"AFRG-ARAB COOPERATION SEMINAR" Jordan Centre for Studies and Information, Amman, 11-14/IX/1982

- (1) programma e lista dei partecipanti
- (2) Aliboni, Roberto: "Afro-Arab relations in the Red Sea area"
- (3) Burton, J. W.: "The Middle East between Russia and Africa"
- (4) Kamhawi, Labib: "Afro-Arab cooperation: an insight into some selected aspects"
- (5) Khader, Bichara: "Arab Funds in Africa"
- (6) Nugent, jeffrey B.: "A new deal on the Old International economic Order: a programme of Arab-African-Asian cooperation in industrial development and trade"
- (7) Phillips, Warren R.: "Alternative futures in the Middle East. The results from three simulations. Addendum"

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المركز الاردني للدراسات والمعلومات

صندوق البريد : 1980 عمان – الأودن

تلکس ۲۱۲۷۹

AFRO-ARAB COOPERATION SEMINAR

11-14 SEPTEMBER, 1982

OUTLINE

It is a multi-national Seminar to explore regional cooperation and development issues with particular emphasis on countries surrounding the Red Sea.

PLACE: ROYAL SCIENTIFIC SOCIETY

Conference Room at the Mechanical Engineering Department

SATURDAY 11/9/1982

SUBJECT:

- 1. ECONOMIC & STRATEGIC RELATIONS IN THE REGION:
 - Alliances
 - Economic Relations Arab Funds in Africa
 - Regional & National Development Plans
 - Fiscal & Financial Cooperation
 - Demographic Outlook

SPEAKERS:

9:30-10:00	Dr. Edward Azar
10:00-10:30	Dr. Labeeb Qamhawi
10:30-10:45	Coffee Break
10:45-11:45	Discussion Session
11:45-12:15	Dr. Bishara Khadre
12:15-12:45	Dr. Roberto Aliboni
12:45-13:45 13:45-00:00	Discussion Session Lunch: Hosted by JCSI at the Royal Scientific Society

SUNDAY 12/9/1982

SUBJECT:

- 2. ARAB-AFRICAN-EUROPEAN RELATIONS:
 - Arab African Cultural Relations
 - Arab African Self Reliance
 - Balance Between Social & Resources Development Complimentarity of Oil to Non-Oil Countries

 - The Cancun Conference
 - Agriculture Problem, i.e. Food Problems
 - The "New International Economic Order"

SPEAKERS:

9:30-10:00 -	Dr. Omar Basheer
10:00-10:30	Dr. Jeff Nuegent
10:30-10:45	Coffee Break
10:45-12:15	Discussion Session
12:15-12:45	Dr. Ahmad Yousef
12:45-13:30	Discussion Session

MONDAY 13/9/1982

SUBJECT:

- 3. USA & SOVIET INTERACTION PAST, PRESENT & FUTURE
 - Strategic Alliances |
 - Competition
 - Crisis Issues
 - Arab & African Perceptions of the Superpowers

SPEAKERS:

9:30-10:00	Dr. Radwan Al-Abdullah
10:00-10:30	Dr. John Burton
10:30-10:45	Coffee Break
10:45-12:15	Discussion Session
12:15-12:45	Dr. Nequessey Aycle
12:45-13:30	Discussion Session

TUESDAY 14/9/1982

SUBJECT:

9:30-10:00

- 4. FUTURISTIC OUTLOOK
 - Scenarios & Simulation
 - Strategies for Collective Action
 - Structure of Conflict
 - Implications of Trends for Stability & Development for The Region

SPEAKERS:

10:00-10:30 10:30-10:45	Dr. Saad Al-Din Ibrahim Coffee Break
10:45-13:30	Discussion & Question-Answer Session
	This session will aim at touching upon under standing issues and ideas that have not been

Dr. Warren Phillips

This session will aim at touching upon understanding issues and ideas that have not been covered during the previous days and will explain implications of the Seminar findings on Jordan

^{***}Afternoon Sessions will be held when necessary.

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صندوق البريد: ٦٩٤٥

عمان -- الأردن

تلک ۲۱۲۷۹



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المزكز ألازدني للدراسات والمعلومات

صندوق البريد: 1980 عمان - الأردن الفون: ١ - 1911 تلكس: 1977

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Afro-Arab relations in the Red Sea area

by Roberto Aliboni, I.A.I. (International Affairs Institute, Rome)

1. Different Afro-Arab approaches

Afro-Arab relations date back to the end of the 1950s, when the first African groupings - the Monrovia and Casablanca groups - were approaching decolonization and independence problems on an African-wide scale. Owing to their active participation in the Pan-African movement and their involvement, to varying degrees, in the rise of Arab nationalism, the North African countries developed a sort of double identity. To the extent that both Pan-Arabism and Pan-Africanism were understood as components of the wider movement for decolonization and non-alignment, that double identity raised no questions. This compatibility between the two movements emerged very clearly from the Addis Ababa inaugural Organization of African Unity meeting of May 1963. The continental particularism which was part of the Pan-African ideology led some Black African delegates to call for the withdrawal of the North African countries from the League of Arab States. The Arab delegates, particularly Egypt's, in their capacity as representatives of non-aligned countries, pointed out successfully that Arabism was a form of micro Afro-Asianism, i.e. a component of the wider decolonization movement of the non-aligned countries (1). As time has elapsed, both Pan-Africanism and Pan-Arabism have lost momentum. As a consequence, the common cause which was supposed to unite the two movements, though it did not disappear, has grown weaker. Pan-Arabism has proved most assertive.

In its efforts to assert itself, the Pan-Arabism has called into question two cardinal rules of the Pan-African game: the inviolability of boundaries and non-interference. Indeed, one cannot help but note how Pan-Arab assertiveness has been accomplished by a widespread erosion of OAU principles. Tanzania's intervention in Uganda has been widely resented in Africa as a breaking of the non-interference rule. The recognition of the Sahrawi Republic has, likewise, been a heavy blow to the OAU. But it should be noted that adherence to OAU principles has at the same time been made difficult by certain African regimes' disregard for domestic autonomy and elementary human and civil rights requirements.

Though the Black African countries are not without blame, it remains true that Arab policies have shown an attitude in favour of exploiting African countries in the context of inter-Arab, bilateral and anti-Zionist issues. True, the case for anti-Zionist involvement may be different. By the beginning of the 1970s the Arab OAU member began a new policy in an attempt to convince the other African countries to support the Palestinian cause. This is the way Nabeya Asfahani has reported this policy: "1) The identification of Jewish colonies in occupied Arab territory with white colonies in Rhodesia and South Africa.

- 2) The exposure of the common interests linking Israel to South Africa, the aim of the former being to perpetuate racist domination in the Arab world, that of the latter to do the same in Africa.
- 3) The building of a common Arab-African anti-imperialist front." (2) As is made clear by its third point, the policy has to be connected to the original non-aligned posture of the Afro-Arab relations. Nevertheless, the reason

one is led to speak of exploitation is due to the substantial Arab failure in offsetting the African support of the Palestinian cause with an adequate Arab support of Southern African black regimes and liberation movements. The expected support has been uneven and weak, for many Arab countries feel that the Southern Africans are too close to the international communist movement and worry about any communist influence on such a strategically sensitive area. In any case the African perception has turned out negative and the Arab diplomatic effort has in the end proved insufficient. As a consequence the policy has not evolved as a non-aligned, anticolonique move of wider significance, but has kept the character of one-sided, Arab anti-Zionist policy.

In the 1970s the oil-wealth has added , a new dimension to the Afro-Arab relations. Aid made suddenly possible by that wealth has been regarded as another Arab tool to exploit the African card in the Arab-Israeli conflict, reversing the Israeli influence. Although this is definitely a factor, the Arab-African aid relations seems more complex. Reviving Islam, strengthening moderate regimes, boosting progressive Lovernments and movements, enlarging future Arab outlets and consolidating/non-aligned, (some say anti-imperialist) movements in general, are all motives behind the Arab aid policies. While these motives continue to be at the basis of bilateral Arab aid policies, one should not fail to stress that thanks to the setting up of international bodies, as the Arab Bank for Economic Development in Africa (ABEDIA), the Arab Fund for Economic and Social Development (AFESD), the OPEC Fund for International Development (OFID), etc., Arabs have succeeded in implementing a set of true cooperative moves substantially devoid of any narrow political purpose. The Afro-Arab multilateral cooperation, despite many problems, can be considered as the latest offshoot of the early non-aligned posture.

Afro-Arab relations into two large categories: macro and micro Afro-Arab relations. Macro relations would indicate those relations which converge in non-aligned policies of global character, such as multilateral aid, OAU's support, balanced decolonisation postures, and any bilateral relation designed to strengthen the non-aligned movement and its unity. Micro relations would in turn indicate all Afro-Arab relations where the partner gets an instrument towards an end outside the strictly Afro-Arab context, such as aid designed to strengthen Islam or specific regimes, policies directed to either assert Arab predominance or destabilize rival

This paper intends to examine micro-Afro-Arab relations in the Red Sea area (with the exception of aid policies), as dictated by the following heteronomous factors: 1) Arab-Israeli conflict; 2) containment of Communism; 3) Pan-Arab assertiveness; 4) inter-Arab rivalries; 5) Nile Valley security.

2. Micro-Afro-Arab relations in the Red Sea

2.1. Arab-Israeli conflict. In the Arab-Israeli conflict both Arabs and Israelis have the aim of securing African support. In dealing with this problem Israel has emphasized its bilateral relations with the African countries, working out what we may call a micro-Afro-Israeli approach. Egypt, and then Algeria, have in turn relied on the commonalities offered by the Third World countries' multilateral organization. Egypt has particularly insisted on the necessity of

setting up specific Afro-Arab institutions connected to the vider non-aligned countries' network. It sticks to a macro-Arab approach. Libya, like Israel, has privile a bilateral (micro-Afro-Arab) approach in order to push forward its own political priorities.

In the Red Sea, with the exception of the exception who have/
the alternative approach, micro-Afro-Arab relations have
by far prevailed through the working of bilateral policies.
In looking at this area therefore we can assess how the
bilateral approach is working in securing African support
to either Israel or the Arab countries and how it affects
the viability of Afro-Arab relations. We will then be able
to compare bilateral and multilateral, micro and macro-Afro-Arab
approaches. Let us look at the sequence of events there.

Ethiopia, as the sole African country bordering the Red Sea basin, holds a special position. To Israel it was important for two reasons. The long-lived alliance with Ethiopia had both the aim of preventing the Arab attempts to preclude the Israelis from using the Red Sea and of securing the way inland to the various countries they kept in touch with (from 6 in 1960 to 32 in 1972) for political as well as for commercial reasons. After 1967 Israeli penetration in Africa acquires new strategic significance taking on also the purpose of supporting the Anyanya revolt in Southern Sudan in order to discredit the Arabs in the eyes of the Africans.

It is the situation of the Ethiopian-Sudanese border that varrants the Israelis to interfere. Formerly, the Ethiopians had supported the Southern Sudanese revolt, just as Sudan supported—the first Eritrean insurgence in 1965—66. In 1965 this mutual threat was eliminated thanks to an

agreement. However, because of Sudan's confirmed inability to settle its civil strife, the conflictual premises that were to be exploited by Israel were kept alive.

In 1971 the Emperor has again to cope with an even stronger Eritrean insurgence, and again Sudan supports it. To make Sudan withdraw, the Ethiopians are forced to stop \cdot Israel's support to the Anyanya revolt. Nevertheless, the overthrow of Milton Obote in January 1971 makes the Israelis believe they are going to get a fresh opportunity to interfere in Southern Sudan from Uganda. In fact, the Israelis were there since the first years of independence and Amin, the new Ugand n leader, was among their trainees. Particularly after the intense border tension of July-October 1970, Obote had scaled off the frontier and had even prevented the Southern Sudanese from using Uganda as a shelter. Amin, by contrast, having relatives in Southern Sudan, is expected to support them and then to allow the Israeli interference, One year later the Israelis would be expelled from Uganda. From our point of view it is interesting to seek to understand the reasons.

It is to the Libyan diplomacy that the most accepted interpretation (3) ascribes the break between Amin and Israel. Seeking arms and loans, Amin visits

Tripoli on February 13, 1972. By the end of February a Libyan delegation is in Kampala. The break is in March. A second interpretation involves Eudan. Mazrui reports that Amin was determined to expel the Israelis right from the beginning, but "could not get rid of them as long as the Sudanese civil war was still being fought, for he had relatives and allies among the Southern Sudanese Anyanya who the Israelis were aiding in their fight against the government

in Khartoum" (4). As ambiguous as this posture may appear, it was true that Ugandan objective involvement had triggered some Sudanese countermeasures (5): first, a force of Obote's fighters was deployed in Equatoria near the border; second, Obote was the guest of Nimeyri in Khartoum and kept in touch with his force. As a consequence between Sudan and Uganda a situation of mutual threat had grown, like that prevailing earlier between Sudan and Ethiopia. In both cases, however, the root of border conflicts was Southern civil strife.

The signing of the Addis Ababa Agreement (February 28, 1972, then ratified by Sudan on March 27) therefore removed the source of the Ugandan-Sudanese tensions. A few days after the Addis Ababa Agreement, the Israelis are expelled

from Uganda, and Obote's force is redeployed far away from the border and in June is dispatched by sea to Tanzania.

Because of Amin's personality, it would be difficult to ascertain whether he expelled the Israelis following the bilateral initiative of Libya or the fundamental Afro-Arab option taken by Sudan in granting substantial Southern autonomy as foreseen in the Addis Ababa Agreement. Irrespective of short term results involved in this question, it is plain that the approach followed by Nimeyri continues macro-Afro-Arab represent a milestone in Afro-Arab relations and the springboard for any enlarged Afro-Arab cooperative scheme. Though this major achievement is also among its major domestic difficulties, Sudan is a lively and inescapable blueprint for ... Afro-Arab relations. By contrast, Amin's era and its fall have associated Libya and its micro-Afro-Arab approach (6) to an experience of crossing external interferences - not to mention misrule and human eclipse - which by any OAU

standard is bound to be considered at least with suspicion by every African country. To conclude, were the Africans ever to extend a long-lived, reliable solidarity to the Arabs within the Arab-Isracli conflict, this solidarity would definitely be based on Sudanese rather than on Libyan-like policies.

2.2. Inter-Arab rivalries and Pan-Arab assertiveness

The clear Afro-Arab commitment of Sudan is anyway an acid test for the other Arab countries' commitment to the same purpose. For in dealing with Sudan, Arab countries are expected to shape and contain their PanArab and interate Endagonals in order to respect and support/Sudanese Afro-Arab option. Libya has consistently failed to stick to this posture. Quite to the contrary, it has constantly interfered with Sudanese domestic politics to assert Pan-Arabism over Southern Sudan autonomy. Furthermore, it has exploited its African connections and alliances against Sudan to acquire advantages in relation to its inter-Arab disputes. Here again, therefore, we discover micro-Afro-Arab policies with Libya as their main actor.

In order to clarify the point we must revert to Sudan's political evolution. Few months separate Libya's Nasserite revolution of September, 1969 from Sudan's. Among the first moves of revolutionary Libya there is Jallud's visit to Nimeyri to start unification of both Libya and Sudan with Egypt. The new leadership in Tripoli, furthermore deems Sudan essential to assert and project pan-Arabism towards Africa, i.e. to reject - as we saw - Israeli penetration, to support Islamic communities and Pan-Arab move-

ments, like the Eritrean Liberation Front (ELF), etc. Nimeyri's decision to participate in the formulation of the. Federation of Arab Republics seems bound to materialize Libya's expectations.

Within Sudan's leadership, however, there is dissent on the broad international goals to be pursued by the country. While the pan-Arab Nasserite officials look at Sudan integration into the Arab World, the Sudanese Communist Party (SCP) looks at Africa and plans to terminate the southern civil war in order to integrate the different Sudanese nations in one state by means of a social revolution meant to transform the entire country (7). Along with other factors, these opposite visions bring about the SCP attempt of July 1971 to overthrow Hineyri. Thanks also to Libya's decisive military intervention - along with Egypt - the attempt fails. In a typical Nimeyrian move, however, this success instead of resulting in the strengthening of Pan-Arab policies, turns out to be a radical change in the overall international posture of Sudan. Power is handed over to the Nationalists (8). They implement social and economic policies definitely different from those the SCP would have. Nevertheless, their priority is also to integrate the country according to its Afro-Arab nature. Consequently with the Addis Ababa Agreement of 1972 they put an end to the civil war. Then, the crisis turns out to be solved by removing the Communists from Sudanese politics but, at the same time, by taking over one of their main policies, namely the shift from the Pan-Arab to the Afro-Arab dimension.

As we have already noted, the birth of an Arab policy towards Africa alternative to Pan-Arab assertiveness was: of great significance for the Afro-Arab relations, for it have the macro-Afro-Arab approach a long-term momentum. This is not to say that it was to be accepted by every Arab country. Nimeyri's Afro-Arab move and his subsequent inter-Arab policy of joining Egypt and the moderate Arab group could not leave Libya's leadership indifferent. By hosting many opponents of Nimeyri and fostering tensions whenever possible between Sudan and its African neighbours, Libya starts then a policy of constant subversion against Sudan with the twofold aim of forcing a return by Sudan to Pan-Arab policies and a break with its Afro-Arab line, for one thing, and of fighting through Sudan the inter-Arab moderate coalition, for the other, giving in particular a thrust to Egypt's security.

In this sense, Libya's Chadian connection has been largely instrumental to its micro-Afro-Arab policies (and to the inter-Arab aim of threatening the Nile Valley security). As for the Red Sea area, however, it is Ethiopia which acts as a leverage for both Libya's Pan-Arab and inter-Arab assertiveness. Formerly committed to support the ELF on the ground of its Pan-Arab posture, after 1974 Libya gets gradually nearer to the new military Ethiopian leadeship as the inter-Arab environment is being changed by the moderate Egyptian-Saudi leadership. In the very serious coup d'état attempted in July 1976 by the National Front of Sadiq al Mahdi and Sharif el Hindi (i.e. the Pan-Arab and sectarian wing of/Sudanese political spectrum)

Libya and Ethiopia turn out to be heavily involved. Never dismantled, Ansar camps settled in Ethiopia since 1970 have kept on training Mahadi's fighters. The coup attempt is manned by them and armed by the Libyans.

To understand Ethiopian involvement one has to recall that, while the rise to power of the radical Dergue military did anyway worry the moderate Arabs, its failure to settle with the Eritreans - particularly after Lt. General Andom, willing to try, was killed - revived Eritrean strife and consequently Pan-Arab assertiveness. Neighbouring Eritrea, Sudan could not help channelling Arab pressures. To get rid of them and keep its Afro-Arab line, Nimeyri tried desperately to favour an understanding between the Eritreans and the Dergue. He did not succeed in this and was forced to become the spearhead of Arab Interference in the Eritream conflict. As a result the Dergue could not help considering Sudan as an important member of the hostile front set up by the Arab countries against Ethiopia. For this reason they did not hesitate to join the Libyan subversion againt Nimeyri. What the Ethiopians expected from the coup was a Sudanese government subservient to Libya, then opposed to the moderate Arab countries and unwilling to lend itself to their subversion over Eritrea.

If x yielded to the Pan-Arab pressures (and anticommunist feelings and fears) of the moderate Arab countries it would be obliged to side with Eritrea and thus deviate from its Afro-Arab stance. On the other hand, alignment

with Libya would allow Sudan to withstand the moderate countries' pan-Arab pressures and then to save its Afro-Arab policy by withdrawing support to Eritrea. At the same time, however, though the alliance with Libya might have countered Pan-Arab assertiveness towards Ethiopia it might at the same time invite that assertiveness within the Sudanese political scene. After the coup attempt failed, Nimeyri mastered the situation as usual by taking over his adversaries' policy. The authors of the coup attempt were allowed to re-enter Sudanese politics through the National reconciliation policy. Excellent from a tactical point of view, this second sharp adaptation of the Sudanese balance of power was not to deliver the country the same stability that the first one had. Also because of the uncertain evolution of the National reconciliation policy, one cannot say that Nimeyri has played down his inter-Arab and Afro-Arab postures as a consequence of that policy. He continues to stick to them, but, since at the same time he cannot escape either domestic Pan-Arab and sectorian demands or Libyan pressures, the Sudanese politics has grown more and more uneffective, unmanageable and weak. Eeyond the agonizing effect on economic developments, one . tends to believe that Libya's micro-Afro-Arab policies, though unable to displace the great macro-Afro-Arab approach Sudan worked out with the Addis Ababa agreement, may have nevertheless undermined its immediacy and effectiveness. Restoring Sudan's strength and freedom against Libya's influence should be, besides other goals, an important aim of the overall Arab policy towards the African countries.

2.3. Pan-Arab assertiveness and containment of Communism

The Horn of Africa is a true ethnic and religious mosaic (9). To this mosaic two forces, namely the Ethiopian Empire and colonialism, have imposed varying degrees of political unity either cutting accross or putting together different peoples and traditions. After the war, as soon as Ethiopian sovereignity was restored and the other regional countries acquired independence within the borders left by colonialism, the pattern which emerged was one of the most delicate in Africa. The most sensitive issues were Eritrea, where a mostly Muslim nationalism grew, and the three "points" of the Somali flag's star which correspond to areas considered by Mogadishu as irredented, namely Ogađen, Djibouti and the Morthern District of Kenya (10). * In this situation Pan-Arab assertiveness in Eritrea and Arab sponsorship of the sweeping Somali irredentism were bound to act inevitably as factors of serious disruption and continued disturbance to the OAU's principles of boundaries inviolability and non-interference. While Kenya's Northern District dispute has a most local character, Eritrea and Ogaden are involved in international conflicts. Djibouti, seated on a volative balance, may follow Leaving aside the minor cases of Northern Kenya and Djibouti, let us consider Eritrea and Ogaden.

In the aftermath of the Second World War, the case for Eritrean independence was firstly sponsored, particularly by Pakistan, on the basis of the mostly Muslim character of the country. The prevalent Muslim liberation movement born at the beginning of the 1960s was an offshoot of Pan-Arab nationalism, permeated by both nasserite and baathi influences. Initial support extended by Egypt was soon

withdrawn because of the wider PanAfrican understanding between Masser and Haile Selassie (11). Furthermore, there is a fundamental Egyptian interest, within its overall vision of the Mile Valley security and stability; for Ethiopia to keep its integrity. The bulk of support came then from both Iraq and Syria, with more or less uneven contributions from South Yemen, Libya and Saudi Arabia. As a matter of fact, Pan-Arab support has been at all times affected by inter-Arab and east-west alignments. Support to different factions within the Eritrean movement happens often to be an aspect of inter-baathi struggle between Iraq and Syrla. Hore undertaking in its inter-Arab manoeuvering, Libya gave uplits support to the Britreans as soon as it decided to ally with Ethiopia and South Yemen to oppose * the moderate Arab countries. On the other hand, its growing alignment with the Soviet Union and Ethiopia also led Aden to drop the Eritreans (to the point of sending combat troops to help Ethiopia to withstand their offensive at the end of 1977). By contrast support has been extended by Saudi Arabia just to counteract the growing communist presence in the Red Sea area. Limited and uneven because of the radical nature of Eritrean nationalism, Saudi support has anyway sought to strengthen the PanArab Eritrean wing (the ELF and, in particular, Osman Saleh Sabba's groups) against the markist Eritrean Popular Liberation Front (EPLF).

Besides the already noted posture of Egypt, the other Arab country conducting a non-PanArab Eritrean policy is Sudan. As we pointed out in the provious section, Sudan's basic posture towards the Eritrean question, following the 1972 Addis Ababa Agreement, is that the way to solve it would be to give Eritrea a federal-like autonomy within

a united Ethiopia as was done with Southern Sudan. Pan-Arab and inter-Arab pressures force ups and downs in Sudan's posture. Nevertheless, Sudan's attitude has not been fundamentally altered so far. Egypto-Sudanese posture represents here macro-Afro-Arab policies against micro-policies set in motion by other Arab countries. Despite the efforts deployed by the Arabs in extending aid and in supporting forms of political understanding within the Afro-Arab multilateral network, the African perception is inevitably affected by the grave and constant upsetting of OAU principles resulting from Pan-Arab/ in the Horn. Though sometimes afraid of Ethiopian Soviet and Cuban links, most of the African countries have very firmly backed Addis Ababa's claims over Eritrea. On the other hand, enfeebled by the interference of inter-Arab disputes and by the uneveness and unreliability of Arab · support, in the recent years the Pan-Arab wing of the Eritrean movement has seriously dwingled to the advantage of the Harxist EPLF. In the new environment, macro-Afro-Arab policies towards Addis Ababa's regime should be revived to help make the Ethiopians less dependent on the Soviets. With a proper Afro-Arab mediation, a less Soviet dependent Ethiopia might be able to reach an understanding with a less Pan-Arab affected Eritrea. This would be - by the way - a turning point for the stability of the region.

Along with Pan-Arabism, East-West preoccupations and alignments have been a further factor leading to micro-Afro-Arab policies in the Red Sea area. As a matter of fact, East-West factors interference into Third World politics is not to be blamed on either the Red Sea region or the Arab countries alone, for it is a basic feature of the contem-

porary international system. Sticking to our point, however, one must recall that Arab policies designed to counter the Soviet presence in The Horn by exploiting Pan-Arab assertiveness in Eritrea and Somalia have here again turned out to be as many blows to the African doctrine of continental stability. Consequently they have added to the negative effects perpetrate by other micro-Afro-Arab approaches. To stress the point oa brief reference to the Ogaden war is in order.

The Ogaden war broke out following a complex combination of international and domestic factors. Misperception by the Somali and Arab leadership of the East-West relevance assigned by Washington to the conflict coupled with American leadership vagaries and the wrong signals it sent to Modadish are all definitely responsible for the final decision to wage the war (12). Hevertheless there is no doubt about the role played by constant Saudi policies designed to dispel marxist influence and Soviet presence from The Horn. The scientific socialism adopted by the revolutionary Somuli leadership of Slad Barre was bound to commit the country to its own social and economic development an urgent necessity indeed - and to de-emphasize its irredentism. Saudi Arabia has consistently supported nationalist and irredentist forces within Somalia and even its leadership to avert Somalis from their socialism and the Soviets. The changing balance between Somali socialism and nationalism was at the root of the Soviet shift of alliances in The Horn and then of the war. On the other hand, the war can be considered as the last event of a long diplomatic chain orchestrated by the Saudis for the sake of their own security and supported by Sadat with the aim of leading a NATO-like, pro-Western Arab coalltion to show the West the Arabs' capability of policing the area against the

Soviets. The Egypto-Sudanese defence pact of July 1974, the meeting in July 1976 between Sadat, Nimeyri and King Khaled in Djeddah - where "Red Sea politics" was discussed - and the March 1977 conference in Taizz on the "Arab lake" between Saudi Arabia, Egypt, North and South Yemen, Sudan and Somalia, were the main steps of this East-West policy. The weakening of the Somali socialist leadership, pursued

so stubbornly by the Saudis, allowed all these factors and aspirations to converge and materialize in an attack on Ethiopia by the Ogadeni movements first and by the regular Somali forces later. It was no accident that Eritreans were made simultaneously able to sustain their worst offensive ever. For months Asmara was cut off from the rest of the country.

We have already noted the decline of the Pan-Arab Eritrean wing following the Arab coalition's defeat against the Soviet and Cuban -backed Ethiopian forces. There is no need to recall how rulnous the conflict proved to be for Somalia. It is worth pointing out just how rainous the consequences of this twofold threat to Ethiopia's integrity have been to the Afro-Arab relations as well. After the War Sonalla has kept its alliance with the West and the moderate Arab countries. American support is deliberately defensive only, in order to prevent any new adventure. Egypt and Sudan which along the West support Somalia with still the alm of containing the Soviets should be careful to avoid . any temptation to exploit Somali irredentism to that purpose. Quite on the contrary they should try to reassure Ethiopia and mediate the Eritrean issue on the basis of macro-Afro-Arab policies. Given the Afro-Arab record of both countries prospects may be fine.

2.4. Nile Valley Security

Nile Valley security is an old Egyptian geopolitical doctrine. From one objective point of view it is an important aspect of both Egypt's and Sudan's overall security perceptions.

The Nile Valley is a natural two-way road between Egypt and the African inland. To the Egyptian social and economic life the Nile has a basic, almost symbolic meaning. The significance of the Nile especially to Egypt requires that all severances along the Valley must be prevented and eliminated. For this reason any threat to Sudan is considered an indirect threat to Egypt. Libya, as we pointed out previously, has consciously attempted at Egyptian security by seeking Sudan's destabilization.

Con the other hand, an Afro-Arab dimension of this Egyptian security posture is given by the fact that the Nile's sources are located in Uganda and Ethiopia, even though some important tributaries spring from Southwestern Sudan's hills. As we hinted at when speaking of the Egypto-Ethiopian relations, there is then a long-term Egyptian interest in Ethiopia's and Uganda's stability and in the peaceful relations with both countries. At the same time (as after the tensions at the end of 1977) any management of Elue Nile waters by the Ethiopians is not to leave Cairo indifferent. Libya is certainly aware that its Ethiopian alliance in the eyes of the Egyptians includes, among other threats, also that one.

The 1974 Egyptian-Sudanese pact of defence, confirmed in July 1976, is geared to meet, whenever needed, Nile Valley security requirements. As is evident, however, peaceful and stable Afro-Arab relations are/essential to that security policy. It is for this reason that, with few ex-

ceptions, - in particular that of the anti-Ethiopian Arab coalition of 1977-78 - Egypt and Sudan keep on supporting macro-Afro-Arab policies. For the same reason any Arab attempt - in particular Libya's - to endanger Nile Valley security is, conversely, to be considered basically as a micro-Afro Arab policy.

3. Conclusions

This paper has sought to give some evidence of how harmful micro-Afro-Arab policies may be to Afro-Arab relations. Provided such a conclusion is correct, one may wonder how important Afro-Arab relations are. Clearly, this is a question only Arabs—answer setting their own priorities. Pan-Arab assertiveness, anti-Zionist struggle, inter-Arab disputes and communism containment may well be set as priorities of single Arab countries and inter-Arab groupings. In this case micro-Afro-Arab policies will be conscious trade-offs, so that any damage to Afro-Arab relations will be offset by rewards on other grounds.

The personal view of this writer, however, is that macro Afro-Arab policies and the viable Afro-Arab relations they are supposed to set in motion are an essential prerequisite of most of the goals included in PanArab, anti-Zionist and inter-Arab policies. For in the end the assertion of the Arab world is bound to a wider process of strengthening the Third World and changing the whole pattern of international relations.

Aliboni-JCIS NOTES/1

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The Middle East between Russia and America

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The Middle East Between Russia and America

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Local conflicts and tensions among States in the Middle East hold our attention because of their overt nature. Less conspicuous, but a conditioning part of Middle Eastern relationships, is the continuing rivalry between the two major thermo-muclear Powers. While Western Europe could be the platform of East-West conflict, problems within the Middle East could be the trigger of such conflict.

1. The Contemporary World Situation

It is far from certain that East-West tension and conflict is, as popularly thought, a function of ideological differences. It could be that the significant source of tension among great Powers may be their greatness and, in particular, their relative stages of growth to greatness. All great Powers are or have been expansionist — expansion is a necessary prerequisite to greatness. Industrial, trade, communication and diplomatic expansion are inevitable features of growth. Rome, the United Kingdom, the United States and the Soviet Union have gone through stages of growth that alter the relative pecking order in international relations. China will also. It is not difficult to hypothesize a systemic process. Changes in technologies, environmental conditions and political and economic structures, lead to uneven rates of development giving opportunities to lesser Powers to catch up to greater Powers in industrial output and political influences. To begin with there is a struggle for parity so

that there can be equal participation and an absence of domination. This struggle, for many reasons that are both psychological and systemic, becomes a struggle for superiority. There seems to be no decision-making process by which a halt can be called. In growth in industry and in social and political organizations, there is ample evidence that capabilities are exploited to the full, despite possible reactions and consequences.

