

Shifting Borders and New Technological Frontiers: The Case of Italy

by Jean-Pierre Darnis

"Technology is the new frontier". This concept is so often used that one has trouble tracing its origin in history. The notion of a technological frontier was already present in the US during the Cold War, when the space race appeared as an expression of the Manifest Destiny that was once associated with the conquest of the West.

Today, the expanding digital dimension also tends to be described as a new frontier to be conquered. A further association between technology and frontiers looks at the "new frontiers of technology", a reference to emerging developments in various technological sectors and their potential impact on human interactions, for both the individual and wider society.¹

Artificial intelligence (AI) stands out as a key issue in these debates

¹ Helen McLure, "The Wild, Wild Web: The Mythic American West and the Electronic Frontier", in *The Western Historical Quarterly*, Vol. 31, No. 4 (November 2000), p. 457-476.

since it is presented as a potentially transformative technology with huge social and individual impact.² Digitalization has already taken place on a global scale and is creating planetary data flows that are shaking classic political paradigms based on the nation state, the rule of law and multilateral frameworks of cooperation.

Taking into consideration the exponential spread of database applications and the growing data processing capabilities of private actors, one could ask how the nation state will fit into these IT trends, a debate that presents both geographic and sovereignty issues.

In other words, to what extent are new technological frontiers and traditional nation state borders compatible? Pushed by new technological advances,

² Bruno Latour, "La technique, c'est la civilisation elle-même", in *Revue internationale et stratégique*, No. 110, (2018), p. 163-171.

Jean-Pierre Darnis, Associate Professor at the University of Nice Sophia-Antipolis, is Scientific Advisor and Head of the Tech-IR Programme at the Istituto Affari Internazionali (IAI).

borders are moving, but such trends cannot be framed as a zero-sum game to the detriment of the nation state.

While no doubt weakened, the nation state remains the main organizational unit of the international system, not least given that support for Hobbesian-type state sovereignty remains strong. This means that new technologies need to be taken into consideration by states to cope with concepts such as democracy, the rule of law or national security.

When seen in this light, a number of paradoxes emerge, as in certain domains technology is being employed to strengthen and consolidate national sovereignty, while in others efforts are moving towards multilateral and/or supranational agreements that are diluting such sovereignty.

One pertinent example includes the rule of law. In the digital age this issue has become tricky, given that sensitive data is stored around the world, beyond the national borders of a given state, but can increasingly be used in legal or court procedures for both national and international procedures.

These concerns were behind the recently adopted US CLOUD Act, which calls for further multilateral agreements to protect both the rights of individuals and the needs of justice in terms of retrieving and using international information.³ In the field of law and justice therefore, new hesitant forms of

multilateralism are emerging, a trend also mirrored by the recent adoption of the General Data Protection Regulation (GDPR) by the European Union or in the institutional build-up to that regulation within the European Commission.

On the other hand, one can observe that national security policies related to the digital dimension are extremely nation-centric, with the strong association between “cyber” and “defence” illustrating a technologically fenced-in vision of the world. The fact that intelligence agencies were the first to understand and invest in the digital domain has set the tone for a relative process of digital nationalization, with agencies extremely concentrated on the national security paradigm, a trend which also runs counter to the spirit of multilateral defence agreements, within both NATO and the EU.

Therefore, while the police and judicial systems are addressing the issue of data sharing through multilateral agreements and cooperation, the security and defence sector seems to be heading in the opposite direction. In a way, the “cyber defence” paradigm could be described as an effort by states to implement security measures similar to those adopted to shield banking systems from all kinds of threats.

In this regard, one may observe the different visions contained in a number of “digital strategies” or “artificial intelligence plans” recently put in place to define public action in the digital domain, both at the national and international level. When addressing the digital and AI dimensions, differently from the “cyber” field, a more communal,

³ Christopher Boehning and Daniel J. Toal, “CLOUD Act Governs Warrants for Data Stored Outside U.S.,” in *New York Law Journal*, Vol. 259, No.107 (5 June 2018), p. 5, <https://at.law.com/jfE6qk>.

democratic and internationalist vision tends to be promoted, including through cooperative actions at the European level.

In the AI realm, for example, a recent plan was presented by the French government,⁴ then promoted at the Franco-German level and finally adopted by the European Commission.⁵ Clearly, there is a will to promote a shared technological and political vision since control of technology has an impact on how data is used, which in turn can allow states to defend their political vision and authority. Investments in technology and in technological policies at the EU level are often aimed at guaranteeing or even extending the sovereignty of EU member states.

The concept of a “new technological frontier” has been largely shaped by the US experience and vision. For a country like Italy, what possible references could be highlighted for the emergence of a vision of the new frontiers of technology?

Italy’s self-perception is rooted in its historical experience and in particular to a series of expressions related to the arts, politics, religion and literature. The figure of the inventor, often

encapsulated by Leonardo Da Vinci, is part of this Italian representation. Science and technology are perceived as the symbol of individual capabilities. Like the arts, with which they are often associated, they represent fields where eminent Italians have often distinguished themselves, attaining international prestige and following.

Scientific and technological capabilities are perceived as important individual skills but are somewhat lacking in terms of their relationship with the state, as they do not stem from a political space that has shaped a goal of scientific and technological progress for the nation as a whole. It is also for this reason that the notion of a collective technological ideology is more difficult to apply to Italy, a country where the Renaissance man remains a strong reference point.

