model we have hypothesized a conflictual situation. We have choiced further 12 indicators as an operational tool for evaluating a or a' .

To conclude our considerations it is necessary to spend some words on the types of forecast. In fact we can have two types of forecast proposition. the first one is of the type in this paper just introduced that is for instance

$\text{Pr}(A) > 0,5$ and therefore $\text{Pr}(A \wedge x_1) > 0,5$
obviously if we put $a = 1$ and $b = 0$.

The second kind of forecast is the forecast of a number with a given confidence interval.

The second kind is obvious

The second kind of forecast is the forecast of a number with a given confidence interval: for instance we can say that in 1980 we shall have in Italy 59,000,000 of individuals with a confidence interval of 1,000,000 at level of confidence of 95%.

This kind of forecast is too obvious. But when we consider the first kind of forecast, as for instance $\Pr(A) \geq 0,5$, what is the meaning? This forecast can be conceived fairly deceiving from the point of view of the man in the street which fears the war. And even from the point of view of the man, generally speaking, which fears uncertainty and chance and therefore the possible damages.

Unfortunately science today can offer only some probabilities, more or less well deduced from the models that our mind can build on the reality. Also in peace researches this fact is true and we consider peace research a scientific discipline as can be conceived every social science. In fact we have in peace researches:

- 1) A language, more or less defined.
- 2) Available data (directly or indirectly collected)
- 3) Some technical devices as statistical devices
- 4) Problems and hypotheses
- 5) There exist a context of validation
- 6) It is possible therefore to explicate and to forecast new events.

As regards our model we hope that it shall not be denied. But we have only a probability and therefore we are in the same situation of a gambler with a device that can produce two events with, respectively, probability more than 0,5 and less than 0,5, since the two events are mutually exclusive so that the sum of the probabilities is 1. We must therefore conclude that can happen sometimes in the long run the unfavourable event.

But shall we be always in a conflictual situation?

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Preliminary version

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RANK AND INTERACTION: A GENERAL THEORY WITH SOME
APPLICATIONS TO THE INTERNATIONAL SYSTEM*

by

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1. Introduction

In the field of "rank theory", definitions and theoretical statements abound.¹ The purpose of this article is to attempt to isolate some hypotheses relating rank and functions of rank to interaction, and to see whether the hypotheses can be derived from a smaller set of assumptions.² Finally, the hypotheses will be applied to some data on interaction in the international system. Whereas some previous empirical material for the international system will be reviewed later, no attempt will be made to review other empirical studies of rank and interaction.³

2. Social structure: definitions and basic assumptions

We define:

- D.1. a rank variable as any variable upon which social units rank themselves and others (e.g., sex for individuals; national income for nations)⁴
- D.2. a status as the value (or position) of a unit on a rank variable (e.g. "male" or "female" on the sex variable)
- D.3. a social system as a set of two or more rank variables and a set of two or more interacting units with an associated set of statuses^{5,6}
- D.4. a rank as the value of a status
(e.g. the rank of "male" is high; the rank of the United States on "national income" is "\$625 mill")
- D.5. the status set as the set of statuses occupied by a unit (e.g., a "rich" "man", a "large", "under-developed" nation)
- D.6. the rank profile of a unit as the set of ranks associated with the status set (thus we shall label the status set of a rich man TT, indicating that he has two high, or "topdog" statuses; whereas a poor woman is UU or twice an "underdog")
- D.7. the total rank of a unit, t , as the sum of ranks on several rank variables
o
- D.8. the total rank of a pair (a dyad), T , as the sum of the total rank of each of the two units in the pair

For simplicity we now assume a society with only two rank variables and that the two rank variables are normed linearly such that the highest rank is 1 and the lowest is 0. We denote the ranks of units A and B on the two variables a_1 , a_2 , b_1 , and b_2 , and write:

$$\text{Total rank of A: } t_A = a_1 + a_2$$

$$\text{Total rank of AB: } T_{AB} = a_1 + a_2 + b_1 + b_2$$

$$\text{Rank profile of A: } (a_1, a_2)$$

Furthermore, we can now define

- D.9. the total rank dissimilarity of a pair as the absolute value of the difference between total rank of one unit and total rank of the other, i.e. for AB

$$\bar{S}_{AB} = |a_1 + a_2 - b_1 - b_2|$$

- D.10. the total rank similarity of a pair as the reverse, i.e.

$$S_{AB} = -\bar{S}_{AB}$$

- D.11. the rank profile dissimilarity of a pair as the sum of absolute values of rank differences on individual rank variables, i.e.

$$\bar{P}_{AB} = |a_1 - b_1| + |a_2 - b_2|$$

- D.12. the rank profile similarity of a pair as the reverse, i.e.

$$P_{AB} = -\bar{P}_{AB}$$

- D.13. the rank incongruence of a pair as the absolute value of the difference between the differences between the two units on individual rank variables, i.e.

$$\bar{C}_{AB} = |(a_1 - b_1) - (a_2 - b_2)| = |a_1 - b_1 - a_2 + b_2|$$

- D.14. the rank congruence of a pair as the reverse, i.e.

$$C_{AB} = -\bar{C}_{AB}$$

- D.15. the rank imbalance of a unit⁷ as the absolute difference between ranks in its profile, i.e.

$$\bar{b} = |a_1 - a_2|$$

- D.16. the rank balance of a unit as the reverse, i.e.

$$b_A = -\bar{b}_A$$

We can now define the four axioms of the theory:

- A.1. Mobility axiom. Units seek to increase their total rank.
- A.2. Balance axiom. Units seek to obtain balanced rank profiles and to avoid imbalance.
- A.3. Similarity axiom. Units seek to interact with similar units.
- A.4. Interaction axiom. Interaction is a rank variable.

