



**Geography, Identity, and Politics:
Concepts, Theories, and Cases in Geopolitical Analysis**

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INTRODUCTION

Nuno Morgado¹

This collective volume is an outcome of the Seventh International Workshop entitled *Political Geography and Geopolitics as scientific approaches: concepts, theories, methods, and cases*, organized by Research Committee 41 – Geopolitics, Research Committee 15 – Political and Cultural Geography of the International Political Science Association, and the Lab of Geopolitics of Corvinus University of Budapest. The event took place at Corvinus University of Budapest (Corvinus Institute of Advanced Studies) and MOME University (Future Potentials Observatory) in October 2024.

The objective of the event and, therefore, of the book is to push the geopolitical research agenda forward. In this effort, an umbrella is created to accommodate radically different theoretical approaches, which, however, are joined by (a) an epistemological belief in the possibility of knowledge and, at the same time, (b) use more or less the same concepts. Many of these geopolitical concepts have been systematized as geopolitical factors in the model of neoclassical/analytical geopolitics I have been developing (Morgado 2023) – space, position, circulation, resources, demography and identity, and politico-military structures. They constitute the potential of the state, which, accumulated and distributed in a certain way by all states in the international arena, generates systemic stimuli and, therefore, certain opportunities and threats in each period of time. However, I am convinced that this often is not enough to explain the behavior of the state and, consequently, a further step is needed. It is required to study the perceptions and capacities of geopolitical agents – flesh and blood decision-makers – to first understand them and then explain how they act(ed) or react(ed).

This book is not, however, about neoclassical/analytical geopolitics. Its theoretical scope is way broader and permits a theoretical richness that concurs with the objective mentioned above. The book consists of three parts. Part I contains the theoretical foundations and comprises two longer Chapters, 1 and 2. Part II contains Chapters 3, 4, 5, and 6, which are devoted to concepts and theories. Part III encompasses Chapters 7 to 12, which are more empirical. I will now introduce the chapters individually, underlining their main arguments and conclusions.

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In Chapter 1, Crikemans offers us an excellent summary of the panorama of geopolitical theories and schools by delving into the research question of how different schools of thought in geopolitics variably explain phenomena in international politics. This research trigger serves, therefore, to provide an overview of the pivotal streams in geopolitics, from classical geopolitics, geo-economics, and environmental geopolitics to the cutting-edge theoretical developments in neoclassical geopolitics – as mentioned above (Morgado 2023) – and analytical geopolitics (Nestoras 2022). In fact, the streams of neoclassical geopolitics and analytical geopolitics seem to have much in common. Thus, they bring a fresh breath of air to the geopolitical approach, constituting a much-awaited surpassing of critical geopolitics.

In Chapter 2, Szántó et al. introduce the concept of “future potential,” a concept applicable not only to states – the object of the chapter when studying OCDE countries – but also to the ambition of encompassing other social entities. The concept of future potential was initially developed with, simultaneously, building a methodological approach, as the “future potential index” constitutes an empirical metric associated with a fixed normative, analytical, and discursive framework. The chapter also compares the FPI with other indexes and explains the *sui generis* characteristics of the former. The results of the study show Iceland at the top of the FPI list and Greece at the bottom.

Appropriately inspired by the unique strategic advantages that small states often possess (e.g., agility in diplomatic maneuvers, the ability to create niche economic roles, cyber capabilities, and digital diplomacy), in Chapter 3, Zorko expands on the scope of geopolitical analysis to include the innovative approaches of small states and, in this way, better explain international politics. She develops the Geopolitical Power Index, which originally contained four categories, by including a new category: cyber-power. This innovative approach involves not only the necessary methodological sophistication required to study the nuances and *sui generis* cases but is simultaneously easily adaptable to working with Big Data and, thus, quantitative methods.

In tandem with this approach to combining qualitative and quantitative methods – despite their radically distinctive theoretical assumptions – in Chapter 4, Hervás has collected quantitative methodologies for world-system mobility analysis and applies them, combining the different tools to sharpen future outcomes associated with world-system theory. In this way, he develops his reasoning and statistical assessments based on the concepts of geographical proximity, economic production, and trade relations according to the Marxist worldview. He compares the main methodologies developed using the world-system framework using a

sample of 105 states from 1972 to 2022, concluding that network analysis based on trade data seems to be the most efficient of the methods.

In Chapter 5, Trailović reviews and sums up four focal emerging ways to re-theorize Central Asia in the conceptualization of international relations: “international society,” decolonizing international relations promoting local approaches, “power as togetherness,” and the “3-i’s model.” He concludes that these approaches, concepts, and explanations have greater explanatory power than classical theoretical IR traditions such as neoliberalism and neorealism due to their recognition of the agency of the Central Asian states.

In Chapter 6, Ajzenhamer et al. raise the idea that software development allows the possibility for experimentation in the virtual realm, helping overcome the challenge that geopolitics can rarely afford experimentation without high risks and costs. The authors’ main objective is to show how strategic simulations can be implemented in the field of geopolitics with a view to improving its research, modeling, and teaching. The authors conclude that apart from theorizing, specific computer software strategic simulations can help geopolitics researchers to better understand international political reality by increasing the comprehension of the relations between different geopolitical variables, their manipulation, and how different outcomes come to be.

A review of the Israeli-Palestinian conflict from the point of view of the two-state solution is provided in Chapter 7 by Geronik. She argues that any compact solution to the problems concerning Palestine requires meeting the security needs of Israel, Jordan, and the Palestinians concurrently. To approach the problem and its solution, she suggests the “Nordic Balance” model as a way of thinking (mirroring the security plans of Northern Europe in the Middle East) based on the idea that mutual dependence ensures stability.

In Chapter 8, Welty offers a study on identity and its relevance for the geopolitical studies research agenda. She advocates for a bottom-up approach in political geography and geopolitics, highlighting the significance of incorporating local narratives and diverse perspectives to create a holistic understanding of geopolitical phenomena. From the analysis of two case studies – Russo-Ukrainian war narratives and the discourse surrounding Ukrainian refugees – she concludes that identity serves as both a catalyst and a consequence of conflict, influencing media representations and policy responses.

Revisiting Mackinder’s Heartland Theory amid the war in Ukraine is Sliwinski’s objective in Chapter 9. He discusses the importance of geopolitics as an approach to explaining international relations. While reminding us of Mackinder’s aphorism

that the key to controlling the Heartland area lies in Central and Eastern Europe, he brings Dugin and Mearsheimer into the discussion. He concludes that the war in Ukraine is possibly going to change the international system in that European security will be influenced more by Germany than by the USA.

Okunev addresses electoral geography as a subfield of political geography in Chapter 10. He investigates the factors that influence the electoral behavior of voters, which he divides by types of effect. Using a set of tools from quantitative methods (e.g., the geographic disparity index and the geographic segmentation index), he discusses literature in the field, looking to explain the choices of voters.

With the same approach to measuring the impact of geography on politics, but this time returning to international affairs, Fartyshev and Pisarenko evaluate countries' friendliness and unfriendliness towards Russia in 2016 and 2024 in Chapter 11. Their objective is to identify the geographical characteristics of subjects of varying degrees of (un)friendliness in relation to Russia and Siberia in particular. Their results confirm that in 2024, the reality of the encirclement of Russia by unfriendly countries will endure.

Finally, in Chapter 12, Domanov and Semenov study international visits by applying dynamic topological network analysis. Using this method and a sample selected from the GDELT dataset, they demonstrate how the abrupt change in international politics caused by the coronavirus lockdowns negatively affected the degree of connectivity between various countries by reducing the international visits of world leaders.

These chapters and their key ideas may contribute to the objective of further developing the geopolitical research agenda. Also, by generating curiosity about new topics and domains, they may stimulate others to develop their own lines of inquiry in this passionate field of research.²

² As is the case with looking at the relations between AI and geopolitics (Mouakher and Morgado, 2024).

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Grounding World Politics Anew

Reflections on the continued relevance of Geopolitics to the study of today's international relations

David Crikemans¹

Abstract

The central question and debate to which this chapter wants to contribute touches the core: how and in what way can various schools of thought in Geopolitics increase the explanatory power of analyses which study international phenomena? At the core lies the role of territorially embedded variables (location, physical geography, human geography, spatial) in international relations, in their various manifestations (material, cognitive and discursive). Some reflections are being developed on the 'unique selling proposition' of Geopolitics to the study of today's international relations. A number of concepts, theories and methods are identified which are highly relevant to understand today's international relations. In what way do Geopolitics and IR differ as fields, and how can their respective schools of thought strengthen each other? It is argued that neoclassical geopolitical analyses could be augmented via Cognitive Geopolitics (dating back to Harold and Margaret Sprout) and Analytical Geopolitics (which stems from a critique to Critical Geopolitics and tries to bridge material and discursive variables, as developed by Antonios Nestoras). Furthermore, geostrategy and geo-economics have become much more closely intertwined (Gyula Csurgai). In addition, French geopolitical scholarship contributed greatly to geopolitical analyses 'below' and 'above' the traditional state level. Geopolitics, as a field of research, could also play an important role in understanding how environmental challenges such as climate change or energy transition can affect the foreign policy of nations. After having been ignored for some decades, it seems as though environmental variables are back with a vengeance within the study of Geopolitics. Finally, the concept of 're-territorialisation' and its application to, for instance, the study of the diplomatic activities of sub-state entities such as regions, cities or even harbors, offers us a way to better grasp the transformative impact of territorially embedded factors. The chapter makes a plea for Geopolitics and IR to learn more actively from each other's insights, theories and methods.

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Introduction

Those who study international relations these days are increasingly confronted with a return of geopolitics in academic language. Although geopolitics has never really gone away after 1945 or 1991, an increasing number of scholars are referring to it in some fashion. The problem is however that many do not actively engage with the wide and rich schools of thought in Geopolitics itself. The central question and debate to which this chapter wants to contribute touches the very core of this workshop; *how and in what way can various schools of thought in Geopolitics increase the explanatory power of analyses which study international phenomena?* At the core lies the role territorially embedded variables (location, physical geography, human geography, spatial) play in international relations, in their various manifestations (material, cognitive and discursive). Innovative approaches could help us to better unlock the geopolitical realities which exist at the same time. Schools of thought in Geopolitics and mainstream International Relations could also be combined so as to better grasp that reality.

Geopolitics was developed as an academic field in 1899 in another period of rapid changes in the global shift of power. At that time, the world was dominated by European powers which encompassed the whole world, in the wake of the colonial age and industrialization. At the time, European powers were vying for geo-economic and geostrategic power. Moreover, the world had become in 1904 – in the words of the British geographer Halford John Mackinder – a ‘*closed political system*’ (Mackinder, 1904). Since most territories all belonged to some kind of sphere of influence, border skirmishes in faraway Africa had an immediate effect upon the power balance among the European powers. Geopolitics was developed by the Swedish scholar Rudolf Kjellén from a perspective to develop a scientifically based instrument that could also advise key decision-makers in foreign policy and defense to avoid war.

Quite interestingly, International Relations (IR) as a field of science was only established after the First World War. It had an initial mission to study the causes of war. It was engaged in the sense that it attempted to avoid new disasters in the future. The first academic chairs in IR were set up in Aberystwyth (Wales) in 1918 and in Geneva (Switzerland) in 1920. That mission already failed dramatically in the 1930s, which produced the ontological first debate in IR between Idealists and Realists. Around that same time, Halford John Mackinder was part of the British delegation at the Versailles treaty negotiations in Paris. Afterwards, he became very pessimistic about the future because he thought ‘Versailles’ had not solved the geopolitical imbalance in the world system, in particular on how to deal with the ‘Heartland’ in Eurasia. As early as 1919, he referred to this dilemma in his book ‘*Democratic Ideals and Reality: A Study of the Politics of Reconstruction*’ (Mackinder, 1919). Mainstream IR, as it developed, seemed to have difficulty with grasping and integrating the importance and

influence of territorially embedded explanatory variables or the 'bigger picture'. The dichotomic debate between Idealism/Liberalism and Realism also inhibited at a basic conceptual level, and in terms of the operationalisation of research designs, to see how the overall geo-economic, geostrategic and geopolitical aims which nations pursue are mutually supporting one another. The failure by some, though definitely not all, to deal with territorially embedded factors left IR often with incomplete analyses. Geopolitics itself became contested during the 1940s, when some scholars in the German geopolitical school under Karl Haushofer associated themselves with the Nazi regime. However, geopolitical thinking did not go away, but was encapsulated in (American) geostrategic thinking during and after the Second World War (Crikemans, 2022a). But what was apparent, was that territorially embedded factors seemed to be less prominent in analyses in International Relations after 1945. It was as if most scholars believed that a combination of technological advances combined with open borders would make these variables less relevant in explaining international relations.

In earlier publications, the realist author Hans Morgenthau had labeled 'Geopolitics' to be a 'pseudo science'. In his book *Politics Among Nations*, Morgenthau described it under the heading "the fallacy of the single factor" (Morgenthau, 1973: 158-159). However, contemporaries such as Robert Strausz-Hupé believed a distinction needed to be made between Geopolitics as a discipline and its application (Strausz-Hupé, 1942; Strausz-Hupé, 1943: 4; Strausz-Hupé, 1945). Henry Kissinger later equated geopolitics with balance of power-thinking, almost deriving it from its physical geographical and human geographical dimensions (Kissinger, 1994). Colin Gray sought to combine insights of geostrategy with conceptual innovations such as Cognitive Geopolitics (Gray, 1979; Gray, 1991; Gray, 1996; Gray, 2004; Gray, 2009). In more recent publications of the last few decades, a kind of 'revenge of Geography' (Robert D. Kaplan) has materialized in publications about climate change or energy security (Kaplan, 1994; Kaplan, 2012). At the same time, geopolitical problems have not gone away after 1991, to the contrary. Some of the most fundamental and difficult problems in international relations entail problems about territoriality; location, physical geography and human geography.

Building upon earlier work in the edited book *Geopolitics and International Relations. Grounding World Politics Anew* (Crikemans, 2022a), we argue for research designs and innovative approaches which combine or even integrate some of the insights of respective schools of thought in Geopolitics and International Relations.

In this chapter, the following questions will be addressed:

- *First*, we will go into the 'unique selling proposition' of Geopolitics to the study of today's international relations. A number of concepts, theories and methods are identified which are highly relevant. This will bring us to the question in what way

Geopolitics and IR differ as fields, and how can their respective schools of thought strengthen each other.

- *Second*, It is argued that neoclassical geopolitical analyses could be augmented via Cognitive Geopolitics (dating back to Harold and Margaret Sprout) and Analytical Geopolitics (which stems from a critique to Critical Geopolitics and tries to bridge material and discursive variables, as developed by Antonios Nestoras).
- *Third*, geostrategy and geo-economics have become much more closely intertwined.
- *Fourth*, French geopolitical scholarship contributed greatly to geopolitical analyses 'below' and 'above' the traditional state level.
- *Fifth*, Geopolitics, as a field of research, could also play an important role in understanding how environmental challenges such as climate change or energy transition can affect the foreign policy of nations. After having been ignored for some decades, it seems as though environmental variables are back with a vengeance within the study of Geopolitics.
- *Sixth*, the concept of 're-territorialisation' and its application to, for instance, the study of the diplomatic activities of sub-state entities such as regions, cities or even harbors, offers us a way to better grasp the transformative impact of territorially embedded factors.
- *In conclusion*, this chapter makes a plea for Geopolitics and IR to learn more actively from each other's insights, theories and methods.

1. The 'unique selling proposition' of Geopolitics to the study of today's international relations

If we try to define 'Geopolitics' and its relation to International Relations, it remains important to keep in mind that there exist many different schools of thought in each field. A comprehensive overview is offered in the recent book *'Geopolitics and International Relations. Grounding World Politics Anew.'* (Criekemans, 2022a). As indicated earlier, 'Geopolitics' as a body of academic endeavour is exactly 20 years older than 'International Relations'. Geopolitics was created as a field of science around 1899 by the Swedish political geographer Rudolf Kjellén. He understood the relevance of territorially embedded factors. Geopolitics was devised by Kjellén as an instrument which also could help the state in steering a safe course for the country in a world that was becoming more and more competitive. Geopolitics thus was designed as an academic body of literature which applied the insights

of Political Geography to the European state system. Kjellén claimed the physical character, size and relative location of the territory of the state was central to its power position in the international system (Holdar 1992, p. 319). From the very beginning, the location of natural resources above and beneath the ground, or the lack thereof, was already considered to be essential in order to understand the geopolitical context. However, this *fin de siècle* geopolitical literature only saw the state as the most relevant actor. Inspired by the work of Friedrich Ratzel, the state was likened to a living organism locked in a social Darwinist struggle of the fittest (Ratzel, 1896; Ratzel, 1897; Ratzel, et al. 1969 [1896]). These ontological assumptions led to what later in International Relations would grow into the school of thought of Realism, although including also other ontological variables (Criekemans, 2007). Kjellén underlined that States as ‘living organisms’ in relation to one another spoke a wholly different language: the concept of ‘**power**’ stood central in this. In their role as ‘powers’, national states should be understood as geographical entities (Thermænius, 1938, p. 166). Kjellén’s analysis in 1914 was that he believed that the future would lie with those land powers that succeeded in achieving **autarky** within their own territory (Kjellén, 1924; Kjellén, 1944 [1924]). The railways over land would considerably reinforce the *capacity for ‘internal communication and power concentration’* (Holdar, 1992, p. 314; Herwig, 1999, p. 220, p. 226; Ó Tuathail, 2001, p. 21). Eventually, only a few world powers would last (Dolman, 2002, p. 51). Kjellén suggested in 1897 that in the long run only three big continental political and economic zones would remain: a *pan-American system* under the leadership of the United States of America, a *Middle-European system* (possibly even a *Eurafrican system*) under the leadership of Germany and an *Eastern system* under the leadership of Japan (Holdar, 1992, p. 314).

The British geographer **Halford John Mackinder** echoed some of the thinking of Kjellén. His ‘*New Geography*’ wanted to offer a comprehensive framework to place human events in a broader perspective (Ó Tuathail, 1996, pp. 86-88), a conceptual bridge between the natural and social sciences (Heffernan, 1998, pp. 63-66) that tried to provide an answer to the problem that ‘power’ had become more difficult to measure in an industrializing world in which the ‘natural seats of power’ also were affected by the introduction of new technologies. Mackinder believed that in the post-Columbian epoch, the dominance of sea power (e.g. Great Britain) could come to an end as a result of a combination of new technologies (in particular railways) and demographic trends (to be more concrete, Russia’s growing population). He predicted that the area which later would turn out to be the Soviet Union, constituted ‘the geographical pivot of history’, a potential new world power which could eventually force the other naval powers (especially Britain) out of their positions in e.g. Asia. Amongst others, that ‘pivot area’ (1904) or ‘heartland’ (1919, 1943) was endowed with vast natural resources which could now be extracted via railways and ‘*man power*’ (read: a growing human geographical demography). Russia would become a power, potentially challenging the *British Empire* – first in Asia, later in Central Europe (Mackinder, 1887; Mackinder, 1919; Mackinder, 1943; Mackinder, 1994 [1904]).

The American naval historian and Captain (later Rear Admiral) **Alfred Thayer Mahan** can be considered as one of the fathers of American geostrategic thinking. **Social Darwinism** constituted an inherent dimension in Mahan's thinking: he conceptualized the international relations as a dynamic condition of a *continuing battle between nations in which acquiring 'sea power' is decisive* (Sloan, 1988, p. 90; Raffestin, Lopreno et al., 1995, p. 104, p. 107). Driven by social Darwinist thinking, Mahan believed (in comparable neo-Lamarckian terms as Ratzel) that a nation should expand territorially, or else be ruined (Sprout & Sprout, 1944 [1939], p. 214) (Crickemans, 2022c, p. 105). But Mahan also included the changing power base of the world into his models; the switch from sailing ships to coal as the basis for a new to-be-built *US Navy* with new ships from the Industrial Age. Such US leapfrogging meant that every 2,000 nautical miles so-called 'coaling stations' became essential for Navy power projection. In a world without free trade, one of the future roles of the Navy would be to protect trade overseas, in particular towards Asia where Japan constituted a potential competitor. Mahan deemed it crucial that the US would need to possess some of the strategic islands in the Pacific, which constituted a highway to the future markets in Asia, with coaling stations built along the way (Mahan, 1890; Mahan, 1898; Mahan, 1900; Mahan, 1957 [1890]).

These authors in 'Classical Geopolitics' thus believed in a social Darwinist world of competition, whereby material forms of power including energy sources and technology would play a major role to defend both the geo-economic and geostrategic interests of nations (Crickemans, 2022a). There are some interesting indications that this literature also affected the thinking in more realist schools of thought later in the 1930s and 1940s, both directly and indirectly (Crickemans, 2007). Also in Realist strands of theory within IR, the material capabilities of states including their resource bases or abilities to project power in order to get access to (power) resources played a role. Later scholars such as Harold and Margaret Sprout were more interested in the uneven distribution of physical and human resources including energy, and the potential for technologies to overcome some of these problems (Crickemans, 2022c, p. 125; Sprout & Sprout, 1971 [1965]).

Next to 'Classical Geopolitics', many forget that there also existed a **'Possibilistic Geopolitics'** as developed and exercised by the French geographers during the interbellum period. In this approach, the environment is conceived as being both *'constraining'* and *'enabling'*, and man is considered to be able to make choices (Vidal de la Blache, 1898; Vidal de la Blache, 1926). The environment provides a number of parameters or limitations to the whole spectrum of foreign policy actions which can be undertaken by an entity ('constraining'), but the environment also provides a political entity with a number of important opportunities (Sprout, 1971 [1965], p. 83). 'Man' or human agency stood central in 'Possibilist Geopolitics' because in the end the political decision-makers try to maximise the opportunities, and to minimise the limitations with which they are confronted. Thus, nature only laid the foundation for human development; the actual cultural and political

progress depended on ‘man’ himself. Hence ‘strategies’ were needed (Crikemans, 2022a, p. 117).

Later schools of thought in the 1990s such as ‘Critical Geopolitics’ started from the assumption that ‘geography’ does not constitute an innocent product of nature. On the contrary, it is the result of the history of the battle between competing authorities about the power to organise, occupy and manage space. Via discourse analysis, ‘Critical Geopolitics’ tries to achieve insight into the way in which foreign policy-elites of territorial entities think about the relation of this entity vis-à-vis the “external environment” (Crikemans, 2022c, p. 130-137). This critical analysis of the geopolitical reasoning about central variables such as energy and climate, were studied over the years by authors such as Simon Dalby (1991, 1998, 2020) and Klaus Dodds (2015, 2021), and more recently by books appeared by Moore (2020) and Wehrmann (2021). An author who more explicitly applied Critical Geopolitics to resources is Phillippe Le Billon (2013). In his book on *‘Environmental Geopolitics’*, Shannon O’Lear discusses scholarship on Critical Geopolitics and environmental issues (O’Lear, 2018, pp. 19-21). This school of thought also has connections with Constructivism in IR, but then focuses more on how territorial factors are ‘imagined’, fitting a wider (geo)political agenda.

Geopolitics can be seen as constituting a *joint project* or *common field* of study between Political Geography on the one hand, and International Relations on the other.

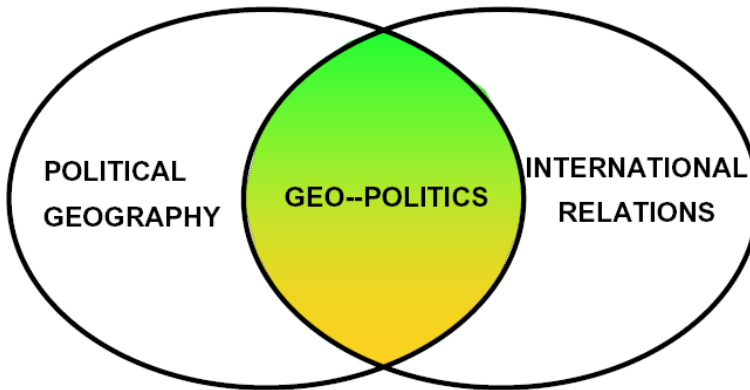


Figure 1: Geopolitics as a ‘joint project’ of both Political Geography (PG) and International Relations (IR).

One could define it as follows (Crikemans, 2007; Crikemans, 2022a, pp. 99-100):

“Geopolitics is the scientific field of study belonging to both Political Geography and International Relations, which investigates the interaction between politically acting

(wo)men and their surrounding territoriality (in its three dimensions; physical-geographical, human-geographical and spatial).”

2. Routes to augment neoclassical geopolitical analysis: Cognitive Geopolitics and Analytical Geopolitics

In neoclassical geopolitical analyses, scholars will mostly focus on the relevance of material explanatory factors and/or be interested to analyze the balance of power (or what neo-realists would term the ‘power distribution’). Whilst having the advantage to produce a parsimonious explanation, these approaches also have some limitations. There are however also two other potential theoretical routes which could augment neoclassical geopolitical analyses; **Cognitive Geopolitics** and **Analytical Geopolitics**.

Harold and Margaret Sprout can be seen as some of the American political scientists who – throughout their career– showed a continued interest in & influence upon geopolitical thinking, in the period between the 1930s and the 1970s (Fox, 1985, p. 27). Amongst other contributions, they can be considered the key authors who developed what we label as ‘**Cognitive Geopolitics**’. From the 1950s onwards, Harold and Margaret Sprout distanced themselves from the ‘national power’-approach in favour of the more tangible level of analysis of the individual decision maker. With this position, they can be regarded as among the first IR-specialists to make a plea for a “more balanced” approach to international relations, in which they wanted to spend more attention to the ‘relative weight’ of the ‘different categories of potential explanatory variables in international politics’ (Baldwin, 2002, p. 179). Moreover, their ‘unit of analysis’ changed from the rather abstract ‘national interest’ in the direction of the more tangible level of the political decision maker. One of the main reasons for this reversal seems to lie with the more nuanced appreciation that the Sprouts developed on the relation between ‘geopolitical’ environmental variables *on the one hand* and foreign policy *on the other hand*. In this context, the crucial book *‘The Ecological Perspective on Human Relations with Special Reference to International Politics’* deserves some special attention (Sprout & Sprout, 1971 [1965]).² In the 1950s and ‘60s, the Sprouts also published a host of important scientific articles in the most prestigious American IR journals. Among these, the following publications can be mentioned: *‘Environmental Factors in the Study of International Politics’* (Sprout & Sprout, 1957), *‘Geopolitical hypotheses in technological perspective’* (Sprout, 1963) & *‘Geography and International Politics in an Era of Revolutionary Change’* (Sprout &

² In 1962, the Sprouts also published *‘Foundations of International Politics’*. Chapter 1 consists of an analysis of the field of International Relations. The next three chapters contain an overview of the components of the ‘international system’, in which new visions were developed based upon such terms as ‘power’, ‘power potential’ and ‘capacities’. The rest of this book contained a revision of material from their earlier book *‘Foundations of National Power’* (Sprout & Sprout, 1967 [1962]).

Sprout, 1964). Further building upon this work, the Sprouts published in 1968 the pioneering '*An Ecological Paradigm for the Study of International Politics*' (Sprout & Sprout, 1968).

The Sprouts did not like the term 'environment'. Especially in the US, there existed a tendency to interpret 'environmental variables' too much in non-human, or –to put it differently– in restrictive physical-geographical terms (Sprout & Sprout 1957, p. 311; Sprout & Sprout 1968, p. 17). This is the reason why the Sprouts used the French concept of '*milieu*' (Rosenau, Davis et al. 1972, p. 6), because the link with the 'social' is more clear (Sprout & Sprout, 1968, 17).³ '*Milieu*' thus entail the whole spectrum of environmental factors; both human and non-human, tangible and non-tangible (Sprout & Sprout, 1971 [1965], p. 27).

The contribution of the Sprouts in 1956 brought a new vitality in the debate on the relation between 'geography' and 'politics', which was gradually becoming rather banal and repetitive (Muir, 1997, p. 185). The first 'breakthrough' the Sprouts made, was at first instance a conceptual one, but also had far-reaching ontological, epistemological and methodological consequences. This first step of the Sprouts was the introduction of their concept of the '**ecological triad**'. This triad consists of: (1°) *an entity ('enviromed unit')*, (2°) *his/ her environment*, and (3°) *the relation between the entity & his/ her environment*. The relation between an 'entity' and his/her environment always entails a combination of the properties of the entity with the surrounding conditions. If there is a change in one of both, then also a different relationship develops. From this, the Sprouts deduced the proposition that *change and transformation are typical for the ecological perspective (to international relations)* (Sprout & Sprout, 1968, pp. 17-18). In other words, the stress lies with the interdependence, which even seems to increase as a result of technological development, population growth and the increase of the urban nature of human societies. Just like the 'classical' geopolitical scientists of the 1930s and '40s, the Sprouts stress that there exists a fundamental problem; on earth, there exists an unequal distribution of these physical and human '*resources*' (cf. climate patterns, topology, available resources, human communities, etc.). From this, the Sprouts postulated the proposition that *this unequal distribution influences in a significant way all human enterprise, interactions, relations and inter-state relations* (Sprout & Sprout, 1968, p. 21). The concept of the '*ecological triad*' states that the attention of the IR scholar, or of the FPA analyst, should focus on the study of a three-part whole; (1°) **the processes of policy choices within an entity**, (2°) **(the nature of the) environment**, and (3°) **the interaction between the entity & the environment** (Sprout & Sprout, 1968, pp. 11-21; Starr, 1992, p. 3). The next step the Sprouts took, was the further refinement of the concept 'environment' or '*milieu*'.

³ The Sprouts formulated it as follows (Sprout & Sprout, 1968: p. 17): "*So used, milieu includes social as well as nonhuman phenomena to which human activities may be relatable. Since the French language contains no adjectival form of milieu, we shall continue to use the English adjective environmental.*"

Harold and Margaret Sprout stated in their central hypothesis that environmental variables can only influence human activities in two ways. First, such factors can be perceived by individuals, who take these into account in their 'foreign policy decisions' and responses. Only in such cases can one speak of a form of 'influence' of human preferences & decisions by the environment, '*mediated*' by perception. Second, environmental variables can be approached as a kind of 'matrix' that possibly limits the results of foreign policy decisions ('foreign policy outcomes'), even if these environmental variables are not perceived. According to the Sprouts two usable explanatory frameworks could be distinguished; the '**psychological milieu**' or '**psycho-milieu**' (*'the environment as perceived by the decision maker & upon which he/she bases his/her reaction'*) on the one hand, and the '**operational environment**' (*'the true environment in which the chosen policy is executed'*) on the other hand. The Sprouts formulated it as follows (Sprout & Sprout, 1968, pp. 33-34):

"We desire to make this distinction between psycho-milieu and operational milieu as explicit as possible, since failure to do so has been the source of endless confused and muddy thinking. Psycho-milieu denotes a human individual's perceived image of a situation, an image that may or may not correspond to reality. Operational milieu denotes that the situation as it actually exists and affects the achievements and capabilities of the entity in question (whether a single individual, group or community as a whole)."

The conceptual distinction between '*psycho-milieu*' and the '*operational environment*' in fact means a fundamental break with the Realist school, which (still) believed that decisionmakers in foreign policy can perceive their environment in a 'correct' way. This 'amendment' by the Sprouts had important consequences *for the FPA scholar and for the decision maker in foreign policy*:

- First, the consequences for the **FPA scholar**. In case a researcher is trying to explain why certain decisions are taken in foreign policy, then one should try to analyse the 'psychological environment' of the decision maker. However, in case the analyst is more interested in the 'operational results' of a specific decision, then the 'operational (or geographical) environment' should be used as an explanatory framework (see figure 1). Especially the *first of these two analyses* is certainly not easy for the FPA analyst. He/she then should try to work out how the involved (group of) decision maker(s) perceived the world, and which opportunities or limitations they saw for themselves. For the researcher, this task entails many obstacles; one has to develop a reconstruction based upon 'second hand'-material (what the decision maker said and did). Even the most 'neutral' analyst is not free of introducing his/her own linguistic or ideologically biased ideas. Moreover, one has to work with incomplete and sometimes even openly contradictory information (Sprout & Sprout, 1957, pp. 319-320). In the *second kind of 'analyses'*, the researcher tries to illustrate how the 'reality on the ground' changes as a result of decisions which were taken earlier, and how the 'characteristic properties' of the environment

‘enforce’ possible limitations on the ‘operational results’ of foreign policy decisions which were taken earlier.

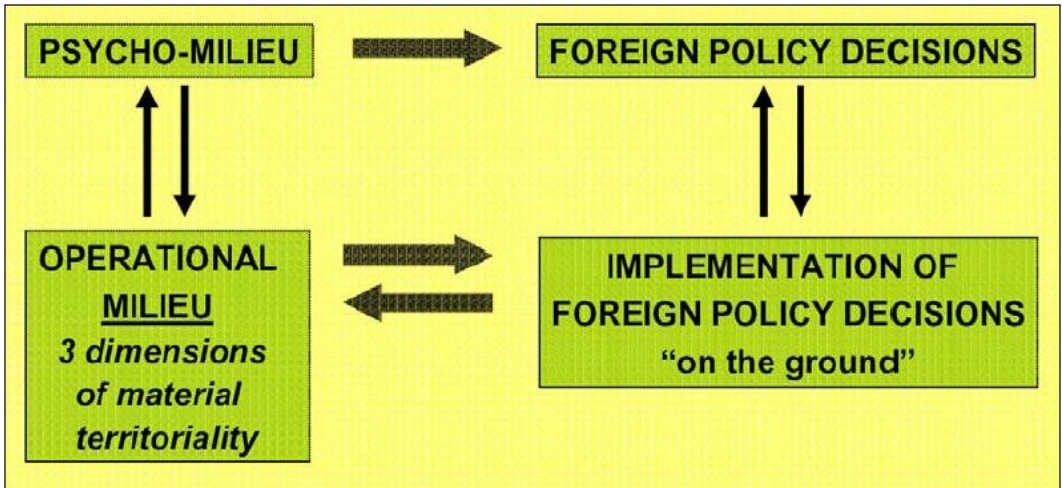


Figure 2: The conceptual revolution of Harold and Margaret Sprout

- Second, the consequences for the **decision maker in foreign policy**. The decision maker should try to keep the gap between the ‘objective’ and the ‘perceived’ environment as small as possible (Dougherty and Pfaltzgraff, 1981, p. 67). One could state that too big a gap between both is ‘lethal’ for foreign policy, and in some extreme cases even for the very existence of the nation.

Many examples exist, for instance mentioned by the Sprouts; the Japanese attack on Pearl Harbor in December 1941 could only take place because the American military and political elite did not (want to) realize that a Japanese *‘task force’* so far from home could be used in an offensive operation (Sprout & Sprout, 1957, p. 318; Sprout & Sprout 1971 [1965], p. 12). Often, decision makers take refuge in a form of thinking in analogies, in which one refers to history in order to make the case for a certain policy choice in foreign policy. However, the same conditions never really repeat themselves because the meaning of geography and technology changes through time (see also: Houghton, 1996). The Sprouts also asked the following question: *“To what extent is a top-level executive a virtual prisoner of the civil and military officials who provide data for him?”* (Sprout & Sprout 1957, p. 321). The civil and military officials provide the decision makers in foreign policy with data on the ‘operational environment’, but these data are often prepared in a way “in which the official thinks the president would like to see the world” (cf. *‘psycho-milieu’*). This forms one of the most important difficulties with which intelligence agencies struggle. The gap between the ‘operational’ and the

'psychological' environment forms a powerful conceptual tool in order to approach the subtle interaction between environment & politics in a more nuanced way.

From this framework of reference, Harold and Margaret Sprout developed in 1957 seven theses, which they tried to defend in this publication (Sprout & Sprout, 1957, p. 310):

1. Environmental factors become related to the attitudes and decisions which, in the aggregate, comprise a state's foreign policy *only* by being apperceived and taken into account by those who participate in the policy-forming process.
2. Conclusions as to the manner in which apperceived environmental factors are dealt with in foreign policy making depend on the theory or theories of decision making which the analyst brings to bear on the case under consideration.
3. Hypotheses as to the manner in which apperceived environmental factors enter into the decision making process can provide fruitful linkages between ecological and behavioural approaches to the study of international politics.
4. Environmental factors can be significantly related to the operational results of policy decisions, even though such factors are not apperceived and taken into account in the policy making process.
5. What is called analysis of state power or international power relations or (preferably, in our view) analysis of state capabilities consists essentially of calculating opportunities and limitations latent, or implicit, in the milieu of the state under consideration.
6. Capability calculations or estimates are always carried out within some framework of assumptions regarding the policy objectives, operational strategy, and political relations of the state under consideration.
7. Conclusions as to the opportunities and limitations which are implicit in a state's milieu and which may affect the operational results of its policy decisions depend on the ecological theory and the topical explanatory premises which the analyst brings to bear in the specific case under consideration.

The explanatory power that analysts attribute to the 'milieu', largely depends on the way in which their proposed *man-milieu-hypotheses* are embedded in a certain epistemology with regards to the feasibility of scientific knowledge about the relationship territoriality–politics. Each geopolitical formulation of a theory rests on such initial assumptions.

Another potential approach is that of Antonios Nestoras; Analytical Geopolitics. In his work on geopolitical myths and Greece, Nestoras has sought to bridge material and identity

factors (Nestoras, 2022; Nestoras, 2024 forthcoming in the Brill book series “Geopolitics and International Relations”). The author states that the shift from Classical Geopolitics to Critical Geopolitics in the literature was largely ontological and epistemological in nature. It replicated the standard dualisms previously introduced in the discipline of IR with the advent of the postmodern condition. In ontological terms, the scientific materialism of Classical Geopolitics (i.e. the belief that there is a material reality that has essential properties) was overturned by the social constructivism of Critical Geopolitics (i.e. reality has no essential properties, only relative, socially constructed properties). In epistemological terms, the positivism of Classical Geopolitics (i.e. through geographical survey and philosophical reflection we can know the essential properties of the material reality) was replaced with the interpretivist stance of Critical Geopolitics (i.e. without fixed essential properties, reality is relative to the ideological interpretation of the observer) (Criekemans 2022). According to Antonios Nestoras, these dualisms – materialism vs. idealism and positivism vs. interpretivism – outline a Classical/Critical divide in geopolitics that diverts scholarly attention from important research questions. Moreover it puts the field in an unfavourable position and reduces its potential to understand and explain patterns of behaviour in IR that may be grounded in geography. Nestoras reviews the philosophical assumptions that underline geopolitics through the prisms of New Materialism and Critical Realism and, drawing from the growing literature on political myth, attempts to initiate a discussion on possible new research directions for geopolitics (Nestoras 2022). The proposed approach is called ‘Analytic Geopolitics’. It tries to offer a structural analysis of geopolitical myths into their constitutive elements, their historical emergence and their effect on patterns of state behaviour. This contribution suggests yet another, new ‘grounding’ of the discipline of IR, not only in geography, but also in history, culture and politics. Nestoras believes that a critical reflection on myth, politics, and geography might show that geopolitics never left in the first place (Nestoras, 2024 forthcoming). Simply deconstructing myths and exposing them as fantasies or immoral instruments of power politics (as the school of Critical Geopolitics did) does not mean that they are no longer active ingredients in the everyday life of a society, or in the government of the modern state. Myths do affect material reality. Hence the research agenda of an Analytical Geopolitics could bridge material and constructive approaches to the geopolitical reality in innovative ways.

3. Geostrategy and geo-economics: closely intertwined

At the beginning of the 1990s, some authors suggested that as a result of the end of the Cold War and the globalisation of the economy, competition between states was shifting *from the political-military to the economic-technological field* (Labohm, 1998, p. 54). Richard Rosecrance was an early proponent of this idea; in his 1986 book *Rise of the Trading State: Commerce and Conquest in the Modern World*. He predicted that leaders would increasingly realise that material

production and trade were a more effective method of increasing a state's power potential than military conquest and occupation (van Staden, 1999, p. 613). Rosecrance drew a very optimistic conclusion; the chances of interstate conflict would, in his view, largely or almost entirely disappear (Labohm 1998, p. 54). Ten years later, Rosecrance published an article entitled *'The Rise of the Virtual State' in Foreign Affairs*, in which he turned his prediction into a conclusion (Rosecrance, 1996). It is no longer the geographical size of a state that determines the success of a country, he argues (*'territory becomes passé'*), but the size of the market. The more open the economy, the bigger the market (as long as it exceeds that of the country). Small countries in particular can therefore benefit from this situation. Instead of accumulating territory, capital and labour, *'virtual states'* (i.e., states that have dismantled their territorially embedded production capacity and reorganised it elsewhere) emphasise *strategy* (e.g., attracting foreign direct investment), as well as *investing in people*, Rosecrance believed. Other authors such as Lester Thurow and Edward Luttwak argued that this 'economisation' of international relations is taking us into a new phase of interstate and interregional conflict, this time focused on the control of markets and capital. In this context, the American Edward Luttwak believed that there would be an evolution "*from geopolitics to geo-economics*"⁴, or as he likes to put it "*from violence to money*". As a former strategic thinker, Luttwak associated geopolitics with military strategies, which may partly explain his preference during the 1990s for the paradigm of geo-economics. According to Luttwak, there is still competition in the international political arena, but it is now mainly settled through an economic struggle between nation states (as opposed to the paradigm of *borderless capitalism*, as suggested by Kenniche Ohmae during the same period) (Ohmae, 1993; Ohmae, 1996).

In 1993, Samuel P. Huntington wrote an essay, *'Why International Primacy Matters'* in the journal *International Security* (Huntington, 1993). This analysis was fairly close to Luttwak's. Huntington expanded on Daniel Bell's assertion: "*economics is the continuation of war by other means*" (Bell, 1990). Samuel P. Huntington asserted that in the coming years, the main conflict of interest between the US and the great powers would probably be over economic issues (especially the relationship with Japan and the European Union). Huntington believed that economists are blind to the fact that economic activity is a source of power, as well as "well-being". In the realm of economic competition, the instruments of power are productive efficiency, market control, trade surplus, strong currencies, foreign exchange reserves, ownership of foreign companies, factories and technology (Baru, 2012).

⁴ About the term '*geo-economy*', Luttwak writes: "*This neologism is the best term I can think of to describe the admixture of the logic of conflict with the methods of commerce - or, as Clausewitz would have written, the logic of war in the grammar of commerce.*" (Luttwak, 1998, p. 126) (our underlining). However, the concept of '*geo-economics*' is not new. The political scientist Kristof used it as early as 1960: "*Contemporary geopolitics [...] rejecting the theory of nature-molded human character [...] has concentrated on geostrategy and the foreign-policy implications of geo-economics.*" (Kristof, 1960, pp 19-20).

A third author worth mentioning in this context is Mark P. Thirwell. He too examined the interrelationship between geo-economics and national security, stating in 2010 that if one is to “understand many of the key strategic developments facing the world in the coming decades, then one will need to spend a reasonable amount of time thinking about what is going on in the international economy.” (Thirwell, 2010, p. 2). Thirwell lists a number of reasons why geo-economics has made a *come-back* since Luttwak’s time: the evolution towards a multipolar global economy, the possible degradation of Washington’s willingness to continue to provide international public goods needed to sustain a (relatively) smoothly functioning global economy, the rise of the dark side of globalisation such as transnational crime, the rise of state capitalism, the financial and economic crisis since 2008 and the era of scarcity (Thirwell, 2010). Earlier, Luttwak almost seemed to suggest that in the post-Cold War era, the geo-strategic struggle would be subordinate to the geo-economic struggle. In a case study on EU-Russia natural gas relations between 2013 and 2016, Crikemans argued however that geo-economic and geostrategic competition can exist simultaneously, and can reinforce each other. It could even be argued that those actors in international relations who manage to align their geo-economic and geostrategic strategies have a greater chance of achieving their goals in a timely manner. As a unitary actor, the Russian Federation seemed much more capable of integrating both than the European Union. This led to a situation in Ukraine where Russia was effectively waiting for the West to blink first. A similar scenario developed later in the war in Syria (Crikemans, 2017).

The thesis of ‘geo-economics’ received increasing support since the end of the 1990s. For example, the success of the neologism ‘*géo-économie*’ in France is striking, and even somewhat contradictory. After all, in 1997, a new journal was founded that tried to investigate the geo-economic thesis: the ‘*Revue française de Géoéconomie*’ (now called simply ‘*Géoéconomie*’). Its founders are people like Pascal Lorot, previously known for their popular science books on geopolitics, such as ‘*Histoire de la géopolitique*’ (Lorot, 1995) and ‘*La géopolitique*’ (Lorot & Thual, 1997). In this sense, the success of the geo-economic paradigm in France is somewhat contradictory; Lorot had made interesting contributions to the French geopolitical literature as an author, but now switched to geo-economics. The fact that he was trained as a political economist might have something to do with that. The first issue of the journal ‘*Revue française de Géoéconomie*’ contains an interview with the French geopolitical writer, Lacoste. ‘*Géo-économie*’ is presented here as complementary to *géopolitique*, an idea that also appeared in Lorot’s books from the mid-1990s. Lorot defines geoeconomics as follows;

“the analysis of economic strategies –notably commercial–, decided upon by states in a political setting aiming to protect their own economies or certain well-identified sectors of it, to help their national enterprises acquire technology or to capture certain segments of the world market relative to production or commercialization of a product. The possession or control of such a share confers to the entity –state or national enterprise– an element of

power and international influence and helps to reinforce its economic and social potential.”

(Lorot, 1999, p. 15)

The question arises whether the economisation thesis can be empirically “proved”. After all, as the Dutch IR specialist van Staden rightly points out, this thesis seems to be at odds with what we observe in the world on a daily basis (van Staden, 1999, p. 615). Although the number of armed conflicts may have decreased since the fall of the Wall, the conflicts that remain or resurface are of a more profound and long-term nature, and often have an *intra-state* character. Moreover, van Staden rightly notes that (van Staden, 1999: 615): “*By far the most important and potentially most dangerous disputes that we face in the world today are precisely those that have a clear territorial dimension*” (e.g. Israel & the Palestinians, India & Pakistan, but also Afghanistan, Iraq, etc.). Aside from this, a second, more important reservation can be formulated with regard to the economisation thesis, according to van Staden: “*the suggestion that one could conceive of security and economy as separate compartments should be particularly objected to.*” (van Staden, 1999: 615). This remark is very justified. Economy and politics cannot be regarded as separate spheres. It may be true that nowadays in the West relatively more attention is being paid to territorial political themes of a predominantly economic nature (e.g. impact of the Eurozone, geo-economic integration along the borders of Europe, etc.), but the question remains whether there are no questions of politics involved. Who has the “last word” in such international questions; economics or politics? As political scientists, we would tend to choose the latter option. Economists may have a different view... The division between geopolitics and geoeconomics may therefore be artificial. The proposition can be defended that Geopolitics originally also took account of the politicisation of “(geo-)economic issues”, but that this is not always (anymore) recognised by the current authors. Kjellén’s ideal type in the economic realm was for instance for the state to achieve ‘autarky’ in key essentials such as food and resources.

Nevertheless, some contemporary authors have in recent years pleaded for a reintegration of geopolitics & geo-economics into one whole. More recent authors such as Braz Baracuhy come to quite similar conclusions. In his book chapter ‘*Geo-economics as a dimension of grand strategy. Notes on the concept and its evolution*’, Baracuhy stresses that geo-economics and geopolitics constitute two sides of the same coin. Although they are different in terms of their instrumental and operative logics, they both constitute expressions of the geostrategic competition among great powers, acquiring relevance and meaning in foreign policy” (Baracuhy, 2019, pp. 14-15). What does remain striking is that geo-economics is often associated in the Anglo-American literature with great power politics, whereas some French authors and also others seem to be more open to the idea that also smaller territorial entities such as regions or even cities could play a geo-economic role (see *infra*; 6).

In his book chapter ‘*The Increasing Importance of Geoeconomics in Power Rivalries: from the Past to the Present*’, Gyula Csurgai underlines that relations between states in the post-Cold War period

have been shaped by an increased economic competition. This includes *Non-Market* factors such as intelligence sharing between state agencies and private businesses, successful economic diplomacy and different techniques to influence and manipulate non-governmental organisations to weaken an economic adversary, among other things. The considerable influence of these *Non-Market* factors illustrates the limits of the liberal economic theories that emphasise the dominant role of market forces and the rather limited role of the state in economics (Csurgai, 2022b, p. 244). One could apply these thoughts also to the energy domain; in the Western world over the past decades, the main investment decisions have been left to the private sector, with the national capitals by the end of the 1990s realising that they had to guide behind the scenes the main decisions of these large energy multinationals, as energy comes very close to the national sovereignty of a state. This explains why for instance in France the Presidential *Élysée* has played such a major role in matters of energy policy.

