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GEOPOLÍTICA E GEOECONOMIA**

*The cartographic representation of political space:
a theoretical challenge for the fields of Geopolitics and International Relations*

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Acknowledgments

Every scientific work goes far beyond the capacity and dedication of who actually drafted the script. They will undertake manual work, but will in the meantime have accumulated a series of crucial intellectual or even purely operational debts, which they are obliged to recognise.

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Abstract

Nos últimos anos, as questões em torno do “espaço” voltaram a despertar o interesse de quem estuda a política internacional no âmbito de diversas perspectivas e disciplinas. Se durante o período de bipolarização política mundial houve pouco interesse pela espacialidade, quer porque o seu esquema dual era altamente evidente e de imediata inteligibilidade quer porque as duas ideologias de referência explicavam a realidade de acordo com fatores substancialmente indiferentes ao espaço (a luta de classes e a democracia popular, por um lado, e as leis de mercado e a democracia liberal, por outro), o fim da Guerra Fria fez ressurgir o debate sobre qual o paradigma espacial que corresponde à nova estrutura de poder no sistema internacional: Unipolar? Bipolar (EUA vs. China)? Multipolar? Apolar? Além disso, as considerações sobre a espacialidade política tornam-se necessariamente relevantes na actualidade tendo em vista a análise dos processos de conexão de áreas regionais e novas relações entre dinâmicas globais e regionais.

Com efeito, o novo interesse pela dimensão espacial da política percorre todo o vasto campo das Ciências Sociais, da Geografia Política à Filosofia do Direito e da Política, Direito Internacional, História do Pensamento Político, Economia, Estudos Regionais e, claro, às Relações Internacionais. Sem mencionar a História, que com novas directrizes da história transnacional e da história global demonstra também uma nova consciência da inseparabilidade da articulação espaço-tempo (ou geohistória) na experiência humana. Esta renovada reflexão do espaço político implica uma redefinição das categorias tradicionais, a começar pelas das fronteiras que nos últimos anos despertou o campo muito vivo e prolífico dos Estudos de Fronteira (Border Studies).

Partindo da observação desta recente avaliação do espaço como dispositivo explicativo para a compreensão da política, a nossa investigação centra-se numa dimensão específica: a representação cartográfica. O interesse por este tema justifica-se pela recente dinâmica nos estudos de mapas que tem produzido uma revisão epistemológica e vem destacando o poder retórico e a qualidade performativa do mapa. Da qui resultou um reexame do significado e valor político da cartografia, para o qual este estudo pretende contribuir.

Depois de uma análise atenta dos muitos aspectos e fenómenos que estão na base da investigação, questiona-se se a alteração do contexto político e intelectual sobre os temas do espaço político tem produzido actualizações e, em caso afirmativo, se tal se repercute na representação da espacialidade política. A nossa reflexão leva-nos a concluir que existem, de

fato, sinais promissores de renovação, mas ainda incapazes de derrubar a primazia do modelo cartográfico da modernidade em favor de um paradigma totalmente pós-moderno.

Palavras-chave: espaço, cartografia, geopolítica, política

In recent years the issue of space has returned to arouse the interest of those who study international politics from various disciplinary perspectives. If during bipolarity there was little interest in spatiality, both because its dual scheme was highly evident and because the two ideologies of reference explained the reality according to factors which were substantially indifferent to space (the class struggle and popular democracy on the one hand and market laws and liberal democracy on the other), the end of the Cold War has made it appropriate once again to wonder about which spatial paradigm lies at the base of the international system: Unipolar? Bipolar (USA vs. China)? Multipolar? Apolar? In addition, considerations on political spatiality become necessarily relevant today in the analysis of the processes of re-articulating regional areas and new relationships between global and regional dynamics.

But a new interest in the spatial dimension of politics today pervades the entire, vast field of Social Sciences, from Political Geography to the Philosophy of Law and Politics, as well as International Law, History of Political Thought, History, Economy, Regional Studies and, obviously, International Relations. This wide-ranging rethink of political space implies a redefinition of the traditional categories, beginning with that of borders, which in recent years has aroused the very lively and prolific field of Border Studies.