A few words about these basic assumptions:

The essence of the mobility axiom is expressed in its label, although "upward mobility axiom" would be even more appropriate. One could, if one wished, go "behind" this axiom and postulate that high rank carries with it rewards of different kind (or, even more generally, utility) and furthermore that units seek to maximize their rewards.⁸

The second, or "balance" axiom is related to psychological theories of cognitive balance. Again, we can go beyond this axiom and postulate that units seek cognitive balance and that this includes their self-images. Thus, if a self-image is formed on the basis of a unit's rank on each rank variable, a balanced rank profile is necessary to achieve cognitive balance.⁹

The third, or "similarity" axiom is the same as the "homogamy" thesis in sociology, which has a long empirical tradition. In particular, numerous studies have demonstrated that like marries like and that one selects similar people as friends.¹⁰

3. Interaction: theorems and hypotheses

We can now state four theorems relating the rank concepts to interaction.

- T.1. Units will seek to obtain balance between interaction and other rank variables, and to avoid imbalance.
- T.2. Units will seek interaction with other units with whom they have high total rank similarity.
- T.3. Units will seek interaction with other units with whom they have high profile similarity.
- T.4. Units will seek interaction with other units with whom they have high rank congruence, and avoid interaction with other units with whom they have high rank incongruence.

T.1. follows from the balance and interaction axioms (A.2. and A.4.). It implies that high-ranking units should have high rates of interaction. T.2. and T.3. are merely specifications of the similarity axiom for two different definitions of similarity.¹¹

T.4. follows from the balance axiom if one regards the interacting pair and the rank variables as a social system in itself (and this is consistent with the definition of a social system, D.3.). If there was rank incongruence between two units in a pair, then the two units are also imbalanced within this social system (the pair). In order to avoid this imbalance, they can interrupt the interaction, in which case the pair no longer is a system. Conversely, to form pair-systems with balance, units should seek interaction with other units with whom they are congruent.

A weakness of the formulation as it now stands is that T.1. is at the unit level, whereas T.2., T.3., and T.4. are all at the pairwise level.

To a hypothesis corresponding to T.1. at the pairwise level, let us assume that there is no particular preference at the pairwise level, and that the amount of interaction in the pair is exclusively determined by the amount of interaction at the unit level. We can then formulate the following theorem:

T.1.1. Units will seek to structure their interaction such that the higher the total rank of the pair, the higher the interaction in the pair.

On the basis of these four theorems alone (T.1.1., T.2., T.3., and T.4.) we are now in a position to make relatively specific predictions at the pairwise level with regard to how units seek to structure their interaction.

We shall use a very simple example with two rank variables and two statuses only on each rank variable, a high status (T for topdog) and a low status (U for underdog). Table 3.1. sets out the relative influence of the four rank concepts, T, S, P, and C on the amount of interaction in the pair. Within each column (corresponding to T, P, S, and C) we have ranked the pairs according to the degree of total rank similarity, congruence, etc.

In order to construct a perfect rank ordering of the pairs in terms of the amount of interaction, we would now have to introduce further assumptions about T, S, P, and C as determinants of interaction. We could weight them, and add the result, or we could decide on a sequential ordering process: first order by T, then by P, etc. However, even without introducing considerations of this kind - and we have found no theoretical rationale for doing so¹² - we can say something about the structure of interaction, because certain pairs dominate others on all four counts. Thus, whether we are concerned with T,P,S, or C the TT-TT pair has a perfect score, and dominates all the others; TT-TU dominates TU-UU because it has higher total rank with all the other three factors equal, etc. Figure 3.1. gives the hierarchy on the basis of Table 3.1.

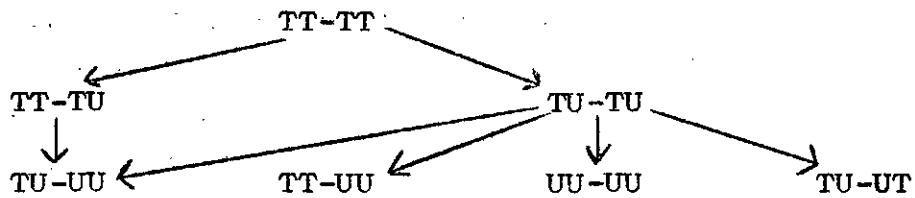
With seven different pairs we have 21 relations between pairs. Of these 21 we can make 11 specific predictions of the rank order with regard to the amount of interaction. Thus, even though the introduction of the four rank concepts creates ambiguities - we cannot, for instance, say whether TT-UU will have more interaction than TU-UT - we can nevertheless submit to it a confrontation with empirical data, even without further assumptions.

Table 3.1. Determinants of interaction in pairs

Pair	Interaction Determinant			
	T	S	P	C
TT-TT	5	3	3	3
TT-TU	4	2	2	2
TT-UU	3	1	1	3
TU-TU	3	3	3	3
TU-UT	3	3	1	1
TU-UU	2	2	2	2
UU-UU	1	3	3	3

Note: All pairs which are different from each other with respect to either T,S,P, or C have been included.