At the international level a sphere of influence acquired by a developing State needs to be protected by extensions beyond the boundaries of this sphere. If there is the capability it will be so protected. Then these extensions require protection, until there are 'foreign bases' scattered far from the national boundaries. This expansion process, like all expansion processes, has inbuilt limits. Each extension is more costly than the last. There is the factor of distance; but more important in the modern world, there is the factor of political resistance in the penetrated regions. Once a State goes beyond what are regarded by world opinion as 'legitimate' security needs, political resistances are generated. In due course, it seems, competition between resources needed for expansion armed forces, subsidies and foreign expenditures - and resources needed for the satisfaction of consumer expectations, gives rise to domestic resistances that can be suppressed only in the short term. Finally contractions take place in the foreign field under such foreign and domestic pressures. The United Kingdom seems to have gone through such a process. This seems to have been the experience of the United States: post-war expansionism, Vietnam, domestic unrest and pressures for contraction. Are there some systemic processes, which relate to growth, at work in international relations which have very little to do with types of political systems and policies?

Whether such processes operate or not, it is clear that States, advancing in greatness, use their influence to alter the international system and to adapt it to their interests, while relatively declining Powers seek to retain existing structures, spheres of interest and linkages. As a consequence, there are and always must be at any one time, 'revolutionary' and 'status quo' powers. Are East and West, the Soviet Union and China, accusing each other of essentially the same behaviour — the behaviour of great Powers, the behaviour to be expected of States becoming powerful at relatively different rates, the behaviour associated with different stages of influence?

As part of this power politics struggle there are, especially in our present post-imperial world, local struggles engaged by great Powers in the promotion of their spheres of influence: Vietnam, Laos, Cambodia, Cuba, Angola, Ethiopia, Afghanistan, Philippines, Salvador - to mention only a few. In the post-imperial world, in which there are many newly independent States, there are necessarily many internal 'liberation' movements and attempts to change from oppressive, sometimes corrupt, regimes to ones that are legitimized. Left to themselves these liberation movements would bring about change gradually, with a minimum of local violence. While both Powers could probably accept political change by indigenous processes, for strategic reasons each must oppose liberation movements that have the support of the other. The result is that both Powers support liberation movements in the spheres of the other, and both defend regimes in their own sphere that could not survive without external support. The levels of violence associated with change are high as a consequence. Each side in this power struggle perceives the behaviour of the other, not as the logical and inevitable consequence of their own systemic power struggle, but as intended threat to the other.

In this fear-promoting rivalry, the Soviet-Union is in a strategically disadvantaged position by reason of the unbalanced spheres of interest that existed before it became a major Power. The U.S.A. has virtually the whole globe outside the Soviet Union and its immediate neighbours, as its sphere of influence and location for bases. The Soviet Union senses threat by political intervention within its own immediate region, especially where there is internal unrest, in addition to the more general nuclear threat both share.

A straight forward competition for allegiance and spheres could be manageable. However, whether they support one type of regime or another, both sides have found that they lose control over their client States once they give support. The U.S.A. pressed the Saigon Government to modify its policies and widen its support; but Saigon knew that it was strategically important to the U.S.A. and did not have to prejudice its authoritarian position. In Afghanistan, where political stability was important to the Soviet Union in view of events in Iran, the Soviet sponsored regime was deaf to pleas for policies that would broaden the political base. Several governments currently are in-flexible in their domestic and foreign policies knowing that one or other great Power is finally committed to them. Thus, the major power rivalry has its consequences throughout world society, creating increasing instability and situations that cause serious tensions, crises and wars. The major Powers cannot control the consequences of their power rivalries.

As observed above, imperialisms appear to crumble once they over-extend their spheres of interest, once costs escalate to the point at which the 'middle class' suffer and the internal infra-structures are weakened. Both the U.S.A. and the Soviet Union are feeling these effects of their imperialisms. In addition both political systems have their own sources of

internal dissent and disintegration. However, in a bi-lateral power struggle the result is not a progressive withdrawal on the British model. These internal consequences are readily blamed on the other side, and, faced with internal defeat and, therefore, with nothing to lose, one side or the other is likely to try to solve its internal problems by promoting the perception of external threats and by the consequential external interventions.

In sum, the world situation is currently one in which both major Powers are locked into a confrontation which is not under their control. There are processes operating that are dysfunctional to both that are inherent in the power policies which both pursue. Neither can give way in their escalating deterrent strategies and in their rivalries.

2. The Fallacy of Deterrent Strategies

The contemporary thermo-nuclear rivalry, which is the symptom of this systemic process, is even more serious and more threatening than is supposed. The reason is that there are two misconceptions in policy, one relating to deterrence and the other to negotiation.

Deterrence strategies, which are the main means by which major Powers endeavour to control their power rivalries, have been shown by past wars not to be an effective instrument. Indeed, they probably have built into them processes of escalation that render them self defeating. The reasons why they fail are now becoming clearer.

Threat of punishment, threat of costs greater than satisfactions to be gained, has an influence on the decisions of individuals and groups. The rules of the road, parking rules, are obeyed in many cases because of threat. Often a deliberate costing is undergone; sometimes there is a calculated preference for a fine that is less costly than the gains to be made from

defiance of the law in particular circumstances. It might be that some orimes are deterred by deterrents more costly than any gains, subject to calculations as to risks of being caught and the level of punishment. For the most part crime is not deterred. Societies are as harmonious as they are, not because of threats and deterrents. Coercion is not the explanation of social order.

At first thought the assumption that deterrence deters is one that is axiomatic. Its validity is fundamental to our notions of social organization and law and order. When in practice deterrence fails it must be argued, on the basis of this view, that this is merely because the amount of deterrence and coercion and of risk of detection are less than required or that some different form of deterrence and detection is needed. No other explanation of the failure of coercion to contain deviance is possible within the framework of conventional wisdom: to recognize the failure of deterrence as a control instrument would jeopardize a whole set of conventional notions involving rights, obligations, morality, values, the socialization process and the justice of institutions and legal processes.

The assumption that deterrence deters is clearly articulated at the strategic level. National defence strategy is merely a special case of the belief that adequate negative sanctions prevent the 'rational' decision—maker being 'aggressive'. NATO officials argue that if it had not been for NATO there would have been aggression in Europe from the East. Warsaw Pact officials probably use a similar argument. 'How do you know' is regarded as an irrelevant or unnecessary question. In practice there cannot be an answer because there cannot be a test.

In the pre-nuclear age the empirical evidence was clearly that strategic balances and military threats did not deter 'aggression'. There is no evidence that the nuclear threat is any more of a deterrent than was the

mighty power of the United States against Japan when the latter bombed

Pearl Harbour. The failure of capital punishment as a deterrent to those
engaged in organized fighting and killing in a communal conflict would suggest
that 'rational behaviour' includes in some circumstances the acceptance of
the risk of paying the highest possible price — which means that there is
no deterrent. On these purely formal and logical grounds the assumption
needs to be questioned whether deterrence is, in any but the most trivial
circumstances, an effective control mechanism.

The effective control of behaviour is not coercion or threat to observe legal norms, but a value attached to relationships which would be threatened by antisocial (legal or non-legal) behaviour. It follows that if circumstances occur which deny to the individual or group in any area of its behaviour the opportunity to interact, there are decreased incentives to conform. It may be that threat and deterrence are subject to limited boundaries of effectiveness, being relevant only in relation to the daily rules of social relationships that rest on mutual convenience, such as rules of the road. The degree of social harmony that societies do experience may be due mostly to different influences, such as values attached to transactional relationships. If this were to be the case, quite fundamental changes would be required in policies designed to promote harmonious social relationships.

This reasoning is applicable to the inter-State level. In a great

Power rivalry the tendency is to isolate, to withhold recognition, to

resist parity, to withhold technology and needed supplies as threat or

punishment. As was the case with Japan, ultimately there is nothing to be

gained and everything to be lost by observing the norms of international

society if these constraints threaten important national interests. The

ending of 'détente' undermines any influences imposed by deterrent

strategies. If the Soviet Union or the United States are seen to be

experiencing internal problems that take time to resolve, or problems in their spheres of interest, this requires co-operative and not threatening responses, if power rivalries are not to lead to war.

3. The Fallacy of Negotiation

A study group was set up in 1963 by the David Davies Memorial Institute for International Studies to examine the peaceful settlement of international disputes. They argued that there was nothing fundamentally inadequate in judicial procedures; the problem was a lack of willingness on the part of States to submit to voluntary or compulsory third-party determinations. This begs the main question: if States are unwilling to adopt judicial and formal procedures that take decision-making away from them, then these procedures are irrelevant to the circumstances. It is of no avail to bemoan the condition of world society and blame States for the lac!, of success of some techniques. The intellectual difficulties experienced in considering traditional means of peaceful settlement of disputes cannot be overcome by impressing upon States their moral obligation to fall in with behavioural patterns suggested by intellectuals and idealists. The reality is that both judicial procedures and the less formal processes of mediation or third-party interventions deny to responsible authorities their final freedom of decision.

Techniques for the resolution of conflict need to reflect the felt needs of all those concerned. Procedures that postulate conflict as a zero-sum game in which the gain of one party is the loss of the other, cannot lead to a decision that satisfies all parties. Judicial processes are of this kind. Aribtration and conciliation, and indeed even more informal procedures such as bilateral bargaining and negotiation, hold that bargains and compromises are desirable and possible, and that external pressures can

help to make them acceptable. The techniques fail because their objective is settlement by third-party decision-making, or by compromises that do not fully and equitably satisfy the needs and aspirations of all parties. Deterrence, not being a means of control, and traditional means of negotiation and conflict settlement being ineffective, what can be the basis of order?

4. Problem-Solving Approaches

This is a complex subject, not because the answer proves to be complex, but because of the traditions and assumptions that have to be brushed aside before the obvious answer is internalised. For example, we assume that conflict is zero sum - that there must be winners and losers. Underlying this assumption is another, that conflict arises over disputes about finite resources. This is our conventional wisdom. It is certainly how parties to a dispute view their conflicts. In practice the assumptions appear not to be justified.

Empirically, conflicts involve many values and costs. Hierarchies of values alter according to circumstances and knowledge, making conflicts subjective in character. Pay-offs and trade-offs, alter options. There are, also, problems of perception and interpretation of the behaviour and motivations of others, adding to the subjectivity of conflict. Furthermore, goals are usually ill-defined in that tactics and goals become mixed. A piece of territory may be important as a strategic tactic in the seeking of military security; but real security might be unattainable by these means and attainable by other means. Furthermore, conflict between nations is typically not over material goods in short supply. It is in relation to goods that increase with consumption: the more security one side experiences, the more others experience. It is the denial of identity, recognition and participation that lead to conflicts and these are not in short supply.

However, the process of transforming a conflict perceived as zero—sum into one that is seen to have positive sum outcomes cannot be the conventional bargaining one. Institutionalised means are required to enable States to reperceive and to obtain information about the motivations and goals of each other. States are not in themselves a cause of conflict; they respond to their environment within the limits of the knowledge they have available about their interests and the responses of others. Given perfect knowledge of responses of others, or tested theories and rules of conduct that could act as a substitute for perfect foresight, States would avoid any conflicts that were more costly than alternative means of achieving their goals.

The traditional arbitrator or mediator makes orders or proposals and believes he is applying principles of justice and reasonableness. Whenever important interests are at stake he fails to bring agreement between parties concerned. Courts make judgments which purport to apply principles; but only after argument and disagreement as to what the principles are and how they should be applied. There is no certainty and, in any event, the decisions may be legal ones that do not reflect the motivations and interests of the persons concerned, resulting in out—comes that are not regarded by them as just or appropriate.

This is not to suggest that a third-party has no role. There are two types of third party. One is the court or mediator with power to arbitrate or to propose. The other is the zero-power facilitator whose role is confined to assisting parties to disputes in analysing their relationships. The professionalism includes an ability to articulate and to translate into terms that are relevant to a particular situation, the principles on which decision-making in behavioural relationships must take place; and, second, to ensure that all the actors concerned are involved and that their involvement is a problem-solving one and not one of confrontation, competition, bargaining or power.

This third party behaviour is the facilitating of decision-making by injecting knowledge into the communication between actors; it is the application of problem-solving techniques to decisions made by actors; it is the means by which is made possible the total involvement in the making of decisions of all those subject to decisions.

If this analysis is valid, there is a call for an organization not unlike the Red Cross, that is a non-governmental and impartial institution which is legitimized by its performance and is readily available to apply its experience and expertise in the resolving of problems, internal or international, as they emerge.

5. The Role of Independent Middle Powers

It is almost certain that such positive approaches to our major international problems are politically and technically impossible in the absence of some middle Power initiatives. We should consider seriously whether States such as Britain, France, Germany and other 'middle Powers' in other regions, such as the Middle East, could make a positive contribution to East-West and North-South relations by moving toward foreign and strategic policies of greater independence.

There are negative reasons for a policy of independence and unilateral actions, in particular to avoid being used by other Powers in their power struggles and to keep out of their conflicts. There are also positive reasons. Sweden has frequently implied that its neutralism is a positive one in the sense that it is in a position to suggest and to assist politically and to contribute to peace keeping. Switzerland's neutrality enables an organization, the Red Cross, to operate with more credibility than would be the case were it not based on neutral soil. The non-aligned States initially argued that their status would enable them to make policy judgments freely,

in favour of or in opposition to the policies of great Powers, according to the merits of each case. It was, in their view, an 'active neutralism'.

Both the negative and positive aspects of the neutralism of each country reflect both the interests and the history of the foreign policies of the States concerned. Neutralism in international affairs was the policy of the Indian Congress Party many years before India was independent. The policies of Sweden, Finland, Austria, Switzerland developed out of their geographic positions and relationships with other States. The non-aligned States were predisposed in this direction on attaining independence. Neutrality and neutralism, where they exist, are extensions of policies of States, not something alien or out of character and merely an ideological commitment on the part of a temporary ruling party.

If 'middle powers' were to be independent of alliances it would be because, and only because, this was a logical development of their policies in the altering context of world affairs. Each would adopt its own particular form of neutralism. Each would play its own distinctive role. Its independence would, inevitably, be a continuation of its past policies, reflecting past and present interests, relationships and values. It would not be a neutrality of the Austrian type, that is a defensive neutrality bordering on isolation or the cautious neutrality of Finland. It would be an approach to world affairs calculated to further these relationships in its own interests and in their interests. To the extent that it were a marked change in policy or a seeming discontinuity, it would be a change in tactics rather than purposes. It would be an approach calculated to strengthen weakened relationships, trading relationships generally and to take advantage of a long experience that each of the middle Powers have in world affairs, in the promotion of those conditions that appeared to be most in its interests.

If middle Powers were to become neutral for these reasons of interest, they would be obligated to go further than the positive neutralism of the

mon-aligned, further than merely being in a position to make judgments on the merits of cases. They would be obligated to intervene as a third party, to prevent and to help resolve disputes. As a great military power Britain, for example, had a power and a balancing role. As a less powerful State, yet one that still has widespread interests, its role must remain one that contributes to law and order and peaceful relations by techniques that do not rest on military power. So, also, with smaller Powers in their own regions.

This approach takes the debate out of the deterrents-unilateralist disarmament framework. The issue is not whether a middle Power should, in its own interests, opt out of alliances and independent deterrents. It is whether it can make a more effective contribution to its own security and to the security of the international community by itself enacting a third-party role for, alternatively, by providing the environment in which an appropriate non-official organization could enact such a role.

6. Conclusion

It has always been widely accepted in Western political thought that violence, including warfare, is, in the last resort, a legitimate means either of bringing about change or of preserving existing orders. Power balances and deterrence strategies have always been pursued to decrease the incidence of violence of war; but they have never been relied upon to prevent it.

The view that war is a legitimate instrument of last resort stems from the belief that relations between nations are determined, finally, by the palance nations make between their own interests and the relative power, economic and military, at their disposal. A small Power has limited means to pursue its interests, a great Power has a dominating position. However, two great Powers, each with an 'over-kill' capacity, present an unprecendented relationship. In theory there should be assured deterrence. In practice, if

the authorities in one feel so threatened either internally or externally that they have nothing to lose by the gamble of war, then consequences of war do not necessarily deter.

There is, consequently, a crisis in thought and in policy. A seemingly universal and rational philosophy and the policies based on it, appear to be dysfunctional. Where do we go from here?

Let us commence with the proposition that despite the logical consequences of a thermo-nuclear confrontation, no great Power will be diverted from its deterrence strategies. Let us assume that the disarmament approach is politically unrealistic: there will not be disarmament or even effective arms control measures at least until there is no felt need for arms.

If we accept this proposition then it is necessary to consider steps toward establishing peaceful relationships as an accompanying or parrallel approach. By this is not meant a competing or opposing approach. On the contrary this proposition implies that security and peace are not necessarily opposites, as is implied by those who attempt to make a frontal attack on arms strategies. This proposition implies that security and peace-making are both legitimate activites compatible, mutually supportive and, probably, necessarily inter-dependent. The two approaches can be perceived as being in tandom or on parallel tracks conveying governments toward the common goal of war avoidance.

This is a simple notion; but it needs to be spelled out a little because there has emerged a tradition of confrontation between the two approaches. It is as difficult for 'doves' to appreciate that 'hawks' no less seek peace, as it is for 'hawks' to realize that 'doves' are being no less realistic in their predictions of catastrophy. Furthermore, because it is governments that are responsible for strategic policies and because it is private people and organizations that are pressing for disarmament, government senses opposition and has to justify its stances and resist the 'doves'. The two tracks have

been perceived as going in opposite directions; there has been an adversary relationship. This effectively prevents government from pursuing the second track as an essential part of its power strategies. Not only is there an adversary relationship within States. The same opposing relationship is likely to develop within alliances as less powerful members perceive themselves as being the pawns or platforms to be used by one thermo-muclear Power in its contest with the opposing one. For these political reasons it is in the interests of government to be seen to proceed along the second track.

This second track has to be, therefore, not just an attack on strategic policies; but part of those policies, part of the activities of government working with those not in government who may have some contribution to make. This includes scientists that can explore options as Pugwash explored the possibilities of a test ban treaty, political and social scientists that can explore solutions to problems emerging within and between spheres of interest, and the media that can try to promote accurate communication and analysis of events.

A second track would seem to include a set of related activities that require a close working relationship between government and others. Four such activities seem relevant. One, a continuing means of communication between the main protagonists at an unofficial level so that there can be exploratory discussions in private, without commitment, on all matters that give rise to tensions between the major Powers — internal conditions, problems occurring in developing States, energy problems, SALT and others. Two, a semi— or non-official organization, which like the Red Cross in relation to disaster situations, can offer a problem-solving service in relation to conflicts within and between nations. Three, a training centre for people undertaking such work. Four, a research establishment that provides the back-up for problem-solving techniques in all these three areas.

Such a strategy almost certainly would require an initiative and an active role by nationals of one or more middle Powers so that dialogue between nationals of thermonuclear States can be mediated by others. In addition middle Powers may have an important strategic role to play by being independent, by denying to thermo-nuclear Powers in their interests, both bases and targets.

It is in this wider context that regional problems must be analysed. The commencing point is with the nations and communities directly concerned. They will not allow greater Powers to use them as strategic powers: they must determine their own fate. However, they must do this having in mind that their fate is not unrelated to the fate of thermo-nuclear Powers. In their own interests they must arrive at resolutions of conflict locally so as to prevent external interventions.

One contribution middle and smaller Powers can make to their own and to world security is to give support to the international institutionalisation of problem-solving processes and to use such institutionalised processes in the resolution of their disputes.

AFRO-ARAB COOPERATION

AN INSIGHT INTO SOME SELECTED ASPECTS: A Working Paper By: Dr. Labib Kamhawi

- PRELUDE:

Probing into the subject of Afro-Arab cooperation seems to suggest that both Arab and African states act in a regional manner. It only seems appropriate at this early stage of the seminar to determine whether Arab states and African states act and behave in a regional manner or not?

In other words do Arab states and African states conceive of themselves and act as two regional powers or not?

While it is contended by many that Arab states and African states conceive of themselves as two regional powers, yet, I propose to disagree with any statement which confirms that Arab states or African states act as regional powers.

On the other hand, I propose to confirm that both Arab states and African states have many things in common, which makes it logical for them to cooperate.

However, the Particular emphasis on countries surrounding the Red Sea, as requested in the tentative outline to this seminar, seems irrelevant to the main theme of this seminar. There are seven Arab states and one African non-Arab state (namely Ethiopia) surrounding the Red Sea. Accordingly, countries surrounding the Red Sea are not representative of Afro-Arab cooperation Moreover, this emphasis on countries surrounding the Red Sea seems to impose a discussion of the issue of Israel, which is, for the time being, the dominant power on the Red Sea. While it is important to discuss Israel, as well as South Africa, as two alien states with colonial nature and expansionist tendencies, nevertheless, such a discussion must be done within the general context of the main theme of this seminar, which is Afro-Arab cooperation.

- The Need for Cooperation: The common Bonds and Features

African and Arab states have, among other things, the following in common:-

- The struggle for independence, and, in most cases, the recently acquired statehood.
- 2. Underdevelopement and the aspiration for developement.
- Variable levels of richness in resources, and the struggle against international exploitation of such resources.
- 4. The existence of pre-colonial cultural, trade and religious links between the Arabs and the Africans.
- 5. The existence of alien and threatening civilizations with colonial nature and expansionist tendencies; i.e., South Africa and Israel.
- 6. The existence of supra-national framework for identification; i.e.,
 Pan-Africanism and Pan-Arabism.
- 7. Abscence of democracy and democratic institutions which also cover the persistance of the tribal tradition as the basis of the sociopolitical order.

In the remaining part of this paper, I propose to dwell on the last two common features shared by Africans and Arabs; namely, the existence of a regional form of identification, and the abscence of democracy and democratic institutions. The other common bonds will be treated through a set of questions which I propose for this seminar to discuss. Some recommendations will be given in the concluding paragraph.

Pan-Arabism and Pan-Africanism: Two Regional Umbrellas or One
Big Problem ?

Pan-Arabism and Pan-Africanism are two supra-national (regional) forms of indentification, that are generally accepted by Arabs and Africans respectively.

Through an analysis of this common feature, one can perhaps broadly determine the extent of the regional committment shared amongst Arab states, as well as African states, and between both of them as well.

The consensus on Pan-Arabism or Pan-Africanism finds its positive expression in issues that do not affect national interest and national sovereignty. It reflects, rather broadly, a symbolic gesture of unity, through institutions that do not represent, and are not meant to represent a general consensus on certain goals, policies and decisions which cut accross the national entities and allow for a certain degree of regional authority over national authority, even in such sectors as economic developement. In retrospect, such regional institutions often reflect a broad consensus on preserving the status-quo, and in some cases serve as an umbrella and as a means towards giving regional legitimacy for some of its illegitimate component regimes.

It is perhaps inaccurate to treat Pan-Africanism and Pan-Arabism on equal footing, since the first is more of a geographic supra-national identification and while the second is more of historical and futurist supra-national form of identification. It is, however, because of this very difference, that one can assume that Pan-Africanism stands a better chance of acceptance and endurance than Pan-Arabism which is very demanding by definition. This is due to the fact that in the case of Pan-Arabism, a strong regional committment might have a bearing on the national scene, thus, transforming regional identity into a force affecting local politics in the state or states concerned. After all, it is the one Arab state and one Arab people that is being advocated by Pan-Arabism. In retrospect, some Arab African states who share both regional identities, have tended, at certain times, to shift closer to their Pan-Africanism as a retreat from the pressures of Pan-Arabism.

The Abscence of Democracy: The Egg or the Chicken ?

Cooperation and alliances among states presumably reflect a certain degree of joint interest between the states concerned. Such interests could either be determined by the state itself, or could be imposed on it by, inter alia, political, economic or military developments which makes it logical for the states concerned to cooperate together, or to come into an alliance. In so doing, the regimes of those states concerned are assumed to be true representatives of the national interests of their respective states. In this respect, it is not our intention to go into theoretical assumptions and claim, though unmistakingly, that only democratically-elected regimes could claim this privilage of representing the national interests of their respective states. Military regimes and dictatorships will also be given the benefit of the doubt, especially that they are the rule and not the exception in many parts of the Arab World and Africa. However, a serious development has recently emerged whereby most of those regimes had openly used the state as a means to reflect the interests of the regime itself rather than those of the state. Such interests could be a certain ideology, mere surival, or even the whims of an ignorant or egoistic dictator.

The logic of stability in international and regional politics calls for gradual and smooth domestic political changes. Sudden changes have often lead to regional and, sometimes, international instability. But, how can this logic of stability prevail in an area where an abrupt change of a regime or a person-ruler leads to 180 degrees shift in state policy and its alliances as well. This situation seriously undermines the credibility of inter-state relations, regional cooperation and even international stability.

Thus, political alliances, cooperation and inter-state relations between and with most of the Arab and African states is not an arrangement between states, but rather between the regimes of the states concerned.

Accordingly, personal relations amongst rulers tend to affect relations between their respective states. If we combine this with the tribal tradition,

nen conflicts between and among Arab and African states are often conflicts etween regimes or dictators and not among the states they govern. While national interest and logical assessment often contradict with existing differences among the states of the region, they, nonetheless, persist. In line with his amazing logic, such differences disappear as suddenly and as abruptly as hey often appear. (a kiss or a hand-shake).

Since the issue of Afro-Arab cooperation can not be treated in isolation rom world politics and the influence of the super-powers, above situation is ound to have an immense impact on African and Arab states' international all-ances and relations. The credibility of Arab and African states' alliances ith other states and with the super powers is , thus, seriously undermined. bscence of democratic institutions in the area has contributed to making major olitical and military decisions the domain of one man, and at best a few. hus, continuity is inextricably linked to the continued existence of this or hat regime or this or that ruler. Hence, super powers support certain regimes nder the banner of maintaining stability in the area, while they actually ean maintaining continuity of a certain policy, irrespective of the fact wheher such policy represents the hopes and aspirations of the people of that tate or not.

One has to stop here and ask, which comes first, the egg or the chicken? uper powers complain that states in this part of the world (Africa and the rab states) are unreliable because they are unstable due to their lack of nstitutions and democratic tradition. At the same time, the same powers foster nd support dictatorships under the banner of maintaining stability and continity of a certain policy with no serious effort towards helping Africa and the rab states building their democratic institutions. Quite to the contrary, all ocal efforts in that direction were either resisted, hampered, foiled or crushed.

In retrospect, Soviet experience in Egypt after the death of Nasser could be a classic example. Alliance between and with African or Arab states were, therefore, never classified by super-powers as strategic, but rather, tactical This might explain, for example, the strength of American-Israeli alliance which is a strategic one due, in part, to the continuity it offers to the Americans, irrespective of who rules Israel. Finally, creating and promoting Afro-Arab cooperation through the establishment of regional organizations that would undertake joint developement programs in various areas might constitute a step in the right direction.

Afro-Arab Cooperation: - A Beautiful Dream Forgotten

The areas that Afro-Arab cooperation can cover are immense. It is not the intention to cover all those areas, but, rather, to explore those which are broadly related to the common bonds mentioned earlier. This exploration will be done through a set of questions which are open for discussion at any stage of this seminar. Following are the questions:-

- Did the investment of Arab oil producing countries in Africa match the suffering which most African states endured due to the huge increase in oil prices?
- How would you explain Afro-Arab failure in establishing a common Market; or, an Afro-Arab OPEC for marketing raw materials?
- Why did the Arabs and Africans fail in establishing specialized organizations for regional economic and industrial planning?
- Is there any concrete Afro-Arab cuttural cooperation ? What are the manifestations?

What did the Arabs do to help Africa in the economic and technological field after the departure of Israel from Africa in 1973 ?

Did the Arabs and Africans succeed in undertaking a joint scheme to exploit common resources, like water, which is bound to have immense impact on the politics of the area?

Do Arabs and Africans have joint institutes for higher education ? What did the Arabs do to help Africa in this area, especially that Arabs are believed to be ahead of Africa in the field of higher education ?

Is there an Afro-Arab genuine aspiration for cooperation ?

Finally, the establishment of specialized Afro-Arab regional organizations should put Afro-Arab cooperation on the right path.





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ARAB FUNDS IN AFRICA.

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ARAB FUNDS IN AFRICA. (*)(**)

PRELIMINARY REMARKS.

For many people in the west, the Arabs are "the new Cresus" of the world. This presumed "wealth" is giving rize to convenient temptation for the western countries, particularly those with a colonial past, "to discard their responsabilities regarding the Third World problems whilst they should in actual fact step up their activities and initiatives to assist developing nations".

In fact, the World Bank Atlas lists only 3 Arab countries with income per capita exceeding the 6.000 dollar mark: i.e. Kuwait (16.000 dollars), Libya (7.210 dollars) and Saudi Arabia (6.590 dollars). In the rest of the Arab World the figures vary from 270 dollars for Mauritania to 1.850 dollars for Iraq and go below 1.000 in six countries: Tunisia (990), Syria (960), Morocco (680) South Yemen (450), North Yemen (410) and Sudan (340).

In 1979, the combined GNB of 21 Arab countries represented less than 10% of that of the U.S.A. and is far inferior to that of a number of developed countries in the EEC, such as West Germany and France. Moreover the Arab region includes countries which rank as among the least advanced in the World.

Thus, we should consider the "economic power" of the Arab world with great caution. In figures, the combined GNP of the seven oil-producing Arab countries, very often qualified of being "abnormally rich", totaled 183.75 billion dollars in 1979. These seven countries account for between 70 to 75 % of the entire Arab world's GNP. But what is the real significance of these 183.75 billion dollars on the international economic scale ? 25% of the GNP of Germany, 34% of that of France, 50% of that of the United Kingdom, 8% of that of the United States, 16% of that of the Soviet Union or of Japan's and 127% of that of Holland. In other words, the supposed Arab "wealth" is only a little greater than that of a small country like Holland.

This preliminary remark was deemed necessary in order to place the <u>Arab Aid</u> in its correct setting. And yet, the Arabs aid effort in 1981 reached a total over 6 billion dollars or nearly 4% of

^(*) I am indebted to Mr Hamid Chabar, researcher in the Arab Study and Research Center of Louvain University, for preparing the graphics and compiling the statistical data.

^(**) This paper has been written without formal editing.

the GNP. This figure acquires relevance if we realize that the financing of aid programs out of the national income denotes a much greater sacrifice for the Arab countries than the industrial world.

As Anthony Sylvester puts it: "Arab aid, which is based on a depletable resource and thus represents loss of asset in real terms (is) distinct from western aid which derives from renewable wealth".(2)

I. A FRIEND IN NEED.(3)

Africa's worsening economic situation is particularly worrying: endemic problems of underdevelopment have been aggravated by recession in industrial countries, combined with price inflation. Demand for Africa's traditional exports has slackened at a time when prices have sharply increased for services and goods, including fuel, which african countries must import.

It is undeniable that the sharp rise in oil prices created further problems for african countries. The higher cost of fuel imports played certainly a part in the dramatic deterioration of African economies. But not the most important part, which remained that of the increased costs of importing manufactured goods from western countries and higher payments from African countries to the West in the form of investment income, especially interest payments on non-concessional loans.

GATT statistics demonstrate the relatively small importance of the higher fuel prices in the deficit of the non-oil producing Third World as a whole. In fact, most of the developing African countries only import relatively small ammounts of oil and its products. Except Ghana and Zambia, all other African countries imported oil worth less than \$100 million (in 1978-1979). None of the ten higher importers of Arab oil is African: Brazil, South Korea, Turkey, Taiwan, India, Yougoslavia, Philippines, Thailand, Cuba and Singapore.