Starting from the observation of this recent evaluation of space as an explanatory device for the understanding of politics, this research focuses on one specific aspect: its cartographic representation. The interest in this topic is justified by the recent critical turn in map studies, which has produced an epistemological revision and focused attention on the rhetorical power and performative quality of the map. This provoked a re-examination of the meaning and political value of cartography, to which this study intends to make a contribution.

After a close examination of the phenomena which lie at the basis of the research, it must finally be asked if the novelty of the current political and intellectual context about the themes of political space have consequently produced updates, and if so which, in the way of representing political spatiality. The conclusions of the reflection lead us to believe that there are indeed promising signs of renewal, however not yet enough to overthrow the primacy of the cartographic model of modernity in favour of a fully postmodern paradigm.

Keywords: space, cartography, geopolitics, politics

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Introduction

The phenomenic and intellectual context from which the research comes

This research work proceeds from the evidence that today we live in a phase of great changes in the spatiality of the system of international relations. Since the end of bipolarity we have witnessed a continuous upheaval in the reconfiguration processes of regional areas and in the relationships between global and regional dynamics. After the collapse of the bipolar spatial order of the Cold War, we entered a phase of great turbulence in which it has no longer been possible to identify the spatial paradigm which lies at the foundation of the system.

The end of bipolarity initially sparked the euphoria of the globalist paradigm, which seemed to dominate uncontested, pushing towards the overcoming of national states in favour of an unstoppable process of homologation which extended to the entire planet. However in recent years an unexpected return to the national question has come up beside that spatial dynamic, which has thrown globalising logic seriously into question and has opposed it. The national dimension has indeed returned to the limelight as a hinge around which the system of international relations is re-stabilising. This is borne witness to by the violent 'sovereignty reaction' which is readily observable in the West with the election of United States President Donald Trump and the electoral advance of populist parties in Europe, who have intercepted the security demands of many citizens, and their need to rediscover identity anchors in the old nation-state model. The very idea that the differences between cultures would progressively dampen, thanks to the mobility of individuals and powerful unifying action of the global market of goods and ideas - an idea that seemed successful in the early 1990's - was first challenged and then clearly towered over by the rhetoric of the clash of civilisations (Huntington, 1996).

This context, of a constantly changing international political spatiality, in which globalising forces alternate and intersect with the sudden return to national callings and never silenced regional claims, has opened a phase of deconstruction of the geography of power which persisted since the end of the Cold War, assuming a structural and no longer contingent character. The intense political and academic debate on the subject, around which conflicting

explanatory paradigms have been proposed on the nature of the international system and its possible evolutions (a return to the balance of power with the clash of civilisations, the emergence of new powers able to contest American hegemony and a possible transformation into a non-polar system etc.) has triggered an unexpected and uncontrolled rescaling of processes of global governance. Multilateralism as the main criterion of international relations indeed seems threatened by the proud return to bilateral logic, with the consequent depletion of the functions of supranational organisations. All of which reconfigures traditional spatial politics and changes spatial categories which had marked the political landscape in the prior epoch at their roots. For example, a central concept of modernity such as that of the border has undergone a profound redefinition. It has definitively acquired a dynamic value which has replaced the static vision of the state tradition. In the new spatial projection of power, it is no longer the old administrative borders which demarcate political space, but frontiers, those routes of passage of variable extension in which conflicts and relationships of force between the static dimension of power and its nomadic dimension are borne out.