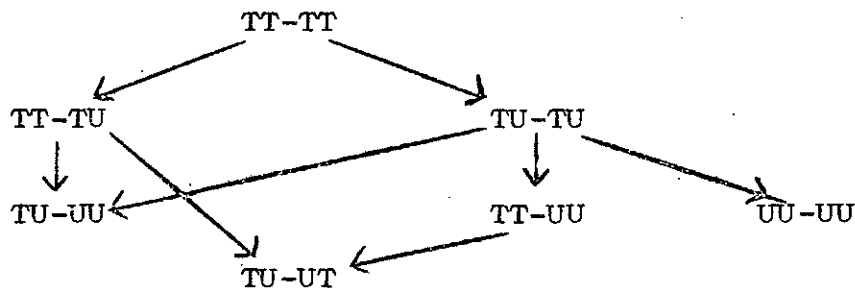
Figure 3.1. A Hierarchy of Pairs in Terms of Interaction



Note: The arrow relation is transitive. The vertical levels have no meaning except where they coincide with arrow relations.

None of the four rank concepts can be removed without changing the ordering of the pairs in terms of their interaction potential. The effect of removing the theoretically most dubious concept, S, can be seen in Figure 3.2. The hierarchy is still far from a perfect rank order, but 13 out of 21 pair relations can now be ordered in terms of interaction.

Figure 3.2. A Hierarchy of Pairs in Terms of Interaction: T,P, and C Only as Determinants of Interaction



Note: See Figure 3.1.

In order to get from the four theorems to a confrontation with data, however, we have to make an inference from the kind of interaction structure units seek and the interaction structure which exists. We therefore have to make explicit the (so far unstated) assumption that interaction is manipulable by the units themselves. We shall therefore exclude, for the moment, the possibility that the amount of interaction between two units can be determined by third parties.

The idea that interaction is manipulable introduces a distinction between interaction and other rank variables. Whereas we have assumed (A.2.) that there will be a tendency to seek to balance ranks, we have not assumed that it will be possible to create a social structure conforming to this, as far as other rank variables than interaction are concerned. Thus, if a country is high on population it may or may not be possible to convert this high rank into a high rank on GNP - depending

on factors external to rank theory proper. Rank theory only says that units will seek to balance their ranks on the two variables.

"Manipulability", on the other hand, must be distinguished from another constraint on amount of interaction, scarce resources. If there was no cost involved in interaction, S and P would not have any influence on interaction since interaction would be carried out in TU-TU and TU-UT pairs alike. T and C are different, however, since we have assumed that imbalance and therefore interaction in incongruous pairs will be directly avoided. In the case of no-cost interaction, therefore, T and C would be the only rank parameters influencing interaction. For practical purposes, however, we may consider all interaction in the international system to have at least some cost; hence all four factors will operate.

The next step from here might be to compare the structure given in Figure 3.1. with empirical data on interaction in the international system. A weakness of this procedure is that it requires a dichotomization of the rank variables and a consequent loss of information.¹³ On the other hand, having four or five statuses on each rank variable would yield such a proliferation of pair types that the scheme would become almost unmanageable.

We shall therefore use continuous variables and make a further assumption that the relationships between the rank parameters and interaction are linear and independent.

This, however, creates one problem. As long as we were talking in ordinal terms only, we could go from T.1. to T.1.1. If we assume proportionality in connection with T.1., then we no longer obtain proportionality between total rank of the pair and interaction in the pair.

If interaction at the unit level is proportional to the total rank of the unit, then - assuming independence between the two units, i.e. that there is nothing special about any one pair, the expected interaction in the pair would be proportional to the product of the total ranks of the two units, rather than their sum,¹⁴ but for one thing: that there is no interaction from a unit to itself. Thus, we cannot simply calculate expected values for the cells in the matrix as in an ordinary chi-square model, but have to make a correction for the a priori zeros in the diagonal. This modified model is identical to the Savage-Deutsch model of transaction flows (Savage and Deutsch, 1960) except that the

basis for calculating the expected values is an external criterion (here: total rank of each unit) rather than the total interaction.¹⁵

We therefore define

D.17. the total expected rank of a pair, E, as the expected value of rank in the pair given independence of the total ranks of the two units and zero expected rank in the diagonal.

We now have four hypotheses:

- H.1. The amount of interaction in the pair is proportional to the total expected rank in the pair.
- H.2. The amount of interaction in the pair is proportional to the total rank similarity in the pair.
- H.3. The amount of interaction in the pair is proportional to the rank profile similarity in the pair.
- H.4. The amount of interaction in the pair is proportional to the rank congruence in the pair.

This gives the following deterministic model, assuming that the interaction effects between E, S, P, and C are negligible:¹⁶

$$I_{ij} = a + b_1 E_{ij} + b_2 S_{ij} + b_3 P_{ij} + b_4 C_{ij}$$

A stronger version of H.1. is mentioned briefly by Galtung in an article on East-West interaction patterns in Europe (Galtung, 1966c, p. 154f). That there is more diplomatic activity between the big than between the small "is a simple consequence of the circumstance that they are big", and Galtung is therefore "not simply trying to prove that there is more interaction, the higher the total rank of the pair, but also that there is more interaction relative to what one might expect, given the interaction potential." The precise meaning of "expect" is not clear from this, but if it means that interaction in the pair should be positively related to total rank in the pair even if we keep constant the expected interaction in the pair on the basis of the total interaction of the units or on the basis of what we have called E, then this is a much stronger hypothesis, and one which has never, to our knowledge, been tested. If, on the other hand, "interaction potential" merely refers to the "possible number of pairs", then this extension represents nothing new.