One should not understand from the precedent paragraph that arabs may shun their responsibility in providing help to Africans. Actually the Arabs did'nt stand idle by. They realize that there is now more need than ever before to help African countries with adequate aid supplied on concessional terms and non-concessional terms in order that the present acute problems may be brought under control, mainly the rising deficits and mounting debt burden.

But the Arabs have made frequently plain that they regard themselves as <u>donors</u> on equal footing with <u>other donors</u>, although the inordinate prominence given to the <u>oil-price</u> increase and its supposed impact on inflation and external balance of payment of the poorer developing countries would seem to imply that Arab oil-producing countries are uniquely responsible for a good deal of the problems besetting African countries. Such an implication as GATT asserts, is both wrong and dangerous. It is wrong since total imports account for not more than 2 to 3 percent of GNP in the oil-importing countries. It is dangerous since it shifts the responsibility to where it does not belong".(4)

II. ARAB AID TO AFRICA: The institutions.

The Arab oilexporters responded to the plight of the African countries with a plenitude of commitments involving substantial transfers of capital in the form of loans, grants and investments. These commitments were made on a multilateral and bilateral basis. In general, donors favour bilateral agreements, since they are able to monitor the use being made of their financial assistance. Recipients on the other hand often feel that bilateral aid is tied aid.

In this chapter, we shall concentrate on arab aid institutions designed to channel developmental aid more efficiently and on an on-going-basis: the main area of concentration will be: Arab Development Aid Institutions.

Acting under the auspices of the Arab League, three instituttions for aid operate already in non-Arab Africa: The Arab Bank for Economic Development in Africa (BADEA) for long-term development aid, the Special Arab Aid Fund for Africa (SAAFA) for emergency assistance. A smaller Fund for Arab-African technical assistance (FAATA) concerned with such matters as the supply of facilities for Arabic studies in Africa.

Two other aid institutions became important channels for Arab aid to Africa: the OPEC FUND, to which the Arabs contribute more than half the capital - and the mostly arab-financed Islamic Development Bank (IDB).

i) Arab Multilateral Aid Institutions.

a). The Arab Bank for Economic Development in Africa (BADEA)
BADEA was established as a result of a decision of the sixth

Arab summit held in Algiers in November 1973. It has a total capital of 231 million dollars, subscribed by 18 Arab governements.

8

CONTRIBUTING COUNTRIES: (5)		US dollar
Saudi Arabia	•	50 m.
Libya		40 m.
Iraq		30 m.
United Arab Emirates		20 m.
Qatar		20 m.
Kuwait Algeria		20 m.
Algeria	* -	20 m.
Morocco		10 m.
Lebanon		5 m:
Tunisia		5 m.
		•

Oman	4	m.
Jordan	1	m.
Bahrain	1	m.
Sudan	1	m.
Syria	1	m.
Egypt	1	m.
Mauritania	1	m.
Palestine	1	m.

'BADEA is not a profit-making institution designed to recycle petro-dollars', Dr Ayari recently told an audience of British businessmen in London. 'It is a development agency with a political purpose - and which international development institution is not political.

'It serves the political purpose of Afro-Arab solidarity and cooperation. Its primary objective is not to invest in profitable ventures but to help development in non-Arab Africa on a broad front, taking account of economic as well as social considerations', Dr Ayari explained.

BADEA is not a charity either. There would have been no need for the Arabs to create a new institution to dispense charity. Most of the facilities provided by the Bank require repayment although on terms which in effect mean that a large proportion of the loan is a free grant. Loans approved by yhe end of 1979 carried interest rates of between 2 ans 7 per cent and maturities from 11 to 25 years with grace periods of between 2 and 10 years. The overall "grand element" was 39.20 per cent.

BADEA, which is designed for development project aid, does not provide balance of payments or budgetary support to individual countries. But balance of payments support was the purpose of the sister institution, the Special Arab Aid Fund for Africa (SAAFA).

b). Special Arab Fund for Africa (SAAFA)

This is the second Arab institution which was set up almost at the same time as BADEA to provide emergency assistance to non-Arab African countries, mainly to alleviate difficulties caused by the higher cost of oil imports or other circumstances affecting their balance of payments.

SAAFA was established in Cairo in January 1974 by the OUA Oil Commettee and the ten countries of the Organization of Arab Petroleum Exporting countries (OAPEC), with an initial capital of 200 dollars. The fund was set up within the secretariat of the Arab League as a temporary stop-gap arrangement and it was to be transferred and amalgamated with BADEA when the latter became operational. Because of this close connection with the BADEA, SAAFA's operations, which involved the distribution of millions of dollars in loans, with a grant element of 75 per cent, to 37 African countries, are usually considered as part of BADEA's work.

c). Fund for Arab-African Technical Assistance (FAATA)

In December 1973, the Arab League Economic Council approved the setting up of a Fund for technical exchange with US \sharp 15 million as initial capital. At the 7th Arab Summet Conference, held in Rabat, it was decided to increase that initial sum to US \sharp 25 million.

FAATA's Board of Directors met for the first time in August 1975 to launch this Fund whose objectives are as follows:

- a. To find new areas of activity for economic and technical co-operation between Arab and African States.
- b. To study the technical aspects of economies, of projects that have common features, and to create an appropriate climate for their implementation.
- c. To help Arab and African States to set up institutions necessary for promoting and sustaining development.
- d. To co-ordinate the efforts of Arab and African countries in their scientific and technical evaluation, and to attract foreign aid, while working for bettering the terms of this aid.
- e. To try and channel Arab capital into investments that concern Arab manpower with the aim of providing the scientific and technological requirements for the development of Arab and African countries.

d). The Islamic Development Bank (IDB).

It was during the Islamic Summit Conference of Lahore, on 24th Fabruary 1974, that the decision to set up this Bank was taken. And in August 1974, the Bank's charter was signed in Jeddah by the 24 Arab and Islamic countries which fixed the initial capital at US \$ 2.4 billion, in 200,000 shares. The paid up subscriptions amount now to 757,5 million Islamic dinars (*).

The IDB aims at contributing to the economic and social development of its member countries. It is worth noting, however that this Bank extends its aid to non-member countries with moslem communities. IDB's loans are interest free.

Contributing countries are: Afghanistan, Algeria, Bahrain, Bangladesh, Cameroun, Egypt, Guinea, Indonesia, Jordan, Kuwait, Lebanon, Libya, Malaysia, Mali, Mauritania, Morocco, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia, Senegal, Sudan, Syria, Tunisia, Turkey, United Arab Emirates and Yemen Arab Republic.

e). The Opec Fund for International Development.

The Opec Fund was created in 1976 as a facility of the 13 petroleum-exporting countries, members of the organization. Opec Fund does help all developing countries, and not only African countries. Between 1976 and 1979 about 654 million dollars of direct aid was committed for the benefit of 72 countries. Of the total, about 336 million dollars had actually been dis-

^(*) An Islamic dinar is equal to one SDR unit.

bursed. Some 37% of the commitment went to the Least Developed Countries. In October 1980 Opec Fund reported that by that date it had signed 210 loans with 76 countries worth 901 million dollars, not including 683 million dollars it had contributed as grants and loans to other development agencies.

Non-Arab African countries benefited by mid Jult 1980: with a total of 284.8 million dollars in loans, of which 180 million were balance of payment support and the rest were project and programme aid.

ii) Arab National Development Institutions.

These are also institutions for bilateral co-operation which are orientated partially or totally towards Africa. They include:

- The Kuwait Fund: set up in 1961 with an initial capital of US \$ 680 million, which has now been increased to US \$ 3.4 billion. This Fund offers some of the most favourable terms in the world. The loans are on average spread over a period of 10 to 25 years, with an annual rate of interest of 3% to 4%.
- The Abu Dhabi Fund: established in 1971 with an initial capital of US \$ 126 million, which has been increased to US \$ 500 million. It was originally set up to cater for the interests of Arab countries, but of late it has made generous contributions to developments in African countries south of Sahara.
- The Libyan Arab Foreign Bank: several African countries including Uganda have received financial assistance from Libya. Most of this aid has been channelled through the Libyan Arab Foreign Bank. The Bank has several branches in Africa.
- The Saudi Development Fund: established in May 1974 with an initial capital of US \$ 2.8 billion. A number of African countries have received technical and development aid from the Saudi Fund.
- The Iraqi Fund for External Development is an older institution which began to increase its aid to Africa after 1975.

By mid-1981 total Arab aid commitment in Africa stood at 6,669,9 million dollars (see Table I). Taking account of the phenomenon of statistical inertia one may regard the sum as being appreciably below what the Arabs has in fact granted for the benefit of Africa. Furthermore, these figures do not cover - with the exception of Arab contributions to the IMF Oil Facility - Arab share in the financing of several important financial institutions for development, such as the IBRD and IDA of the World Bank Group, the Commonwealth Fund for Technical Cooperation or for that matter the agencies of the United Nations, including the UNDP, FAO, the World Food Programme, IFAD, UNESCO, United Nations Telecommunications Union and WHO. It is common knowledge that Arab financial contributions to the budgets of these institutions indirectly help economic development in Africas countries. In inclusion of these contributions to Arab Aid for Africa would considerably increase the overall Arab financial transfers to the Continent.

TABLE I - COMMITMENTS OF ARAB COUNTRIES AND ARAB INSTITUTIONS IN AFRICA

(1973 - mid 1981) (in \$ m.)

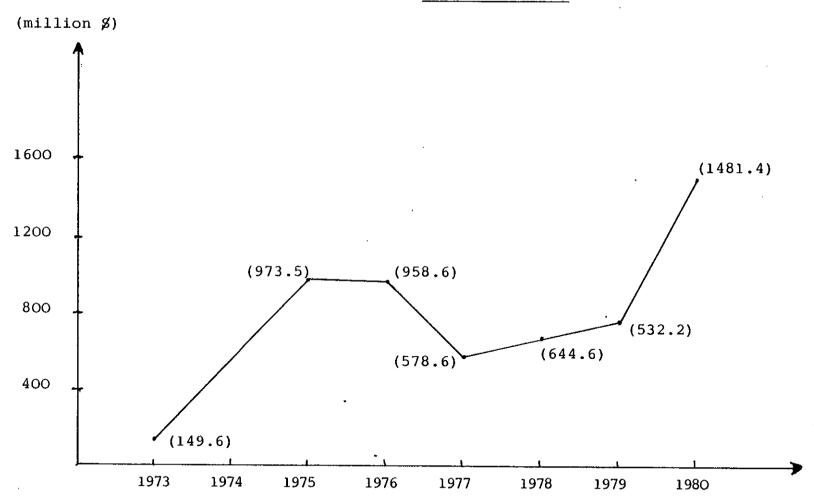
DONORS	1973	1974	1975	1976	1977	1978	1979	1980	1981	TOTAL
				<u> </u>				<u> </u>		
Arab OPEC Countries (X)	149.6	345.3	557.9	659.7	393.4	432.9	326.3	1140.0	558.8	4563.9
BADEA	-	- · J	71.6	61.9	66.2	67.9	44.1	72.0	76.0	459.7
SAAFA	-	79.9	64.7	56.5	13.2	- 1	-	l - · 1		214.3
FAATA	-	-	- 1	0.5	2.5	2.9	-	-	_	5.9
IDB.	- 1	-	-	7.0	25.5	64.5	61.1	125.0	64.0	347.1
I S F	- 1	_	5.0	0.6	4.7	1.3	-	11.2	-	22.8
OPEC FID	-		-	77.4	68.6	74.1	100.7	133.2	103.4	557.4
IMF Oil Facility	-	121.9	267.9	83.7	-	- 1		- 1		473.5
A A B	1 - 1	2.1	6.4	9.8	4.5	1.0	_	I - I	<u>.</u>	23.8
A I B	- 1	-]	- 1	1.5	- [- 1	_		-	1.5
	1	1		1	ļ	ĺ		1	i	-
GRAND TOTAL	149.6	549.2	973.5	958.6	578.6	644.6	532.2	1,481.4	802.2	6,669.9

⁽X) These figures include commitments made by SFD, KFAED, ADFAED, IFED and LAFB.

Out of the total Arab commitment, as defined, nearly two thirds, or 4,563,9 million dollars were directly granted by the Arab countries members of the OPEC. This bilateral aid amounted to 558.8 million dollars in the first six months of 1981. The rest of the aid was supplied from multilateral sources, i.e. development agencies financed by the Arab donor countries.

Arab Aid to Africa rose up from 149,8 million dollars in 1973 to 973,5 million in 1975, fell down to 578,8 million in the critical year of 1977 before reaching the peak of 1481,4 million in 1980. The graphic below illustrates this sinuosity in Arab Aid:

EVOLUTION OF MULTILATERAL AND BILATERAL ARAB AID TO AFRICA (1973 - 1980)



From 1975 to 1980 the Arab countries of the OPEC committed bilaterally or through their multilateral institutions, a total of 39.315 million dollars for the benefit of the Third World or almost 4% of their combined GNP.

Table II-COMMITMENTS OF ARAB COUNTRIES MEMBERS OF OPEC FOR AFRICA AS PROPORTION OF TOTAL ARAB AID (1975-1980).

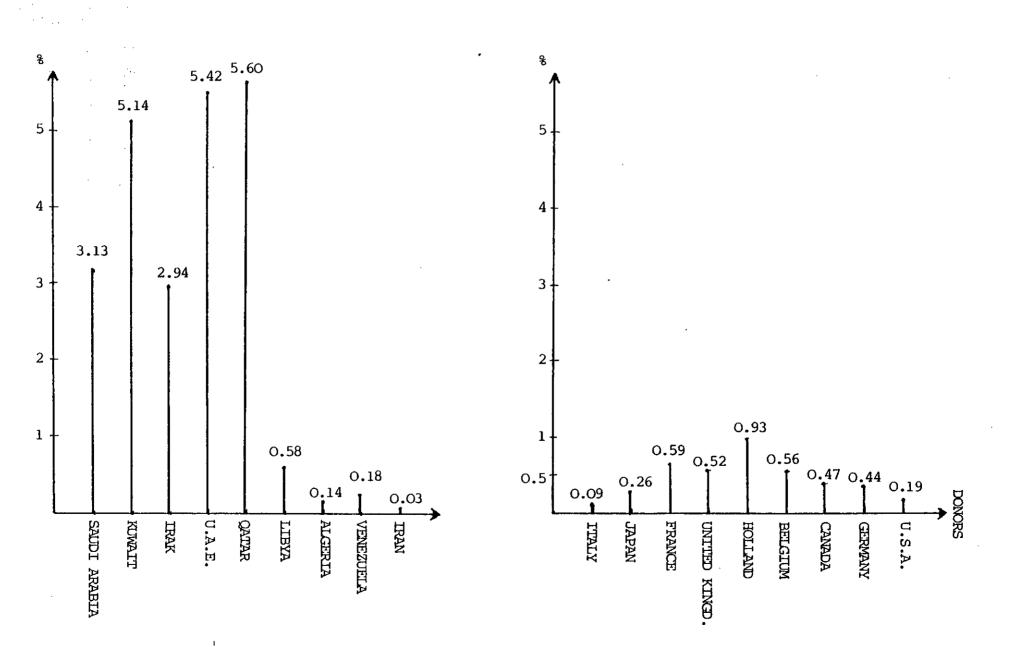
	TOTAL	L ARAB CO	MMITMENTS	ARAB COMMITMENTS FOR AFRI						
YEAR	Bila- teral	Multi- later-	Total	in %	Bila- teral	Multi-	Total	lin %		
 	 (in\$m)	al (in\$m)	 (in\$m)	GNP	 (in\$m)	al (in\$m)	 (in\$m)	mitment		
1975	! 5,667	 527	6,194	6.3	558	416	974	15.7		
1976	4,393	3,012	7,405	6.4	660	299	959	12.9		
1977	5,122	1,009	6,131	4.4	393	185	578	9.4		
19,78	6,515	721	7,236	4.5	433	212	645	8.9		
1979	1 4,545	468	5,013	2.7	326	206	ļ _. 532	10.6		
1980	6,473	863	7,336	2.5	1,140	341	1,481	20.2		
TOTAL	32,715	6,600	39,315	4.0	3,510	1,659	5,169	13.1		

(1) Source: OECD Reports.

If we undertake a rapid comparison between the ratio Arab Aid/GNP and Developed Countries Aid/GND, we will be stunned by the results. The Arabs devoted an average of 4% of their combined GND to Aid while the most generous country in Europe, i.e. Holland, spent only 0.93% of its GNP on Aid. The following graphic made of data appeared in the report of the World Bank in 1980, speaks by itself:

RATIO AID/GNP IN SOME OIL-EXPORTING COUNTRIES IN 1979.

RATIO AID/GNP IN SOME DEVELOPED COUNTRIES COUNTRIES IN 1979.



It may be useful to observe that although Venezuela and Iran are members of the OPEC, their contribution to foreign aid is almost insignificant.

Out of the total amount of Arab Aid, almost 15% went to Africa, almost 2/3 through bilateral channels and 1 third through multilateral institutions.

Among the multilateral institutions, BADEA and SAAFA played a major role as donors. This is indicated in the following tables:

TABLE III - BADEA COMMITMENTS IN AFRICAN COUNTRIES.

TABLE III - BA	DEA COM			FRICAN C	OUNTRIE	<u>s</u> .		/· • \
	11015		75 - mid		1.020	11000	14004	(in \$ m)
Beneficiary Countries	1975	1976	1977	1978	1979	1980	1981	TOTAL
SAHEL COUNTRIES:	-	1	-	- 044		-	0.280	0.280
Cape Verde	-	1 - 1	- 1	0.964	2.40	-	-	3.364
Chad	-	1 - 1	- !	9.702		-	_	9.702
Gambia	-	3.3		0.598	5.20	-	-	9.098
Mali	- 7 00	15.0	5.00	1.860	10.00	-	-	31.860
Niger	7.00	<u> </u>		8.868	-	-	5.000	20.868
Senegal	1.60		7.20	0.927	-	10.00	0.046	19.773
Upper Volta		4.5	! -	1.879	_	_	-	6.379
TOTAL SAHEL COUNTRIES		 	1		1	1		101.324
OTHER LDC'S:(1)	1						1.	<u> </u>
Benin	8.00	- '	- '	4.600	-	-	2.700	15.300
Botswana	-	- '	- '	2.200	-	7.25	-	9.450
Burundi	-	4.0	-	6.000	-	10.00	-	20.000
Central African R.	-	- '	- '	i -	-	-	5.000	5.000
. Comoros	_	- '	-	-	1.57	8.00	-	9.570
Ethiopia	-	- '	-	0.540	-	i -	-	0.540
Guinea	-	- '	4.84	1.029	6.00	i -	i -	11.869
Guinea Bissau	1 -	1 -	_	1.116	i -	i -	_	1.116
Lesotho	i -	_	_	6.000	3.90	i -	i	9.900
Rwanda	ĺ -	5.0	6.00	i -	-	i -	i -	11.000
Tanzania	5.00	•	10.00	i -	i -	8.00	i -	23.000
Uganda	Í	i -	i –	4.850	-	-	i . -	4.850
TOTAL LDC'S	Í	i	İ	ĺ	1	1	i	203.146
		ĺ	İ	İ	İ	İ		
OTHER COUNTRIES:		İ					Ì	į.
Angola	-	- '		-	10.00	-	10.000	20.000
Cameroon	10.00	-	10.00	-	-	9.00	-	29.000
Congo	10.00	- '	-	-	• -	-	10.000	20.000
Ghana	8.33	- '	10.00	-	_	. -	! -	18.330
Ivory Coasc	3.33	-	-	-	-	-	-	3.330
Kenya	-	5.0	-	-	5.0	-	-	10.000
Liberia		-	3.20	3.92	i –	-	-	7.120
Madagascar /	5.00	-	10.00	1.908	_	-	8.000	24.908
Mauritius	_	10.0	-	-	-	-	-	10.000
Mozambique	-	- '	1 -	-	-	10.00	-	10.000
Sao Tome & Principe	-	-	-	-	-	-	5.000	5.000
Seychelles	-	-	-	1 -	_	1.20	-	1.200
Sierra Leone	i	5.0	-	-	-	8.50	-	13.500
Togo	3.34	-	-	-	-	-	-	3.340
Zaire,	10.00	l	-	4.400	-	-	10.000	24.400
Zimbabwe	-	-	-	-	-	-	10.000	10.000
Regional Agencies	1 -	0.1_		6.509	-	-		6.609
GRAND TOTAL	71.60	61.9	66.24	67.870	44.07	71.95	76.026	459.656

⁽¹⁾ The 19 non-Arab African Least Developed Countries (LDC's), as officially classed by the United Nations, include all African Sahel Zone countries except Senegal.

TABLE IV - SAAFA COMMITMENTS IN AFRICAN COUNTRIES. $(1974 - 1977) \qquad (in \% m)$

Beneficiary Countries	1974	1975	1976	1977	TOTAL
SAHEL COUNTRIES:					
Cape Verde	-	0.500	10.000	_	10.500
Chad	8.800	_	-	-	8,800
Gambia	0.700	_	 	_	0.700
Mali	7.800	_	 	_	7.800.
Niger	-	2.700	_	- -	2.700
Senegal	-	7.500	_	-	7.500
Upper Volta	-	2.700	-	-	2.700
TOTAL SAHEL		1	•		40.700
OTHER LDC's:		<u> </u>]	`	
Benin	2.400	-	i -	-	2.400
Botswana	-	5.400	-	_	5.400
Burundi	2.000	-	-	_	2.000
Central African R.	2.400	- ·	-	· -	2.400
Comoros	-	_	10.500	-	10.500
Ethiopia	_	14.200	1 -	_	14.200
Guinea Bissau	0.250	_	-	_	0.250
Lesotho	2.800	, _	İ -	_	2.800
Rwanda ·	2.000	·-	_	_	2.000
Tanzania	14.200	_	_		14.200
Uganda	11.300	! –	_	_	11.300
TOTAL LDC's			, 1		100.650
OTHER COUNTRIES:		1	4		
Angola	_	<u>-</u>	_	13.244	13.244
Cameroon	-	2.850	-	_	2.850
Equatorial Guinea	0.500	_	_	. <u>.</u>	0.500
Ghana	† -	4.400	-	_	4.400
Kenya	-	3.600	l -	_	3.600
Liberia	3.600	-	-	_	3.600
Madagascar	4.800	-	_		4.800
Mauritius	-	2.700	· -	-	2.700
Mozambique		1.000	26.000	-	27.000
Sao Tome & Principe	-	0.500	10.000		10.500
Sierra Leone	3.600	_	-	_	3.600
Swaziland	7 -	4,200	-	_	4.200
Zaire	-	12.400	_	_	12.400
Zambia	12.700	. –	J - i		12.700
GRAND TOTAL	79.850	64.650	56.500	13.244	214.244

Thus BADEA's commitments attained between 1975 and 1980 459,7 million dollars, while SAAFA's committed 214 million in the same period.

Of the other Arab-financed multilateral institutions, the OPEC FUND for International Development committed 557,4 millions for the benefit of Africa, the Islamic Development Bank 347,1 millions, the Islamic Solidarity Fund 22,8 millions, AFTAAC 5,9 millions and IMF Oil facility 473,5 millions.

IV. ARAB AID TO AFRICA: its geographical distribution.

As indicated in BADEA's reports, mainly "the Survey of Arab Programme of co-operation with Africa" (Dec. 1981).

From January 1973 to June 1981 total Arab commitments in favour of Africa amounted to 6,669,9 million dollars.

With 3,817.9 million dollars of aid, or 57.2 percent of the above total, West Africa is the leading target of Arab assistance for the Continent. It will be noticed that Arab aid to this region is given on exceedingly favourable conditions: of 3,817.9 million dollars allocated to this region 3,333.4 millions have been granted on concessional terms against only 484.5 millions supplied on commercial terms.

This trait is, however, also evident in regard to East Africa which benefited from a total of 2,468.4 million dollars worth of commitment (37 percent). In this case too, the volume of commitment on concessional terms (1,879.0 million dollars) far exceeded the value of transfers on commercial terms (589.4 million dollars).

Apart from aid to individual African countries and their organizations, some Arab aid also goed to regional African institutions and multinational or pan-African development projects. This window of Arab aid for Africa was in the period stated responsible for a total commitment of 383.6 million dollars (5.8 percent of total aid) of which 250.2 millions were supplied on concessional terms and 133.4 million dollars on non-concessional, as indicated below in the following tables and graphic.

Table V - GEOGRAPHICAL DISTRIBUTION OF ARAB COMMITMENTS FOR AFRICA (1973 - mid 1981).

	Concessional	Non-Con-		
REGION .	Commitments	cession-	TOTAL	%
	1	al Com-		
		mitments	1	•
	(in \$ m)	(in \$ m)	(in \$ m)	<u> </u>
West Africa	3,333.4	484.5	3,817.9	57.2
East Africa	1,879.0	589.4	2,468.4	37.0
Regional Organisations	250.2	133.4	383.6	5.8
TOTAL	5,462.6	1,207.3	6,669.9	100

GEOGRAPHICAL DISTRIBUTION OF ARAB AID IN AFRICA (1973 - mid 1981).

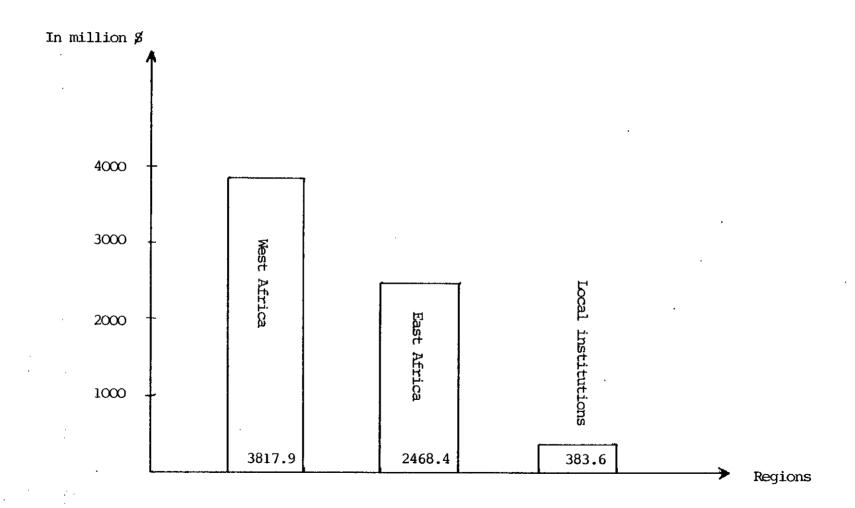


TABLE VI - TOTAL ARAB COMMITMENTS IN AFRICAN COUNTRIES (1973- mid 1981) (in \$ m).

		1		1	1		1	1	*	1973-	mid 1981	
Beneficiary Countries	1973	1974	1975	1976	1977	1 1978	1979	1980	1981	Con.	N.Con	TOTAL
Regional Agencies	1 3.5	1 36.7	59.9	107.3	1 95.5	112.2	4.0	274.5	294.3	854.5	133.4	1987.9
Angola	i -	-	i -	i -	13.2	-	10.6	3.0	22.0	48.8	-	48.8
Benin	i -	3.7	8.0	3.0	8.2	16.4	4.5	4.5	8.7	48.4	8.6	57.0
Botswana	i -	5.4	· _	i -	6.5	2.2	2.0	26.5	4.0	46.6		1 46.6
Burundi	3.4	4.0	2.6	8.0	6.3	26.3	4.5	19.8	i -	71.0	3.9	74.9
Cameroon	<u> </u>	8.4	40.4	63.2	34.1	16.7	27.7	12.5	55.8	210.0	48.8	258.8
Cape Verde	i -	i -	0.7	22.6	0.5	3.7	4.4	17.2	1.0	50.1	-	50.1
Central African R.	i -	5.6	2.8	3.1	0.7	0.7	3.9	-	6.5	15.7	7.6	1 23.3
Chad	39.6	17.4	15.3	13.2	32.2	32.7	<u> </u>	i –	-	125.1	25.3	150.4
Comoros	i -	-	i -	31.5	1.6	14.7	24.7	20.7	1.0	94.2	-	94.2
Congo	1	<u> </u>	36.7	24.4	1.5	17.5	i -	18.4	10.0	107.0	1.5	108.5
Equatorial Guinea	j -	16.7	<u> </u>		0.5	i -	1.0	i -	i -	18.2		18.2
Ethiopia	j -	15.7	1.6	4.8	i -	0.5	4.8	i _	, _	26.5	0.9	27.4
Gabon	38.7	10.1	16.9	22.7	21.3	31.5	-	_	i _	82.5	58.7	141.2
Gambia	<u>i</u> –	1.9	0.6	15.7	18.3	5.0	15.9	25.0	5.0	87.0	0.4	87.4
Ghana	i -	4.4	61.6	57.3	49.2	, _	3.7	7.5	14.2	120.7	77.2	197.9
Guinea	1.2	43.9	7.7	65.6	18.4	76.0	20.9	1370.9	-	519.5	85.1	604.6
Guinea Bissau	i -	2.3	8.9	3.3	8.6	9.4	14.6	14.9	6.5	68.5		68.5
Ivory Coast	i -	13.5	7.4	36.1	1.0	-	i -	-	-	6.0	1 52.0	1 58.0
Kenya	i -	42.6	36.7	15.1	34.8	5.4	7.2	197.8	_	253.8	85.8	1339.6
Lesotho	-	2.8		1.9	0.8	11.4	11.4	1.5	2.5	32.3	05.0	32.3
Liberia	· -	5.6	_	-	24.5	15.0		1 5.0	1	44.1	1 6.0	50.1
Madagascar	<u> </u>	17.8	25.2	3.1	35.3	16.6	40.8	12.6	18.0	139.0	1 30.4	169.4
Malawi	<u> </u>	-	2.9	1.6	1.8		_	_	1	1.8	4.5	6.3
Mali	2.2	29.8	34.1	106.6	27.9	25.7	50.2	52.5	16.5	321.1	24.4	345.5
Mauritius	, <u></u>	2.7	1 _	10.0	0.1	0.1	1 12.3	7.7	13.4	1 46.3	1 44.4	46.3

TABLE VII

	1			1	•	1	1		*	1973 -	mid 1981]
Beneficiary Countries	1973	1974	1975	1976	1977	1978	1979	1980	1981	Con.	N.Con.	TOTAL
Mozambique	-		1 1.0	32.7	0.1	6.0	11.8	13.5	-	55.1	10.0	65.1
Niger	2.5	6.8	28.0	12.0	23.5	40.5	53.4	80.9	39.1	273.8	12.9	286.7
Nigeria	-		-	0.1	2.0	-	-	-	-	0.1	2.0	2.1
Rwanda	-	2.1	18.8	11.7	8.8	-	38.6	7.1	} -	85.7	1.4	87.1
Sao Tome & Principe	-	-	1.2	10.0	0.4	-	-	1 -	6.0	17.6	-	17.6
Senegal	0.7	86.6	102.1	30.9	16.9	12.7	12.1	76.9	74.4	351.5	61.8	413.3
Seychelles	-	i –	-	-	0.6	0.5	2.8	20.9	10.7	33.2	1 2.3	. 35.5
Sierra Leone	-	8.8	0.7	28.3	2.1	-	4.0	12.0	7.0	56.4	6.5	62.9
Swaziland	_	4.2	-	i -	-		-	-	-	4.2		4.2
Tanzania	-	48.4	56.7	5.5	10.0	5.1	30.0	81.0	38.4	202.0	73.1	275.1
Togo	-	1.7	6.2	4.0	_	2.5	19.0	0.5	7.4	35.6	5.7	41.3
ปganda	7.4	38.7	145.0	9.9	28.7	50.3	10.4	14.5	40.0	253.6	91.3	344.9
Upper Volta	0.1	8.8	2.6	22.3	42.4	10.6	4.9	19.7	10.0	121.4	_	121.4
Zaire	50.0	38.4	217.1	47.5	_	76.6	4.8	-	10.0	296.5	147.9	444.2
Zambia	0.3	13.7	24.1	123.6	0.3	0.1	70.8	61.9	10.0	166.9	137.9	304.1
Zimbabwe	! -	-	! -	1 -	<u> </u>	-	0.5	-	69.8	70.3	<u> </u>	70.2
] }	}	i 	1		1		1] 	1]
TOTAL	149.6	549.2	973.5	958.6	578.6	644.6	532.2	1,481.4	802.2	15,462.6	1,207.3	6,669.9

^{*} First six months.