This brings us to another often forgotten concept in geopolitics and geo-economics; the **‘geo-technical ensemble’**. In our recent book chapter *“Geotechnical ensembles”: how new technologies change geopolitical factors and contexts in economy, energy and security*, the interaction between technology and geopolitics is discussed at length (Crikemans, 2022b). The evolution towards a world increasingly run on renewable energy will also mean that the needs of many countries will shift; from conventional oil over natural gas towards the critical materials that will power a renewable energy future. This could lead to scarcity & supply problems and geopolitical competition over key resources such as nickel, cobalt, copper, silver, scandium, lithium and rare earth elements (Crikemans, 2018). In summary, the interaction between technologies and geopolitical factors may also have consequences for the foreign policy and diplomacy of nations; patterns of conflict and cooperation may be affected.⁵ The thesis which we developed in this recent publication states that *territorial entities (states, regions or cities) which invest in ground-breaking technological know-how, both fundamental and applied innovation, as well as in the industrial base that comes with it, will in many ways be able to shape tomorrow’s world in its geo-economic, geopolitical and geostrategic dimensions* (Crikemans, 2022b). Already many authors in Classical Geopolitics (e.g. Mackinder, Spykman, Sprout) developed hypotheses with regard to the impact that new technologies could have upon geopolitical and geo-economic relations. Geopolitical hypotheses in this context were defined by Sprout as *“propositions that purport to explain or to forecast the geographical distribution and patterning of political potential (power)”* (Sprout, 1963, p. 190). One of the types of geopolitical hypotheses in

⁵ In their book chapter *‘Technologies for the Global Energy Transition’* in the book *‘The Geopolitics of the Global Energy Transition’*, Manfred Hafner and Michel Noussan offer an interesting overview of some of the more recent technological developments (Hafner & Noussan, 2020), but do not always explicitly link to geographically embedded opportunities and limitations. This however is essential to also more explicitly connect to a ‘geopolitical analysis’ in the body of literature, and can be approached in many different ways.

technological perspective dealt with the *uneven distribution of natural resources*. According to Harold Sprout, these geopolitical hypotheses generally start from the proposition that a nation's political position in international politics is significantly related to its capacity to provide military instrumentalities (Sprout, 1963, p. 201). That may have been true in the decades after the Second World War. However, today's literature also investigates how (the changing demand for) resources impacts the geo-economic and overall geopolitical position of territorial entities *other* than the state; sub-state entities such as a region, or for instance the European Union as an emerging foreign policy actor. More recent emanations of this body of literature tackle a wide range of issues. One can think of publications on resource war and the scramble for resources (Klare, 2001; Klare, 2012), oil geopolitics (Yergin, 1992), natural gas geopolitics (Grigas, 2017), the geopolitics of renewables (Crickemans, 2018b), the interconnection between energy and climate (Yergin, 2020) or even the geopolitics of the deep oceans (Hannigan, 2016). Technological advances may change once again the geo-economic and geopolitical situation and consequences. Harold Sprout had already referred to '*geo-technic politics*' (Sprout, 1963, p. 192). Daniel Deudney believed geopolitical scholars should describe the base or infrastructure as *combinations of particular geographic features and technological capabilities*. He termed these **"geotechnical ensembles"**. Whereas 'global geopoliticians' treated combinations of geographical and technological factors as *exogeneous* factors acting upon or shaping human institutions, IR scholars primarily saw technology as *derivative* of human and political choice (Deudney, 1989, p. 13). Deudney believed that by incorporating technology, with some changes, into their concept of the base or non-social environment, 'global geopoliticians' were able to advance beyond the impasse of the naturalist theories (Deudney, 1989, p. 14). They were all theorists of change, looking at the impact of new technological forces and new aspects of geography. 'Classical Geopolitics' *"inferred that the existing natural resource base was fixed, subject only to the question of distribution – which might grow in a zero-sum environment"*. Deudney believed this inference was flawed. The continued growth of scientific knowledge and technical know-how has altered in many important ways the effective uses to which human institutions can put materials and energies drawn from the fixed or closed Earth (Deudney, 1989, p. 627). The same can be said of technologies today. How can this be applied to questions of energy transition in today's world? *First*, changes to existing energy mixes might provoke geo-economic and geopolitical 'fall out'. Conventional oil will in the coming decades diminish in *relative* importance. This may provoke crises in the business models of traditional oil producers such as in the Middle East, which could produce societal instability. *Second*, a growing need to get access to the critical materials that will power a renewable energy future could lead to scarcity & supply problems and geopolitical competition over key resources such as nickel, cobalt, copper, silver, scandium, lithium and rare earth elements. *Third*, a race over technological advances and intellectual property in the energy domain could erupt, most notably in the field of battery efficiency & recycling technologies. *In conclusion*, the debate in the West on 'strategic

autonomy' may also be relevant for the domain of energy. The interaction between technology and geopolitics changes also the economic relations, both on the supply side, the demand side, and the dimension of transit countries. If electrification further grows to connect for instance more windy or sunny regions with lesser endowed ones, then those territories through which power lines pass may be able to develop a new business model, hence rising in geopolitical importance (Crickemans, 2021).

4. Some lessons that can be drawn from French geopolitical scholarship

In future literature, authors could again be inspired by the Environmental Possibilism of the French geopolitical schools pre-1945, the so-called '*Possibilists*' (Crickemans, 2022c, pp. 116-117). These scholars argued, in contrast to the German geographical determinists of the interbellum, that the environment should be approached as being both '*constraining*' and '*enabling*', and man is considered to be able to make choices (Vidal de la Blache, 1898; Vidal de la Blache, 1926). The environment provides a number of parameters or limitations to the whole spectrum of foreign policy actions which can be undertaken by an entity ('constraining'), but the environment also provides a political entity with a number of important opportunities (Sprout, 1971 [1965], p. 83). As stated earlier, '*man*' stood central in 'Possibilist Geopolitics' because in the end the political decision-makers try to maximize the opportunities, and to minimize the limitations with which they are confronted. In addition, Possibilism makes active connections between elements of physical geography (again relevant in energy transition in terms of resources or ideal locations to pursue solar or wind power), human geography (think about social acceptance of these technologies), and spatial factors (needed to take into account for instance in the development of power lines and grid infrastructure over longer distances). Good statesmanship maximizes the opportunities, and minimizes the disadvantages. Also in complex questions of energy transition these lessons still are very relevant indeed (Crickemans, 2022b, pp. 116-117), and await further exploration.

At the beginning of the 1980s, the literature in Geopolitics underwent a revival in France. One of the leading figures became Yves Lacoste and the journal '*Hérodote*'. The objective was not to simply leave geopolitical discourse exclusively to "certain groups", the "strategic elites" who had dominated Cold War thinking, and had consequently narrowed the conceptualisation of "geopolitics" to mere "strategic issues" (Lacoste, 1983: 4). Lacoste wanted to show that there were many different ways in which geographical and geopolitical problems could be studied. Lacoste believed that the 'geo' aspect should not be reduced to mere "natural phenomena" (Lacoste, 1993: 9; Lacoste, 2000: 127). "Geo" should be more broadly defined to include ALL factors that are territorially "embedded". One can think of the quantitative & qualitative characteristics of a territory (e.g. territorial size & available resources) or of its geographical position & borders. Nevertheless, there are also other

'geopolitical variables' such as demographics, transport-economic situation, language & culture, and so on. The Hérodote school pays much attention to geographic/geopolitical reasoning at different spatial levels of analysis (e.g. local, regional, national, macro-regional, global) (Hepple, 2000: 279-280). This school paid a lot of attention to identity. It believed the object of Geopolitics lies essentially in the study of territorial rivalries between actors, and their repercussions on public opinion (Lacoste, 2000: 155). In his impressive *'Dictionnaire de géopolitique'* (1993), Lacoste-'Hérodote' concentrated more and more on the analysis of the 'representations' of territoriality (or expressed differently; the way in which 'territoriality' is presented); *"the set of ideas and perceptions of the political, religious or other order that drive social groups, and structure their vision of the world."* (Lorot, 1997: 44). Indeed, it is through the analysis of different representations about territoriality that Yves Lacoste hopes to better understand the strategic importance or symbolic value; attached to it in situations of rivalry (Lacoste, 2000: 155). According to French lecturers in Geopolitics and International Relations Pascal Lorot and François Thual, the main contribution of the group around Lacoste now lies precisely in bringing the notion of 'representation' into geopolitical analyses. To this very day the French literature in *Geopolitique* can be seen as an inspiration. Innovative as well was there distinction between *'géopolitique externe'* and *'géopolitique interne'*. French scholars in Geopolitics also devoted attention to the political levels 'below' and 'above' the national state, as additional carriers of geopolitical action.

5. Geopolitics, energy transition and climate change

When one takes a long view at the ontological assumptions of many schools of thought in academic fields such as Geopolitics and International Relations, one realizes that most of the foundational academic work conducted in each of them saw the daylight in a world of centrally state-controlled, fossil energy sources such as coal, oil and later natural gas. That world gradually took shape in the latter part of the nineteenth century and speeded up into the twentieth century. One could say that academic work in this long time period has been 'fueled' by the 'energy building blocks' of each phase of human development in this new era.

The literature on 'energy geopolitics' and 'energy security' has a long tradition and connection (Biresselioglu, 2011). The earliest concerns around these issues date back to a century ago (Prontera, 2017, p. 4), in the midst of an earlier energy transition we sketched in the introduction of this chapter. Academic literature on energy security theory started to develop in the 1970s, as a result of the oil crises. These were 'artificial' supply side crises whereby OPEC countries pressurized Western governments' support of Israel by 'turning the tap' several times. It was not a coincidence that the International Energy Agency (IEA) was set up in 1973 within the Organisation for Economic Cooperation and Development (OECD) to study supply and demand issues, and the impact of new technologies in the

energy sector. This helped western countries to deal with the major impact of the energy crises of the 1970s.

In 1979, David Deese defined 'energy security' in the journal *International Security*: "*a condition in which a country perceives a high probability that it will have adequate energy supplies at affordable prices*" (Deese, 1979, p. 140). There were two principal economic and political components of energy security. First, the set of all behaviours which are affected by the reliability and quantity of energy supplies. Second, the set of all behaviours which are affected by external energy supplies, and more in particular the relationship between demand and supply. But until then the geopolitical or geostrategic dimension remained underexplored.

This changed radically only a year later via the so-called '*Carter Doctrine*'. On 23 January 1980, the then US President Jimmy Carter declared in his State of the Union Address that the United States would use military force, if necessary, to defend its national interests in the Persian Gulf. This statement was geopolitical and geostrategic in nature, a response to the Soviet Union's intervention in Afghanistan in 1979. It was intended to deter the Soviet Union from seeking further influence in the Persian Gulf. 'Energy geopolitics' and 'energy security' now seemed to become extensions of each other. However, the definition of 'energy security' in practice still remained somewhat unclear.

During the 1980's, David Deese (MIT) and Joseph Nye (Harvard) contributed to a broader conceptualization of 'energy security' (Deese & Nye, 1981; Biresselioglu, 2011). They focused on the energy security threats that consumer governments face; demand reduction and restructuring, stockpiles and emergency plans, development of alternative domestic supplies, development and diversification of sources of external supply, as well as diplomatic, industrial and military measures. During those years, western literature became deeply entrenched in a Cold War East-West context; the risk of the dependency of the 'West' on the 'East' – most notably via oil and natural gas.

At the end of the 1980s and the beginning of the 1990's, increasingly authors started to talk about the eclipse of the 'oil age' and the 'geopolitics of oil', the structural shortages between demand and supply, and their geopolitical consequences. Michael T. Klare can be considered as one of the authors who was quoted often and who also managed to open up a broader public debate, together with many other contributions from think tanks around the world. Especially Klare's *Resource Wars. The New Landscape of Global Conflict* (Klare, 2001) and *The Race for What's Left. The Global Scramble for the World's Last Resources* (Klare, 2012) can be mentioned in this regard. From conventional oil and gas, over to unconventional oil and gas (shales, tar sand) into rare earths and other critical materials, Klare sounded the alarm bells that countries needed to prepare for what was coming. The author seemed to lean more towards the *scarcity* side of the spectrum, whereas others would later predict an age of *abundance* due to technological revolutions. However, Klare did realise that also energy

innovation would become a major factor in a ‘clean energy race’ in which China and perhaps the United States would become major players or competitors (Klare, 2012, pp. 230-234).

From mid-2001 till July 2008, the oil price rose from 20 US dollar a barrel to 147.50 US dollar. This created a new dynamic in the literature on the Geopolitics of Energy, discussing the need for alternative supplies and demand reduction via energy efficiency. One year earlier, in 2007, Mathew Burrows and Gregory Treverton developed a new energy paradigm in the journal *Survival* (Burrows & Treverton, 2007). They discussed a much more nuanced definition and approach of ‘energy security’. Taking into account the latest societal and international developments, Burrows and Treverton saw the concept more as a set of complex “trade offs” that decision-makers had to make between three sides of a triangle; security and foreign policy objectives, economic objectives and now also environmental objectives. Many different technologies and forms of energy ticked one but not always necessarily all three of these boxes. Political choices sometimes had to be made as a consequence. In the middle of the triangle however, Burrows and Treverton placed ‘energy efficiency’. The best energy that ticks all three sides of the triangle at the same time, is the energy which you do not consume.

From the years 2000 onwards, the debate on ‘energy security’ gradually came of age. Academia produced certain criteria which together could make up a good definition of ‘energy security’. In 2005, Barton, Redgwell, Rønne and Zillman, hence defined the concept as follows: *“A condition in which a country or several, or most of its citizens and businesses have access to sufficient energy resources at reasonable prices for the foreseeable future, free from any serious risk of major disruption of service”* (Barton et al., 2005, p. 5). Next to security of supply issues (important for consumer countries and territories), there existed also security of demand (important for producer countries and territories). The reliability of supply was closely connected to the functioning of energy markets. The only actors which this definition of ‘energy security’ did not completely address were transit countries and regions, for instance the predicament of countries such as Ukraine, which had already in the past major pipelines (Brotherhood, Yamal) running over its territory from the East (Soviet Union and later the Russian Federation) towards the markets in the West.

In a recent book on *‘The New Politics of Energy Security in the European Union and Beyond’*, Prontera uses the traditional definition of ‘energy security’, referring to such matters as *“long term security of supply and its connection to international politics in the areas of diversification, infrastructure, investments and market governance”* (Prontera, 2021, p. 7). A recent, two-part book is *‘The changing world of energy and the geopolitical challenges’* by Samuel Furfari. Its second volume is solely devoted to the ‘geopolitics of energy’. He sees geopolitics as *“a methodology based on multidisciplinary analysis”*, which brings together variables as geography, demography, history,

economic and financial power, transport routes, technology, etc. (Furfari, 2017, p. 45-48). His approach comes quite close to the 'geopolitical method of analysis' as explained and developed by Gyula Csurgai at the Geneva Institute of Geopolitical Studies in Switzerland (Csurgai, 2022a).

Yet other authors emphasize ecological issues and crises that "threaten to radically alter the very nature of international relations" (Ó Tuathail, 1997, p. 36). According to Mustafa Tolba, *executive director of the United Nation Environment Program*, a transition needs to be made "*from geopolitics to ecopolitics*" (Tolba, 1990). According to Simon Dalby, ecological issues have been regarded as having a fundamental, 'global' dimension since the 1970s. Dalby and more recently O'Lear rather use the term '**environmental geopolitics**' (Dalby, 1998; O'Lear, 2018), which partly reflects the fact that the term '*ecopolitics*' has never really gained a foothold in the literature. According to Dalby, the new element lies in the fact that, since the mid-1990s, the 'global environment' has been increasingly explicitly regarded as both an object of research and the object of prescriptive policy recommendations. Also outside of this, in the more "popular" IR literature of the mid-1990s, "ecological degradation" was identified as one of the causes of state disintegration and chaos. Consider, for example, the well-known article '*The Coming Anarchy*' by the American foreign correspondent and writer on international relations Robert D. Kaplan, in the magazine '*The Atlantic Monthly*' (February 1994). In it, the author argued that the microcosm of *failed states* in Africa foreshadows what awaits us internationally as a result of disruptive global demographic, economic and ecological dissolution processes. Kaplan's ideas are an archetype of what is often referred to in textbooks on international relations as the 'anarchy model'. From a geopolitical perspective, however, it becomes more difficult to maintain the classic assumption that only states play a role in global ecological issues; multinational corporations & grass roots movements also fulfil their function (Dalby, 1998, p. 184-185). In more recent literature on energy geopolitics, it has become apparent that this can no longer be seen separately from climate politics (Faye, 2022; Yergin, 2020). In her study on '*Geopolitics of Climate Change and Sustainable Development*', Faye develops an actor-centred approach (Faye, 2022). Human agency of not only state actors but also non-state actors such as multinationals becomes important in order to understand these processes. Realist and neo-realist paradigms rather suggest states as the main actors without whom joint management cannot be imagined, but there exist also more liberal paradigms that can help us to tap into energy transition with a broader, perhaps more accurate portrayal (including the role of individuals, private companies, multinationals) (Faye, 2022, pp. 63-65). The author is right in this analysis, yet there are also territorially embedded and geographical issues at play here. In that sense 'energy geopolitics' and 'environmental geopolitics' touch upon different dimensions of the geopolitical challenges related to energy transition. In his book '*Anthropocene Geopolitics. Globalisation, Security, Sustainability*', Simon Dalby outlines a number of important issues (Dalby, 2020). Among other things, he discusses the use of chemicals and the long-term

viability of the current agricultural sector. Dalby also questions the limits and finiteness of what is possible on this planet Earth, indirectly interacting with earlier debates on the 'end of growth'. Geopolitics can also reflect on the extent to which and with which humanity moves or organizes its production chains. Sustainability comes to the fore as a central concept in human survival. The implicit message is that this is only possible by coming back into balance with 'environmental variables'. A combination of technological innovations and a new geo-environmental awareness should provide solace in this, although, according to Dalby, it is not certain that a 'good Anthropocene' can emerge from this.

6. 'De-territorialisation', 're-territorialisation' and the study of the diplomatic activities of non-state actors such as regions and cities

At the beginning of the 1990s, influential IR scholars focused their attention on globalization and its impact. Some believed the world would gradually become one village, with no borders. They argued that myriad processes of *de-territorialisation* were occurring, in which society and politics were less bound to territorial spaces. Different authors in IR but also in Political Geography focused on other aspects of de-territorialization. Ó Tuathail (1998), a seminal author in 'Critical Geopolitics', made some very important remarks in this regard:

"Deterritorialization is best interpreted, as Virilio remarks, as a question; it evokes the challenges posed to the status of territory and, by extension, our territorially embedded understandings of geography, governance and geopolitics, states, places and the social sciences, by planetary communication networks and globalizing tendencies. But it is deceptive when it becomes an answer polemically naming this challenge as a clear disappearance of territoriality. The problematic of deterritorialization is therefore also the problematic of reterritorialization; it is not the presence or absence of state territoriality but its changing status, power and meaning in relation to postmodern technological constellations, speed machines and global webs of capitalism" (82).

Another seminal contribution can be found in the work of Ruggie (1993). He spoke of a process of "unbundling" of territoriality:

"in the modern international polity an institutional negation of exclusive territoriality serves as the means of situating and dealing with those dimensions of collective existence that territorial rulers recognize to be irreducibly transterritorial in character. Nonterritorial functional space is the place wherein international society is anchored." (165).

During the 1990s, it seemed this process would continue. However, as the twenty-first century dawned, it became clear that territoriality had not vanished as a potential explanatory variable of international relations and diplomacy. In fact, quite the opposite has occurred.

Scholte (2000) argued: “*The end of territorialism as a consequence of globalization does not mean the end of territoriality.*” (59).

Today, multiple processes of re-territorialisation can be identified. This concept can be understood as a series of “*developments which occur when certain territorial entities diminish in importance, in favour of other territorial configurations*” (Scholte 2000: 60). Thus, geopolitics has not vanished: different types of re-territorialisation are altering the fabric of international relations and, inevitably, such processes are also influencing the practices and conduct of modern diplomacy.

An interesting example concerns the relationship between re-territorialisation and non-state actors. Both above and beneath the state level, territorial entities become relevant, and generate their own external relations, foreign policy and diplomatic practices. As stated earlier, Europe constitutes an interesting testing ground in this regard. On the one hand, the Lisbon Treaty in 2010 has led to the establishment of the European External Action Service (EEAS). European diplomacy is still in its infancy, but with the new Commission under the leadership of Ursula von der Leyen, it has expressed an ambition to think more in a geopolitical and geostrategic fashion. Many institutional hurdles, such as the need for unanimity and the compartmentalization of dossiers over different policy-matters, are obstacles to achieving that goal. Nevertheless, the EU’s *Global Strategy* developed under the former High Representative for Foreign Affairs Mogherini, constitutes an important milestone in this ongoing ambition. One of its added values is that it tries to identify the root causes of problems such as migration, terrorism and instability in Europe’s near and far abroad. At the same time, national diplomatic services are adapting to this new geopolitical reality. They often sent their brightest diplomats to the *European External Action Service*. Gradually, a new division of work between the EU level and the member states will materialize on the wide variety of foreign policy dossiers. This experiment will impact European and possibly global diplomatic practices.

On the other hand, Europe has been and still is a nursery for sub-state diplomacy, a phenomenon that also exists in other parts of the world. Different regional sub-state entities in Europe such as Flanders, Wallonia, Catalonia, Scotland, Bavaria and others engage in international relations on their own merits, and conduct a foreign policy parallel, complementary or sometimes in conflict with their diplomatic state counterparts. The days when diplomacy was exclusively associated with national states are gone. Since the late 1990s, the spectrum of diplomatic instruments and the strategies that accompany sub-state entities have become more diverse and complex (Criekemans 2010a; Criekemans 2010b). To a certain extent, today’s diplomatic practices resemble a pre-Westphalian world in which realms of different territorial sizes generate their own diplomatic identity and practices. Diplomacy has become a multi-level endeavor, in which different policy levels (macroregional, national, cross-border, substate: regions and cities) each generate specific

types of diplomatic activities reflecting specific needs felt at their respective territorial levels. The question here then is when and under what conditions are diplomats of the macro-regional, national and sub-state level able and willing to cooperate with one another? This line of thinking mirrors the complexity of societal questions relating to the EU experiment and would add another layer of knowledge to diplomatic studies. In addition, all around the world, cities and even harbors are becoming important geopolitical actors in domains such as energy, climate mitigation, security and supply chains.

Re-territorialisation challenges the study of diplomacy, particularly in terms of its research questions and objectives. The potential for exploring the geopolitics-diplomacy-nexus is valuable but multifarious.

7. Geopolitics and IR: a plea to learn more actively from each other's insights, theories and methods

Bringing the scholarships of Geopolitics and International Relations more actively together may result, over time, in the development of a joint research agenda (Criekemans, 2022). It may be guided by and facilitated through the fascinating process of learning from different schools of thought and of academic fields. The most obvious elements of such a research agenda are affected by the times in which we are living. Clearly, global power centres are shifting and territorial entities around the world (states, macro-regional entities, cities and regions) are trying to deal with these realities. The drivers of these shifts are multiple; demography, technology, economy, energy, military, etc. Each of these variables offer us a 'way into' better understanding the fundamental geopolitical shifts which we are experiencing, and how world actors are responding to them. *Combining material capability approaches with cognitive or critical research approaches could offer us a more multi-faceted understanding of a changing geopolitical reality.*

Geopolitical analyses can be developed at a global, macro-regional or local level. The French geopolitical tradition has shown how a geopolitical analysis may also be relevant inside states themselves, in addition to their foreign policy ('géopolitique interne' vs. 'géopolitique externe') (Lacoste, 1976; Lacoste, 1982). Geopolitical developments at the local level may also change regional equations. Conversely, global geopolitics may limit what is possible at the regional or local level. Specialists in Geography and International Relations can also help each other in making sense of some of these dynamics.

Geopolitical analyses can be historical in nature, contemporary or even include scenario analysis. Historical analyses can help us to better understand key geopolitical concepts of the past. In this book we for instance discussed the origins and interpretations of the concept of 'containment'. Such an analysis can still be relevant to today's world. Another domain to be further developed lies in extrapolating key geopolitical variables into the future for the

purpose of developing better policy or even investment choices. Both military planners and financial specialists have, over the last years, become quite interested in combining the insights of forecasting with geopolitical analysis (Papic, 2021). This area clearly also constitutes a domain which can be of future relevance to both academia and practitioners. For foreign policy elites, it is crucial to gain a better insight into the dependence of societies upon the ‘changing’ environmental variables; to include them into their political ‘calculations’ in order to better understand the viewpoints they have to defend in their foreign policy ‘the day after tomorrow’.

During the past decades, Geopolitics and International Relations have at best been ‘living apart together’. In our opinion, Geopolitics and International Relations can again become at least ‘friends with benefits’. Both have much to offer to each other, but hurdles at the conceptual, theoretical or methodological level may lie in between. Both have similar interests; to make sense of a world which is in transition in many domains; economic, energy, technological, environmental and in terms of power politics. Both are also different; Geopolitics asks attention for territorially embedded variables and provides a more holistic view of world problems and their interconnectedness. International Relations is a broader, multi-disciplinary endeavour which also encapsulates approaches coming from diplomatic history, economic theory, international law, etc. Moreover, IR has branched out in many different areas around crucial concepts such as power (Realism), interdependence (Liberalism), inequality (Marxism), and identity and international norms (Constructivism). Similar theoretical developments have taken place inside the field of Geopolitics. But because of all these theoretical branches and different schools of thought, it has become less apparent for outsiders where respective theories of Geopolitics and IR can be mutually strengthening each other’s ontological views and epistemological insights.

The renewed attention for territorially embedded factors in several schools of thought nevertheless connects numerous scientific approaches. By better understanding these contributions, academics, students and practitioners can learn from each other. Hence it is possible to develop more comprehensive analyses on the geopolitical challenges which affect many dimensions of politics today and tomorrow (security, economy, energy, environment, technology, diplomacy & foreign policy).

Better understanding these changes through an innovative combination of theoretical and methodological insights beyond neoclassical geopolitical geopolitics, can help us to better understand that geopolitical reality. In this chapter, we pointed to Cognitive Geopolitics, Analytical Geopolitics and the literature on Geoeconomics as some of the more promising routes to further explore and apply in future studies. In conclusion, Geopolitics and IR can further learn from each other’s insights, theories and methods in the years to come.

An ongoing challenge within the literature of Geopolitics remains that the Western perspective often seems to dominate (Parker, 2015; Rona, 1982), whereas the actual richness of the literature is much greater. Mainstream literature could thus be enriched to also discover more local, non-Western approaches from Central and South America, Africa, Russia and the post-Soviet area, Asia, etc. Only gradually are these trickling into the mainstream geopolitical literature. Confronting Western and non-Western approaches with regard to basic geopolitical concepts and their political application at home may prove very insightful, both from a fundamental and a more practical point of view. It may give us a better insight into basic sources of contention and potential areas of agreement. It may help us to identify misunderstandings or fundamental differences in opinion. It may also help us in the “decolonization” of key geopolitical concepts and approaches. Through such a scientific endeavor, a critical attitude can be developed which may inform a rethinking of North-South relations (Slater, 2004) and the ongoing debate about a new multipolar order in the making.

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The Future Potential Index for OECD Countries (2022)

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Abstract

This paper presents a new, multidisciplinary concept applicable to social entities called “Future Potential” and introduces a methodology for measuring this concept empirically. Notably, in addition to outlining the concept, it presents a new global index, the “Future Potential Index” (hereinafter, FPI). Positioned at the intersection of philosophy, psychology, sociology, political theory, economics, and geopolitics, along with other fields of social sciences, Future Potential and its empirical metric, the index, should be of interest to both academics and policymakers alike.

The concept of Future Potential derives from an effort to capture the key elements of a social entity that determine its potential to continue and possibly flourish in the future. This requires first defining what the entity is, what it means to exist and flourish, and then how to measure it.

To address the very first step – defining a social entity – in a way that ensures consistency and facilitates comparability across different contexts, our work on defining Future Potentials and an FPI starts by establishing a fixed normative, analytical, and discursive framework. The explicit definition of such a framework is, to the best of our knowledge, unique to our work and, thus, to the FPI.

The question addressed by our work is whether there is a framework that is broad and consistent enough to permit both the definition and the measurement of a social entity such that we can monitor whether it is evolving over time in a direction that may be considered “good” or intentional or both. We show how to do this and then describe the development of the first index that actually does this using real-world data. More specifically, we present here our results for the OECD countries using 2022 data. While the concept and

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measurement thereof are described in this paper, we hope the initiative will form the basis for future research that utilizes the index and/or approach to address policy questions regarding the development of social entities and institutions perceived as integral parts of a broader society of value to humanity. Alternatively, it may be noted that this approach can be modified and applied to smaller-scale entities – something we discuss briefly below.

This paper proceeds as follows. We first present the normative framework, which is centered around the idea of "a good life in a unity of order," emphasizing a harmonious balance of peace, security, attachment, and care (Csák, 2018). We then explain how this architecture suggests key dimensions and metrics that can be measured as indicators of the various aspects of Future Potential. We then discuss how these have been compiled into an index and applied to a range of countries. We close by discussing the latest results as an example of this approach and include thoughts about future directions for the further application of the innovation.

Introduction

The Future Potentials Observatory (FPO) was established in 2023 to bring together scholars from diverse fields to research and keep track of future-oriented topics, including, but not limited to, the Future Potentials of various countries and other social entities from nations all the way down to cities and even private organizations. The FPO defines Future Potential as “the readiness of social entities (e.g., countries, cities, organizations, groups) in terms of their ability to preserve a good life for their members in a unity of order through the strategic management of future change” (Szántó, Aczél, Csák, Ball, 2019).

What is meant by “a good life in a unity of order” and what a nation or country may be expected to provide for its citizens in terms of a good life are questions that date back at least to Ancient Greece (Csák, 2018). In recent years, the generally applied approach has simply involved looking at a country’s GDP, assuming that GDP and welfare are closely related and that more GDP implies more human welfare. Today, that approach is being called into question from a range of intellectual perspectives, each generating its own branch of research around its specific area of critique. Kocsis (2020), for example, compared the FPI with eight other country-level indices.⁹ As the challenges to the traditional approach have grown, so has the volume of new measures aimed at more comprehensively capturing the notion of “better,” “welfare,” and a “good life” (Csák, 2018). Some examples include

⁹ Kocsis (2020) undertook the comparison against the Better Life Index (BLI), Change Readiness Index (CRI), Global Resilience Index (GRI), Human Development Index (HDI), Happy Planet Index (HPI), Inclusive Development Index (IDI), Sustainable Development Goals Index (SDG), World Happiness Index (WHI) from three different perspectives: nature, society, and economy.

happiness indices and measures incorporating environmental sustainability into their broader assessment.

The Human Flourishing Program at Harvard's Institute for Quantitative Social Science is yet another and different approach that has some loose conceptual similarities to our work (VanderWeele, 2017). This approach also recognizes the limitations of the traditional GDP-equals-welfare perspective and the importance of making explicit a general framework. The Human Flourishing program thus measures human flourishing "based around five central domains: happiness and life satisfaction, physical and mental health, meaning and purpose, character and virtue, and close social relationships"¹⁰ (VanderWeele, 2017).

While perhaps a distant conceptual relative to our work (since the framework does recognize the importance of virtue, for example), this initiative lacks a deeper normative framework. Thus, the presence of the latter makes our approach unique. Additionally, the former work merely applies a set of two questions per domain. The questionnaire can then be downloaded and used to survey people in an organization, for example, to determine if they are flourishing.¹¹ In addition, this work is static, being interested in measuring a snapshot in time, while our FPI is, by definition, interested in potential over time rather than cross-sectional measurements at a point in time.

Perspectives about "futuring" itself vary. Many associate futuring with future studies, while others associate it with sustainability, and yet others with competitiveness (Szántó, 2018; Kocsis, 2018; Monda, 2018). To clarify our usage, we focus on two concepts that are closely linked to futuring: future orientation and future-proofing (Aczél, 2018).

Future orientation refers to the degree to which an individual or a culture thinks about and plans for the future, capturing attitudes toward how the future is connected with the present and past. This concept also reflects the mindset through which the future is conceived and can vary significantly across cultures and disciplines. For instance, technologically oriented societies and disciplines may emphasize performance, completion, and achievement over time, measuring the future in terms of performance-related outcomes.

On the other hand, future-proofing is more prevalent in technological and architectural fields, where the emphasis is on ensuring that investments, whether in

¹⁰ While VanderWeele (2017) is the basis for this work, the latest research by this program is shared on the website: <https://hfh.fas.harvard.edu/measuring-flourishing>. The quote here was taken from the website to ensure the use of the latest version of their wording for the project.

¹¹ See VanderWeele 2017 for details and further exposition about their approach.

products or structures, remain viable and adaptable to future changes. This concept involves informed strategic formulation, aiming to create flexible and open-ended systems that can adapt to changing needs and withstand environmental or technological challenges. Unlike future orientation, which focuses on how far and in what manner an entity looks forward, future-proofing is concerned with the practical measures taken to secure the longevity and relevance of investments. Despite their differences, both concepts are integral to the broader practice of futuring, ensuring that social entities and investments are strategically positioned to thrive in an uncertain future.

Just as future orientation and future-proofing provide frameworks for strategic planning, both approaches offer specific and different perspectives, offering unique insights into overall well-being and national potential. Happiness literature attempts to address people's psychological well-being. Sustainability measurements focus on environmental well-being and long-term viability. Still other indices examine aspects of the political system, such as the rule of law, or focus on traditional economic indicators. The FPI aims to integrate diverse normative standards and strategic pillars to provide a holistic view of a nation's capabilities and prospects. It quantifies the degree of Future Potential by evaluating various normative standards and synthesizes a broad range of insights into a comprehensive framework for assessment that is tailored to each country.

Unlike other indices that function in isolation, the FPI attempts to bring their key insights under one roof and asks how this may be done for society as a whole. In order to do this, one first needs to identify a common social goal against which to measure the current position and, hence, develop a means of measuring progress over time. As an initial step, the concept of Future Potential returns to the classical perspective of "a good life in a unity of order" as the broad notion of welfare in a society. The study of human development is an interdisciplinary endeavor ultimately driven by implicit and explicit moral and metaphysical considerations. Historically, reflections on a worthwhile life, the image of man, and the human condition have been formulated from philosophical, religious, scientific, and artistic perspectives. Philosophy ultimately deals with issues such as "how one ought to live [well]; what course of life is best; [and what is] the right conduct of life," and the nature and proper operation of the unity of order that enables a good human life (Csák, 2018).

From the religious perspective, transcendental principles provide the fundamental framework for comprehension and interaction and have been an integral and valued aspect of the identity of civilizations, permeating every sphere of life throughout history. Nevertheless, Western civilization has been an exception, as it seems to have

undermined its own religious and transcendental foundations, particularly over the last 300 years.

The modern scientific perspective is a detached, strictly rational, methodological approach intended to free humankind from the limitations defined by Nature and to change the world. Modern science claims neutrality with regard to ultimate values. Thus, when science faces ultimate choices between values, the risk of reducing persons to physiological processes arises, with all the potential unintended consequences. Historically, the arts have also been a unique guide for human comprehension through endeavors that inspire man's aesthetic sense and emotions.

Philosophical, religious, scientific, and artistic perspectives of comprehension cross-fertilize and prevail upon each other over time, as exemplified historically by Christianity assimilating elements of ancient Greek philosophy, the arts invigorating worldviews during the Renaissance, and the natural sciences overtaking philosophy, religion, and the arts altogether during modernity. Despite such 'contests,' we argue that sophisticated philosophical, religious, scientific, and artistic reflection is necessary for any entity that aspires to comprehensive self-consciousness and identity.

"Future Potential" is a new multidisciplinary perspective that builds on the findings of the fields mentioned above to map out the characteristics that enable entities to preserve their way of life. Correspondingly, we assume that there exist ways of being/living through which human persons can fulfill their material, intellectual, spiritual, and psychological needs and, in general, flourish better than others and are thus worth preserving and reproducing (Haldane, 2009). In this paper, we elaborate on the constitutive qualities of this worthwhile, or, in other words, "good life" in a unity of order as a conceptual framework or standard (Strauss, 1953), according to which the changes in the FPI scores may be interpreted. Such analysis may help social entities to systematically reason about alternative courses of action for shaping their futures. Using this conception as the normative metric and basis for evaluation is one of the aspects that makes the Future Potential approach unique.

Once the appropriate normative objective is established, the Future Potential concept can draw with intent from a range of social science approaches to bring together relevant insights and metrics. Finally, Future Potential determines the appropriate means of measuring the progress of an actual social entity toward its stated goal. Operationally, this is achieved through the new FPI.

The Future Potential concept is a refined term based on the prior notion of "Social Futuring" presented in the *Foundations of the Social Futuring Index* (Szántó et al., 2020). In that paper, Social Futuring was defined as "a measure of a social entity's creative

intent and potential to comprehend the ever-evolving world, its ability to get things done, to preserve and reproduce its way of life, and to control its destiny in general” (Szántó, Aczél, Csák, Ball, 2019; see also Szántó and Mueller, 2023). This provided a holistic overview of the process of measuring a social entity’s ability to strategically plan for and sustain itself in the future while attempting to maintain the broad goal of sustaining a good life for constituent members.

Both concepts align, emphasizing the importance of maintaining a good life and unity of order for members of such entities through organized and intentional efforts. The Future Potential concept builds upon the original idea by integrating and emphasizing the readiness to preserve a given quality of life by managing future changes. This both reflects and enhances social futuring’s focus on a social entity’s creative intent and potential to navigate an evolving world. Moreover, both perspectives stress the ability to take decisive action, preserve cultural and social continuity, and exert control over one’s destiny. Thus, Future Potential’s emphasis on strategic management and structure complements the criteria employed in the earlier social futuring notion of intent, capability, and future-oriented adaptability, creating a more comprehensive approach to evaluating social resilience and foresight.

Defining the Concept of Future Potential

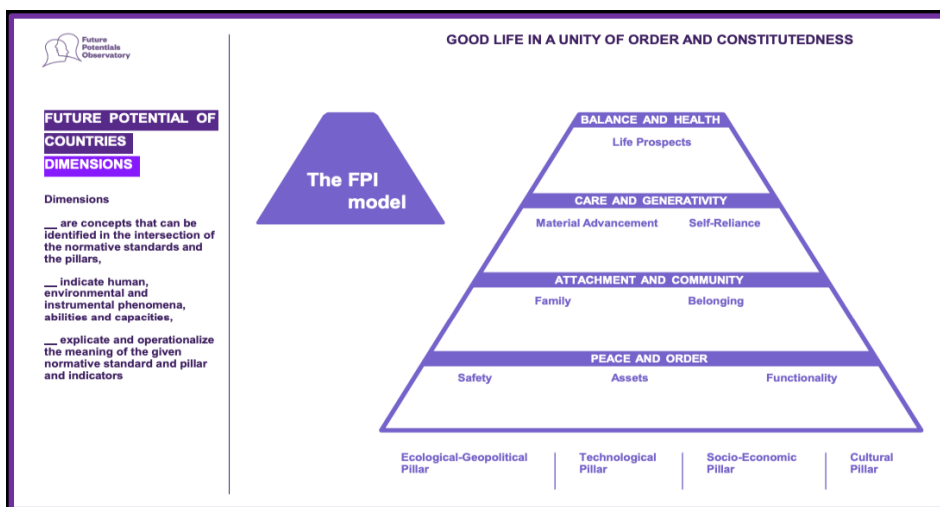
Future Potential is defined as the ability of social entities, such as countries, cities, organizations, and groups, to strategically manage future changes to maintain a good quality of life for their members within a harmonious order. These are the very features of an arbitrarily chosen social entity that express its potential, ability, and competence – namely, (1) to interpret, envisage, influence, and generate future changes, and (2) to prepare for their strategic treatment – that is, to await challenges that stem from any changes (be they limits/opportunities or threats) in a state of full preparedness. One may encounter expressions like “future-proofness,” “future-orientedness,” “resilience,” and “adaptation” in the semantic surroundings of Future Potential (Szántó, 2018).

The necessary conditions for a social entity’s Future Potential are that the given entity is self-conscious and constitutes itself, permanently operates in a functional way, and organizes actions that influence its functioning and environment in the future. The sufficient conditions of social futuring are that a given social entity is able to facilitate/create changes or prepare itself to manipulate, exploit, or manage the risks of future changes.

The Methodology of the Compilation of the Future Potential Index

The FPI expresses countries' degree of Future Potential, grounding its logic and composition on multidisciplinary conceptual foundations. Normative standards such as Balance and Health, Care and Generativity, Attachment and Community, and Peace and Order form the conceptual framework that defines a “good life” within nations. These standards intersect with pillars encompassing ecological-geopolitical, technological, socio-economic, and cultural aspects, which necessitate strategic management to navigate future changes.

Figure 1: FPI normative standards, pillars, and dimensions



Source: Szántó, Aczél, Bóday & Harsányi (2023)

Figure 1 shows the hierarchy of normative standards. The four layers and subsequent dimensions are those needed to achieve a good life in a unity of order and constitutedness.

The foundational layer upon which the entire entity's structure is built is that of Peace and Order. An entity cannot function without a meaningful degree of peace – free from constant threat and disruption – as well as basic order within society. The Future Potential of an organization cannot be measured if it does not exist in the present.

Attachment and Community are included in the second most important normative layer for a social entity to meaningfully exist. The reasoning here is that to exist as an entity, the entity itself must want to exist, thus necessitating attachment to something larger than itself. Community forms a bond between individuals and

ideally drives action that sustains the country, allowing it to have a measurable future.

The third layer is formed by the concepts of Care and Generativity. These are intended to capture the level of future-proofing of any one organization. The previous two layers help establish and sustain the nation, but to remain sovereign and stable for the future, the former requirements must be met.

The topmost layer, Balance and Health, serves as a measure of the quality of life. A nation could most certainly meet all three requirements by ruling with an iron fist, for example, but a poor quality of life does not meet the standard of a good life of unity. Thus, this top layer serves as a way to distinguish countries that are performing well in a holistic manner from those only performing well, say, economically or in some other single dimension.

Dimensions emerging from this intersection encompass human, environmental, and instrumental phenomena, explicating the capacities that operationalize these normative standards and pillars, evaluated across 22 selected indicators. From a theoretical framework of sixteen potential dimensions (four normative standards multiplied by four pillars), essential aspects such as Life Prospects, Material Advancement, Self-Reliance, Family, Belonging, Safety, Assets, and Functionality were identified for measurement. These are later defined in more detail, as they are a crucial part of the index.

The FPI serves as a crucial tool for quantifying and expressing the overall Future Potential of countries and is constructed upon sound multidisciplinary conceptual foundations to ensure its logical and comprehensive composition.

The Future Potential of countries is defined through normative standards that define the framework for a good life, including Balance and Health, Care and Generativity, Attachment and Community, and Peace and Order. These normative standards intersect with Ecological-Geopolitical, Technological, Socio-Economic, and Cultural pillars, necessitating strategic management to address future changes. Dimensions identified from this intersection are human, environmental, and instrumental phenomena, operationalized through 22 indicators that measure abilities and capacities. From the theoretically possible sixteen dimensions, essential ones such as Life Prospects, Material Advancement, Self-Reliance, Family, Belonging, Safety, Assets, and Functionality were chosen. The FPI quantifies the degree of a country's Future Potential, structured upon multidisciplinary conceptual foundations.

The FPI is a composite index of sub-indexes comprising a hierarchical indicator system based on the holistic Future Potentials conceptual framework. Simply put,

the FPI is a weighted average of carefully selected indicators that best capture the elements of Future Potential.

The FPI comprises 22 indicators selected with the help of an expert panel. Each indicator is transformed into a combined indicator by incorporating its latest value and change over time. During the process, outliers are handled and all elements are normalized on a scale of 0 to 100. The combined indicators are weighted and aggregated according to the structure of the FPI framework.

A hierarchical structure was selected to best grasp the concept of the indicator. This structure allows for the creation of sub-indicators at different levels to examine the contexts of the conceptual framework. In general, such hierarchical structures are the most suitable choice for presenting complex, multi-dimensional phenomena.

To connect the normative standards with the pillars defined in the wider framework, definitions were prepared to describe the phenomena of each of the nine essential paired intersections of the aspects, based on which the appropriate indicators could later be selected.

Selection of Variables

The FPI is, in some ways, the next evolution of the original indicator set employed by the Social Futuring Index (SFI). Eight indicators have remained unchanged, five were slightly changed to express a different aspect of the measured phenomenon, and nine new indicators were selected. A panel comprised of members with expertise in various academic disciplines and statistics examined the potential indicators of SFI and compiled the final set of indicators that best suit the written definitions.

The indicator selection process involved the basic requirements that indicators had to

- * be measurable/available,
- * have a time series,
- * be accessible from official, publicly available sources,
- * have at least OECD-country coverage,
- * have no or limited overlap with other indicators and
- * have a measurable and meaningful range.

Several workshops were held to finalize and fine-tune the indicator set to avoid overlaps and maintain a balance between the elements of the framework. In the end, all indicators were designed to capture both the latest value of the given indicator and its change over time. More details about the compilation of the indicators can be found under the “Normalization” section below.

For each indicator, the most recent data that was available was used. In most cases, this involved data from 2020 to 2022. For each indicator, the direction (positive or negative) of the evaluation was determined based on the concept of Future Potential. This was an essential step, primarily for the purpose of normalization.

Imputation

As with nearly all datasets, there are cases with missing values. Such missing observations accounted for only about 2% of our total observations and, therefore, had little bearing on the final rankings. The selection of indicators was partially based on an attempt to obtain maximum country coverage. When observations were missing, or there were clear anomalies – for example, radically different data to other countries for that observation and seemingly inconsistent with reasonable boundaries – the observations were imputed using other reliable sources or, in rare cases, supplemented with the value of a similar country. Again, with less than 2% of total observations either missing or clearly erroneous, none of the rankings were sensitive to imputation in these cases.

Normalization and Compilation of Indicators

Normalization is required prior to any data aggregation, as the indicators in a data set often have different measurement units or orders of magnitude. After filtering outliers with an interquartile range, the min-max method was chosen because it best met the needs of a hierarchical model. There were no negative numbers and no problems handling 0; therefore, additivity was retained.

All indicators are designed to capture both the latest value of the given indicator and its change over time. This results in a combined value that also captures dynamic performance.

Change over time is measured by absolute rather than relative change. This reduces the effect of small value changes (e.g., a change in a value from 1 to 2 is 100% more, while from 50 to 51, it is only 2% more).

The basic data for each indicator is the latest available value (filtered of outliers and normalized) and its absolute change (also filtered of outliers and normalized) compared to 2010 (in general).

The 'final' normalized indicator for each indicator is calculated as the sum of these two factors, which are then re-normalized (to a value between 0 and 100) for ease of interpretation. The two factors are equally weighted, so the range of the normalized values is 100 for both factors.

Establishing the Index

The study of resilience, future orientation, and future-proofing contributes new insights into how cultures differ and which parameters affect a group's ability to engage with the world around it over time. The FPI aims to do the same while being grounded on a normative framework. However, as a project, it is not merely an intellectual endeavor. The Future Potential initiative defined the practical goal of developing the FPI, a composite measure of countries comprising several dimensions and indicators associated with four pillars with pre-defined normative standards.

Pillars

Figure 2 presents the outlines of the FPI, which are summarized here. According to this logic, the index's concept is based on four pillars: Ecological-Geopolitical, Technological, Socio-Economic, and Cultural.

The *Ecological-Geopolitical* pillar captures aspects of a social entity's assets, such as its basic Assets (energy, water, land, etc.), without which it would not have the resources to maintain itself. Moreover, it includes elements that aid in measuring levels of Safety, Assets, and standards of living to capture various aspects of Belonging to the social entity and the resources required to develop Future Potential.

The *Technological* pillar includes aspects such as a social entity's ability to connect, innovate, and function generally. Basic functioning requires fundamental resources like clean water, while innovation requires a legal framework for patents and intellectual property. Finally, the ability to network and connect can be measured in physical terms, such as roads, or digitally, such as internet access and ICT use.

The *Socio-Economic* pillar includes classical economic areas like capital, labor, various forms of expenditure, and indicators of unemployment, schooling, and

GDP/capita. Socially, the core unit considered appropriate for a stable, socially cohesive society that has Future Potential is the Family, so the FPI includes measures such as fertility, the number of single-parent households, couples with children, work-life balance, ageing and inequality.

Finally, the *Cultural pillar* – in many ways, the single dimension that makes the FPI unique since its normative basis is one of the key aspects of Future Potential, includes measures such as religiosity and adherence to tradition.

Dimensions and Indicators

The dimensions are concepts that can be identified at the intersection of the normative standards and pillars. From the sixteen possible dimensions (four normative standards multiplied by four pillars), the eight that were chosen were Life Prospects, Material Advancement, Self-Reliance, Family, Belonging, Safety, Assets, and Functionality. These indicate the human, environmental, and instrumental phenomena, abilities, and capacities that operationalize the meaning of the given normative standard and pillars. The following is a list containing every dimension and the related indicators, with their respective weight, used to quantify the dimension within the whole index. Please refer to Chart 2 for an illustration.

Life Prospects: This is the sole dimension of the Balance and Health normative standard. It captures the forward-looking aspects of the standard of living, gauging how good life will be in the future. The dimension is formed at the intersection of the Cultural and Ecological/Geopolitical pillars with the respective normative standard. It lies at the top of the pyramid, as it exists only if all other defined dimensions are present. Indicators: life expectancy (3.3%), alcohol use disorder (3.3%), anti-depressant usage (3.3%).