4. Bilateral and multilateral interaction

In the derivation of the four hypotheses we have implicitly referred to two "levels" of social system: the pair and a larger set of units united by a connected graph of interaction. The latter type of social system is necessary to the theory as a reference point for the measurement of concepts such as total rank similarity and rank profile similarity. The pair is necessary in the derivation of H.4. because only in the pair does rank congruence become the same as rank balance.¹⁷

But this raises three problems: Why is there no parallel to the rank congruence hypothesis with reference to the total system? Why is there no parallel to the S and P hypotheses with reference to the pair system? And why have no systems of intermediate size been considered? We shall deal briefly with these three in the order we have raised them.

First, a parallel to the rank congruence hypothesis with reference to the total system would be something like the following: if a unit is imbalanced in the total system, then it should try to dissociate itself from the system by breaking all interaction bonds. We have not included this hypothesis here, mostly because its effect will be so close to the effect of rank congruence that it may not make much practical difference. In part, this hypothesis seems somewhat less realistic: it is one thing to break an interaction tie to a single other unit, and a different matter altogether to break off all interaction. The latter hypothesis ignores the possibility of intrinsic necessities to interact - again, these are outside rank theory proper. Or, in other words, the whole interaction structure of a unit is less "manipulable" than any single link.¹⁸

Second, why no S and P hypotheses with reference to the pair system? A P hypothesis at this level makes little sense since all profiles are equally different when the pair is the basis for norming the rank variables from 0 to 1 (except the rare cases where values are equal, and these can be considered coincidences due to inaccurate measurement). In other words, P at the pairwise level would have no variance and could therefore not account for any variance in interaction. With S it would be a different case but again we felt that it was simply unnecessary to include this, since it is not likely to account for much extra variation.

Third, why no intermediate levels? The reason is that we are dealing with bilateral interaction only. (Even multilateral forms of

interaction, such as organization memberships, can be dealt with in a bilateral form - i.e., in the form of organizational ties. But this is not without a loss of information.¹⁹ We therefore felt that it was theoretically more meaningful to include only hypotheses relevant to the largest and smallest social system included in the theory, the total system and the interacting pair. However, multilateral organizations may have a sub-universal range of membership. This might be taken into account even when analysing the bilateral membership bonds. Thus, P and S should refer to similarity between two members of an organization, judged on the basis of the range of values among the members of that organisation, and not on the basis of the universe of nations. Future models might be revised to take account of this.²⁰

5. The influence of geographical distance

To improve the model for social systems with a fixed spatial location of the units, we shall introduce the additional factor of geographical distance in the model.

Previous reviews of distance and interaction (Olsson, 1965; Gleditsch, 1969) have indicated that distance influences interaction at all levels of social organization, from the inter-personal to the international. A priori one might think that this should be particularly true for the international system, since the distances between nations are greater and present more absolute obstacles than e.g. the distances involved when one has the choice of going to see a colleague next door or to see one on the next floor up. It has also been argued that the influence of distance in the international system is decreasing, although a previous study by this author found it to be increasing, if by "influence" one means the association between distance and interaction. (See Gleditsch, 1969 for this discussion.)

The form of the distance/interaction function has been the subject of considerable debate. Most commonly, it is argued that interaction is inversely proportional to distance. This relationship can be derived from the following assumption: a unit will interact equally with units at all distance levels. If the units are evenly distributed over space, and if there are x units to interact with at distance d_x , then the number of units at distance d_y is $x \cdot d_y / d_x$. Hence the amount of interaction with each of the units at distance d_x relative to the units at distance d_y is d_y / d_x . The unsatisfactory aspect of this derivation lies in the two assumptions, that one interacts equally with units at

each distance level (which is arbitrary) and that units are evenly distributed (which is false for the international system).

If we assume that distance is proportional to cost, however, (an assumption which is partly validated by a correlation of .95 for distance and cost of international air travel from Oslo to 45 other capitals in 1965) we can reach the same relationship by a more intuitive assumption: a unit will spend equal amounts on interaction with different interaction partners. Thus, if France is twice as far (and thus twice as expensive per unit of interaction) away from Norway as Sweden is and we spend the same amount on interaction with each country, then we interact twice as much with Sweden. This, then, gives the relationship that distance is inversely proportional to interaction.

However, this is only realistic if no other factors than distance enter the picture. Here we shall modify this assumption to read: a country will spend an amount on interaction with a given partner which is proportional to its significance for oneself in terms of the rank factor previously described.

Thus, if we take the rank factors separately, we obtain the following deterministic model:

$$I_{ij} = a + b_1 E_{ij}/D_{ij} + b_2 S_{ij}/D_{ij} + b_3 P_{ij}/D_{ij} + b_4 C_{ij}/D_{ij}$$

It should be noted that in this derivation no assumption has been made about an even spatial distribution of units.