The changes in the phenomenon reality mentioned above produce consequences within the perception of political spaces, which in turn impact the way in which intellectuals study these phenomena. Returning to the case of borders, one notes that the field of Border Studies has attracted much attention and aroused interest among scholars of various disciplinary extractions, becoming one of the mostly lively fields of the social sciences. The interdisciplinary debate sees geographers, political scientists, scholars of international relations, anthropologists, sociologists, economists, historians, international legal experts and others facing each other. In this field there has been an extension of the object of study, which is no longer the simple boundary line but the border, with complex processes both of a symbolic and real nature, which cross it and endlessly reconfigure it. Obviously, the concept of border no longer refers exclusively to the classic political border but concerns a plurality of borders, differentiated by geographical scale (from the State to the urban quarter), by nature (from the concrete and visible to the perceived and imagined), by degree of permeability (from the closed which divides highly diverse regions to the porous which resembles a transition zone) and by the effect that it produces (from what is a source of opportunity to what instead inhibits the behaviour of individuals).

Such an opening of new horizons of research has modified the hermeneutic approach, favouring a bottom up model which, alongside analysis of the behaviour of institutional actors, also looks with interest at everyday practices of ordinary people, valorising the element of permeability instead of the idea of borders as barriers. Research on the new role of

borders is in progress and represent, as mentioned, one of the most lively and promising fields in the debate, not only between the diverse components of political and geographical sciences, but the entire spectrum of human sciences.

The research question and the starting hypothesis

In light of the changes in the international picture mentioned above, between globalising pressures and nationalistic or regionalist closures, this research seeks to verify if the transformations undergone today by contemporary political spatiality, which inevitably involve both the phenomenal reality and the scholarly approach toward the study of the topic, also translates into an evolution of the way of graphically representing that political spatiality. If, in other words, the revolution in space perception generated by the overcoming of modern political spatiality models, in favour of new and more flexible and varied forms, is also producing a corresponding revolution in space representation.

The relevance of this theme resides in the conviction that cartography is a particular kind of social practice affecting our cognitive understanding of space, in the sense that maps shape world views, national identities and narratives. The rhetorical and performative power of the map today acquires even more value than in the past because we live in a society which makes increasing use of visual instruments, and this phenomenon has not failed to arouse the interest of scholars. It is an interest which cross-cuts scientific disciplines and national contexts: the same tendency to reorient knowledge and organise knowledge around visual paradigms is found in various fields of contemporary Western thought, though perhaps with differing labels. In Anglo-Saxon countries the most commonplace expression is visual studies, which developed around the thought of W.J.T. Mitchell (1994); in German-speaking countries it is called Bildwissenschaft, whose major figures of reference are Klaus Sachs-Hombach, Horst Bredekamp, Hans Belting and Gottfried Boehm.

Over and above national traditions, there is no doubt that “our primary way of understanding the world is now increasingly visual, and not textual” (Mirzoeff, 1999: backpage). This means that the growing relevance gained by visual means in our society has also entailed the transmission and circulation of knowledge being expressed by growing intensity through visuality. Of course, to be able to speak of a revolution in space representation, this research will have to determine that it does not exhaust itself within

formal variations resulting from changes in aesthetic tastes, but displays a substantial transformation in representative paradigms and basic factors of the new description of political spatiality.

Bearing in mind the power of maps in stimulating senses and emotions, and their ability to create narrations of international politics that affect its understanding, my hypothesis is that we are going through a period of deep innovation in the way we visually represent international politics. My supposition comes from the observation of some epistemological shifts in the academic studies of international politics in relation to cartography caused by the success of behaviourist and non realist theories in social science.

This research has analysed the consequences of these intellectual currents for the theme of visibility, with specific reference to the fields of International Relations and Geopolitics. In the latter field, the advent of popular Geopolitics has been particularly significant, increasing the interest of the discipline towards visual communication (Dittmer, 2010).

Theoretical framework and methodology

As for its theoretical framework, this research takes into consideration the understanding of the map in recent paradigms of social science (i.e. post-structuralism, cultural turn, spatial turn, post-representational theory). They question the systematic and unconditioned application of the critical deconstructionist approach, in search of hidden meanings of the map. Maps are still considered as tools serving political means but the possibility to unmask them is less obvious than for classic (and old-fashioned) deconstructionist approaches.