Material Advancement: Half of the dimensions in Care and Generativity are comprised of Material Advancement. Advances in an organization's technological and economic sectors are key to maintaining activity and care within the organization. This dimension is 'only' crucial for any entity in relation to keeping up with societies that are evolving and having a measurable future, but it is not a prerequisite for existence as a society. Indicators: average wages (3.3%), labor productivity (3.3%), Gini coefficient (3.3%).

Self-Reliance: The other half of Care and Generativity is located at the intersection with the Socio-Economic pillar. An organization or nation's ability to sustain itself in sectors associated with food and energy is vital to its ability to function as a

sovereign entity. Indicators: employment rate (3.3%), old age dependency (3.3%), and population with tertiary education (3.3%).

Family: The normative standard of Attachment and Community is partially comprised of 'Family,' which is at the intersection of both this standard and the Culture and Socio-Economic pillars. To properly plan for the future, a population must be sustainable; steady growth measured by Family size can provide insight here. However, Family is equally important to individual wellbeing and thus plays a role in measuring future success. Indicators: single person households (7.5%), fertility rate (7.5%).

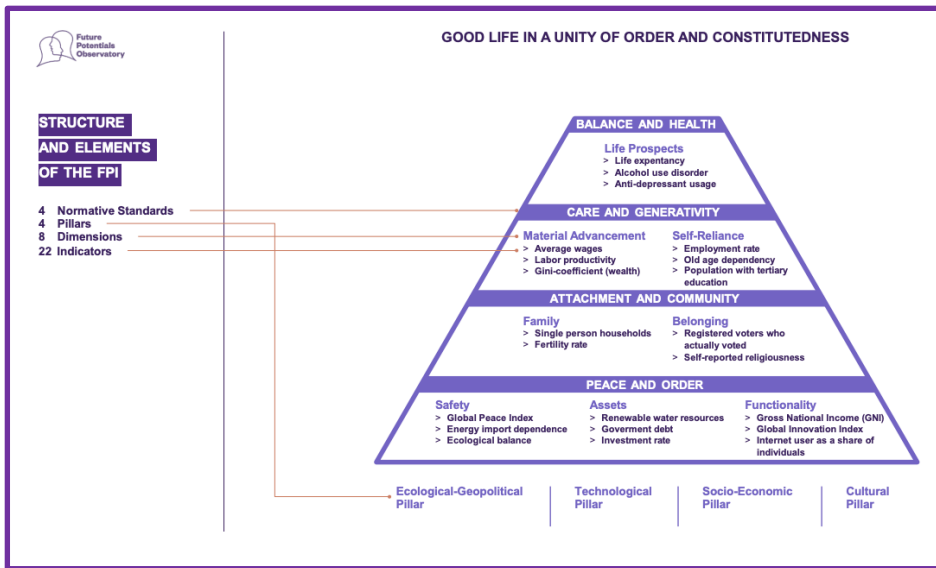
Belonging: While Family is a necessity, personal attachments to groups and individuals outside of one's own household can indicate a higher level of cooperation among an organization and may be a measure of overall well-being. This dimension is associated with the Culture and Socio-Economic pillars due to their significant presence in determining how and with whom any one individual may interact. Indicators: registered voters who actually voted (7.5%), self-reported religiousness (7.5%).

Safety: The foundation of Peace and Order is partially based on the Safety of individuals. Ecological conditions and geopolitics influence this dimension greatly due to their ability to affect every individual. To ensure there is a community to belong to, residents must feel that they are safe from local, foreign, and ecological threats. Indicators: global peace index (4.4%), energy import dependence (4.4%), ecological balance (4.4%)

Assets: To develop Peace and Order both ecologically and geopolitically, the government and society must have enough Assets to address problems/threats. From domestic production to having cash on hand, Assets are key in the establishment of an organization capable of measuring its Future Potential. Indicators: renewable water sources (4.4%), government debt (4.4%), investment debt (4.4%).

Functionality: The last vital dimension that underpins the existence of a society is Functionality. Indicators: gross national income (4.4%), global innovation index (4.4%), internet users as a share of individuals (4.4%).

Figure 2: FPI indicators



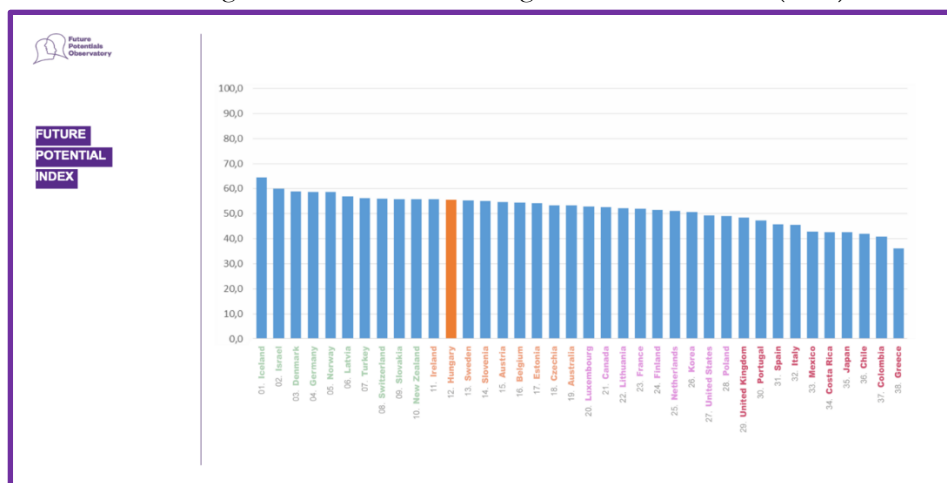
Source: Szántó, Aczél, Bóday & Harsányi (2023)

Main results

In the first iteration of the index in 2022, Iceland led the OCED nations in the FPI with a score of 64.4 out of 100. Greece rounded out the group with a score of 36, slightly more than half of Iceland's score. A difference of almost thirty points is not insignificant; there are a few areas where this difference does not occur within the country profiles within the FPI.

Starting with the foundational normative standard of Peace and Order, Iceland outranks Greece in every dimension. The smallest gap between these two nations was 37 points in Safety. In the dimensions of Assets and Functionality, the scores were 70.1 and 47.2, respectively. While the difference between the two countries' Peace and Order scores is the largest in the index, this highlights the robustness of the index. Greece has a near-average score for Balance and Health, which helped narrow its score to within 30 points of Iceland, despite the 50+ point gap in the Peace and Order score, a dimension that accounts for 40% of the total index score.

Figure 3: Overall FPI ranking of OECD countries (2022)



Source: Szántó, Aczél, Bóday & Harsányi (2023)

According to the FPI, Iceland is the country best suited to face the future (scoring four points more than the nation with the second-highest score, Israel). Iceland ranked highest on the dimensions of Material Advancement (68.1), Safety (82.3), Assets (82.8), and Functionality (75.1). However, Iceland performed poorly in Balance and Health, ranking 33rd out of all OECD countries. It is on the dimensions of Life Prospects and Family where last-placed Greece outperforms Iceland, ranking 22nd and 28th, respectively, out of all the OECD countries.

It is important to note here that Denmark and Germany are the only two countries in the top ten performing nations that do not place in the bottom quarter of the rankings for any of the normative standards. This is in sharp contrast to the countries that ranked between 11 and 19 in the index, of which five did not rank in the bottom quarter for any normative standards. Four of those five nations ranked in the top 10 for at least one normative standards.

These statistics highlight the significant variability across nations, making calculating Future Potential difficult. The common trend among the top ten nations is a strong foundation. High scores across the normative standards of Peace and Order, attachment, and community suggest the establishment of a more stable nation, leading to a higher score.

An example of a nation lacking such a foundation would be Japan, an aging, indebted society that ranks 35th on the FPI. Despite ranking second in Life Prospects with a score of 88.9 and 9th in Self-Reliance, it lacks the fundamentals of a stable society, ranking 34th in Peace and Order and 38th in Attachment and

Community. It must address its slowing economy, growing debt, and aging population to become better positioned to address future problems. Without addressing these issues, Japan may be caught flatfooted as it lacks Assets and Safety.

The Role of Sustainability Within the Future Potential Index

The concepts of environmental sustainability and measuring Future Potential are difficult to distinguish at first sight, and both are clearly future-oriented (Kocsis, 2018). On a deeper level, it becomes evident that both fields paradoxically cannot exist without one another. It is not possible to measure a society's Future Potential if it is not functioning in a sustainable manner. However, it is equally impossible to classify a society as sustainable if it is incapable of ensuring the basic features that permit the measurement of its Future Potential.

Thus, any index that measures a certain degree of sustainability will also measure the level of a society's Future Potential. Conversely, any index that measures the Future Potential of a society will inherently capture how environmentally sustainable that society is. The relationship between these two features helps highlight the uniqueness of the FPI.

The United Nations maintains an index that measures each country's progress in achieving the sustainable development goals (SDGs). (The SDGs are a series of goals defined by the UN as a roadmap for creating a future that address inequality, climate change, and any other potential issue that could hinder development). The index is comprised of 84 indicators that measure the 17 different goals and each subsection of these goals.

Ranging from economic growth to poverty alleviation to achieving net zero carbon emissions, the SDGs have similar goals to the FPI, making the two a good pair for comparison in terms of how they rank OECD nations.

Comparing the FPI Against the Sustainability Development Goals Index (SDGI)

The FPI, as established, emphasizes the necessity of peace and community for achieving a good life in a unity of order. Yet, this is not the only way a nation's success or readiness for the future may be measured. Numerous other indices, from the Happiness Report to the Human Development Index, have attempted to do this. However, the SDGI takes one of the most holistic approaches, as it is centered around sustainable development, thus making it a good index to compare against

the FPI. By comparing the indexes, it is possible to highlight the uniqueness of the FPI and how the methodology is applied. Israel and the United Kingdom are prime examples that highlight the differences well.

In the FPI, Israel was ranked second overall among all OCED countries but in the bottom five by the SDGI. Based on how Israel ranks over the next few years, the importance of measuring the Peace and Order normative standard and Material Advancement will be significant. War, while not considered in these reports, is unsustainable, but being able to defend oneself properly in/against war and amass strong allies is pivotal to ensuring a nation remains sovereign. While the region may not be safe today, Israel is liable to survive and recover due to the country's high pre-war FPI score.

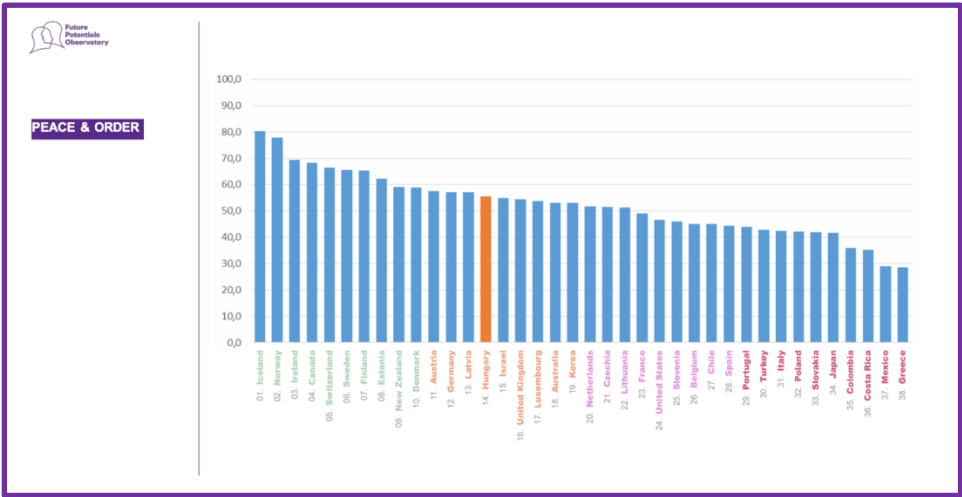
As measured by the FPI Life Prospects, the United Kingdom (UK) has some of the worst Life Prospects in the OECD, and the nation lacks the necessary Belonging and key Assets. While the FPI contains only twenty-two indicators, all of them are of value. However, the SDGI has seventeen dimensions, each with its own indicators. So, while the UK is projected to fall short of its goals in the areas of good health and well-being, it is still ranked in the top ten of the OECD nations in terms of the SDGs. Hedging against certain indicators always has its benefits, preventing nations from wild swings in their index score.

The two 'case studies' that compare the FPI to another major index show the dynamism of the FPI. There are enough indicators and, importantly, variations in the type of indicators that make up the index to avoid violent swings in measurement. Great Britain is downgraded for its permanent shortcomings with some key elements needed to achieve a good life in an order of unity. On the other hand, throughout the war, Israel's situation was coherent with the FPI findings from previous years; a well-prepared country can successfully handle a major problem due to its future-proofing measures. These results are currently the most concrete evidence that the FPI has established a meaningful way of measuring how future-proofed a country is and how we can learn from the successes of other nations.

Figure 3 shows the overall FPI rankings of OECD countries. Overall, northern European nations dominate the top 10 list, taking four of the five top spots in the Index. This is seen with other indexes, too, as Nordic nations are typically ranked highly. However, we start to see some deviation in the lower half of the top 10. In other indexes, such as the Human Development Index (HDI), Turkey ranks below the nations of France, Italy, Japan, and Greece, but in the FPI, we see Turkey ranked well above this latter group, in seventh place from all OECD countries. The

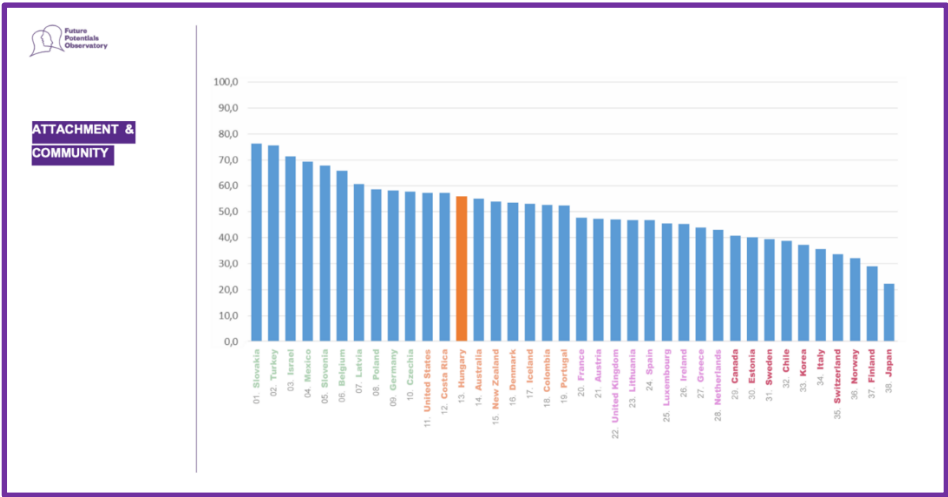
above-mentioned group of nations places 23rd, 32nd, 35th, and 38th, respectively, in the overall FPI rankings of OECD countries.

Figure 4: OECD country ranking according to Peace and Order normative standard (2022)



Source: Szántó, Aczél, Bóday & Harsányi (2023)

Figure 5: OECD country ranking according to Attachment and Community normative standard (2022)



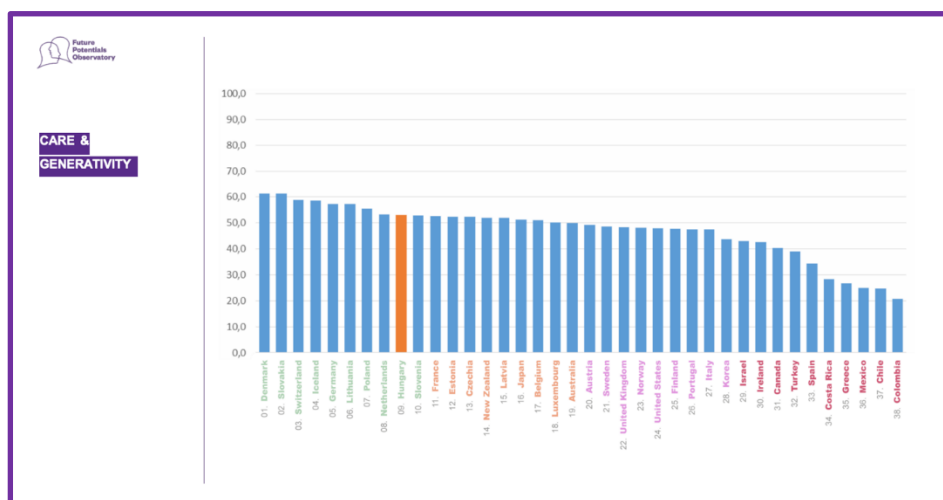
Source: Szántó, Aczél, Bóday & Harsányi (2023)

According to the normative standard of Peace and Order, Iceland remains at the top. Accounting for 40% of a nation’s total FPI score, this normative standard has

the most weight of all four normative standards. Despite the security the United States enjoys due to its large military, the FPI ranks it in 24th place. With a government debt of more than 100% of GDP and an increasing deficit, there is a lack of major fiscal responsibility in the States, resulting in a lower score. Other notable movements include Israel in 15th place (2nd overall) and Estonia in 8th for Peace and Order (17th overall).

The normative standard of Attachment and Community captures the more personal elements of nations, something that can be hard to quantify. The top quartile here is dominated by Central European nations, with Slovakia in 1st (9th overall), Slovenia in 5th (14th overall), and Czechia in 10th (18th overall) place. This highlights one of the FPI's strengths – countries like Iceland and Denmark (3rd overall) fall to 17th and 16th place when scored on this normative standard. Being able to capture these details helps enhance the robustness of the index.

Figure 6: OECD country ranking according to Care and Generativity normative standard (2022)

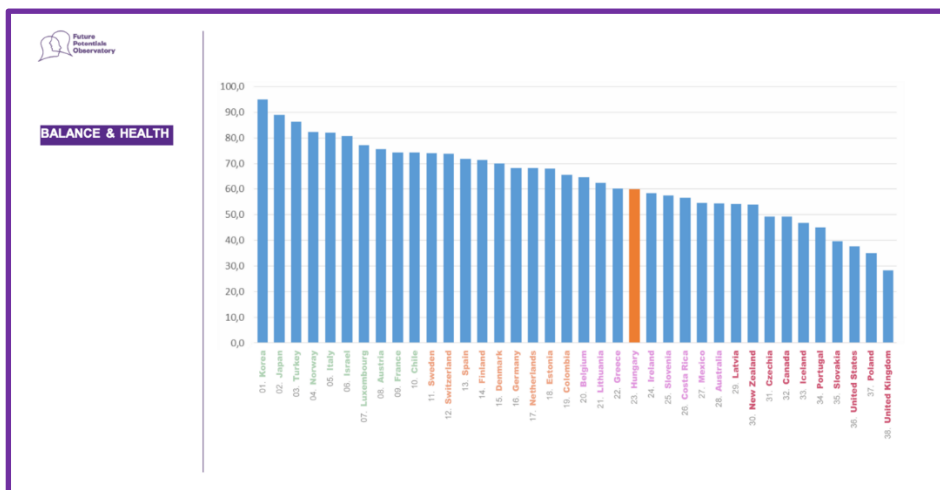


Source: Szántó, Aczél, Bóday & Harsányi (2023)

With the normative standard of Care and Generativity, there are some significant changes in the rankings of the OECD nations. Poland's ranking increases the most relative to the overall scores. The nation jumps from 28th overall to 7th on this standard. However, the largest change in ranking occurs with Israel, which drops from 2nd overall to 29th on this normative standard. Having a wide range of standards and indicators allows the FPI to capture these massive changes in performance while still providing a fair and holistic evaluation of each nation. Other

notable changes are Japan gaining 19 spots and Ireland dropping 19 spots (in terms of the relation of the overall FPI ranking to the ranking for Care and Generativity).

Figure 7: OECD country ranking according to Balance and Health normative standard (2022)



Source: Szántó, Aczél, Bóday & Harsányi (2023)

The final normative standard, Balance and Health, is attributed 10% of the combined weight of all the standards. With this measurement, there are drastically different rankings. Japan gains 33 spots (from 35th overall to 2nd) for this normative standard. The top spot is held by the only other eastern-Asian nation, South Korea. The scores (ranking) for Iceland and Latvia decline the most for this normative standard, dropping 32 and 23 places, respectively. This is the weakest score for Iceland, but the country's performance is well-rounded enough to ensure it the top spot despite performing poorly on certain indicators.

Conclusions

This paper has presented the newly created FPI. The index is based on the Future Potentials concept and the effort to operationalize the concept into a metric with some value and potential utility to researchers and policymakers alike. The first index was created for OECD countries using 2022 data and demonstrates the viability of the concept and index.

The concept we have applied is unique in that it creates a substantive normative framework that guides the determination of the architecture on which an entity, its Future Potential, and our measures are based. We then provide details about each

layer of the architecture in the context of the framework and how they are transformed into data-based metrics.

We show that the overall index is different from other indices and is robust because of its multi-layered (horizontal) plus multi-pillared (vertical) approach, creating a structure that incorporates weights for various categories, all of which indicate Future Potential. This allows researchers to explore inter-country differences and intra-country ones across various categories that are deemed important for determining a nation's Future Potential.

Policymakers in these countries can likewise use this index and sub-category rankings to determine where the policy focus is most appropriate going forward. Again, the FPI concept and index are different because we do not intend to help policymakers maximize a single objective like GDP or “happiness,” however defined today. Rather, the FPI may help policymakers focus on what they can do to improve their nation's outcomes today, and how they can sustain and improve the Future Potential of their nation in terms of the aspects they value themselves.

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Appendix 1 – Indicators associated with the Future Potential Index

1. Global Peace Index

(direction: negative, normative standard: Peace & Order, dimension: Safety)

Definition: The Global Peace Index is a composite index calculated using 23 qualitative and quantitative indicators and measures the state of peace across three domains: a) the level of Societal Safety and Security, b) the extent of Ongoing Domestic and International Conflict, c) the degree of Militarization.

Unit of Measure: Index (1 to 5)

Source of Data: Vision of Humanity, <https://www.visionofhumanity.org/public-release-data/>

2. Energy Import Dependency

(direction: negative, normative standard: Peace & Order, dimension: Safety)

Definition: Energy import dependency is estimated as energy use minus production, both measured in oil equivalents and divided by final energy consumption.

Unit of Measure: Percent of energy use

Source of Data: UN, <https://unstats.un.org/unsd/energystats/dataPortal/>

3. Ecological Balance

(direction: positive, normative standard: Peace & Order, dimension: Safety)

Definition: The ecological balance is the difference between a population’s ecological footprint and a country’s biocapacity. If a country's demand exceeds its biocapacity, it has an ecological deficit. If a country's biocapacity exceeds its ecological footprint, it has an ecological reserve.

Unit of Measure: Global hectare

Source of Data: Global Footprint Network, <http://data.footprintnetwork.org/#/exploreData>

4. Renewable Water Resources

(direction: positive, normative standard: Peace & Order, dimension: Assets)

Definition: "Total annual actual renewable water resources per inhabitant

$$[\text{Total renewable water resources per capita}] = [\text{Total renewable water resources}] * \frac{1000000}{[\text{Total population}]}$$

Unit of Measure: Cubic meter/inhabitant

Source of Data: FAO, https://tableau.apps.fao.org/views/ReviewDashboard-v1/country_dashboard?%3Aembed=y&%3AisGuestRedirectFromVizportal=y

5. Government Debt

(direction: negative, normative standard: Peace & Order, dimension: Assets)

Definition: General government debt-to-GDP ratio measures the gross debt of the general government as a percentage of GDP.

Unit of Measure: Percent of GDP

Source of Data: IMF, https://www.imf.org/external/datamapper/GG_DEBT_GDP@GDD/hun

6. Investment Rate

(direction: positive, normative standard: Peace & Order, dimension: Assets)

Definition: The investment rate is defined as gross investment (gross fixed capital formation) divided by GDP.

Unit of Measure: Percent of GDP

Source of Data: OECD, <https://stats.oecd.org/index.aspx?lang=en#>

7. Gross National Income (GNI)

(direction: positive, normative standard: Peace & Order, dimension: Functionality)

Definition: Gross National Income (GNI) is an indicator derived from GDP that takes into account primary income received from abroad and paid abroad. Unlike gross domestic product, it does not include the income associated with foreign ownership generated by foreign capital operating in the country or the income of foreign workers in a country, but it does include the income earned abroad by investors and workers in a country and the sum of the balance of subsidies received and taxes paid from abroad.

Unit of Measure: USD (current price and PPP)

Source of Data: OECD, <https://data.oecd.org/natincome/gross-national-income.htm>

8. ***Global Innovation Index***

(direction: positive, normative standard: Peace & Order, dimension: Functionality)

Definition: The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facet of innovation.

Unit of Measure: Score (0 to 100)

Source of Data: Global Innovation Index, <https://www.globalinnovationindex.org/analysis-indicator>

9. ***Internet Users as a Share of Individuals***

(direction: positive, normative standard: Peace & Order, dimension: Functionality)

Definition: Internet users as a share of individuals measures Internet uptake by the adult population who have used the Internet over the past three months prior to being surveyed.

Unit of Measure: Percent of individuals aged 16-74

Source of Data: Going Digital, <https://goingdigital.oecd.org/indicator/20>

10. ***Share of Single-Person Households***

(direction: negative, normative standard: Attachment & Community, dimension: Family)

Definition: Share of single-person households among all households.

Unit of Measure: Percent of all households

Source of Data: Eurostat, https://ec.europa.eu/eurostat/databrowser/view/ilc_lvph02/default/table?lang=en

11. ***Fertility Rate***

(direction: positive, normative standard: Attachment & Community, dimension: Family)

Definition: The total fertility rate is defined as the total number of children that would be born to each woman if she were to live to the end of her childbearing years and give birth to children in alignment with the prevailing age-specific fertility rates.

Unit of Measure: Number of children

Source of Data: OECD,

[#](https://stats.oecd.org/viewhtml.aspx?datasetcode=HEALTH_DEMR&lang=en)

12. ***Registered Voters Who Actually Voted***

(direction: positive, normative standard: Attachment & Community, dimension: Belonging)

Definition: The total number of votes cast (valid or invalid) divided by the number of names on the voter register, expressed as a percentage.

Parliamentary Elections: The parliamentary elections displayed in the voter turnout database are elections to the national legislative body of a country or territory. If the legislative body has two chambers, only the second (lower) chamber is included. If elections are carried out in two rounds (using the two-round system, TRS), only the second election round is included.

Unit of Measure: Percent

Source of Data: International Idea, <https://www.idea.int/data-tools/world-view/40?st=par#rep>

13. ***Self-reported Religiousness***

(direction: positive, normative standard: Attachment & Community, dimension: Belonging)

Definition: The share of those who reply that they are religious to the question. “Are you (1) A religious person, (2) Not a religious person, or (3) A convinced atheist?”

Unit of Measure: Percent

Source of Data: World Values Survey,

<https://www.worldvaluessurvey.org/WVSONline.jsp> ; <https://ess-search.nsd.no/CDW/ConceptVariables>

14. Average Wages

(direction: positive, normative standard: Care & Generativity, dimension: Material Advancement)

Definition: Average annual wages per full-time and full-year equivalent employee in the total economy. Average annual wages per full-time equivalent dependent employee are obtained by dividing the national-accounts-based total wage bill by the average number of employees in the total economy, which is then multiplied by the ratio of average usual weekly hours per full-time employee to average usually weekly hours for all employees.

Unit of Measure: USD (constant prices 2021 and PPPs)

Source of Data: OECD,

https://stats.oecd.org/viewhtml.aspx?datasetcode=AV_AN_WAGE&lang=en#

15. Labor Productivity

(direction: positive, normative standard: Care & Generativity, dimension: Material Advancement)

Definition: GDP per hour worked is a measure of labor productivity. This measures how efficiently labor input is combined with other factors of production and used in the production process. Labor input is defined as the total hours worked by all persons engaged in production. Labor productivity only partially reflects the productivity of labor in terms of the personal capacities of workers or the intensity of their efforts. The ratio between the output measure and the labor input depends to a large degree on the presence and/or use of other inputs (e.g., capital, intermediate inputs, technical, organizational, and efficiency change, economies of scale). This indicator is measured in USD (constant prices 2010 and PPPs) and indices.

Unit of Measure: USD (constant prices 2010 and PPPs)

Source of Data: OECD, <https://data.oecd.org/lprdy/gdp-per-hour-worked.htm#indicator-chart>

16. Gini-coefficient (Wealth)

(direction: negative, normative standard: Care & Generativity, dimension: Material Advancement)

Definition: The Gini coefficient is a measure of the inequality of the wealth distribution in a population. Higher values indicate a higher level of inequality.

Unit of Measure: 0-100

Source of Data: Credit Suisse, <https://www.credit-suisse.com/about-us/en/reports-research/global-wealth-report.html>

17. ***Employment Rate***

(direction: positive, normative standard: Care & Generativity, dimension: Self-Reliance)

Definition: Employment rates measure the extent to which available labor resources (people available to work) are being used. They are calculated as the ratio of the employed to the working-age population.

Unit of Measure: Percent of working-age population,

Source of Data: OECD, <https://data.oecd.org/emp/employment-rate.htm>

18. ***Old Age Dependency***

(direction: negative, normative standard: Care & Generativity, dimension: Self-Reliance)

Definition: The ratio of dependents older than 64 to the working-age population (15-64).

Unit of Measure: Percent of working-age population

Source of Data: WB, <https://data.worldbank.org/indicator/SP.POP.DPND.OL>

19. ***Population with Tertiary Education***

(direction: positive, normative standard: Care & Generativity, dimension: Self-Reliance)

Definition: Population with tertiary education is defined as those having completed the highest level of education. This includes both theoretical programs leading to advanced research or high-skill professions such as medicine and other vocational programs leading to the labor market. The measure is the percentage of the same-age population. As globalization and technology continue to reshape the needs of labor markets worldwide, the demand for individuals with a broader knowledge base and more specialized skills continues to rise.

Unit of Measure: 25–64-year-olds, % in same age group

Source of Data: OECD, <https://data.oecd.org/eduatt/adult-education-level.htm#indicator-chart>

20. **Life Expectancy**

(direction: positive, normative standard: Balance & Health, dimension: Life Prospects)

Definition: Life expectancy at birth is defined as how long, on average, a newborn can expect to live, if current death rates do not change.

Unit of Measure: Years

Source of Data: OECD, <https://data.oecd.org/healthstat/life-expectancy-at-birth.htm#indicator-chart>

21. **Alcohol Use Disorder**

(direction: negative, normative standard: Balance & Health, dimension: Life Prospects)

Definition: Alcohol dependence is defined by the International Classification of Diseases as the presence of three or more indicators of dependence for at least a month within the previous year. To allow comparisons between countries and over time, this metric is age-standardized.

Unit of Measure: Percent

Source of Data: Our world in data, <https://ourworldindata.org/grapher/share-with-alcohol-use-disorders?time=2019>

22. **Anti-depressant Usage**

(direction: negative, normative standard: Balance & Health, dimension: Life Prospects)

Definition: Antidepressant drug consumption in DDD. Defined daily dose (DDD) is the assumed average maintenance dose per day for a drug used for its main indication in adults.

Unit of measure: Defined daily dosage (DDD) per 1,000 people per day

Source of data: OECD, https://stats.oecd.org/viewhtml.aspx?datasetcode=HEALTH_PHMC

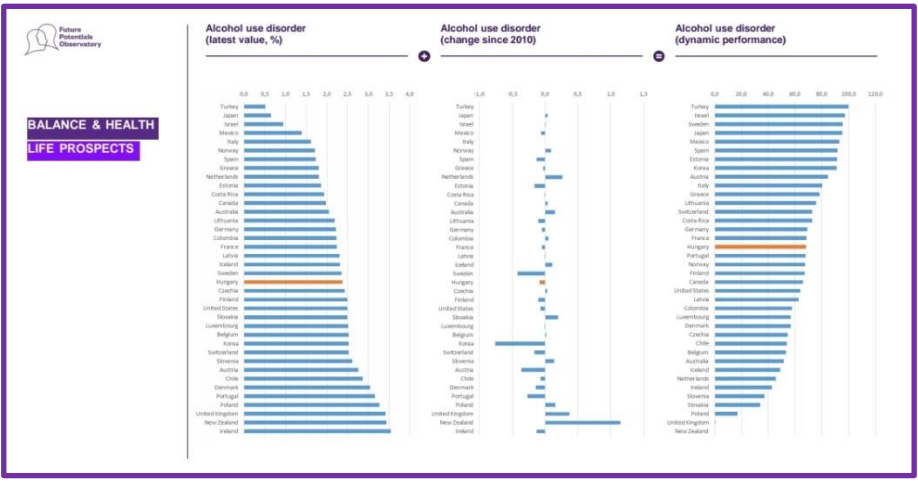
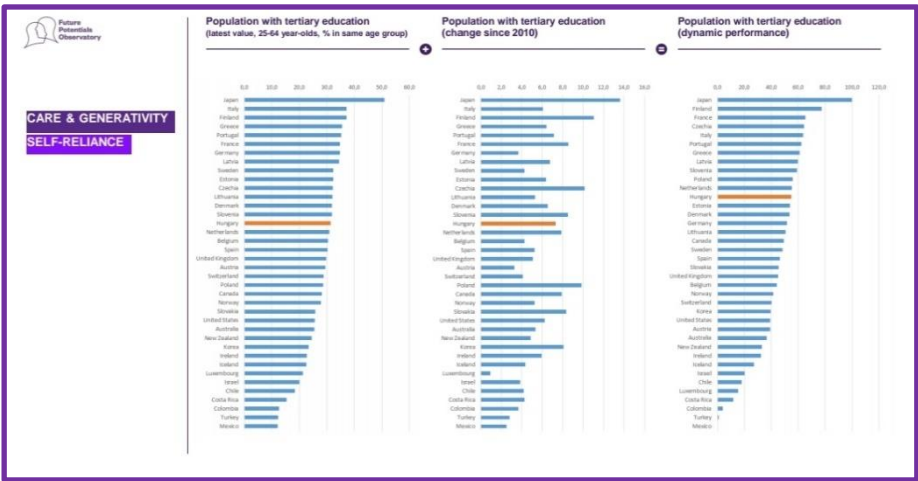
Appendix 2 – Weighting and Aggregation

Weights were defined on the basis of the conceptual framework and considering the importance of the normative standards. All indicators within each dimension were equally weighted.

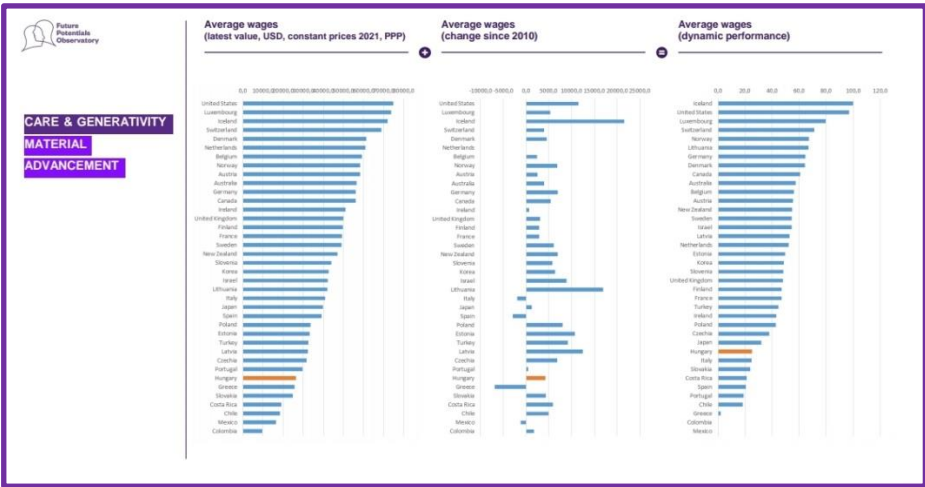
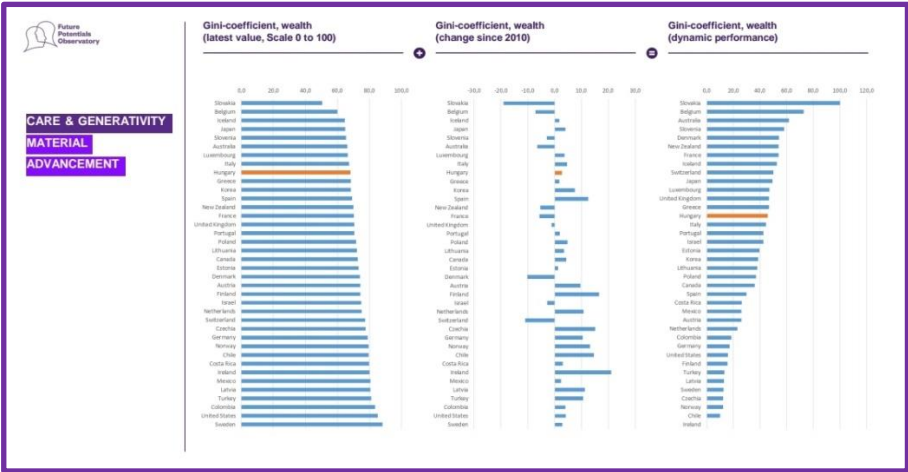
Normative Standards	Weight according to Normative Standards	Dimensions	Weight according to Dimensions	Number of Indicators within the Dimension	Weight according to Indicators
Peace & Order	40	Safety	13.3	3 Indicators	4.4
		Assets	13.3	3 Indicators	4.4
		Functionality	13.3	3 Indicators	4.4
Attachment & Community	30	Family	15	2 Indicators	7.5
		Belonging	15	2 Indicators	7.5
Care & Generativity	20	Material Advancement	10	3 Indicators	3.3
		Self-Reliance	10	3 Indicators	3.3
Balance & Health	10	Balance and Generativity	10	3 Indicators	3.3

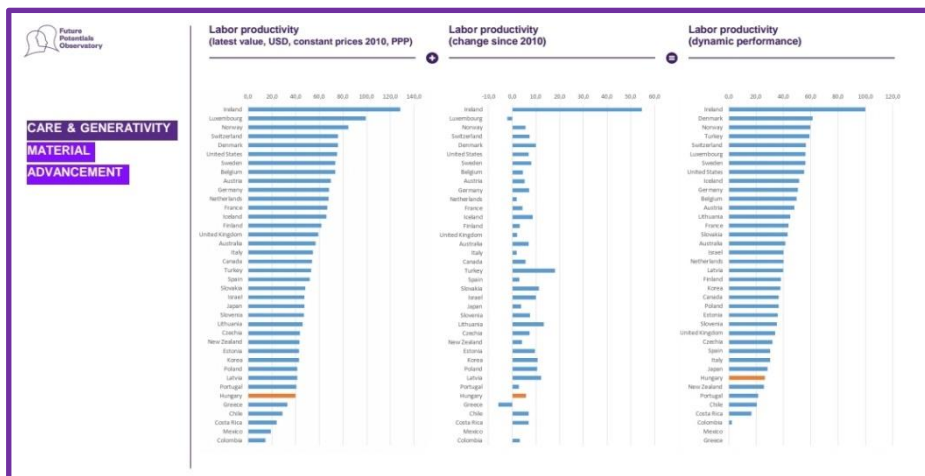
Aggregation was based on weights and normalized indicator values. Based on this, sub-indicators can also be defined (at the dimension and normative standard level). All composite indicators should be interpreted on a scale ranging from 0 to 100.

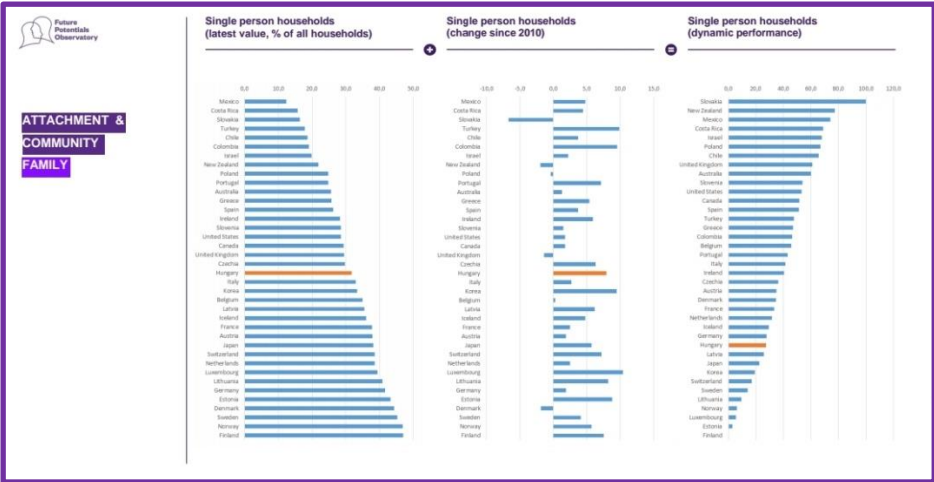
Also, the composite indicator at any given level can be built from the sub-indicators that comprise it. This greatly facilitates the analysis of the effect of the indicator composition.

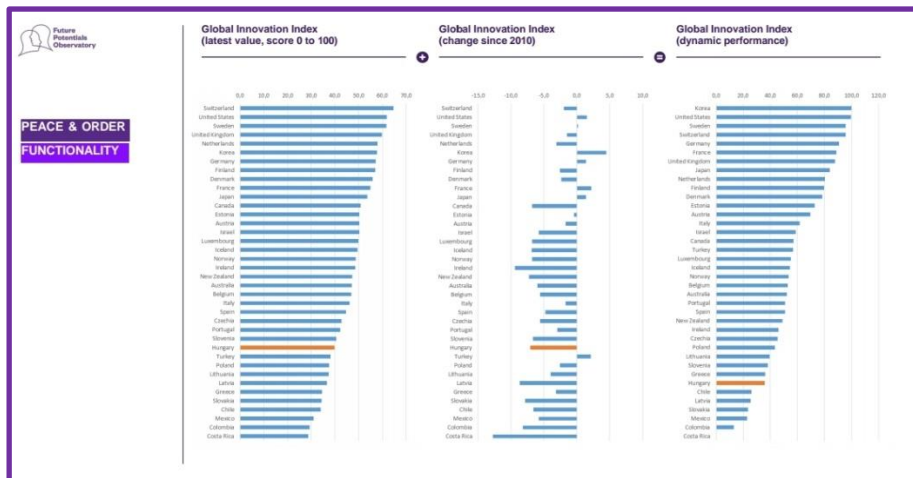


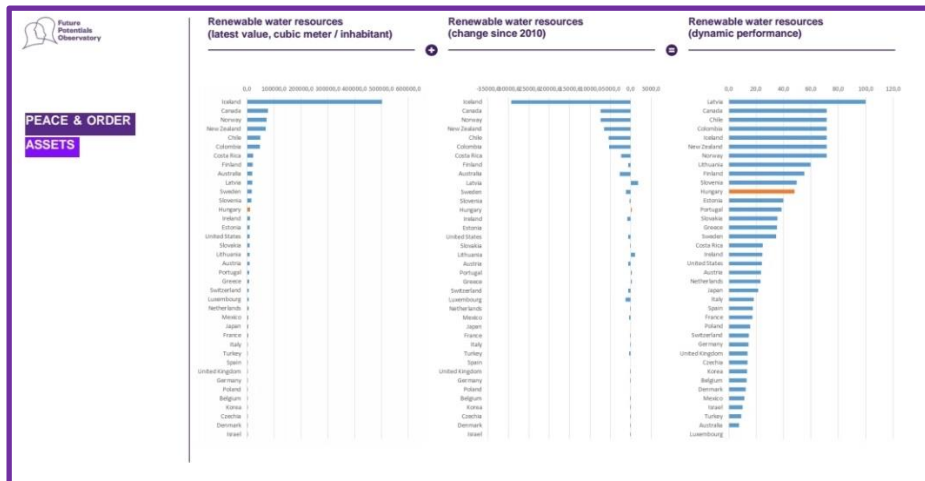
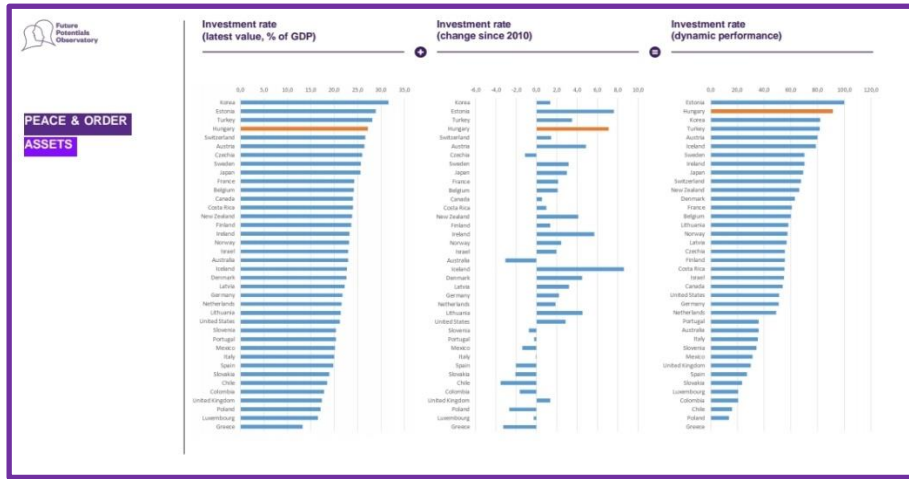


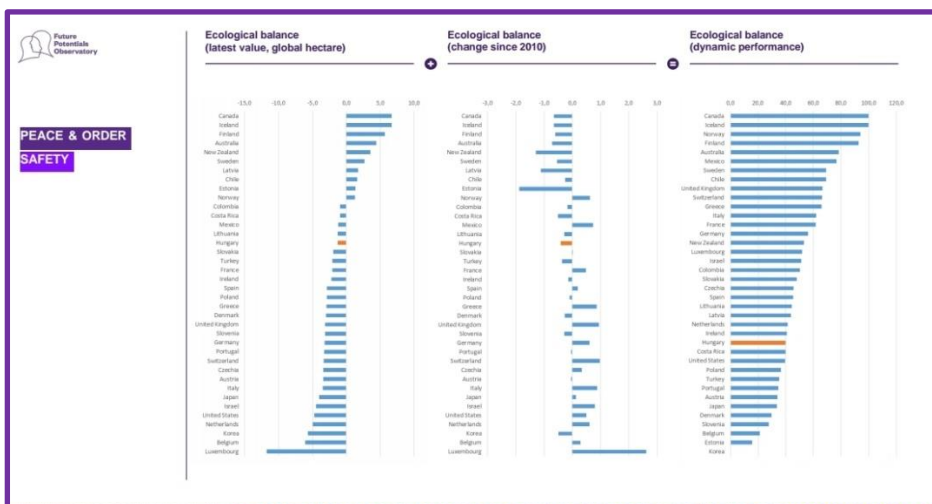
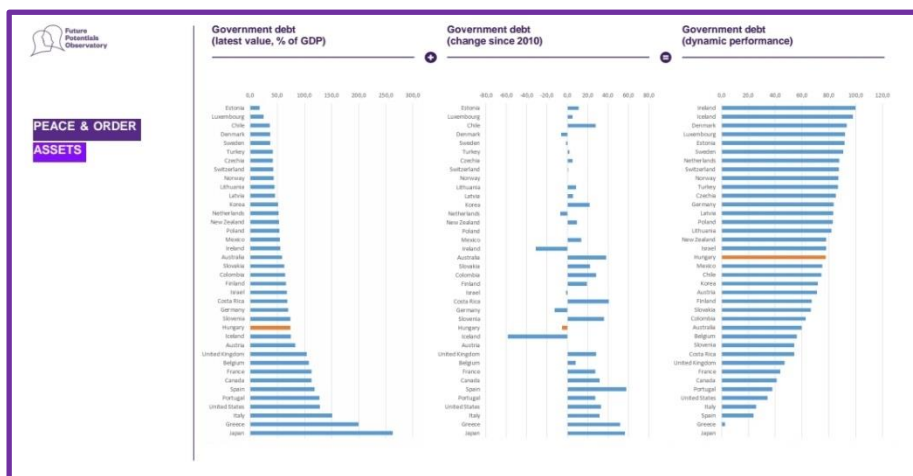


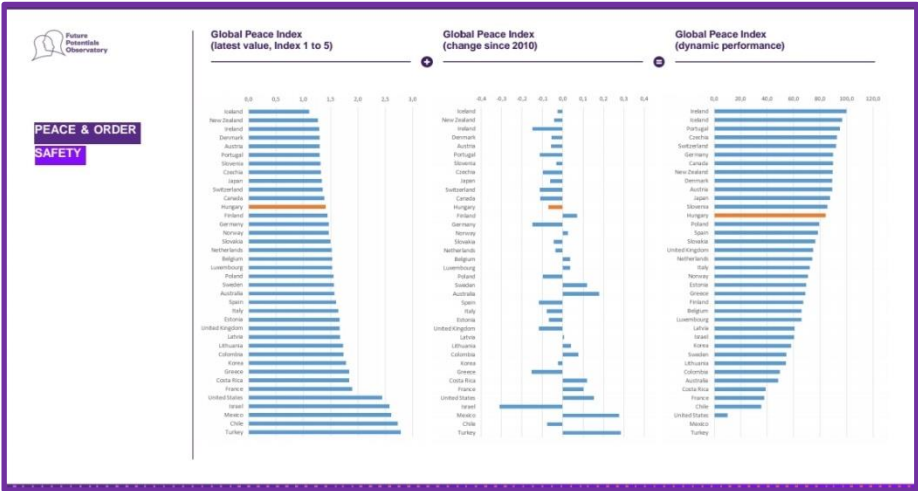
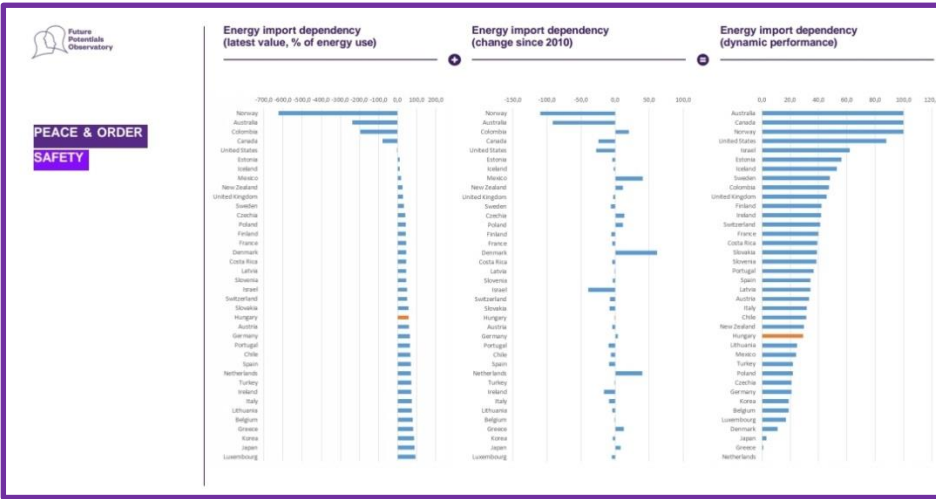












Methodological Concepts in Small States Research: Introducing the Geopolitical Power Index Framework

*Marta Zorko*¹

Abstract

In recent years, the study of small states has gained increasing attention in the field of international relations and geopolitics. These states, often overlooked in traditional analyses dominated by great powers, may play a significant role in shaping global affairs of a multipolar order. However, existing methodological frameworks for studying small states dynamics often fall short in capturing the complexities of their geopolitical behaviour and potential in their global power dynamics. To address this gap, this paper presents a methodological concept of the Geopolitical Power Index which was originally developed for Routledge Small States Series book (Car & Zorko, 2025). The main aim here is to test it across different disciplines and methodological approaches common for research in the area of geopolitics and International Relations. This paper debates on usage of indexation in geopolitical analysis and purpose of such indexes for future research. Unlike traditional power that primarily focus on military capabilities or economic strength, the GPI Framework considers a broader range of factors relevant to small states, including geographical positioning, diplomatic influence, digitalization readiness, and resilience to cyber threats. The GPI framework enables comparative analysis across different small states, allowing researchers to identify patterns and trends within diverse group of countries.