Italy is not immune to current debates about policy and technology however, and the national Digital Italy Agency (AGID) has recently put together an AI task force to deepen coordination and shape a strategy. AGID has also presented a White Paper on Artificial Intelligence, filling a void that had not been covered by other government bodies.⁶ One can also point to the dynamism of the Italian space sector, where actors are benefitting from government support to invest in data retrieving and processing capabilities in order to prepare for a potential geo-data market.⁷

⁴ Stéphanie Dos Santos, *France’s AI Strategy*, 5 April 2018, <https://uk.ambafrance.org/France-s-AI-strategy>; Nicholas Thompson, “Emmanuel Macron Talks to WIRED About France’s AI Strategy”, in *WIRED*, 31 March 2018, <https://www.wired.com/story/emmanuel-macron-talks-to-wired-about-frances-ai-strategy>.

⁵ European Commission, *Artificial Intelligence for Europe* (COM/2018/237), 25 April 2018, <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=COM:2018:237:FIN>.

⁶ Task Force on Artificial Intelligence of the Agency for Digital Italy (AGID), *Artificial Intelligence at the Service of Citizens*, March 2018, <https://ia.italia.it/assets/whitepaper.pdf>.

⁷ See Jean-Pierre Darnis, “The New Space Economy, An Opportunity for Italy?”, in *IAI*

At the same time, national security players are also pushing the “cybersecurity” paradigm, investing in human and digital capabilities to create a national cyber architecture coordinated by Italy’s Security Intelligence Department (DIS).⁸ Similarly to other countries, Italy is also experiencing parallel trends that see the civilian and law enforcement sectors push for openness and multilateral agreements, while defence oriented actors, particularly in the cyber realm, are more focussed on developing robustness, national capabilities and the protection of national data streams.

The Italian case, therefore, does in part reflect those international trends in the digital domain, with trajectories caught between the two extremes of protectionism versus openness and cooperation. What does this imply for new frontiers of Italian technology? What kind of global projection can Italy aspire to through the promotion of its technological sector?

While powers like the US, China or Russia are renewing their competition through technological, mainly digital, investments, both in terms of internal use and worldwide dominance, is there any room for an Italian vision and contribution to the emerging tech world?

Since World War II, Italy has carefully avoided the development of a power-

based international policy, preferring to embrace multilateralism. Today, the pace and breadth of the digital expansion is posing radical questions as to the future existence and utility of modern states. The European Union is investing in political and regulatory capacities in a number of digital domains, a remarkable example of a positive EU role.

Yet, there is more to be done at the level of member state policies and blueprints, not least to avoid a dichotomy between digitally protectionist national policies and EU wide approaches based on the pooling of responsibility and multilateral frameworks. In this respect, the EU is faced with a double challenge: the need to maintain open and pan-European regulation and policy in the digital domain, and the need to defend this system from other, often aggressive, global actors.

Single member states have neither the ability nor the human and financial capital to play an incisive role in the digital field, if not through the European Union. Like other member states, Italy is therefore called to embrace a difficult balancing exercise.

For this reason, it is essential to increase technological awareness and as well as the capabilities and oversight of governing institutions, a growth that should be anchored within wider EU policies in order to avoid counterproductive nationally oriented digital systems that risk being both a technical anachronism and a political mistake.

Commentaries, No. 18|36 (June 2018), <http://www.iai.it/en/node/9320>.

⁸ Dipartimento informazioni per la sicurezza (DIS), *Pubblicato il nuovo Piano nazionale cyber*, 31 May 2017, <https://www.sicurezza nazionale.gov.it/sisr.nsf/archivio-notizie/pubblicato-il-nuovo-piano-nazionale-cyber.html>.

Istituto Affari Internazionali (IAI)

The Istituto Affari Internazionali (IAI) is a private, independent non-profit think tank, founded in 1965 on the initiative of Altiero Spinelli. IAI seeks to promote awareness of international politics and to contribute to the advancement of European integration and multilateral cooperation. Its focus embraces topics of strategic relevance such as European integration, security and defence, international economics and global governance, energy, climate and Italian foreign policy; as well as the dynamics of cooperation and conflict in key geographical regions such as the Mediterranean and Middle East, Asia, Eurasia, Africa and the Americas. IAI publishes an English-language quarterly (*The International Spectator*), an online webzine (*Affarinternazionali*), two book series (*Quaderni IAI* and *IAI Research Studies*) and some papers' series related to IAI research projects (*Documenti IAI*, *IAI Papers*, etc.).

Via Angelo Brunetti, 9 - I-00186 Rome, Italy

T +39 06 3224360

F + 39 06 3224363

iai@iai.it

www.iai.it

Latest IAI COMMENTARIES

- 18 | 46 Jean-Pierre Darnis, *Shifting Borders and New Technological Frontiers: The Case of Italy*
- 18 | 45 Francesco Paron, *Europe's Dependence on Critical Raw Materials: Implications for the Competitiveness and Independence of Strategic Industries*
- 18 | 44 Stefania Sgarra, *Jordan's Protests and Neoliberal Reforms: Walking on Thin Ice*
- 18 | 43 Fabio Angiolillo, *China-Vatican Talks: Covert Negotiations Aim to End Decades of Severed Relations*
- 18 | 42 Luca Barana, *EU Migration Policy and Regional Integration in Africa: A New Challenge for European Policy Coherence*
- 18 | 41 Giuliano Macioci, *Overcoming a Dark Past, Is Zimbabwe Ready for a Brighter Future?*
- 18 | 40 Paola Sartori, *Brexit and European Defence: What to Expect from a "No-Deal" Outcome?*
- 18 | 39 Cono Giardullo, *Fly High Or Die Trying: Drones in the Service of Human Rights*
- 18 | 38 Giorgia Perletta, *Street Protests and Socio-Economic Challenges in Iran: The Case of Khuzestan Province*
- 18 | 37 Gianni Bonvicini, *Beyond the European Council: Domestic Politics Drives the Migration "Crisis" in Italy and Germany*