Figures in tables VII give an exacte picture of the movement of Arab aid to African countries individually. In 1973 the beneficiary countries numbered eleven. Two years later 37 African countries received financial assistance from Arab donor countries. But in 1979 Arab aid covered just about the entire non-Arab developing Africa, or 41 countries. The trend of increasing geographical spread went hand in hand with the growth in the volume of aid which reached its high point in 1980 when commitments totalled 1,481.4 million dollars.

It should be pointed out that of the total of Arab aid to Africa, 81.9 % were on concessional terms against only 18.1% provided on commercial terms.

V. SECTORAL VENTILATION OF ARAB COMMITMENTS IN AFRICA.

The distribution of Arab commitments in Africa, by sector, follows as closely as possible the real recessities and priorities as noted in the development plans of the African countries. Sectoral trends of the Arab Aid Programme in Africa are indicated in the Table VIII (BADEA report 1981)

TABLE VIII - SECTORAL DISTRIBUTION OF ARAB COMMITMENTS IN AFRICA (1973 - mid 1981).

SECTOR	(in 5 m.)	<u>0′</u>
Transport 1 Communications	1,170.8	17.6
Balance of payments support	1,161.3	17.4
Agriculture	1,149.9	17.2
Construction Industry	545.3	8.2
Aid Programme	469.7	7.0
Social Services	439.6	6.6
Energy	435.8	6.5
Tourism - Trade	413.7	6.2
Extractive industries	292.5	. 4.4
Financial Institutions	275.6	4.1
Manufacturing Industries	245.4	3.7
Technical Cooperation	70.3	1.1
TOTAL	6,669.9	100.0

Three priorities of almost equal wheight head the list: transport and communications, which being a very sensitive sector in Africa, receive corresponding attention by benefiting from 17.6 percent of total aid; the balance of payments support comes next next with 17.4 percent followed by agriculture whose crucial significance for the livelihood of so many in Africa is acknowledged by the share in aid amounting to 17.2 percent. The fourth is construction industry which in the period between 1973 and mid-1981 benefited from a commitment totalling 545.3 million dollars. Follow in the order of importance, aid programme (469.7 million dollars), social services (439.6 million dollars),

energy (435.8 million dollars), tourism and trade (413.7 million dollars), extractive (292.5 million dollars) and manufacturing (245.4 million dollars) industries, etc...

It should be pointed out that this distribution by economic sectors is related to all Arab Aid, bilateral and multilateral. If we consider only the <u>multilateral aid</u> we will find another classification of priorities and objectives. The distribution of BADEA's commitments from 1975 to 1981 is indicated below:

Table IX - DISTRIBUTION BY SECTOR OF BADEA'S COMMITMENTS 1975-1981.

Year	Infrast	ructure	Agriculture		Industry		Energy		Special Emergency prog.		Total	
	in Ø m	%	in Ø m	%	in 🖇 m	% ;	in ≸m	%	in Ø m	0/ /0	in \$ m	%
1975	42.00	58.7	11.60	16.2	18.0	25.1	_	-	-	-	71.600	100
1976 .	29.10	47.0	17.80	28.8		_	15.0	24.2	_	-	61.900	100
1977	13.20	19.9	12.20	18.4	24.84	37.5	16.0	24.2	-	_	66.240	100
1978	17.60	25.9	14.65	21.6	9.70	14.3	10.92	16.1	15.20	22.1	67.870	100
1979	36.67	83.2	2.40	5.5	5.0	11.3	-	j –		_	44.070	100
1980	32.25	44.8	18.50	25.7	20.0	27.8	1.2	1.7	_	-	71.950	100
1981*	37.70	45.4	23.046	30.4	10.0	13.2	5.0	6.6	-	-	75.746	100
1975- 1981	208.52	45.4	100.196	21.8	87.54	19.0	48.12	10.5	15.0	3.3	459.376	100

^{*} The grant of 0.280 million \$ for the study of Arab aid to the development of the Sahel.

Thus, in regard to economic sectors, "Infrastructure" - rather broadly defined as including mostly transport facilities, such as roads, railways, airports and ports, but also dams, water supply installations and sewage works, as well as telecommunications received pride place, and BADEA reports 1980 and 1981 made clear that this preference is likely to remain "for many years to come".

The second highest share of total commitment until 1980 has gone to the manufacture sector. A mesure of general progress and provider of employment, manufacturing has sadly been neglected in Africa, although the Lagos Plan of Action now aims at correcting this anomaly. There has been a certain bias in favour of large industrial projects, like the Mozambique wood manufacturing complex in Mozambique and the phosphate-based chemical industries in Senegal, both of which were helped by loans in 1980. It would have been preferable to financially assist small and widely-scattered industries. But Arab Aid Institutions have not yet the dimensions and the staff fit to serve a large number of small industriel projects. A way out of this has been found, however, by providing regional or national banking institutions with "lines of credit" that are used for distribution of loans to a number of local clients. A good exemple is a loan which BADEA has approved for the government-owned Kenyan Industrial Development Bank.

The agricultural sector which until 1980 occupied the second rank in the percentage breakdown became the second in importance in 1981 (BADEA Report 1981, french version, p.34). No surprise since most people in Africa live in rural communities and the vast majority of these depend on farming and stock raising for their livelihood. It should furthermore be highlighted that the Emergency Aid listed in the Table has been mostly for projects of an agricultural nature.

The energy sector which comes fourth in importance is regarded as all the more important given its role in the growth of other economic activities. It is therefore likely to be stepped up in the future.

VI. THE QUALITY OF ARAB AID TO AFRICA.

As the reader may have noticed, by Arab aid we intended the aid given to African countries through bilateral and multilateral channels. None of the institutions mentionned above should be confused with another long array of newly established investment companies, banks and other financial institutions which have been marching across the Middle East stage: the Kuwait Investment Company, the Arab Petroleum Investment Company, the Arab Investment Company, the Arab Finance Corporation, among others. These are basically commercial institutions seeking profitable outlets for Arab surplus funds, particularly private funds, in the region and elsewhere.

The bilateral and multilateral Arab aid institutions operate on a different basis. It is given on exceedingly advantageous conditions. Arab development loans are granted largely on concessional terms. But in respect to Africa generally and the 19 LDC's (least developed countries) and Sahelian countries particularly, Arab aid is supplied on especially easy conditions.

Taking the period from 1973 to mid-1981, 81.9% or 5,462.6 million dollars of the total Arab aid for Africa amounting to 6,669.9 million dollars, were on concessional terms against 1,207.3 millions (or 18.1%) on commercial conditions. But nearly 89 percent of the assistance provided for the 19 Least Developed Countries was given on soft terms while in the case of seven Sahelian Countries the percentage was 93.9%.

If we take the example of BADEA's commitments in Africa, we will find that the terms under which the transfers have been made are impressive. Between 1975 and 1981 the following weighted averages emerged: 4.5% of the rates of interest, 18.3 years for repayments, 4.3 years for grace period and 33.89% for the grant element. The following tables are indicative of this important fact:

TABLE IX - WEIGHTED AVERAGE TERMS OF BADEA LOANS.

Year	Amounts Interest of Loans Rate (in \$ m) %		Maturity Period (in years)	Grace Përiod (in years)	Grant Element %
1975 1976 1977 1978 1979 1980 1981	71.6 61.9 66.24 67.87 44.07 71.95 76.026	3.7 2.6 5 4.3 4.3 5.5	23.5 23 18 16 17.1 16.3	5 5 4.5 4.2 4 3.8 3.8	41.08 47.42 28.97 40.97 36.86 25.07 20.61
Total Averages	459.656	4.5	18.3	4.3	33.89

Source: BADEA Report, french version, 1981, p. 20.

TABLE X - LOANS APPROVED DURING 1980.

Beneficiary Country	Project	Amounts of Loans (in \$ m)	Interest Rate %	Maturity Period (in years) (1)	Grace Period (in years)
Botswana	Gaberone Airport	7.25	5	15	3
Burundi	Sugar Complex	10	5	17	4
Cameroon	Douala-Yaounde Road	9	6	15	3
Comoros	Port of Mutsamudu	8	5	20	5
Mozambique	Wood Factory	10	6	13	3
Senegal	Chemical Industry	10	8	15	5
Seychelles	Electrification of Praslin Island	1.2	5	12	2 .
Sierra Leone	Integrated Agricultural Development	8.5	5	20	5
TANZANIA	Bukombe-Isaka Road	8	5	20	4
Total and Averages		71.95	5.5 (2)	16.3 (2)	3.8 (2)

Source: BADEA Report, 1980, p. 20.

⁽¹⁾ Including period of grace.(2) These represent weighted averages.

The slight decline in the concessionality of an average BADEA loan in 1980 and 1981 was dictated by the nature of operations in these two years. Financial terms of the Bank's loans are largely influenced by three factors: the general economic situation of the beneficiary; the economic and financial nature of the project, including particularly its rate of return; and the financial situation of the Bank itself. The interplay of these three factors resulted in 1980 and 1981 in the terms of loan repayment being slightly less favourable than in the preceding years.

Nonetheless, Arab aid contains a <u>substantial grant element</u>. The grant element "may be viewed as the difference between the face value of the loan and the discounted value of scheduled repayments of interest and principal - the discount rate must be based upon either private market conditions or the rate of a loan emanating from an alternative available source" (6).

To put the matter in proper perspective "it should be pointed out that even when a loan has a grant element of less than 25% this still represents a valuable and important source of finance for developing countries, as evidenced from data supplied by the World Bank" (BADEA Report, 1980, p. 21).

Another caracteristic of Arab aid is that there is no procurement typing a condition which often tends to reduce the aid element in loans because the recipient cannot buy its imports in the cheapest market. This is the case when for example Belgium gives a loan of 5 million dollars to Zaire in order to pay for equipments bought in Belgium. The Arabs have broken with a very common practice of trying "to make every dollar given in aid come back to the donor country in the form of payments for supplier credits, purchases of goods and services and in other ways". Aid tying, as has been underlined by El Mallakh and Kadhim "(Ibid) has two additional disadvantages: "It places a serious burden on already weak administrations in most developing countries and creates cynicism concerning the true motives of the donors because, when the aid extenders compete fiercely to supply the goods themselves, recipients "come to beleive that aid is a benefit rather than a sacrifice to the donors". Arab aid is, moreover, unlikely to be tied in the future even as industrialisation proceed since the oil producers - who are at the same>time the major Arab aid suppliers - are specializing in energy and capital intensive industries - lines of production in which they possess distinct and considerable comparative advantage.

This does not mean that the Arabs will not try to expand their exports in Africa. But for some years to come, this expansion will remain a wishful thinking. In fact, Arab exports to Africa in 1979 amounted to less than 2% of total Arab exports and more than 70% of these exports are constituted of oil products (see Tables XI and XII).

TABLE XI - ARAB EXPORTS TO AFRICA - 1979 (in million \$)

ARAB COUNTRIES	GLOBAL	SUB-SAHARIAN		OTHER COUN	TRIES
	EXPORTS	AFRICA	8		8
JORDAN	259.3	1.1.	0.4	258.2	99.6
U.A.E.	13,493.0	38.0	0.3	13,445.0	99.7
BAHRAIN	2,042.3	227.6	11.1	1,814.7	88.9
TUNISIA	1,771.0	27.2	1.5	1,743.8	98.5
ALGERIA	9,380.1	27.0	0.3	9,353.0	99.7
DJIBOUTI	46.0	1.3	2.8	43.2	97.2
SAUDI ARABIA	56,329.0	272.0	0.5	56,057.0	99.5
SUDAN	818.0	0.8	0.1	817.2	99.0
SYRIA	1,578.3	Un.	Un.	Un.	Un.
SOMALIA	181.7	0.51	0.3	181.19	99.7
IRAK	19,000.0	<u>195.0</u>	1.0	18,805.0	99.0
OMAN	2,161.9	Un.	Un.	Un.	Un.
QATAR	3,621.1	141.3	3.9	3,479.0	96.1
KUWAIT	16,483.0	35.0	0.2	16,448.0	99.8
LEBANON	883.8	10.9	1.2	872.9	98.8
LIBYA	15,055.0	23.0	0.2	15,032.0	99.8
EGYPT	Un.	13.9	Un.	Un.	Un.
MOROCCO	1,779.5	24.1	1.4	1,755.4	98.6
MAURITANIA	203.7	3.16	1.6	200.54	98.4
NORTH YEMEN	11.7	0.3	2.6	9.1	97.4
SOUTH YEMEN	222.5	17.6	7.9	204.94	92.1
TOTAL		1,059.73	+ 2 %		

Source: Statistical summary of a report prepared by the Economic Unit of the Arab League. Un.= Unknown for 1979.

TABLE XII - COMMERCIAL FLOWS BETWEEN ARAB COUNTRIES AND AFRICA 1970-1979. (m. U.S. \$\mathfrak{g}\)

COUNTRIES	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	TOTAL
JORDAN	-	_	0.5	0.4	4.0	2.2	2.6	-	1.1	1.1	11.3
U.A.E.		0.02	-	_		1.0	89.0	71.0	67.0	38.0	265.02
BAHRAIN	<u></u>	0.5	0.9	1.6	21.4	9.3	47.3	83.9	131.8	227.6	522.3
TUNISIA	3.9	5.5.	3.3.	3.9	4.3	7.3	25.4	27.4	12.5	27.2	120.7
ALGERIA	18.8	10.0	12.6	7.1	42.1	83.3	54.5	69.4	7.3	27.0	329.1
DJIBOUTI	0.3	0.1	0.2	0.5	0.5	0.4	0.61	0.8	0.9	1.3	5.61
SAUDI ARABIA	26.4	34.7	29.0	38.0	219.0	286.0	272.0	195.0	146.0	272.0	1318.1
SUDAN	0.01	1.36	0.4	1.1.	2.6	0.5	0.8	3.4	0.6	0.8	10.57
SYRIA	-	_	_	_	_	-	-	_	_	-	_
SOMALIA	0.71	0.7	0.33	0.31	0.7	1.03	0.57	1.12	1.1	0.51	7.08
IRAK	11.5	21.4	21.0	40.0	116.0	84.0	110.0	148.0	141.0	195.0	887.9
OMAN	_	_	_	-		-	_	_	_	-	-
QATAR	-	-	9.9	83.6	_	-	93.0	186.0	176.7	141.3	690.5
KUWAIT	1.3	5.9	3.0	11.0	66.0	9.0	8.0	17.0	7.0	35.0	163.3
LEBANON	5.66	7.48	7.8	9.9	12.4	21.1	10.9	11.4	12.5	10.9	121.04
LIBYA	1.0	1.7	2.0	4.0	56.0	62.0	10.0	9.0	9.0	23.0	177.7
EGYPT	18.38	15.44	5.2	14.6	8.7	8.0	11.0	8.3	6.2	13.9	109.72
MOROCCO	7.58	9.3	12.4	15.3	16.7	30.6	28.6	37.4	40.3	24.1	222.28
MAURITANIA	2.1	4.2	3.2	2.0	1.7	3.32	9.21	1.71	1.91	3.16	32.51
NORTH YEMEN	_	_	0.01	0.04	0.12	0.12	0.01	0.4	0.4	0.3	1.40
SOUTH YEMEN	6.833	4.24	6.97	11.39	11.9	9.51	9.95	12.35	13.83	17.56	104.533
TOTAL	104.473	122.54	118.71	244.74	584.12	618.68	783.45	883.58	777.14	1059.73	

Thus Arab aid is not destined, in the first instance, to promoting Arab exports in Africa. This does not mean that the Arabs should not endeavour to promote these exports and diversify their economies. But commercial relations with Africa should be a sort of two-way flow.

Finally, we already pointed out to another caracteristic of Arab aid. It resides in the fact that Arab aid derives almost entirely from petroleum revenues, that is a depletable source. Arab aid in this sense has better quality than assistance supplied by developed countries which is based on industrial and agricultural potential representing virtually renewable sources of wealth rather than a constantly eroding capital asset.

VII.THE EVALUATION OF ARAB AID.

About two thirds of the Arab aid, so far, has been contributed by seven leading Arab donor countries (headed by Saudi Arabia), the remaining third coming from multilateral Arab institutions, including BADEA, SAAFA, two other institutions which are mainly, though not entirely financed by the Arabs: the OPEC FUND and the ISLAMIC DEVELOPMENT BANK.

Direct Arab aid to non-Arab Africa now accounts for something like one third of the entire Official Development Assistance coming to the region. And yet, very often, western mass media endeavour to minimize the Arab effort to assist the African countries. Arabs are accused of profiteering and shameful bargaining. Sometimes Arabs and Africans did not beware of falling into the traps which their enemies are laying for them and whose purpose is to check the impetus which took off so well in the first Arab-African Conference in Cairo.

In evaluating Arab aid to Africa, the following observations are pertinent:

- Compared to bilateral aid, the Arab multilateral aid to Africa remains relatively moderate. Political decisions must be taken by Arab countries to consolidate the multilateral ais institutions, in order to give them a better chance to diversify their operations.
- 2. While in the beginning Arab aid was almost wholly used to wipe off the balance of payments deficits and reduce external debt, it has been gradually assuming the form of project aid, or in other words is more directly given in support of economic investment and growth. But this tendency for the aid to become more development-oriented should be pushed forward(7).
- 3. Cooperation between Arabs and Africans, who share the same geopolitical interests and development objectives, should lead to a "horizontal partnership" (a south-south cooperation). Unfortunately Africans are receiving aid but the pay off for the Arabs is mainly political. In the long run, Arab-African cooperation should become an objective alliance which must transcend the minor designs and calculations and the minor

contingencies of the moment.

That's why Arab aid should pave the way for an increase of mineral, industrial and agricultural exports and an encouragement to public and private investments. These new trends should be coherent with the overall plans of development of both regions.

4. It must also be recalled that Arab aid is generally provided on a project by project basis. Plan or program aid is seldom extended. However, as El Mellakh and Kadhim point out: "if a country does operate on the basis of a tightly knit plan, in which everything depends appreciably on everything else and where the timing of projects is therefore of importance, extending aid for projects only may be harmful for a number of reasons. If expenditures on an aided project are delayed for unforseen circumstances, the funds cannot be transferred to another project which may be waiting for lack of money... Moreover, if aid is restricted to projects, the result may be that either the aid cannot be absorbed within the prescribed period or that too many projects get started at a time when there is a high demand for replacement and minor extensions throughout the economy"(8).

For the time being, financing only planned projects is a guarantee for the donor. The projects re usually examined with meticulous care and they retain their distinct advantage of a means of surveillance. Furthermore, projects are scrutinized in order to ascertain that they are classified according to the needs of the African countries.

- 5. Another caracteristic of Arab funds is their lack of coordination and proliferation. The proliferation appears to
 - a. encourage the diffusion of scarce manpower,
 - b. prevent the application of uniform criteria for project appraisal both among and within sectors and economies,
 - c. militate against the formulation of in integrated programs of aid,
 - d. increase the cost of administration and surveillance,
 - e. increase the donor's non-development considerations since a national lending institution is more likely to be subject to narrow political pressures than multinational agencies,
 - f. reduce the capability of individual lending agencies to carry out substantive and comprehensive research concerning the economies of recipient countries, This problem, although real, is losing of its acuity due to the new tendency of multiple participation in project financing.

Experience during the last years underscored the necessity of co-financing large projects. Examples of development ventures almost wholly funded by Arab interests circlude the Clinker factory in Guinea, which started in 1977; fishery development in Cape Verde (1979 and electric energy generation in Seychelles (1980).

CONCLUSION.

After twenty years of sovereign independence, the African countries as a whole, were still suffering from most of the problems that can beset the developing world: rapidly encreasing population, dualistic economy, backward agriculture, limited industrialization, excessive growth of tertiary economic activities and unplanned. The Arab world, inspite of its "wealth", which is a contingent feature, share all these caracteristics.

And yet, the oil-exporting states, through different channels, are serving increasingly as the prime vehicles for development of African economies.

The significance of Arab aid lies not so much in its present magnitude but rather in its great potential. Moreover, Arab aid comes at a time when aid from other sources is drying up.

But Arab aid should be placed in its strategic perspective, a global vision of Afro-Arab relations. The benefits of aid should accrue to recipients as well as to donors. The recipient African countries gain from increased flows of capital at concessionary terms and the donor secure the advantages of greater economic relations.

That's why the co-ordination of information and activities between beneficiary countries and bilateral and multilateral aid donors is essential if a reliable flow of aid is to be maintained and Afro-Arab economic relations to be promoted and diversified.

Finally, Arabs and Africans are engaged on the path of South-South cooperation. The success of such an enterprise requires a persistent and "great act of collective imagination and a quantum leap in statesmanshup" for it needs, as Julius NYERERE put it, "confidence in ourselves and abilities as well as a definite commitment to go ahead on our own, in areas where the North is now unready or unwilling to work with us in the attack of world poverty" (9).

Arabs and Africans should realize that South-South cooperation cannot be developed along the pattern of Nort-South interactions. If one of the partners seeks to exploit the weaker ones, then third-world countries will repeat among themselves - and at a lower level - the kind of dependency imbalance which now exists between the North and the South.

To prevent the Afro-Arab cooperation from being too stuck to the contingencies of the moment, Arabs and Africans should set up a commission with broadly-based, high calibre membership and technical staff, which could examine the current and probable future organisational needs and the priorities of Afro-Arab action, which are appropriate for the benefit of all.

NOTES

- (1) Dr Chedli AYARI: "The Arab World in the international policy of cooperation", BADEA, Khartoum, June 1981, p. 1.
- (2) Anthony SYLVESTER: Arabs and Africans, cooperation for development, The Vodley Head, London, 1981.
- (3) It is the title of a short article written by Anthony SYL-VESTER in the Annual Review of the BADEA "Developing Africa", Jan. 1981, p. 2.
- (4) GATT: Prospects for international trade, Geneva, September 1979, p. 25.
- (5) BADEA REPORT: Bilateral and multilateral Arab financial institutions, Khartoum, March 1976, p. 5-6.
- (6) Ragaei AL MALLAKH and Mihssen KADHIM: "Arab institutionized development aid: an evaluation", in <u>The Middle</u> East Journal, Autumn 1976, p. 480.
- (7) Abd el Hassan ZALEALA: "The prospects of Arab-African cooperation" (in arabic), in Chooûn Arabiya,n°6, 1980, p. 63.
- (8) Ragaei AL MALLAKH and Mihssen KADHIM, op.cit., p. 481.
- (9) Julius NYERERE: "South-South option", in <u>JFDA Dossier</u> 31, Septembre-October, 1982, p. 69.

PRELIMINARY DRAFT NOT TO BE QUOTED WITHOUT WRITTEN PERMISSION

A NEW DEAL ON THE OLD INTERNATIONAL ECONOMIC ORDER:

A Program of Arab-African-Asian Co-operation in Industrial Development and Trade*

Paper presented to the Multinational Conference of "Afro-Arab Co-operation" at the Jordan Center for Studies and Information, Amman, Jordan, 11-14 September, 1982.

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*This paper is based on research carried out by the author as a consultant to the Global and Conceptual Studies Branch of United Nations Industrial Development Organization and is not to be published in any form. The purpose of this paper is to develop the logic of South-South co-operation, in general, and Afro-Arab Co-operation in particular, and to articulate this logic into both a method and an institutional framework for achieving such co-operation in the field of industrial development.

The logic of South-South co-operation is developed in Section I from the perspectives of the call for the New International Economic Order (NIEO) and the current deadlock in the North-South dialogue. Section II contains a critical account of the pitfalls and failures of past and current efforts in South-South co-operation. Section III outlines a method for identifying likely activities for South-South co-operation in industrial development and finally Section IV suggests an appropriate institutional framework for such co-operation with special reference to co-operation among the Arab, Tropical Africa and South Asian regions.

I. THE NEW INTERNATIONAL ECONOMIC ORDER AND SOUTH-SOUTH CO-OPERATION.

For well over a decade developing countries (the South) have been calling on developed countries (the North) for NIEO. This call has seemingly fallen on deaf (or perhaps hearing but unfriendly) ears in the North. Despite the South's sense of frustration from what it feels is the Northern bias of international economic institutions and relations, \frac{1}{2} the call for NIEO somewhat paradoxically has been largely a call to the North to help the South.\frac{2}{2} The South has alternatively begged, bargained with, preached to, threatened and cajoled the North, but always with the same negative result of non-response by the North. Likewise, the appeal to the North to help and cooperate with the South has alternatively been based on humanitarian, global responsibility, mutual benefit, or narrow self-interest grounds, but again always equally without effect.

Not only has the North turned a cold shoulder to all these calls for specific reforms, but also the North, buffeted as it has been by severe stagflationary cycles and decelerating growth, has retracted further from its prescribed ODA targets and begun to invoke increasingly protectionist restrictions on trade with the South. Northern markets, therefore, have all the appearance of being increasingly risky and unprofitable sources of finance and places to sell their industrial products.

Not surprisingly, the South's reaction to the increasingly bleak prospects of benefitting through greater co-operation with the North on either the old international economic order or in the achievement of the NIEO has been to turn further inward. Despite both the widely acknowledged shortcomings of traditional import substitution policies and programs, and the considerable progress in freeing trade that was made in the 1950s and 1960s in most of the world, many developing countries, and especially those in Tropical Africa, South Asia and the Middle East (with the exception of the oil exporting countries of these regions) have moved further in the direction of import substitution. Even radical calls for delinking from the North have been increasingly common.

Although calls for economic and technical co-operation among developing "collective (ECDC/TCDC) self-reliance" have countries and also increasingly common themes of NIEO in United Nations circles, these themes have to a large extent remained simply empty slogans devoid of practical content. These terms have seldom, if ever, been articulated into practical and workable forms of co-operation among developing countries. To the extent they have been, once again they have tended to depend on actions and reforms taken on behalf of the South in and by the North. As an example of the latter tendency, the primary instrument for meeting the South's target set in Lima in 1975 of the South attaining 25 percent of the world's manufacturing value added by the year 2000 seems to have been redeployment of certain industries from the North to the South. Redeployment has, however, proved rather difficult to accomplish and has thus far been largely limited to declining industries, implying that many more industries would have to be successfully deployed from North to South for the target to be achieved than would be the case if the redeployed industries were of rising importance. view of (a) the understandable difficulties in achieving redeployment, (b) slow growth and increasing protectionism in the North, and (c) the fact that for the Lima target to be achieved, overall manufacturing value added would have to grow at something like 5.2 per cent per annum faster in the South than in the North between now and the year 2000, it would seem highly unlikely that more than a few developing countries, e.g., the so called newly industrialized countries (the NICs), could be successful in achieving substantial industrial growth by continuing to depend so heavily on Northern markets.

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South-South co-operation, therefore, at this point constitutes the most promising vehicle for achieving the industrialization targets of developing countries, in general, and of individual regions thereof, such as those of Tropical Africa, South Asia and the Arab world of North Africa and the Middle East, in particular. Co-operation in and among North Africa-Middle East, South Asia and Tropical Africa would seem particularly important in view of the fact that at present these three regions share common bodies of water and hence transportation routes and yet are by far the least developed industrially. Indeed, as shown in Table 1 as recently as 1979 these three regions, which together have populations of more than 1.4 billion persons, or some two-thirds of the population of developing countries outside of China and over 43 per cent of world population (excluding China), had less than one-quarter of the manufacturing value added (at 1975 prices) or less than 2.5 per cent of the world's manufacturing value added (excluding China).

Past efforts in trying to achieve genuine South-South cooperation, however, have been on the whole distinctly unsuccessful. This implies, of course, that if future South-South co-operation efforts are to be any more successful than in the past, the lessons of the past experience must be taken into account in the design of future efforts.

The main message of this paper is to demonstrate that it should be possible to design a positive program of South-South co-operation for increasing the shares of these three regions in manufacturing value added in such a way as not to depend on actions of the North. It requires, therefore no reform of the international economic order, only that the South give itself a redeal of the existing order so as to be able to work within that order more effectively on the basis of South-South co-operation.

Table 1: Shares of the Arab, Tropical Africa and South Asia Regions in Manufacturing Value Added (at 1975 Prices) of the South (excluding China) and of the South in the World (excluding China) in 1979. (In per cent).

9.76	7.89	∜ 8.60	26.25
9.49	5.99	10.76	26.24
9.99	3.21	10.57	23.77
•			
38.79	1.92	2.29 ,	42.98
5.25	1.44	8.61	15.30
11.40	4.48	9.10	24.98
8.44	14.87	44.19	66.50
	5.25 11.40	5.25 1.44 11.40 4.48	5.25 1.44 8.61 11.40 4.48 9.10

Source: UNIDO data base, information supplied by the Statistical Office of the United Nations, with estimates by the UNIDO Secretariat.

II A CRITICAL ACCOUNT OF PAST SOUTH-SOUTH CO-OPERATION EFFORTS AND THE LESSONS FOR THE FUTURE.

A. Specific Features of Each Form of South-South Co-operation

In order to analyse past efforts of South-South co-operation, such efforts can usefully be divided into the following 8 categories which will be discussed in order: (1) removal of barriers to trade, (2) removal of barriers to factor mobility, (3) harmonization of policies, (4) regional finance, (5) regional (supranational) planning, (6) collective bargaining (7) producer and exporter organizations and (8) joint venture enterprises of developing countries. 4/

1. Removal of Restrictions on Trade.

The principal difficulties of customs unions, free trade areas and other efforts within the South to remove or reduce restrictions on trade have been (a) that agreements are both costly and time-consuming to achieve, and inflexible to changing circumstances, making them even more costly to monitor, maintain and enforce over time, (b) that as passive instruments relying on market forces they have tended to give rise to polarization effects, not only because of static trade-diversion effects, but also on account of dynamic agglomeration economies; and (c) in view of the fact that countries of the given region may tend to have similar resource endowments and hence may have little to trade with one another, the creation, maintenance and enforcement of any agreement on the removal of obstacles to trade is by no means a sufficient condition for trade to take place.

2. Removal of Barriers to Factor Mobility.

The creation and maintenance of any such agreement is likely to be quite difficult and dependent on the existence of a stable pattern of full utilization of all resources in some countries of the region but underutilization in others. Even when instituted and properly maintained, the removal of restrictions on factor mobility may well be rendered either ineffective or undesirable. Specifically, the removal of such restrictions would be likely to be ineffective if social or political considerations in either the sending or recipient regions arise so as to over-ride any economic

incentives for factor mobility. Especially in the case of capital mobility, political and other risks are likely to outweigh ordinary economic profitability in the determination of the extent and nature of such mobility. Likewise, the effects of factor mobility can be (a) to increase rather than to reduce existing inequalities, hence giving rise to polarization effects which tend to undermine the feasibility of the agreement in the long run or (b) to introduce social problems (as for example in the case of labour mobility when workers leave their families back home).