Key Words:

Geopolitical Power Index, GPI framework, small states, Routledge Small States Book Series

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Introduction

In the vast landscape of geopolitical theory, the spotlight has historically been dominated by the great powers (Mackinder, 1919; Spykman, 1942; Kennedy, 1989; Kissinger, 1994; Huntington, 1996; Brzezinski, 1997; Mearsheimer, 2001; Zakaria, 2008; Kagan, 2013; Allison, 2017). The name itself – Great Game – suggest that only big players are allowed to participate. The Great Game often include analysis on actions and reactions of great powers instead of focusing on balance of power in International Relations or even minor roles that small(er) states may play in international arena. This focus stems from the traditional view that these large, powerful states are the primary architects of international order and the main drivers of global political dynamics. Theories and models developed by prominent geopolitical scholars, Mackinder's Heartland Theory (1904; 1919) or Mahan's Sea Power concept (1890), predominantly emphasize the strategic maneuverers of large states. As a result, the geopolitical discourse has often overlooked the significant roles and capabilities of small states in shaping the global order.

The traditional neglect of small states can be attributed to several factors. Firstly, the classical understanding of power in geopolitics is rooted in tangible assets such as military strength, economic clout, and territorial expanse—metrics by which small states often fall short. This has led to a pervasive underestimation of their potential impact on international relations. Additionally, the realist school of thought, which has heavily influenced geopolitical theory, tends to prioritize the study of power politics among major states, reinforcing the marginalization of smaller nations. However, this traditional perspective is increasingly at odds with contemporary geopolitical realities. In an era marked by rapid technological advancements, globalization, and the proliferation of digital spaces, the influence of small states cannot be further ignored. Small states often possess unique strategic advantages, such as agility in diplomatic maneuvers (Luša & Picula, 2025), the ability to forge niche economic roles, and the capacity to act as mediators in international conflicts. Furthermore, the rise of cyber capabilities and digital diplomacy provides small states with new avenues to exert influence and alter geopolitical dynamics. For example, Estonia's pioneering efforts in e-governance and cybersecurity have positioned it as a global leader in digital innovation, despite its small size (Puusalu, 2025; Mikac et al, 2025). Similarly, countries like Malta (Grech & Debattista; 2025) and Iceland (Kos-Stanišić et al, 2025) have leveraged their strategic positions and specialized sectors to punch above their weight in international affairs. These examples underscore the need for a revised geopolitical framework that

acknowledges the significant, albeit different, forms of power potential wielded by small states.

While great powers undoubtedly play a crucial role in shaping the global order, the capabilities and contributions of small states must not be overlooked. By expanding the scope of geopolitical analysis to include the strategic behaviours and innovative approaches of small states, scholars and policymakers can gain a more comprehensive understanding of the contemporary international landscape. This shift in perspective is essential for recognizing the multifaceted nature of power in the 21st century and for fostering a more inclusive and accurate representation of global geopolitical dynamics and multipolar World. Bearing in mind multiple “new” subjects arisen, small states are also one of them, but in old traditional nation-state centric way. In the evolving landscape of global politics, the emergence of a multipolar world order is reshaping the dynamics of international relations both with new subjects as well as under new processes and in new unconventional dimensions.

This paper offers insights on already developed Geopolitical Power Index (Car & Zorko, 2025). The existing index combines different geopolitical factors and recognized “four key categories for analysis of geopolitical power – geographical power; social and political power; economy power; and military power. While first factor is rather easy to present, later three should be represented by combination of indexes and qualitative interpretation of existing data and indicators” (Car & Zorko, 2025: 4). Moreover, the fifth category in a form of cyber-power was tested as a stand-alone factor for future research through case-study oriented part of the book. But, following Nuno Morgado (2023: 15) re-thinking on power, stating that “power and potential are two different concepts” one must consider this power-divide as a factor for itself. As further explained (ibidem) “power depends on potential; i.e., power is “inferior” to potential in the sense that there will always be a waste of, or mismanagement of, resources in the process of their extraction and operationalization. Consequently, power is the revelation of potential in a particular space and time. It follows that if the assessment of potential is demanding, the full-scale apprehension of power before it is revealed in its course of action is virtually unachievable”. Power depends on potential, meaning that without the underlying resources or capacities, power cannot be exerted. However, power is considered “inferior” to potential because not all potential can be perfectly converted into power. In that sense, actual power potential, rather than power itself should be a scope for wider framework. There is also another dimension to consider in a form of the will to act. One might have both potential and power but without will to act there are no actual changes in power dynamics.

The role of small states in multipolar world

Traditionally overshadowed by great powers, small states are increasingly asserting their influence and redefining their roles on the global stage. This shift is driven by a combination of strategic adaptability, technological advancements, and the fluid nature of modern geopolitical alliances. The end of the Cold War and the subsequent decline of bipolarity marked the beginning of this transformation. The power vacuum left by the diminishing dominance of the United States and the Soviet Union created opportunities for new actors to emerge. In a multipolar world, power is distributed among multiple states, including emerging powers like China, India, and Brazil. This diffusion of power has inadvertently provided small states with more room to manoeuvre and assert their influence. Technological advancements, particularly in the realms of digitalization and cybersecurity, have further levelled the playing field. Small states like Estonia and Singapore have harnessed their technological prowess to become leaders in e-governance and digital innovation, setting global standards and influencing international policies. These states have demonstrated that size is no longer a determinant of influence; rather, it is the ability to innovate and adapt that defines a state's role in the contemporary world. Small states have also excelled in niche diplomacy and multilateral engagement. Countries such as Norway and Switzerland have established themselves as key mediators in international conflicts, leveraging their perceived neutrality and diplomatic agility. Moreover, the strategic importance of small states has been amplified by their geographic positions. States like Qatar and the UAE, situated in geopolitically critical regions, have used their resources and strategic locations to become pivotal players in regional politics. Their roles in energy markets, financial sectors, and as hubs for international dialogue further underscore their rising influence.

Small states are typically defined by factors such as their population size and geographical area. However, there is no universally accepted definition, and scholars often employ a range of criteria to classify states as “small” (Crowards, 2002; Maass, 2008; 2009). Research on small states encompasses a wide range of topics, including their security strategies, diplomatic behavior, economic policies, and regional dynamics (Goetschel, 1998; Ingebritsen et al., 2006; Thorhallsson & Wivel, 2006; Briguglio, 2016; Baldacchino & Wivel, 2020). Scholars examine how small states navigate the complexities of the international system, form alliances, and pursue their national interests in a world dominated by larger powers (O Tuathail et al., 1998; Walton, 2007; Grey & Sloan, 2014; Dittmer & Sharp, 2014; Morgado, 2021; Baldacchino, 2023). But often not from the perspective of small states ability to change or influence the change in global world order but from the perspective how

to cope in/with existing one. For instance, there is a book “Small States in World Politics: Explaining Foreign Policy Behavior” (2003) edited by Jeanne A.K. Hey explores the foreign policy strategies of small states in various regions of the world and provides theoretical frameworks for understanding their behaviour in the international arena. Furthermore, book “Geopolitics of the Knowledge-Based Economy” (2019) by Sami Moisio examines the geopolitical implications of the knowledge-based economy, including the role of digital technologies in shaping power dynamics and international relations. The book “Digital Diplomacy: Theory and Practice” (2015) edited by Corneliu Bjola and Marcus Holmes is a book that examines the evolving role of digital technologies in diplomacy and international relations, including the use of social media, digital platforms, and cyber tools by states and non-state actors but not focusing on small states in particular. Finally, “The Diplomacies of Small States: Between Vulnerability and Resilience” (2009) by Andrew F. Cooper, Timothy M. Shaw is an in-depth analysis of the various methods used by small states to overcome their vulnerabilities in the international arena.

The concept of “small states” remains one of the most elusive and debated topics in geopolitical discourse. Despite extensive research and numerous theoretical frameworks, there is still no universally accepted definition of what constitutes a small state. This lack of a clear definition presents significant challenges for scholars, policymakers, and international organizations attempting to understand and address the unique issues faced by these states and potential roles they could play in global order. At the core of this definitional ambiguity is the complexity and diversity of criteria used to categorize states as “small”. Traditionally, size has been measured in terms of geographical area and population. However, these metrics alone fail to capture the multifaceted nature of state power and influence. For instance, many small states possess substantial economic clout, advanced technological capabilities, or significant geopolitical importance due to their strategic locations. These factors complicate simplistic size-based classifications and highlight the need for a more nuanced understanding.

Different academic disciplines offer varied definitions, further complicating the discourse. In international relations, small states are often defined by their limited ability to influence global politics and their dependence on larger states for security and economic stability. In contrast, economists might classify small states based on economic indicators such as GDP or market size, while political scientists might focus on institutional capacity and governance structures.

Moreover, the relative nature of smallness means that a state's classification can change over time or depending on the context. A country considered small in one

regional context might be viewed differently in another. Moreover, the “smallness” is interconnected to power potential as well.

The lack of a standard definition has practical implications. It affects the design and implementation of policies tailored to small states, potentially leading to ineffective or inappropriate measures. International organizations, such as the United Nations or the World Bank, often have to adapt their programs and support mechanisms to fit a broad range of state sizes and conditions, which can dilute the effectiveness of their interventions. Without a clear understanding of what constitutes a small state, it is challenging to form cohesive groups or alliances that can effectively lobby for their collective interests on the global stage. This fragmentation can weaken the position of small states in international negotiations and forums, where unified action is often necessary to influence outcomes. This definitional ambiguity complicates scholarly research, policy formulation, and international cooperation, underscoring the need for a more comprehensive and flexible approach to understanding the unique characteristics and needs of small states.

Methodology, Indexation, Power Categories, and Intent to Measure

In international relations (IR), indexation refers to the process of ranking or measuring countries or regions based on specific criteria. It typically involves the creation of indices that help in comparing various aspects of state behaviour, development, and power dynamics usually reserved for geopolitics. These indices can be focused on economic, political, military, environmental, or societal factors and are used to facilitate analysis and policy decisions. In geopolitics, the methodological use of indexes involves a systematic approach to quantifying and comparing different dimensions of state power, stability, or potential influence in relation to ability to influence or change world order. Researchers and policymakers employ these indexes to organize complex data into measurable indicators, allowing for the comparison of states or regions across specific variables such as military strength, economic resilience, or governance quality. Methodologically, this process begins by selecting relevant metrics, collecting data from reliable sources (e.g., international organizations or national reports), and then aggregating this information into composite scores that reflect broader geopolitical trends. The construction of these indexes often follows statistical techniques like normalization or weighting to ensure that diverse variables are comparable and reflective of real-world conditions. Analysts then use these indices to draw correlations, identify patterns, or inform models of prediction in geopolitical behaviour, enhancing decision-making in international arena. However, rigorous attention is paid to the

choice of indicators and data sources to minimize biases and ensure that the index accurately captures the complexities of the global landscape. However the use of multiple indexes are often needed to ensure more objective perspective.

While indexes in geopolitics offer valuable insights, they also face significant shortcomings that can undermine their reliability and applicability. One major limitation is the potential for bias and subjectivity in the selection and weighting of indicators, which can skew results toward particular political or ideological perspectives. Data availability and quality pose another challenge, as not all countries consistently provide reliable or transparent data, leading to gaps or inaccuracies that can misrepresent a nation's true standing. And finally, when comparing the power potential new subjects such as non-state actors or small states are often neglected. Additionally, indexes often oversimplify complex geopolitical dynamics by reducing multifaceted issues like governance, security, or economic resilience to a single score or rank, masking important regional or contextual nuances. The comparability of different countries or regions can also be problematic, as diverse political, social, or economic systems may not be adequately captured by universal metrics. Moreover, some indices rely heavily on historical data, which may not reflect current realities or rapidly shifting geopolitical landscapes, reducing their relevance for contemporary analysis. Consequently, while indexes provide useful frameworks, their results must be interpreted cautiously and supplemented with deeper, more qualitative analyses.

Indexes play a crucial role in a variety of other geopolitical methods, providing data-driven insights that enhance the rigor and in-depth of analysis. These methods span areas like power projection, conflict forecasting, risk assessment, and diplomatic strategy, where indexes serve as foundational tools for evaluating state capacity, vulnerabilities, and global influence. Moreover, indexes often serve as basis for sophisticated trajectories such as Scenario Analysis of Future Science. The use of indexes in scenario analysis offers framework for examining potential future developments in international arena. By providing structured, data-driven representations of various dimensions of state power, stability, or influence, indexes allow analysts to build multiple plausible scenarios for how global dynamics may evolve. These scenarios, which are narratives of possible future states, help policymakers, businesses, and scholars anticipate risks, identify opportunities, and develop strategies to manage uncertainty in an increasingly interconnected world.

In scenario planning, analysts typically select a set of key drivers that are most likely to influence the future trajectory of geopolitical dynamics. These drivers are represented by index scores, which provide a baseline for understanding current conditions. Analysts then explore how changes in these index values might interact

to produce different outcomes. For instance, if an index shows a country's economic capacity declining while its military expenditure index rises, this could lead to a scenario where internal pressure grows due to economic hardship, but the government prioritizes military strength over social welfare, increasing the risk of conflict or authoritarianism. Scenario analysis can thus help policymakers identify early warning signs of instability or conflict by tracking shifts in index values over time.

One of the most useful aspects of using indexes in scenario analysis is their ability to incorporate a wide range of factors and uncertainties. Indexes can reflect everything from shifts in economic growth patterns to climate change vulnerability or changing diplomatic relationships. Despite its strengths, there are challenges to using indexes in scenario analysis. Over-reliance on quantitative data can lead to oversimplification of complex dynamics, particularly when social or cultural factors that are harder to quantify play critical roles. Furthermore, the accuracy and timeliness of data used in indexes can affect the quality of scenarios. Outdated or incomplete data may lead to scenarios that do not fully capture the evolving nature of geopolitical risks. To mitigate this, scenario analysis should complement index data with qualitative insights and expert judgment.

In future studies—also known as futures analysis or foresight—indexes play a critical role in exploring potential global developments and preparing for a wide range of future scenarios. Futures studies aim to anticipate long-term trends and uncertainties by identifying key drivers of change, assessing emerging risks, and generating alternative futures. The use of indexes in this field allows researchers and policymakers to ground their analyses in data-driven insights, creating more robust and plausible models of the future. Future studies is a constantly evolving field, and there is growing interest in developing new indexes to better capture emerging global trends. For instance, there is increasing recognition of the need to index the impact of artificial intelligence on geopolitics or the role of data sovereignty in global power structures. The development of new indexes to measure these emerging areas would provide futurists with more accurate tools for predicting the future geopolitical environment. Moreover, indexes are increasingly being integrated with big data and artificial intelligence (AI) technologies in future studies, offering new ways to model complex geopolitical dynamics. Predictive algorithms, combined with real-time data from indexes, can be used to simulate future scenarios with higher levels of accuracy and detail.

The use of GPI framework

The Geopolitical Power Index (GPI) with cyber-power component added (GPI+C) offers a comprehensive and multidimensional framework for assessing state power potential, making it an invaluable tool for policymakers, analysts, scholars, and businesses alike. However, it is oriented solely towards small state research since the area for shifts in power (potential) are bigger in case of new emerging actors in IR. Its applications and benefits extend across strategic planning, comparative analysis, risk assessment, diplomatic and economic engagement, academic research, business investment, and international cooperation.

Governments can utilize the GPI for strategic planning and policy formulation. By understanding their strengths and weaknesses across the five categories of power, states can craft informed national security strategies, economic policies, and diplomatic initiatives. For instance, a state with robust cyber capabilities but limited military power might prioritize cybersecurity measures and digital diplomacy to enhance its international standing and security.

The GPI framework also enables comparative analysis between states, providing a nuanced understanding of how different countries measure up across various dimensions of power. This is particularly useful for identifying potential allies and competitors. Small states can compare their cyberpower and economic power with those of other small states or larger nations to find areas where they can collaborate or compete effectively. Analysts can employ the GPI for risk assessment and management, evaluating a state's performance in each category to identify potential threats such as economic dependency on a single resource, demographic challenges, or cybersecurity weaknesses. This comprehensive risk assessment facilitates better-prepared contingency plans and more resilient national strategies. The Index is particularly valuable for small states, which often face unique challenges and opportunities. By using it for strategic purposes, small states can identify their niche strengths, such as advanced cyber capabilities or strategic geographical positions, and leverage these in international forums.

Diplomatic missions and international organizations can leverage the Index to enhance their engagement strategies. Understanding a country's geopolitical power profile aids in crafting targeted diplomatic efforts and economic partnerships. For example, knowing that a particular state excels in economic power but lacks cyber capabilities might encourage investment in joint technological initiatives or cybersecurity collaborations. International organizations and coalitions can use it to identify areas for cooperation and capacity-building. Initiatives aimed at improving

cybersecurity in states with strong economic power but weak cyber defences can enhance collective security and foster international collaboration.

Beyond practical applications, the Geopolitical Power Index contributes to geopolitical theory and the measurement of power potential. It offers a holistic approach to understanding state power, moving beyond traditional metrics focused solely on military and economic strength. By incorporating dimensions like cyberpower reflects the complexities of modern territoriality and envisions of the place/space changes. This multidimensional perspective enriches theoretical discussions and provides a more accurate tool for measuring and comparing state power in an increasingly interconnected and digital world. This Index provides a structured methodology for research. Scholars and students of international relations and geopolitical studies can use it to conduct detailed case studies, comparative research, and theoretical analyses. Academic research can also benefit from the GPI Framework by providing a structured methodology for analysing the complex interactions between different dimensions of state power.

Conclusion

The study of small states in the context of geopolitics and international relations remains an essential yet complex field, underscored by the lack of a universally accepted definition. This complexity stems from the diverse criteria and multifaceted nature of state power and influence, which traditional metrics such as geographical size and population fail to capture adequately. As we have explored and presented in Routledge Small States Series book, the Geopolitical Power Index offers a nuanced framework for understanding and measuring the power of states, integrating categories like geographical power, social and political power, economic power, military power, and cyberpower. This comprehensive approach allows for a more accurate assessment of a state's capabilities and strategic importance, especially in a world increasingly influenced by digitalization and cyber dynamics.

The GPI's inclusion of cyberpower as a distinct category highlights the increasing importance of digital capabilities in the contemporary geopolitical landscape. As traditional notions of power are challenged by technological advancements, the ability to project influence in cyberspace becomes a critical component of national power (but not exclusively military power). This shift underscores the need for small states to invest in digital infrastructure and cybersecurity to enhance their resilience and strategic positioning.

The evolving geopolitical landscape, characterized by rapid digitalization and changing power dynamics, calls for innovative approaches to better understand and

navigate the complexities of contemporary international relations. As small states continue to play critical roles in regional and global contexts, their study will remain crucial for advancing geopolitical theory and practice, ultimately contributing to a more nuanced and effective engagement with the diverse new actors shaping the multipolar world order.

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Multidimensional quantitative methods for improving world-system analysis:

Examining mobility across periphery-semi periphery-core structure

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Abstract

Even though during the last five decades world-system framework has experienced an enormous development, as it has provided a wide range of analytical categories for spatiotemporal processes from historical sociology gaze, it might not have deepened enough into its empirical dimension beyond historiographic resources. Regarding this fact, one of its main axes as three tier structure of core-semi periphery-periphery and its features have been well described and discussed from the beginning. However, empirical quantitative methodology for determining reshaping and mobility along this structure has been barely treated in comparison with the employment of qualitative and observational techniques.

To fill this relative absence is fundamental not only to study mechanisms for upgrade or downgrade mobility during long wave periods but also because of the importance of providing tools for researching systemic transformations in a controversial region such as the semi periphery. This last one is especially important in relation with this sort of methodology because of the ambiguity that this category sometimes have showed in different analysis as well as the structural relevance that it has for (dis)stabilizing world-system.

In this sense, this paper seeks two main goals. Firstly, to collect all the previously described quantitative methodologies for world-system mobility analysis. Secondly using primary sources and data, to put them into practice and to combine their different tools in order to boost the future outcomes from world-system theory.

Key words:

world systems, semi periphery, mobility, methodology, comparison

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Introduction

The well-known tripartite structure of the capitalist world-economy, based on the development of the dialectic between the core and the periphery, having as a synthetic result the historical-spatial conformation of the semi-periphery; has been shown as a category of analytical and explanatory potential for long processes from the sphere of historical sociology in general (Wallerstein 1974, 1976; Hopkins and Wallerstein 1977; Radice 2009; Karataşlı 2017) and in an accessory way offering multiple tools and background for other disciplines such as international relations, geopolitics and political economy. Within this framework, despite initial criticism of the issue of ambiguity surrounding the ontological delimitation of the semi periphery category (Aymard 1985), subsequent and more recent works have been able to provide a series of definitions (Arrighi and Drangel 1986; Chase-Dunn 1988; Terlouw 1992; Radice 2009) provide more detailed and solid basis on the role of the semi-periphery, as well as everything related to upward and downward mobility within this social structure. However, precisely within this epistemological plurality, a methodological plurality has also developed when it comes to specifying the hierarchy, antagonisms and the variables that govern them within the world-economy. In short, proposals have been made by different authors who, beyond the diversity in the modification of algorithms or quantitative techniques to obtain results with good statistical quality, do not coincide at all in the inclusion criteria of variables that simply have to do with the differential spatial distribution of income in the world system, with the international division of labor throughout the core and the periphery, with the inclusion of social dimensions that characterize local labor forces and with the capacity of national states to develop coercive power and legal-administrative influence on a global scale to maintain or improve their position within the tripartite structure (Babones 2005).

Taking this background into consideration, the possibility of determining to what extent this relationship between the use of a certain methodology based on the formulated epistemology influences the determination of a particular configuration of the world system, appears relevant. Although the main methodologies both at a qualitative level (Wallerstein 1974, Braudel 1992, Frank 2011) and the previously mentioned quantitative ones are well known and have been largely compiled (Babones 2005; Clark and Beckfield 2009; Barbones and Chase-Dunn 2012). This compilation has not been accompanied by a comparison that makes it possible to analyze the differential results when reflecting changes in mobility within the structure. Considering

this fact, this article precisely aims to be able to concretely assess the precision and sensitivity of the main methodologies developed under the systemic theoretical framework. Under a total sample of 105 States, from the period from 1972 to 2022, which makes it possible to obtain all the necessary data and variables according to each methodology, it is proposed to apply four of the main most used techniques at the same time through which a relationship of the upward and downward mobilities that occurred during the last long wave of expansion and contraction of the capitalist world-economy is obtained. To achieve this objective, the article will be organized through the following structure. Firstly, the main axioms and premises will be briefly explained, both those previously tested at an empirical level and those that are purely theoretical, about the mobility that has occurred since the rise of the world-economy until today to understand and explain the mechanisms of mobility in the results obtained in the analysis. After this, the next section details the more purely methodological aspects and discussions to make understandable the previous works that have discussed the inclusion criteria for the variables, the different foundations of the algorithms, the limitations when establishing the size sample, the methods to compare the mobility data obtained, etc. Subsequently, the results obtained with each of the four methodologies will be presented, their comparison will be made, and the potential and limitations will be discussed based on the analyzed sample itself. Finally, in the conclusions, it will be fully established how the main methodologies present today within the world systems perspective make it possible to obtain a complete scheme of the transformations in long-term global power relations, as well as the possible developments, from this, in future academic works.

Hypotheses and foundations of mobility within the capitalist world-economy

Although mobility within the capitalist world-economy can largely be conceived as the rise from the periphery to the core or vice versa, passing through the semi-periphery, it must be taken into consideration that other jobs that have precisely focused on production of multivariate quantitative methodologies (Nemeth and Smith 1985; Van Rossem 1996; Mahutga and Smith 2011; Jacinto 2023) have established new divisions within each of the parts with different degrees of integration in each of them. In any case, these new tones also appear to be relevant when analyzing the mobility of nation-states. Once we have taken this clarification into account, we must go to the

basic root that explains the transformations in the core-periphery dialectic. This means understanding the Marxist expression of capital accumulation (M-C-M') not simply as a social relationship, but as a historical-spatial process in which the production of mercantile equivalents corresponds to systemic material expansion (M-C) and contraction has to do with obtaining surplus value as profit (C-M') (Arrighi 1994). It is precisely after these cycles that the reorganization of the role that capital and States acquire, with their agency capacities, in the international division of labor occurs. Although the ultimate foundation of the system, unequal exchange, is maintained and therefore direct mobility between periphery and core in a single cycle is very complicated, the semi-peripheries are presented as the regions with the most upward and downward mobility for different reasons. Even despite this general characterization, there is no consensus on the unique particularities of semi-peripheries. Since there are no specific productive activities that differentiate the semi-peripheries because these will always be relational to the development of historical capitalism (Morales-Ruvalcaba 2013). However, attempts have been made to conceptualize them through other peculiarities such as the mix of core and periphery activities, with an intermediate geographical position between the core and periphery and the value chains between them (Arrighi and Drangel 1986) and with sufficient balances. in these nodes to avoid falling towards the periphery (Radice 2009, Mahutga 2012); the difference in the ways of organizing production, the diversity of public policies and strategies by institutions to maintain stability in contraction cycles, the intermediate levels of intensive capital (Chase-Dunn 1988), the strong control of the political structures of the national elites compared to those of the peripheries, the character of the core but with an internal periphery that is capable of exploiting (Babones 2013), etc. They do roughly compose the characteristics of the semi-peripheries according to most of the authors, unlike others, such as the level of income distribution or the destabilizing or stabilizing nature between cycle transitions, which is subjected to further questioning (Terlouw 1992).

Beyond the innovative base on which the semi-peripheries are based to achieve upward mobility, the maintenance of their role or even the dispute for hegemony at the core; the strategies they can follow to achieve this are very diverse, being able to distinguish mainly three (Chase-Dunn 1988): those of evolutionary potential, maintaining adaptation and adaptability between the innovation of economic, political and cultural practices; that of the “advantage of backwardness”, through which a given, although with less intensive technologies and capital, can exceed the rate of profit of a given core activity

through higher rates of exploitation of the labor force combined with organizations more effective productive structures and, finally, the strategy of uneven and combined development, through the incorporation of new processes and practices brought from the core, while maintaining structures typical of peripheral underdevelopment. However, if we look at the strategy of the semi-peripheries not with respect to their interior, but rather based on their relationship with the core and the hegemon, we could differentiate two possible results and, therefore, two types of semi-peripheries results. of this mobility (Arrighi 1990; Bornschier and Trezzini 1997). On the one hand, those that fight against exclusion, seeking their integration through the transfer of core activities and their subordination to it; and on the other hand, those that fight against exploitation through partial disconnection, seeking a direct dispute of hegemony (Bradshaw and Lynn 1994). Both can result in the opposite effect and produce downward mobility since they can either increase dependence on the core and reduce the decision-making capacity for future new strategies and innovations or hinder access to fixed capital and technology to be able to compete at the same time. even with the core. These semi-peripheral processes are usually determined in turn by the historical dependence on the export income of raw materials, fostering interclass conflicts that hinder upward mobility, unlike others where this social composition does not occur and the process of substitution by import is shorter (Bornschier and Trezzini 1997).

Regarding the most recent mobility processes, these have been characterized by the capacity to attract medium-value manufacturing activities (Arrighi and Drangel 1986). Although this process would have led to significant mobility during the 1970s and 1980s through dependent development with rapid economic growth, such as in Southeast Asia, today it would have been much more limited (Clark, 2010), due to the great stabilization in the unequal exchange that the current composition of the semi-periphery would have achieved (Mielants 2012) despite the greater capacity that exists between the three levels to transfer capital, technology and labor force (Mahutga and Smith 2011). Other authors, on the contrary, affirm that precisely the great territorial conflicts and wars at the end of the 20th century are examples of this reconfiguration, of new mobility processes during the contraction cycle (Bergesen 1992).

Methods for determining hierarchy and mobility

Babones (2005) fundamentally distinguishes three main quantitative methodological trends when analyzing hierarchies in the world-economy: those that establish network analysis, with multiple types of dimensions, to determine the level of connection between the different States to from there infer its position; those that carry out a conceptualization of the structure in a non-compartmentalized manner in a non-discrete manner, but rather as a continuous whole through indexing and normalization of multiple variables; and finally, the third and one of the first to be developed (Arrighi and Drangel 1986), which establishes a discrete distribution based on the income distribution as an indirect measure, not to infer with great precision, but to determine changes in mobility and power. incorporate a voluminous sample due to the ease in obtaining data. Applying each of them, we will carry out the comparative analysis. Furthermore, we will add a fourth considering one more element of an epistemological and methodological nature. This consists of carrying out another analysis from the continuous perspective but without including variables that have to do with the coercive capacity, diplomatic and military influence of the States (Terlouw 1992; Van Rossem 1996; Kentor 2014) and without applying indexation but rather factorization. and blockmodeling based on the position in global commodity chains.

For the first type, network analysis, after discrete analysis by income, is one of the methods that has been most used (Nemeth and Smith 1985; Kick 1987; Smith and White 1992; Clark and Beckfield 2009, Boyd et al 2010, Hyacinth 2023). The main foundation of these methodologies is the establishment of connections between States based on international trade data, regarding imports and exports. It is based on the premise that the States closest to the core will have a greater number of connections while the more peripheral ones will be more disconnected. Through different network analysis algorithms that factor and simplify the matrix obtained, a range of scores between 0 and 1 is generated to determine the position. In this case, we will apply the SVD/MINRES algorithm, based on the State-by-State import data matrix, which has been shown to be effective in establishing these hierarchies (Boyd et al 2010, Jacinto 2023). The statistics, in this case, have been obtained from trade data from the International Monetary Fund.

Regarding the second method, based mainly on the proposal of Kentor (2014), an index will be established that will serve as continuous stratification based on three dimensions: economic power, coercive power and global dependence. The dimension of economic power will be determined from four

variables: capital intensity (indirectly through GDP per capita), the size of production based on GDP, the volume of trade through the size of exports and finally, control over global capital through a ratio between the investment of national capital outside the country and foreign direct investment. For the dimension of military power, military spending, arms exports and global military control will be included through a ratio between the volume of arms exports and imports. Thirdly, regarding global dependence, the degree of diversification of the type of exports will be considered, the dependence on foreign capital through the volume of debt with respect to GDP and military dependence as a ratio between arms imports with respect to GDP. All these variables, obtained through the World Bank database, will be standardized through a normal distribution to obtain Z scores that can be grouped to form the index.

For the third case, the distribution of income in relation to the population (Arrighi and Drangel 1986; Babones 2005), data on the total populations of the States and their GDP per capita will also be collected. These, to facilitate graphical distribution, will be converted into decimal logarithms so that the set of accumulated populations will be represented as dependent variables with respect to it. The relative positions of the concavities will group each of the structural parts of the world-economy. To better interpret the distribution in the histogram, the function will be transformed using the Kernel Gaussian method, smoothing the lines. Furthermore, to determine the limits of each region between the minimum and maximum of the concavities, the method of Korzeniewicz and Martin (1994) will be applied. Both variables, in this method, will also be compiled from the World Bank databases.

Lastly, for continuous clustering, the methodology proposed by Mahutga and Smith (2011) is used. This is based on the premise of the definition of global commodity chains within the world system (Gereffi and Korzeniewicz 1993; Bunker and Ciccantell, 2005; Fernández-Stark and Gereffi 2019), which understands that the differential spatialization of commercial productive nodes is fundamental to understanding how exchange is generated. unequal based on competitive advantages and innovations, leading to the rise or fall within the structure. Within this hypothesis, five sets of chains are taken as representative: high-tech and heavy industry, sophisticated extraction goods, simple extraction, low value/light industry, and animal products and bioproducts. Based on these data, obtained from the UN COMATRADE Database, a hierarchical clustering is developed along two extracted factors

through Principal Component Analysis (PCA) employing hierarchical algorithm.

The total sample of 105 States in a distributed manner is applied to the period from 1972 to 2022. This long wave period allows for finding a balance between including a time frame that includes two economic crises to be able to assess mobility or absence of it. Furthermore, methodologically, data from this large sample is available within it for all the variables necessary in each of the four methods to be applied.

Results and discussion

Firstly, in order to evaluate the compositions in the three dimensions of the structure, we will apply to the set of distributions of each methodology, based on their normality, the T test for the means of the three parts of the structure established from deciles, although in the case of clustering of commercial chains (Chart 3.1 and Chart 3.2) they are grouped into three despite obtaining six groups as the optimal distribution (Mahutga and Smith 2011). Observing the results, given the total statistical significance obtained in each case, the analysis of commercial networks using the SVD/MINRES algorithm (Chart 1.1 and Chart 1.2), appears to be the most sensitive when it comes to establishing significant changes in the total of the composition of each part, highlighting above all the change appreciated only by this between the periphery and the semi-periphery between 1997 and 2022 and the greater significance that it gives to those that occurred between the semi-periphery and the core for the same period. Next, partly unexpected, is that the clustering method (Chart 3.1 and 3.2) and the discrete income/population distribution (Chart 2) show practically the same sensitivity and results. The only difference between these is in the periphery-semi periphery changes from 1972 to 1997 and the intra semi periphery mobility between 1997 and 2022. Finally, the least sensitive, although like the latter two, is the continuous analysis of economic and coercive power (Table 2), which does not reach the highest level of statistical significance $p < 0.01$ in any period and for any part of the world economy.

	1972-1997			1997-2022		
Trade network analysis	PS*	H.H**	SC*	PS*	H.H**	SC**
Economic and coercive continuum	P.S.	H.H*	S.C.	P.S.	H.H*	SC*
Income/population discrete distribution	PS*	H.H**	SC*	P.S.	H.H*	SC*
Continuum Clustering Commodity Chains	P.S.	H.H*	S.C.	P.S.	H.H**	SC*

Table 1. Statistical significance for changes in parts from Student's T test (: $p < 0.05$; **: $p < 0.01$).
Source: author.*

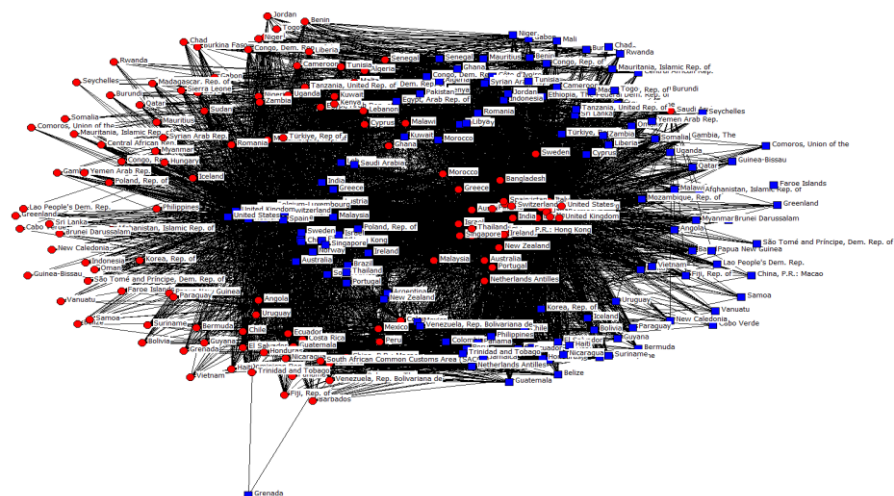


Chart 1.1. Trade network after SVD/MINRES analysis for import/export coreness in 1972.
Source: own elaboration based on IMF data

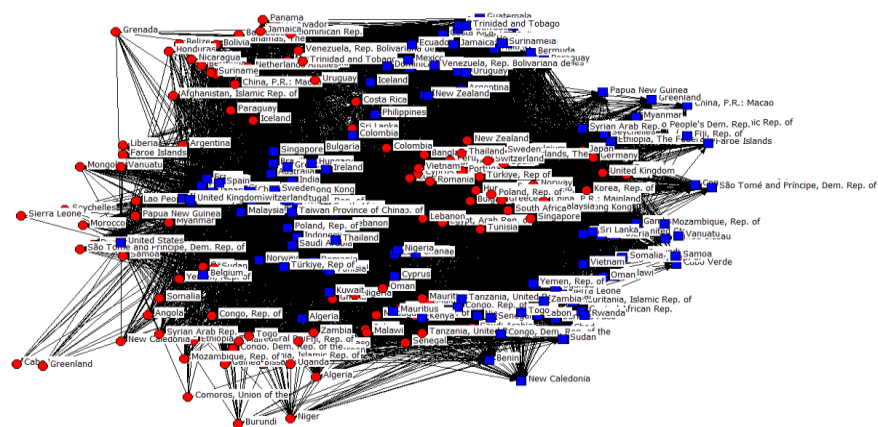


Chart 1.2. Trade network after SVD/MINRES analysis for import/export coreness in 2022.
Source: elaboration

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world-system analysis*

	1972	1997	2022
1	United States (5.71; 5.12; 0.88)	United States (5.11; 4.79; 0.92)	United States (5.98; 4.8; 0.07)
2	United Kingdom (6.41; 0.27; 0.55)	Japan (3.18; -0.33; 1.29)	China (3.15; 0.62; 0.33)
3	France (2.26; 0.23; 0.24)	Germany (2.44; -0.12; 0.72)	Germany (2.93; -0.32; 0.48)
4	Germany (1.77; -0.17; 0.70)	United Kingdom (2.14; -0.08; 0.69)	United Kingdom (2.47; -0.28; 0.25)
5	Italy (1.26; -0.46; -0.22)	France (1.82; 0.10; 0.49)	France (2.14; -0.08; 0.07)
6	Japan (1.08; -0.50; 1.44)	Netherlands (1.62; -0.67; 0.21)	Japan (2.13; -0.60; 0.80)
7	Belgium (1.03; -0.51; -0.25)	Italy (1.45; -0.44; -0.06)	Netherlands (1.91; -0.76; -1.91)
8	Australia (0.99; -0.59; -1.54)	China (1.43; -0.05; -0.40)	Italy (1.78; -0.35; -0.30)
9	Sweden (0.88; -0.61; -0.14)	Canada (1.11; -0.33; -0.12)	South Korea (1.77; -0.57; 0.63)
10	China (0.55; -0.55; -1.33)	Australia (0.83; -0.65; 0.25)	Spain (1.59; -0.54; -0.28)
...			
50	Suriname (-0.94; -1.11; -0.89)	Costa Rica (-0.78; -0.73; 0.74)	Thailand (0.49; -0.75; 0.95)
51	South Korea (-0.95; -0.55; -0.22)	Jamaica (-0.80; -0.73; -1.71)	Indonesia (0.47; -0.74; -0.72)
52	Türkiye (-0.96; -0.44; -1.44)	Thailand (-0.83; -0.70; 1.56)	South Africa (0.41; -0.75; 0.28)

53	Malaysia (-0.97; -0.69; -1.12)	Botswana (-0.84; -0.75; -2.06)	Colombia (0.38; -0.74; 0.46)
54	Costa Rica (-0.98; -0.71; -1.88)	Dominican Republic (-0.85; -1.05; -0.8)	Peru (0.38; -0.76; -1.53)
55	Fiji (-0.98; -0.99; -1.44)	India (-0.88; -0.60; -1.24)	Vietnam (0.37; -0.77; 0.71)
56	Algeria (-0.99; -0.59; -1.00)	Tunisia (-0.89; -0.82; -1.24)	Suriname (0.36; -0.77; 1.67)
57	Colombia (-0.99; -0.51; -0.88)	Ecuador (-0.90; -0.88; -0.52)	Botswana (0.35; -0.77; -2.21)
58	Iraq (-1.01; -0.78; -2.12)	Suriname (-0.91; -0.73; -2.25)	Ecuador (0.33; -0.76; -1.12)
59	Tunisia (-1.02; -0.88; -0.81)	Morocco (-0.92; -0.71; -0.70)	Algeria (0.32; -0.74; -2.23)
...			
96	Mauritania (-1.11; -0.62; -1.33)	Central African Republic (-1.04; -0.73; -0.48)	Malawi (0.14; -0.75; -0.85)
97	Senegal (-1.12; -0.63; -1.72)	Niger (-1.04; -0.73; -0.55)	Mozambique (0.13; -0.72; 2.14)
98	Solomon Islands (-1.17; -0.59; -1.55)	Malawi (-1.04; -0.68; -1.22)	Gambia (0.13; -0.77; -0.80)
99	Indonesia (-1.18; -0.68; 0.8)	Rwanda (-1.05; -0.68; -0.83)	Chad (0.12; -0.69; -1.98)
100	Niger (-1.21; -0.68; -2.28)	Cambodia (-1.05; -0.69; -0.94)	Guinea Bissau (0.12; -0.79; -1.24)
101	Chad (1.22; -0.60; -1.51)	Nepal (-1.05; -0.70; -1.36)	Niger (0.11; -0.77; -1.43)

102	Gambia (-1.23; -0.63; 0.21)	Chad (-1.06; -0.73; 1.51)	Somalia (0.11; -0.81; -0.83)
103	Central African Republic (-1.23; -0.67; 0.51)	Myanmar (-1.06; -0.67; -0.95)	Sierra Leone (0.10; -0.77; -1.52)
104	Cambodia (-1.24; -0.67; -2.1)	Sierra Leone (-1.07; -0.91; 0.71)	Burundi (0.09; -0.77; -1.66)
105	Haiti (-1.25; -0.68; -1.99)	Ethiopia (-1.07; -0.92; -0.33)	Central African Republic (0.09; -0.79; 1.02)

Table 2. Z scores result for continuum multivariate analysis [State (economic power; military power; global dependence)]. Source: Author

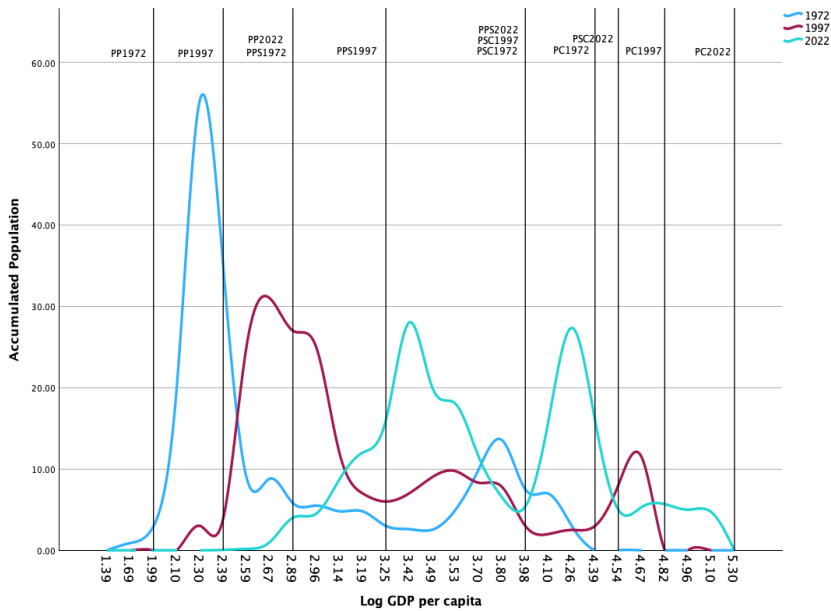


Chart 2. Income/Accumulated population distribution for 1972, 1997 and 2022. Source: own elaboration

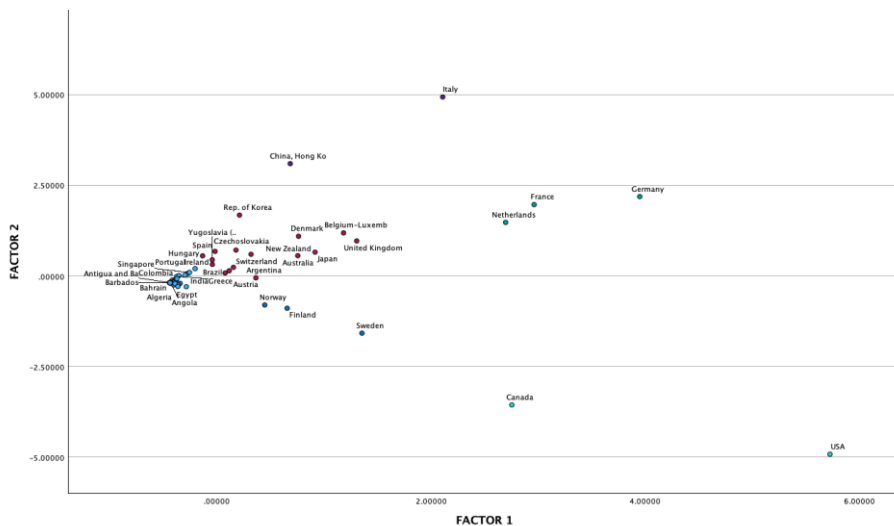


Chart 3.1. Continuum Clustering Plot by Commodity Chains for 1972. Source: Own elaboration

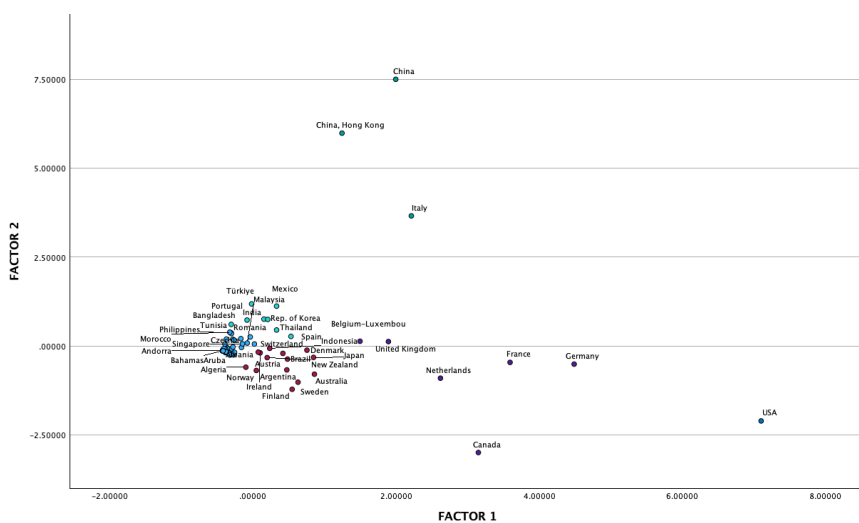


Chart 3.2. Continuum Clustering Plot by Commodity Chains Plot for 2022. Source: Own elaboration

Secondly, to compare upward mobility and downward mobility between the different models, a Student's T test has also been applied to compare those States that had experienced mobility of more than 10 positions in each corresponding period. If we look at Table 3 where these results are collected.

