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Asymmetric knowledge war : Europe a prime target Part 1

Given the relentless competition between the United States and China, and the heightened ambitions of certain regional powers, Europe is still struggling to assert itself as a leading geopolitical player. Threatened militarily on its borders, it is also under threat at its very heart from repeated hybrid attacks that undermine its stability and sovereignty.

Fortunately, Europe has initiated response and is now tackling head-on the digital, informational, electoral and economic interference directed at it. However, it is still less vigilant regarding the malicious operations targeting the world of research and knowledge. It is true that such interference is rather difficult to detect and counter due to its multifaceted nature. It may involve anything from the theft of sensitive scientific knowledge to the deliberate introduction of bias into the teaching of a discipline. Its effects are rarely immediate and must therefore be assessed over the long term.

Scientific rivalry between nations is nothing new, but for a long time it took place within a peaceful framework that respected the traditional rules of competition and international cooperation. The recent proliferation of predatory practices and cognitive manipulation marks a paradigm shift that should serve as a warning. All the more so given that, clearly, Europe^[1] appears to have become the main target of the interference affecting the world of knowledge^[2].

Furthermore, it is undeniable that significant inequalities persist between European countries in the field of higher education and research (HER). What consequences do these have for the continuation of interference? Is Europe, in the eyes of its attackers, a single, overarching target or a fragmented collection of individual targets?

1 – MULTIFACETED FORMS OF FOREIGN INTERFERENCE WITH DISTINCTIVE CHARACTERISTICS

1-1. A definition that is still open to debate

The term 'foreign interference' has only come into common usage in recent years. Attempts at a formal definition are still rare, vary from one country to another, and are subject to differences depending on the specific context in which they occur. The severity of the methods used is generally assessed according to their degree of seriousness and reprehensibility.

There is a consensus that such actions are manipulative or coercive in nature, and that they are often carried out with a high degree of secrecy. The fact that these types of operations originate from foreign sources, but that they very often proceed through the intermediary – whether voluntary or not – of local players, is a constant feature of all current definitions.

However, the list of areas in which foreign interference occurs remains all too often incomplete. For instance, the definition currently provided by the European Union's institutions emphasises 'manipulations aimed at influencing and destabilising public opinion and interfering in political decision-making processes', whilst others broaden this to include the gathering of sensitive information to the detriment of the nation's fundamental interests.

[1] By the generic term 'Europe', we mean here all Member States of the European Union or those in the process of joining it, as well as the nations on the continent that are associated with them through various research and academic mobility programmes.

[2] The second part of this article will focus on identifying the vulnerabilities specific to European countries

As things stand, therefore, no official definition accurately covers the full range of these malicious foreign operations, whether in terms of methods of operation, intended targets or intended objectives. It must be acknowledged that this is a complex task, one that is hardly made any easier by the lack of transparency shown by the agencies responsible for counter-interference, as well as by the victims, who fear being blamed for a lack of vigilance. Added to this is the rapid development of new technologies, which significantly influences the way interference methods are evolving. Who, at present, is in a position to assess the precise impact that the phenomenal advances in artificial intelligence will have in this field in the future?

1-2. The specific characteristics of foreign interference in the world of knowledge

Beyond the characteristics common to all forms of foreign interference, each type of sector-specific interference tends to be distinguished from the others by its own specific features. There are four such features relating to the world of research and higher education.

a) A narrow scope governed by specific rules

The academic world is a relatively small and elitist sphere. Recruitment within it is highly selective. Its legitimacy and authority are based on its mastery of knowledge rather than power. It also enjoys specific freedoms (academic freedoms) and a high degree of operational autonomy, which protect it from interference by political authorities, towards whom it harbours a deep-seated mistrust.

b) The importance of the human factor

Within this relatively closed environment, interpersonal exchanges are prioritised and trust between stakeholders is crucial to the mechanisms of knowledge-sharing. Whilst the use of electronic means of communication has certainly increased significantly in recent decades, it is conducted in accordance with security protocols whose robustness has been well established. When it comes to both interference and counter-interference, human intelligence is crucial. Infiltration into this environment requires the deployment of significant human networks to achieve its objectives.

c) Long-term mechanisms

Foreign interference in research and higher education is characterised at all levels by a longer timeframe than that seen in other fields. Complex to carry out, such interference requires careful planning, the mobilisation of significant resources, as well as patience, skill and discretion on the part of those responsible. The actual benefits derived from an operation of this kind can only be assessed over the long term. By their very nature, fundamental scientific knowledge precedes the technological applications derived from it, which in turn only yield tangible benefits at the end of a long and often uncertain process.

d) A wide range of objectives

Foreign interference in the academic world is distinguished from other forms by the relatively wide variety of objectives that may be assigned to it.