In this light, this project examines how the concept of political space, both in its territorial materiality and spatial virtuality, has been theoretically engaged and visually expressed in the contemporary age.

The above mentioned schools of thought, which contain an implicit rediscovery of the relationships between society and space in its varied political and cultural expressions, opens, for a large range of disciplines, encouraging prospects for identifying new heuristic and hermeneutical tools through the prism of space. In fact, the general purpose of the project has required a wide-ranging review of political theories and scholars across all Western countries, in order to enhance scientific knowledge of the topic. In particular, the work makes reference to authoritative scholars who have distinguished themselves through reflections on spatial

politics and the political value of territory, coming either from Geography (Agnew, 1994, 1998, 2003; Elden, 2009, 2013; Harvey, 1982, 1990; O'Tuathail, 1996, 1998; Soja, 1996), Political Science (Huntington, 1996; Schmitt, 2006; Jameson, 1991; Fukuyama, 1992, 2014), Sociology (Castells, 1996; Debord, 1967; Sassen, 2013), Philosophy (Lefebvre, 1974), Cultural studies (Said, 1978), History (Schlögel, 2009) or International Relations (Kaplan, 2013).

Despite the topic of this research could potentially involve a high number of disparate disciplines, such as History, Sociology, Anthropology and Cultural studies, it focuses however on Geopolitics and International Relations because of their intrinsic embroilment with political space and the belief that they could easily profit by a deeper engagement with territoriality and spatiality.

Moreover, to capture the discursive potential of maps and their public role, the project has to extend the scope of its research to include less studied cartographic genres such as maps published in newspapers and textbooks.

Structure of the work

I start by explaining why the topic is important, i.e. why visual representations matter in studying international politics (chapter 1). After an introductory overview on the relations between space and politics (paragraph 1.a), this research delves into the role of graphic representations in the common understanding of international politics, highlighting the performative value and narrative potential of maps by specific historical examples (paragraph 1.b).

The reasoning concerning the shortcomings of our current way of representing the spatiality of politics (paragraph 1.c) opens up the need to find new solutions in mapping (paragraph 1.d).

To this regard, chapter 2 and 3 explain why our time is so intellectually favourable to such a purpose, due to current epistemological shifts both in the academic studies of international politics and in mapping studies.

On the assumption that the tradition of cartography can offer some useful models for Political Cartography, this project then provides a historical review describing a very

innovative period in the history of political mapping, i.e. the interwar time of the twentieth century, when scientists gave birth to new genres of spatial representations (chapter 4).

A final step elaborates on the outcomes of such a review and offer insights on the relationship between political science at large and cartographical representations, trying to check the research hypothesis by comparing the current situation with that of the analysed period of the past (chapter 5), and verifying common elements (Conclusion).

1. Space and politics

a. What relation between space and politics: an introductory overview

The political dimension of society engages varied and complex relationships with both space and territory. Those same relationships between political entities, whether they be of a conflicting or cooperative nature, manifest and exert themselves in arena of space, intended in its plurality of economic, geographical, cultural, religious or many other forms of space.

As a matter of fact, space and politics are certainly linked in many ways both because political processes occur in spatial contexts and because political practice is still largely shaped by spatial factors.

First of all, political actors are always in some sense local. They may have a physical territorial base (e.g., states), they may depend on local support and legitimisation (e.g., political parties), or they may operate within a geographically defined context (e.g. regional organisations such as the European Union). The existence of such political actors makes it impossible to study political processes without taking the spatial dimension into account.

Second, despite appearances to the contrary, political practice is largely shaped by spatial factors, because what is at stake may be the land itself (as in the case of Palestine), its resources (as in Iraq), or specific places linked to local cultural history and mythology (as in Kosovo).