3. Harmonization of Policies.

Since the benefits and costs of harmonization of policy quite naturally vary according to the kind of policy harmonized, it is not easy to generalize on the experience with all forms or kinds of policy harmonization. much as competition among firms of different countries can be considered fair only if they are subject to similar types of taxes and tax rates, harmonization of tax policy becomes a quite natural direction for policy harmonization to take once a customs union has been formed or perhaps simultaneous with its creation. Harmonization of foreign investment codes can also be an attractive instrument for avoiding unnecessary competition between countries in attracting foreign investment which would have the effect of subsidizing that investment rather than of promoting domestic interests. Likewise, programs to harmonize macro policies, and to promote exchange convertibility or even monetary union can offer important inducements to or even be necessary conditions for the achievement of substantial trade and or factor mobility among developing countries of a given region. Nevertheless. because policies are likely to differ more substantially from country to country in developing countries than in developed countries, the difficulties of attaining agreements on any of these policy spheres among countries of the South are likely to be much greater. Moreover, the fact that relevant circumstances, such as external trade conditions, economic structure and political orientation and leadership, are likely to change more frequently and more abruptly in developing countries than in developed countries, such agreements are likely to be much more difficult to maintain and update in developing countries than in developed countries. Most agreements of the policy harmonization type, indeed, have the effect of limiting such flexibility by making it more difficult for the participating countries to adopt to changing circumstances. While in most cases, cooperative efforts

are likely to be easier to negotiate, revise, renegotiate, monitor and enforce the more limited the area of application and number of countries involved, with respect to foreign exchange pooling, and monetary union, both the feasibility of these actions and the benefits of such schemes may well be relatively greater the wider the scope of such application, such as the level of the South as a whole.

4. Regional Finance.

Regional financial institutions can potentially serve, not only as important sources of development finance for developing countries of a given region, but also both (a) as vehicles for rectifying inequities among participating countries of the region (including those brought about by the polarization effects of other forms of co-operation), and (b) as instruments for directly or indirectly developing regional projects.

The possibilities for accomplishing these objectives, however, are limited by a number of factors. First and foremost, these possibilities are limited by the availability of financial surpluses in the South. Only the relatively few oil exporting countries with large resource supplies but small populations and limited absorbtive capacities have actually had such surpluses. other cases, regional financial institutions have been rather dependent on the North for sources of finance, making even the regional financial institutions representative of North-South co-operation than Second, regardless of either their sources of finance or their co-operation. magnitude, the ability of regional financial institutions to achieve their special functions, namely, of promoting equity in distribution and truly regional projects is limited by the facts such institutions must at each stage (a) deal with and obtain agreement from all the nation states involved, thereby once again raising the costs of creating and maintaining agreements on regional projects, and (b) respond to proposals sent to them which may be limited especially in the relatively poor countries of the region by existing shortages of skilled manpower, in general, and by existing bottlenecks in project formulation, evaluation and implementation in particular.

5. Regional (Supranational) Planning.

Regional planning is impeded by differences in the nature, extent and

eliminate monopsony power on the part of the TNCs and to improve the relative position of producing vis-a-vis consuming countries, but also they have both (a) created unprecedented surpluses of government enterprises and governments proper which have for the first time made possible sizeable sources of development finance in the South and hence South-South financial co-operation and (b) developed joint venture activities upstream and downstream from petroleum which in the long run should help to diversify and hence stabilize such economies.

8. Joint Venture Enterprises of Developing Countries.

OPEC and OAPEC are not the only sources of multinational joint venture enterprises among developing countries. Although their nature and number vary considerably from one region to another within the South, the evidence is accumulating 5/ that such enterprises are proliferating rapidly and for the most part accomplishing quite a bit both in the way of development-oriented activities and in stimulating further efforts at South-South co-operation.

Among their advantages are (a) the fact that they are able to reduce the transactions and monitoring costs that arise in "arms-length" market activities, and especially the enforcement costs of hard-to-enforce contracts extending across international boundaries, (b) that they facilitate mobility of critically scarce factors among countries or regions of the South, (c) that they allow important dynamic benefits arising from learning-by-doing to be captured and retained in the South, (d) that they provide convenient models for the introduction of modern management practices that can raise technical efficiency of Southern production in both the short and long runs, and last but not least, (e) that they are extremely flexible, allowing participating parties to opt in or opt out as they wish without imposing harmful consequences on the activities themselves, thereby reducing the transactions costs of forming agreements and maintaining them relative to those of other forms of South-South co-operation.

B. The Overall Lessons of the Experiences in South-South Co-operation.

Several common themes emerge from this brief survey of the experience with the several different forms of South-South co-operation.

First, with the exception of foreign exchange reserve pooling, monetary co-operation and collective bargaining, small efforts are more likely to be successful than large efforts.

Second, "active" instruments of co-operation like regional planning, particularly active regional financial institutions, and multinational joint ventures among developing countries are more likely to be successful in avoiding polarization effects than are the more passive instruments of co-operation, such as customs unions, common markets and the like which rely on existing (imperfectly competitive) market forces.

Third, high transactions and information costs are extremely important in explaining the failures arising from the application of many traditional forms of co-operation to developing countries. Low transactions costs, however, explain the relatively successful experience of multinational joint ventures of developing countries (MJVs).

Fourth, in the long run dynamic factors like learning-by-doing (which MJVs are particularly able to take advantage of) are more important than the traditional static sources of efficiency.

Above all, the fragility of co-operative agreements among countries of the South revealed in this experience calls attention to the difficulties in the creation, preservation and enforcement of such agreements, all factors taken for granted in traditional economic analysis.

III. METHODS FOR IDENTIFYING AND QUANTIFYING LIKELY SOURCES OF INDUSTRIAL DEVELOPMENT BY SOUTH-SOUTH CO-OPERATION.

We turn now to the matter of identifying and quantifying the potential for industrial development via South-South co-operation. Two different methods are proposed.

The principal reason for the use of two methods is the difficulty of the task. Considering the difficulties involved, the use of two methods affords the possibility of making comparisons which, if they yield similar estimates, would serve to reinforce the conclusions that would have been drawn from either. If they yield differing estimates, they at least offer the user the

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opportunity to find out why the two estimates differ. In the longer run, therefore, such an analysis of the difference could go a long way to resolving the choice among them and to designing better and more efficient alternatives.

In the present case for our two alternatives, we deliberately choose two quite different approaches, one based in large part on production patterns as revealed in international cross-section studies, and the other based on both the dynamics of production and trade patterns as revealed in recent time series data for different countries.

Since the former is by far the neater, simpler and perhaps more familiar method, we start with it. It is based on those empirical studies hich define the normal sectoral growth pattern of an economy in terms of the income per capita, population size and other variables including perhaps some nonlinear terms. The normal growth pattern is generally simulated by plugging hypothetical population and income variables into an equation whose parameter values have been estimated by regressing country-specific sectoral value added data on country specific per capita income and population data from an international cross-section or from data combining international cross-section and time series.

The effect of economic integration or complete co-operation countries on industrial structure can be determined by simulating the effect of treating the data for an hypothetically integrated region of countries as if they were from a single but large country and comparing the value predicted for sectoral value added in this way with that which would be predicted by adding the sectoral value added figures predicted for each country of the region on the basis of the same method applied to country data. this method has been used to quantify the degree of industrialization that could be obtained from economic integration almost invariably at subregional level.7/ Since in recent years the emphasis in economic cooperation among developing countries has been at the world level, we deem it relevant and important to apply this method, first at the regional level relative to countries comprising the region, then again at the level of all three regions together relative to the situation of separate regions, and finally at the level of the South as a whole relative to that (in the absence of integration) of the results obtained by adding up the predicted values for individual countries of the South.

Somewhat different estimating equations have been employed in the different empirical studies mentioned above, almost always with some advantages but also some disadvantages relative to the available alternatives. Because of its convenience, accessibility and more official status, in this study the estimating equations presented in United Nations (1963, Table 1, p.7) are employed. For manufacturing as a whole these are of the form:

$$log V = a + b log y + c log P$$

where Vi represents the value added in sector i in millions of U.S. Dollars (at 1953 prices) and P is population (in millions).

For the various subsectors of manufacturing an extra term was added to account for the actual relative to the calculated amounts of total manufacturing value added.

Since the empirical relationship estimated in the United Nations study was based on data for the 1950s, and since estimates based on cross-section data may not apply to sectoral growth patterns and structural changes which take place over time, we also deem it important to re-estimate the relationship with 1975 data and thereby to be in a position to determine the sensitivity of the simulation results to the vintage of the data base.

Table 2 presents the simulation results for manufacturing as a whole using both the original estimating equation and the one re-estimated with 1975 data. The use of the original estimating equation led to exaggerated estimates of the predicted manufacturing value added with or without the effect of South-South co-operation.— For this reason, the results presented are given only in terms of the absolute and percentage changes attributable to the institution of an effective program of South-South co-operation.

The results show that, by practicing complete co-operation within the region, the manufacturing value added at constant prices of the Arab region (North Africa - Middle East) could be increased by approximately 11 per cent. The corresponding increase for the three region total, i.e. that of North Africa - Middle East, Tropical Africa and South Asia, is of the same

order of magnitude (approximately 12-14 per cent). The introduction of an effective program of interregional South-South co-operation among the three aforementioned regions would raise real manufacturing value added of the three regions as a whole by somewhere between 0.4 per cent and 3.4 per cent over and above that attainable by intraregional co-operation. The corresponding increase for South-South co-operation in the South as a whole vis-a-vis the alternative of complete intraregional co-operation in each region of the South is somewhere around 7 per cent.

In Table 3 we present the corresponding estimates of percentage changes in value added of specific manufacturing sectors by the same two estimating equations under two different sets of co-operation experiments. In the first - given in the first two columns of the table - the real sectoral value added for the North Africa - Middle East region predicted on the basis of intraregional co-operation is compared with that predicted in the absence of any co-operation among countries of the region. In the latter - given in the last two columns of the table - the real sectoral value added attainable on the basis of full co-operation among countries and regions of the South is compared with that attainable in the absence of co-operation. As the reader can see, the results are not particularly sensitive to the choice of equation or particular co-operation experiment.

According to these simulations South-South co-operation could be expected to raise real manufacturing value added in certain sectors, such as textiles, rubber and rubber products, basic metals, metal products and capital goods industries, but not in other sectors.

The second method employed both for identifying the sectors appropriate for South-South co-operation and for estimating the approximate magnitude of the potential industrialization that can be accomplished by South-South trade and co-operation is much more complicated. Because of limitations on space, this method can only be sketched and the results reported without further explanation.

This method consisted of the following steps:

(1) Starting from the list of all manufacturing sectors at the three-digit ISIC level, rule out all industries and

sub-industries for which the rate of new product development is estimated to be high. $\frac{9}{}$

- (2) With respect to the remaining industries, from the point of view of factor proportions required, to identify those sectors and subsectors for which factor requirements can be satisfied at regional or sub-regional level but not at the individual country level.
- (3) With respect to the industries and sub-industries remaining qualified after steps (1) and (2) were completed, to identify the realistic amount of potential import substitution attainable on the basis of South-South co-operation by confining attention to the amounts by which both value added and exports would increase over the plan horizon (defined arbitrarily as 1990) of value added was to grow at the minimum of the growth rates of each of these (in real terms) in the recent past.

In brief, step (1) eliminated only certain subsectors of capital goods, such as professional and scientific equipment, and steel. Step (2) eliminated most industries other than non-metallic minerals, basic metals, rubber, leather, and capital goods industries. Finally, step 3 served to focus attention on basic goods and capital goods industries and indicated that in each of these sectors domestic value added and trade could be increased by as much as 30 per cent.

Therefore, roughly speaking at least, the application of the two very different methods for estimating the potential for South-South co-operation yields rather similar results, suggesting that capital goods and basic goods are the most promising sectors for South-South co-operation.

IV. AN INSTITUTIONAL FRAMEWORK FOR ARAB-AFRICAN-ASIAN CO-OPERATION WITH RESPECT TO INDUSTRIAL DEVELOPMENT.

From the discussion of Section II two conditions for successful implementation of South-South co-operation may be derived and applied in the present context.

First, in order to have trade in goods and services among developing countries, a certain degree of exchange convertibility is virtually a

One vehicle for attaining currency convertibility within the South as well as the complementary policies of foreign exchange pooling and policy coordination, and perhaps even in some regions of the South, monetary unions, would be the creation of a Southern Monetary Fund built along the lines of the IMF, but exclusively composed of developing countries like the regional and subregional organizations such as the Arab Monetary Fund, and the Stabilization Fund. Central American An additional purpose establishment of a Southern Monetary Fund would be to serve as a potential. offset to the Northern market bias of the IMF and the financial markets which As such, the Southern Monetary Fund might be able to decrease it influences. the current dependence and vulnerability of developing countries on and to roller-coaster-like fluctuations in interest rates and other credit conditions in developed countries in general and the U.S. in particular.

Second, the increased Southern production and trade should be undertaken in so far as possible in and by Southern multinational companies or joint ventures (MJVs). Among other benefits MJVs should be able (a) to take advantage of the very substantial learning-by-doing benefits of basic goods and capital goods production, (b) to reduce transactions costs of all kinds, (c) to provide linkages to other South-South co-operation efforts and industrial production, (d) to allow for meaningful kinds of factor mobility to take place between regions of the South, thereby increasing resource complementarity of the countries of the region, (e) as active instruments to help overcome critical bottlenecks in project identification, formulation, evaluation and implementation, and (f) to raise the rate of net capital formation.

Indeed, the specific industries favoured for South-South co-operation would seem ideal for MJVs. Both capital goods and selected resource-based "basic goods" would seem ideal for South-South co-operation because of (a) the aforementioned opportunities for dynamic benefits, (b) the possibility of providing a more appropriate technology and (c) for allowing the different scarce resources available in different countries or regions of the South to be pooled.

Footnotes

- 1/ See for example Lang (1979), Bhagwati, ed.
- Notice the prominence of the North in the following list of some of the most common themes and proposals of the NIEO.
 - a. Price indexation of Southern exports to the North on the basis of import prices of Northern exports to the South.
 - b. Allocation of .7 per cent of the GDP of Northern countries in the form of aid to the South.
 - c. Development of better mechanisms for transferring technology from the North to the South than via transnational corporations (TNCs).
 - d. Creation of international food grain reserves and buffer stock schemes for commodity price stabilization.
 - e. Linkage of development aid to the creation of international reserves in the form of special drawing rights (SDRs) by the International Monetary Fund.
 - f. Preferential credit and debt relief schemes.
 - g. The creation of a new, better and more South-oriented industrial development bank.
 - h. The institution of a code of conduct for TNCs.
 - i. Preferential tariff reductions in the North for developing countries.
 - j. Redeployment of mature and/or labour-intensive industries from the North to the South.
- 3/ The North Africa-Middle East region includes all the Arab countries of North Africa and the Middle East plus Iran; the South Asia region includes Bangladesh, Burma, India, Nepal, Pakistan and Sri Lanka and Tropical Africa includes all sub-Saharan African countries except for South Africa.
- 4/ For a more detailed account of the benefits and costs of each such instrument with special reference to the Middle East, see United Nations, ECWA (1981).
- 5/ See especially Lecraw (1981), Kumar and McLeod, ed. (1981), Nugent (1982), White (1981a and 1981b)
- 6/ See especially Chenery (1960), United Nations (1963), Chenery and Taylor (1968), Chenery and Syrquin (1975) and Chenery (1979).
- 7/ See for example Nugent (1974):

- 8/ This implies that over time the level of real manufacturing value added has been less sensitive to the growth of income per capita and population between 1953 and 1975 than would have been expected on the basis of the 1953 cross section results.
- 9/ See United Nations UNIDO (1981).

Table 2: Estimated Changes in Manufacturing Value Added Attributed to the Imposition of an Effective Program of South-South Co-operation, by Type of Program and Data Base Employed in Parameter Estimation.

Simulated Change in Institu- Data tional Base Relation- Used and ship Type of Change	Intraregional Co-operation in the 3 of South Relative to No Co-opera- tion	Intraregional Co-operation in the 3 Regions of South Rela- tive to No Co-operation	Extraregional Co-operation among the 3 Regions of South Rela- tive to Intraregional Co-operation	Extraregional Co-operation among all Regions of South 1/ Relative to Intraregional Co-operation	
Region	North Africa- Middle East	Three-Region Total	Three-Region Total	South Total	
A. Original Equation Absolute Change in Millions of	8051	16,099	478	22,706	
U.S. Dollars Percentage Change	11.0	13.3	0.4	6.5	
B. Reestimated Equation Absolute Change in Millions of U.S. Dollars	4228	8525	2598	13,353	
Percentage Change	11.5	12.4	3,4	7.2	

Note: 1/ Because data for China was not available the Centrally Planned Asia region, of which China is the most important country, has been excluded from the Definition of South.

Table 3: Percentage Changes in Real Value Added in Specified Sectors of Manufacturing by Various Programs of South-South Co-operation.

Old New Sector SIC ISIC

Comparison: Intraregional

Co-operation in North Afric-Middle East Relative to No

1.

Interregional Co-operation among 3 Regions Relative to No Co-operation

Co-operation

	•		Original Equation	Reestimated Equation	Original Equation	Reestimated Equation
	20-22	Food, Beverages and Tobacco	-38.1		-51.4	
	23	Textiles	65.4		84.7	
	24	Clothing	-24.7		-36.7	
	25,26	Wood,Wood Products	-17.8		-36.7	
,	27	Paper,Paper Products	-27.2		-47.7	
	28	Printing and Publishing	-20.9		-36 . 9	
	29	Leather	-48.6	•	-57.2	
	30	Rubber	24.3		26.5	
	31.32	Chemicals and Petroleum Products	94.7		132.2	
	33	Non-metallic Minerals	-20.4	· · · · · · · · · · · · · · · · · · ·	-28.1	
	34	Basic Metals	47.0	•	148.2	•
	35-38	Metal Products Machinery and Transport Equipment	20.2		11.9	
	39	Miscellaneous Manufactures	45.3		50.9	

Source: Original equation is from United Nations 1963,p.7.

Table Z Predicted Manufacturing Value Added in Millions . A U.S. Tollars

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ŧ	Leadwin Products	269	265	536	135	93	2.5)	200
ŧ.	Motor Products	881	207	1094	1100	365	स्विष्	(42)
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Total Manufacturing 73,348 20,718 84,066 \$1,389 26,768 108,107 109,565

Source: UN (1963) and UN statistical Office date beve based on UNITO secretarial estimates Table 3

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ALTERNATIVE FUTURES IN THE MIDDLE EAST

The Results From Three Simulations

September, 1982

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ALTERNATIVE FUTURES IN THE MIDDLE EAST The Results From Three Simulations

The task of this paper is twofold: to make some intelligible statements about the future of Middle East relations and to demonstrate methodologically how to build an empirically based forecasting tool. Neither task is very easy: Both exercises have proven fruitless frequently in the past. Substantively this paper reports on an attempt to identify the complex mix of strategies which constitute a major portion of Middle Eastern affairs and to make some policy relevant assessments of alternative scenarios for the future of relations in the area of the Red Sea and Israeli-Arab affairs. The author wishes to hasten to confess his relative lack of substantive depth in Middle Eastern politics and his sense that many have expressed hopes of "solving" these problems before--but, after two recent experiences in the region, its problems seem compellingly interesting and somehow almost understandable.

The traditional concerns of regional specialists are to identify how a series of forces coalesce to form the exchanges between nations in the region. These forces include:

- Domestic forces which spill over into international affairs
- 2. The stimulus reponse of the Arab states

- 3. The Arab-Israeli conflict
- 4. The mix of issues and levels, ie. domestic economics and international political institutions
- 5. The external stimuli from the East and West which cascade over the Mideast arena.

It is the contention of this paper that these forces are combined in more than one way. But these combinations are not infinite, nor are they necessarily idiosyncratic to individual nations. That is, there are dramas, scenarios, or regimes which seem to be well recognized implicitly and tacitly by many actors in this region. These dramas are explained by complex mixtures of forces from the above five alternative sources. They are stable across all actors involved in the region and they constitute a collage which when taken together is difficult to interpret. They must be broken down into separate but interrelated patterns and unfolded separately in order to forecast the future course of events in the region.

At the heart of this analysis is the belief that we must understand the goal crientation of actions. Inputs are intended to generate outputs, outputs are intended to produce outcomes, and outcomes create states of goal attainment or frustration. Political processes are saturated with values, purposes and objectives. It makes no sense to embrace a science of politics that is so sterile as to

exclude these components. Indeed, it would be fruitless to attempt to forecast Arab futures without their inclusion.

The social sciences have frequently adhered to statistical explanation in which analysts asserted that in order to explain an event, all that is needed is a conviction that it was generated by a given type of random process. But this is a non argument (Jeffery 1971 and Salmon 1971); these "explanations" do not consist of premises and conclusions convincing us about the high probability of the conclusions. When these conclusions must be in the form of assertions. about the future, statistical explanations are futibe. course, the central problem is left untouched; how can we gain knowledge about the process or processes underlying the observed events? Salmon's answer is simplicity itself: by making statistically relevant partitions in the referent class and "screening off" other partitions. If frequency interpretations are assumed, we are, strictly speaking, not entitled to any inference concerning the future outcomes on the basis of the observed ones unless we resort to some additional rule of induction (Nurmi 1974). In statistics the solution requires a trivial assumption, we simply assume the process is random in the sense that frequencies of each of the outcomes cluster "around" some number when the trial is repeated "a large number of times." But in causation / in politics it makes much more sense to assume that behavior is a property of a generating device and not the outcode

of a sequence. The business of the social sciences is primarily to explain actions and it is contended here that that can best be done by resorting to intentions. Social science behavior is action which consists of an inner and outer component.

Mario Bunge (1959) distinguishes between inner and outer determinants of system performances. This allows him to focus upon the stimulus-response aspects of social systems and their development as adaptations over time. The question becomes what kind of intelligence do we need to insert between stimulus and response in our social systems (here the political environment of the Middle East in the last decade) in order for us to explain and predict behavior. This intelligence is composed of two components:

(1) The actors beliefs concerning the linkage between actions and the environment; and (2) their observations of the environment and the actions they choose. We contend that there are several "games" or patterns which characterize the political discourse in the Middle East and that they each have separate, albeit, interrslated logics.

A central problem in political decision making is the identification and evaluation of plausible alternative courses of action. For several decades now, political scientists have attempted to be of assistance in analyzing problems from the perspective of practical decision makers.

Our aim, as scientists, is to make only vulnerable statements. The generation of theory must have its rational points as well as its empirical strengths, however. We must, therefore, look at the process of developing theories useful for public policy decision making rather than the structural requisites of theory. As a starting point, we need to take the position that science is a triplet of a specific state of knowedge, problem identification, and instruments for measuring or testing. This KPI triplet of knowledge, problem identification, and instruments lies at the heart of any scientific theory. Knowledge represents the cognitive image (model) that we currently hold of some real world process. Problem identification is a forecasted or current inability to reach objectives given in that image of the real world. Finally, the instruments are the tools we bring to bear on a particular subject. The process of development in science is the process of change in the particular triplet, some addition of knowledge in the form of a change in the mental images that we deal with, new identification of problems, or the development or new instruments to deal with problems. In this artiple, two problems of developing more policy relevant KPI triplets are addressed. First, we must change the way we think about political processes, and second, we must change the way we model. Thus, K and I must be changed if we are

to significantly advance the state of theorizing in public policy decision making, especially with reference to forecasting in complex issue areas as the Middle East.

Such systems have a number of components. There is an inner environment (I.E.) which attempts to achieve goals in an outer environment or task environment (0.E.). The inner environment recieves information about the cuter environment through an observation interface. Similarly, the inner environment implements its decisions through an access interface. In order to evaluate alternative policies without actually implementing them, the inner environment must have a representation or image of the outer environment. The structure common to adaptive systems is shown in Figure 1.

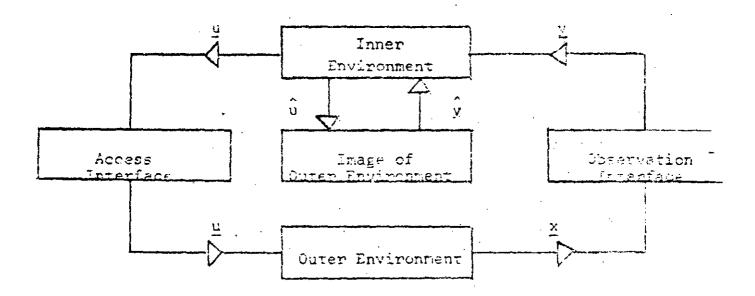


Figure 1. Structure Common to Adaptive Systems

The easiest way to explain this perspective is to examine a political problem such as energy allocation policies. Let the inner environment be an energy office in an international organization such as the EEC, which is responsible for allocating crude oil for various refined products and setting price levels for those refined products. Let us further stipulate that the officials' goals are to maintain present community patterns and present demographic distributions of population in country members.

Information concerning the state of the environment is now represented by the vector X and might include the use of public transportation, new cars sold, and movement to and from suburban areas. The officials must have some way of observing X so that they can determine whether their goals are being acceptably met. However, they cannot observe every sales transaction or every family move directly. In fact, even if they could obtain all of this information, it would probably exceed their information-processing capability. Therefore, they need a mechanism that filters the minute information into manageable form. This is the task of the observation interface.

The observation interface is the inner environment's sensing device for gauging changes in the outer environment. In this example it might include the various agencies that collect and aggregate data on gasoline availability and

price, automobile usage, automobile purchasing, etc. To avoid information overload from X, the observation interface might incorporate an indicator system. Thus, instead of having a lot of information about the outer environment (X) as an input, the inner environment receives Y. Vector Y might include such indicators as changes in the level of public transportation use and changes in the rate of new care purchasing. In some cases Y and X will be equivalent. Most often, however, Y will be some summary measure of X and the notation reflects this distinction.

Upon receiving \underline{Y} , the inner environment must evaluate it to determine what sort of policy is indicated. Results of this evaluation will depend on the nature of \underline{Y} and on the inner environment's image of the outer environment. The image might, for example, consist of an economic model in which the critical variable is the price elasticity of gasoline for private transportation use. Generally, this image will at least in part, contain the elements of \underline{Y} . In this way \underline{Y} can be used to set the state of the image, and various policy alternatives $\underline{\hat{U}}$ can be put into the image to assess the differential impacts \hat{Y} . To have any impact, the elements of the \underline{U} vector must have some way of entering the outer environment; that is, the inner environment must have some access interface that can implement U in the outer environment. Refinery allocation,

gasoline rationing, and price adjustments might serve as access points for the officials in this example.

Of course, the model structure outlined here merely identifies the important characteristics of adaptive systems. For theorists to represent goal-directed policy effectively in a changing environment model, the system must be capable of:

- Specifying systems' goals in terms of desired characteristics in the environment in which policy is implemented,
- Possessing an access interface with the outer environment which permits it to alter that outer environment,
- Maintaining a realistic image of that outer environment which allows it to gauge the impact of alternative policy actions prior to their actual implementation and,
- Possessing an observation interface with the outer environment which permits it to monitor changes in the outer environment constantly and efficiently and to assess the actual effect of the already implemented policies with respect to goals.

Assuming that the system has an identifiable set of goals and possible alternative policies, a model of the process requires an "image" of the outer environment and an observation interface for monitoring that outer environment. The goals provide criteria for utilizing policy alternatives to regulate change in the outer environment. There are three aspects of this decision process that characterize nations as systems: (1) nations

are goal-seeking systems, (2) nations hold many goals simultaneously, and (3) nations are responsive to a perceived rather than an objective environment. The last of these assertions is seen in the development of images in the above adaptive systems approach. The first, that nations are goal-seeking, stems directly from the whole adaptive systems approach and is consistent with the position held by Snyder, Bruck, and Sapin (1982), the Sprouts (1956), and Holsti, et al. (1968, 1965) on foreign policy decision making and international relations. nations hold many goals simultaneously is the crucial element that distinguishes them from most lower level systems. This is one of the most difficult aspects in the development of a general systems theory for large, complex systems. When dealing with nations or supernational units, social scientists must deal with the fact that there is no single goal that can adequately describe the operation of the system. If the goals of the system are inconsistent. one goal can be achieved only at the expense of the other. In that case the system (nation, organization, or individual) must determine which trade-offs are acceptable. Even if the goals are consistent, all goals may not be achieved at the same time because the systems have only a finite amount of resources. Again, the system must determine the optimum allocation of resources.

At least since the publication of Weaver's (1948) well-known paper on complexity, many scientists have argued that the practices employed in forming a representative model of a social process ought in some sense to be related to the "complexity" of the phenomenon under investigation. Nurmi (1974) asserts "Complexity can be viewed as an ontological property of the relationship between the actor and environment" (p. 84). As long as the focus of study is systems with control structures (such as nation states) complexity must be viewed in a contingent fashion; contingent upon the perspective of the analyst (K) and the mechanisms available for investigating alternatives (I). The next section will suggest implications of this contingent view for developing instruments to deal with political problems. Determining the instruments to bring to bear on social problems depends to a large extent on the researcher's skill, interest, and sensitivity to the policy-maker's problems. But it is also a function of the type of structure a particular theory brings to the development of answers to the questions.

The Methodology

As stated above, the strategy of research must be to identify relevant patterns in the behavior of states in the Middle East and then to identify the intentions or images

that could have created this behavior. In order to accomplish this task we have resorted to two methodologies: factor analysis to identify patterns and artificial intelligence to capture the complexity of the process of political decision making.

In resorting to factor analysis we are arguing that there is likely to be more than one pattern in the interactions which make up the behavior of states in the Middle East. Since we believe these patterns are not independent of each other, we have chosen to identify oblique factor patterns and structure as opposed to orthogonal patterns (Rummel 1970). Since these techniques are well documented in the literature, no explanations or justification of the technique is presented in this paper.

Artificial intelligence is used to identify decision making models consistent with these patterns of behavior.

Since this is a more novel approach, some discussion of the perspective is essential.

Artificial intelligence is a broad field of study which contains many diverse areas of inquiry such as: theorem proving, pattern recognition, robotics, natural language interpretation and comprehension, problem-solving, as well as modeling of knowledge and belief systems. One important strand of thought holds these seemingly unconnected disciplines together: that human intelligence and perception can, in some way, be simulated with the aid of computers.

While the field of artificial intelligence is a relatively recent one, the use of AI by political scientists is not unprecedented. Alker and Christensen (1974), used AI techniques to simulate a model of U.N. peacekeeping. Other political scientists who have used AI include: Thorson and Miller (1977), Phillips and McCormick (1979), Alker and Bennett (1977) and more recently, a group at Yale which has developed the CYRUS program, (which answers questions about the former Secretary of State's activities and attitudes).

The major differences between earlier attempts by political scientists to utilize AI and the methodology used in this study are three: the method for the representation of causality, the recognized importance of contextuality, and the emphasis and treatment of complexity in modeling either physical mechanisms or policy environments.

The concept of causality has generated a great deal of debate and discussion among social scientists (See Nurmi, 1974). Causality in this model has been defined and represented with a theory known as the "Common Sense Algorithm" (CSA) theory. (See Rieger, (1976), and Grinberg and Rieger, (1980). The theory, simply stated, is that humans use a small set of primitive notions in perceiving cause-effect relationships, and furthermore, that these notions of causality can be approximated and modeled using

symbolic assertions. The developers of the particular AI simulator used in this study recognize that while the theory is not yet complete, they state that they are, "convinced that any theory about human representation of causality must eventually incorporate the main tenets of this theory."

(Rieger 1975, p. 2) The theory states that the causal relationships to be defined below serve to concert four types of "events" (whose categories are also primitive), into often large data structures that explain complex causal environments. The important elements of the theory for this particular study are the events and the links (causal connectors) between events.

There are four categories of events: action, tendency, state and statechange. There are seven cause-effect links between these events: causality, enablement, statecouple, rate confluence, threshold, state antagonism, and state equivalence.

An action generates or causes another event-either a state or a statechange. A tendency also generates an effect, but it is an "inanimate force generator" (e.g. represented by a natural phenomena such as gravity).