1-3. Classification by intended purpose specific to the academic world

This wide variety of objectives stems quite directly from the diversity of the roles assigned to the academic world. These essentially fall into two categories: a research role, whether fundamental or applied, and a role involving the transmission and dissemination of this knowledge, principally through higher education or by providing expertise to decision-making bodies within society. Following various studies carried out on this subject^[3], a key distinction must be drawn between interference that can be described as 'extractive' and interference of a cognitive or ideological nature.

1-3-1. Foreign interference of an extractive nature

These are acts of interference involving the unlawful or underhand appropriation of sensitive knowledge held and protected by a third country. Fundamental research and the so-called exact sciences are the main targets of this type of operation, which bears a strong resemblance to economic, industrial or military espionage.

^[3] In particular, those led by Kyle A. Long and Carly O'Connell, the 2021 French Senate fact-finding mission on non-European influences in academia, and the French Office for Scientific Integrity

Within this extractive interference, two types of objective can be distinguished:

a) The acquisition of scientific or technological knowledge with the aim of gaining a competitive advantage (knowledge transfer without compensation, gains in productivity or market share, etc.). This type of interference, which may be described as 'predatory', increasingly targets so-called 'dual-use' technologies, i.e. those with both civilian and military applications.

b) The gathering of sensitive and confidential information concerning a country's critical infrastructure (military installations, energy, communications and transport networks, port facilities, etc.). This is driven by a commitment to neutralise, or even sabotage or destroy, the strategic capabilities of the targeted country in the event of a potential military escalation.

In both cases, these are highly intrusive and coercive methods that often involve breaking and entering, blackmail and psychological pressure, as well as bribery and the subversion of intermediaries, in order to achieve their aims.

1-3-2. Foreign interference of a cognitive or ideological nature

These forms of interference are described as 'cognitive' because their primary aim is to insidiously influence the intellectual sphere of a rival country. They primarily target the social sciences and humanities, as research in these fields can have a significant impact on the direction of public debate.

They are themselves divided into two distinct sub-categories:

a) Malicious influence operations, referred to as 'corrective', which aim to alter the negative perception held of the intervening state by opinion leaders and the population of a given country. These are sometimes described as operations to positively reshape the country's

international image[4], the methods employed go far beyond generally accepted policies of cultural influence. Often regarded as impervious to external criticism, authoritarian regimes are in fact more concerned than is commonly believed about the consequences of their poor reputation, particularly when this results in significant legal or trade sanctions or their ostracism from the international community.

b) Malicious operations aimed at provoking or exacerbating divisions within a given country with a view to destabilising it and undermining the legitimacy of its leaders. Their implementation is often facilitated by the very high degree of freedom of expression and the strong critical thinking that have historically prevailed within Western universities. Their disruptive objectives are very similar to those of disinformation campaigns conducted on social media. The intended effects, however, are more subtle and targeted: they seek to hijack the legitimacy and intellectual authority enjoyed by the academic world to bolster biased narratives designed to influence national decision-makers.

2 – EUROPE TAKES CENTRE STAGE IN THE NEW WAR OVER KNOWLEDGE

Although there is as yet no authoritative international study on this issue, a review of recent sector-specific research supports the view that Europe has become, on a global scale, the primary target of attacks on the academic world. At first glance, this observation may seem surprising, as our continent's R&D investment currently ranks only third in the world, well behind the United States and China, which are rising rapidly. The quality of our fundamental research and the excellence of our higher education institutions[5] are therefore far from being the sole explanation for the appeal of interventionist states to the European academic world. Other significant factors help to provide a better understanding of the prominence of this threat on our continent.

[4] A process known as 'image reshaping', which was theorised by William L. Benoit in a book entitled **Accounts, Excuses, and Apologies: A Theory of Image Restoration Strategies**, published in 1995.

[5] Europe, largely thanks to the United Kingdom, continues to hold second place globally in the three main international university rankings (QS World University Rankings, Times Higher Education, and the Shanghai Ranking).