In addition, political actors typically have a spatial organisation: a “base of operations” (e.g., the capital of a state or the main village of a tribal community, the headquarters of an international organisation or that of a political party); minor centres (e.g., local offices of state government); a regular catchment area (e.g., a provincially-based party) or a target area over which they may wish to extend their influence (e.g., a regional organisation may wish to recruit new members from neighbouring areas). Networks are another spatial aspect of organisations. Such networks may be material (e.g., the telecommunications and transport infrastructure) or abstract (e.g., the hierarchy of command of a supranational organisation or the horizontal network formed by the tacit flow of information within a grassroots movement).

And finally, politics exerts an influence on physical space: political processes occur in

physical contexts, and affect both the space itself and the people in it.

The link between politics and cartography is thus clear, for - as Robinson and Petchenik put it (Robinson and Petchenik: p. 15) - “anything that can be spatially conceived can be mapped, and probably has been”.

Indeed, one would expect spatial representations to constitute an essential tool for political scientists, past and present, in every branch of the discipline. Reality, however, is different and this research is going to question this issue. Admittedly, maps are replete with elements that evoke politics and political power, but their use in the many fields of the political science has been rather sporadic and yet surprisingly heterogeneous.

In fact, in the tradition of political science there has generally been a substantial lack of interest towards the topics of spatiality, despite certain laudable exceptions from the past (such as Carl Schmitt, Raymond Aron or Stein Rokkan), and the present (Saskia Sassen, Paul Virilio).

The geographer Angelo Turco sustains that in modern times there has been a detachment between political science and territoriality, and a trivialisation of territory which is reduced to space (Turco, 2015: pp. 1-35). Since Giovanni Botero, geography would be treated as a mere catalogue, a contingency without any problematisation of what it involves. In other words, in modern political science, territory would only remain as a banal background of political action, and this downgrades geography to an enumerative and descriptive science.

Before him, Henri Lefebvre had already spoken authoritatively during the '70s (Lefebvre, 2009). His polemic against the underestimation of spatial aspects in political processes railed against liberal and Marxist doctrine, both of which were guilty, in his view, of minimising or even completely neglecting the spatial component.

There would however be many motives for reviewing the attitude of indifference of traditional political science towards spatiality. The usefulness of analysing the relationship between territory and power lies not only within the enrichment which would ensue for our understanding of complex mechanisms of power, but also for the broadening of the knowledge that territory has contributed to the history of human communities. Territory is indeed a fundamental component of the exercise of power, which bears witness and expresses its hegemonic will through a continuous reconfiguration and transformation of the material and symbolic connotations of territory.

In other words territory is, as much as in its material as its perceptive and symbolic aspects, at all times the fulcrum of the power relationship between competing powers, each intent on shaping it in accordance with its vision and interests.

Despite the underestimation of spatiality in the mainstream tradition of political sciences, one notes the promising recent news that seems able to modify this situation. In recent years it indeed seems that a phenomenon has emerged, pointing toward the rediscovery of the spatial dimension in the social sciences, which has been labelled “spatial turn”. The discovery of new research terms does not derive from this so much as the prospect of a wide range of disciplines identifying new heuristic and hermeneutical tools through spatiality.

History I can certainly be counted among these disciplines. The reconstruction of history via spatial means has recently become a well established research perspective in many areas of historical studies, from *global history* to the history of international relations and even military history. These directions tend to favour an integrated vision. The relationship is their fundamental characteristic. Thus the land is no longer a collection of varied and distinct objects such as cities, states, factories or more. The world instead becomes significant for the relationships between these objects, and their histories, previously worthy of investigation alone, are now seen as strongly connected. It is indeed in such connections that the key to understanding the history of the world lies (Conrad, 2003).

This new need to conceptualise space by historical studies as well as by all fields of the humanities has drawn attention to concepts, theories and research methods of spatial relevance, originally developed within Geography. As chapter 3 will highlight, the field of Mapping Studies underwent in the last two decades major epistemological changes. Years ago maps were considered to be a neutral, objective technical instrument. Only since John Brian Harley’s seminal studies on the history of cartography was this status questioned, and critical research on the complex relations between cartography and power undertaken (Harley, 1988 and 1989).