Once again, for the specific cases of States, the trade network analysis methodology appears to be the most sensitive, especially to determine mobility between the periphery and the semi-periphery, compared to the rest. The other three, although highlighting different cases, show very similar results. A problem to highlight in the distribution of accumulated income/population is the special and oversized mobility that it gives to oil-exporting countries. This, for example, is an advantage in the value chain methodology, since it completely excludes all goods linked to fossil fuels, giving a much more realistic image of the position in the international division of labor.

	1972-1997	1997-2022
Trade network analysis	Brazil (U, 19) China (U, 13), India (U, 14), Indonesia (U, 25) South Korea (U, 12), Spain (U, 13), Thailand (U, 24) Vietnam (U, 18), Botswana (U, 11)	Argentina (D, 15) Australia (D, 10), Brazil (U, 12), India (U, 21), Indonesia (U, 10), DPR Laos (U, 14), Lesotho (D, 20), Libya (D, 12) Nepal (D, 23), Sierra Leone (D, 22), South Africa (U, 13) South Korea (U, 13), Thailand (U, 11), Turkey (U, 15) Venezuela (D, 13), Vietnam (U, 20), Zambia (D, 14)
Economic and coercive continuum	Brazil (U, 15) China (U, 10), Vietnam (U, 19), India (U, 26), Indonesia (U, 24), Malawi (U, 20)	Brazil (U, 13), India (U, 24) South Africa (U, 15) Venezuela (D, 12), South Korea (U, 13) Vietnam (U, 20), Zambia (D, 16)
Profit/population discrete distribution	China (U, 12), Indonesia (U, 22), Nepal (D, 20), Vietnam (U, 18), Zambia (D, 21)	Brazil (U, 11), China (U, 17), India (U, 21), United Arab Emirates (U, 25), Guinea Bissau (D, 10), Nigeria (U, 14), Sierra Leone (D, 12), Thailand (U, 15) Vietnam (U, 14), Qatar (U, 22)

Continuum	Clustering	China (U, 11), India (U, 15), Nepal (D, 21) Spain (U, 13), Singapore (U, 17)	Australia (D, 10), Argentina (U, 12) Brazil (U, 10), China Hong Kong (U, 15) Norway (D, 10), Venezuela (D, 10)
Commodity Chains			

Table 3. Statistically significant mobility between periods in the different methodologies [State (D: Downward mobility, U: Upward mobility, No. of positions)]. Source: Author.

Conclusions

In addition to evaluating the specific cases of States that have experienced mobility in the last long wave cycle, being able to corroborate that, although limited in comparison to other previous cycles within the world economy, relevant mobility continues to occur, especially within the semi-periphery; We have been able to achieve both objectives: apply the main methodologies developed through the same sample for a period of 50 years in which significant changes could be observed and compare results to evaluate the quality and sensitivity of each one. With this, in short, it could be said that the method that presents the best prospects today is network analysis based on trade data. After it, we find that, despite the simplicity in data collection and analysis, the discrete distribution of income/accumulated population presents very good sensitivity for determining the composition of the parts. Although, in terms of mobility, it may overestimate some cases such as countries that export raw materials with variable prices, it finds a very good balance between time spent and results. The clustering of commercial chains, although it requires greater data processing and analysis, is not far from the quality of results of the latter and allows greater precision in the classification by establishing 6 groups in the structure (one for the core, two for the semi-periphery and three for the periphery). For its part, the continuous analysis, although it shows greater detail in variables that, although questioned by authors from the world systems tradition, the other analyzes do not include, finds a worse balance between the time necessary for its application and the less sensitivity shown.

Based on this, with a view to future methodological perspectives from a systemic prism, it would be very interesting to explore the continuation of the development of the network methodology applied to new variables, beyond trade data, which would make it possible to extend the analysis periods and

would provide, if possible, within the quality already obtained, greater statistical significance.

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Beyond the Geopolitical Chessboard: New Ways of Theorizing the International Relations of Central Asia¹

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Abstract

For a long time, Central Asia has been seen as a region divided by conflict, insecurity, and competition, lacking comprehensive cooperation between its countries. Writings on the region often focused on the influence of external powers, institutions, and norms they created. Since the collapse of the Soviet Union and the independence of the Central Asian republics, discursive framing of the region has repeatedly relied on the notion of the Great Game/New Great Game, a competition between major powers for regional influence. This portrayed Central Asian nations as passive participants in international relations, objects of international relations, pawns on a geopolitical chessboard. Now, with the intraregional process of power transition and the internally initiated process of strengthening regional integration through consultative meetings of the heads of state of the Central Asian republics, there have also been changes in the theorizing of regional international relations. Therefore, the aim of this paper is to demonstrate the main emerging ways of re-theorizing Central Asia in this field. To this end, the article will present the primary approaches for reconceptualizing the region, with a particular emphasis on several theoretical frameworks and concepts. These include Buranelli's perspective on Central Asia as an "international society", Dadabaev's advocacy for the "decolonization of Central Asian international relations," Fazendeiro's concept of "power as togetherness", and Dzhuraev's "3-i's model."

Keywords:

geopolitics, New Great Game, IR theories, Central Asia retheorized, "international society", "decolonization of knowledge", "power as togetherness", "3-i's model"

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Introduction

There is no single, universally accepted definition of Central Asia (CA). The understanding of its boundaries has changed over time, influenced by historical-political contexts, regional social circumstances, and the relationships between various rulers, political units, and centres of power. This has resulted in different names for the region, such as Transaxonia, Turkestan, and Central Asia, each reflecting different geographical scopes and highlighting that the concept of Central Asia is more a social and political construct than a fixed geographical area. Nevertheless, the most common definition in the literature defines Central Asia as the territory of the five former Soviet Central Asian republics: Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan, and Tajikistan (Artman and Diener 2022, 135-140)

Brzezinski (1998) compared Central Asia to the Balkans due to its history of instability and potential for conflict. His analogy suggests that “Eurasian Balkans” (Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, Turkmenistan, Azerbaijan, Armenia, Georgia, and Afghanistan), with its own complex ethnic structure, unresolved border disputes, and history of Soviet authoritarian rule, has the potential for similar outbreaks of violence. Additionally, the region's strategic location and wealth of natural resources makes it an area of competition for influence by major powers, further raising the risk of instability (Brzezinski 1998, 123-150).

Commonly, Central Asia has been viewed in this manner, as a space divided by conflict, insecurity, instability, cleavages, and rivalry, regardless of how its borders were understood and spatialized (Karabayeva 2021, 25-26).

However, although this view of the Central Asian region is in some aspects grounded in empirical evidence, in relation to the practice of regional international relations, there are completely opposite facts that significantly affect the new dynamics of international relations in the region. This refers primarily to intra-regional changes, especially concerning the transition of power in the Central Asian republics and the initiation of consultative meetings among the heads of state aimed at improving regional connectivity and strengthening regional identity. Such processes have led to changes within the Central Asian region, particularly in the foreign policy behaviour of individual states, thereby impacting wider intra-regional relations.

Importantly, the aforementioned changes at the empirical level in the Central Asian region not only confirm existing theoretical explanations of international relations in the region, which critique the dominant view of the region as a battleground for

great power competition, but also demonstrate that newer approaches to theorizing interstate processes in Central Asia possess significant explanatory potential. The main critiques in this body of literature highlight the overemphasis of systemic IR theories on major global players and external influences, neglecting the agency of Central Asian states, while also critiquing monocausal and structural explanations that diminish regional agency, overlook local norms and institutions, marginalize local perspectives, and perpetuate reductionist views that oversimplify foreign policy dynamics (Buranelli 2019; Dadabaev 2022; Fazendeiro 2020; Dzhuraev 2021).

Recent literature on Central Asia indicates a departure from a purely geopolitical paradigm and concepts such as rivalry, domination, and spheres of influence (New Great Game). Instead, Central Asian states are increasingly recognized as active agents shaping regional integration according to their national interests (Marat, 2021).

Building on the points mentioned above, the goal of this paper is to present several authors and their works from a larger group who theorize international relations in Central Asia differently than the dominant perspectives in existing literature. The intention of this paper is not to dismiss earlier approaches, particularly those relying on the geopolitical paradigm or the concept of the New Great Game, as lacking explanatory potential for international relations in Central Asia. Instead, the paper argues that these approaches are often limited and overlook other important and influential factors.

In this context, the paper will present theoretical approaches and conceptual frameworks from selected authors to illustrate new ways of theorizing international relations in Central Asia in order to understand Central Asia's changing regional dynamics. One approach uses the English School's concept of "international society" to explain Central Asia's order and stability through norms, institutions, and informal rules (Buranelli 2019). Another advocates decolonizing international relations by integrating regional traditions and challenging Western and Russian-centric perspectives, promoting local approaches to concepts like sovereignty and modernity (Dadabaev 2022). A different perspective views power as a collective capacity shaped by shared norms and collective action, challenging dominance-focused narratives (Fazendeiro 2020). Finally, an approach employing analytical eclecticism integrates ideas, interests, and institutions to capture the dynamic nature of foreign policy decisions (Dzhuraev 2021).

Changes in the Intra-Regional Context of Central Asia

The first group of changes that took place in the region are the processes of the transition of power in the Central Asian republics. It is important to note that in many cases, this did not signify a change in the character of the government system, but rather personal changes in the most important institution of the system—the president of the republic. The transition of power has occurred in almost all Central Asian republics, including Kyrgyzstan, Uzbekistan, Kazakhstan, and Turkmenistan. Only in Tajikistan is President Emomali Rahmon, who has been in that position since 1994, still in power.

These transitions brought changes in certain aspects of the social, political, and economic contexts, as well as in foreign policy approaches and cooperation with other countries. This has resulted in improved relations between the countries of the region and even sparked the process of resolving decades-long border and other disputes. Uzbekistan and President Mirziyoyev stand out as the best example (Tolipov 2022). Uzbekistan's cooperation agenda is being reshaped by domestic policy changes that critically re-evaluate its post-independence development, leading to economic liberalization, political reforms, and greater openness. This shift has altered national self-perception and influenced the regional environment, changing the political discourse from competition to cooperation (Dadabaev 2022, 80-81).

This further triggered another significant change: for the first time, there is a self-initiated and internally driven effort to strengthen mutual regional connections and create a stronger Central Asian identity. This effort aims to establish a regional order based on dialogue and trust without external influence or initiatives from outside the region (Buranelli 2021). This is exemplified by the consultative meetings of the heads of state of all five republics. Previously, the countries of the Central Asian region were mostly connected through forms of cooperation that were driven by external actors such as Russia, China, the USA, and the EU. These initiatives often did not involve all Central Asian countries together and lacked a comprehensive regional approach.

Regional cooperation gained momentum under Uzbekistan's new president, Shavkat Mirziyoyev, who prioritized good relations with neighbouring countries for stability and sustainable development. In 2017, he proposed regular high-level consultation meetings, leading to the first such meeting of all five Central Asian presidents in 2018 in Astana, followed by subsequent meetings in Tashkent, Ashgabat, Cholpon-Ata and Dushanbe. At the Cholpon-Ata meeting, the presidents signed several agreements, including a roadmap for regional cooperation and a green agenda program. Kazakhstan, Kyrgyzstan, and Uzbekistan signed a treaty of

friendship and cooperation, with Tajikistan and Turkmenistan pledging future accession (Kassenova 2023, 16-17).

Regionalism, as an institutionalized process of integration, is exemplified by European integration, which served as a model for regions worldwide, including Asia. However, Central Asia did not achieve the same level of integration and institutionalization due to the EU model requiring both economic and political integration. Instead, regional organizations and mechanisms in Central Asia resemble ASEAN's model, which focuses on enhancing economic cooperation without compromising the sovereignty of nation-states with supranational elements (Cornell and Starr 2018; Starr 2019)

Buranelli (2023) notes that Central Asia has its own ideas of informal regionalism and order, which do not necessarily follow the integrationist dynamics seen in Europe and other parts of the world. Consultations, consensus, and informality remain central to Central Asian regionalism, though elements of institutionalization are emerging. Annual summits, the creation of the Council of National Coordinators for Consultative Meetings, and a regional diplomatic award signify a growing commitment to stronger regional cooperation.

Rethinking Central Asia: Buranelli's English School Approach

Filippo Costa Buranelli (2019, 237-239) in his chapter titled "The Heartland of IR Theory? Central Asia as an 'International Society' Between Realism and Liberalism" uses the English School's (ES) concept of "international society" to explain the region's order, stability, and coexistence as a balance between competition and cooperation in Central Asia. He argues that Central Asia cannot be viewed solely through the lens of realism and competition; instead, norms, institutions, and informal rules play significant roles in regulating relations between states. He argues that such an approach can shed better light on intra-regional dynamics that are often neglected by other theoretical approaches. Buranelli (2019, 240) contends that world politics is not a 'black and white' realm, where states either compete or cooperate mechanically pushed by structural forces as it is the case with neorealism and neoliberalism.

According to him, Central Asia is best theorized as an international society in which order, stability, and coexistence are *viae mediae* between competition and cooperation, far from being a Hobbesian state of nature marked by continuous conflict or a peaceful, Kantian world made up of liberal democracies (239).

The ES, like neorealists and neoliberalists, maintains that states exist in an anarchic environment, without an overarching authority. Buranelli (2019, 251) adds that states are still capable of maintaining order, coexistence, and achieving a minimal degree of cooperation by abiding by very few norms, rules, and institutions in what is known as an 'international society'. In Central Asia "relations are aimed at ensuring coexistence and limited to *ad hoc* cooperation on given matters (transit of goods, water-sharing, border definition, limited trade, diplomatic resolution of skirmishes, and intercultural programs), and not at full-fledged integration" (ibid.).

Challenging the dominant (neo)realist framework, Buranelli's (2019, 253) research highlights norms and institutions that establish a degree of order in Central Asia. These include references to sovereignty, diplomacy, non-intervention principles, and international law, along with informal practices like president-to-president dialogues, problem-solving phone calls, and seniority-based relations among elites. These elements indicate a web of normative dynamics that sustain the region.

Buranelli (2019, 256; 243-250) further contends that the institutions of Central Asian international society—sovereignty, international law, diplomacy, authoritarianism, and great power management—hold different meanings in this region. Sovereignty is more rigid and less flexible, diplomacy depends more on strong inter-presidential contacts than on multilateralism, and authoritarianism is not only accepted but has become an institution in itself.

Buranelli (2019, 254; 256) argues for a methodological approach to International Relations (IR) research in Central Asia that moves away from the traditional analytical, or "mind-world dualism," where concepts from the global level are imposed on the region without considering its unique characteristics and its unique social relations. Instead, he advocates for an interpretivist approach that focuses on understanding how institutions and practices are conceptualized and implemented by local actors creating a basis for a sociology of IR that reflects socio-behavioural differences on a regional level.

Buranelli (2019, 257) suggests differentiating regions based on the formality or informality of their practices and institutions. He proposes Central Asia as a case study to explore this approach further and to identify "regional international societies" where global norms are either weakly internalized or replaced by local customs and informal practices.

Dadabaev's Challenge to the Coloniality of Knowledge in Central Asian IR

In his book "Decolonizing Central Asian International Relations: Beyond Empires", Dadabaev (2022, 150) argues that existing theoretical frameworks in International Relations (IR) applied to Central Asia either heavily rely on positivist and rationalist approaches (commonly found among realists, neo-realists, liberalists, neo-liberalists) which emphasize rivalry, domination, spheres of influence, and 'divide and conquer' rhetoric, or they attempt to transcend these rationalist perspectives by focusing on local interpretations of various concepts and terms.

Dadabaev (2022, 15) suggests that the region of Central Asia has been turned into a 'knowledge consumer' rather than a 'generator.' By prioritizing a dogmatic inheritance of 'knowledge' and 'meaning' over knowledge creation, the discipline of international relations in the CA region falls into a 'coloniality of knowledge.' This is partly due to the Soviet past, where Marxist-Leninist ideas were imposed as 'faith' rather than operationalizable political platforms. In the post-Soviet setting, Marxist-Leninist interpretations were replaced by Western interpretations, treating the CA region as a mere consumer of Western knowledge.

The book underscores the necessity of decolonizing international relations in the Central Asian region to achieve a fair representation of regional states in global affairs. According to Dadabaev (2022, 1-12), this involves exposing the concepts and stereotypes imposed on the region by dominant assumptions in contemporary international relations. By offering empirical grounding for alternative perspectives, the author challenges Western international relations' tendency to replicate the errors of Russian Marxists in attributing a narrative of modernity to the region. He highlights the need to integrate Central Asia into the broader International Relations (IR) discipline by valuing knowledge production rooted in regional traditions and approaches. This approach does not dismiss Western IR advancements but calls for recognizing and incorporating regional perspectives to give Central Asian actors a voice and agency. Currently, non-regional actors like the EU, the US, Russia, and China dominate the narrative on CA politics. To address this imbalance, CA voices should be central in discussions about the region, allowing their unique perspectives to enrich IR discourse and promote a more inclusive and representative body of knowledge.

Contemporary approaches to Central Asia suggest that the end of the Soviet Union did not terminate colonization but merely shifted the narrative of 'modernity' from a Russian perspective to a Western one. These societies are continually framed within a dualistic system: 'modern vs. traditional,' 'agricultural vs. industrial,' and 'democratic vs. authoritarian.' Their non-European (non-Russian, non-Western)

traditions and approaches are often relegated to the past, with the future portrayed as aligned with 'global' and 'universal' values and norms (Dadabaev 2022, 15-16).

Dadabaev (2022, 152) argues that attempts should be made to counter the tendency to accept the 'meanings' of concepts from other regions and apply those 'meanings' to the Central Asian regional context. He argues that the Marxist-driven theoretical platform, prevalent among Central Asian scholars in the late Soviet and immediate post-Soviet context, was a double-colonial construct. It was initially framed around European experiences, applied to Russia, and then reintroduced in the Central Asia realm, shaping new layers of colonial ideas. The unconditional acceptance of the Western version of the state and progress, coupled with the rejection of the Central Asian past as immature and transitional, leads to the rejection of the CA 'self' and the possibility of alternative visions of progress, sovereignty, cooperation, and engagement.

Both Western and Russian perspectives disregard the region's unique model of modernity and progress, which doesn't necessarily align with the modern nation-state, ethnicity, and state-building. Central Asian behaviour is often guided by notions of neighbourhood, brotherhood, informal community of states, and regional norms, rarely acknowledged in mainstream IR theories (Dadabaev 2022). Dadabaevs (2022, 5) study emphasizes the need to move beyond state-centric notions of sovereignty, power politics, domination, democratization, and modernity, or their complete rejection. Instead, it advocates for a 'reconciliation of diverse perspectives' aiming 'to achieve mutual learning'. There is a need to use Central Asian cases to advance Western theoretical assumptions about state behaviour. The major problem is not the reflection of Western and European experiences on Central Asian cases, but the claim of their global and universal applicability. This book joins the call for a need to pursue global IR with disciplinary inquiries that focus on pluralistic universality and respect for diversity and agency while negating exceptionalism (Dadabaev 2022, 16).

According to Dadabaev (2022), Central Asian states should be seen as active agents capable of shaping their foreign policies and generating knowledge, on par with global powers like Russia, China, the US, and the EU. Related to this problem are the concepts proposed as paradigms defining the nature of relations in Central Asia. The most enduring one is the narrative of the Great Game. However, there is a growing understanding that this image is no longer empirically valid. According to Dadabaev (2022, 20), narratives of various schemes in the Central Asia require successful interlocutors between rationalism and critical post-positivist approaches. While these interlocutors have Western intellectual roots, they need to be equipped

to account for the social construction of relations, identity, norms, and the changing nature of the state.

In this process of constructing norms and identities, the notions of 'practicality' and 'functionality' are key for understanding the construction of relations among Central Asian states (Dadabaev 2022, 20). Dadabaev (2022, 22) emphasizes the importance of neighbourhood as a psychological and identity-rooted notion defining the Central Asia 'selves' as parts of a regional identity. Informal structures of neighbourhood, informal consultations, and the institution of political elders are based on shared norms of enduring, collective decision making, brotherhood (fraternity). These norms shape the Central Asian identity and define how Central Asian states construct their interactions with others. Central Asian states have demonstrated agency in constructing their regional order, albeit within the constraints imposed by historical, geopolitical, and economic factors.

The concept of neighbourhood is central „long-term platform for interactions, which is neither formalized nor operationalized in terms of structure (Dadabaev 2022, 23).“ It extends beyond geographical proximity to encompass shared history, culture, and social interactions. This notion of neighbourhood has facilitated the development of informal mechanisms of cooperation, such as regular summits of heads of state and subnational diplomacy among regional governors (Dadabaev 2022, 25).

Fazendeiro's Challenge to the Dominance Paradigm in Central Asia: “power as togetherness”

Bernardo Teles Fazendeiro (2020, 1) in his article "Domination and Togetherness: Conceptions of Power in Central Asia's International Politics" begins by highlighting that in the academic literature on Central Asian international relations, the "struggle for dominance" is the most commonly represented conception of power. As he notes, "the struggle for dominance remains one of the more systematic ways to depict Central Asian international relations (ibid.)." This concept, which gained prominence in the 1990s under the "New Great Game" label, equates the regional dynamics to a contest involving great powers (the United States, Russia, and China) and other influential states (India, Pakistan, and Iran) competing for material wealth, particularly natural resources. While still a prevalent analogy, it is increasingly criticized for exaggerating the influence of external powers and overlooking regional agency (Fazendeiro 2020). Additionally, Fazendeiro (2020, 1-2) notes that it perpetuates misleading geopolitics, benefiting local incumbents who invoke external threats to maintain their positions.

According to this author, different conceptions of power significantly influence the understanding of international relations. He contends that these different conceptions of power offer distinct interpretive frameworks for analysing international politics, particularly in regions like Central Asia, where both forms of power are evident. The author builds on two classical manifestations of power: *potestas* (power as domination) and *potentia* (power as togetherness). *Potestas* focuses on individual or group dominance through coercion and strategic positioning, emphasizing a logic of instrumentality. Conversely, *potentia* highlights the capacity for collective action based on shared norms and values, emphasizing a logic of performance and logic of appropriateness (Fazendeiro 2020). Fazendeiro (2020, 1-3) draws on Hannah Arendt's ideas, suggesting that political actions are influenced by collective norms and the moral principles of the community. Words, ideas, and symbols play a crucial role in constituting meaning and guiding actions. This conception of power as togetherness highlights how communities are built on shared ideas and practices, reaching beyond the elite's preoccupation with retaining power.

According to him, while several scholarly depictions have moved away from certain aspects of the New Great Game, they still adhere to its underlying spirit of domination. Fazendeiro (2020, 3-6) uses Roy Allison's concept of "virtual regionalism" to show how Central Asian leaders prioritize regime security and reinforce dominance through regional organizations, Kathleen Collins to highlight how local elites use patrimonial networks for survival and enrichment through corruption and nepotism, and Alexander Cooley's "Great Games, Local Rules" to demonstrate how local actors manipulate great powers for their advantage, all emphasizing the spirit of domination in Central Asian politics.

The author argues that there's another way to see this: power can also be about cooperation and a sense of belonging to a common region. Countries work together on things like border control, establishing regional organizations, and managing natural resources. This cooperation helps create a sense of shared identity and strengthens the states involved. State actions are not solely driven by material interests or coercion but also by the desire to establish a sense of belonging. This broader perspective challenges the simplistic view of Central Asian politics as dominated by the pursuit of dominance and highlights the importance of collective ideas and practices in shaping regional dynamics (Fazendeiro 2020).

To support his argument, Fazendeiro (2020, 6-7) highlights several contributions to the literature that demonstrate how emphasizing togetherness can mitigate the pervasive spirit of political domination typically invoked. As Fazendeiro explains, Nick Megoran argues in "Nationalism in Central Asia" that the tensions between

Central Asian states stem primarily from their distinct nationalist visions (nationalistic ideology), rather than solely from hegemonic ambitions or patrimonial politics. While acknowledging the role of patrimonial politics, Megoran asserts that focusing solely on patronage networks overlooks deeper ideological factors at play in regional interactions. He emphasizes that beyond economic or security interests, nationalist ideologies significantly shape the positions of state actors and often hinder bilateral cooperation between countries in Central Asia.

Fazendeiro also examines the perspectives of other authors. According to his analysis, John Heathershaw and Edward Schatz (*Paradox of Power: The Logics of State Weakness in Eurasia*) argue that states in Central Asia should not be viewed merely as entities with a monopoly on violence. Instead, they contend that states also perform roles to satisfy audiences, and these performances can maintain order and legitimacy even without formal benchmarks of power. Heathershaw further argues that performances of the state in the international arena are significant and impact how local and international actors perceive and interact with the state (Fazendeiro 2020, 7).

According to Fazendeiro (2020, 7-8), Alessandra Russo's work "Regions in Transition in the Former Soviet Area: Ideas and Institutions in the Making" introduces a framework that reinterprets Central Asia's international politics by challenging the notion that former Soviet regional organizations are merely tools of domination. Russo argues that these organizations and states mutually shape each other in what she terms co-constitution. This means that regional organizations, like the Commonwealth of Independent States, not only help states secure political networks but also contribute to defining the region by fostering a sense of belonging. As Fazendeiro (2020, 7-8) noted, Russo concludes that while power struggles are part of the regional dynamic, cooperation at various levels contributes significantly to Central Asia's cohesion as a region beyond mere domination dynamics.

Overcoming Monocausality: Dzhuraev's 3-i's Model for Central Asia

Shairbek Dzhuraev (2021, 232-234) in his chapter "Domestic Sources of Foreign Policy in Central Asia" begins by grouping the literature on international relations in the Central Asian region into three categories based on different disciplines: international relations, foreign policy analysis, and comparative politics. Actually, he identifies two main groups of literature on international relations in Central Asia: one that predominantly relies on systemic theories of international relations, and

another that relies on foreign policy analysis (FP) of using domestic sources of international relations.

Dzhuraev (2021, 232;241) continues with his criticism of both sets of literature and academic works, pointing out that both lack broader explanatory potential, or that their explanatory power is at least limited. According to him, both groups are characterized by monocausality and structural explanations of foreign policy and are limited by the domestic-external dichotomy.

The first group, which relies on systemic theories of international relations, especially neorealism, views international relations in Central Asia through the lens of either the relations between major geopolitical players or the relations of Central Asian states with those actors. This approach typically views the agency of the Central Asian republics in international relations as limited, seeing them as objects of international relations due to their status as "small" and "weak" states. If Central Asian states are considered small and weak, their foreign policy agendas are primarily focused on international alignment with greater players (Dzhuraev 2021, 233-234).

When it comes to the second strand of literature, Dzhuraev (2021, 232) argues that it originated from dissatisfaction with the theoretical limitations of geopolitics-focused arguments but seldom escaped its own restrictive framework of political ruling regimes. According to Dzhuraev (2021), the focus on ruling regimes in Central Asian political studies is well-founded, given that these states have not experienced peaceful transitions of power through elections in the thirty years since their independence. However, Dzhuraev (2021, 239-240) argues that an exclusive focus on regime interests can limit the understanding of Central Asian foreign policies in several ways.

Firstly, viewing regimes as unitary and rational actors merely replaces one presumed unitary actor (the state) with another (the regime), without justifying the assumption of their rational and predictable behaviour. This perspective risks simplifying the complexity of who actually constitutes the ruling regime at any given time. Secondly, while the shift from IR-centric views to domestic ruling regimes aims to incorporate domestic politics into the analysis, it often neglects the intricacies of domestic political dynamics, assuming that external threats are the primary concern for these regimes. Finally, the focus on regime interests tends to promote monocausal explanations, limiting the scope of foreign policy analysis to a single variable and ignoring the multifaceted nature of foreign policy actions.

He proposes using analytical eclecticism as an alternative and the 3-i's model to provide complex understanding of the factors at play. This approach would integrate ideas, interests, and institutions into a comprehensive analytical

framework, offering a better understanding of foreign policy actors and actions. By considering the interaction of these three elements, researchers can better capture the complex nature of foreign policy decisions in Central Asia. This framework allows for a deeper exploration of how individual leaders' ideas and identities influence foreign policy, how regime changes impact decision-making processes, and how personal motivations and interpretations of political environments shape foreign policy actions. Analytical eclecticism, therefore, provides a more holistic approach to studying Central Asian foreign policies, moving beyond the constraints of monocausal explanations (Dzhuraev 2021, 239-241).

Conclusion

The long-standing lack of clear indicators of more serious regional integration in terms of institutionalization in Central Asia, coupled with its strategic geographical position, wealth of resources, and proximity to major regional powers, has contributed to the perception of the Central Asian region as historically unstable, fragmented, and strongly influenced by external forces competing for dominance. Central Asia has long been seen as a "pathologically" non-cooperative region (Karabayeva 2021, 25-26).

The prevailing narrative of Central Asia as a volatile region prone to instability and conflict, often framed within the "Eurasian Balkans" or "New Great Game" paradigms (great power rivalry), while rooted in historical realities, has increasingly become an oversimplification.

The analysis presented here underscores the significance of intra-regional developments in reshaping Central Asia's trajectory. The transition of power in several republics, coupled with Uzbekistan's pivot towards regional cooperation, has fostered a new era of intra-state relations characterized by increased dialogue, trust-building, and a nascent sense of regional identity. This shift is evident in the establishment of consultative meetings among the heads of state and the growing emphasis on regional cooperation initiatives in many areas.

Likewise, other approaches and explanations have begun to appear in the literature, offering different theoretical and methodological starting points for a more thorough understanding of interstate (international) relations in this region.

In this paper, we first highlight the basic shortcomings in the so far dominant views and analyses of regional international relations in Central Asia, based on the works of several selected authors who critically examine the weaknesses and limitations of traditional understandings of the region. According to them, the geopolitical

paradigm, systemic theories of international relations (neorealism and neoliberalism), as well as previous works in the field of foreign policy analysis (which rely on domestic factors of foreign policy behaviour and relations), have limited explanatory potential regarding Central Asian IR. There are several dominant points of criticism of the previous literature and approaches to IR in Central Asia, which we noticed in the new group of authors analysed in the paper. First, they criticize earlier literature for overemphasizing only one factor (variable) as influential, whether it is the influence of great powers and their hegemony, internal factors such as the struggle for influence, dominance and rivalry between the Central Asian states themselves, or the overemphasis of domestic factors such as the role of regime-centric or elite-driven factors (patrimonial regimes, security concerns, and personality cults) as determinants of the foreign policy behaviour of CA states and, consequently, international relations in the region (Buranelli 2019; Dadabaev 2022; Fazendeiro 2020; Dzhuraev 2021).

These authors further argue that the CA region cannot be viewed only through the lens of realism, characterized solely by competition and conflict, and that the propositions of systemic IR theories are monocausal and dominantly focused only on structural factors that mechanically and deterministically influence the states of the region. According to these authors, previous approaches to the region are dominantly based on rationalist points of view, while ideational and normative ones are left out. They dominantly emphasize dynamics of dominance, "power as dominance", and "logic of instrumentality" (Fazendeiro 2020). According to them, such approaches significantly lead to the uncritical imposition of top-down external concepts onto the region in explanations of regional dynamics in CA without taking into account its unique characteristics and distinct social relations, where the region becomes a recipient of knowledge rather than its generator (Dadabaev 2022). The consequence of such approaches is the practical denial of any agency of CA republics in their own region, viewing them as objects of international relations due to their status as "small" and "weak" states (Dzhuraev 2021).

To address the shortcomings of the aforementioned approaches, the authors analysed in this paper propose different theoretical-methodological approaches, concepts, and explanations that, according to them, have greater explanatory power. They suggest moving towards an "inside-out" approach to the region, emphasizing the need to recognize the agency of Central Asian states in shaping their foreign policies. This involves moving beyond the limitations of established theoretical frameworks by adapting them to the unique context of the region.

While traditional approaches to the Central Asian region have merit, the region is also characterized by cooperation, the absence of major interstate conflicts, and the

existence of local regional informal rules and norms that maintain stability. The foreign policy behaviour of Central Asian states is often guided by notions of neighbourhood, brotherhood, and regional norms, which are rarely acknowledged in mainstream IR theories (Dadabaev 2022). Therefore, the authors we analysed argue that it is necessary to understand and explain international relations in Central Asia through theoretical and methodological approaches that include analytical eclecticism, interpretivism, multicausalism, and pluralistic universality while respecting diversity and negating exceptionalism (region) (Buranelli 2019; Dadabaev 2022; Fazendeiro 2020; Dzhuraev 2021).

The concepts that these authors believe have greater explanatory power include "international society", "power as togetherness", and the "logic of appropriateness", according to which ideas, norms, interests, and formal and informal institutions are integrated into a comprehensive analytical framework (Buranelli 2019, Fazendeiro 2020). These authors advocate for an approach that focuses on how institutions and practices are conceptualized and implemented by local actors in Central Asia. In Central Asia, institutions hold different meanings, and global norms are often weakly internalized or replaced by local customs and informal practices. This perspective values knowledge production rooted in regional traditions and approaches, and it does not dismiss Western or any other IR explanations. Instead, it calls for recognizing and incorporating regional perspectives to give Central Asian actors a voice and agency (Buranelli 2019; Dadabaev 2022; Fazendeiro 2020; Dzhuraev 2021).

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STRATEGIC SIMULATIONS IN GEOPOLITICS: RESEARCHING, MODELING, TEACHING¹

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Abstract

In the field of geopolitics, it is difficult to aptly study the complex processes on how space impacts international politics. There are three main reasons for that. Firstly, as in most social sciences, it is impossible to conduct experiments and empirically test one's own ideas. Secondly, being that geopolitics tends to observe the *longue durée* processes, it takes years, decades, or even centuries to see whether certain ideas will prove to be a sufficient explanation. Thirdly, we cannot simply wage a war, to put it to extremes, in order to see whether we are right or not. We could even add a fourth issue related to teaching – given previous issues, it becomes difficult for professors to adequately pass on knowledge to students in courses that last mere few months. However, trends in software development are allowing us to overcome these issues in the virtual realm, by developing specific software dedicated to simulating the international arena. Although wargames have always existed within military planning and education it was never as prominent in academia. In recent years, many top university and research institutions have begun establishing specific departments that solely focus on conducting strategic wargames. The goal of this paper is to show how strategic simulations can be implemented in the field of geopolitics in order to provide a better foot ground for researching, modeling and even teaching geopolitics. Although utilization of software simulations will be highlighted, the paper will also deal with the merits of relying on existing practices of *in vivo* wargames. To do so, this paper is organized into three parts. Firstly, we will provide an overview of wargames and simulations in the broader fields of international relations, security and strategic studies. Secondly, we will point out the main differences between software and *in vivo* simulation from the perspective of their utility for different scenarios. Finally, we will highlight the main benefits utilization of strategic simulations have for researching, modeling and teaching geopolitics.

Key words:

Geopolitics, strategy, simulations, strategic simulations, wargames

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Introduction

In the field of geopolitics, it is difficult to aptly study the complex processes on how space impacts international politics. This is not just an issue for geopolitical studies. In general, social sciences are burdened with major complexities in experimenting and empirically testing one's own ideas. There are two major issues present – nowhere as evident as in the case of trying to test different hypotheses on what causes war. In such an experiment, researchers would take several states and manipulate their behavior in ways that it causes war. The first issue is how would we even do that? For the corps of variables that are structural in nature, researchers would essentially have to remake the world order. But even if they were to focus on second image variables, they would have to not only get acceptance by the overwhelming majority of people, but also manipulate the behavior of everybody – something that seems virtually impossible. Second, and more pertinent issue is – would that even be moral? We believe that every reader of this paper is acquainted with many problematic psychological experiments conducted in the 1950s and 1960s, which caused irreparable damage to volunteering participants. Now just imagine the case of experimenting with the causes of war. How many tens or hundreds of thousands of people would have to die just so that we can gain some knowledge. The amorality and even cruelty behind such endeavors render experimenting, especially in international security, virtually impossible.

But besides these issues, there are additional ones – more specific to geopolitical studies. On the one hand, being that geopolitics tends to observe the *longue durée* processes, it takes years, decades, or even centuries to see whether certain ideas will prove to be a sufficient explanation. Take Mackinder's *Geographical Pivot of History*, Ratzel's *Laws of State Growth*, or, from the more recent repertoire, Jared Diamond's *Gun, Germs and Steel* which represent cases of research where long-term trends have been detected (Mackinder, 1904; Ratzel, 1969; Diamond, 1997). The specificity of geopolitics, when compared to many international relations approaches, is that it avoids what John Agnew calls the *Territorial Trap*, in that it recognizes that spatial structure of the world is never the same (Agnew, 1994). Being that we are talking in terms of decades and centuries, as well as the fact that each epoch is virtually unique, longitudinal experiments become impossible to conduct. Finally, there is even the issue of teaching. Given everything previously stated, it becomes difficult for professors to adequately pass on knowledge to students in courses that last a mere few months. Since students are never given the chance to test abstract ideas, only the few with exceptional qualities can see through theory into the real world.

We believe that the previous passages came as no surprise to readers of this paper. All of us are aware of these issues in our everyday work. We do our best to overcome these obstacles in our quest for knowledge. However, trends in software

development are allowing us to overcome these issues in the virtual realm, by developing specific software dedicated to simulating the international arena. Although wargames have long existed within military planning and education it was never as prominent in academia. In recent years, many top university and research institutions have begun establishing specific departments that solely focus on conducting strategic wargames. The goal of this paper is to show how strategic simulations can be implemented in the field of geopolitics in order to provide a better foot ground for researching, modeling and even teaching geopolitics. Although utilization of software simulations will be highlighted, the paper will also deal with the merits of relying on existing practices of in vivo wargames.

To do so, this paper is organized into three parts. Firstly, we will provide a short overview of wargames and simulations in the broader fields of international relations, security and strategic studies. In doing so, we highlight how wargames and strategic simulations have long been an integral part of the broader geopolitical problematic (albeit indirectly). Secondly, we will point out the main differences between software and in vivo simulation from the perspective of their utility for different scenarios. While there is an implicit notion that computer software simulations provide a more adequate reflection of reality, we show how there are cases where in vivo simulations are a more adequate tool. Finally, we will highlight the main benefits utilization of strategic simulations have for researching, modeling and teaching geopolitics. Given the aforementioned issues plaguing empirical testing in geopolitical studies, as well as passing on knowledge, strategic simulations can be the way to vastly improve the state of the discipline.

Wargames and Strategic Simulation

Wargaming and strategic simulations came long before the information age. While we have repeatedly mentioned terms like software and simulation, thus implying the usage of computers. However, in principle, this is not needed. Nor has it been needed. Since humans started living in organized groups, one can argue that wargaming was present. There is evidence from more than millennia and a half ago from Ancient China (McCreight, 2013, 21). One can argue that chess and go are nothing more than one of the oldest wargames (Caffrey Jr. 2000, 34). The amount of chess metaphors in contemporary geopolitics, IR and strategic studies just serve to highlight this connection (eg. see Brzezinski, 1997). In fact, as George P. Baird et al. imaginatively showcase, even bonfire gatherings where elders speak of their war achievements can be thought of as wargaming (Baird et al, 2009, 146). Why? Well, there are at least two reasons. Firstly, if conflict existed so did attempts to be prepared for them. Secondly even bonfire gatherings hit the core of what wargaming, and strategic simulations are. Why we clump these terms together in

this paper, and use them almost interchangeably, is that they share the same basic idea of ***recreating the complex and violent nature of geopolitical phenomena in a controlled and non-destructive environment***. This point is pertinent to both long established wargaming practice and the strategic simulations in the virtual domain and in vivo simulations that we focus mostly on in this paper.

The practice of wargaming, that has led to strategic simulations, as we know it today is a German, or better yet a Prussian product. Even the term wargame came from a translation of the German word *kriegspiel*. In the aftermath of Napoleonic Wars, study of warfare rose prominently and gave us some of the most prominent authors of war and strategy like Clausewitz and Jomini. It was in the same era that wargaming was born. This connection is clearly evident from Jomini's definition of strategy as "the art of making war *upon the map* [emphasis added], the art of embracing the whole of a theatre of war" (Jomini, 1952, 90). By emphasizing warmaking upon the map, there is a clear connection with prior preparations where generals have essentially been simulating possible courses of action in order to achieve the objective of war. Caffrey Jr. provides a concise history of the evolution of wargaming by highlighting its beginnings in 19th century Prussia, from 1825 to 1871, followed by wargaming becoming global between 1872 and 1913, steady decline between 1913 and 1945, return during the Cold War, and, interestingly, its biggest rise during the Unipolar Moment in the 1990s (Caffrey Jr, 2000).

To write on the complete evolution of wargames and strategic simulations is a book project in its own right. However, it is important to highlight that wargaming and strategic simulations are not the same concepts inasmuch as war and conflict are not the same. Akin to the field of strategic studies – thinking on strategy in war led to thinking on strategy in international politics – wargames are narrower form in terms of problematique they focus on. However, for full conceptual clarity, the distinction between wargames, models and simulations must be understood. As Matthew Caffrey Jr. writes, modeling and simulation are different from what wargaming is since "models are simply proportional representations of reality...[while]...simulations are proportional representations of reality through time" (Caffrey Jr. 2000, 34). According to this author, wargames use both modeling and simulation aspects and direct it towards a singular agenda – understanding how best to act in an armed conflict under both your constraints and constraints and behavior of your opponent. Therefore, while the label might be misleading, strategic simulations are not just simulations, but wargames on a bigger scale.

Understanding the differences between these terms does not change an important fact – they *are* virtually interchangeable terms (McCreight, 2013). International Politics without warfare is just as nothing as warfare without international politics. One can never have strategic simulation without some form of wargame, just as no wargame can exist outside the context of international politics. Circling back several

paragraphs ago, it remains the fact that both share the idea of recreating the complex and violent nature of geopolitical phenomena in a controlled and non-destructive environment. As McCreight stresses “this [wargame or strategic simulation] is done to replicate reality and force participants to make decisions, extract new information, verify or clarify ambiguities or discern new insights that would be required in order to develop different courses of action in the midst of battle” (McCreight, 2013, 22).

Much has been said here on battles, namely because wargames and strategic simulations began for those purposes. But this is not a paper in military science or the tactical level. Likewise, wargames and strategic simulations are not solely applicable to these matters. In fact, we argue that true benefits of strategic simulations are even more evident in the geopolitical domain. There are several reasons for that. Firstly, in order for an analysis to be geopolitical you need spatial factors influencing international politics, that are very complex and plentiful. Secondly, geopolitics does not solely revolve around the usage of military power. Contrary to what authors like Guzzini believe, geopolitics study a broader scope of interactions between states (Guzzini, 2014). This only increases the complexity of reality that needs to be modeled and simulated, and therefore requires a more careful and thorough approach in researching, modeling, and teaching. Thirdly, geopolitical problematique is, as we mentioned, *longue durée* in nature. This means that in order to fully grasp the complexity of it, you must find a way to “accelerate time”. At this point even the traditional wargames fail. Therefore, strategic simulations help us to envision how such long lasting processes will manifest themselves, allowing us to better understand and be better prepared. However, as we said, this is something that even the more traditional wargames and simulations that rely on *in vivo* interactions fail – whereas software ones do not.

In Vivo vs. Software Simulations

For most of our history, wargames and strategic simulations were solely possible *in vivo*. Given their long history it is understandable why – we did not have the technology needed. It is important to understand that we have had computers in our daily life for around four decades, with some specialized institutions having them for around three quarters of a century. This, however, did not mean that *in vivo* simulations of the past were inadequate. On the contrary. They gave us the blueprint on how to conduct complex strategic simulations that did produce great results – as evident from the quality of Prussian officer schools. Yet, with the introduction of computers and computer programs that were able to model and simulate natural and social phenomena, our abilities increased greatly. As we stated to a certain degree in the previous chapter, software that is developed for strategic simulations are not only able to encompass a wider array of phenomena but are also

able to do so for a significantly longer period of time. This is because while in vivo simulations are “slaves” to the natural flow of time, computer software can be modified so that time passes much quicker. Although this can also be done in in vivo simulations through time jumps, this method still relies on human decision making which does not need to account for the actual behavior in the simulated reality.

An additional obstacle that plagues in vivo simulations is the interpersonal relations of participants. More often than not, in vivo simulations are conducted within a closely knit group of people who know one another. Having such relationships in mind, actions within in vivo simulations may be governed even more by the previous knowledge or others’ perceptions, personality, and character which can lead to behavior tailored not to the simulated situation but the adversary on the other side. Simply put, it is difficult to factor out interpersonal relationships out of the equation, and therefore end up with a strategic simulation that does not adequately reflect reality. Even when different participants are held strictly separated, you still require middlemen in order to make an in vivo simulation which also corrupts the simulation.

In contrast, software simulations are not plagued with such issues. Software simulations of geopolitical phenomena rose in prominence in recent years. To a certain degree they do owe their rise to the popularity of grand strategy computer games that virtually do the same thing, albeit for different purposes. Among those strategic simulations that have gained most attention in the academic community are the products of Statecraft Simulation Inc (StatecraftSim). In recent years, there has been a plethora of published papers that focus on both the good and the bad sides of Statecraft Sim (eg. see: Raymond, 2014; Saiya, 2015; Cox, 2021; Smith and Michalsen, 2021). In essence it was developed primarily as a teaching tool for students to understand the complex theoretical concepts in IR and geopolitics. This is why the application of Statecraft Sim is mostly used in classrooms and is therefore plagued with some of the same issues as in vivo simulations – namely that interpersonal relationships do factor in. However, this does not necessarily need to be the case. Given that it is run completely online, you could hypothetically run a strategic simulation without these issues. From the geopolitical perspective, one of the most interesting – and we would argue important – aspects of Statecraft Sim is that it simulates international politics unfolding in a reality with different geography to our planet. This means physical geography of Statecraft Sim’s world is completely different. This helps students understand how space impacts state behavior because they are not burdened with assumptions and implicit knowledge they gained over the years.

Leaving aside Statecraft Sim (primarily because of its teaching focus), software strategic simulations could further improve the whole wargaming and strategic

simulations domain because it can hypothetically simulate the behavior of the other side. Computer software is nothing more than algorithms, akin to how independent-dependent variables work in our theoretical approaches. Therefore, our theoretical knowledge not only can, but must be factored into the software in order to make the simulation viable. While most humans do implicit decision-making by factoring many variables, computer software does that explicitly. This means two things: firstly, that we can replicate a vast array of independent variables in order to see how their joint values impact the dependent variable we desire; and secondly, assuming we have information both precise and vast enough, we can simulate the behavior of the other side without the need of other people making decisions behind the scenes. And what is more important, we can track the process, manipulate the variables, and produce different outcomes without any moral burdens. This allows for reaching scientific conclusions without the concern of researchers' biases.

However, this does not mean that traditional *in vivo* strategic simulations should be forgone all together, and they still retain value. It is difficult to aptly simulate many cognitive aspects of individuals leading their countries. Practical geopolitical reasoning, and the geopolitical codes that stem from them, concepts like place and civilizations – basically most concepts from the corps of critical geopolitics, as well as some types of state interactions like negotiations cannot be so aptly simulated by software. While recent strides in machine learning and artificial intelligence are getting us closer to that, we still have a very long way to go in order to do so. Therefore, both *in vivo* and software strategic simulations do have their merit and should be applied according to the research, model or lecture thought.

Benefits of Strategic Simulations: Researching, Modeling and Teaching Geopolitics

Previous chapters have given us some glimpses to the benefits of strategic simulations in the domains of researching, modeling, and teaching geopolitics. However, a more systematic review of the main benefits was absent. This is because they were more related to the histories and concepts of wargaming and strategic simulations as well as the differences between *in vivo* and software simulations. This helped us ascertain them rather than connect them more fully to geopolitics in general. As stated in the introduction, geopolitics is the spatial analysis of international politics. This means that geopolitics is a) an approach to analysis; that b) relies on spatial phenomena; to understand c) international politics. Therefore, if analyses do not rest on spatial phenomena as an independent variable, we cannot truly say that such an analysis is geopolitical. The problem lies in the fact that spatial phenomena that geopolitics relies on are complex and long-lasting (Cohen, 2015, 1).

While some factors like geographical location or natural resources – that are crucial for more classical analyses, are relatively simple, they never exist in a vacuum. Furthermore, you cannot change the physical geography of a state (Grygel, Sicker). Of course, it is not absolutely static, but nevertheless changes at such a slow pace that we can think of it as static. Therefore, manipulating the individual geopolitical variables of a state becomes almost impossible. However, in its own right, this is not an issue. Because of the complexity and long-lasting processes of geopolitics even the most static variables can lead to different dependent values in correlation with others and over time. Open western borders of Russia, which are virtually a static fact, are either a problem or a blessing, depending on relations between Russia and the European countries. If good, open borders ease communication and help. If bad, it is a source of insecurity. When you factor in dozens of factors that are key for the conduct of geopolitical study, one tends to get overwhelmed. Knowing that in theory can help us to develop software strategic simulations that can more explicitly and thoroughly account for the interrelationship between these variables.