6. The effect of political factors

That political groupings such as formal alliances and dependence relationships (military, colonial, etc.) influence interaction is also well-known and has been demonstrated to hold for international interaction specifically in previous publications (Gleditsch, 1967, 1968). However, the question is how to bring these into the model. We shall suggest a distinction between a) military and polarised antagonisms where we suggest that the negative effect on interaction will take the form of a boycott and b) weaker forms of antagonism and influence spheres with efforts to keep members of the opposite bloc out of one's own sphere. The latter will be another "cost" to interaction for the "intruder". Or, conversely, we argue that just as one will spend proportionately more on interaction with countries that are advantageous according to the rank factors, one will also spend proportionately to

the political advantages involved. Thus, this factor will interact with distance in exactly the same way. If we write B for the existence of a boycott (B=1 if there is a boycott, 0 if not) and POL for political similarity, we can extend the model as follows (subscripts deleted):

$$I = (a + \frac{E}{D} + b_1 \frac{IC}{D} + b_2 \frac{P}{D} + b_3 \frac{S}{D} + b_4 \frac{POL}{D}) (1 - B)$$

Whereas the first versions of the model can be tested by means of ordinary multiple regression analysis, the present model requires a slightly different procedure. In boycott pairs, I=0. Hence, we first eliminate all these pairs and perform the analysis on the model

$$I = a + b_1 \frac{E}{D} + b_2 \frac{P}{D} + b_3 \frac{S}{D} + b_4 \frac{POL}{D}$$

Then, using the same coefficients a, b₁, b₂, b₃ and b₄ to generate expected interaction in the non-boycott pairs, we add the boycott pairs with an expected value of 0 and calculate R as the correlation between the observed and the expected for all the pairs.

7. Empirical application to the international system

We have applied a somewhat simplified version of the model to several sets of data on international interaction.

The simplification consists of three points.

First, we have limited the selection of rank variables to gross domestic product (GDP) and population. The reason for this is partly arbitrary, for lack of good theoretical criteria to limit the choice of rank variables. Among the non-arbitrary elements in the decision are the following: They are both important variables in an intuitive way and they are perceived as important aspects of international "power" or, more generally, rank both by politicians and by traditional writers in international relations.²¹ They capture both achieved and an ascribed aspect of nation's status, with national product leaning more in the direction of achievement, population more in the direction of ascription. They are correlated for the world as a whole (.8 for our data), which means that there is sufficient rank congruence among the attributes that it makes sense to hypothesize congruence between attributes and interaction.

Second, for technical reasons, we have not yet been able to calculate E, and we will therefore use T instead.

Third, we have not included here an extensive set of political and boycott relationships. The boycott relationships, in particular, raise a number of problems. A simple definition would have been in terms of diplomatic recognition, but no one appears to have collected the data on that for any large number of countries. Furthermore, even where diplomatic recognition is withheld, there may be unofficial recognition and a resulting interaction.²² We have therefore limited ourselves to including a number of very salient conflicts (Table 7.1.).

Table 7.1. Some boycott pairs, 1965

Diplomatic interaction:

China - Taiwan

East Germany - West Germany

Israel - Algeria

Iraq

Jordan

° Kuwait

Lebanon

Libya

Mauritania

Morocco

Saudi Arabia

Sudan

Syria

Tunisia

United Arab Republic

Yemen

North Korea - South Korea

North Vietnam - South Vietnam

United States -

China

Cuba

North Korea

North Vietnam

Airline interaction:

The above, plus Latin American countries to all socialist countries (including Cuba).

Apart from the "divided countries"²³ the Table includes the participants in the Israeli-Arab conflict (even the Arab states which are passive in the military confrontations), the US and the countries which are listed as prohibited to US citizens in American passports²⁴ and the pairs between South Africa and the member states of the Organization of African Unity. Most of our data are from before or immediately after Rhodesian independence, so the OAU boycott of Rhodesia has not been included.

To judge how such boycotts will be applied, three distinctions must be introduced: between public and private interaction, between highly visible and not so highly visible forms of interaction, and between multilateral and bilateral interaction. We assume that the higher the visibility, the more public and the more multilateral the transaction, the less likely that two nations will engage in a transaction if they are in conflict.²⁵

In the following we shall analyse the results for five types of international interaction. These are classified in Table 7.2. on the three criteria just mentioned.

Table 7.2. Different forms of interaction

Form of interaction	Public/ Private	Visibility	Bilateral/ Multilateral
International flights ²⁶	Semi-public	High	Bilateral
Common memberships in IGOs ²⁷	Public	Medium	Multilateral
Common memberships in INGOs ²⁷	Private	Low	Multilateral
Diplomatic bonds (no. of diplomatic envoys in country) ²⁸	Public	Medium	Bilateral
Trade ²⁹	Both	Low	Bilateral

Thus, flights and diplomatic bonds are the two interaction variables for which the boycott effect should be present. For the others, there may be a political effect, but not a boycott effect. In particular, it is important to emphasize that even if all bilateral interaction has been broken (even trade) it may be very hard to break all multilateral interaction because it implies that one either has to accept isolation for oneself or that one persuades a large number of other countries to join the boycott and expel the other country from the organization.³⁰

For "flights" we have introduced an additional "boycott" to improve the model: that between Cuba and the other socialist countries on the one hand and the Latin American countries on the other. This is not so

much a boycott by any of the sides as an extreme case of imperial fence-building which prevents interaction between Latin America and certain "dangerous countries".³¹

Finally, it should be emphasized that for the various boycotts listed there is no assumption that the boycott is symmetric in intention, only in effect, since all these forms of interaction depend on the willingness of both parties to engage in interaction.