At the same time, a decisive turn was taking place in the history of Geopolitics: the advent of so-called critical Geopolitics in the 1980s and ’90s resulted in the emergence of a new area of research - popular Geopolitics, ‘wherein scholars study the everyday experience of Geopolitics’ (Dittmer, 2010). The need to consider the wealth of practices and representations that determine power relations and their association with reality on the ground has drawn the attention of scholars dedicated to the study of Geopolitics in general, and popular Geopolitics in particular, to a wide range of cultural expressions – from cinema, literature, music, painting and photography, to more popular forms, such as comics, satire, animation and geographical maps. Indeed, the latter, considered more effective in conveying geopolitical narratives to the general public, have aroused more interest.

This interest towards cartography in geopolitical studies, associated with spatial turn as we

said earlier has taken hold of all the humanities in general, constitutes a fine premise, allowing for the extension of the interests toward the representation of political space which have matured in recent years to other disciplines of political science.

Something is already in motion. The nexus between space and politics is indeed gaining traction in many disciplines, from legal and political philosophy to international law and the history of political thought. It is also naturally so with scholars of international relations, who display a new interest in the political organisation of geographical space, at whose base there is an ongoing attempt to identify the spatial paradigm which underpins the system of international relations.

b. Why graphical representations matter in studying international politics: the performative value and narrative potential of maps

Any social organisation of any human community is built upon a specific spatial ordering. Likewise, every community feels the need to express this ordering through drawings, i.e. maps in the Western tradition. To this respect, the map is a useful gnosilogic tool allowing all readers to visualize, and therefore perceive, significant spatial aspects and relationships relevant to the expression of the spatial ordering.

Among the intellectual tools which are able to attribute meanings to territory, we are presented with the map. It is equipped with a performative power consistent with the fact that projects of reconfiguration and territorial transformation, both in their material and symbolic connotations, take shape in the (cartographic or otherwise) representations, and then translate into actions.

This performative capacity operates as far as human beings are able to understand the reality, and only if they are able to represent it. Any form of representation is useful not only to the individual who produced it for communicating with others, that is to describe something to someone, but it is useful above all to the same individual to understand a given situation. Indeed, we incessantly tend to order reality and continuously produce models (simplified schematics) of the world. Of these, only some become true maps, while most remain mental models. Even those spatial representations which end up in a book or magazine have already produced the consequence of modelling the studied reality before being printed, thus decisively contributing to shaping our way of thinking. As Christian Jacob stated: “la

carte est, dans son processus comme dans son résultat, la projection d'un schéma mental sur un support, la matérialisation d'un ordre intellectuel abstrait de l'univers empirique" (Jacob, 1992: p. 51).

In other words, the map enables one to manage complexity, that of the territorial whole, which is very, if not excessively, high. It renders it comprehensible and identifiable. It tends towards the logic of domination and the exploitation of society.

The reading of a map represents a moment of extreme importance, not only because it allows the intellectual appropriation of the territory, i.e. the acquisition of its nature and the understanding of its dynamics, but also because it is indeed from this first level of interaction with it that the processes of territorialisation which it models arise. As Emanuela Casti reminds us "Representations have as their primary goal not so much and not only to describe the world objectively or subjectively, but rather to change the world through the images of it that they provide" (Casti, 1998: pp. 18-19).

Any line of thinking regarding the map would therefore be of modest value if it were to be considered as nothing more than a reproduction of the world on a small scale. That is, a miniature, useful for seeing the Earth in its totality in a single glance. This aspect is of some importance but it is, on the whole, secondary. The map is indeed much, much, more. Its role in our perception of spaces is not purely passive, i.e. a simple cast of reality, but active: it structures and defines both our way of acquiring knowledge of the territory and participating in it.