That is why strategic simulations can be a very useful tool in researching geopolitics. By modifying certain variables of the greater conceptual tool-kit of geopolitics in a given case, we can simulate the “new reality” in order to research and predict the problematique in question. In a sense, software strategic simulations are akin to three different methodological approaches: process tracing, scenario building and counterfactual analyses. The way in which software algorithms are coded and how they function is eerily similar to how process tracing is conducted. The major difference is that software simulations can cover more variables and even more relations between them, when compared to human implemented process tracing. It can show us how relations between different variables account for the geopolitical reality we see. On the other hand, it is also similar to scenario building inasmuch as it does create a “reality” in its own right. Although, the similarity to scenario building is more evident in modeling. Finally, it is perhaps the most akin to counterfactual analysis when talking from the perspective of research. Since counterfactual analyses rest upon manipulating as few variables as possible in order to see how differently the case would unfold, software simulations can help to deprive this process of researcher’s biases. What is more, strategic simulations can *show us* the world we created by implementing those changes and not rely only on narrative explanations. Of course, the problem of quantification of geopolitical phenomena does remain here, however overcoming them does not lead to further obstacles. In doing so, software strategic simulations can point us to the merits of individual geopolitical factors, the importance of their mutual interactions as well as overcoming researcher biases.

This directly correlates to the secondary point of modeling. While we have said that models are a proportional representation of reality, the usage here is more related

to the “holy grail” of any scientific field – prediction. Just as strategic simulations can be used as a tool for researching through conducting complex analyses of how different factors of the conceptual tool-kit of geopolitics interact and produce international political outcomes, they can also be used as tools for predicting certain outcomes. However, this point is even more so contingent on having full and right information about the values different factors have, to do so. In order to predict with any degree of certainty, you need to have correct values of geopolitical factors. Contrary to utilizing strategic simulations for research purposes, you do not know the end result – that is the international political outcome. In all honesty, we as authors are somewhat skeptical on the ability of strategic simulations to ever produce statistically significant predictions. There is too much hidden variables in geopolitical research to ever produce correct predictions. This is why we insisted on referring to it as modeling rather than predicting. If we conceptually stretch out a bit the concept of a model, it is possible to consider the usage of strategic simulations as a tool for modeling rough estimates of potential outcomes courses of action will create. While it might not be as appealing as providing accurate predictions, it can still help strategists and decision-makers in their pursuit of optimal courses of action.

Finally, all those who teach geopolitics or IR can agree that making students truly understand the complex concepts in these fields is a daunting task. As it turns out, utilizing strategic simulations in the classroom arguably has the biggest and most immediate benefit in the field of geopolitics. We say immediate because even with existing strategic simulations this is possible. Programs like Statecraft Sim are used precisely for those purposes. On the other hand, we say the biggest impact because it allows for a better grasp of complex geopolitical concepts and ideas. It is one thing when we teach abstract theoretical concepts, another when we showcase them on case studies. But nothing can compare to putting students in the “driver’s seat” of a country and show them what they did right and what they did wrong. Like in any activity, trial and error tends to be the best teacher, and in the field of geopolitical studies this is the only viable option for such a thing. However, teaching need not be reduced to universities and student classrooms alone. A similar approach can be used in training professionals in the military and statecraft domain. Somewhat comparable to students, military and statecraft professionals do not have the luxury of a trial-and-error approach to learning as their mistakes cost money, lives and lost years and decades not just for them, but for millions of their fellow citizens. Implementing strategic simulations as a part of not only university curriculum but also continued education of military and statecraft professionals can lead to better governance and a more secure world.

Conclusion

Theorizing is great. It helps us give sense and order to the chaotic geopolitical reality that we live in. However, it can only take us so much. Reality is overly complex for singular humans to envision all possibilities and scenarios. Utilizing computer software strategic simulations can help us overcome this. Of course, no simulation can exist without theory, as it provides the direction. However, leaving things “as they always were” – an academic conservatism if you will, can rob us of endless possibilities that exist in the information age. Strategic simulations, namely those that are made using computer software can help us in our research – by allowing us to better comprehend the intricate interrelationship between different geopolitical variables, their manipulation and how different outcomes came to be; modeling – by allowing us to envision the potential outcome certain courses of action can lead to, how they fare, and what is more effective; and teaching – by allowing us to pass on knowledge better, include something akin to a trial-and-error approach, and give actual training.

Although mostly confined to military circles, traditional wargaming has been developed and implemented in parallel to theoretical advancements in more mainstream academia. However, advances in technology have the potential to help us further expand the way we approach researching, modeling and teaching geopolitics. And this is not something we should either pass because of academic conservatism or wait until other disciplines already implement it and just jump the bandwagon. Still, no matter how these things make it seem like traditional research will become obsolete, logical and theoretical reasoning will still remain – if nothing else then do inform, expand, and elaborate strategic simulations to come.

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**Reinventing the "Two State" Solution as a Consequence of the
"Swords of Iron" War**

**An Adoption of the 'Nordic Balance System' as a Security Regime
in the Middle East**

Arie L. Geronik¹

Abstract

Believing that two decades of experience in Vietnam would ensure victory, American generals requested that Secretary of Defense Robert S. McNamara would authorize additional troops for the campaign. However, McNamara countered that, far from accumulating twenty years of experience, the US had repeated one year's worth of mistakes over a period of twenty years. Likewise, those who look with equal parts of optimism and frustration at nearly fifty years of failed peace initiatives between Israel and the Palestinians ignore the fact that each "new" plan has been nothing more than a repetition of past unsuccessful efforts.

The prospect of renewed Israeli-Palestinian negotiations on a two-state solution might seem highly distant. Yet the trauma of October 7, 2023, and the pain engendered by the ongoing crisis may create the kind of willingness on both sides lacking in the past decades. Good faith negotiations would require new leadership in Jerusalem and Ramallah, which enjoy broad public support. That might be possible in Israel even with the current parliamentary makeup (provided Prime Minister Netanyahu steps down and a new coalition is formed). In Palestine, where elections for the Palestinian Authority have not taken place since 2006 and are unlikely to take place anytime soon, the legitimacy would need to be achieved through internal organizational reforms as well as through major economic reconstruction and assistance by way of a Marshall-like Plan, namely, external support. Meanwhile, the demilitarization of the Gaza Strip and the consolidation of a Palestinian polity would suggest the removal of one of the main obstacles to such negotiations since Hamas took over Gaza in 2007. An external model, such as the Scandinavian Model, may be of assistance.

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For a suggested solution to the Palestinian situation to be viable, it must meet the security needs of Israel, Jordan, and the Palestinians concurrently. To achieve this, we must alter our point of view and widen our perspective so that the entire Middle East will be included.

The "Nordic Balance" model is a way of thinking that contributed to the security of Northern Europe throughout the Cold War and can be reproduced in the M.E. In the North European framework, the USSR was on one side, NATO-member Scandinavian countries were on the other, and neutral Finland and Sweden were in the middle, serving as buffer states. Thus, they became a regional power that served as a stabilizing factor in the subsystem.

For reasons made evident in this paper, in the Middle East, Israel can technically assume the role that the USSR held in Northern Europe on the one hand, while Iraq and Iran can play the part of Denmark and Norway on the other. Jordan and Palestine can serve as buffer states, assuming the role similar to that of Sweden and Finland, thus becoming the hearth of the model.

Sweden and Finland constituted a kind of international strategic vacuum in the grey zone between the two blocks. This state of affairs turned these two states into mutually dependent "Siamese twins," where any change in the political status of one would immediately result in a change in the geopolitical situation of the other. **The interdependence** arising from such a situation, the fact that each country safeguards the neutrality of the other, **warrants stability.**

Keywords:

International Relations, Regional Stability, Balance of Power, Middle East, War, Scandinavia

Background

The past decades have seen the greatest geopolitical change in the Middle East in an entire century. Iraq, Yemen, and Syria are no longer territorially coherent functioning states, with the civil war in the latter being a stain on humanity. Egypt underwent a revolution, democracy, theocracy, and a coup. At the same time, the West's nearly 40-year-long cold war with Iran has begun to thaw somewhat, just as the whole region is engulfed in a quadrupole proxy war of Sunni, Shi'ite Saudi, and Iranian actors.

Yet the Israeli-Palestinian conflict—the hinge on which the rest of the region used to swing—has been strangely sluggish until recently. Israeli Prime Minister Benjamin Netanyahu leads a coalition with no genuine interest in pursuing a two-state solution. At the same time, President Mahmoud Abbas of the Palestinian Authority oversees a fractured and corrupt construction with no natural or practical ability to deliver a deal.

Just as history is being written and rewritten all around them, Israelis and Palestinians remained submerged in a decades-long status quo of creeping settlement growth and sporadic violence.

Nevertheless, it is essential to understand that of all the strategic and other problems facing Israel and the Arab and Muslim world, the most critical is the Palestinian problem. While it is unclear whether a lasting solution can be found, the absence of one will make attempts to solve other strategic issues more complex for the parties involved.

Israel's constant goals of preventing future violence, maintaining her special relationship with the United States even post the Biden era, and – according to the Arab initiative of 2002 –even concluding peace agreements with the entire Muslim world all depend on finding a viable solution to the Palestinian problem. From the regional point of view, if a solution is not found, sooner or later, the Arabs might unite to fight Israel again; the peace process will thus be destroyed, but the Palestinian problem will live on. All parties involved in the peace process must, therefore, accord top priority to finding a lasting solution to the Palestinian problem; otherwise, having paid dearly in blood, they may find themselves in the same continuous situation.

Looking, we notice that all the possibilities and options advanced in recent years for a solution to the Palestinian problem have been deficient; no available formula is acceptable to all sides and, hence, could be implemented. For a suggested solution to the Palestinian problem to be viable, it must meet the objective as well as the subjective individual security

needs of Israel, Jordan, and the Palestinians simultaneously. To achieve this, we must alter our point of view and widen our perspective to include the entire Middle East. The solution will have to rest on a model of balance of power, where the countries involved (including Palestine) will be members of dynamic coalitions that balance out one another, thus preventing one nation from monopolizing others and, in so doing, laying the groundwork for future attacks.

The term **balance of power** refers to the general concept of one or more states' power being used to balance that of another state or group of states. According to this way of thinking, in the anarchy of the international system, the most reliable brake on the power of one state, is the power of the other states. Balance of power can refer to any ratio of power capabilities between states or alliances, or it can mean only a relatively equal ratio. Alternatively, balance of power can refer to the process by which counterbalancing coalitions have repeatedly formed in history to prevent one state from conquering an entire region. (Goldstein& Prevehouse; 2010)

The theory of balance of power argues that such counterbalancing occurs regularly and maintains the stability of the international system. The system is stable in that its rules and principles stay the same: state sovereignty does not collapse into a universal empire. It is important to emphasize however, that this stability does not imply peace. It is rather a stability maintained by means of recurring wars that adjust power relations.

When thinking about Scandinavia, or the Middle East, as this paper does, one should in addition to keep in mind also the lessons of history regarding **small states**. History teaches that small states cannot take their survival for granted. For example Athens decreed that Melos should be wiped out, despite the islands efforts to stay out of the Peloponnesian War. Other small states, in more recent history, such as Estonia, Czechoslovakia and Kuwait suffered at the hands of large, threatening neighbors, sometimes to the point of loss of territory or independence or even destruction (Feldman; 2023).

The small state will try, in these circumstances, to encourage its rivals to adopt international norms, rules and laws, join institutions and embed patterns of democratic values in its rival's society and regime to advance mutual dependence. In other words, the small state will ascribe a central role to soft power in its security strategy and rely less on military strength and will try in this manner to moderate the aggressiveness of its neighbor

peacefully (Koehane & Nye, 1977; Miller, 2010; Neumann & Gstohl, 2006; Nye, 2002; Rosenrance, 1986; Russel,2020).

A New Perspective

The "Nordic Balance model" could be an apposite model for implementation in the Middle east. It contributed to the security of Northern Europe throughout the Cold War, and it can be reproduced in the Middle East. In this framework the Soviet Union was on one side, the NATO-member Scandinavian countries were on the other and neutral Finland and Sweden were in the middle, serving as buffer states, **thus becoming regional powers**, who serve as a **stabilizing factor** in the sub-system. In the Middle East, for reasons that will be made clear in the course of this paper, Israel can assume the role of the Soviet Union on the one pole, Iraq and Iran can play the part of Denmark and Norway on the other, and Jordan and Palestine can serve as buffer states, assuming a role similar to that of Finland and Sweden. They will become the model's core as neutral states between the belligerent countries.

Finland and Sweden together constituted a kind of international strategic vacuum in the grey zone between the two blocs, and, as in nature, so too in international politics; a vacuum is a condition that tends to be filled. This state of affairs turned Finland and Sweden into mutually dependent political "Siamese twins," where any change in the geopolitical status of one would immediately result in a change in the geopolitical situation of the other. Possible scenarios could have been, for example, a Soviet invasion of Finland resulting from Sweden's increasing ties with NATO or Sweden joining NATO in reaction to Finland coming closer to the Eastern bloc, or one of the two becoming an isolated buffer state, an impossible situation on the long run. **The mutual dependence** arising from such a situation, the fact that each country safeguards the neutrality of the other, **ensures stability**.

In the Middle East, as in Scandinavia, one can find a geostrategic reality that prefers a situation in which two neighboring states are linked as neutral states between two blocs. In both cases, one can identify the factor that makes this bonding possible: the shared historical experience and the virtually identical worldview and cultural-social structure of both countries. Each condition is necessary; both together are sufficient in this case.

Israel, with its military and technological might, is, in fact, the regional power in the Middle East. On the other hand, the Fertile Crescent constitutes the opposing pole to Israel's power within the subsystem. This system includes, first and foremost, Iraq, as we knew her before 2003, and Iran. Between these two Middle Eastern blocs, we find Jordan fulfilling, almost traditionally, her national function of a buffer state. Since the establishment of the Emirate of Transjordan, Jordan has, in its various metamorphoses, served as a buffer state. At one time, she stood between the Saudi Wahabis and the French in Syria; today, she separates between Israel and the Arab world and between the radical north and the more conservative south. In her role as a buffer state, Jordan helps to preserve stability in the region, as was seen in the Gulf War (1990-91), when she stood between Iraq and Israel. This takes place utilizing a complex game of deterring each side through tactical reconciliation with the other side. In return, Jordan received support from countries concerned with maintaining regional stability, such as the United States and Europe. This consideration results in the Israeli government's traditional support of Jordan's continuing existence as a buffer state.

Israel is suited to play a role similar to that of the Soviet Union in the Middle East for several reasons: First, as in the case of the Soviet Union at one time, Israel (for the time being) is the only country in the region considered (though not confirmed) to be a nuclear power. Second, in both cases, we see the need for, and even the willingness of other subsystem members, to recognize the special security interests of both countries. This has been reflective of the attitude of the Arab states toward Israel since the mid-seventies. The Arab initiative of 2002 is yet another example of that. One may add a cultural parallel to this strategic-political consideration: both the Soviet Union in northern Europe and Israel in the Middle East are culturally foreign to the subsystem of which they are a significant part.

Today, Iraq and especially Iran, can suitably fulfill the role of Denmark and Norway in the proposed equation since, as in Scandinavia, we are referring in the Middle East as a pair of nations which, though powerful, are not yet nuclear powers in the accepted sense of the term. In the Nordic case, the power stemmed from membership in a pact and, in the Middle East, from a strong army equipped with non-conventional weapons (and in the case of Iran – with nuclear aspirations). In both cases, these are pairs of nations with similar socio-economic, political, and religious outlooks, their different emphases notwithstanding.

If the intention is to adopt the Nordic Balance model, the significant political change that must take place in the Middle East will be characterized by the turning of Jordan and the future Palestinian state into neutral status. Neutrality is perceived as an attractive policy for small nations, which, because of their strategic location or symbolic political value, stand or may stand in the focus of a struggle for influence or control by regional or global rivals. The neutral state is a country whose political independence and territorial integrity enjoy the permanent recognition of the superpowers, provided that the neutral country does not use weapons against another country except for self-defense and does not enter into contractual obligations with any party that might endanger its status.

The object of neutrality is to preserve international order, to reduce tensions in the system, and to bring international disputes to a solution based on agreed norms and institutions. From the neutral state's point of view, neutrality's objective is to defend its military security and preserve its political and territorial integrity. From the standpoint of the nations bordering the neutral state, the object of neutrality is to preserve the balance of power.

In this case, a distinction that is particularly apposite is the division of neutrality into positive and negative aspects. The positive aspect of the policy of neutrality denotes the complexity of the policy of neutrality. It denotes the complex attempts by neutral states to make their neutrality as attractive as possible to the contesting sides. This aspect incorporates a series of political measures carried out simultaneously on two levels: the first is measures intended to reduce fears of the contending sides regarding possible damage that might be caused to them by the neutrality of the small country; the second is steps intended to strengthen their interest in continuing to preserve neutrality.

The negative aspect of the neutralist policy refers to deterring the contending sides from violating neutrality by convincing them that the price they would have to pay for such a step will be high. Such deterrence is based on military power (Karsh, 1988).

Since this division is hypothetical, it would be more correct to distinguish between "negative-positive" neutrality, which puts the emphasis first on military deterrence and only then on political reliability, and "positive-negative" neutrality, which first underlines reliability and deterrence. This is precisely the distinction between the neutrality of Sweden and Finland,

respectively. The same distinction would apply to Jordan and Palestine, also respectively.

Contrary to Scandinavia, where neutrality can be defined as "traditional neutrality," an attribute of which is the freedom of choice, the more appropriate term for the neutrality applicable to the Middle East would be neutralization, in the context of which neutrality would be imposed on the state engaging international agreements. The outstanding characteristic of such a nation is that it is not neutral out of choice and, accordingly, cannot change its status according to its wishes. Though filled with suspicions, this would somehow contribute to stability in the Middle East.

It should be noted that the question of Israel's (or Jordan's) preferences regarding the future of the Palestinian Authority as a sovereign state or as something less within the context of a federation or confederation with Jordan is irrelevant. An examination of recent processes in the international context, especially in Europe in the post-cold war era, shows that the question of "nationalism" or "supra-nationalism" is a function of political development. In the modern era, the future seems to lie in the system of blocs, provided that these are freely entered (otherwise, we're talking about colonialism). To achieve political unity of either kind, as in Western Europe, for example, or as the Palestinian-Jordanian confederation proposes, a relatively homogeneous group of sovereign states with many years of sovereignty is required. Assets, including sovereignty, cannot be relinquished unless they exist. Thus, the movement toward Palestinian independence does not contradict the unifying tendencies within the Arab world; instead, it constitutes a continuity: initially, Palestinian sovereignty in the framework of an independent state and later, relinquishing some of the rights of statehood to be integrated into a confederation with Jordan. The cases of the former Soviet Union and Yugoslavia show what can be expected when an attempt is made to curtail these developmental processes by skipping the initial stage of sovereignty. Introducing such a Trojan horse into our backyard would be unwise, primarily due to the unstable factor that the "Arab Spring" had contributed to the region, as mentioned. **In other words – any idea for solving the Israeli-Palestinian conflict that is not based on the "Two States" solution is not realistic.**

Speculation about a neutral Palestinian state is not new. Still, it seems that contrary to conventional thinking, which denies this possibility, because Palestine will be a purely Arab nation (neutrality does not necessarily mean ideological neutrality), in this case, the problem lies in the fact that it would

be an isolated buffer state, a situation which history has proved to be untenable in the long run. The solution proposed here corrects this deficiency as not all of Palestine's borders would be belligerent since not all of Palestine's borders would be confrontational borders, as they would be encircled by two buffer states (along with Jordan). **This is what combines them as a regionally stabilizing power.** The buffer state thus becomes an edge country, with all the latter's advantages to a small and neutral country. One can apply this lesson from the "Nordic Balance Model."

Let's examine previous proposals for solving the Palestinian problem. We see that what is expected demand of Jordan and Palestine is, in fact, neutrality, even if it is not explicitly designated. For example, Jordan is called upon not to take part in any military alliance, not to allow foreign troops to be stationed on its soil, nor to enable such forces to use Jordanian territory as a corridor. Regarding Palestine, emphasis should be placed on limitations concerning membership in military or political pacts. The fact that all these are characteristics of neutrality cannot be ignored.

As mentioned before, in connection with the different shades of neutrality, the Nordic case can also serve as a model for what can be implemented in the Middle East. In addition, the Soviet-Finnish border corrections and restrictions regarding the size and quality of the Finnish army determined in bilateral Soviet-Finnish agreements can serve as precedents.

Palestine, initially under Jordanian rule (until 1967) and later under Israeli rule, resembles Finland in this inconsistency. Until its independence, Finland was under Swedish rule (until 1809) and later under the rule of Imperial Russia (until 1917). It thus seems that the slogan of Finnish nationalists in the early 20th century, "Swedes we are not, we'll not be Russians, so let us be Finns," can be applied to the Palestinians, *Mutatis Mutandis*.

Advantages

This proposal seems to be advantageous to all parties involved: Israel will gain peace safeguard its security interests in the east and enhance its regional and international recognition. Palestine will gain independence anchored in international agreements. Jordan will achieve international standing and a national role similar to Sweden during the Cold War; she will become an edge country instead of just a buffer state while protecting her interests in the face of Palestinian irredentism. The entire region will gain stability, even

without a straightforward solution to the Israeli-Iranian tension. (Thus also enabling a successful American withdrawal from Iraq and Syria within a broader regional settlement) This will be achieved thanks to a subsystem composed of nations which balance one another, with a dyad of two neutral countries in between, serving together as a regional buffer power; "Peace by balance," to quote Raymond Aaron.

This proposal constitutes a conceptual framework for a lasting solution to the Palestinian problem. Many substantial issues, such as the final borders, the question of Jerusalem, the question of Jewish settlers on the one hand and Palestinian refugees on the other, the allocation of water, the involvement of the international community, and others, are omitted. The parties involved could discuss these issues after establishing the framework recommended here.

One of the known obstacles preventing a successful transition from hostility to peace is the necessity of replacing negative attitudes, beliefs, and values concerning the opposite side. Paradoxically, the best way to achieve this goal is to practice living in peace, but this will not be achieved without stability first. Later, the parties can turn to attitude changes through "Truth and reconciliation committees."

In addition, the framework suggested here offers two significant contributions to furthering the peace process which is not included in the existing peace proposals: **The first** – to quote President Reagan, when talking to the Soviet leader Gorbachev at their meeting in Reykjavik in 1986, "We are armed because we don't trust each other, and we don't trust each other because we are armed," it seems that the element of trust is the critical element necessary for breaking this vicious circle which is related to the "Security Dilemma." The framework suggested here solves this dilemma because establishing a Palestinian State will become a source of stability in the area rather than a source of instability as is feared.

The second –Author Amos Oz claimed, in his book, Actually There Are Two Wars Here (Hebrew), that Israel is going through two wars simultaneously: the first is against the Palestinians, for which there is a broad consensus even within Israel that the solution has to be based on the principle of "two states for two peoples." The second and more essential war is the war against Islamic fundamentalism. My claim is that **the fear of the second war prevents a successful solution to the first war!**

We are now facing a situation where Israel – for the first time in its history – is fighting a full-scale war against Islamic fundamentalism. **Should the "Swords of Iron" war in Gaza, which falls into that category, end by repulsing Hamas out of the Gaza Strip, leaving it demilitarized and repulsing the Hezbollah north of the Litany River in Lebanon (in accordance with the 2006 UNSC resolution 1701), it might bring an unprecedented opportunity: The vacuum that will be created in the place where Islamic fundamentalist organizations once stood, the detachment of these organizations from the immediate vicinity of Israel's borders might make place to a successful effort to bring the Israeli-Palestinian conflict to a more stable solution.** That means a **solution** to the first war through effective **management** of the second war.

There is no easy fast-forward track, but the urgency for regional and global diplomacy cannot be overstated. Failure to create an off-ramp from this war would mean not simply more of the same but a precipitous fall into the abyss.

Finally, this framework is missing in the successive implementation of the well-known Clinton parameters, the "Road Map" or the "Obama plan" for the broader Middle East. In other words, integrating these principles into the various peace proposals for the Middle East will ease the way for decision-makers on both sides to adopt and implement these ideas, both externally and internally. An implementation that, as mentioned, will sooner or later become imperative.

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Embracing Political Ethnography: The Impact of Identity Constructs in Response to Ukraine

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Abstract

This paper explores the impact of geopolitical conflict on identity construction by analyzing the evolution of discourse surrounding Ukrainian identity in the wake of the 2022 Russian invasion and situating it within broader discussions surrounding refugees. Critical discourse analysis of Ukrainian and Russian media reveals how conflicting identities are framed, reflecting divergent national, political, and sociological worldviews (Ushchyna, 2022). Drawing on identity theory, this paper analyzes the construction and reconstruction of who qualifies as 'European'. It will explain the conceptualization as a response to geopolitical conflict and its resulting impact on the behavior of political actors. It will show how imperative it is to have a nuanced understanding of race, ethnicity, culture, and identity to provide essential context for a holistic understanding of the shifting nature of responses to geopolitical events.

Furthermore, this paper discusses the value of incorporating a bottom-up and 'from within' approach across various dimensions of geopolitics. Specifically, it highlights the significance of incorporating an ethnographic understanding of identity and advocating for a more reflexive approach that acknowledges diverse perspectives and knowledge systems. Additionally, it examines the potential for reshaping methodological approaches to capture the complexities of contemporary geopolitical landscapes better, emphasizing the need for interdisciplinary collaboration and innovative research methodologies.

Keywords

Geopolitics; Ethnography; Identity; Discourse; Media; Ukraine; Refugees

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Introduction

Identity serves as a catalyst and a consequence of conflict, which is evident in the relationship between geopolitical conflict and identity construction in the Russia-Ukraine war. This paper demonstrates the impact of identity construction on geopolitics by focusing on the evolution of discourse surrounding Ukrainian identity following the Russian invasion in 2022. This analysis is situated within broader discussions on refugees, drawing on identity theories to examine how definitions of 'European' are reconstructed in response to geopolitical turmoil. A nuanced understanding of race, ethnicity, culture, and identity is necessary for comprehending the shifting nature of geopolitical responses.

The paper advocates for a bottom-up approach in political geography and geopolitics, highlighting the significance of incorporating local narratives and diverse perspectives to gain a holistic understanding of geopolitical phenomena. This perspective challenges traditional top-down analyses, emphasizing the value of ethnography in capturing the complexities of contemporary geopolitical landscapes. Ethnography's strength lies in its ability to provide in-depth insights into the everyday experiences and cultural contexts that shape geopolitical events, moving beyond elite discourses to include multiple voices and perspectives.

Two case studies are analyzed: the Russo-Ukrainian war narratives and the discourse surrounding Ukrainian refugees. The first case study examines how media discourse constructs and perpetuates conflicting national identities, reflecting deeper ideological divides. The second case study analyzes the differing responses to Ukrainian refugees, exploring how narratives of compassion and othering shape refugee policies. Media statements reveal how conflicting identities are framed, reflecting divergent national and political worldviews.

Conceptual Overview

Identity is a construct shaped by mental and material practices that create a distinction between the 'self' and the 'other.' The construction of the 'other' is a core component of identity creation. Carl Schmitt (1932) posits that all politics is based on the friend-enemy distinction; it is inherently public and involves groups finding themselves in situations of mutual enmity. Any distinction can serve as a marker of collective identity and does not inherently hold any intrinsic significance; simply, the distinction is important because a group relies on it to define its own collective identity and believes it is worth defending. Humanity is hidden, and this concealment "requires both individual personality and particular cultures to close onto themselves and requires all individuals and groups to differentiate others as

others" (Plessner et al. 2018; Delitz and Seyfert 2018, vii). This mirrors hegemony theory, which states that the definition of culture also always includes differentiation from a constitutive outside (Laclau and Mouffe 1985; Delitz and Seyfert 2018). Research and theorizing on social identity are complemented by psychology's historical emphasis on personal identity (Erikson 1968). This can be seen in the interplay between conceptions of self and group identity. Identity is not neutral; it is embedded within power dynamics, working as a classification system for individuals and groups while imposing societal norms and perceived truths (Burlachuck, 2023).

Awareness of the 'constitutive outside' can be explained by social identity, which refers to an individual's sense of belonging to a particular social group and significantly influences their behaviors, cognitions, and emotions. Rooted in Social Identity Theory, it emphasizes the collective self over the individual self, where identification with a group involves cognitive awareness, value connotation, and emotional attachment to the group (Guan and So, 2022). It relies on self-categorisation of group memberships (the "we"), while personal identity refers to the unique ways that people define themselves as individuals (the "I"). Tajfel and Turner (1986) argue that the perceived differences between groups with which one self-identifies can lead to increased occurrences of otherization. The fear of an outside 'other' mobilizes individuals, communities, countries, and global regions into social and political action.

Situational identity refers to how individuals express different identities in different contexts or situations. It is the idea that one's sense of self and identity can vary depending on a particular situation's social, cultural, and environmental factors. This can include identifying situations based on images and negotiating identity in different cultural settings, especially when incorporating online spaces (Qin and Lowe 2021). The notion of situational identity highlights the dynamic nature of identity and how it can be influenced and shaped by various situational factors. Social and situational identities are interrelated as the interplay between individual self-conception and the surrounding social environment shapes both. They are mutually reinforcing, each shaping and being shaped by the other in a dynamic, context-dependent process.

Identities are not static structures; they are discursive constructions constantly in flux that only gain stability and meaning within specific contexts and situations (Benwell and Stokoe 2006; Törrönen 2013). Narratives fuel the fluidity of identities. They become "subjective meaning-making tools for shaping people's thoughts and beliefs, which provide a framework for explaining and justifying social and political events, thereby constructing the boundaries between 'we' and 'others'" (Demirel,

2023, p.1). Social identity influences information consumption, fueled by narratives, where individuals tend to favor information that enhances their in-group's status while discrediting out-groups. This phenomenon can lead to misinformation (Klandermans and Van Stekelenburg 2020).

Othering naturalizes exclusion, justifies discrimination, and fuels xenophobia (Holohan, 2019). The reaction to refugees is often characterized by fear, suspicion, and antipathy. It perpetuates a neocolonial discourse of otherness, further embedding refugees within a narrative that diminishes their humanity and rights. This is compounded by the exclusion of refugees from knowledge production and historical narratives, which not only marginalizes their experiences but also reinforces the epistemic injustice that silences their voices and contributions (Reed and Schenck, 2023). The process of empathizing with and understanding the experiences of refugees, particularly those from different cultures, challenges Western norms and structures.

The way that states craft refugee policies built on othering narratives and an 'us' versus 'them' mentality can be explained by defensive nationalism. Rabinowitz's (2023) defensive nationalism is a form of national populism that combines anti-liberalism and anti-globalization sentiment with economic nationalism. Nationalism is concerned with ensuring that the rights of 'true citizens' are safeguarded against the encroachment of 'outsiders' and necessitates the creation of an 'us' versus 'them' dichotomy with clearly defined in and out-groups. Defensive nationalism emerges when states face global economic pressures and demographic changes simultaneously and stems from the need to protect the 'nation' against global forces under the assumption that these forces are inherently hostile. Four dimensions necessary for defensive nationalism include a precise construction of who constitutes the 'national people,' construction of the global enemy, organizing principles, and clear policy objectives (Rabinowitz, 2023).

The implementation of discriminatory refugee policy is justified by constructing the identity of the national people while othering the external enemy. Creating narratives that clearly define 'us' establishes a logic to delineate which refugees deserve assistance and protection under the law due to the constructed proximity of the refugees' identity to that of the national people. The more similar the refugees' identity is perceived to be to that of the host country, the more positively they will be received due to a reduction in the othering of that identity compared to the national people. Media narratives on refugees exemplify how elements of intersecting identities can be employed to humanize or other both the refugee and the conflict, leading to varying levels of acceptance from countries expected to receive refugees. How identity narratives are constructed, interweaving elements

that evoke feelings of compassion and shared plight or the unlikelihood of shared suffering and experience, directly impact the attitudes and policies concerning refugees.

When explaining why there are differing responses to refugees, we can call on Nussbaum's position of compassion to analyze how narratives are constructed. If observing suffering leads to compassion, which motivates action to spur an individual, or in this case, any political actor, one must frame the plight of the refugee in a way that facilitates the emotion of compassion. If inaction is the desired outcome, then issue framing should impede compassion. Highlighting the suffering of a refugee group should be done in a way that emphasizes the severity of their experience, shows the suffering was not due to the observers' direct action, and emphasizes how the observer may meet a similar fate to motivate the observer into action (Nussbaum, 1992; Schriefer, 2011). Alternatively, if inaction is the goal, then the severity of suffering should be trivialized or normalized, the culpability of the observer should be emphasized, and the observer should be framed as different from the refugee to underscore the unlikelihood of the observer experiencing similar suffering. Inaction typically occurs through the construction of normative discourse, which otherizes the experience and identity of the refugee and leads to a lack of compassion and action.

Why Ethnography as Methodology?

It is vital to have a holistic and contextual understanding of the intricate interplay between power, space, and human agency. To achieve this, researchers incorporate ethnography and analyze politics as a process that demands the inherent inclusion of all processual elements. This approach to the analysis of politics incorporates "the study of the processes involved in determining and implementing public goals and in the differential achievement and use of power by the members of the group concerned with those goals" (Swartz et al. 1966, 3). To understand how political actors behave within the political process, it is necessary "to know how the political "units" think, feel, and will in relation to their understanding of the issues that they generate or confront" (Swartz et al. 1966, 18). The 'Processual Paradigm' is primarily concerned with rejecting government structures as the primary unit of analysis and provides room for local perspectives and multiple levels of analysis (Swartz et al., 1966). This approach allows for an analysis that prioritizes how various political actors engage with conceptions of the 'self,' 'other,' and 'the nation' and their direct impact on creating or reacting to geopolitical events and resulting policies. The Processual Paradigm aligns with Holland's (2020, 2) assertions that "critical

constructivist perspectives conceive ethnic, racial, and nationalist identities as social processes that are historically contingent, plastic, and varying in degree of social and political importance across time and place."

Political ethnography is research based on immersion in the subject, including reasoning originating from social practice that leads to contextual knowledge claims (Bellah et al. 2007; Snow and Benford 1988). The approach emphasizes analysis and knowledge 'from below' and 'from within.' It requires investigating situational actors' practices, concepts, and processes to generate holistic understanding. Political sociology and political science traditionally look at formal politics as the object of analysis, including the clear distinction between civil society and state actors. The referent object is not static. Ethnography focuses on "the nature of the political bond, such as how it is organized and whether people invest their sense of sovereignty in other citizens and organizations or in state institutions." (Benzecry and Baiocchi 2017, 234).

Complimentary to the Processual Paradigm, a political ethnographic approach justifies the inclusion of local perspectives and accounts of personal experience and opinion in understanding political action and the multi-level analysis and decentralization of the state. Benzecry and Baiocchi (2017, 230) explain that "political ethnographies get to the lived experiences of the political. Where previous studies of politics used broad strokes to paint a picture of political life, political ethnography allows the researcher to bring up the mundane details that can affect politics, providing a 'thick description' where one was missing". Tilly (2006, 410) furthers this with the statement that "political ethnography provides privileged access to [the] processes, causes, and effects" of political processes.

Overall, as a research method, ethnography is "well equipped to capture a messy and complex picture at the local level by privileging the informants' point of view or the emic perspective" and provides an "opportunity to study politics from the insider's viewpoint, relating it with other domains of life" (Kumar, 2014, 237). Examining the construction of identity as a 'from-within' process allows for a more nuanced conceptualization of identity and its relation to geopolitics and resulting policy. Reflexivity and the centering of local voices give nuanced insight into how individuals create the 'self' and how that 'self' informs all other intersecting forms of identity from the bottom up. Understanding how individuals create and interact with the 'self' provides a pathway for changing thoughts and behaviors based on identity. This impacts everything from how an individual may view another person to how states craft foreign policy.

Geopolitics, Identity Construction, and Ethnography

Identity and conflict are mutually constituted and reinforcing; therefore, it is vital to incorporate an ethnographic understanding of identity when analyzing geopolitics. This paper advocates for a methodological framework grounded in political ethnography to address critical lacunae in contemporary geopolitics research. Traditional approaches often prioritize top-down analyses, overlooking the nuanced dynamics and voices embedded within socio-political landscapes. By advocating for a bottom-up perspective that privileges local narratives, experiences, and perceptions, this paper argues for a paradigm shift in how scholars conceptualize and investigate key themes within political geography and geopolitics. By centering the experiences of individuals and communities, researchers can gain a more nuanced understanding of the socio-political processes that shape our world. This approach enriches theoretical understandings of geopolitics and fosters more inclusive and equitable analyses.

Using ethnography is crucial for understanding geopolitics because it provides a nuanced and in-depth perspective that traditional methods often overlook. Ethnography allows researchers to capture the everyday experiences and cultural contexts that shape geopolitical phenomena, moving beyond elite discourses to include multiple voices and perspectives (Firat 2022; Käihkö 2022). Furthermore, ethnographic approaches also challenge the assumptions of traditional political studies by offering real-time, long-term observations that reveal the micro aspects of politics and the discrepancies between what people say and do (Neumann, 2022).

Ethnography's focus on the everyday and emic perspective challenges the dominance of elite discourses in critical geopolitics, advocating for a more inclusive and comprehensive analysis (Sturm 2008). By integrating diverse insights, ethnography enriches theoretical conceptualizations. It provides practical tools for analyzing and intervening in geopolitical events, making it an indispensable method for contemporary political geography and international relations (Hagene, 2018; Petsinis, 2019).

An interdisciplinary approach to anthropology and geopolitics can recalibrate geopolitics as an ethnographic object, enriching the field with more diverse perspectives and methodologies (Firat, 2022). Ethnography significantly enhances the understanding of geopolitics by providing a nuanced, ground-level perspective that challenges traditional, often elite-focused analyses. It captures the micro aspects of politics, revealing the intentions and meanings behind actions that broad-based models might overlook (Kumar, 2014). This method allows for the exploration of

the 'cultures of geopolitical expertise,' offering insights into how geopolitical knowledge is produced and enacted in various contexts (Firat 2022).

Ethnography's strength lies in its ability to restore ambiguity to polarized understandings of war and strategy, emphasizing the human face of conflict and the ethical responsibility of researchers (Käihkö 2022). It also provides a unique lens to scrutinize institutional habits and bureaucratic norms, highlighting the tension between individual ambitions and institutional dictates (Brigg and Bleiker 2008; Jackson 2008). Incorporating ethnography and its 'from within' approach to defining identity helps provide a more holistic and nuanced understanding of geopolitics. This approach demonstrates how everyday phenomena and local contexts shape and are shaped by geopolitical forces. It allows for observing discrepancies between what people say versus what they do, which can provide a more accurate account of political dynamics (Kumar 2014).

The study of identity through ethnographic narrative reveals how dominant and alternative political discourses inform personal experiences and identities (Price 2018). The approach aids in adding to the cultural competence of analyses, which is required for accurate understanding and interpreting of the social forms of politics and policy processes (Neumann 2022). However, the concept of identity has been muddled in disciplinary practice, with ethnicity, culture, and identity being analytically distinct notions (Chun 2016). Identity is not solely tied to the existence of groups but also to evolving social and political forces (Kearns et al. 2018). Therefore, examining identity as fluid, situational, and contextual is essential when analyzing its impact on geopolitics.

Geopolitical conflict and identity construction are intricately related, with identity often serving as both a catalyst and a consequence of conflict. In protracted conflicts, identity building becomes multigenerational, reinforcing negative perceptions of the 'self' and 'other,' thus perpetuating the conflict (Ricarte 2023). Beyond the individual, geopolitical practices play a role in forming national and cultural identities (Nestoras 2021).

Three issues are central to the ethnographic study of political life: trajectories of individuation, mediation, and categorical division. When evaluating trajectories of individualization, "instead of thinking of the individual as a finalized and punctuated self, clearly delimited, we want to observe in which relational ways individuals inscribe themselves in groups and activities they qualify as political" (Benzecry and Baiocchi, 2017, 238). This often occurs within larger holistic and hierarchical ideas of identity. Thus, it is crucial to identify how someone individualizes themselves.

These individual constructions of identity are essential when evaluating how identities are hierarchically categorized based on their importance to the 'self.'

In addition to self-individualization, it is integral to understand how individuals choose their affiliations and how this self-inclusion and exclusion form a political self, based on pre-existing understandings of political roles and establish bonds they understand as political (Benzecry and Baiocchi, 2017). Processes of inclusion and exclusion bring into question the imagining of political bonds and resulting categorical separations. These perceived bonds result in "categories through which participants self-define their experiences and how they imagine what counts as political and what does not, as well as how these categories may be generative of forms of institutionalized inclusion and exclusion" (Benzecry and Baiocchi 2017, 238). This is in alignment with Foucault's (2001) definition of culture as "a hierarchical organization of values, accessible to everybody, but at the same time the occasion of a mechanism of selection and exclusion" (p. 173).

The concept of ethnogeopolitics, which merges ethnopolitics, the politicization of ethnicity, and geopolitics, underscores the importance of defining and understanding the political, ethnic, and geopolitical dimensions to grasp the complexities of global interactions (Holland, 2020; Rezvani, 2018). By integrating these approaches, researchers can challenge traditional assumptions and contribute to a more comprehensive understanding of geopolitical phenomena (Petsinis, 2019). This holistic approach ultimately fosters a deeper engagement with social transformation and the politics of identity, ethnicity, and race (Ramirez and Chan, 2021).

Case-study: Russo-Ukrainian War Narratives

Ethnography restores ambiguity to polarized understandings of war, helping to humanize the conflict and reveal the complex strategies and ethical responsibilities involved (Yao, 2022). The Russo-Ukrainian war highlights how media discourses construct and perpetuate conflicting national identities, reflecting deeper ideological divides (Ushchyna, 2022). Crump (1975) and Meertens (1975) stress the necessity of studies with a representative regional focus and account for geography, national history, and ideology (Hutson, 1976). Therefore, studies of the war must be culturally contextual and situational, accounting for unique regional characteristics, which can be done through ethnography.

The geopolitical conflict between Russia and Ukraine is deeply intertwined with the construction of national identities, as evidenced by the contrasting historical narratives and cultural affiliations that shape each nation's self-perception. Russia's

imperial narrative, which emphasizes state power and control, clashes with Ukraine's pursuit of sovereignty and alignment with European values, creating an intractable identity conflict.

The conflict is deeply rooted in the contrasting national identities constructed through various discourses and media representations. Critical discourse analysis of the Ukrainian and Russian press reveals how conflicting identities are framed, reflecting divergent national, political, and sociological worldviews (Ushchyna, 2022). In 2012, Putin stated Russia is a "type of state civilization where there are no ethnicities, but where 'belonging' is determined by a common culture and shared values," which is reliant upon "preserving the dominance of Russian culture" against "hostile forces." Former Putin aide Vladislav Surkov denied the existence of Ukraine but admitted to "Ukrainianism," which he claimed was a "specific mental disorder... There is borscht, Bandera, bandura. But there is no nation" (Chesnakov 2020). Russian economist and political pundit Mikhail Khazin supports a "complete ban on Ukrainian fonts, Ukrainian texts, programs on [the] Ukrainian language, on teaching Ukrainian – i.e., completely" (Melamed 2016). This discourse demonstrated the Russian framing and re-conceptualizing of Ukrainian identity to fit their political goals.

The conflict is also framed as a struggle between the Ukrainian world, aligned with European values, and the Russian world, driven by imperial ambitions (Laplan et al. 2022). In 2022 Telegram posts, Ramzan Kadyrov said, "Sooner or later everything returns to its native freedom. So it was with the Crimea. Donetsk and Luhansk did not take root either. I think this is not the limit" (Apt, 2024). In a Youtube video, Mikhail Khazin stated, "New Russia should be joined to the Russian regions, with full denazification, deukrainization" (Melamed 2016). Khazon refers to Kharkov, Odesa, Zaporozhe, and Dnepropetrovsk. Redefining Ukrainian identity to delegitimize their sovereign land claims, justifies the Russian invasion in the name of their 'nation', and unification of territory based on conceptions of their own identity.

The war has also reinforced Ukraine's European identity, diminishing alternative identities like Eurasian and Slavic supranationalism, thus aligning more closely with European values and distancing from Russian influence (Minesashvili, 2022). This has caused pushback from Russian officials. On May 1, 2023, Dmitry Mendev posted on Telegram, "Our main task is ... to inflict a devastating defeat on all enemies – the Ukronazis, the United States, their minions in NATO, including vile Poland, and other Western nits. We must finally return our lands" (Apt, 2024). On June 16, 2023, he said, "We do not need Ukraine in NATO. In any case, as long as at least a stump of this state is preserved in its current form. Consequently, for Nazi

Ukraine, the conflict will be permanent. And the new political regime in Kyiv (if it exists at all) will definitely not be asked for in NATO" (Apt, 2024). This demonstrates the position of Russia on their perceived interference of the West.

The integration of ethnography and a 'from within' analysis would lead to a more holistic and nuanced understanding of how these conceptions of identity came into being. By examining the Russian 'self' and Ukrainian 'self' and how each perceives the constitutive outside, scholars can understand how they position themselves within the world. Including an ethnographic narrative would show how dominant and alternative political discourses inform identities and how that affects policy and geopolitical conflict more broadly. It would also provide insight into defensive nationalist policies by explaining more intricately how each side constructs the 'national people', and how and why the global enemy is defined (Rabinowitz, 2023).

Case-study: Narrative on Ukrainian Refugees

When examining the discourse surrounding Ukrainian refugees, it is easy to see how the 'us' versus 'them' worldview is crafted. The narrative simultaneously brings Ukrainian refugees into Nussbaum's position of compassion while otherizing them in juxtaposition to a more mainstream conceptualization of European identity.

CBS News senior foreign correspondent Charlie D'Agata received immediate backlash for stating that Ukraine "isn't a place, with all due respect, like Iraq or Afghanistan, that has seen conflict raging for decades. This is a relatively civilized, relatively European ...city, one where you wouldn't expect that, or hope that it's going to happen" (Bayoumi, 2022). This statement encapsulates the duality of constructed narratives. It immediately degrades places like Iraq or Afghanistan as locations somehow deserving or expected to have this type of conflict and places Ukrainian refugees above those from areas that are perceived to be more 'war-torn.' Simultaneously, it otherizes Ukrainians as somehow different from the rest of Europe or the broader Western world. Ukraine is 'relatively civilized' and 'relatively European,' meaning that they are not equal, they are not civilized, nor entirely European, and that distinction is important because it paves the way for a policy response that's, while better than the treatment given to refugees from the Middle East, still allows for inaction, normalization of suffering, and differentiation to the host population. Furthermore, it trivializes the situation in Ukraine, which has been ongoing since 2014, and the annexation of Crimea.

Immediately after the Russian invasion, the narrative surrounding Ukrainian refugees frequently tried to include them in the observer's conception of self. Observers perceived Ukraine and the resulting refugees similarly to their own

personal, group, and geographic sense of belonging. Journalist Phillipe Corbé stated: "We're not talking here about Syrians fleeing the bombing of the Syrian regime backed by Putin. We're talking about Europeans leaving in cars that look like ours to save their lives" (Bayoumi, 2022). When the BBC (2022) hosted Ukraine's deputy chief prosecutor, David Sakvarelidze, he stated "It's very emotional for me because I see European people with blonde hair and blue eyes being killed every day with Putin's missiles and his helicopters and his rockets", the implication, being that if they were non-Europeans with different phenotypical presentations then somehow these attacks would or should garner less of an emotional reaction. It also presents Europeans as only being blonde-haired and blue-eyed. While the statement was likely made in an attempt to highlight the plight of Ukrainians and humanize them to Western Europeans and the wider world, it plays into Eurocentrism. Also, it does not acknowledge other people fleeing Ukraine who do not fit this description. It is well documented that non-white Ukrainian refugees have faced significantly more barriers while fleeing and increased racism (Ferris-Rotman 2022; Ray 2022). Similarly, Al Jazeera (2022) English presenter Peter Dobbie described Ukrainians fleeing the war as "prosperous, middle-class people so obviously refugees trying to get away from areas in the Middle East that are still in a big state of war; these are not people trying to get away from areas in North Africa, they look like any European family that you would live next door to." An ITV journalist in Poland, Lucy Watson, said: "Now the unthinkable has happened to them. And this is not a developing, third-world nation. This is Europe!" (White, 2022). In *The Telegraph*, Daniel Hannan (2022) wrote, "They seem so like us. That is what makes it so shocking. Ukraine is a European country. Its people watch Netflix and have Instagram accounts, vote in free elections and read uncensored newspapers. War is no longer something visited upon impoverished and remote populations. It can happen to anyone". This reflects Nussbaum's model, highlighting how the observer may meet a similar fate. However, despite this narrative creation of the similarity in European-ness of Ukrainian refugees, you still see policy enacted that is based on otherizing language.

These media statements highlight how identity is a construct shaped by mental and material practices, creating a clear distinction between the idea of the 'self' and 'other.' Including Ukrainians in the 'self' automatically imposes societal norms and perceived truths upon them. Echoing Carl Schmitt's (1932) friend-enemy distinction and Laclau and Mouffe's (1985) hegemony theory, Ukrainians have been brought into the 'in-group.' The conceptualization of the 'constitutive outside' is no longer divisions within the European Community such as Eastern versus Western Europe, Northern versus Southern Europe, or Slavs versus non-Slavs, but instead a new conception of Ukraine as European 'enough' to be included within the identity and

community. This is then juxtaposed against the external 'other,' Russia. These narratives also highlight the value connotation and emotional attachment to the collective self, which now has been rewritten to include Ukraine by individuals through humanizing narratives. Situational identity explains how this new conception of community, self, and the other has altered due to the social and cultural impacts of the war. It demonstrates how ideas are not static structures as previously when discussing who or what is 'European' Ukraine, and often other Eastern European countries, are either excluded from the narrative or not the primary focus of defining the identity.