8. Results

Table 8.1. gives the results for the model

$$I = a + b_1 T/D + b_2 S/D + b_3 P/D + b_4 C/D$$

for all forms of interaction.

Table 8.1. The rank and distance model. Product-moment correlations*

Term	Form of interaction				
	INGO member-ship	IGO member-ship	Flights	Diplo-matic Repre-sentation	Trade
1. T/D	.407 (+)	.212 (+)	.486 (+)	.462 (+)	
2. S/D	-.223	-.113	-.343	-.338	
3. P/D	-.208 (+)	-.106 (+)	-.340	-.314	
4. C/D	-.173	-.092	-.256 (+)	-.307	
R	.472	.248	.531	.625	
R includes terms *	1, 3	1, 3	1, 4	T, D, 1	
no. of pairs included	6441	6441	8515	8010	

*Bivariate correlations with/ ^{the signs of the} partial correlations in brackets. Since the four factors were correlated quite highly, the partials and the multiple R are for a smaller number of factors, as given in the second last line of the Table. The least important factors in terms of increasing R in a stepwise regression have been excluded.

By and large the results are in the expected direction, although the correlations are not large. Once again, T/D turns out to be the most important factor for all forms of interaction. The effect of T/D is not much reduced by taking into the account of the other three terms. The bivariate correlations for S/D, P/D and C/D are all in the opposite direction but after the effect of T/D has been taken into account the sign becomes positive, as it should. (Not all the partials are reported in the Table, however, only those for the terms which remained after

the most highly correlated independent variables were removed from the regression equation.)

Of the three other terms it is C/D and P/D which "behave best". This supports our inclination to believe that it is more meaningful to operationalize "rank similarity" in terms of the rank profile, rather than in terms of total rank, although when the two terms are divided by distance they are extremely highly correlated.

"INGO membership", "Diplomatic representation", and "flights" give fairly similar results. This is interesting, because diplomatic representation is asymmetric, while the two others are symmetric. (However, the asymmetry in diplomatic representation is not high).

The difference between IGO and INGO membership is very marked. A possible explanation of this may be that membership in IGOs is much more dependent on the other factors, such as the political ones. In that case, the application of the full model ought to give substantially better results for this dependent variable.

A number of related models were tried out, such as

$$\log I = a + b_1 \log T + b_2 \log S + b_3 \log P + b_4 \log C - b_5 \log D$$

which is the same as

$$I = \frac{a \cdot T^{b_1} \cdot S^{b_2} \cdot P^{b_3} \cdot C^{b_4}}{D^{b_5}}$$

provided one assumes that the stochastic error term is multiplicative,³² models where the rank variables were ranked and the ranks used as values, etc. By and large these models gave roughly similar results. In this sense, the most satisfactory aspect of this empirical test is that a more rigorously derived model can give equally good results as the curve-fitting involved in the alternative model.³³

Finally, additive models ($I = c + b_1 T + b_2 S + b_3 P + b_4 C - b_5 D$) were tried out, but with much poorer results than the alternative model. This confirms previous findings (Gleditsch, 1969) and supports the rationale for the model presented here.

9. Extensions of the theory

Briefly, we shall only indicate some possible directions where the theory can be extended.

First, new assumptions should be introduced which would enable us to derive hypotheses about asymmetric interaction. A common hypothesis is that there is more interaction from the high-ranking unit to the low-ranking than vice versa (Berelson and Steiner, 1964; Galtung, 1968). On the other hand, theories of exploitation state that flows of value generally run in the direction of the high-ranking members (cfr. Frank, 1965, for a theory for the international system in these terms). Apart from the problem of defining precisely "the amount of interaction" in asymmetric relationships, there is nothing in the theory as stated here which will let us derive such hypotheses.

Secondly, the theory deals only with positive interaction and not with negative. This is also a limitation. It has been argued that high total rank in the pair ought to be positively associated with high negative interaction. High-ranking units emit more conflict behavior (as well as positive interaction) and we would therefore expect total rank in the pair (or, better, E) to be associated with conflict behavior in the pair. On the other hand, this is much too naive, since for many of the largest pairs, relations are permanently friendly and almost no negative interaction is transmitted. Here one would need something like a "negative boycott" or friendship model of the type we have developed above for boycotts to account for the lack of conflict behavior in these pairs. However, the criterion for selecting the "friendship pairs" remain even more obscure than those for the boycott pairs.

Thirdly, we need a typology of rank variables. The distinction between achieved and ascribed variables is useful, of course, and it seems e.g. to hypothesize that "the higher the achieved rank similarity the higher the interaction in the pair". Or, in general, the more specific the type of similar rank, the higher the interaction.

Fourth, the following hypothesis was suggested in Galtung (1966b): "A unit will define interaction so as to emphasize its highest status." It is difficult to see that this implies much for symmetric forms of interaction, but for asymmetric forms the hypothesis is more probable because the interaction can more easily be manipulated by one side alone. As an example, a small but highly developed country like Israel

with its technical assistance programs emphasize quality and expertise, whereas e.g. the Soviet Union will go for big TA programs above all, because their resources are big. It is not just that the particular resources possessed by each country makes the respective form of aid cheaper; it also serves to emphasize in each case the high status of the country and thus TA may serve to increase prestige.