Since the representations are never transparent, but are always the consequence of what a certain company has produced, scholars focus their attention on the pre-cognitive aspects. In the analysis of the relationship between pre-cognitive aspects and performative capacity of the map, useful insights are offered by John Austin's theory of speech act, which regards the service of language ("performance"). We could apply the categories which Austin elaborated for statements: they are constative, which express a fact in an aseptic and neutral way (eg.: "He said: 'the dog is dangerous'"), as well as performative, which tend to modify the existing situation (eg.: "I declare that I take you as my bride"). The former may be true or false, whilst the second can be effective or not (Austin, 1987: pp.7-70). A further development of the theory distinguishes speech acts in illocutionary and perlocutionary speakers, in the latter category meaning those acts which obtain effects that specifically result from the spoken statement (eg.: "Close the door") (Austin, 1987: pp.71-120).

Many objections have been raised by the constructivist linguistic approach of Austin, whose first theoretical elaborations date back to the '50s. It nevertheless remains useful to ask

whether Austin's categories can be applied to maps, and if it seems plausible to say that they constitute a case of performative or perlocutionary utterance.

A few years after John Austin's studies, the original theorisation of a cartographic canon arrived, which can be attributed to the French philosopher Henri Lefebvre, in his sophisticated reasoning on space as a social product. In his classic "La production de l'espace" of 1974, he described space as conceived, distinguishing it from that which is experienced and that perceived: "L'espace conçu, celui des savants, des planificateurs, des urbanistes, des technocrates «découpeurs» et «agenceurs», de certains artistes proches de la scientificité, identifiant le veçu et le perçu au conçu ... C'est l'espace dominant dans une société (un mode de production). Les conceptions de l'espace tendraient ... vers un système de signes verbaux donc élaborés intellectuellement" (Lefebvre, 1974 : pp.48-49).

The conception and systematisation of space as put by Lefebvre became a school of thought and constitutes a true spatial principle of explaining phenomena which are adoptable in any discipline, from geography to literature and philosophy. The implicit references to the map lead it to claim to be seen "non seulement une façon de représenter par l'agencement d'images la connaissance sur l'espace géographique, mais aussi une forme particulière, et spécifiquement visuelle, de penser par l'espace les objets de la connaissance" (Castro, 2011: p.197).

The reasoning on the performative capacity of cartography is interesting because each power attempts to impose its own logics of reading the political reality, which as we have seen are also inevitably geographical logics, because politics is located within a space. For example, the geopolitical configuration of the world order that every political actor attempts to coherently spread with his own interests is the result of a process - at times also cultural - which aims to render a specific reading of the world hegemonic, rooting it in the perceptions and sensibilities of citizens.

To this end the map lends itself perfectly to the naturalisation of an abstract spatiality which aims to demonstrate itself as neutral as possible. Indeed, there is nothing better than a representation of an apparently aseptic and detached reality to impose instead of representations (which are precisely induced) which have a significant social diffusion.

All of this is closely linked to the thoughts of Michel Foucault on the connection between knowledge and power, which would put in doubt, from Foucault onward, the liberal idea that sees the sciences as neutral disciplines separate from policy. In this perspective knowledge, which of course includes the academic disciplines and the sciences, is never disconnected from power relationships, from institutional and social practices, but is an integral part of the

way in which power is exercised within a social body.

We have said that the map not only has the power to describe but also, thanks to its performative capacity, plays a quasi-divine and prognostic role. Take for example Colin Powell, the US Secretary of State who convinced the world of the legitimacy of overthrowing the regime of Saddam Hussein by providing maps which showed deposits of weapons of mass destruction as evidence. The US military bombardment of those sites followed the media barrage of the maps presented by Colin Powell to the UN, which was convincing enough to obtain the backing of a large part of public opinion which was initially skeptical about the war. The fact, then, that those deposits contained nothing of what had been asserted reinforces the conviction in the persuasive prognostic capacity of maps, based on the trust that public opinion puts in them, leads us to give unqualified credit to the map, to not look at it with a critical and doubtful spirit.