2-1. The three factors behind the prominence of the threat in Europe**2-1-1. A greater focus on international opportunities than elsewhere**

The first explanatory factor relates to the exceptional international openness of research and higher education in Europe. The so-called 'open science' culture – which regards knowledge as a common good and a key tool for peaceful cooperation between nations – remains dominant. European countries host the highest number of foreign researchers. The same is true of foreign students: Europe currently has 1.4 million [extra European students](#), compared with fewer than 1.2 million international students in the United States and fewer than 400,000 in China. Enrolment and tuition fees are, generally speaking, much lower than elsewhere. Whilst entry restrictions and limits on the length of stay are tending to become stricter in the rest of the world, Europe continues to pursue its policy of openness. It attracts many of those who previously favoured the United States, Canada or Australia as their preferred destination.

2-1-2. Financial fragility and increased external dependence

The second factor relates to the extreme fragility of funding. Government budgetary contributions continue to dwindle, and the number of universities running a deficit is constantly rising. To cope with this, institutions are attempting to boost their own resources by raising tuition fees for non-European students and forging more partnerships with foreign institutions and businesses. This increased dependence is driving many institutions to accept highly asymmetrical relationships with certain third countries, whether in terms of knowledge transfer or infringements on freedom of research and expression^[6].

2-1-3. A fragmented and poorly co-ordinated European research and higher education sector

The third factor is the extreme fragmentation of the European higher education and research sector. Member States maintain separate national organisations, their intelligence services remain insufficiently coordinated,

and the European Union unfortunately has only limited powers in these sensitive areas. Added to this national fragmentation is the autonomy of institutions, which compete quite fiercely with one another. This fragmentation presents a significant opportunity for countries pursuing a deliberate policy of predation or interference.

2-2. The perceived threat varies considerably from one European country to another**2-2-1. The main factors driving differentiation at national level**

There are numerous differentiating factors. In addition to those mentioned above (performance, openness, dependence and fragmentation), there are other parameters that fall within the specific national framework of each higher education and research institution:

- The country's economic and demographic weight, as well as its political and diplomatic influence within Europe and beyond;
- The extent to which it is economically dependent on foreign funding and investment, given its level of debt;
- The extent of its political, economic and social stability;
- Its specific geopolitical context, in particular the importance of its strategic infrastructure and its proximity to areas of tension.

2-2-2. A diversity within Europe which can nevertheless be broken down into five main situation types

Despite the sometimes-marked national differences across Europe, it should nevertheless be noted that, in the face of the threats they face, higher education and research institutions on our continent are less fragmented than one might fear. They can therefore be grouped into five broad categories:

- **Group 1:** Large countries with highly developed economies whose ESR performs very well on an international scale. These highly coveted countries are the target of numerous attempts at interference, both extractive and cognitive. The growing difficulties in

^[6] Several studies carried out at international or European level provide evidence of increasing instances of external interference on our continent, which seriously undermine academic freedom. Notable examples include the European Parliament's **Academic Freedom Monitor 2025** and the European University Association's **University Autonomy in Europe IV**.

funding their research and higher education systems are prompting them to turn to sources of funding outside Europe, at the risk of becoming overly dependent on countries with malicious intentions. Less stable than in the past, they are also the target of significant cognitive influence operations. This group comprises four countries, which, in descending order of the intensity of the attacks they have suffered, are: the United Kingdom, Germany, France and Italy.

- **Group 2:** These are smaller countries, yet they rank amongst those with the highest per capita R&D expenditure in the world. Their scientific and technological research, which is at the very forefront in several cutting-edge sectors, is now frequently the target of interference aimed at exploiting their resources. Their often highly strategic geographical position also provides a pretext for cognitive interference designed to destabilise them. These are mainly countries in the north of the continent (Sweden, Norway, the Netherlands, Belgium, Denmark, Ireland, Estonia and Finland), but also the Czech Republic and Austria.

- **Group 3:** These are countries whose economic progress has at times been slow and disrupted by various crises but which, through hard work, now have a research and higher education sector of a fairly high standard. Having long been relatively spared from foreign interference, their research and higher education sector – which is often a key part of major European research programmes – is now the target of an increasing number of malicious attacks. The geographical location of these countries on the periphery of the continent also exposes them to a growing volume of cognitive and ideological interference. The countries in this group are Spain, Poland, Portugal, Slovenia, Latvia, Lithuania, Romania, Iceland, Greece and Malta.