Appendix. Continuous vs. discrete measurement of rank variables

Most empirical work in the "rank theory" tradition has worked with discrete measurement, of the rank variables, usually dichotomies or trichotomies. Furthermore, the analysis has been in the form of contingency tables. Although similar arguments may be used in both cases, these are two separate research design decisions. The number of variables and their interrelationships make a contingency table approach here, and multiple regression analysis is more manageable. However, even within multiple regression analysis we could have used either discrete or continuous measurement of the variables. The decision depends on one's confidence in the meaningfulness of more than e.g. three levels of status. (For a statement in favor of three values for sociological variables in general, not only for rank variables, see Galtung, 1967.) A particularly relevant argument for a small number of values in this case is the well-known observation that no individual can discriminate between as large a number of different ranks as continuous measurement implies. Thus, it would be more realistic to group the units into a smaller number of classes. The loss of information involved in the grouping, this argument goes, is no loss at all, since the empirical distribution of the rank variable is not what determines the interaction, but the units' perception of the distribution. A counterargument is that the closer a stratum of society is to the individual, the finer the discrimination. Thus, a middle-class professional can see the difference between a judge in a lower and a higher court, whereas for a working class person he may just be "a judge". (The same holds, of course, for discrimination on non-vertical variables: a Maoist can see a world of difference between himself and a trotskyite, whereas to a conservative the difference is negligible if it is perceived at all.) This implies that there is a very extensive rank order in society as a whole, but no one social actor can see the whole range. However, we are not interested in the perception of individual actors, but in the structure of the social system as a whole. In this case, the continuous variable model seems more realistic, although a more sophisticated model would make corrections for the contractions and expansions of the scale which occur as a result of the limited social perspective of each individual. - An argument which applies to nations more than to individuals is that with the improvement of international statistics, national decision-makers become increasingly cognizant of their nation's exact position in the distribution on the

rank variables. An example: Japan was reported to have used as an argument in its trade negotiations with the United States in early 1969 that "we are only number 19 in GNP per capita" (hence we still need protective trade barriers). Presumably, the United States negotiators had just pointed out that Japan was just overtaking West Germany to become number 3 in GNP.

NOTES

*This article was begun while the author was an assistant researcher with the Dimensionality of Nations Project at the University of Hawaii and completed at the International Peace Research Institute, Oslo. While Johan Galtung and other colleagues at PRIO are mainly responsible for the author's general orientation to the subject, the stimulating atmosphere of a seminar at the DON project provided the impetus to write this down. I am grateful to the participants of the seminar and the director of the project, Rudolph J. Rummel, in particular, for numerous suggestions and comments. Financial support for the period in which this research was undertaken is gratefully acknowledged from the DON project, the Norwegian Council for Research in Science and the Humanities (NAVF), and the Norwegian Research Council for Conflict and Peace (RKF). Furthermore I am grateful to Åke Hartmann for programming assistance and to Kjell Skjelsbæk and Reidar Kvadsheim for assistance in connection with the empirical work on the data from their projects on international organizations and the world diplomatic network. This article is PRIO-publication no. 10-2.

1. The expression "rank theory" was first(?) used as a unifying concept for a number of related issues to be discussed at a conference planned for Copenhagen in January, 1969 by the Institute for Peace and Conflict Research. Whether there is a "rank theory" as such is a matter of debate. It might be more adequate to talk in terms of the "rank approach" or a language for describing social systems. In any case, the present paper is only concerned with a rank theory of interaction patterns.

2. In doing so, we are drawing freely on the work of Johan Galtung, particularly Galtung 1966a, 1966b, and 1968. Many related ideas can be found within the large area of stratification research in sociology, sometimes expressed in terms of rank, sometimes not. But we are not concerned here with intellectual history. Needless to say, there is no claim that our hypotheses exhaust the theoretical ideas in the papers by Galtung or others.

3. A very relevant book is Laumann, 1966. This work also contains an extremely extensive bibliography of American works on social stratification.

4. "Rank dimension" is a more common term. In view of the increasingly frequent use of the word "dimension" for "factor" (as extracted by a factor analysis) and the resulting associations of "independent dimensions" when "rank dimensions" are referred to, we prefer to use "rank variable".

5. For a theoretical discussion of a simple society with two rank variables (economic and political) and two statuses on each dimension, see Galtung, 1966a.

6. This definition does not imply that every unit interacts with every other. Rather, we mean that each unit must be connected to all the others by an interaction network, i.e. there must be no pair of units where one cannot reach one from the other by means of direct interaction or indirect interaction through intermediaries. In graph theoretical terms, the graph must be strongly connected or strong (cfr. Havary et al., 1965). An even more general definition of social status is "a set of interacting social units" (see e.g. Svalastoga, 1969, p. 13).

7. Or: rank disequilibrium, status inconsistency, etc. This concept has a variety of names.

8. The motive for going "further back" and defining new axioms from which the present axioms can be deduced as theorems might be to increase the range of possible derived theorems. The decision to stop going backwards is somewhat arbitrary. In this case the range is just wide enough to include the empirical phenomenon of interest to us.