A state, within this theory, is defined as a static condition or as a value of an attribute (e.g. political stability, economic growth). States do not cause actions (the reverse is true-actions cause states); but states

can enable actions or tendencies. According to Rieger and Grinberg, there are conditions which govern whether or not the action or tendency can begin or proceed in the first place. These conditions are always states and are designated as the actions or tendency's enabling conditions. Enablement and causality, then, define the relationship between states and actions.

In addition to the events and links described above, there are five links between states and one additional event that has not been defined—the statechange. A statechange is simply a changing condition, "with respect to some continuous attribute." The rate confluence link connects statechanges. It is the result of changes in statechanges which cause a transformation into a new statechange. The statechanges which contribute to the new statechange (SC) all reference the same attribute and object. The final link between statechanges is the threshold link which represents a change in the level or rate of a statechange (e.g. statechanges which result in a change in the inflation rate).

Three more commonly used links between states are the statecuple, state equivalence and state antagonism.

The statecouple link is used when there is a known cause-effect relationship between two states, but that is not a direct relationship. What is not known is the intervening relationship or cause structure between the two

states. In this case, state one (S1) indirectly produces state two (S2).

State equivalence is relatively straightforward. It defines a link between two states when the two states reflect a common representation of the same event (e.g. economic growth being equated with an increase in the GNP). The opposite of state equivalence is state antagonism. State antagonisms exist when one state negates another; when the existence of one state is antagonistic to the other state, (e.g. catastrophic weather conditions would be antagonistic to food production).

Finally, a concept that is essential to the theory of the CSA but has not yet been discussed is the idea of gating. For many of the events presented, a gating condition is possible. The linked events represent a causal relationship that exists "when all other conditions in the environment" are correct. This phrase represents the concept of a gate (e.g. if a country plans an economic growth strategy (sl) on the basis of export led growth (actionally, then one of the conditions that is necessary for this relationship to exist is that there are markets for the exported goods—in this case, the necessity of open markets would be a gating condition). The gate, which must be a state, "has nothing to do with the existence of the initiating event itself. That event may be proceeding, yet not producing any results because of some missing

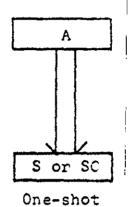
gating conditions. Thus gates help us to segregate the conditions which are requisite to the initiating events existence from the conditions which govern the influence such an event has on its environment." Each of these events and links are presented in Diagram 1.

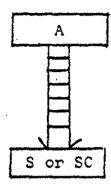
The events, links and the concept of gating are used to develop a model of human perception and representation of causality. The CSA theory of knowledge representation has been used to build a number of physical mechanisms (a digital electronic NAND gate, a flip-flop mechanism, etc.). This exercise is one of the first social scientific uses of the simulator. Others include Ensign (1982) and Phillips and Ensign (1981 and 1982).

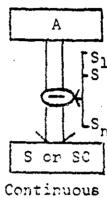
The representation of causality in the CSA theory of knowledge representation is only one part of the AI simulator. In Diagram 2 below, this first building bloc of the simulator is noted by A--the user defines the mechanism. The next step in the diagram below, has drawn on another aspect of AI termed "pattern directed inference." In many previous models using AI, a simulated model proceeded--or computations occurred--enly on demand from other computations. This model contains, "spontaneous computations!" This means that the simulator books at part A from the diagram, (the causal model) and triggers all events represented in the model--simultaneously, rather

Diagram 1 EVENTS AND LINKS

CAUSALITY





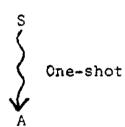


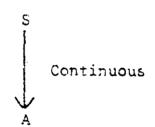
Continuous

One-shot Gated

Continuous Gated

ENABLEMENT





ANTAGONISM

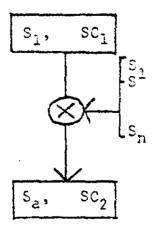
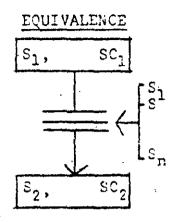
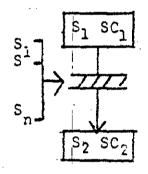


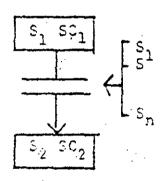
Diagram 1 Continued



STATE COUPLING



One-shot Gated



Continuous Gated

ABBREVIATIONS:

A = Action

S = State

SC = State Change

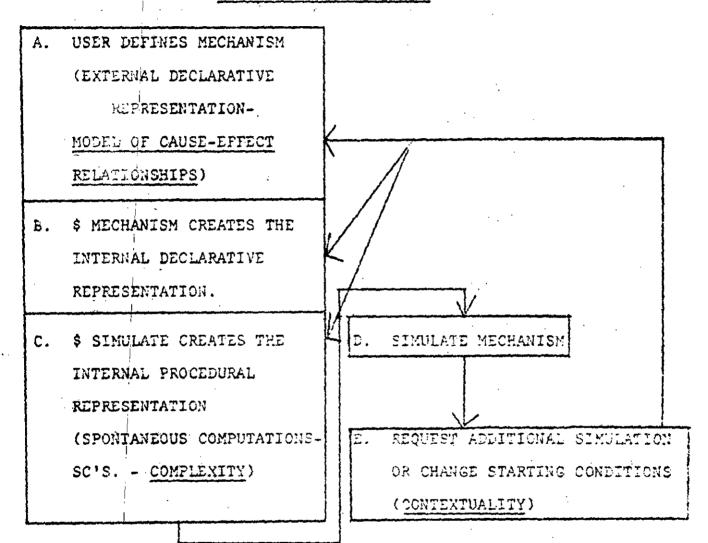
Source: Dr. C. Rieger, "One System for Two Tasks: A CSA Memory That Solves Problems and Comprehends Language." University of Maryland, Technical Report: 435, Department of Computer Science, 1978.

than moving from one cause-effect relationship to the next. (This is also referred to as a demon!) The simulator, in a sense, is like a referee: it searches the model for all triggerable events and does not stop the game until all possible events have occurred. This is an important aspect of the system for it allows one to build a more realistic and sophisticated model or image of causal relationships. Instead of one action or tendency simply causing one event (which would be a simplistic representation of any mechanism either physical or social), the simulator allows for all influences to be activated without any prompt from the outside. In technical terms:

A simulator amounts to embedding the reactive SC (spontaneous computation) population modeling the events in the mechanism in an environment in which so the conditions are appropriate for triggering the mechanism. The environment, as well as all instantaneous states during the simulation, are modeled as a collection of data base assertions. Triggering of the mechanism leads to a conceptually parallel avalanche of activity wherein the running of one or more SC units can prompt the running of one or more other units, and so on. The simulator becomes quiescent when no remaining SC's perceive themselves to be applicable——By concerning the mechanism's

Diagram 2

SIMULATOR FLOW DIAGRAM



Source: Rieger and Grinberg, "Cause-Effect Representation and Simulation." in <u>Artificial Intelligence and Pattern Recognition in Computer Aided Design</u>.

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declarative form (part A of the diagram) into SC form, we effectively crack the description open, exposing all the individual cause-effect relationships directly to the environment. Each is free to behave as its trigger pattern dictates.

The notions of causality and complexity that are a concern of this study are reflected in the ideas of the CSA representation theory and in spontaneous computations. The final notion, that of contextuality is also addressed by the developers of this AI technique.

As social scientists, we have recognized that the context (of decision-making, of policy implementation, for example) matters. But we have not been able to easily deal with contextuality, except by examining individual case-studies. An AI technique allows one to model different contexts of a situation, and also allows one to change contexts to discover different views of a situation.

Contextual modeling also-allows the modeler to pose hypothetical questions (what if X happens) and trace through the response. Contextual modeling, using the AI techniques built into the simulator, is done by altering what is called the "initial world" of the model, and setting a trigger which starts the model running. At the end of the run, it is possible to retain the information from that run and alter both the initial world and the trigger

(or either one alone) and glean information on how a change in the context (or hypothetical world) has affected the model.

The three ideas embedded in the AI simulator: the representation of causality, contextual modeling and the use of spontaneous computations, have given us a powerful tool with which to model human decision-making in the context of political and economic development.

The Research

In order to identify patterns in the interaction between Middle Eastern countries, the COPDAE data set was employed (Azar 1980). This data set is an extensive computer based library of longitudinal daily international and domestic events/interactions. Data was taken from August of 1972 until the end of the data set, December 1978. The time frame represents what is frequently asserted as the new era in Middle Eastern politics. It coincides with the decision of Sadat to shift Egypt from a Soviet to an American orbit and it begins a new era of American involvement in the political processes of the Middle East.

coppable divides the data into seven issues and scales, each act from 1 to 15 with 8 being neutral. These issue types are listed in Table I. The scales are in the Appendix. To create a data set we identified actor-object issues

Table I

COPDAB ISSUE-AREA TYPES (CATEGORIES)

Issue-Type 1: Symbolic political relations

This category of events serves to express one actor's political affect toward its target (either cooperatively and positively or conflictively and negatively). These events demonstrate the type and intensity of support which international (or domestic) actors employ to define the broad political linkages between them. They tend to be verbal statements of intent or policy references, expectations and preferences which convey the subjective aspect of politics (e.g., anxieties, fears, needs). Events in this category are often ideological or even propagandistic in nature and can be cooperative or conflictive.

Examples of the symbolic events contained in COPDAB are accusations, denials, vote abstentions, expressions of friendship, pacts, arrests of "enemy agents," statements of policy preferences, etc.

Issue-Type 2: Economic relations

This category contains inter-nation and intra-nation events that deal with the web of economic interactions, organization, control and regulation between governments and their representatives. Trade, balances of payment, and

monetary questions are aspects of the economic cooperative or conflictive relations.

Some of the economic relations events found in COPDAB are expropriations, purchases, sales, trade agreements or protocols, joint development ventures, joint firms, common market activities, economic policy agreement, strikes for economic reasons, business negotiations, price and wage increases, devaluation of currencies, taxes, levies, etc.

Issue-Type 3: Military and strategic relations

Events in this category involve interactions in the field of military affairs. Troop deployment, military exercises, military cooperation, security pacts and related discussions, truces, non-aggression pacts, prisoner-of-war exchanges, wars, guerrilla raids, ceasefire violations, and the like are all included in this category. Domestic military and civil-military relations are included herein.

Some of the military and strategic events found in COPDAB are sales and strategic arms limitation talks, border clashes, joint manuevers, defense treaties, guerrilla activities such as bombing, kidnapping, capturing and murdering, violating airspaces, military administrative activity, coups, troop movements, martial laws, military personnel arrests, etc.

Issue-Type 4: Cultural and scientific relations

This category is used for events which involve information exchanges, scientific cooperation, education, non-military personnel training, tourism, or the exchange of cultural troups or artifacts. Domestic cultural, technological and scientific interactions are grouped bere.

Some of the cultural, scientific and technological relations described by the COPDAB events are information exchanges, communication agreements, tourism pacts, activities such as visits from artists, scientists and athletes, joint surveys or explorations, literacy campaigns, housing and highway technology exchanges, joint research (sponsored and unsponsored), etc.

Issue-Type 5: Physical environment and natural resource relations

This category includes events which deal with the quality and management of the Earth's natural environment inter-or intra-nationally. Air pollution, anti-desertification and water resource management programs fall under this category.

Some of the COPDAB events which describe the relations on matters related to the physical environment (ecological events) are seabed exploitation, de-desertification, water management (irrigation, sewage treatment, dams),

reforestation attempts, pollution control, and programs to protect the deterioration of the environment.

Issue-Type 6: Human environment and demographic and ethnic affairs

This category deals with the management of minority affairs and with ethnic or linquistic groups. Refugees, war victims, and religious minorities are also included. Inter-state relations or domestic activities pertaining to such matters are improving the social-psychological and physical quality of peoples' lives are grouped here.

Some of the COPDAB events which describe inter-state (and intra-state) relations on matters of human, demographic and ethnic affairs, human rights policies, refugee assistance, minority problems, population control, ethnic persecution, migration, etc.

Issue-Type 7: Political order, political relations, and law/organization

This issue category incorporates the major political interactions between and within countries. Events concerning diplomatic recognition, sovereignty, bonder demarcation, espionage, alliance formation and internal political operation are aggregated in this category. This is the set of events which describe relations on structuring the political environment (regional and international) and on setting out the rules and norms of political

governance. International law and order matters in the broadest sense of the term are included under this category.

Some of the COPDAB events which describe these relations are elections, diplomatic relations, law approvals, political persecution, censorship, expulsion of persons, resignations, appointments, policy acts, political and administrative reform, arrests, jurisdictional proceedings, political alliances, meetings to delineate policy agreements or exchanges, peace negotiations, joint communiques, visits by high officials, arrest or termination of pacts negotiations, amnesty grants, political prisoners release, etc.

for a set of ten Middle East countries (i.e. IRAQ-EGYPT symbolic political relations). In addition dyads with the United States, Soviet Union, Great Britain, France, and West Germany as an actor or object with one of the Middle Eastern countries were included. The seven domestic issue areas for each of the Middle Eastern nations were also included. This provided a potential data set of 1400 variables. Many of these links were empty sets, however. That is, there was simply no reported behavior between nations. A cut off criteria of at least twelve months of recorded events was established. This reduced the number somewhat: from 1400 to 190. The values for each month was the product of the scale eight and frequency of occurrence in the month. A standard principal axis solution with unities in the diagonal of a correlation matrix was calculated. This was rotated to an oblique solution using oblimin criteria (Rummel 1970). The first three factors explained more than sixty-four percent of the variance. The fourth factor accounted for less than halfof the variance of factor three. It would appear that a three factor solution accounts for a majority of the stable activity in the affairs of this collection of nation pairs. The presentation of the loadings is found in Tables II-IV. The loadings are all over .500 but they are presented here rearranged to better accentuate the

... Table II

Economics	<u>Politics</u>	Soviets
JORSYR 2 SAUIRQ 2 IRQSAU 2 SYRJOR 2 SAUEGY 2 USAISR 2 IRQEGY 2 LBYEGY 2 SAUSYR 2 USAEGY 2	SYRLBY 7 SYRJOR 7 SAUSYR 7 LBYSYR 7 EGYISR 7 IRQISR 7 GEREGY 7 JOREGY 7 ISRJOR 7	USRJOR 7 USRISR 3 USRISR 7
Military FRNSAU 3 LBYISR 3 UNKEGY 3 IRCSYR 3 SYREGY 3 USASAU 3 SYRIRQ 3 ISREGY 3 EGYISR 3 JORSYR 3 ISRSYR 3 SYRISR 3 SYRISR 3 SYRISR 3 LBYSYR 3	JORISR 7 IRQSYR 7 SAUISR 7 GIRISR 7 SAUSUD 7 UNKEGY 7 SYREGY 7 USASUD 7 EGYLEY 7 SAULBY 7 IRQUOR 7 SYPIRQ 7 FRNISR 7 SYRSYE	Domestic LBY 7 EGY 7 SUD 1 IRQ 7 EGY 3 ISR 1 JOR 6 JOR 7 ISR 2
From ISR T	To ISR	<u>USA</u>
EGY 3 SYR 3 JOR 7	EGY S SYR 1 JOR 7 EGY 3 USA 2 EGY 7 FRN 7 LBY 3 SYR 3 USR 7 USR 7 USR 3 IRQ 7 GER 7	EGY 4 SAU 3 ESE 2 SUD 7 EGY 2

Table III

Economics	Politics	Soviets		
JORSYR 2	SYRJOR 7	USRJOR 2		
SAUIRQ 2	EGYISR 7	USREGY 7		
IRQSAU 2	USASYR 7	ISR 7		
SAUEGY 2	SAUEGY 7	ISR 3		
	USASAU 7	IRQ 7		
	SYEEGY 7	-SYR 7		
	SUDEGY 7			
Military	USAJOR 7	Domestic		
	EGYSUD 7			
USAISR	SYRSAU '7	ISR 7		
	USAEGY 7	SUD 3		
ISREGY 3	USAISR 7	ISR 2		
JORSYR 3	IRQISR 7	EGY 6		
		-SYR 7		
	LBYSYE 7	SUD 1		
	ISREGY 7			
From ISR	SYRSYE 7	USA		
-	SYRIRQ 7			
-EGY 3	SYESYR 7	SYR 7		
-EGY 6	SYEYEM 7	SAU 7		
-EGY 7	SYELBY 7	JOR 7		
SYR 1	YEMSYE 7			
EGY 1	YEMSUD 7	ISR 3 EGY 7		
-4:	SUDLEY 1	ISR 7		
	SYRSAU 7	231/		
		r		
	To ISR			
	EGY 7			
	USR 7			
	USR 3			
	EGY 1			
	USA 3			
	USA 7			
•				

	<u>Table IV</u>			
Economics	Politics	Soviets Nothing		
JORSYR 2 SAUIRQ 2 IRQSAU 2 SYRJOR 2 SAUEGY 2 SAUSYR 2 USAUGY 2	SYESAU 7 SAUSYE 7 IRQISH 7 -IRQSYR 7 -IRQSYR 7 -SAUISR 7 -USASYR 7 -EGYSAU 7 -USAISR 7 -USAISR 7 -SYREGY 7 -EGYSYR 7 -IRQLBY 7 -FRNEGY 7			
Military		Domestic		
FRUSAU 3 EGYLBY 3 JOREGY 3 -IRQSYR 3 -USAISR 3		-DGY 3 SUD 3 -EGY 5 -SYR 3 -EGY 1 -ISR 3 -EGY 7		
From ISR	To ISR	<u>USA</u>		
Nothing	-SYR 1 -SAU 7 -USA 3 -USA 7 IRQ 7	-USASYR 7 -USAISR 3 -USAISR 7 -USAEGY 2		
	·			

drama or to highlight this attempt to discern rules of behavior rather than as empirically derived and points in analyses themselves.

The tables have been organized to highlight those dyads (ordered pairs) that account for the economic (2), political structure (7), domestic actions (1-7) USA involvement, Soviet involvement, Israel as actor, Israel as object, and EEC involvement. Factor one, the strongest factor of the three factors, presents a cross section of many of the individually discussed issues of Middle Eastern affairs. Issues between Syria and Jordan, Saudia Arabia and Egypt, Egypt and Libya are among those highlighted in the Arab play of events. Notice that in this political structure, two opposed components emerge. These negative and positive loadings tend to imply that when certain political issues are active between certain dyads, other dyads are definitely not involved. For instance, Symian-Jordanian exchanges on this set of issues occur only when there are no exchanges between Iraq and Jordan. The same appears to hold true for Jordan balancing between Syria and Egypt. Domestic activities highlight domestic political structure discussions in Libya, Egypt, Iraq and Jordan. Military issues in internal dialogue occur in Egypt and Israel. Soviet involvement appears to center on their comments about Israel and some discussion with Jordan.

Taraeli initiatives appear to be military against Egypt and Syria and politically aimed at Jordan. On the other hand, this factor appears to include considerable activity aimed at Israel. Military initiatives come in two waves -- Egyptian and Syrian or Libyan-Soviet. It would appear that threats are made by the Soviets only when there is no actual fighting. Germany and France comment of Israeli political initiatives during Syrian and Egyptian military initiatives but not in concert with the Soviet initiatives. U.S. assistance to Israel, on this pattern or in this "game" is limited to economic. We will return to this later in other patterns as US millitary assistance is highlighted. US economic assistance does appear to be associated with Soviet initiatives toward Israel but negatively related to Egyptian and Syrian military Initiatives aimed at Israel.

The American involvement in this pattern or game seems to be limited. It shows definite economic components jointly to Israel and Egypt. They do indeed appear linked. The United States military discussions or activities with -- Saudi Arabia are timed to be in counter distinction with economic assistance to the other two countries.

Turning to factor two, it shows much less economics and military activity. It appears to center more on the peace processes between Israel and Egypt and upon a two sided political debate within the Arab world. Here we can see US military assistance to Israel but no loadings

for US to Egyptian military issues. Notice also in domestic Israeli issues both economic and political structure concerns drive this. In this pattern the only initiatives toward Israel come from Egypt the US or Soviet Union. With the exception of some political accusations of Israel toward Syria, it appears interested in dealing only with the Egyptians. The United States is busier, however. It is talking to Syria, Saudi Arabia and Jordan as well as to Egypt and Israel. It is also clear that when Israeli actions toward Egypt occur, there is a good deal of political activity between an identifiable group of Arab States (Libya, Yemen, South Yemen, Syria and Iraq). The Egyptians are silent and not directly contacted by the Arabs. When Egyptian initiatives occur, the Israelis are silent. The US supports the Egyptians. Several Arab States (Saudi Arabia, South Yemen and Sudan) engage in political initiatives toward Egypt and there is a definite inter-Arab discussion. This discussion shows no EEC involvement but it does show Soviet activity toward Jordan, -Egypt, Iraq, and Israel or toward Syria but not at the same time.

Finally, pattern three highlights yet another angle of this collage. It highlights some rather interesting economic initiatives between Saudia Arabia, Iraq, Syria, Jordan and Egypt. It suggests that this is in the context of

Saudi-South Yemen political exchanges but not in the context of other political components of this pattern. The political components tend to identify Symia or Irac involvement with Egypt and Saudi Arabia. There is not Soviet involvement, only French initiatives and no Israeli initiatives. Israel did receive initiatives however: Syrian political accusations, Iraqi commentary and Saudi commentary. America seems to have supported Israel militarily and politically in this pattern. There are two separate versions of US military assistance to Israel. One pattern in which Israel is being attacked by Soviet propaganda, and wher she is in negotiations with the Egyptians and another pattern in which it appears that US actions coincide with an Israeli internal military buildup. It also coincides with considerable domestic activity in Syria and Egypt and with Syrian-Egyptian and Saudi-Egyptian discussions or exchanges about political relations.

The challenge now comes to put this together with a more coherent story about intentions, fears and objectives. The correlation between factors asserts strong interrelationships here (Table V). It suggests that when rettern One holds sway, Two and Three are definitely not operative but Patterns Two and Three both come into play at the same time. In order to keep the patterns identifiable, we will develop models consistent with each pattern in this paper. Discussions about future implications will lump Pattern Two and Three, however.

Table V

Correlations Between Oblique Factor Patterns

	Pattern 1	•	Pattern 2	Pa	ittern	3
	T F (1.00)		*			÷.
	980					:
	980		. 960		1.00	

The COPDAB data source is an excellent, reliable reporting device on the interactions between parties in the Middle East. Factor analysis has provided a technique for identifying patterns in these exchanges. But the underlying causes of these actions have not been generated. The actions are themselves indicative of the complex set of relations which have made up Middle Eastern politics since the vertual withdrawal of the Soviets and the Egyptians move to recognize Israel. But if we are to look to the future, we must hypothesize more about the causal elements which generated these patterns and we must do so in a more systematic fashion than merely suggesting the "hidden" meanings to the probability density functions we have engaged in above. To accomplish this task we move into artificial intelligence. The directed dyads reported on above are the actions in the state-actionstate tendency distinctions made earlier. What is necessary now is to guess at the intentions, the fears, and the hopes which cause actions and at the state of mind which these actions are intended to enable. To do that, concept maps with only actions in them were constructed. The actions were the issue dyads from the factor analysis, then states of mind which these actions caused and states of being which were thought to be enabled by the actions were added to the maps. Finally, logical connections between the state (antagonisms, state couplings, and

equivalences) were incorporated. These maps of the rules of the game which were thought to generate the factor patterns were coded by identifying all the states and actions and then coding all the linkages into the computer. (See Tables VI-VIII) An articifical intelligence program written in LISP (Common Sense Algorithm by Grinberg and Rieger 1980), at the University of Maryland was employed. In order to excerize the program, once it is encoded into the computer, the analyst specifies an initial world (state of being) and then institutes a trigger or starting mechanism. The program logic evaluates the initial world, attributes certain interpretations and prescribes some actions. Then it goes on to respond to the trigger. such a manner analysts are able to look at the implications for future scenarios or to test counter factuals on a particular mental image or set of rules of the game. We have done this for all three patterns and exercized the patterns for a set of triggers and initial worlds that look something like present scenarios. The initial worlds reflect what has to be Arab frustration over the events of the summer of 1982. It also reflects the continued Israeli concern for her military security. The triggering mechanism was in each simulate world US desire to help Israel. From this combination of initial signals, the three versions of Middle East affairs can

Table VI

```
1. (SMECHANISM)
                 (NAME ME-ONE)
                (EVENTS
            (1 S (SYR SUPPORT OF PAL FREE STATE))
   5. (2 S (POLITICAL INSTABILITY IN JORDAN))
6. (3 S (PLA CAUSED CONCERN IN JORDAN))
7. (4 S (JORDAN DESIRES TO SOLVE CONFLICT WITH SYRIA))
8. (5 S (JORDAN DESIRES TO BREAK RELATIONS WITH SYRIA))
   9. (6 A (JORDAN POL))
9. (E A (JORDAN POL))
10. (7 A (JOR SYR ECONOMIC))
11. (8 A (SYR JOR ECO))
12. (9 A (JOR SYR MIL))
13. (10 S (DESIRE TO FORM ECONOMIC TIES))
14. (11 S (DESIRE TO RECIPROCATE))
15. (12 S (ISR CONCERNED OVER ARAB POL DISCUSSION))
16. (13 A (SYR LYB FOL))
17. (14 A (SYR JOR POL))
16. (15 A (SYR JOR POL))

18. (15 A (SAU SYR POL))

19. (16 A (JOR EGY POL))

20. (17 S (DESIRE TO BRING IN RAD ARABS))

21. (18 S (DESIRE TO INCLUDE MODERATES))

22. (19 S (ARAB DESIRE TO LINK MIL AND POL))

23. (20 A (IRQ SYR MIL))

24. (21 A (SYR IRQ MIL))

25. (22 A (SYR EGY MIL))

(23 S (SOVIET DESIRE TO INCREASE VISIBIL)
              (23 S (SOVIET DESIRE TO INCREASE VISIBILITY))
  27. (24 A (USR IRQ MIL))
28. (25 A (USR ISR POL))
29. (26 A (IRQ SYR POL))
30. (27 A (SYR IRQ POL))
31. (28 A (SAU SUD POL))
32. (29 A (SYR EGY POL))
              (30 A (SAU ISR POL))
   33.
   34.
              (31 A (JOR ISR POL))
   35. (32 A (ISR MIL))
36. (33 S (ISR DESIRE TO DIVERT ATTENTION TO IR))
   37. (34 S (USA CONCERN OVER PEACE IN ME))
   38.
              (35 A (ISR EGY MIL))
               (36 A (SYR ISR:MIL))
   39.
   40.
               (37 A (ISR JOR POL))
                (38 A (SYR ISA MIL))
   41.
              (39 A (IRQ ISR MIL))
(40 A (USA SAU MIL))
(41 S (ARAB CONCERN OVER WAR))
   42.
   43.
   44.
                (42 S (ARAB DISTRUST ANGER AT ISR))
   45.
```

```
46. (43 A (SYR ISR ACCUSE))
          47.
                                             (45 A (FRON ISR POL))
       48. (46 A (GER ISR POL))

49. (47 A (UNK EGY POL))

50. (48 S (ISR CONCERN FOR MIL SECURITY))

51. (49 A (ISR MIL))

52. (50 S (EGY MIL CONCERN FOR SECURITY))

53. (51 A (EGY MIL))

54. (52 A (LIB POL))

55. (53 S (LIB DESIRE TO RESTRUCTURE IR))

56. (55 A (LIB SYR POL))

57. (56 S (DESIRE TO EXPAND TALKS))

58. (57 S (SESIRE TO BENEFIT FROM ECONOMIC RELATIONS))

59. (58 A (LIE EGY ECO))

60. (59 A (IRQ EGY ECO))

61. (60 A (SAU EGY ECO))

62. (61 S (EGY DESIRE TO STABALIZE POLITICAL RELATIONS)
          48. (46 A (GER ISR POL))
62. (61 S (EGY DESIRE TO STABALIZE POLITICAL RELATIONS WITH LIB))
63. (62 S (IRQ CONCERN FOR DOMESTIC STABILITY))
64. (63 A (IRQ POL))
65. (64 A (EGY LIB POL))
66. (65 S (ARAB CONCERN OVER US BIAS))
67. (66 A (EGY POL))
68. (67 S (USA SUPPORT FOR EGY))
69. (68 S (USE DESIRE TO HELP ISR))
70. (69 A (ISR ECO))
71. (71 A (USE EGY C AND S))
72. (72 A (USE EGY ECO))
73. (73 A (USE ISR ECO))
74. (74 S (USA DESIRE TO INITIATE NEW PEACE PLAN))
75. (75 S (SAU DESIRE TO INITIATE NEW ME STRATEGY))
76. (76 A (IRQ SAU ECO))
77. (77 A (SAU IRQ ECO))
78. (78 A (SAU SYR ECO))
79. (79 S (SAU DESIRE TO EXPAND ECONOMIC RELATIONS))
80. (80 S (DESIRE TO RECIPROCATE))
81. (81 A (LIB ISR MIL))
82. (82 A (IRQ ISR FOL))
83. (83 A (EGY ISR POL))
84. (84 S (EGY DESIRE TO SOLVE ME PROBLEMS))
85. (105 S (DESIRE TO CREATE ARAR RAD ALTERNATIVES))
86. (107 S (SOV DESIRE TO CREATE DIVISION IM ARAB WORLD))
87. (44 S (NATO CONCERN FOR FEACE IN MEX))
88. (155 S (EGYDOM CONCERN OVER NEW USA IMASE))
99.
                                                                                     WITH LIB))
          $9.
            90. (LINKS
```

```
91.
92.
         (C-COUPLE (1 3))
         (C-ENABLE (1 9))
 93.
        (ANTAG (5 10))
 94.
        (S-EQUIV (5 3))
 95.
         (C-ENABLE (3 6))
 96.
        (C-ENABLE (2 6))
 97.
        (C-CAUSE (6 10))
         (C-ENABLE (10 7))
 98.
        (C-ENABLE (10.14))
 99.
100.
        (C-CAUSE (7 4))
101.
         (ANTAG (4 5))
        (C-CAUSE (7 11))
102.
        (C+ENABLE (11 8))
103.
        (C-ENABLE (41 7))
104.
105...
       -(C-ENABLE (41 8))
        *(C-CAUSE (14 12))
106:
         (C-CAUSE (9 5))
107.
         (C-CAUSE (28 12))
108.
109.
        (C-CAUSE (21 12)
        (C-CAUSE (22 12))
110.
111.
         (C-ENABLE (19 20))
112.
         (C-ENABLE 19 21))
         (C-CAUSE (26 19))
113.
         (C-CAUSE (26 19))
114.
         (C-CAUSE (27 19))
115.
         (C-CAUSE (29 19))
115.
        (C-CAUSE (26 12))
117.
118.
        (C-CAUSE (27 12))
        (C-CAUSE (29 12))
119.
120.
        (C-CAUSE (32 12))
121.
        (C-CAUSE (32 33))
        (C-ENABLE (33 37))
122.
123. ...
        (C-ENABLE (33 36))
124.
        (C-ENABLE (33 35))
125.
         (C-ENABLE (12 35))
126.
       (C-ENABLE (12 36))
127.
         (C-ENABLE (12 37))
        (C-CAUSE (15 12))
(C-CAUSE (16 12))
128.
129.
130.
         (C-COUPLE (12 48))
131.
         (C-CAUSE (14 17))
        (C-CAUSE (14 18))
132.
        (C-ENABLE (18 16))
133.
         (C-ENABLE (17 13))
134.
         (C-ENABLE (17 55))
135.
136.
         (C+CAUSE (35 44))
137.
        (C-CAUSE (35 44))
         (C-CAUSE (35 41))
138.
        (C-CAUSE (36 41))
139.
```

```
(C-CAUSE (37 41)
 140.
 141.
          (C-CAUSE (35 42))
 142.
          (C-CAUSE 36 42))
          (C-CAUSE (37 42))
 143.
 144.
          (C-CAUSE (35 34))
 145.
          (C-CAUSE (36 34))
 146.
          (S-EQUIV (17 18))
          (C-ENABLE (44 45))
 147.
 148.
          (C-ENABLE (44 46))
          (C-ENABLE (44 47))
 149.
          (C-COUPLE (44 34))
(C-ENABLE (41 25))
 150.
 151.
 152.
          (C-ENABLE (41 27))
 153.
          (C-ENABLE (41 28))
 154.
          (C-ENABLE (41 29))
155.
          (C-CAUSE (45 48))
          (C-CAUSE (46 48))
 156.
157.
          (C-CAUSE (47 48))
 158.
          (C-ENABLE (48 49))
          (C-CAUSE (49 42))
 159.
          (C-COUPLE (41 50))
 160.
 161.
          (C-ENABLE (50 51))
          (C-CAUSE (49 50))
 162.
          (C-ENABLE (41 83))
 163.
 164.
          (C-ENABLE (41 82))
          (S-EQUIV (41 42))
 165.
          (S-EQUIV (42 65))
 166.
· 167.
          (C-ENABLE (42 38))
          (C-ENABLE (42 39))
 168.
          (C-ENABLE (42 43))
169.
 170.
          (C-CAUSE (38 34)) .
          (C-CAUSE (39 34))
 171.
 172.
          (C-CAUSE (43 34))
 173.
          (C-ENABLE (34 40))
 174.
          (C-CAUSE (40 75))
          (C-ENABLE (75 77))
 175.
          (C-ENABLE (75 78))
 17€.
 177.
          (C-ENABLE (75 60))
          (C-ENABLE (41 81))
 178.
 179.
          (C-ENABLE (42 83))
 180.
          (C-ENABLE (42.82))
          (C-ENABLE (42 81))
 181.
 182.
          (C-ENABLE (65 77))
          (C-Enable (65 78))
 183.
          (C-CAUSE (76 80))
 184.
          (C-ENABLE (80 77))
 185.
```

```
185.
          (C-CAUSE (77 79))
  187.
          (C-ENABLE (79 60))
  188.
          (C-ENABLE (79 78))
  189.
          (C-ENABLE (62 76))
          (C-ENABLE (62 39))
  190.
  191.
          (C-ENABLE (61 64))
  192.
          (C-ENABLE (61 29))
  133.
          (C-CAUSE (63 62))
  194.
          (C-ENABLE (62 59))
  195.
          (C-CAUSE (58 61))
          (C-ENABLE (57 58))
  196.
  197.
          (C-ENABLE (57 59))
  198.
          (C-ENABLE (57 60))
          (C-CAUSE (66 57))
  199.
  200.
          (C-CAUSE (73 65))
  201.
          (C-CAUSE (72 155))
  202.
          (C-ENABLE (67 72))
  203.
          (C-ENABLE (68 73))
  204.
          (C-CAUSE (66 67))
          (C-ENABLE (68 37))
  205.
  206.
          (C-CAUSE (69 68))
  207.
          (C-COUPLE (48 68))
          (C-ENABLE (74 73))
  208.
          (C-ENABLE (74 72))
  209.
          (C-ENABLE (74 71))
  210.
          (C-COUPLE (58 74))
  211.
  212.
          (C-CAUSE (31 34))
  213.
          (C-CAUSE (29 56))
  214.
          (S-EOUIV (56 18))
. 215.
          (C-COUPLE (56 57))
  216.
          (C-ENABLE (56 13))
          (C-ENABLE (58 55))
  217.
  218.
          (C-ENABLE (56 14))
          (C-ENABLE (23 24))
  219.
  220.
          (C-ENABLE (23 25))
          (C-CAUSE (24 48))
  221.
  222.
          (C-CAUSE (25 48))
  223.
          (C-CAUSE (20 23))
  224.
          (C-CAUSE (71 23))
          (C-CAUSE (73 23))
(C-ENABLE (53 58))
  225.
  226.
  227.
          (C-ENABLE (53 13))
  228.
          (C-ENABLE (53 55))
229.
          (C-CAUSE (52 53))
  230.
          (S-EQUIV (52 23))
  231.
          (C-COUPLE (50 44))
```

```
232.
        (C-CAUSE (72 44))
        (C-CAUSE (71 44))
233.
        (C-COUPLE (74 44))
234.
235.
        (C-CAUSE (13 105))
236.
        (C-CAUSE (55 105))
        (C-CAUSE (82 105))
237.
238.
        (C-CAUSE (38 105))
239.
        (C-CAUSE (21 105))
        (C-CAUSE (26 105))
240.
241.
        (C-CAUSE (52 107))
242.
        (INITIAL-WORLD 41 42 48)
243.
        (TRIGGER 68)
244.
        (END)
245.
```