- **Group 4:** Countries led by nationalist or populist governments, which are critical of the European Union and maintain relationships that are at times ambiguous with certain authoritarian and aggressive powers. Their illiberal practices weigh heavily on their higher education and research sectors, which are struggling to modernise and become more autonomous. Foreign influence of a cognitive nature, often with the complicity or tacit approval of the national authorities, is particularly strong in these countries. The composition of this group varies depending

on the outcome of national elections. Consequently, Hungary is no longer part of it. By contrast, Slovakia and Bulgaria have recently joined this group.

- **Group 5:** These are some of the continent's poorest countries, awaiting their accession to the Union. Their higher education and research sectors, still plagued by numerous archaic practices, remain excessively subject to political authority, which imposes significant restrictions on them. There are numerous instances of political – and sometimes religious – interference. These are often coupled with interference from external powers hoping to turn these countries into their rear bases in anticipation of their future accession to the Union. This group of countries comprises Serbia, Albania, Bosnia and Herzegovina, Montenegro and North Macedonia.

3. THE REASONS BEHIND A TREND THAT HAS NOW SPREAD ACROSS THE WHOLE OF EUROPE

This brief overview confirms and expands on our observation: Europe is indeed the number one target of foreign interference in the academic sphere. This offensive is widespread, as no European country appears to be immune to it, regardless of the performance of its higher education and research sector.

a) From de-escalation to renewed tensions

As regards interference in the world of knowledge, Europe experienced more than two decades of calm following the fall of the Wall, the reunification of Germany and the gradual integration of the former countries of Central and Eastern Europe into the Union. The collapse of the USSR significantly reduced the espionage and foreign propaganda operations that had targeted Western Europe during the Cold War. Admittedly, such intrusive operations never ceased entirely, but their occurrence had become much more sporadic during the 1990s and 2000s.

However, this lull was relatively short-lived. From the mid-2000s onwards, economic and trade disputes between developed countries and emerging nations intensified sharply. Regulated competition quickly gave way to unbridled rivalry, bringing predatory, extractive interference operations back into vogue.

**b) A widespread pattern of interference
approaching a critical level**

In Europe, the resurgence of knowledge predation from the 2010s onwards initially targeted the countries most renowned for basic research and technological innovation (Group 1 countries) and then rapidly spread to Group 2 countries, which have very high scientific performance but in more sector-specific fields. The other groups of countries, which had long been spared, are now affected, particularly due to their growing participation in major European research programmes.

However, the factor that has contributed most to the spread of this threat across all countries on the continent in recent years is, without doubt, the significant rise in cognitive interference aimed at destabilisation. Our continent is now being portrayed as a genuine ideological enemy by an unprecedented number of countries led by autocratic regimes[7]. Weakened by successive crises and lacking any truly autonomous defence capability, Europe is seen as a fragile power in the eyes of several major predators who dream of its disintegration and dismantling for their own gain. Owing to the way it operates, the European Union's decision-making process can easily be hampered or derailed by opposition from just one of its Member States. Thus, the rule of unanimous voting in the European Council on certain strategic issues effectively grants a veto to certain countries (such as those in Group 4) that have little regard for European unity and are under the influence of certain particularly aggressive external powers[8].

Against a backdrop of mounting geopolitical tensions and open conflicts directly involving our continent, the possibility of a clash of civilisations is a serious one. For it is one thing to challenge the ownership of sensitive knowledge; it is quite another, and far more serious, to fundamentally undermine the principles and rules that govern the production of knowledge.

To tackle this threat effectively, two sets of issues not yet addressed here need to be clarified:

- Which states are threatening our knowledge? What are their underlying intentions towards Europe? To what extent are they deploying resources to achieve this?
- What measures have Europeans taken to try to curb this threat? Are they sufficient to meet the challenge, or do they require greater investment and inter-state coordination?

These points will be explored in a second part to be published shortly.

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[7] According to the V-Dem Institute's 2025 report, in 2024, for the first time, there were more autocratic regimes than democratic ones in the world; the former now account for more than 72 per cent of the world's population.

[8] Thus, Hungary under Viktor Orbán – which maintained highly controversial ties with Russia, China and Turkey – is by far the EU country that has made the most use of its right of veto over the past 15 years. In particular, it has done so in relation to decisions concerning aid to Ukraine, sanctions imposed on Russia and statements on the human rights situation in China.

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