This clearly defined 'us' versus 'them' dichotomy with clear in and out-groups provides a foundation for defensive nationalist policies built on othering narratives. Ukrainian refugees have been included in European conceptions of self enough to allow for wide sweeping acceptance of refugees, with more lenient domestic policies than shown to refugees from areas such as Syria or Afghanistan. However, the narrative still others Ukrainians and makes subtle distinctions of difference, which allows for discriminatory refugee policy to be implemented to protect the original 'nation' or 'self' from external forces that are perceived as inherently hostile or detrimental. This reflects Rabinowitz's (2023) requirements of an explicit construction of who constitutes the 'national people' (the population of the host state), the construction of the global enemy (Russia), organizing principles (citizens versus refugees), and clear policy objectives.

Conclusion

This paper has demonstrated the profound impact of identity construction on geopolitical conflicts, using the Russian invasion of Ukraine in 2022 and the narratives surrounding Ukrainian refugees as a case study. Through the lens of social identity theory, situational identity theory, and critical race theory, the analysis revealed how discourses surrounding Ukrainian identity have evolved, highlighting the fluid nature of concepts such as 'European.' These identity reconstructions underscore the necessity of understanding race, ethnicity, culture, and identity to grasp the shifting responses to geopolitical events, which is best done from ethnography's 'from within' and 'bottom-up' approaches.

Including bottom-up approaches in geopolitics allows for including local narratives and diverse perspectives. This methodology challenges traditional top-down analyses and demonstrates the value of ethnography in capturing the complexities of contemporary geopolitical landscapes. Ethnography's strength in providing in-depth insights into everyday experiences and cultural contexts enriches our

understanding of geopolitical phenomena by moving beyond elite discourses to include multiple voices and perspectives.

The case studies on the Russo-Ukrainian war narratives and the discourse surrounding Ukrainian refugees illustrate the intricate relationship between geopolitical conflict and identity construction. These studies show how identity serves as both a catalyst and a consequence of conflict, influencing media representations and policy responses. The analysis of Ukrainian refugees, in particular, highlights how narratives of compassion and othering shape public perceptions and state policies, reflecting broader trends in defensive nationalism.

This paper argues for a holistic and inclusive approach to studying political geography and geopolitics. This approach embraces the complexities of human experiences and challenges traditional hierarchies of knowledge production. By centering the voices of those directly impacted by geopolitical processes, scholars can contribute to more robust theoretical frameworks and foster a more socially just world.

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Is Geopolitics still relevant?

Halford Mackinder and the war in Ukraine¹

Krzysztof Śliwiński²

Abstract

This paper starts with an assumption that Geopolitics, understood as one of the great schools of International Relations, is not only still relevant but, indeed, should be one of the essential items in the toolkit of any student or policymaker who peruses the challenging and ever eluding realm of international security.

It draws chiefly on the Heartland theory of Halford Mackinder to explain the dynamics of contemporary European Security in general and the ongoing war in Ukraine in particular.

The analysis, which relies on historical examination of the geopolitical realities of Central and Eastern Europe, leads the author to a pair of conclusions: firstly, that the conflict in Ukraine is unlikely to end anytime soon and, perhaps more importantly, that the outcome of the conflict will only be one of many steps leading to the emergence of the new, possibly a multipolar, international system and consequently, and more obviously, a new security system in Europe, which will be strongly influenced by Germany rather than by the United States as before.

Keywords:

Geopolitics, Heartland, Europe, Security, Ukraine

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Introduction

On Thursday, February 24, 2022, the Russian Federation commenced its invasion of Ukraine, officially referred to by Moscow as a 'special military operation' against Ukraine (Osborn, 2022). The offensive caught many by surprise, especially the severity of Russian military actions, such as targeting civilians and civilian infrastructure. During the first weeks of the war, the Ukrainian army and society impressed the world with their bravery and commitment to preserving territorial integrity and sovereignty.

Members of the European Union agreed on an extensive package of sanctions against various Russian entities and individuals connected to Vladimir Putin, the president of Russia. Until the attack against Ukraine, the EU had been "muddling through" with numerous countries pursuing their national interests, shaping their individual foreign and security policies, notably vis-à-vis Russia. The attack reinvigorated calls of E.U. bureaucrats for more unity and an actual common defence. EU's chief diplomat Joseph Borrel, during an extraordinary plenary session of the European Parliament on March 1, 2022, urged the European Parliament's MPs to "think about the instruments of coercion, retaliation, and counterattack in the face of reckless adversaries. [...] This is a moment in which geopolitical Europe is being born", he stressed (Brzozowski, 2022).

Heartland theory – Geopolitics 101

Geopolitics is one of the grand theories of international relations (Sloan, 2017). Fundamentally, rather than treating states as separate, alienated geographical organisms, geopolitics allows us to look at a broader picture, including regions or even the whole globe, thus making it possible to account for interactions between many states functioning in particular systems defined by geographical criteria.

According to Grygiel, geopolitics exists outside the state; it is the environment within which, and in response to which, the state must act (Grygiel, 2006). Furthermore, two key variables shape this environment: the location of resources (distribution of power) and the lines of communication linking them (Grygiel, 2006).

Today's war in Ukraine occurs in a vital region for the European continent – Central and Eastern Europe. One of the founders of Geopolitics, a scientific discipline – Halford Mackinder (British geographer, Oxford professor, founder and director of the London School of Economics) proposed an enduring model in his seminal publication at the beginning of the 20th century - *The Geographical Pivot of History*.

Mackinder starts with the basics – he looks at the physical map. He concludes, looking at Eurasia, that Russia occupied half the continent, juxtaposed by many small European powers to the West. The East is generally flat and low, whereas the West has many complications, such as mountains, valleys, islands, peninsulas, and rivers. Geographical conditions account for the historical developments that could be summarised as a great push of various Asiatic peoples from the East to the West, culminating in the complicated political puzzle on the European continent (Mackinder, 1904, p. 425).

Consequently, drawing on the general term used by geographers – 'continental' he posits that the regions of Arctic and Continental drainage measure nearly half of Asia and a quarter of Europe and therefore form a grand 'continuous patch in the north and the centre of the continent' (Mackinder, 1919). It is the famous 'Heartland', which, according to his inventor, is the key geographical area for anyone pursuing their dominant position in Euroasia. "[...] whoever rules the Heartland will rule the World Island, and whoever rules the World Island will rule the world" (Kapo, 2021). Notably, the key to controlling the Heartland area lies in Central and Eastern Europe, as it is an area that borders the Heartland to the West. Heartland itself is protected by mountain ranges from the South and the Sea from the North. The developments of WWII slightly altered this approach. By 1943 Mackinder rightly foresaw the potential of the Soviet Union as a land power if it were to emerge victorious from the war (Mackinder, 1943, p. 600).

Historical context of contemporary European geopolitics

Germany paid extra attention to Central and Eastern Europe after its unification in 1871 under Prussian Chancellor Otto von Bismarck. Its policy was the one of remorseless *Kulturkampf* (culture war) through which Germans hoped not only to gain an advantage over the Catholic Church in Europe and Papacy but, in the context of the region, to Germanize its people, which was, after all, a form of imperialism and colonialism (Bideleux, Jeffries, 2007).

WWII started with an attack on Poland in September 1939 and ended (at least in Europe) with Red Army soldiers sizing Berlin by the end of April 1945. Consequently, Germany was divided into four different occupation zones, out of which two independent German states were formed by 1947. Most nations shared the same fate in Central and Eastern Europe, which had been pre-approved by the "Big Three" conference in Yalta in 1945. In a nutshell, the region was sacrificed to the USSR and its territorial ambitions in Europe.

Under the Administration of President John F. Kennedy, the United States moved from massive retaliation (response or deterrence) strategy, which posited that in case of a USSR attack against the U.S. or its allies, Washington committed itself to retaliating with much greater power, including nuclear weapons (Wells, 1981). Proposed by Secretary of Defence Robert MacNamara, the Strategy of flexible response, adopted as early as 1961, introduced an 'appropriate' response to potential aggression by the Warsaw Pact (military alliance led by the USSR) (Pepper, 1990, p.292). Whereas nuclear weapons were primarily located in the U.S., conventional weapons were spread around European land. Washington assumed that the attack with conventional forces would occur in Europe, once again stressing the importance of Central and Eastern Europe. It was considered vital as one of the three options for NATO in case of an actual military operation. The so-called 'forward defence' concentrated conventional defence efforts at or around the central European front (Pepper, 1988, p. 165).

On the other hand, the Warsaw Pact developed in its early years a tendency toward conferring privileged status on the northern members of the Pact. This has taken the form of referring in public media to the northern quartet - Poland, the German Democratic Republic, Czechoslovakia, and the Soviet Union - as the 'first strategic echelon of the Pact' (Wolfe, 1966). The territory of the three East European members of the Northern Quartet lay directly in line with what, in wartime, would be the main axis of a central European campaign. Consequently, Central and Eastern Europe had to be controlled again should the USSR seriously consider protecting its core. As Patricia Haigh rightly reminds us: "The Warsaw Pact meant that the countries of Eastern Europe could be bound to the strategic policies of the Soviet Union, and the concept of buffer States against a resurgent Germany realized." (Haigh, 1968, p.170). This is precisely how historians read the events of 1968 and the application of 'The Brezhnev doctrine', exemplified by the intervention of the Warsaw Pact in Czechoslovakia the same year.

Twenty-First century geopolitics (Dugin vs Mearsheimer)

One of the most popular and arguably influential thinkers and writers in Kremlin is Aleksandr Gel'evich Dugin. His 600-hundred pages book, *Foundations of Geopolitics 2*, published in 1997, has allegedly had an enormous influence on the Russian military, police, and statist foreign policy elites (Dunlop, 1997). In his book, Dugin, drawing on the founder of geopolitics, Karl Haushofer, posits that Russia is uniquely positioned to dominate the Eurasian landmass and that, more importantly, 'Eurasianism' will ultimately hold an upper hand in an ongoing conflict with the

representatives of 'Atlantism' (the U.S. and the U.K.). Crucially, Dugin does not focus primarily on military means as a way of achieving Russian dominance over Eurasia; instead, he advocates a relatively sophisticated program of subversion, destabilization, and disinformation spearheaded by the Russian special services, supported by a tough, hard-headed use of Russia's gas, oil, and natural resource riches to pressure and bully other countries into bending to Russia's will (Dunlop, 1997).

The Moscow-Berlin Axis

According to Dugin, the postulated New Empire (Eurasian) has a robust geopolitical foothold: Central Europe. "Central Europe is a natural geopolitical entity, united strategically, culturally and partly politically. Ethnically, this space includes the peoples of the former Austro-Hungarian Empire, Germany, Prussia and part of the Polish and Western Ukrainian territories. Germany has traditionally been a consolidating force in Central Europe, uniting this geopolitical conglomerate under its control" (Dugin, 1997). Consequently, while the impulse of the creation of the New Empire needs to come from Moscow, Germany needs to be the centre of its western part. Furthermore "only Russia and the Russians will be able to provide Europe with strategic and political independence and resource autarchy. Therefore, the European Empire should be formed around Berlin, which is on a straight and vital axis with Moscow." (Dugin, 1997, 127).

Regarding the role of Anglo-Saxons in Central and Eastern Europe, Dugin offers a very straightforward analysis: "The creation of the Berlin-Moscow axis as the western supporting structure of the Eurasian Empire presupposes several serious steps towards the countries of Eastern Europe lying between Russia and Germany. The traditional Atlanticist policy in this region was based on Mackinder's thesis about the need to create a "cordon sanitaire" here, which would serve as a conflict buffer zone preventing the possibility of a Russian-German alliance, which is vitally dangerous for the entire Atlanticist bloc. To this end, England and France strove to destabilize the Eastern European peoples in every possible way, to instil in them the idea of the need for "independence" and liberation from German and Russian influences". It follows logically that "Ukraine as an independent state with certain territorial ambitions, represents an enormous danger for all of Eurasia and, without resolving the Ukrainian problem, it is, in general, senseless to speak about continental politics" (Dugin, 1997). "[T]he independent existence of Ukraine (especially within its present borders) can make sense only as a 'sanitary cordon'. Importantly, as this can inform us to an extent about the future settlement of the

conflict: "The absolute imperative of Russian geopolitics on the Black Sea coast is the total and unlimited control of Moscow along its entire length from Ukrainian to Abkhazian territories".

The Tragedy of Great Power Politics

In the preface to the update of his seminal book "The Tragedy of Great Power Politics" (2013 edition), John Mearsheimer acknowledges that his analysis had to be updated with regards to the so-called "peaceful rise" of the People's Republic of China as a significant challenger to the role and position of United States in the international system. Consequently, he envisaged that the process would produce a highly sensitive, if not prone to local conflicts environment (Mearsheimer, 2013, 10). Following the logic of power balancing, he claimed that firstly, China had to build formidable military forces and, secondly, dominate Asia similarly to how the United States dominated Western Hemisphere. Correspondingly, China would strive to become a regional hegemon to maximise its survival prospect. This would make China's neighbours feel insecure and prompt counterbalancing by, as one might surmise, strengthening the existing bilateral and multilateral alliances and building new ones (AUKUS being a perfect example). Logically speaking, therefore, if you follow Mearsheimer's argumentation, Russia and India, Japan and Australia, and the Philippines and Indonesia should build a solid coalition to counter the ascent of China. Such developments would be in the interests of the United States, and Washington would naturally play a crucial role under such circumstances. Notably, the rise of China was not likely to be peaceful and produce "big trouble" for international trade as well as peace and security.

This was approximately what the Trump administration had in mind when preparing the national security strategy in 2017. The Strategy mentions Russia 25 times, frequently in connection with China, as major challengers to the U.S.: "China and Russia challenge American power, influence, and interests, attempting to erode American security and prosperity. They are determined to make economies less free and fair, grow their militaries, and control information and data to repress their societies and expand their influence" (National Security of the United States of America, 2017). Yet, after even a short analysis of the document, one identifies the difference between the two in terms of how the U.S. perceives the challenge that each represents. Regarding Russia, Washington concludes that Kremlin's main aim is to: "seek to restore its great power status and establish spheres of influence near its borders". China seems to be more ambitious in the eyes of the Capitol. As evidenced by such statements as: "Every year, competitors such as China steal U.S.

intellectual property valued at hundreds of billions of dollars", "China seeks to displace the United States in the Indo-Pacific region, expand the reaches of its state-driven economic model, and reorder the region in its favour. China's infrastructure investments and trade strategies reinforce its geopolitical aspirations. Its efforts to build and militarize outposts in the South China Sea endanger the free trade flow, threaten other nations' sovereignty, and undermine regional stability."(National Security of the United States of America, 2017).

Given this perception, it is no wonder that under Trump, Washington embarked on a new mission that questioned the processes of globalization for the first time in many decades. Under Trump, the U.S.A. introduced numerous economic sanctions against China, which sparked a revolution called 'decoupling'. Johnson and Gramer, writing for *foreignpolicy.com* in 2020, questioned this policy: "The threat of a great decoupling is a potentially historical break, an interruption perhaps only comparable to the sudden sundering of the first massive wave of globalization in 1914, when deeply intertwined economies such as the Great Britain and Germany, and later the United States, threw themselves into a barrage of self-destruction and economic nationalism that didn't stop for 30 years. This time, though, decoupling is driven not by war but peacetime populist urges, exacerbated by a global coronavirus pandemic that has shaken decades of faith in the wisdom of international supply chains and the virtues of a global economy." (Johnson, Gramer, 2020).

With the comfort of looking at hindsight, we should conclude that perhaps luckily for the Far East and international political economy, Mearsheimer was wrong, at least for the time being. Firstly, no military conflicts exist in the Far East or the Pacific. The most potentially dangerous issue remains one of the cross-strait relations, i.e. P.R.C. vs Taiwan (Chinese Taipei). Whether Xi Jinping will risk another diplomatic backlash by an open invasion remains to be seen. The jury is out, and one might claim that with the world being focused on the war in Ukraine, China could get away with an invasion of Taiwan. Then, on the other hand, perhaps there is no need for the P.R.C. to unite all territories of China in the imminent future forcefully.

At the same time, as it appears at least mid-2023, contrary to Mearsheimer's predictions, Russia and China seem to be getting closer regarding geopolitics and geoeconomics. On February 4th Russian President Vladimir Putin met face-to-face with Chinese President Xi. The leaders convened in Beijing at the start of the Winter Olympics — and issued a lengthy statement detailing the two nations' shared

positions on a range of global issues.³ The meeting happened shortly before the Russian invasion, and one could surmise that it was supposed to soften the possible adverse reaction from Beijing to the already prepared military operation by the Kremlin since Putin told Xi that Russia had designed a new deal to supply China with an additional 10 billion cubic metres of natural gas. Consequently, China abstained from a U.N. Security Council vote condemning the Russian invasion (Gerson, 2022).

Conversely, one cannot but notice that most of the energy transferred to the West before the war in Ukraine has been redirected to the East, mainly China (Soldatkin, Aizhu, 2022). At the same time, Russia also shifted its imports of high-tech. Instead of the U.S. or Germany/France, it now has developed cooperation with ... again China (Taplin, 2023).

Andrew Krepinevich's Protracted Great-Power War

Andrew Krepinevich's "Protracted Great-Power War - A Preliminary Assessment work" published by the Centre for a New American Security, informs us about the American posture. Accordingly, "Now, however, with the rise of revisionist China and Russia, the United States is confronted with a strategic choice: conducting contingency planning for a protracted great-power conflict and how to wage it successfully (or, better still, prevent it from occurring), or ignoring the possibility and hoping for the best." (Krepinevich, 2020)

Among many valuable lessons that history can offer, one should remember that no country can wage a systemic war on its own on two fronts hoping to be successful. Suppose both China and Russia are seen as strategic challengers to the American position in the international system. In that case, it follows logically that the U.S. needs to make one of them at least neutral (appease them) when in conflict with another. Given China's technological, economic, military, or population challenges, the most optimal choice would be to make Russia indifferent to American 'elbowing' in Central Asia or the Middle East vis-à-vis China. The price for such indifference also seems logical, and it is the dominance of the Russo-German tandem in Central and Eastern Europe and German dominance in the E.U. This would explain at least some developments in Europe regarding energy security, particularly President Biden's administration position on Nord Stream 2 and the not-so-much enthusiastic help to Ukraine from Germany.

³ Joint Statement of the Russian Federation and the People's Republic of China on the International Relations Entering a New Era and the Global Sustainable Development. Available at: <http://en.kremlin.ru/supplement/5770#sel=1:21:S5F.1:37:3jE> (Access 18.10.2023)

However, recent developments seem to contrast such logical argumentation. President Biden's administration, as well as the leadership of the U.S. Armed Forces, seem to be committed to continuing the financial, technical and logistical support to Ukrainian President Zelensky's government for "as long as it takes" (the term frequently used in official speeches by Antony Blinken – The Secretary of State). According to the U.S. Department of Defence information (as of Feb 21, 2023), the U.S. committed security assistance to Ukraine in the form of 160 Howitzers, 31 Abrams tanks, 111 million rounds of small arms ammunition and four satellite communication antennas, among others. On top of that, Washington committed more than 30.4 billion U.S. dollars (only since the beginning of the Biden Administration) (U. S. Department of Defence, 2023). The U.S. is the leader of the coalition of many nations (54 to be exact) in efforts to counter the Russian invasion of Ukraine. This situation puts Washington in a predicament as, at least in the mediasphere, experts and former policymakers such as the former C.I.A. Director and U.S. Defence Secretary Leon Panetta do not shy away from identifying the existing state of affairs as a "proxy war" between the United States and the Russian Federation (Macmillan, 2022).⁴

But is "Uncle Sam" still in a position to effectively challenge either Russia or China on their own? In 2001, French historian, sociologist and political scientist Emmanuel Todd claimed that as of the beginning of the 21st century, the United States was no longer a solution to global problems; instead, it became one of the problems (Todd, 2003). The U.S. guaranteed political and economic freedoms for half a century. In contrast, today, they seem to be more and more an agent of international disorder, causing wherever they can uncertainty and conflicts. They demand the international community support their foreign policy goals and join in their actions regardless of cost and benefit analysis. Given the geopolitical changes after 1989, the U.S. took for granted its position in the international system and decided to extend its interests across the globe. Surprisingly, perhaps for Washington, even traditional U.S. allies started to demand more independence (see the case of Germany and its role in southern Europe.) (Macron's idea of 'strategic autonomy')⁵. According to Todd, given the actual balance of power globally, the U.S. would have to fulfil two conditions to maintain its hegemonic position. Firstly it had to continue controlling its protectorates in Europe and Japan. Secondly, it had to finally eliminate Russia from the elite group of 'big powers', which would mean

⁴ Importantly, Kremlin has been playing the "proxy war" card for some time in building its narrative regarding the ongoing "Special Military Operation" in Ukraine.

⁵ "Emmanuel Macron's comments about Taiwan and his call for European "strategic autonomy" sparked controversy as he advocated for the EU not to become followers of the US and China". This parallels with President de Gaulle earlier calls for European strategic independence from American influence over European security (Lory, 2023).

the disintegration of the post-Soviet sphere and the elimination of the nuclear balance of terror. None of these conditions have been met. Not being able to challenge Europe or Japan economically, the U.S. has also been unable to challenge the Russian nuclear position. Consequently, it switched to attacking medium powers such as Iran or Iraq economically, politically, and militarily engaging in 'theatrical militarism'. (Todd, 2003).

In contrast to the French historian, American political scientist Joseph Nye claims "The United States will remain the world's leading military power in the decades to come, and military force will remain an important component of power in global politics." (Ney, 2019, p.70). He goes on to question whether the rise of China is going to spell the end of the American era: "[...] but, contrary to current conventional wisdom, China is not about to replace the United States as the world's largest economy. Measured in 'purchasing power parity' (P.P.P.), the Chinese economy became larger than the U.S. economy in 2014, but P.P.P. is an economists' measure for comparing welfare estimates, not calculating relative power. For example, oil and jet engines are imported at current exchange rates, and by that measure, China has a US\$12 trillion economy compared to a US\$20 trillion U.S. economy." [...] "Power—the ability to affect others to get what you want—has three aspects: coercion, payment and attraction. Economic might is just part of the geopolitical equation, and even in economic power, while China may surpass America in total size, it will still lag behind in per capita income (a measure of the sophistication of an economy)." (Ney, 2019, p.70).

And yet, as of 2023, America's economic components of her might seem to be very quickly eroding. After the 2008 subprime mortgage crisis and the consequent Covid-19 induced economic crisis, there are several woes on the horizon: Inflation has been rampant (that is one of the effects of federal stimulus after Covid-19), which makes the Federal Reserve continue to increase interest rates, making loans more and more expensive (Goldman, 2022). The stock market has been in the "sell-everything mode", which means the investors are losing a lot of money, so their trust in the economy is decreasing. Thirdly, this time around, the investors are not switching to bonds, which seems to confirm the previous point. Fourthly and finally, "none of this is happening in a vacuum. Russia continues its deadly invasion of Ukraine, which has choked off supply chains and sent energy prices through the roof." China, on the other hand, remains in semi-locked mode when it comes to some of its biggest cities due to after Covid-19 vulnerability.

On top of that, a labour shortage has sent salaries surging and hindered the normal flow of goods worldwide (Goldman, 2022). Worse still, according to the Bureau of Economic Analysis of the U.S. Department of Commerce, some of the key

performance indicators regarding international trade are primarily negative (Bureau of Economic Analysis, 2023). As of July 2022, experts debated whether the country was in a technical recession, whereas by now (mid-2023), the actual national debt surpassed 31.46 trillion U.S. dollars (FiscalData.Treasury.gov, 2023), with states such as California officially defaulting on its debts towards the Federal Government (Gillmore, 2023). Finally, one cannot but notice the latest initiatives of the BRICS nations to drop using the U.S. dollar as a means of international payments (Aizhu, 2023). Some economists predict the Ukraine crisis will lead to the end of the dominance of the dollar-euro system, the backbone of Western military power. With nearly 4 billion people, Asia will develop a parallel financial system and lessen its dependence on the West (Krikke, 2022).

One could also argue that the fact that the war in Ukraine happened in the first place and is continuing proves that the position of the United States and the *Pax Americana* are being effectively challenged.

The German-French engine of the European federalization?

The economic and political decrease of the U.S. and the parallel increase of China with Russia holding its position or even reclaiming its influence vis-à-vis NATO countries causes significant challenges to European powers and offers some ground-breaking opportunities. In terms of challenges, especially economically, Germany and France, as mentioned before, find themselves in a predicament. Their, especially Germany's, idea was to continue the role of an economic powerhouse, based chiefly on the export of manufactured goods worldwide, thanks to energy security provided by the Russian Federation. The war in Ukraine has changed these dynamics completely due to the pressure of the U. S. to support Ukraine and economic sanctions against The Russian Federation. Similarly, France, is not very happy with the economic sanctions against Russia and has continually tried to play down the possibility of an all-out EU vs Russia conflict. Listening to the speeches of Macron and Scholz, one cannot but hypothesise that Paris and Berlin would be happy with the end of the war as soon as possible at any cost, to be born by Ukraine, only to be able to come back to "business as usual". Apparently, in an attempt to "escape forward", both European powers are proposing further steps to generate even more federal dynamics. To be more exact, they suggest that concerning Foreign and Security Policy, the still observed voting pattern based on unanimity, one of the last strongholds of sovereignty, should be abolished, and the decisions should follow qualified majority voting. Notably, such arguments are made, invoking the potential gains for the EU as a geopolitical actor. In other words,

countries such as Poland and Hungary would no longer be able to block Paris and Berlin from imposing their interests on the rest of the EU by presenting them as European. According to this vision, Hungary would no longer be able to 'sympathize' with Russia, and Poland would no longer be the 'Trojan Horse' of the U.S. interests in Europe in their game with Russia. And so, the war in Ukraine presents a perfect circumstance to call for a European federation. Germany has recently publicized such a vision. On August 24, 2022, Chancellor Olaf Scholz presented a speech at Charles University in Prague regarding his vision of the future of the EU at the beginning of the 3rd decade of the 21st century against the backdrop of the Russian invasion of Ukraine. Experts, policymakers, and media pundits widely commented on the speech. It starts with an assertion that Russia is the biggest threat to the security of Europe. That fact produces two breakthrough consequences: firstly, Berlin has to pivot from Russia to its European Partners both economically and politically. Secondly, the European Confederation of equal states should morph into a European Federation (The Federal Government, 2022). Scholz's vision includes four major 'thoughts'. Firstly, given the further enlargement of the European Union for up to 36 states, a transition should be made to majority voting in common foreign or tax policy. Secondly, regarding European sovereignty, "we grow more autonomous in all fields; that we assume greater responsibility for our own security; that we work more closely together and stand yet more united in defence of our values and interests around the world.". In practical terms, Scholz singles out the need for one command and control structure of European defence efforts (European army equipped chiefly by French and German Companies?). Thirdly, the EU should take more responsibility (at the expense of national governments) regarding migration and fiscal policy against the backdrop of the economic crisis induced by Covid-19 pandemic. This, in practical terms, means, according to Scholz, one set of European debt rules to attain a higher level of economic integration. Finally, some disciplining. "We, therefore, cannot stand by when the principles of the rule of law is violated, and democratic oversight is dismantled. Just to make this absolutely clear, there must be no tolerance in Europe for racism and antisemitism. That's why we are supporting the Commission in its work for the rule of law. The European Parliament is also following the subject with close attention. For that I am very grateful [...] We should not shy away from using all the means at our disposal to correct failings. [...] It also seems sensible to consistently tie payments to the maintenance of the rule of law standards – as we have done with the 2021-2027 Financial Framework and the Recovery Fund in the COVID crisis".

Conclusion

The war in Ukraine is arguably proof of the region's role in the security and stability of Europe and its economy. Food supplies, mostly various harvests and energy, mainly gas, are a case in point. On top of that, the region has a lot of raw materials. Ukraine has large deposits of 21 of 30 such materials critical in European green transformation (Ukrinform, 2023). Before the war in Ukraine began, in July 2021, the EU and Ukraine signed non less than a strategic partnership on raw materials. The partnership includes three areas from the approximation of policy and regulatory mining frameworks, through a partnership that will engage the European Raw Materials Alliance and the European Battery Alliance to closer collaboration in research and innovation along both raw materials and battery value chains using Horizon Europe (European Commission, Press Release 2021).

As for security, in a traditional sense, the U.S. is involved with Ukraine regarding nuclear weapons. In the letter from March 17, 2023, the director of the Energy Department's Office of Nonproliferation Policy, Andrea Ferkile, tells Rosatom's director general that the Zaporizhzhia Nuclear Power Plant in Enerhodar "contains US-origin nuclear technical data that is export-controlled by the United States Government" (Bertrand, Lister, 2023).⁶ Worse still, The Under Secretary of State for Political Affairs, Victoria J. Nuland, admitted in her testimony on Ukraine in the US Congress that, indeed, "Ukraine has biological research facilities, which we are now quite concerned Russian troops, Russian Forces, may be seeking to gain control of, so we are working with the Ukrainians on how they can prevent any of those research materials from falling into the hands of Russian forces should they approach" (C-Span, 2022).

As Scott and Alcenat claim, the analysis of the competitive policies of each great power confirms the Heartland concept's importance. They project the utility of Mackinder's analysis to Central Asia, asserting that: "it is valid in today's foreign policy and policy analyses. Each power strives for control of or access to the region's resources. For China, the primary goal is to maintain regional stability as a means for border security and assurance of stable economic relations. For the European Union, the main goal is to gain economic access while simultaneously promoting the democratization of those countries that are politically unstable." (Scott, Alcenat, 2008).⁷

⁶ See more at: <https://www.state.gov/energy-security-support-to-ukraine/> (Access 18.10.2023)

⁷ Senior Colonel Zhou Bo (retired) - a senior fellow of the Centre for International Security and Strategy at Tsinghua University and a China Forum expert, a former director of the Centre for Security Cooperation of the Office for International Military Cooperation of the Ministry of National Defence of China offered a similar evaluation: "the competition between the two giants (U.S.A. and China) will not occur in the Global South, where the US has already

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Neighborhood Effect Revised:
Spatial Statistical Analysis in Electoral Geography

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Abstract

The differentiation of space based on the electoral preferences of residents is what forms the electoral space – a special layer of the earth's surface that is the object of study of the discipline we call electoral geography. Geography of voting identifies the factors and patterns that underlie long-standing territorial differences in the political activity of voters and their voting habits by administrative and territorial unit, constituency and district, as well as the geographic favouritism and disproportionality of electoral systems – that is, the proclivity of electoral procedures to the territorial differentiation of election results. The key task of electoral research is thus to assess the degree to which voter intention is deformed by a system of interrelated filters including the effects of electoral geography.

Keywords:

electoral geography, geography of voting, spatial effects, neighborhood effect, spatial analysis, spatial statistics.

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A number of factors influence the electoral behaviour of voters, some of which have a pronounced geographical nature. These are called the spatial effects of voting, which we will discuss in greater detail. *Scalar* spatial effects of voting include those in which electoral behaviour is determined by the properties of a given place (say, the fact that an election campaign was successful in one region, but unsuccessful in others). *Vector* spatial effects of voting are those where electoral behaviour is determined by the location of a given place (for example, the fact that the region is located close to the area where a given candidate can traditionally rely on support). We can thus say that scalar voting effects are based on the principle of vertical conditionality in geography, where the properties of an object are determined by the properties of the place in which it is located, and vector effects are based on the principle of horizontal conditionality in geography, where the properties of an object are determined by its location relative to other objects – that is, they arise as a result of its relations with the positions of other objects in space (Table 1).

Effect type	Geographic principle	Explanatory factor	Examples of effects
Scalar	Vertical conditioning	Properties of the place	Friends-and-neighbours effect, campaign effect, issue voting effect
Vector	Horizontal conditioning	Location of the place	Neighbourhood effect

Table 1. The scalar and vector spatial effects of voting

The most obvious scalar geographic factor in electoral behaviour is the *friends-and-neighbours* effect (sometimes called the localism effect), which describes the propensity of voters to vote for people from the same region. There are, in fact, dependencies of two different scales here.

At the local level, the friends-and-neighbours effect can be seen in a narrow sense: the closer voters live to the hometown (district, street, home) of a candidate, the more likely they are to vote for them.

At the regional level, the friends-and-neighbours effect is evident in the broad sense: when voting for a candidate to represent them in the authorities, the electorate is more inclined to support someone local, that is, a candidate who was born in or spent a significant part of his life in the same region (district, city, country) as his or her voters. Accordingly, candidates get more support in territories they have a personal connection with.

There are two key explanations for this dependency. First, candidates are traditionally more recognizable in their native regions and it thus is easier for them to rally support there, because proximity to the candidate (geographical, but also social) equals trust, since it is far more likely that interactions with this candidate will take place in the future than with a candidate who is not from the region. Second, voters will naturally expect a “hometown” boy or girl to pay more attention to local interests, which means that it is easier for these candidates to convince doubters or get indifferent voters to be more politically engaged. The first explanation is more typical of situations where a narrow understanding of the *friends-and-neighbours* effect is evident, while the second is truer of situations where the broader understanding reigns. Moreover, opening up the scale of the analysis makes the first explanation irrelevant – that is, isolated local cases aside, voters tend to cast their vote for local candidates, even when they know just as much about them as they do about their rivals.

The effect was first described by Valdimer Key Jr, in his 1949 book *Southern Politics in State and Nation*, but in a negative connotation: it turned out that the localist factor was more important than the political platform of the candidate. Next came the methods proposed by Raymond Tatalovich in 1975 and John Van Wingen and Joseph Parker in 1979 that estimate the friends-and-neighbours effect by calculating the correlation between the level of support for a candidate and the distance between voting districts and that candidate’s hometown. These approaches differ in that the first describes the dependence as linear, while the second describes it as logarithmic.

$$\begin{aligned} \text{Tatalovich friends-and-neighbours effect } V(D) &= aD + b, \\ \text{Van Wingen–Parker friends-and-neighbours effect } V(D) &= b \left(\frac{1}{D} \right)^a, \end{aligned}$$

where V is the percentage of support for the candidate, D is the distance to the candidate’s voting district, b is the level of support in the candidate’s voting district, and a is the strength of the friends-and-neighbours effect. Another obvious scalar spatial effect of voting is the *campaign effect*, according to which a voter is more likely to support a candidate in areas where they have campaigned more actively.

During an election campaign, candidates and parties are forced to choose constituencies and regions into which more resources will be channeled in order to secure victory. This is done based on two main factors. First, attention is paid to areas where the electoral strategy will be most effective, that is, areas with the highest numbers of undecided voters who are more likely to lean towards the chosen candidate. Second, this electoral strategy

tries to adjust the inherent geographic favoritism of the electoral system in order to prevent wasted votes. For example, in single-member plurality systems, large parties try to avoid receiving excess votes, as they would prefer a more even distribution of voters across the country to hypertrophied support in certain regions. At the same time, small parties are interested in consolidating their supporters in individual districts, since equal distribution across the territory necessarily leads to a large number of lost votes and, subsequently, seats. These considerations, among others, affect the decision whether a candidate should visit a region on his or her campaign trail for rallies and meet-and-greets with voters, or whether a media campaign will suffice.

Researchers are effectively left guessing as to the size of the resources that candidates direct to various regions during their election campaigns. Indicators they look to typically include the distribution of regional shares in the overall campaign budget, or the volume of campaign materials, although gaining access to such data is far from easy. This is why the main indicator for evaluating the campaign effect is the number of times a candidate visits individual districts, and for how long, as well as the number of pre-election events held there – we could just as well call it the pre-election visit effect. In our opinion, these metrics could be supplemented by an assessment of the nature of the spatial distribution of these visits (in terms of turnout and regularity).

Eric Mintz is considered a pioneer in the analysis of the geography of election campaign tours following his 1985 study into the impact of candidate visits on the 1984 Canadian federal election. One of his followers, Thomas Holbrook, used regression analysis to prove that each of Harry S. Truman's campaign visits during the 1948 U.S. presidential election brought him an average of 0.248% support. Major election campaigns have effectively turned into a race to see how many regions across the country candidates can visit, because the more meet-and-greets and events the candidate holds in different regions, the greater the spatial effect of his or her campaign will be. For example, during the 2020 U.S. presidential campaign, during the final three weeks before voting, Donald Trump visited 48 cities in 15 states, while Joe Biden visited 23 cities in 10 states. That is, both candidates managed to visit at least two cities per day.

The final scalar effect of voting is the *issue voting effect*, which states that voters tend to support candidates more in areas they pay greater attention to during their election campaigns. For example, a party that is against tearing down residential buildings to make way for new ones in Moscow will find more support in those districts of the capital where this is happening and public opinion is rather negative towards it.

While a scalar is a value that remains the same when the spatial coordinate system changes, the value of the vector depends on its location relative to other elements of space. Suppose we are studying the relationship between the share of workers and support for the left party in two cities, A_i and B_j , located in places i and j , respectively. The left party received 60% of the votes in City A_i , where 40% of the residents are working class, and 40% of the votes in City B_j , where 20% of the residents are working class. This territorial differentiation reflects the geography of ideological and political cleavages in society. Imagine we can change the coordinates of these cities, but the dependence remains the same: 20% of the residents of City A_j are working class, and the left party will receive 40% of votes; while 40% of the residents of City B_i are working class, and the left will receive 60% of the votes. What this means is that the results depend solely on the properties of the place itself, and that we are dealing with a scalar effect in electoral geography. But what if dependence is determined not by the properties of a given place, but rather by that place's location in space (for example, it belongs to a belt of cities that traditionally supports the left? Suppose that, now, the left receives 30% of the votes in City A_j , where 20% of the population is working class, and just 50% of the votes in City B_i , where 40% of the population is working class. What we have here is an example of the vector voting effect, also known as the *neighbourhood effect*. In this example, the neighbourhood effect will be 10% in both cities (see Table 2). This effect belongs to a large family of contextual voting effects in political science that describe how external factors influence the nature of electoral choice.

Initial situation		No neighbourhood effect		Neighbourhood effect	
A_i	B_j	A_j	B_i	A_j	B_i
20% → 40%	40% → 60%	40% → 60%	20% → 40%	40% → 50%	20% → 50%

Table 2. The neighbourhood effect

So, let us get this straight: *if you change the location of an object and its properties do not change as a result, then we are dealing with non-spatial (scalar) dependence that is determined by the properties of the object itself. If the properties of the object do change when placed in a different location, then we have spatial (vector) dependence.*

The neighbourhood effect means that support for a candidate (or party) is greater in districts that are adjacent to regions where support for this candidate (or party) is higher than the national average. Accordingly, the inverse neighbourhood effect is when support for a candidate (party) is lower in districts that are adjacent to regions where support for this candidate (or party) is lower than the national average. A more formal expression of the neighbourhood effect is that the share of people who vote for a candidate (party) tends to show a positive correlation with the share of those who vote for the candidate (party) in neighbouring districts. In other words, the neighbourhood effect is observed when there is significant spatial autocorrelation in the level of support for a candidate (party) and, as a result, stable spatial differentiation of the electoral landscape.

The neighbourhood effect was conceptualized in 1969 by David Reynolds in the article “A Spatial Model for Analyzing Voting Behavior”, and then further explained that same year by Kevin Cox in his paper “The Voting Decision in a Spatial Context”. Cox based his explanation of this principle on Torsten Hägerstrand’s theory of the spatial diffusion of innovations. According to Cox, the regular spatial clustering of specific candidates and parties is somewhat similar to the way in which rumours or diseases spread. The voter’s behaviour is determined by the influence of the information that dominates in the area where he or she lives. Each person acts as a node in the network of information flows, acting simultaneously as the addressee, transformer and sender of signals. The effectiveness of connections between nodes, and thus of the dissemination of information in the network, depends on the number of addressees, the distance between them and quality of the political culture. The neighbourhood effect is thus explained by the density and quality of the connections between voters: higher density and quality means that voters tend to repeat the voting decisions of their neighbours. William Miller described the essence of the neighbourhood effect using the simple formula “those who speak together vote together”, and this conjecture about the nature of the effect of the communication network on electoral behaviour was confirmed by Robert Huckfeldt and John Sprague’s 1995 study on how people in Indianapolis and St. Louis voted in the presidential elections.

An important addition to our understanding of the neighbourhood effect was provided by the models of environmental effects identified by Miller based on his observations of the UK electoral landscape in 1977. Describing the neighbourhood effect, Miller pointed out that the dependence can manifest itself differently for different parts of society (class, strata, ethnic groups, etc.), which partly explains situations when the effect is minimal (Fig. 1). Miller identified the following environmental (neighbourhood) effect models:

- 1) *consensual environmental effect* – the classic neighbourhood effect, where communication between people strengthens the position of the dominant political force in the region;
- 2) *no environmental effect* – the absence of the classic effect, when communication between people does not affect their electoral behaviour;
- 3) *reactive environmental effect* – the opposite of the classical type, when communication between people increases their mutual annoyance, anxiety and hostility, and, as a result, this weakens the position of the dominant political force in the region;
- 4) *Przeworski environmental effect* – when the neighbourhood effect acts differently on individual parts of society: say, one segment of society is influenced by the majority, while another is indifferent to it, and a third votes differently in defiance.

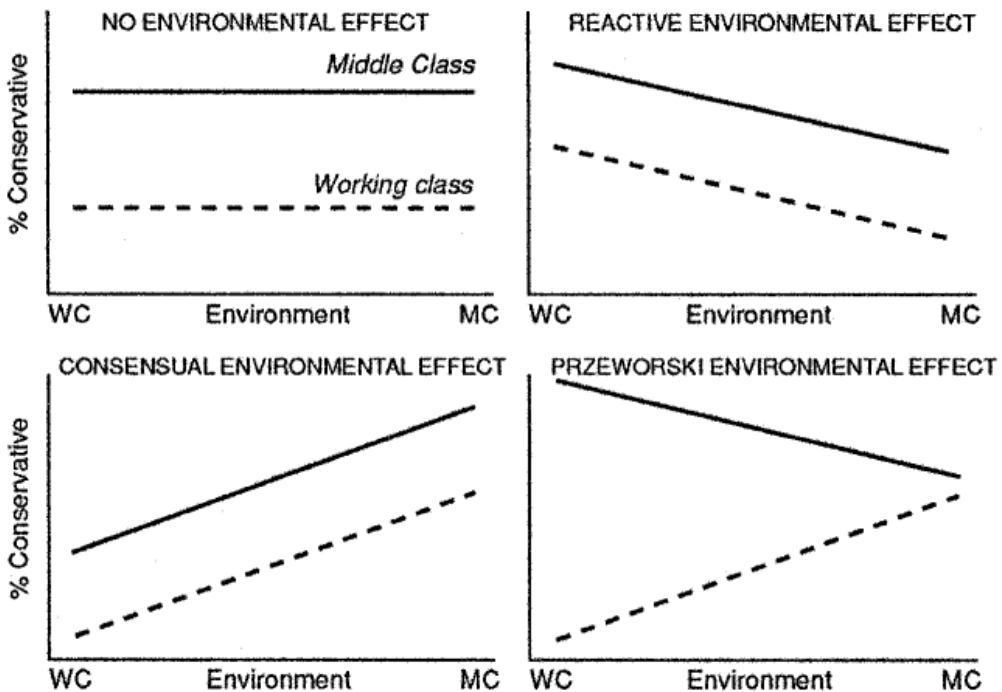


Fig. 1. Miller's environmental (neighbourhood) effect

Source: Miller W.L., *Electoral Dynamics in Britain since 1918* (London: Macmillan, 1977), 266.

As we see, the neighbourhood effect is not equivalent to the geography of ideological and political splits in society, including those that are based on territoriality. It can be said that the geography of voting (the electoral and geographic differentiation of society) is a reflection of the geography of ideological and political divisions anchored in space by the neighbourhood effect. The geography of cleavages would create smooth territorial transitions in the spatial continuum of the state, but the neighbourhood effect polarizes society in space by, among other things, creating a territorial dimension for non-territorial (social, ideological and other) splits.

To assess the degree of clustering of the electoral space, either simple indicators of geographic concentration and spatial relationships or spatial statistical analysis methods can be used.

The *localization coefficient* measures the relative distribution (or relative concentration) of supporters of a given party in a specific region in relation to the country as a whole.

$$\textit{Localization coefficient} = \frac{X_i / \sum X_i}{N_i / \sum N_i} * 100,$$

where X_i is the number of supporters of the party in region i , $\sum X_i$ is the total number of supporters of that party in the country, N_i is the total number of voters in region i , and $\sum N_i$ is the total number of voters in the country. If the localization coefficient is greater than 1, this means that the party is relatively more concentrated in the region being observed.

While the localization coefficient estimates the relative distribution in space of supporters of one party among all voters, the *geographic disparity index* compares the proportional distribution in space of supporters of two different parties.

$$\textit{Geographic disparity index} = \sum_{i=1}^N \frac{(X_i / \sum X_i) - (Y_i / \sum Y_i)}{2} * 100,$$

where X_i and Y_i are the number of supporters of parties X and Y in region i , $\sum X_i$ is the sum of supporters of these parties in the country as a whole. The index ranges from 0 to 100, where 0 means absolutely equal spatial distribution of the two parties across the country, and 100 means completely opposite spatial distribution.

$$\text{Geographic segregation index} = \sum_{i=1}^N \frac{(X_i / \sum X_i) - (Y_i / \sum Y_i)}{2} * 100$$

The *geographic segmentation index* is similar to the geographic disparity index. The difference is that it compares the performance of one party relative to voters in the country as a whole, rather than the performance of two parties. It is also measured on a scale of 0 to 100 and has the same threshold interpretations.

In order to assess the neighbourhood effect, it is important to both determine the level of space clustering, and to identify the strength of the geographical interaction between objects – i.e., how connected and interdependent they are. This is done using the *gravitational model*, borrowed from Isaac Newton's equation of universal gravitation.

$$I_{ij} = k \left(\frac{P_i * P_j}{D_{ij}^b} \right),$$

where I_{ij} is the force of gravity (spatial interaction) as it is directed from Place i to Place j , k is a constant, D_{ij}^b is the distance between i and j with distance exponent b , and P_i and P_j are the number (or share) of Party P 's supporters in regions (electoral districts) i and j . Points i and j are mapped as centroids or administrative centres of regions or electoral districts. For most investigations in absolute two-dimensional space, it is reasonable to use $k = 1$ and $b = 2$.

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Measuring Unfriendliness and Remoteness: Dynamics of Geopolitical Processes in Eurasia

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Abstract

The official list of the "unfriendly countries" has appeared in the Russian political discourse since 2022, though dividing countries into friends and foes has deep roots, that come from traditional American geopolitical discourse. The authors view friendliness and unfriendliness of the geopolitical actors and their mutual distance as key characteristics of the geopolitical space. The study presents a renewed scale of friendliness and unfriendliness based on "Discord and collaboration" by A. Wolfers. Analyzing both qualitative and quantitative data, the empirical research includes using this multistep scale to evaluate countries friendliness and unfriendliness towards Russia in 2016 and 2024. Next, the method of multiscale distances is used to measure and graphically represents the connectedness and degree of geographical influence of the geopolitical subjects varying in friendliness and unfriendliness on Russia, Siberia (as a general geographic region) and the Siberian federal district. The research considers in mesolevel that is measured through economical distances (understood as the length of the existing transport lines) between nearest cities as actors of economical space. The research proves that due to its remoteness Siberia has a more beneficial location in comparison with Russia as a whole, because only friendly economic centers can be found within 2500 km from Siberia, unfriendly geopolitical actors moved even farther from it, whereas the friendliest actors (primarily Eurasian states) remained as close as in 2016 and became even friendlier towards Russia. The view of the geographical map through the prism of dynamic characteristic of graduating friendliness-unfriendliness and the multiscale analysis of remoteness of geopolitical subjects help us to understand geographical and geopolitical advantages and disadvantages of the Eurasian integration and the concept of the Greater Eurasia, its problems and threats. In case of Siberia the main characteristic of the current geopolitical position is the drifting of Mongolia and Kazakhstan as the most geographically close subjects from friendliness to the opposite, whereas other subjects in Central Asia rise to more friendly status as detected on the scale. Overall, the presented view on the geopolitical dimensions presents a new geographical picture of position Russia and Siberia in Eurasia.

Keywords: quantitative geopolitics, Russia, Siberia, economical distances, Wolfers, unfriendliness, Eurasia, sanction policy, economic distance

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Introduction

Traditionally, geopolitics is concerned primarily with the global and the national level (Okunev 2021), and the role of subnational units - regions - is somewhat reduced due to their smaller role in foreign policy. The methodology of regional geopolitics is most fully presented in the works of P.Ya. Baklanov on the territory of the Far East (Pacific Russia) (Baklanov, Shvedov, and Romanov 2023). Probably, the interest in this topic specifically in the Far East is associated with the significant vulnerability of this territory and constant geopolitical shifts in the external environment. Siberia, despite its remoteness from most world powers in modern times, is also an important part of Russia, the geopolitical position of which has significant dynamics. This is manifested in the changing positioning of neighboring Mongolia on the world stage, the foreign policy drift of Kazakhstan and, of course, in the Ukrainian crisis, which pushed Russia to accelerate its “turn to the east.” In view of these transformations, the importance of geopolitical research is increasing.