9. For a development of this theme, see Zelditch and Anderson, 1966.

10. See e.g. Kerckhoff, 1963 and Eckland, 1968.

11. To resolve the dilemma of what type of similarity is more important, the empirical literature in sociology is of little help. Almost all of it is "unidimensional", i.e. the authors use single indicators of stratification. An exception is the work in the area of status inconsistency or rank imbalance. However, all of the many works we have examined on rank similarity and interaction have been "unidimensional".

12.

13. For discussions of the problems of continuous vs. dichotomous measurement of rank variables, see Curtis and Jackson, 1968, p. 115 and the Appendix to this paper.

14. The idea of using the product rather than the sum of unit attributes in accounting for interaction between them corresponds to the so-called "gravity model" of interaction. For an application to the international system with a number of references to theoretical formulations and other applications, see Gleditsch, 1969.

15. If a simple chi-square model was adopted rather than the Savage-Deutsch model we would implicitly have assumed that internal interaction is proportional to the square of the unit's rank. This creates two problems. First, that the model is improbable, since all units except the largest (the one with highest total rank) would then have more interaction with at least one other unit than with itself. (Consider for a moment what this would mean in terms of the mail flow.) Second, it would involve many practical and conceptual problems to obtain comparable data for internal and external interaction. For these two reasons, we prefer to ignore the diagonal and define interaction as inter-unit interaction only.

16. In general, of course, there will tend to be non-zero correlations between F, S, P, and C since these are four parameters generated from two variables. In empirical applications, then, the standard deviations of the coefficients should be observed for possible errors resulting from multicollinearity.

17. A little reflection will indicate that in the n-person group ($n > 2$) the distinction between rank congruence and rank balance corresponds roughly to the distinction between correlation and agreement, whereas for $n=2$ they coincide.

18. A well-known hypothesis with regard to systemic imbalance is that it will produce "aggression" of some sort (Jackson, 1962; Galtung, 1964). In view of what is said here we might modify this hypothesis as follows: an imbalanced unit will seek to dissociate itself from the system. To the extent that this is not possible, it will become aggressive.

19. Almost all formal interaction analysis in sociology, economics, or international relations known to this author - with the exception of coalition theory - has the same limitation: that it deals only with bilateral links or a summation of such links. An ingenious example of how there can be structure in a matrix which - when analysed in terms of bilateral links - seems completely uniform, is provided by a physicist, Satoshi Watanabe (see Watanabe, 1965, and Watanabe, forthcoming, 1969).

20. The distinction drawn here between comparison in the pair and comparison in a group corresponds to a distinction drawn by Anderson et al. (1969) between local comparisons and comparisons in a referential structure. While Anderson et al. state with reference to the local comparison formulation that "there are good reasons for believing that this is an inadequate formulation of the way in which comparison takes place" we have settled for both types of comparisons.

21. Cfr. Organski, 1958 for a discussion of elements of power. Starting with six factors, he eventually whittles them down to two, population and GNP/capita, which he multiplies and then decides to use GNP as a single measure of power.

22. Cfr. note 30 below.

23 Cfr. Reidar Kvadsheim's paper to this Conference.

24. As of March 19, 1968. The restriction includes transit traffic. (However, individual exemptions are now possible.)

25. This discussion owes much to ideas in Galtung's analysis of cooperation in Europe. See J. Galtung (ed.) Cooperation in Europe (Oslo: Norwegian Universities Press, forthcoming 1969), particularly the chapters on a theory of cooperation and on the German problem.

26. The variable is "no. of scheduled international flights per week", 1965, coded from the ABC World Airways Guide. This variable has the advantage of being available for all countries and can be coded with high reliability. Its direct importance may be somewhat lower than other forms of interaction.

27. The variable is "no. of common memberships" in IGOs and INGOs, 1964. Coded from the Yearbook of International Associations, 1965.

28. The variable is "no. of diplomats sent or received".

29. Data for 1965 provided by the International Monetary Fund.

30. This is analysed in great detail in a paper by the present author on "interaction patterns in the Middle East", presented at a seminar organized by the Norwegian Institute of International Affairs, September 15-17, 1969.

31. The difference between this and other cases of non-interaction is that it is not just a social pattern, but explicit policy. A semi-official report from the (US) Agency for International Development (Loy, 1964), based in part on a Rand Corporation report (Heymann, 1964) states - in an almost perfect expression of polemized thinking - that "However hard it may be to prove harm, there is something disquieting about the thought of Aeroflot gamboling about Latin America." There is,

of course, no general boycott on bilateral interaction between the US and the socialist countries, and the same author speculates (p. 43) about the possible effects of the US-Soviet agreement to establish a direct air link:

"One additional note about the complications which would flow from the signing of a U.S.-USSR bilateral air service agreement. A quite respectable argument can be made that even though it may be desirable for the U.S., a powerful, stable nation with considerable traffic potential, to exchange air service with the USSR, it does not follow that such exchange is desirable or safe for politically unsettled, developing countries, quite subject to subversion. On a recent trip the author tried to gauge the reaction of foreign government officials to such argument. The result was not encouraging. The distinction is understood, but no one was willing to acknowledge that Soviet air service could lead to subversion, certainly not subversion which would be more troublesome than present Soviet efforts."

32. If the error term is additive, then the multiplicate model acquires a different procedure for calculating unbiased least squares estimates.

33. The multiplicative form of the model may, of course, be justified. It is the fact of raising variables like T and D to empirically found "powers" which smacks of curve-fitting.

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