Table VII

```
(MECHANISM)
           (NAME ME-TWO)
        (EVENTS)
  3.
         (34 S (USA CONCERN OVER PEACE IN ME))
          (84 A (USE SAU POL))
      (85 A (USA JCR POL))
  6.
       (86 A (USA EGY POL))
  7.
  8.
         (33 A (USA ISR POL))
      (87 A (USA SYR POL))
(88 S (USA DESIRE TO FORM ME MODERATE GROUP))
(89 A (ISR EGY ACCUSE))
  9.
 10.
11. (89 A (ISR EGY ACCUSE))
12. (90 A (ISR EGY ACCUSE))
13. (92 A (IRQ ISR POL))
14. (12 S (ISR CONCERN OVER ARAB POLITICAL DISCUSSION))
15. (53 S (LIBYA DESIRES TO RESTRUCTURE IR))
16. (91 A (ISR EGY ECONOMIC))
17. (92 A (ISR EGY POL))
18. (48 S (ISR CONCERN WITH MILITARY BALANCE))
 11.
 19. (105 S (DESIRE TO CREATE ARAB RAD ALTERNATIVE TO ME))
      (100 A (LIB SYE POL))
(101 A (SYR SYE POL))
(103 A (SYE SYR POL))
 20.
 21.
 22.
      (104 A (SYE LIB POL))
(98 S (SYE DESIRE TO CONTINUE CONFLICT WITH YEM))
23.
24.
 25.
         (99 S (SYR DESIRE TO EREAK WITH MCDERATES))
      (5 S (JOR DESIRE TO BREAK WITH SYR))
(93 S (USA CONCERN FOR USR IN ME))
 26.
 27.
28. (94 A (SYE YEM POL))
      (95 A (YEM SYE POL))
 29.
         (96 A (YEM SUD POL))
 30.
         (97 A (SUD LIB SUPPORT))
 31.
      (106 A (SYR SAU POL))
(9 A (JOR SYR MIL))
(132 S (ARAB DESIRE TO ESTABLISH MODERATE POSITION))
 32.
 33.
 34.
35. (23 S (SOVIET DESIRE TO INCREASE VISIBILITY))
36. (109 A (USR TRO POL))
37. (108 A (ISR ECONOMIC))
 38.
       (107 S (SOVIET DESIRE TO CREATE DIVISION IN ARAB WORLD))
(18 S (DESIRE TO INCLUDE MODERATES))
 39.
         (125 A (SAU EGY POL))
 40.
 41.
         (126 A (SUD EGY POL))
          (127 A (EGY SUD POL))
42.
         (128 A (SYR SAU POL))
 43.
      (129 A (SYR JOR POL))
(130 A (SYE EGY POL))
44.
45.
46. (25 A (USR ISR POL))
```

```
47.
       (24 A (USR ISR MIL))
48.
       (114 A (USR JOR ECO))
49.
       (113 A (USR ECY POL))
       (111 S (USA CONCERN FOR ISR MIL CAPABILITY))
50.
51.
       (110 A (USR SYR POL))
52.
       (131 A (EGY ISR POL))
       (123 A (SUD DOMESTIC POL))
53.
       (124 A (SÚD MIL))
54.
       (122 S (EGY DESIRE TO CREATE RED SEA STRATEGY))
55.
       (60 A (SAU EGY ECO))
56.
       (133 A (USA ISR POL))
57.
       (102 A (SYR IRQ POL))
58.
59.
       (3 S (PLA CAUSED CONCERN IN JORDAN))
       (75 S (SAU DESIRE TO INITIATE NEW ME STRATEGY))
60.
       (118 A (SAU EGY ECO))
61.
62.
       (117 A (JOR SYR ECO))
       (116 A (SAU IRQ ECO))
63.
       (115 A (IRQ SAÛ ECO))
64.
65.
       (119 S (DESIRE TO RECIPROCATE))
       (112-A (USA ISR MIL))
66.
       (121 A (EGY ETHNIC))
67.
68.
       (120 S (EGY DESIRE TO SOLVE ME PROBLEM))
69.
       (38 A (SYR ISR MIL))
70.
       (39 A (IRQ ISR MIL))
71.
       (LINKS
72.
73.
       (C-ENABLE (34 34))
74.
       (C-ENABLE (34 85))
75.
       (C-ENABLE (34 85))
       (CTENABLE (34 133))
76.
       (C-ENABLE (34 87))
77.
78.
       (C-ENABLE (88 84))
       (C-ENABLE (88 85))
(C-ENABLE (88 86))
79.
80.
       (C-ENABLE (88 87))
81.
82.
       (C-CAUSE (84 132))
       (C-CAUSE (85 132))
83.
       (C-CAUSE (86 132))
84.
85.
       (C-CAUSE (133 132))
       (C-CAUSE (87 132))
86.
87.
       (C-CAUSE (90 132))
       (C-CAUSE (87 23))
88.
89.
       (C-COUPLE (132 18))
       (C-ENABLE (132 125))
90.
91.
       (C-ENABLE (132 126))
       (C-ENABLE (132 127))
92.
     (C-ENABLE (132 128))
93.
94. (C-ENABLE (132 129))
95. (C-ENABLE (132 131))
96.
       (C-ENABLE (132 117))
```

Table VII Continued

```
(C-COUPLE (132 75))
       98.
                        (C-CAUSE (123 122))
       99.
                        (C-CAUSE (124 122))
                          (C-CAUSE (121 122))
      100.
      101.
                       (C-CAUSE (121 120))
                   (C-ENABLE (122 126))
      102.
      103.
                       (C-ENABLE (122 127))
      104. (C-ENABLE (122 130))
      105.
                         (C-ENABLE (120 131))
                       (C-CAUSE (128 75))
      106.
     107. (C-COUPLE (122 75))
108. (C-ENABLE (75 118))
109. (C-ENABLE (75 116))
      110.
                        (C-ENABLE (75 115))
     111.
                        (C-CAUSE (118 122)
111. (C-CAUSE (118 122)
112. (C-CAUSE (116 119))
113. (C-ENABLE (119 115)
114. (C-ENABLE (23 25)
115. (C-ENABLE (23 24))
116. (C-ENABLE (23 114))
117. (C-ENABLE (23 113))
118. (C-ENABLE (23 109))
119. (C-CAUSE (114 93))
120. (C-CAUSE (109 93))
121. (C-CAUSE (24 111))
122. (C-ENABLE (111 112))
    122. (C-ENABLE (111 112))
123. (C-CAUSE (108 111))
124. (C-ENABLE (107 110))
125. (C-CAUSE (110 93))
126. (C-CAUSE (128 23))
127. (C-CAUSE (129 23))
128. (C-CAUSE (130 23))
   127.
128. (C-CAUSE (130 23))
129. (C-CAUSE (129 12))
130. (C-CAUSE (94 33))
131. (C-CAUSE (95 88))
132. (C-CAUSE (96 88))
133. (C-CAUSE (97 88))
130. (C-CAUSE (106 107)
    133. (C-CAUSE (97 88))
134. (C-CAUSE (106 107))
135. (C-ENABLE (99 106))
136. (C-ENABLE (5 9))
137. (C-ENABLE (98 94))
138. (C-ENABLE (98 95))
139. (C-ENABLE (98 96))
140. (C-ENABLE (98 97))
    141. (C-ENABLE (12 89))
142. (C-ENABLE (12 90))
143. (C-ENABLE (12 92))
144. (C-ENABLE (12 91))
145. (C-CAUSE (82 12))
```

Table VII Continued

```
146.
        (C+CAUSE (100 12))
        (C-CAUSE (101 12))
147.
        (C-CAUSE (102 12))
148.
        (C-CAUSE (103 12))
149.
        (C-CAUSE (104 12))
150.
151.
        (C-CAUSE (100 98))
152.
        (C-CAUSE (101 98))
153.
        (C-CAUSE (103 98))
154.
        (C-CAUSE (104 98))
155.
        (C-CAUSE (101 99))
156.
        (C-CAUSE (102 99))
        (C-CAUSE (103 99))
157.
158.
        (C-CAUSE (101 5))
        (C-CAUSE (102:5).)
159.
        (C-CAUSE (103 5))
160.
161.
        (C-COUPLE (53 88))
162.
        (C-CAUSE (100 53))
163.
        (C-ENABLE (105 100))
        (C-ENABLE (105 101))
164.
165.
        (C-ENABLE (105 102))
        (C-ENABLE (105 103))
166.
        (C-ENABLE (105 104))
167.
        (C-COUPLE (105 3))
168.
169.
        (C-COUPLE (3 48))
170.
        (C-COUPLE (105 48))
171.
       (C-COUPLE (48 34))
        (C-COUPLE (93 88))
172.
        (C-ENABLE (93 86))
173.
        (C-ENABLE (93 85))
174.
175.
        (S-EQUIV (23 107))
      - (C-COUPLE (99 23))
176.
177.
        (C-CAUSE (94 23))
178.
        (C-CAUSE (95 23))
        (C-CAUSE (123 107))
179.
        (C-ENABLE (53 123))
180.
181.
        (C-COUPLE (99 105))
        (C-ENABLE (105 38))
182.
183.
        (C-ENABLE (105 39)) '
        (C-CAUSE (38 48))
184.
3.85.
        (C-CAUSE (39 48))
        (C-CAUSE (38 111))
186.
        (C-CAUSE (39 111))
187.
188.
        (INITIAL-WORLD 48))
189.
190.
       (TRIGGER 34))
```

Table VIII

```
1.
           ($MECHANISM).
 2.
           (NAME ME-THREE)
           (EVENTS)
  3.
           (79 S (SAU DESIRE TO EXPAND ECO))
  4.
  5.
           (134 A (FRN SAU MILL))
          (48 S (ISR CONCERN FOR MILITARY BALANCE))
           (87 A (USA SYR POL))
  7.
8.
           (135 A (SAU POL))
          (75 S (SAU DESIRE TO INITIATE NEW ME STRATEGY))
  9.
         (136 A (JOR EGY MIL))
 10.
 11.
          (137 S (JOR DESIRE TO ASSURE ALTERNATIVE MIL FACTS))
 12.
          (30 A (SAU ISR POL))
           (77 A (SAU IRQ ECO))
13.
14.
         (60 A (SAU EGY ECO))
         (78 A (SAU SYR ECO))
 15.
         (7 A (JOR SYR ECO))
 16.
17.
         (8 A (SYR JOR ECO))
18. (138 A (SAU SIE .UZ)
19. (139 A (SYE SAU POL))
21.
22.
        (140 S (IRQ DESIRE TO RECIPROCATE))
(76 A (IRQ SAU ECO))
 23.
         (4 S (JOR DESIRE TO SOLVE CONFLICT WITH SYR))
        (11 S (SYR DESIRE TO RECIPROCATE ECO TIES))
(141 S (SYR RECIPROCATE DESIRE SAU))
 24.
 25.
          (142 S (USA CONCERN WITH EGY STABILITY))
 26.
           (125 A (SAU EGY POL))
(143 A (EGY SAU POL))
 27.
 28.
           (144 S (EGY DESIRE TO RECIPROCATE))
 29.
 30. (145 S (EGY DESIRE TO GET USE AID))
31. (146 S (EGY DESIRE TO BENEFIT FROM ECO TIES))
32. (147 S (EGY DESIRE TO SHIFT ATTENTION TO IR))
 33.
         (148 A (SYR MIL))
 34. (149 A (SYR POL))
35. (150 S (SYR ATTEMPT TO GO INT))
36. (151 S (IRQ DESIRE TO FORM ARAB SOLUTION))
37. (152 A (EGY POL DOM))
38. (153 A (EGY ECO))
 39. (51 A (LG: MIL),
40. (121 A (EGY ETHNICITY))
1200 S (EGY DESIRE TO SO
 41. (120 S (EGY DESTRE TO SOLVE ME PROBLEM))
42. (154 A (EGY LIB MIL))
43. (29 A (SYR EGY POL))
44. (156 A (EGY SYR POL))
45. (157 A (IRQ LIB POL))
 46. (26 A (IRQ SYR POL))
```

Table VIII continued

```
47.
       (20 A (IRQ SYR POL))
48.
       (82 A (IRQ ISR POL))
49.
       (32 A (ISR MIL))
       (158 S (EGY RECIPROCITY DESIRE))
50.
       (5 S (JOR DESIRE TO BREAK WITH SYR))
51.
52.
       (111 S (USA CONCERN FOR ISR))
       (133 A (USA ISR POL))
53.
       (112 A (USA ISR MIL))
54.
55.
       (43 A (SYR ISR ACCUSE))
       (12 S (ISR CONCERN FOR ARAB DISCUSSIONS))
56.
       (155 S (EGY DOM CONCERN TO CREATE DIVISION IN ARAB
57.
           WORLD))
       (107 S (SOV DESIRE TO CREATE DIVISION IN ARAB WORLD)
58.
       (38 A (SYR ISR MIL))
59.
       (105 S (DESIRE TO CREATE ARAB RAD ALTERNATIVE))
60.
61.
62.
       (LINKS
       (C-ENABLE (155 152))
(C-ENABLE (155 153))
63.
64.
       (C-ENABLE (155 51))
65.
       (C-ENABLE (155 121))
6E.
       (S-EQUIV (145 120))
67.
68.
       (C-CAUSE (152 142))
69.
       (C-CAUSE (153 142))
       (C-CAUSE (51 142))
70.
71.
       (C-CAUSE (121 142))
72.
       (C-COUPLE (145 146))
73.
       (C-CAUSE (153 145))
       (C-CAUSE (153 146))
74.
75.
       (C-CAUSE (152 147))
76.
       (C-CAUSE (153 147))
       (C-CAUSE (51 147))
77.
78.
       (C-CAUSE (121 147))
       (S-EQUIV (146 120))
79.
       (S-EQUIV (147 120))
80.
81.
       (C-ENABLE (147 254))
82.
       (C-ENABLE (147 156))
       (C-CAUSE (133 150)).
83.
       (C-CAUSE (32 111))
84.
85.
       (C-ENABLE (111 133))
       (C-ENABLE (111 87))
86.
       (C-ENABLE (150 29))
87.
88.
       (C-ENABLE (150 156))
89.
       (C-CAUSE (29 159))
       (C-ENABLE (159 156))
90.
       (C-ENABLE (150 43))
91.
```

```
(C-ENABLE (151 157))
  92.
  93.
          (C-ENABLE (151 26))
          (C-ENABLE (151 20))
(C-ENABLE (151 82))
  94.
  95.
  96.
          (C-CAUSE (157 12))
          (C-CAUSE (26 12))
  97.
          (C-CAUSE (25 5))
  98.
          (C-CAUSE (20 5))
  99.
          (C-CAUSE (26 12))
 100.
          (C-CAUSE (20 12))
 101.
±02. 7
          (C-ENABLE (111 112))
          (C-CAUSE (43 111))
 103.
       - (C-CAUSE (148 150))
1104.
          (C-COUPLE (75 151))
105.
         (C-ENABLE (147 143))
 106.
          (C-ENABLE (146,60))
 107.
 108.
          (C-CAUSE (125 144))
          (C-ENABLE (144 143))
(C-ENABLE (145 72))
 109.
 110.
          (C-CAUSE (148 11))
 111.
          (C-CAUSE (149 11))
 112.
          (C-CAUSE (7 4))
 113.
 114.
          (C-CAUSE (7 11))
          (C-ENABLE (11 8))
 115.
          (C-CAUSE (138 141))
 116.
          (C-ENABLE (141 139))
 117.
          (C-ENABLE (75 125))
 118.
          (C-ENABLE (75 125))
 119.
        (C-ENABLE (75 77))
 120.
          (C-ENABLE (75 &0))
 121.
          (C-ENABLE (75 78))
 122.
          (C-ENABLE (75 138))
 123.
          (C-CAUSE (7 137))
 124.
          (C-CAUSE (8 137))
 125.
          (C+ENABLE (137 136))
 126.
 127.
          (C-CAUSE (136 48))
          (C-CAUSE (134 48))
 128.
          (C-ENABLE (75 134)) ·
 129.
 130.
          (S-EQUIV (78 75))
          (C-CAUSE (185 78))
 131.
 132.
          (C-ENABLE (142 87))
 133.
          (C-CAUSE (77 140))
          (C-ENABLE (140 76))
 134.
 135.
          (C-CAUSE (152 107))
 136.
          (C-CAUSE (153 107))
 137.
          (C-CAUSE (149 107))
```

138. (C-CAUSE (38 111)) 139. (C-ENABLE (150 39)) 140. (C-CAUSE (157. 105)) ... (C-CAUSE (26 105)) (C-CAUSE (20 105)) 141. 142. (C-CAUSE (82 105)) 143. 144. 145. (INITIAL-WORLD 48) (TRIGGER 111) 146. 147.

. .

•

. . •

.

be evaluated and additions or deletions can become the basis of experimentation.

Turning to the results of Pattern Cne exercize. Table IX presents the output of the simulation. activities are current on-going actions, states or state changes. Erased activities are states, actions or state changes which cease to remain operative due to the initial world, trigger or new stimulus provided by the experimentor. The output Pattern One shows an extensive dynamic quite complex in its detail. If the "game" analyst focus upon is the dominant pattern of Middle Eastern affairs, the initial response to relatively current events would suggest Syrian, Iraqi discussions on political structure and military preparedness and Israel concerns for these developments. There is also the suggestion that Israel will have domestic problems, both military and political. The simulation suggests she will attempt to divert attention from domestic to international issues in the region. As the scenario unfolds, our simulation suggests Egypt will continue to experience internal strains and show some considerable concern for her military security. The US is expected to continue military assistance to Israel; primarily economic. Military assistance from the US will continue to be provided to Saudi Arabia. The simulation suggests stronger attempts on the part of the Saudis to

Table IX

```
...INITIAL WORLD...
  (ARAB CONCERN OVER WAR) STORED G501 BY IW
  (ARAB DISTRICT ANGER AT ISR) STORED G502 BY IW
  (ISR CONCERN FOR MIL SECURITY) STORED G503 BY IW
  ...END IW...
  (IRO SYR POL) STORED G504 BY G465
  (DESTRE TO CREATE ARAB RAD ALTERNATIVE) STORED G505 BY G413
 (ISR CONCERNED OVER ARAB POL DISCUSSION) STORED G506 BY G309
  (ISR MIL) STORED G 507 BY G457
(EGY MIL CONCERN FOR SECURITY) STORED G508 BY G355
  (EGY MIL) STORED G509 BY G455
(NATO CONCERN FOR PEACE IN ME) STORED G510 BY G251
  (FRN ISR POL) STORED G511 BY G471
  (USA DESIRE TO HELP ISR) STORED G512 BY G245
  (USA DESIRE TO INITIATE NEW PEACE PLAN) STORED G513 BY G247
   (USA ISR ECO) STORED G514 BY G423.
  (SOVIET DESTRE TO INCREASE VISIBILITY) STORED G515 BY G395
   (USR IRQ MIL) STORED G516 BY G419
   (USR ISR POL) STORED G517 BY G417
   (LIE POL) STORED G518 BY G284
   (SOV DESIRE TO CREATE DIVISION IN ARAB WORLD) STORED G519
       BY G415
   (LIE DESIRE TO RESTRUCTURE IR) STORED G520 BY G397
   (ARAB CONCERN OVER US BIAS) STORED G521 BY G375
   (EGY ISR POL) STORED G522 BY G453
   (IRQ ISR POL) STORED G523 BY G451
   (SYR ISA MIL) STORED G524 BY G449
   (USA CONCERN OVER PEACE IN ME) STORED G525 BY G357
   (USA SAU MIL) STORED G526 BY G443
   (SAU DESIRE TO INITIATE NEW ME STRATEGY) STORED G527
       BY G363
   (SYR ISR ACCUSE) STORED G528 BY G445
   (LIB ISR MIL) STORED G529 BY G435
   (SYR IRQ POL) STORED G530 BY G463
   (ARAB DESIRE TO LINK MIL AND POL) STORED G531 BY G305
   (IRQ SYR MIL) STORED G532 BY G489
   (SYR IRQ MIL) STORED G533 BY G487
   (SYR EGY MIL) STORED G584 BY G485
   (SAU SUD POL) STORED G535 BY G461
   (USA EGY C AND S) STORED G538 BY G421
   (GER ISR POL) STORED G537 BY G469
   (UNK EGY POL) STORED G538 BY G467
   (ISR DESIRE TO DIVERT ATTENTION TO IR) STORED G539 BY G317
   (ISR JOR POL) STORED G540 BY G483
   (SYR ISR MIL) STORED G541 BY G481
   (ISR EGY MIL) STORED G542 BY G479
```

```
(JOR SYR MIL) STORED G543 BY $TIMER
(JOR POL) STORED G544 BY $TIMER
(DESIRE TO FORM ECONOMIC TIES) STORED G545 BY G287
(JOR SYR ECONOMIC) STORED G546 BY G495
(DESIRE TO RECIPROCATE) STORED G547 BY G291
(SYR JOR ECO)STORED G548 BY G491
(SAU IRQ ECO) STORED G549 BY G441
(SAU DESIRE TO EMPAND ECONOMIC RELATIONS) STORED G550 BY G367
(SAU SYR ECO) STORED G551 BY G439
(JORDAN DESIRES TO SOLVE CONFLICT WITH SYRIA) STORED G552
    BY G289
(JORDAN DESIRES TO BREAK RELATIONS WITH SYRIA) STORED G553
    BY G295
(PLA CAUSED CONCERN IN JORDAN) STORED G554 BY G263
(JORDAN DESIRES TO SOLVE CONFLICT-WITH SYRIA) ERASED G552
    BY G261
(DESIRE TO FORM ECONOMIC TIES) ERASED G545 BY G255
(JOR SYR ECONOMIC) ERASED G546 BY G496
(DESIRE TO RECIPROCATE) ERASED G547 BY: G292
(SYR JOR ECO) ERASED G548 BY G492
(SAU IRQ ECO) ERASED G549 BY G442
(SAU DESIRE TO EXPAND ECONOMIC RELATIONS) ERASED G550 BY G368
(SAU SYR ECO) ERASED G551 BY G440
```

initiate new peace initiatives in the Middle East. It also shows Soviet initiatives picking up again. EEC countries can be expected to strive for a new role in the near future of this region. Political difficulties are likely to center on Syrian and Jordanian relations with Israel. The simulation shows little reason to expect Egyptian reintegration into the Arab world as a result of this particular set of rules which generate the main pattern of Middle Eastern change.

Upon completion of the initial runs, the Jordanian impact upon the unfolding of future events in this drama became the topic of experimentation. Jordanian difficulties with Syria and domestic political structure problems, presumably over the reintroduction of PLO soldiers were stored by the simulator (called the timer in the output). The simulation asserts that initially it would expect that Jordan and Syria with the encouragement of Saudia Arabia would attempt to find grounds for solving their differences. These grounds would be both political and economic. It warns that the final results are not likely to be encouraging, however.

The "final world" or the status of Middle Eastern affairs at the end of the simulation follows:

... FINAL WORLD... (PLA CAUSED CONCERN IN JORDAN) (JORDAN DESIRES RO BREAK RELATIONS WITH SYRIA)

```
(JOR SYR MIL)
 (JOR POL)
(ISR EGY MIL)
 (SYR ISR MIL)
(ISR JOR POL)
 (ISR DESIRE TO DIVERT ATTENTION TO IR)
 (UNK EGY POL)
(GER ISR POL)
 (USA EGY C AND S)
 (SAU SUD POL)
 (SYR EGY MIL)
(SYR IRQ MIL)
 (IRQ SYR MIL)
 (ARAB DESIRE TO LINK MIL AND POL)
 (SYR IRQ POL)
 (LIB ISR MIL)
 (SYR ISR ACCUSE)
 (SAU DESIRE TO INITIATE NEW ME STRATEGY)
 (USA SAU MIL)
 (USA CONCERN OVER FEACE IN ME)
 (SYR ISA MIL)
 (IRQ ISR POL) .
(EGY ISR POL)
 (ARAB CONCERN OVER US BIAS)
 (LIE DESIRE TO RESTRUCTURE IR)
 (SOV DESIRE TO CREATE DIVISION IN ARAB WORLD)
 (LIP POL)
 (USP ISR POL)
 (USR IRQ MIL)
 (SOVIET DESIRE TO INCREASE VISIBILITY)
 (USA ISR ECO)
 (USA DESIRE TO INITIATE NEW PEACE PLAN)
 (USA DESIRE TO HELP ISR)
 (FRN ISR POL)
 (NATO CONCERN FOR PEACE IN ME)
 (EGY MIL)
 (EGY MIL CONCERN FOR SECURITY)
 (ISR MIL)
 (ISR CONCERNED OVER ARAB POL, DISCUSSION).
 (DESIRE TO CREATE ARAB RAD ALTERNATIVE)
 (IRQ SYR POL)
 (ISR CONCERN FOR MIL SECURITY)
 (ARAB DISTRUST ANGER AT ISR)
 (ARAB CONCERN OVER WAR)
 (ME-ONE) SIMULATED 180918
 VALUE: NIL
```

In the second pattern, Arab concern for the current state of affairs was not responded to by the simulation.

Israeli concern over the military balance did trigger considerable response; however. (Sec Table X) In this arena Israeli concerns trigger heavy American activity. The US expresses concern over peace in the Middle Last, talks politically with the Israelis, the Saudis, the corollans, syrians and Egyptians. There is a pressure to provide Israel with weapons apparently brought on by Israeli pressure and Soviet involvement in the Middle East. There appears to be no new Arab-Israeli confrontation which initiates the arms transfers.

This pattern highlights and Arab affempt to establish a peace initiative with Saudi, Egyptian, Syrian and Jordanian involvement. There appears to be general Red Sea involvement in this pattern. South remen and audan enten into political or economic exchanges with Egypt or Saudi Arabia. The Arab support of Iraq seems to be suggested in several interactions generated by the consensus forming initiatives reported in this pattern.