Another factor that has influenced the revision of geopolitical studies is the creation of "lists", "axes" and "registers" of unfriendly countries. Such lists are rarely based on clear and objective criteria, but some efforts to formulate them can be noted (for example, Safranchuk, Nesmashnyi, and Chernov 2023 is noteworthy in this regard). One way or another, subjects of varying degrees of unfriendliness have different geographical influence on Russia. Siberia also occupies a special place, being, like the Far East, the most remote territory from the theater of Russian-Western confrontation, but the question arises how significant this fact is. The purpose of this work is to identify the geographical characteristics of subjects of varying degrees of unfriendliness that affect Russia and Siberia in particular.

Review

Attempts to create a scale of friendliness and hostility have been made in the academic literature for quite a long time, but researchers have used different terms and variables for this topic. Back in 1941, a study by F. Klingberg was published, in which tension was considered as a “psychological distance” separating two states, the value of which can be measured within the framework of the “friendliness - hostility” scale (Klingberg 1941).

In 1955, a model for measuring interstate tension as a dynamic state located in a multidimensional space between the poles of stability and conflict was presented (Wright 1955). Earlier, in thinking about whether tension could be assessed or measured, Wright started from the use of this term in the physical sciences and its reflections in sociological and psychological research. An approach to measuring

tensions, based on the assumption that in formulating foreign policy it is important to understand the perceptions of reality, images, stereotypes and definitions of the situation by decision makers, rather than the objective conditions existing in the world, was later proposed by K. J. Holsti 1963. The greatest attention when turning to the analysis of tension, as a rule, was attracted by the problem of identifying the main causes and factors causing it (Leifer 1974). These included perceptual variables such as threat perceptions, assessments of abilities, intentions, attitudes and overt behavior (O. R. Holsti 1962). As a result of all these efforts, the concept of tension gradually began to acquire greater definition and substantive rigor. In accordance with the classical interpretation of K. Holsti, it has come to be understood as a set of attitudes and tendencies, such as distrust and suspicion, that the public and politicians experience towards others (K. J. Holsti 1963).

In mathematical models used in political science, the political attitude is represented as a certain constant that is specified by the researcher. In the model of L.F. Richardson, known as the arms race model, identifies “the magnitude of past grievances” as such a variable (Richardson 1960). This variable can be either a positive or a negative number, but one way or another it was perceived as a constant. Richardson's followers were engaged in a detailed description of the exact definition of this parameter.

The most well-known scale in the positive direction (that is, the scale of friendliness) is probably the concept of B. Balassa about the stages of integration processes (Balassa 1961). Complex integration processes have a branched structure, but it has been revealed that economic integration has certain stages: a preferential trade zone, a free trade zone, a customs union, a common market, an economic union. At the same time, currency unions remain somewhat on the sidelines, since they are created for various reasons (this can occur both from integration processes and due to currency protectorate or post-colonial ties) (Okunev 2021). A similar gradation can be seen in the military-political sphere: a non-aggression treaty, an agreement on cooperation in the military-technical sphere, joint military exercises, a joint defense agreement, a unified military command. In the context of the friendliness of states, these processes overlap each other, forming different levels of friendliness of states.

To summarize, we derive the parameter of “political attitude” as a measure of the positivity or negativity of connections between geopolitical subjects, which is similar to Richardson’s “magnitude of past grievances”, since it generally reflects the assessment of one subject by another on the “friendliness-hostility” scale. It is this factor that introduces a geopolitical aspect into political-geographical analytics. At the state level, A. Wolfers, in his essay “Discord and collaboration”, presented certain

and clear criteria for political subjects, divided into categories, ranked on a “hostility-friendliness” scale. He identified the following categories:

- Irreconcilable hostility (state of war)
- Showing hostility
- Termination of friendly relations
- Minimum relationships
- Cool or non-aligned relations
- Active internal cooperation
- External cooperation
- Extreme expression of friendship (Wolfers 1962)

The Wolfers scale emphasized military power, but in subsequent decades there was a tendency to reevaluate the importance of military and economic factors in shaping foreign policy in favor of the latter. In our earlier works, the Wolfers scale was modernized and the exact criteria for the onset of one or another stage of manifestation of friendliness or hostility were identified (Fartyshev 2018). It is the basis for this work.

Data and Methodology

Within the framework of the task, two successive stages are distinguished: distribution of geopolitical subjects according to the degree of friendliness-hostility and assessment of the remoteness of subjects of varying degrees of distance from Russia (Fartyshev 2017). The sample includes Asian countries (excluding Southeast Asia and the Arabian Peninsula), the most significant and close countries of Europe and the USA. In earlier works, a typology of political attitude was proposed based on a linear scale of “friendliness-hostility”, which presents clear criteria for stages of the parameter PA (political attitude), starting from $PA = 0$, as minimal relations, both in the direction of friendliness and in the direction of hostility, and being divided into 9 stages (Fartyshev 2018). The assignment of one or another degree of gradation is based on the criteria reflected in Table 1. In case of duality of assessment, the prevalent criterion is considered to be the one that is more up-to-date (for example, the expulsion of diplomats as the latest fact of a change in the type of political relationship), or stronger (for example, the fact of regularly held military exercises between Russia and Mongolia is more significant than the negative factor of the negative connotation of news about Russia in the Mongolian media).

Table 1: Typology of political relations between geopolitical subjects

Type	Sub-type	Attribute
Union ($PA=+3$)	3.3 Unity	Common governmental structures
	3.2 Trust	No border control, common currency
	3.1 Cohesion	Military alliance, joint defense treaty
Cooperation ($PA=+2$)	2.3 Friendship	Customs union
	2.2 Mutual benefit	Special conditions for trade agreements
	2.1 Partnership	Joint military training
Warm neutrality ($PA=+1$)	1.3 Consent	Support in voting on UN resolutions
	1.2 Sympathy	Positive connotations of news about the country in the media
	1.1 Communication	Existence of trade relations without special conditions
Minimal relations ($PA=0$)		Small volumes of trade, political and cultural connections
Cold neutrality ($PA=-1$)	-1.1 Caution	Strengthened visa regime, tougher customs duties
	-1.2 Rejection	Negative connotations of news about the country in the media
	-1.3 Disagreement	Protest voting on UN resolutions
Competition ($PA=-2$)	-2.1 Rivalry	Territorial disputes are in the active stage of discussion
	-2.2. Opposition	Embargo/sectoral sanctions
	-2.3 Disgust	Diplomatic wars (cases of expulsion of diplomats)
Hostility ($PA=-3$)	-3.1 Remission	A war in a frozen state
	-3.2 Escalation	Local war
	-3.3 Destruction	Total war

To assign one or another degree of friendliness, current data on UN voting on resolutions, data on military exercises, data on international treaties on the degree of

economic integration, data on the political coloring of messages in the leading media of the relevant countries (the sample included 100 publications in each country), data on cases of expulsion of diplomats and other relevant data were analyzed.

Geographical analysis is based, first of all, on measuring the distance of certain entities from each other. In classical geopolitical studies, the principle of neighborhood order is used (Baklanov, Shvedov, and Romanov 2023), however, we believe that this approach is incorrect due to the underestimation of the extent of space, therefore the influence of subjects is evaluated through the economic distance between the nearest demographic and economic centers, reflecting the possibilities of direct cooperation between countries.

Economic distance (in other terminology “relative distance”) refers to the distance along existing communication routes (roads, railways, sea routes) (Bezrukov 2023). It can be measured in length, time or prices. This is important from the point of view of the immediate possibility of contact between two geopolitical entities for the exchange of goods. The comparison of economic distances was carried out on the basis of border checkpoints operating on highways as of March 1, 2024. In a number of cases, sea distances are taken through currently existing sea connections (for example, transport connections with Syria are actually carried out along the Novorossiysk-Latakia sea line, and connections with India are through the ports of Calcutta-Vladivostok and Nhava Sheva-Novorossiysk, and not by land transport).

For comparative analysis, two dates were taken: 2016 as the year preceding the period of global turbulence and pandemic transport restrictions, and the current year 2024.

Besides, the perception of the borders of Siberia should be clarified. During the period under review, the Siberian Federal District was reshaped after the resubordination of the Republic of Buryatia and the Zabaikalsky krai to the Far Eastern Federal District, however, following the academic traditions of V. B. Sochava Institute of Geography SB RAS, the territorial framework of Siberia in the general geographical sense should include the Tyumen region with its districts and the Republic of Sakha-Yakutia (Korytny 2021). From the point of view of modern approaches in regional studies, the region does not have clearly defined boundaries at all, since the level of regional cohesion (regional consolidation) is of greatest importance (Hettne 2005).

Results

The origin of the concept of unfriendly countries

In itself, the division into friendly and unfriendly countries is fundamental for political theory, since the theory of the emergence of statehood according to K. Schmitt is built around the dichotomy of friend or foe. The proclamation and institutionalization of “other” communities or subjects allows us to see more clearly what “we” are, where the border between “them” and “us” lies, and what exactly serves as this border (Kharkevich 2009). In the period of antiquity, states on the political map of the world, according to this demarcation, were divided into the “civilized world” and “barbarians”, during the Middle Ages - into Christian states and infidels, in modern times and especially aggravated during the Cold War - “democratic” and “authoritarian” states. In 1959, US President D. Eisenhower signed a joint declaration with Congress recognizing the “Captive Nations Week” and issued a proclamation, which subsequent US presidents reissued every year. In the same year, Public Law No. 86-90 (07/17/1959) was adopted, under which it was impossible to peacefully exist with a communist society, and Russian communism (in fact, the USSR) was declared a serious threat to the national security of the United States and the whole world. The law designates the countries (Poland, Hungary, Lithuania, Ukraine, Czechoslovakia, Latvia, Estonia, Romania, Belarus, East Germany, Bulgaria, mainland China, Armenia, Azerbaijan, Georgia, Albania, Idel-Ural, Tibet, Kozakia, Turkestan, etc.) in need of support of their desire for freedom and independence from the USSR.

The report of the US National Security Council No. NSK 5811/1 dated May 24, 1958 provides an overview of the geopolitical relationship of Romania, Hungary, Czechoslovakia, Albania, Bulgaria to the United States, and formulates short-, medium- and long-term goals reflecting the declared principles of the proclamation. At the same time, guidelines were drawn up for the introduction of US foreign policy towards Eastern Europe and the following measures were prescribed (some are classified to this day): nurturing nationalist pride and aspirations among people and within the leadership of the regime, publishing evidence of violations of the human rights of citizens of the republics by the USSR, etc. This document provides specific guidance on policy towards the Baltic countries. It seems that such proclamations should be considered an official designation of the geography of US geostrategic interests, which have not changed since the end of the Cold War.

In the late 1980s – early 1990s, the term “rogue states” arose in the discourse, characteristic of US international policy, as a similar manifestation of the “alien” in

foreign policy to replace the collapsed USSR (Kharkevich 2009). US President George W. Bush, speaking before Congress on January 29, 2002, introduced the term “axis of evil” into international circulation, referring to countries that allegedly support terrorism and develop weapons of mass destruction. The first list included Iraq, Iran and North Korea; in 2005, Condoleezza Rice and her deputy John Bolton included Libya, Syria, Cuba, Belarus, Zimbabwe and Myanmar in the “axis of evil”.

In 2022 the Government of the Russian Federation published the “List of Unfriendly Countries and Territories” (Order of the Government of the Russian Federation dated March 5, 2022 No. 430-r), thus institutionalizing one of the main components of the geopolitical position - the political relationship between countries, expressed on the scale of “friendliness-hostility”. The list as of March 1, 2024 includes: Australia, Albania, Andorra, Great Britain, including Jersey, Anguilla, Bahamas, British Virgin Islands, Gibraltar, member states of the European Union, Iceland, Canada, Liechtenstein, Micronesia, Monaco, New Zealand, Norway, Republic of Korea, San Marino, North Macedonia, Singapore, USA, Taiwan (China), Ukraine, Montenegro, Switzerland, Japan, as well as dependent territories of Great Britain. This list was originally created from the point of view of the so-called “sanctions policy” (Timofeev 2023), but in reality it has had an impact on many more areas than just economic measures. When referring to this list, the following important aspects should be emphasized:

- The selection of “aliens” was done quite clearly (although the above-mentioned decree is constantly being supplemented), whereas the selection of entities that are friendly is a more debatable topic. Although a number of legislative acts (for example, Federal Law No. 630-FZ dated December 25, 2023 “On Amendments to the Law of the Russian Federation “On Customs Tariffs” and the Federal Law “On the Fundamentals of State Regulation of Foreign Trade Activities”) introduce such a definition, there is no list of friendly countries.

- The register of states itself is discrete and does not imply gradation, which is a significant simplification of current reality. In terms of research, it is more accurate to talk about levels or degrees of gradation, which will be discussed in more detail below.

- The list contains polities that do not take direct unfriendly actions towards Russia, for example, the British dependent territories, such as the Pitcairn Islands, were included in the list in order to comply with the sanctions regime on all territories that have any form of dependence from the metropolis, but, at the same time, unincorporated dependent territories of the Netherlands, such as the island of Aruba and Curacao, on the contrary, were not included. Such an approach is inconsistent and gives rise to misinterpretations of the list.

Thus, lists of unfriendly countries are a traditional form of fencing, hanging a “label” or a “black mark” and highlighting the “alien” in a multidimensional political space, but from a research point of view it seems more relevant to speak about various levels of political relations of geopolitical subjects.

Assessment of the level of political attitude

During the period under study, significant changes occurred in the political attitudes of countries. In 2016 the vast majority of European countries were subject to Russia’s economic and political sanctions. After the announcement of a “special military operation” in 2022, hostility intensified with the expulsion of diplomats (which in the previous period happened only in the case of Great Britain, Sweden, Poland and the Ukraine), which means a transition from the stage of “opposition” to “disgust”. The most radical geopolitical subject in attitude towards Russia is the Ukraine, the degree of hostility with which in 2024 can be assessed as “escalation” (although in the political discourse of both Russia and Ukraine in a number of cases the “destruction of statehood” is mentioned). Relations with China have not developed, and Russia and the PRC have not advanced along the path of integration, although every year the parties conduct joint Maritime Cooperation exercises in the Sea of Japan, which allows one to evaluate relations as “partnership” with the prospect of moving to higher degrees of friendliness (Lukin 2021).

Relations between Russia and the DPRK over the past period remain uncertain. North Korea is one of the few countries that recognized the annexation of new regions by Russia. In September 2023 the leader of the DPRK visited Russia and negotiations were held at the highest level, in July the Russian Minister of Defense visited the DPRK, where the issue of joint military trainings was discussed among other things. However, the political attitude is not symmetrical, since Russia holds strict sanctions against the DPRK, introduced by the UN.

Russia's warmest relations are observed in Central Asia, where the CSTO military alliance prevails as the highest stage of friendship, with high stability, assessed as “cohesion” Relations with the countries of South Asia are characterized primarily by joint military exercises, which are held regularly. In the case of India, these have been carried out since 2005, with Pakistan - since 2014, and with Iran - since 2019. Since 2023, Iran has entered into a free trade zone with the EAEU, which further increases its degree of friendliness. Relations with Nepal and Bhutan can be characterized as minimal relationship.

The remaining assessments of countries according to the scale are more specific. The final distribution of countries by degree of political attitude is presented in Fig. 1.

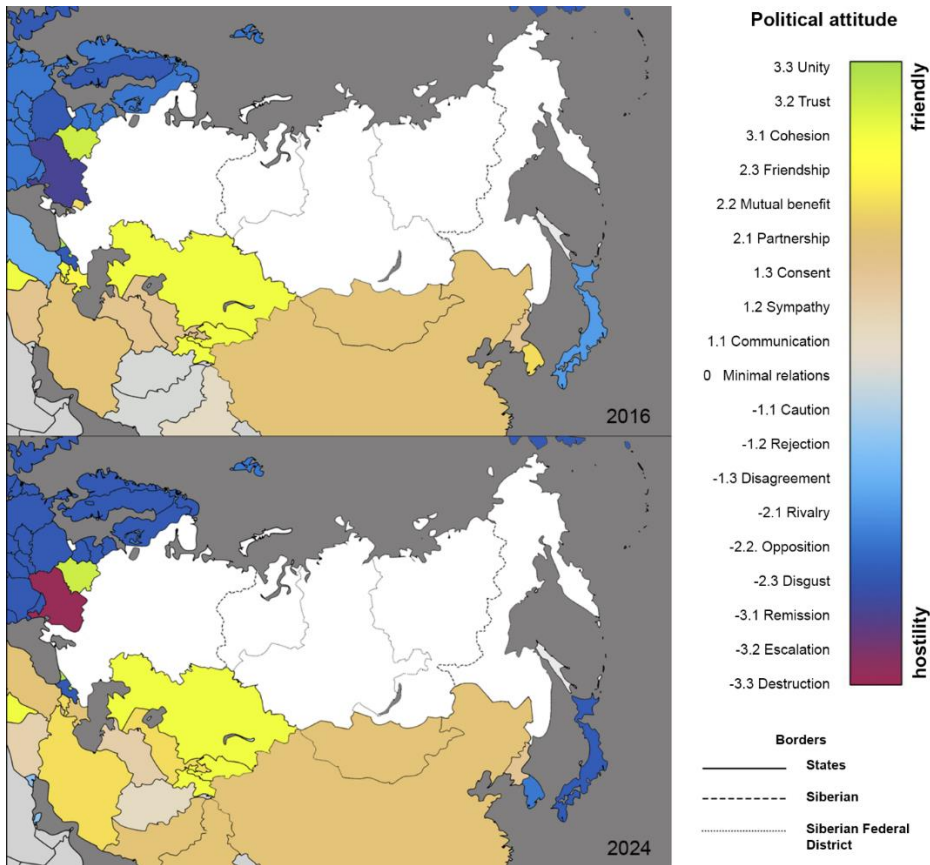


Figure 1: Political attitude of the countries of the world towards Russia.

The following trends are visible from the presented maps:

- Over the past period, there has been an increase in unfriendliness both on the eastern and the western “flank” of Russia that were already unfriendly in the previous period (from the degree of competition to hostility). For Siberia, these subjects have a more distant position, but they are of more critical importance for Russia as a whole.

- The friendliness of countries within the Eurasian space to the south of Russia has increased, it is strengthening slowly and gradually, from neutrality towards cooperation. For Siberia, these are the closest subjects, which increases the geopolitical significance of this macro-region.

- The presented maps show the inconsistency of the judgment about the political isolation of Russia and, taking into account a number of assumptions, clearly shows the implementation of the concept of the so-called “Greater Eurasia”, implying the political consolidation of the intra-Eurasian space (Bezrukov 2018; Fartyshev 2021).

Analysis of the degree of remoteness of geopolitical subjects

The results provide grounds for a geopolitical assessment of the proximity and distance of countries with various political attitudes and depending on the level of their significance in world politics. The classification of power levels is taken from the another study (Nesmachnyi, Zhornist, and Safranchuk 2022). Distance diagrams are presented for this assessment (Fig. 2).

An analysis of the remoteness of political entities showed the main trend that occurred during the period under review: unfriendly entities moved away from the territory of Russia due to the closure of the border between Russia and the Ukraine, and the closure of all checkpoints on the Belarusian-Ukrainian border. The greatest increase in distance is observed with Moldova, which, despite the fact that geographically it is a second-order neighbor, now has land connection with Russia only through three countries - Ukraine, Poland, Belarus. The closure of most border points in Finland has led to an increase in the economic distance by land between the nearest economic centers; whereas the maritime connectivity of the states remains. As for the macroscale, there have been no fundamental changes, but when considering the distances between political centers along aviation routes, taking into account the emergence of no-fly zones and closed airspaces, the greatest changes have affected almost all European countries, where the connection with Russia is only possible through third countries (for example, through Turkey).

These processes have less impact on Siberia and the Siberian Federal District, since they are located at a considerable distance and, according to the law of diminishing returns, the increase in high mileage is less significant. In the 2500-km distance zone, Siberia has exclusively friendly entities, which makes its geopolitical position extremely advantageous, while they remained at the same distance as they were in 2016, since during the period under review there was no increase in connectivity as border points (the only new border checkpoint was opened on the Russian-Chinese border in the area of the village of Nizhneleninskoye, Jewish Autonomous Region), no new direct transport routes connecting economic centers, no transfers of political centers occurred, and the closest entities that were previously unfriendly (among them) did not become friendly. Only Turkey can be noted, and the growing

friendliness of Pakistan and India is offset by the excessive remoteness of these countries.

The overland remoteness of Siberia is, of course, an economic problem for itself, since transport costs by land are significantly higher than by sea (Bezrukov 2008), however, from a geopolitical point of view, Siberia seems to be the most favorable territory for future internal economic and internal political development. But, of course, this is only one of the factors.

Discussion

Today we can observe a significant civilizational movement, when Russia is increasingly moving away from the “Western countries”; against this background, a new interest in Eurasianist ideas has arisen (Druzhinin 2021), as well as the ideas of the “Siberianization” of the country (Karaganov 2024). As the results of our analysis show, Siberia has an advantageous geopolitical position due to its proximity to friendly countries, therefore Siberia becomes a platform for ensuring the internal economic stability of a country under siege by the Western thalassocratic bloc. The failure to finish creating the third industrial base with the center in East Siberia led to the lack of industrial development of the vast territories beyond the Yenisei, the focus not on creating full-cycle production chains, but on the export of resources without a high degree of processing, the problems of developing transport and logistics capacities along the transit type along the Asia-Europe route. This negative feature of spatial development in the post-Soviet stage is clear now, when the military and strategically important industry of the country is primarily situated in the European part of Russia, in the proximity of the theater of military operations.

At the same time, it is important to understand that political attitudes are extremely dynamic and depend mainly on government decisions and internal political events, which is why the presented structure is flexible. For example, the change of power in Argentina in 2023 turned the state's policy almost 180 degrees from the desire to join BRICS towards increased foreign policy dependence on the United States and the “dollarization” of the country. The same processes could be observed during the periods of “color revolutions” of the 1990s-2010s. There are still countries in close proximity to both Russia and Siberia that have the potential for a sharp change in foreign policy course through a revolutionary path, for example, in Kazakhstan, or an evolutionary path, for example, in Mongolia. These two neighboring countries are located at the very core of the continent, and the dynamics of consolidation in the Eurasian space depend on the policies of these countries. In many ways, the project of Greater Eurasia will depend on Russia's policy towards these two countries,

which, translated into the language of geopolitical analysis, implies increased friendliness on the scale we presented above.

On the other hand, geographical images and stereotypes are incredibly inertial (Kolosov 2003), which is embedded in the political culture and behavioral patterns of both the population and the elites of a particular country. The construction of the image of “enemy” or “friend”, “significant other”, “center” and “periphery”, etc. occurs through human communication, mass propaganda, art, etc. These images, based on collective identity, remain unchanged for a long time, which depends on the speed of information dissemination, the degree of ingrained ideas, consistency with the picture of the world, which reflects the process of diffusion of innovations. How to influence this image of one’s country in the event of a transition of one or another state to a hostile state is a question of the design of social behavior. For the studied time period 2016-2024 there was no overall critical change in the political attitude of these countries towards Russia, although for the purposes of national interests, the increase in friendliness of continental states should be at least symmetrical to the deterioration of sentiment in the countries of the Western bloc. At the moment, such a symmetrical process is not happening.

In order to increase the relative proximity of states, it is necessary to develop intracontinental highways. For example, India, being a generally friendly state towards Russia, remains an extremely distant country, since communication with it is carried out not by land routes, but almost exclusively through seaports. But the main limiting factor of meridional distribution is the belt of political instability on the border of South Asia with East and Central Asia (Bezrukov 2008).

Conclusion

The division into unfriendly and friendly countries has a long historical tradition. The modern “list of unfriendly countries” published by the Russian Foreign Ministry is, from the economic side, a manifestation of the “policy of sanctions”, but from the political side it is the successor to the American geopolitical tradition of identifying “rogue countries” or “captive nations”.

Analysis using the grading of geopolitical subjects on a scale of “friendliness-hostility” shows the exact characteristics of the political attitude of countries. The following changes were recorded for 2016-2024: increased hostility of European countries, increased friendliness of the countries of Central and South Asia, static relations with China, North Korea and Mongolia, and increased friendliness with Turkey. The geopolitical situation requires constant monitoring due to the dynamism recorded in this work.

The trends in geographic remoteness, which are only briefly reflected in this article, indicate many side effects of political decisions to change the status of border crossings or airspace. At the same time, economic distances shows the real difference in the distance of countries much more accurately than dividing countries according to an ordinal principle and should be used as a basis for geopolitical analysis. A tendency has been revealed that Siberia, in its general geographical understanding, has an advantageous geopolitical position due to its remoteness of more than 2500 km from hostile entities, however, economically this is a disadvantage due to the long transport distance and high transport costs.

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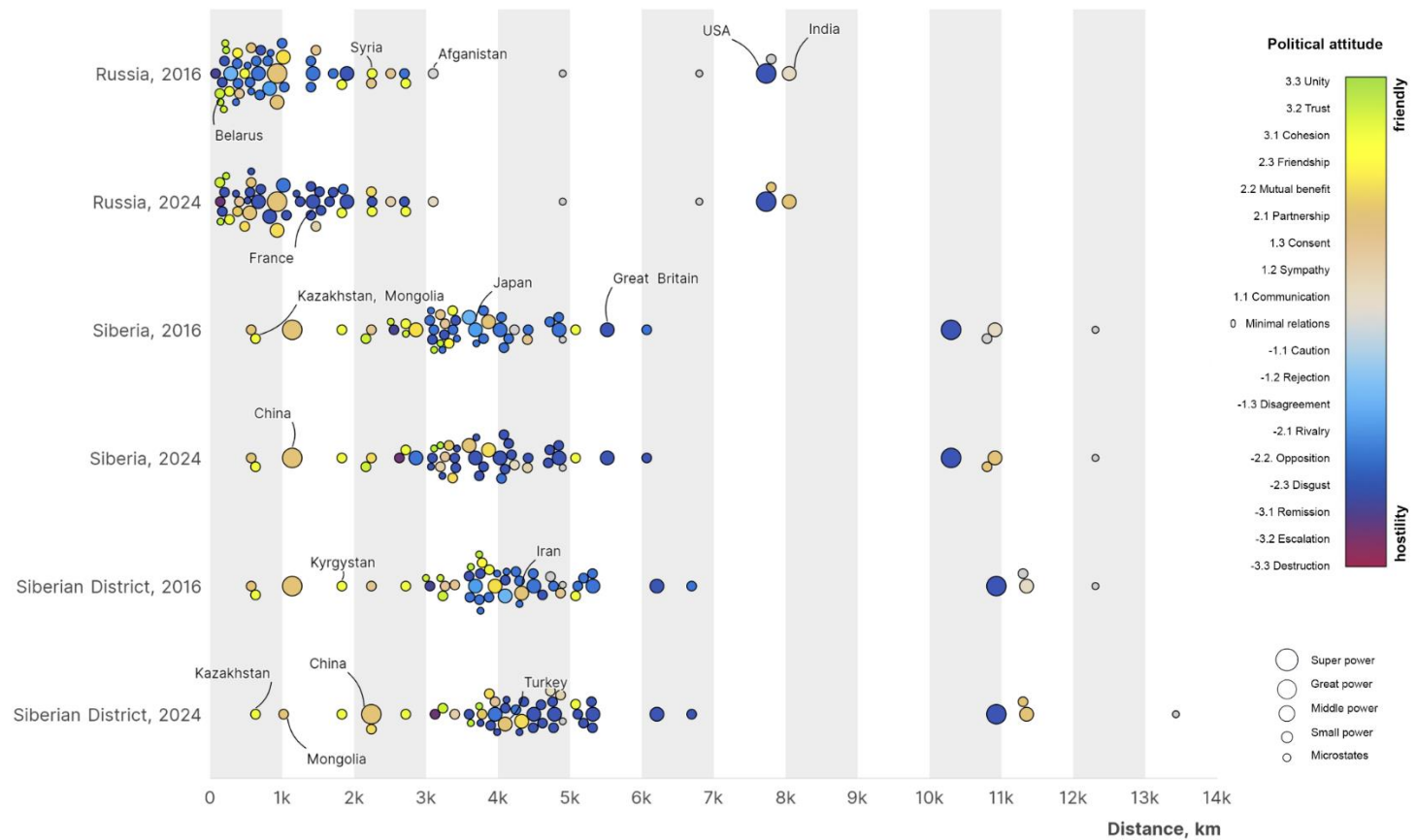


Figure 2: Diagram of the distance between subjects of varying degrees of friendliness and hostility towards Russia, Siberia and the Siberian Federal District

Stochastic Count Processes and Hypergraph Databases in the Dynamic Network Analysis of International Visits

Aleksey Domanov¹ and Oleg Semenov²

Abstract

The given study applied dynamic topological network analysis with regime shifts to international visits. Using this quantitative method, we demonstrated, how the degree of connectivity between various countries has been affected by abrupt changes on the international arena — like coronavirus pandemics. High-level officials' visit hypergraphs were compared between the first and the second quarter of 2020. Hypergraph database allowed for modeling multilateral meetings sampled from the GDELT project materials. Transforming them into simplicial and cell complexes allowed for applying a well-established spatial computing method (one of the techniques employed by topological data analysts) to international relations. Topological tools revealed key structural features of pre- and early-Covid networks. Parallel interpersonal channels of communication decreased in number after the pandemic start, and this regime shift was reflected in the number of topological features. A “hole” discovered between France, Turkey and Nigeria suggests emergence of considerable obstacles to communications between their leaders. According to GDELT database, not only did they interrupt direct personal contacts, but also no intermediary head of state personally visited all the three countries, hosted their leaders or met them on a “neutral” territory.

Keywords:

connectivity, Topological Data Analysis, 2-simplex, cell complex, random hypergraph, persistent homology, coronavirus restrictions, clustering, multilateral summits, communication.

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Introduction

Fragmenting world politics increases the necessity to provide solid quantitative basis for analyzing the density of interactions between international actors. Being a trigger of major readjustment in global connections, Covid-19 pandemics provided researchers with rich material to understand, what changes in international connectivity resulted from restrictions related to this virus. We suggest approaching this phenomenon using topological network analysis.

Hypothesis 1: global connectivity decreased after the beginning of Covid-19 pandemics.

More specifically, we would like to focus on the subnetwork of connections between 3 following countries.

Hypothesis 2: the connectivity between France, Turkey and Nigeria decreased after the beginning of Covid-19 pandemics.

The following sections describe our approach to network analysis and a sample selected from checked GDELT dataset. Furthermore, we compare two networks by a single global characteristic (representing increased sparsity in international connections around the world after Covid-19 pandemics start). Besides, connections between 3 specific countries and other states are characterized using the same networks with transformed edges.

Stochasticity in visits network dynamics

Connectivity between two states could be reflected in the frequency of friendly actions undertaken by the political elite of one country towards their counterparts abroad - e.g. visits. Two countries could be regarded as connected, if their leaders met (not only on their territories, but also in a neutral location). Therefore via these meetings a network of visits is created, which could have dense connectivity or high sparsity.

Sparse networks could be analyzed within the tradition advanced by Hungarian mathematician Paul Erdős: as a random graph, where edges between vertices appear with a certain probability. In the case of international relations these edges could depict interpersonal ties established or reinforced by politicians – from geographical point of view, they become contiguous in relative space (moreover, they constitute a space in mathematical sense without geodesic coordinates).

Randomness in this graph is not only observed spatially, but also temporally. Politicians' external actions could be generalized as a process including probabilistic events, which contribute to network density. Therefore the neighborhood of every node and the whole graph stochastically evolves – edges are added at variable rate in various periods. If the number of meetings is aggregated by timeslots, it is described as a count process.

This temporal model of contacts between actors theoretically allows for a simultaneous drop in this frequency of negotiations. At the level of the whole network it could result in decreased overall connectivity. This effect could have a long-lasting nature: some inertia from the event, which caused that major reconfiguration, often remains tangible several months or years after this date. Sometimes observers could register that the system transitioned to a new mode of operation – underwent a regime shift. It is worth noticing that not only some values of network nodes could endure changes (e.g., a decrease in the GDP level due to a crisis), but also edge attributes or weights could be altered, and the whole network could be rewired

In practice this dynamics of meeting probability could be witnessed at the start of Covid-19 pandemics, which could accelerate decoupling between key international players. This divergence could arise from inability to eliminate misunderstandings during personal, offline contact (which became more difficult to organize because of health restrictions). Information flow in the network could be hampered, because of disappeared direct connections: although indirect duplicating circuits of interpersonal communication (visits of intermediaries) and low-level meetings could remain, actors could withhold sensitive information for several more months than usual – until it becomes possible to discuss these issues personally in private.

As for quantitative characteristic of the “regime shift” in focus, meetings network could become more sparse. Its density could decrease (following the number of edges) and more messages could be delivered along bridges – intermediaries instead of direct meetings. The pandemics start could have the disconnection effect depicted on Fig. 1: the solid, black circuit between 3 partners could be replaced by indirect communications (dotted contour).

Long-lasting consequences of Covid-19 restrictions make reasons to attempt modeling this dynamic as a “regime shift”: substantial change of system parameters from one period to another. This temporal approach resembles difference in differences research design, widely used for spatial analysis – inside geographic regression discontinuity algorithms.

For that purpose the stochastic processes related to political actors were sampled in order to conduct dynamic comparison between pre-Covid and early-Covid periods. It is worth noticing, that this “shift” has not been sudden (after 11 March 2020, when the World Health Organization declared Covid-19 a pandemic, some countries didn’t introduce full restrictions, and their presidents continued meeting each other). Therefore our network was divided at the end of March 2020 – into two windows by 3 months (equal periods in order to avoid unbalanced sampling) for the first quarter 2020 and the second quarter 2020.

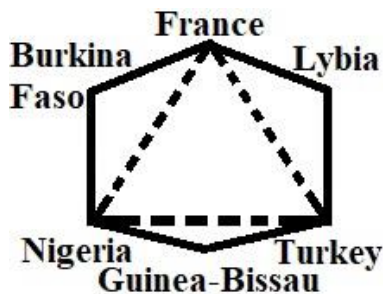


Fig. 1. Personal communication channels in parallel to disappeared (dotted) connections between French, Turkish and Nigerian leaders.

Hypergraph database, simplicial and cell complexes

A dataset, which could be divided into pre- and early-Covid-19 periods, has been collected by filtering and checking information from the Global Database of Events, Language and Tone (GDELT project) with the help of our colleagues I. Ivlev, V. Lazereg and V. Botvinkin. This is a catalog of media materials, which underwent speech recognition and natural language processing procedures [The GDELT Project].

Our database consisted of individual meetings sampled according to some requirements. In particular, we were interested only in contacts between heads of state, which occurred in person (phone calls have also been registered, but not analyzed below).

Information about multiplicity of participants in some summits (multilateral conferences) should have been accurately reflected in our dataset: otherwise we could lose interesting patterns related to cumulative qualities of communities and its members – e.g. 3 leaders’ readiness to adjust their schedules for a trilateral meeting rather than having 3 separate discussions. In order to preserve this multilateral data, it was stored in hypergraph format.

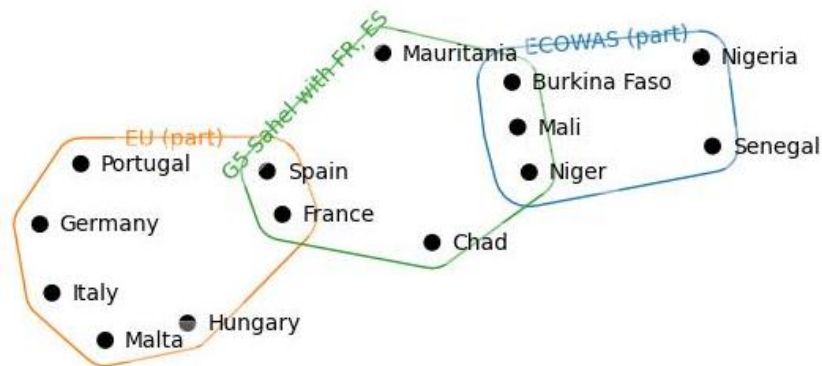


Fig. 2. Fragments of overlapping hyperedges corresponding to summer 2020 multilateral conferences.

Hypergraphs improve upon graph structures in the following way: they allow for modeling connections between more than two vertices (in our case, multilateral conferences including more than two state leaders). As hyperedges are not limited to relations between two vertices (Fig. 2), hypergraphs could demonstrate that, for example, strong connectivity could exist between NATO governments, judging by their decision to conduct a roundtable discussion even if Turkish and Greek presidents would prefer not meeting (bilaterally) some year because of their military tensions.

One could also represent the same multilateral meetings as generalized clique complexes - simplicial and cell complexes. These are topological structures which could have groups of vertices belonging to the same hyperedges – n -ary polyhedra. For instance, 2-simplices for trilateral meetings, other types of cells – for summits with more than 3 participants.

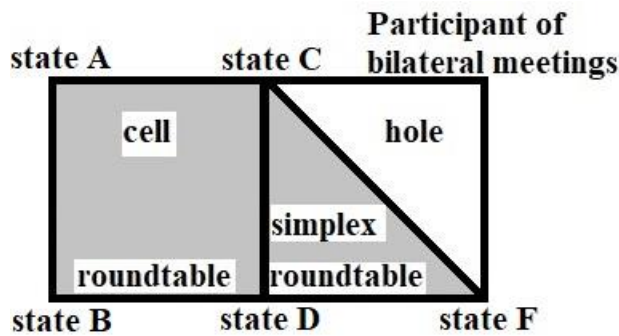


Fig. 3. A network with cell complex.

This simplicial representation is used (Aktas, Akbas, Fatmaoui, 2019) to focus on topological invariants of a network. A topological characteristic could be given to the whole configuration of edges, in particular one could compute the number of holes between the international links. This procedure is based on the following theoretical ground.

The topological data analysis (TDA)

This database was analyzed with an emphasis on its topology. One of the methods suitable for this task is the topological data analysis (TDA). It is reputed for adopting a holistic perspective on samples: this is made possible by approaching the space constituted by individual elements.

The TDA regards space as a set of objects with connections between them, and connections could be defined in abstract terms: any item could be considered close to another according to the researcher's choice (following the "axiom of choice" in set theory), even if they are located 1000 km from each other. These relaxed assumptions about neighborhood allow for clarifying, how individual units (organized in triplets, polyhedra and other simplices) structure this space. The TDA formalizes this global relationship structure, and due to this operationalization a new information about it could be extracted from particular datasets.

It is worth noticing, that the TDA is a multifunctional tool: it is applied to cases with established metric distances, or when contiguity between countries is not expressed in km. Topological perspective presupposes abstracting the network structure – analyzing it regardless of the vector space, in which it is embedded (e.g. constituted by geophysical locations of nodes). The TDA attempts at revealing fundamental properties inherent in a dataset's shape, looks for phenomena, which are present at different measurement scales.

The existence of these fundamental properties provides a solid methodological ground for comparison between different spaces. For instance, in the realm of world economy researchers could be interested in finding similarities between foreign direct investment network and regional trade blocs: whether the latter tends to structure the former ties. Topology formalizes resemblance between these graphs by describing similar ways, in which nodes are wired together in both cases. The TDA also ensures drawing analogies

between large-scale and small networks, because sets with uneven number of objects are approached in the same manner during the computation process.

Due to its focus on the dataset shape, the TDA is particularly instrumental for dynamic comparisons. Indeed, various configurations of the same network at different time could be inspected for major structural changes resulting from external influences or internal tensions, while disregarding minor distinctions: e.g. related to a change in distances between objects, if their relative locations remained the same – their order has been preserved. Therefore the TDA appears to be useful to study the consequences of the Covid-19 pandemics (regarded as an operator, which reshaped international networks), and properties of a new early- or post-Covid configurations could be compared against the parameters of the same system before this major shift.

Moreover, deformation research motivated topologists to specify the properties in question and focus on phenomena remaining stable under special types of operations – homeomorphisms. The network features, which are robust against space deformations are called topological invariants (because they proved to be permutation-invariant). Most parameters, suggested by mathematicians since Leonhard Euler in 18th century, were aimed at quantifying the shape of continuous, infinite spaces, especially 3-dimensional spheres. Numerous invariants were defined for vector spaces as corollaries of theorems proved on manifolds, where most points did not represent individual isolated objects. Nevertheless, some of theoretical topological studies are considered applicable not only to smooth surfaces, but also to relations between discrete entities (for instance, systems visualized as graphs). Besides, some achievements in the field of continuous spaces could be transposed to discrete or combinatorial geometry, and further applied to data science and statistics.

In particular, many topological studies of continuous and discrete spaces share the same topic: connectivity between points or individual objects. Expanding on observations made by colleagues studying connection density and graph sparsity, topologists emphasize, that connectivity or ruptures could be deformation-invariant: some places could remain inaccessible after network configuration had changed due to a mathematical operation or an event. Consequently, specific evaluation procedures were elaborated in order to quantify and compare spaces by their interrelatedness.

Reformulating a problem in topological terms and representing a dataset as a simplicial or cell complex or a hypergraph makes it possible to discover “handles” and “holes” besides them. Having defined connections of higher order (e.g. hyperedges “ECOWAS” and “G5 Sahel” are linked with 3 common points), we could go beyond traditional graph measures

like the minimum cut coefficient. Namely, the TDA is used to find points of multidimensional (and therefore intensive) communication between nodes – along handles –, and locate parts of a network lacking important links – where they are replaced by holes. The number of holes in a dataset could give an idea about the extent, to which the real network resembles an ideal fully-connected, dense graph. Researchers of dynamics could also count holes in order to evaluate, how many of these features disappeared after transformation (e.g. after network reshaping by the Covid pandemics): planes equivalent to “filled holes” taken into account in one of the earliest coefficients developed in topology – Euler characteristic/number.

Two TDA approaches to visits network dynamics

This quantitative method consists in looking for connected components including all the possible combinations of vertices (e.g. 2-simplices – trilateral meetings). Failure to find high-rank simplices could presuppose the existence of other topological features – holes. A hole between several meetings – (hyper-)edges of a network – could visualize parallel channels of communication. International configurations having these duplicating liaison circuits could have relatively high connectivity, whereas without this intermediaries (intermediate vertices) governments could have limited ways to exchange opinions). E.g. German government could get information about Latvian approach to the pandemic by using two channels:

- indirect (during the bilateral meeting with Kersti Kaljulaid, Estonian president on 30 June 2020 about the results of Kaljulaid's recent visit to Latvia of 25 June 2020);
- and direct (during personal meeting with Krišjānis Kariņš, Latvian prime minister on 18 July 2020) - to check the information gathered from Estonia.

Having compared the pre-Covid and early-Covid datasets, one could register a loss in the number of holes-circuits. Only 181 holes remained after the pandemics started, which could reflect a decrease in connectivity, i.e. confirm hypothesis 1. In particular, there is no evidence of any personal connection between leaders of any South-East Asian state with the rest of the world (whereas prior to Covid-19 these countries were fully integrated into global communications).

Topological data analysis could also be useful to confirm the emergence of communication barriers between particular actors. For this task the data should be transformed: these target nodes are separated from the rest, because researchers are

interested in the absence or presence of contacts with these special nodes. Nevertheless, binary arrays (one for every source node) are inspected for the same topological feature – hole. In this case its existence could mean that some obstacles prevents all the countries from reaching all these target states.

As France, Turkey and Nigeria had been selected as target nodes, the dataset was recalculated into evidence about combinations of target countries, which had been contacted by other governments during the studied periods. An edge was drawn on Fig. 1, if, for example, US president contacted only two countries out of the given triple, hyperedge or 2-simplex – if he met leaders of all the three target states (not necessarily at a quadrilateral meeting – not only simultaneously between France, Turkey, Nigeria and the US at the same table).

We were mostly interested in the following configurations: if authorities from this country had met only one pair of those leaders (so an edge appeared on Fig. 1, for example between Turkey and Nigeria), but had not reached the remaining third country (in this case, France). E.g. during the summer of 2020 Lybian government contacted France and Turkey, but not Nigeria. This fact could suggest some obstacle preventing Lybians from reaching Nigeria, although Libya is located on the same continent, unlike France and Turkey.

Unlike the above-mentioned processing of unchanged database, this technique would demonstrate the existence of a single hole after considering all the countries, which could theoretically contact France, Turkey and Nigeria. Another calculation method is used: all the countries’ “French-Turkish”, “Turkish-Nigerian” and “French-Nigerian” edges, as well as “French-Turkish-Nigerian” hyperedges or 1-simplices are pooled together on the same triangle (Fig. 1) and the computer finds out, whether this triangle remains empty or this hole is filled. Theoretically, one could fail to construct this triangle: one or several edges along its boundary could be absent if no president visited or hosted, e.g. French *and* Turkish leader during this period.

This approach has been established a decade ago to deal with accessibility problems - to check if actors are able to reach some objects (Ghrist et al., 2012; general principles of this approach were later applied to spatial computing: Derenick, Speranzon, Ghrist, 2013). To our knowledge, this approach has not been used in political geography yet.

Technically, this method presupposes computing persistent homology, which are often visualized using persistence diagrams. These homological structures appear (are “born”) during automatic step-by-step reconstruction of the cell complex – at recorded stages of the layout *process*. Many features are cancelled out after further steps (e.g. a hole could be

covered because a “French-Turkish-Nigerian” simplex has been found – like the middle point on Fig. 4), but some remain for infinite time (“persist” till the upper line on the diagram).

Therefore our hypothesis 2 would be confirmed, if the topological hole between France, Turkey and Nigeria remained till the end of our Covid computation, but eventually disappear (i.e. filled) in pre-Covid case. Fig. 4 and 5 demonstrate that this structure appeared during processing of both pre-Covid and Covid networks, but remained intact only for the 2nd quarter of 2020: the diagram for the beginning of 2020 shows, that this hole was filled (see the “short-lived” middle point) and at the same time a new topological feature appeared – the simplex which covered that hole (see the highest point).

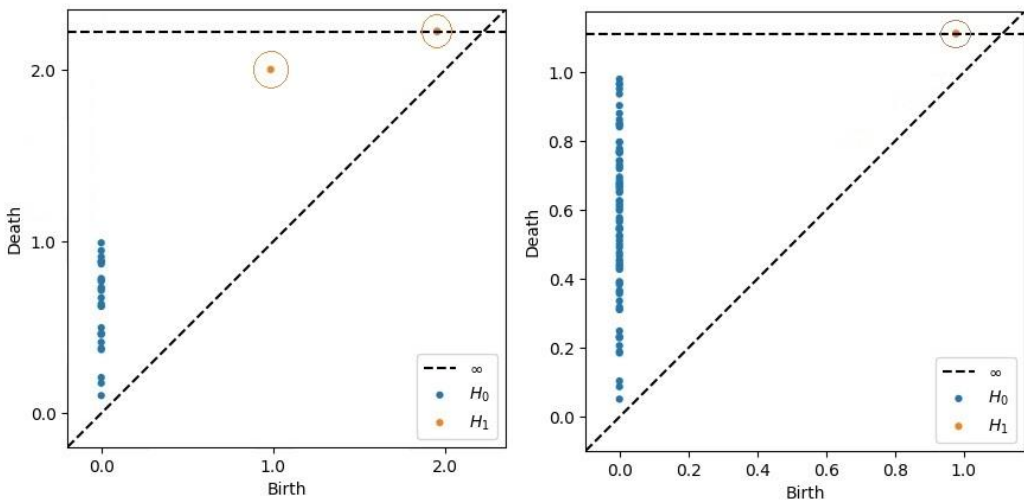


Fig. 4 and 5. Persistence diagrams visualizing homology, simplices and holes in two cell complexes around France, Turkey and Nigeria.

This difference between networks means hampered communication between France, Turkey and Nigeria: not only did their leaders cease direct personal contacts till end summer of 2020, but also no intermediary head of state personally visited all the three countries, hosted their leaders or met them on a “neutral” territory. This failure to maintain trustful connections could prevent governments from exchanging sensitive information required for globalization and interregional cooperation.

Discussion

In the given study hypergraphs of international high-level visits in the 1st and the 2nd quarter of 2020 have been compared using topological data analysis. This quantitative method has been applied to evaluate connections density prior to and after Covid-19 *pandemics* start.

Hypergraph databases and cell complexes have been used in order to model connections between more than two states at the same time (e.g. at a multilateral conference). These topological structures demonstrated, how simplices and holes could give a single dynamic characteristic to the whole international network and take into account disconnection (topological “holes”) between 3 or more entities.

Our conclusions about connectivity decrease (both globally and between France, Turkey and Nigeria) have been derived by interpreting the same algebraic structures (“holes”) in two opposite ways. For the first task of characterizing the *whole* network, holes represented duplicating circuits of communication (so a loss of these intermediated channels could mean fewer opportunities for sensitive data exchange). As for persistent homology analysis after database transformation (computation, whether any country leader established personal connections with all these 3 countries), the same topological feature represented communication barriers between *particular* 3 actors.

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