This model was then exercised by inputing the possibility of domestic problems in Jordan with the arrival of PLO soldiers and by the possibility of a break down in relations with the Syrians. The simulation responded by asserting that there would be no change in the unfolding of patterns along this dimension. The final question concerned the

Table X

```
...INITIAL WORLD...
(ISR CONCERN WITH MILITARY BALANCE) STORED G395 BY IW
...END IW...
(USA CONCERN OVER PEACE IN ME) STORED G396 BY G197
(USA ISR POL) STORED G397 BY G387
(ARAB DESIRE TO ESTABLISH MODERATE POSITION) STORED G398
   BY G215
(SAU EGY POL) STORED G399 BY G383
(SYR SAU POL) STORED 6400 BY 6377
(SOVIET DESIRE TO CREATE DIVISION IN ARAB WORLD) STORED
   6401 BY 6263
(USR SYR POL) STORED G402 BY G349
(USA CONCERN FOR USR IN ME) STORED G403 BY G245
(USA DESIRE TO FORM ME MODERATE GROUP) STORED G404 BY
   G199
(USA SAU POL) STORED G405 BY G393
(SYR JOR POL) STORED G406 BY G375
(ISR CONCERN OVER ARAB POLITICAL DISCUSSION) STORED G407
   BY 6253
(ISR EGY ACCUSE) STORED G409 BY G335
(JOR SYR ECO) STORED 6409 BY 6371
(SAU DESIRE TO INITIATE NEW ME STRATEGY) STORED G410
   BY 6185
(SAU EGY ECO) STORED G411 BY G367
(EGY DESIRE TO CREATE RED SEA STRATEGY) STORED G412 BY
   6233
(SUD EGY POL) STORED G413 BY G881
(EGY SUD POL) STORED G414 BY G378
(SYE EGY POL) STORED G416 BY 6369
(SOVIET DESIRE TO INCREASE VISIBILITY) STORED 6416 BY
   G251
(USR ISR POL) STORED G417 BY G3E1
(USR ISR MIL) STORED 6418 BY 6359
(USA CONCERN FOR ISR MIL CAPABILITY) STORED 6419 BY G241
(USA ISR MIL) STORED 6420 BY 6351
(USR JOR ECO) STORED 6421 EY 6367
(USA JOR POL) STORED 6422 BY 6391
(DESIRE TO INCLUDE MODERATES) STORED G423 BY G183 (USA EGY POL) STORED G424 BY G389
(USR EGY POL) STORED 6425 BY 6355
(USR IRO POL) STORED 6426 BY 6358
(SAU IRO ECO) ETORED 6427 BY 6365
(DESIRE TO RECIPROCATE) STORED 6428 BY 6235
(IRO SAU ECO) STORED 6429 BY 6363
(ISR EGY POL) STORED 6430 BY 6331
(ISR EGY ECONOMIC) STORED 6431 BY 6329
(USA SYR POL) STORED 6432 BY G365
```

Table X continued;

TRIGGERING MECHANISM

(ME-TWO)

(PLA CAUSED CONCERN IN JORDAN) STORED 6433 BY \$TIMER

TICK 1+REAL TIME 90381

EMPTY AGENDA

(JOR SYR MIL). STORED 6434 BY \$TIMER

(JOR DESIRE TO BREAK WITH SYR) STORED 6435 BY \$TIMER

(USA CONCERN FOR ISR MIL CAPABILITY) ERASED 6419 BY \$TIMER

(USA ISR MIL) ERASED 6420 BY 6352

United States over Israeli activities in Lebanon. US concern for Israeli military capability was dropped or erased as the simulation terms it. The impact was for the US to stop providing new weapons for the Israelis. That was the only impact, however. It did not affect Israeli-Arab interactions directly nor did it seem to have an effect on intra-Arab interchanges. The final World is presented below.

```
...FINAL WORLD...
(JOR DESIRE TO BREAK WITH SYR)
(JOR SYR MIL)
(PLA CAUSED CONCERN IN JORDAN)
(USA SYR POL)
(ISR EGY ECONOMIC)
(ISR EGY POL)
(IRQ SAU ECO)
(DESIRE TO RECIPROCATE)
(SAU IRO ECO)
(USR IRQ POL)
(USR EGY POL)
(USA EGY POL)
(DESIRE TO INCLUDE MODERATES)
(USA JOR POL)
(USR JOR ECO)
(USR ISR MIL)
(USR ISR POL)
(SOVIET DESIRE TO INCREASE VISIBILITY)
(SYE EGY POL)
(EGY SUD POL)
(SUD EGY POL)
(EGY DESIRE TO CREATE RED SEA STRATEGY)
(SAU EGY ECO)
(SAU DESIRE TO INITIATE NEW ME STRATEGY)
(JOR SYR ECO)
(ISR EGY ACCUSE)
(ISR CONCERN OVER ARAB POLITICAL DISCUSSION)
(SYR JOR POL)
(USA SAU POL)
(USA DESIRE TO FORM ME MODERATE GROUP)
(USA CONCERN FOR USR IN ME)
```

(USR SYR POL)
(SOVIET DESIRE TO CREATE DIVISION IN ARAB WORLD)
(SYR SAU POL)
(SAU EGY POL)
(ARAB DESIRE TO ESTABLISH MODERATE POSITION)
(USA ISR POL)
(USA CONCERN OVER PEACE IN ME)
(ISR CONCERN WITH MILITARY BALANCE)
(ME-TWO SIMULATED 137341
VALUE: NIL

In the last pattern of exchanges the final side of the collage becomes recognizable. (Table XI) The initial world of Israeli concern for the military balance is irrelevant. This is in considerable contradiction to Pattern Two and Three behaviors. The trigger "US concern for ISR" generates more activity here than it does in Pattern Two, however. It suggests not only military assistance but political presence. It also warns that American assistance to Israel can be instrumental in generating conflict with the Syrians and in creating a considerable role for the Syrians in the dynamic of events over the immediate future.

Again, the simulation was querried as to the implications for Jordan of Syrian initiatives and of the unfolding of events. The simulation also suggested stronger Jordanian Egyptian relations could result. Finally, a Saudi Arabian initiative was introduced. The simulation responsed by unfolding a complex set of political and economic exchanges involving Saudi Arabia with Egypt, Irao and Syria. It

Table XI

...INITIAL WORLD... (ISR CONCERN FOR MILITARY BALANCE) STORED G299 BY IW ...END IW... TRIGGERING MECHANISM (ME-THREE (USA CONCERN FOR ISR) STORED G300 BY TRIGGER (USA ISR POL) STORED G301 BY G285 (SYR ATTEMPT TO GO INT) STORED G302 BY G179 (SYR EGY POL) STORED G303 BY G281 (EGY RECIPROCITY DESIRE) STORED G304 BY G183 (SYR ISR ACCUSE) STORED G305 BY G279 (USA ISR MIL) STORED G306 BY G269 (SYR ISR MIL) STORED G307 BY G241 (JOR DESIRE TO SOLVE CONFLICT WITH SYR)STORED G309 BY \$TIMER (JOR DESIRE TO ASSURE ALTERNATIVE MIL PACTS) STORED G309 BY \$TIMER (JOR EGY MIL) STORED G310 BY G247 (SAU DESIRE TO INITIATE NEW ME STRATEGY) STORED G311 BY \$TIMER (SAU ISR POL) STORED G312 BY G257 (SAU EGY POL) STORED G313 BY G255 (EGY DESIRE TO RECIPROCATE) STORED G314 BY G201 (SAU IRQ ECO) STORED G315 BY G253 (IRQ DESIRE TO RECIPROCATE) STORED G316 BY G223 (IRQ SAU ECO) STORED G317 BY G243 (SAU SYR ECO) STORED G319 BY G251 (SAU SYE POL) STORED G319 BY G249 (SYR RECIPROCATE DESIRE SAU) STORED G320 BY G211 (SYE SAU POL) STORED G321 BY G259 (FRN SAU MILL) STORED G322 BY G245 (SAU DESIRE TO EXPAND ECCO STORED G323 BY G156 (IRQ DESIRE TO FORM ARAB SOLUTION) STORED G324 BY G141 (IRQ LIB POL) STORED G325 BY G277 (DESIRE TO CREATE ARAB RAD ALTERNATIVE) STORED G326 BY G233 (ISR CONCERN FOR ARAB DISCUSSIONS) STORED G327 BY G195 (IRO SYR POL) STORED G328 BY G275 (JOR DESIRE TO BREAK WITH SYR) STORED G329 BY G191

(IRQ ISR POL) STORED G330 BY G271

also suggested French involvement with Saudi Arabia most likely in the form of military sales. There appears to be Saudi Arabian and Iraqi initiatives aimed at Israel and a clear Israeli concern over the possibility of a unified Arab position. The final world looked like:

```
... FINAL WORLD.
(IRQ ISR POL)
 (JOR DESIRE TO BREAK WITH SYR)
(IRQ SYR POL)
(TSR CONCERN FOR ARAB DISCUSSIONS)
 (DECIRE TO CREATE ARAB RAD ALTERNATIVE) (TRQ LIB FOL)
 (IRQ DESIRE TO FORM ARAB SOLUTION)
 (SAU DESIRE TO EXPAND ECO)
 (FRN SAU MILL)
(SYE SAU POL)
(SYR RECIPROCATE DESIRE SAU)
(SAU SYE POL)
 (SAU SYR ECO)
 (IRQ SAU ECO)
 (IRQ DESIRE TO RECIPROCATE)
 (SAU TRO ECO)
 (EGY DESIRE TO RECIPROCATE)
 (SAU EGY POL)
 (SAU ISR POL)
(SAU DESIRE TO INITIATE NEW ME STRATEGY)
 (JOR EGY MIL)
 (JOR DESIRE TO ASSURE ALTERNATIVE MIL PACTS)
 (JOR DESIRE TO SOLVE CONFLICT WITH SYR)
 (SYR ISR MIL)
 (USA ISR MIL)
(SYR ISR ACCUSE)
 (EGY RECIPROCITY DESIRE)
 (SYR EGY POL)
 (SYR ATTEMPT TO GO INT)
(USA ISR POL)
 (USA CONCERN FOR ISR)
 (ISR CONCERN FOR MILITARY BALANCE)
 (ME-THREE) SIMULATED 46353
 VALUE: NIL
```

The first of the second second

Conclusion

The original correlation matrix between oblique patterns delineated a strong negative correlation between factor Pattern One and Patterns Two and Three. It also depicted a strong positive pattern between Two and Three. This would suggest fairly strong tendencies of Final World One to be working in counter distinction to Two and Three. There is, to mix our regional analogies a bit, a ying and a yang to the dynamics of Middle Eastern politics. Frequently it is argued "things could go either way" in the Middle East. The two "ways" vary from observer to observer. What this exercise suggests is that the complexity of causal forces in this region is such that events unfold at the nexus between two major sets of forces. In terms of variance explained, Pattern One is just equal in potence to the combination of Patterns Two and Three. Thus the opposing forces are rather neatly balanced. Just as in the past, the forces should coincide in the future -- one pattern controlling for awhile giving away to a quite polar opposite set of forces. The juxtaposition here suggests some very interesting alternatives for the future unfolding of events. Consider the final worlds as laid out in Tables IX, X, and XI. Me-One suggests a military confrontation of Israel and Syria, with Egyptian, Iraqi

Commence of the Commence of th

assistance. It suggest difficulties within Jordan and between Jordan and Syria. There appears to be a strengthening Iraqi, Syria, Libyan connection and a strong attempt to link political and military solutions to conflicts ប៊ីឌីប៉ា ប្រជាជនជាក្រស់ស ធី នេះស្រ in the Middle East. Israel is buffeted by the Soviet and the state of t Colored Colored Colored Union as it tries to gain a new role in the Middle East. US involvement with Israel is primarily economic and political. Its activities are distrusted by the Arabs 化邻环烷基化 电影 化二氯化基甲烷 化二硫二甲烷 化二氯化铂基 化氯苯 while the EEC countries are expected to play a stronger role in future solutions. Egypt seems beset by issues of internal security and military weakness. It does appear to be entering into exchanges with Arab league members but Contract to the second section of the it is not a strong player in the unfolding of events according to the version of the future.

When Patterns Two and Three are integrated, we get a and the state of t very different picture of the unfolding of events. Here American military exchanges with Israel occur as well as political and economic. The exchanges do not mean assistance, they may even be agreement over the use of US weapons on the part of the Israelis. The Jordanian situation is A GRADE CONTRACTOR OF THE CO also quite different. Domestic difficulties are surmountable 45 1 3 1 2 3 1 2 3 1 2 3 2 3 and relations with Syria appear to be straightened out. Military conflict with Israel is unlikely and a separation of political and military solutions seems quite likely. US involvement is more complex in this joint pattern showing

Syrian, Egyptian, Jordanian and Saudi initiatives. Soviet activity can also be expected but the radical solution seems swamped by Saudi peace initiatives and an Egyptian economic initiative within the Red Sea. A Syrian-Israeli military confrontation is also suggested in this combination, but it would appear less critical to the unfolding of events. Western Europe is less involved in this dynamic with the exception of some French military sales.

In short, we see in these comparisons the classic battle of international relations theory. On the one hand, events in the Middle East are heavily influenced by the marriage of politics and warfare. Solutions to political differences are frequently sought by military initiatives. On the other hand, there is also a marriage between economics and politics which leads to quite different solutions. As in our text books, we find arguments for each view of the world. So do we see room for both explanations in the behavior of nation states. The factor analysis suggests that in the Middle East, both forces are at work. Neither marriage is in danger of dissolution but neither is likely to hold advantage for long. The search for economic imparatives to solve future problems will continue, probably along the Mediterranean and into the Red Sea. But military driven searches for solutions are also a clear component of the future, perhaps in the Bekaa Valley and over the West Bank.

The results here are not intended to forecast the one, true course of history. That would obviously be beyond reach of a science no matter how "artificially intelligent" it elimed to become. What has been attempted is the integration of factor analysis in its more inductive modes into a hypothetical deductive framework which allows analysts to guess at the underlying or root causes of behavior and then to sensitivity test these hundres by formulating rather rigorous models and using them to simulate alternative scenarios. These scenarios have led us to some rather fruitful insights into the complex collage of Middle Eastern politics. They have also suggested a hypothetical-deductive component for causal explanation in the analysis of international behavior.

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Appendix I

COPDAB INTERNATIONAL SCALE

15 Transive var acts causing deaths, dislocation and high stravesic cost

Use of atomic or nuclear weapons; full scale air, naval, or land battles; invasion of territory; occupation of territory; massive bombing of civilian areas; capturing of soldiers in battle; large scale bombing of military installations; chemical or biological warfare.

14 <u>limited var acts</u>

Intermittent shelling or clashes; sporadic bombing or military and industrial areas; small scale interception or minking of ships; mining of territorial waters.

13 Small scale military acts

Limited air, sea, or border skirmishes; border police acts; annexing territory already occupied; seizing material of target country; imposing blockades; assassinating leaders of target country; material support of subversive activities against target country.

12 Political-military bostile actions

Inciting riots and rebellions (train and financially aid rebellions); encouraging guerrilla activities against target country; limited and sporadic terrorist actions; kidnapping or torturing foreign citizens and prisoners of war; giving sanctuary to terrorists; breading diplomatic relations; attacking diplomats or embassies; expelling military advisor; nationalizing companies without compensation.

11 Diplomatic-economic hostile actions

Increasing troop mobilization: boycotts: imposing economic sanctions: hindering movement on land, waterways, or air; embargoing goods: refusing mutual trade rights: closing borders and blocking free communication: manipulating trade and currency to cause economic problems: halting aid; granting sanctuary to opposition leaders: mobilizing hostile demonstrations against target country: refusing to support foreign military allies: recalling ambassador for emergency consultation: refusing visas to other nationals or restricting movement in country: expelling or arresting nationals or press; spying on foreign government officials: terminating major agreements.

Appendi I continued

10 Strong verbal expressions displaying hostility in interaction

Warning rotalisation for acts: making threatening demands and accusations; condenning strongly specific actions or polities; denouncing leaders, system, or ideology; postponing heads of state visits; refusing participation in meetings or summits; levelling strong propaganda attacks; denying support; blocking or vetoing policy or proposals in the UN or other international bodies.

9 Hild verbal expression displaying discord in the interaction

Low key objection to policies or behavior; communicating dissatisfaction through third party; failing to reach an agreement; refusing protest note; denying accusations; objecting to explanation of goals, position, etc.; request change in policy.

8 Wentral or non-significant acts for the inter-nation situation

Thetorical policy statements; non-consequential news items; non-governmental visitors; indifference statements; compensating for nationalized enterprises or private property; no comment statements.

9-Hipor official orchanges, talks and policy expression--

decting of high officials: conferring on problems of mutual interest: visit by lover officials for talks: issuing joint communiques: appointing ambassadors: announce cease-fire; non-governmental exchanges: proposing talks: public non-governmental support of regime: exchanging prisoners of var; ask for support of policy: stating or explaining policy.

6 Official verbal support of goals, values, and regime

Official support of policy: raising legation to embassy: reaffirming friendship; asking for help against third party: apologizing for unfavorable actions or statements; allowing press correspondents entry: thanking for aid; resuming broken diplomatic or other relations.

Appendix I continued

5 Eultural and eclentific agreement and support (non-

Starting diplomatic relations; establishing technological or scientific consumination; proposing or offering economic or military, sid; recognizing government; opening borders; conducting conducting friendship, agreements; conducting culturals and academic agreements or exchanges.

W Man-military occupation technological and industrial agreement

Haking economic loads, grants; agreeing to economic pacts; giving industrial, cultural, educational assistance; conducting trade agreements and granting nost dayored pation status; establishing common transportation or communication network; selling industrial-technological surplus supplies; providing technical aspertise; ceasing economic restrictions; repaying debts; selling non-military goods; giving disaster relief.

3 Hillsary, economic and strategic apport

Selling nuclear power plants or materials; providing air, mayal, for land facilities for passe; giving military technical or advisory assistance; granting military aid; sharing highly advanced technology; intervening with military support at request of government; concluding military agreements; training military personnel; joint programs and plans to initiate and pursue discrement.

2 Bajor strategic alliance (regional or international).

righting a war jointly; establishing a joint military gone adding or alliance; conducting joint military maneuvers; establishing or organizing international addiances; establishing joint program to raise the global quality of life.

1 Yoluntary unification into one nation

Herging voluntarily into one nation-state: forming one nation with one legally binding government.

Appendix II

COPDAB DORESTIC SCALE

1. Major governmental programs and policies to substantially increase socio-scononic freedom and equality

Items in this category describe a very extensive role for the government clites in trying to initiate and implement policies and programs which substantially improve the quality of life economically, socially, and politically. These policies and programs should be directed towards the mational integration of the mociety in a manner so as to create an agalitarian and just society. Events in this category should imply substantial initiatives to reduce structural victimization in the society. Examples of events in this category are laws enacted to protect the rights of minorities; initiation of extensive social and economic welfare programs and policies; and programs aimed to reduce or climinate illiteracy. Other examples are:

Guarantee energy, food, and basic resources to all parts of the country/society
Invest substantially in reducing illiteracy and infant sortality and related social ills
Start extensive social velfare programs
Abolish slavery
Establish economic structures to improve distribution
Legislate suffrage regardless of sex, race or origin
Write social security, labor and retirement insurance laws
Emact laws to protect the rights of minorities and individuals

2. Irrortant governmental actions to establish and promote political rights and equality:

This category addresses substantive governmental activities which promote political rights and freedom by reducing political repression. Heasures which mubitantially reduce conditions of domination, censorship, and fear and reinstitute both attractures and channels for political expression are included in this category. Examples of this are releasing political prisoners; granting annesty to opposition leaders; lifting government censorship; and instituting free elections. Category 2 represents a quantitative improvement initiated by the government in promoting the political rights of individuals or groups and expanding the political freedom in society.

Uphold constitutional rights by higher courts
Reform the judicial, constitutional and educational systems
Restore the normal constitutional life
Reinstitute the normal constitutional life
Reinstitute voluntary assembly and free elections

Open universities, schools and public facilities that were closed for political unrest Return revoked citizenship and permit free movement Release political prisoners
Government lifts censorship or curfer Grant amnesty to exiled leaders and nationals

3. Fational activities to ease internal tension by loveting the levels of economic inequality between groups in the society

This category includes events that reflect a clear governmental policy towards the establishment of a more just and egalitatian society in economic terms and the creation of a less tense and uncertain environment at a societal level. Examples of event statements in category 3 are governmental actions, programs and policies which increase the rational per capita income; assure more equitable redistribution; reduce poverty; improve levels of employment; and facilitate social mobility.

Return expropriated property
Initiate agrarian reform
Grant laborers a share in corporate decision-making
Government alters takes making them more equitable
Start new educational institutions
Improve income distribution of individuals and corporations
Government releases frozen accounts of opposition

4. General public engages in activities to reduce domestic instability and economic hardship

The events in this category are characterized by the support given by the general public for those governmental activities which are intended to reduce conflictive telations in the society at large. Events which reflect greater political participation and greater cultural, social and economic assimilation between elites and masses are included in this category. Por example, formation of labor unions: successful arbitration between labor and management; end of major strikes waged against the government; and surrender of rebels and opposition leaders.

Porm unions
Opposition participates in political, economic and cultural
life of the nation
Bebels surrender
End hanger or general strikes
Public shows support of government
Tote of confidence
Political support of legislation to reduce structural
inequalities
Public joins in support of government external policies

Domestic coesofires

5. Moderate official policies which can improve the overall physical and human resources of the nation-state

Category 5 photospasses all measures which contribute to the ultimate improvement in the natorial quality of life of the country. Any activity, program or policy which adds to the general development of the country or its human resources should be considered part of this category. Examples of event statements in this category are the exploration, discovery or technological barnessing of natural resources such as oil or mineral deposits; the construction of hospitals, port facilities, roads and highways; and the expansion of hoalth and safety services.

Improving the level of technology
Construct port facilities and transportation modes
Adopt policies facilitating free powement of goods and
services
Enact laws to protect the environment

6. Verbal agreements intended to nobilize greater public support and national unity

Events in this category are verbal statements intended to mobilize support for the regime and increase social and national cohesion. This is the arena where the government and opposition groups jointly work to resolve their differences, solve national problems or crises, and create an atmosphere of national unity. Examples of events in this category are leaders of various factions negotiating to reduce a crisis situation; government hears and promptly acts upon grievances advanced by the public representative; government and labor leaders cooperate to fight inflation and energy crises.

Request public support for donestic and foreign policy Agree to confer or study social welfare legislation/programs Exploration to improve economic and industrial conditions in the country Government agrees to study complaints of the public

Government agrees to study complaints of the public Government and opposition talk about nutual concerns Government and labor representatives neet or agree to change conditions

Dismiss or oust unpopular or corrupt officials "Regotiate the release of kidnapped persons

7. Events of national symbolic value

Events in Category 7 include statements which have minimal impact on the socioeconomic or political life of the nation but are nevertheless nominally positive. Events such as

appointments of new cabinet members; celebration of national holidays; the gl9cic9plc9on in international meetings; and reports of economic matters or routine governmental news are examples of this category.

Report on matters of state: budget, imports, exports Elect low-level officials Hinisters and cabinet officials appointed Reporting of news events Celebrate holidays

8. Routine, purposive actions

Events in this category are state actions undertaken as part of their privileges as states. Examples are reporting, informing, announcing and making declarations which reflect neither cooperation nor conflict and which have neither positive nor negative impact on the mituation.

Announce problems being studied Issue rhetorical statements

9. Intra-governmental tensions

Events in this category are those which deal with official governmental difficulties or crises. Examples of this are dismissal of public officials; an abrupt reshuffling of the cabinet; intra-governmental accusatory statements; and resignations of high-level governmental officials in protest of governmental actions or policies.

Reshuffle or dismiss cabinets for political conflict reasons Intra-governmental conflictive statements or actions Governmental resignation due to political problems

10. General opposition to governmental policies and activities

This category refers to the lowest level of conflictive events that are undertaken by individuals or groups of individuals who are not part of the government. They are part of the opposition, unions or organized groups in one sense or another, who oppose the government and its policies. In being the lowest level of domestic conflict, category 10 events are primarily limited to those verbal activities such as threats, demands, acts of protest, marches, and strikes which do not result in physical violence. Other examples of events in category 10 are demanding the release of jailed or detained opposition members; limited strikes or threats of strikes; and the calling for a general strike or armed opposition to the government.

Demand release of jailed or detained opposition
Request ouster or impeachment of unpopular officials
Accuse government of arbitrary acts of injustice or revenue
Opposition lines up against governmental policies
Limited strikes or threats of strikes
Distribution or confiscation of anti-regime propaganda
papers or documents
Opposition calling for general strike, civil or armed
resistance or retaliatory acts

11. Minor restrictions on socio-economic reforms or freedoms

This category refers to those events which restrict the socio-economic rights of the population at large. It is the lowest level of domestic conflict regarding actions taken by the government which have a negative impact upon large segments of the nation. This category differs from category to in that the critical actor for these types of events is the government; the restrictions or limitations come as a direct result of the government's actions. Bramples of events which would fall within this category include the imposition of a partial curfex in response to civil disorder; official devaluation of currency; and official accusations by government spokespersons of treasonous or violent acts committed by major forces who oppose the government.

Short-term restrictions on travel and internal movement Hobilize drafts to conduct wars Impose partial curfew or censorship Impose taxes to conduct wars Devalue currency without compensation Reject ideas of social legislation reforms Accuse opposition of treason and with violent acts and destruction Abolish minor social welfare programs

12. Major governmental actions and policies to restrict free movement of people and deny them their civil rights

Category 12 is similar to category 11 in that the government is the critical actor and it is the population at large who is being acted upon. However, there is a critical difference between these two categories. While category 11 deals primarily with the restrictions upon rights and freedoms, category 12 addresses itself to the abolition of some but not all institutional rights within the country, with primary emphasis on those rights which serve to promote freedom of movement, assembly, speech, and the right to private property. For example, forbidding public gatherings; confiscating the property of citizens without compensation; dismissal of judges for political reasons; and disbanding parliament temporarily.

Forbid public gatherings
Detain opposition leaders or place them under house arrest
Preeze accounts of opposition for political reasons
Restrict use of public facilities and close airports
Bevoke citizenship and cancel passports of citizens for
political reasons
Expropriate private property without compensation
Dismiss judges arbitrarily
Close universities, schools or public facilities for
political reasons

13. Physical violence and military unrest

This category includes actions of overt violence precipitated by governments, groups, institutions and individuals. All actions that disclose instability and initiate conflict are included herein. Examples of this category deal with actions taken against elements in the army considered to be disloyal to the government; secret police activities against nationals; violent actions among different groups and factions in between these groups and government; mass arrests; and the kidnapping or hijacking of public officials or groups.

Large-scale stockpiling of arms by private citizens Creating private ailitias
Large-scale riots and general violent strikes
Extensive violence in the streets
Pursuing and crushing liberation movements
Coup detat
Mass arrests

14- Abolition of civil rights

This category includes events which describe the intrusion of government into the civil and political rights and activities of citizens. All actions taken by the government to restrict or deny individuals, groups, parties or organizations from pursuing their political and civil rights are included in this category. Governments which define for themselves the role of sole guardian or arbitrator of what a society would say or do tends to precipitate events which restrict or deny basic political and social rights and actions. Examples are imposing total curfey, martial lay, or a state of emergency; arbitrary seizure of newspapers or public facilities; arbitrary arrest and sentencing of opposition leaders in a manner which clearly denies these persons or groups their political and civil rights.

Abolish parliamentary life or halt it arbitrarily Impose total curfew or martial law Declare state of emergency Abolition of civil courts and political rights and freedoms

Arrest dissident journalists or opposition leaders
Military control of public media facilities
Enact total censorship
Abolish social welfare programs affecting large portions of
the society
Violate ethnic or individual rights

15. Highest level of structural violence and acts of internal var

This category includes events of the highest behavioral and structural violence. They indicate the deterioration of the quality of life as indicated by the massive loss of life; the loss of effective law and order; massive civil upheavals; large-scale chaos; and the prevalence of terror, fear, disease, sickness and famine throughout the nation.

Torture and execution of political prisoners and enemies of the state assassinate public figures for political and internal var reasons Large-scale bombing and terrorist activities Campaigns of extermination Execute public officials by government or rebels for political and internal war reasons

Addendum

Alternative Futures in the Middle East September: 3, 1982

4 (2)

After President Reagan's speech, September 1, 1982, the three simulations were rerun with a new set of conditions reflecting a changed environment. This time the simulations involved initial conditions set as a new USA initiative in the Middle East. The trigger or event which was set in juxtaposition to the initial conditions was the Israeli response of September 2, 1982. In discussing the results the guidelines of the original paper will be followed by assuming a pair of countervening forces at work, each roughly equal in strength but each polar opposites in terms of their direction and temporal incompatibility (keep in mind that the early empirical work supports the argument that one but not both patterns will be operative).

In the first scenario (or pattern) which tends to follow from a marriage of political and military strategies, there is obvious concern on the part of the Israeli's with their military situation and with the possibility of a unified Arab position. The simulation predicts a domestic military build-up or alert in Israel. It does not anticipate any USA military assistance, however. An attempt to initiate military activity in the Bekaa Valley is likely given Israeli concern over a unified Arab stance. Such an initiative would be coordinated with Israeli political

pressure being leveled at Jordan, probably in an effort at reaching a bilateral agreement on the future of the West Bank.

This version of the future sees little role for the Saudis but it does see a clear presence of Iraq, Syria and Libya in forming a solution to the issues initiated by Reagan's speech. Soviet desires at increasing its role in the area are not strongly visable. Thus in a militarily gense scenario, the Soviet role is expected to be minimal. Another result of this pattern is a new role for West Europe. The simulation sees strong pressure upon Israel coming from France, Germany, and the United Kingdom.

The Egyptian role in this scenario is minimal due to its concern over its own military weakness. It is seen as expressing concern for its military position and in political discussions with Israel, but it appears to have no new role in the Middle East. If there is a major confrontation with Syria, it would request Egyptian military support but the simulation suggests it would receive little response.

If Egypt were to experience domestic political difficulties, the simulation suggests a number of actions. First American economic aid would increase in an attempt to bail her out of difficulty. Secondly, there would most

likely be an international effort on Egypt's part to solve the domestic economic difficulties. This would result in attempts to reinstitute better economic and political ties with Libya and political exchanges with the Syrians. It also suggests contact with the Jordanians but little response in return. The simulation suggests a rapid increase in the international activities of the Egyptians to offset domestic problems and possibly to prevent international support of domestic dissidents.

Durning to the second scenario, which is seen as being in juxtaposition to the previous one, the future is linked more directly to a marriage of economics and politics. In this version of the future, the United States strategy is focused upon creating a unified Arab resolution to the Palestinian problem. The Saudis become a cornerstone in the strategy exhibiting economic and/or political exchanges with Egypt, Syria, the United States, and Iraq. There is a rapprochement between Jordan and Syria and a growing political accommodation between Sudan, Egypt and Saudi Arabia.

The Israeli position seems limited to arguing with the Americans over economic and political interpretations of previous agreements and of putting pressure on the Egyptians; either over interpretations to the Camp David Accords or in an attempt to get them back into the autonomy

talks. The lack of Israeli exchanges with the Arabs here suggests an attempt on her part to ignore the Arab world until she has straightened out her conflict with the USA. The possibility of a Syrian initiative in this case remains possible. The simulation warns that such an initiative might create enough pressure on the USA that it would supply Israel militarily.

Soviet activities are more noticeable in this future world, due in part to the apparent lack of military confrontation. They appear to be active with Syria, Jordan, and Iraq. A division in the Arab world is even less likely in this scenario than in the more militant strategy.

As to a possible short term strategy shift on the part of the Egyptians, there appears little prospect nor does there need to be in this scenario. Libyan and Syrian overtures are unlikely to be fruitful at this time.

Israeli pressure to continue on a non-Arab course will be obviously watched carefully. The possibility that does present itself is a renegotiation of some of the economic terms of United States assistance to a more favorable Egyptian position domestically in exchange for resistance to the Israeli pressure.

Given economic and political initiatives working out well for the Egyptian government with Saudi Arabia and the Sudan as well as a strengthening of its economic agreements with the United States (here I would assume trade, loan, and investment policy) the domestic situation is much more stable. The government need not respond in a significant manner to domestic differences in this scenario.

The preceding material can be reorganized to highlight the alternative pressures facing each of the major players in the Middle East scenarios:

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Jordanians would seem to be able to play off the desires of the Soviets and the Americans in its own concern for flexibility in military procurement.

EGYPT

Egypt's position will be governed by its current military weaknesses and by the direction that Israel chooses in its response. If Israel chooses to focus upon the Arab world (Scenario 1), there appears little role for Egypt. It must be very careful of domestic unrest. Should it occur, Egypt can be expected to react quickly to head off external involvement with dissidents and to solve immediate economic problems.

If Israel focuses upon the United States and Egypt, there will be considerable pressure brought to bear upon the Egyptians. This pressure is itself an opportunity in the Arab world. The simulation sees the possibility of a stronger economic and more central political role based upon joint Saudi, Egyptian initiatives. There is some room for a renegotiation of economic terms of American assistance in this scenario as well. Under these circumstances,

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