The map then presents a further quality, regarding the prescriptive value oriented towards the interpretation of current and future events it itself contains, for those who read it: this holds true both for the simple reader, who by putting trust in it is spontaneously calibrated to accept the situation envisaged in the map, and for the policy-maker, such as in the case of the UN representatives who saw the maps which Colin Powell presented. On top of that, the maps circulate in the general public and therefore have an inherent capacity to influence the collective thinking of the general public on delicate issues of international politics.

There are many linguistic devices of a map able to direct the reading of the represented reality. To take a simple example with reference to specifically political aspects, we should point out the choices of toponyms, an issue which has long been studied by scholars with interests towards semiotic cartography (Casti, 2000). For example, the sea which divides Japan from Korea is named differently in the two countries and in their respective atlases: in Korea is it the “Eastern Sea”, in Japan however it is the “Sea of Japan” (the version whose use in international diplomacy emerged during the period in which, incidentally, Korea was under Japanese occupation; a dominion which one might call toponymic as well as military). The effect of toponymic nomenclature on the interpretation of maps is particularly effective when placed in the tile of the map, thanks to the evidence that this element has; the map of a State has, out of habit, the name of the state itself, a name that may have an implicit political significance in the official denomination of the state: in its extended denomination Iran is “Islamic”, China is “popular” and the USSR was “socialist”. These devices also bear witness to the specific political angle from which the territory is observed: in any good European atlas from the beginning of the twentieth century one finds a panel dedicated to India, but while in

some it is simply titled “India”, in others it takes the name “British India”. The two versions imply a different treatment of the role and influence of the coloniser in the life of the colonised territory.

Despite the aforementioned powerful persuasive capacity of maps, it is not however appropriate to use the word “propaganda”. Not because geographical/political maps do not end up having a similar effect to propaganda (pushing the reader to understand a specific representation of reality as legitimate and correct), but because of the degree of awareness of the act. The view of Karen Culcasi should be shared: “*every* [italics in the original] map reflects a level of values, ideas, and politics. Regardless of whether a cartographer or publisher intended to influence public opinion or not, banal geographical messages and pre-existing stereotypes are asserted... Thus, I am cautious to use the term ‘propaganda’ to refer to all maps concerning geopolitical issues such as national identity, territorial disputes, or military interventions because this all encompassing category muddles the varied levels of intent to influence or persuade the map reader” (Culcasi, 2006: p.687).

From what has been said one can easily understand how and why cartography influences the social understanding of international politics. We have indeed claimed that the representation is a fundamental act of communication which enables each individual to comprehend reality, express themselves and grasp the messages of others. It passes through the filter of the social model.

To make our case of visual representations they - whether pertaining to an object such as a house or an abstract idea such as love - are the result of a combination of two factors: the interpretation of that object or idea by the author and the visual canon used in its social context. The final result does not accurately reflect the referent but it will be a combination of the current aesthetic model and the idea (also called concept or meaning in semiotics).

To give an elementary example, when a child is asked to draw a house, his drawing will be characterised by a combination of the idea of the house and the graphical model of the house which he learned at school. The proof of this is given by the fact that the outcome could have nothing to do with the object itself, as shown in figure 1.1, in which a young girl who lives in a large city house portrays her own house as if it were a country house, therefore according to the model of a house which is typically taught at school.



Figure 1.1 Drawing by a child: My home by Flaminia Boria, aged 6

Applied to our field of interest, this reasoning leads us to the conclusion that the visual representation of international politics reflects both the subjective idea that the author has of them, both models and visual canons which are normally expected for its representation.

Later on we shall analyse the maps of one of the most celebrated and debated books of recent years in the interpretation of international dynamics: “The Clash of Civilisations” by Samuel Huntington (1996). If, for hypothesis, Huntington had lived 500 years earlier, his theory would have been expressed through maps different to those presented in his 1996 book, even in the case of invariance of the theory. This would have happened because his maps, like all maps, incorporated the properties and characteristics of cartography of that time, which was still affected by the logic of medieval representation.

To sum up, we stated that, far from being a simple, small-scale reproduction of the world, the geographical map structures and defines how we acquire knowledge of the territory and how we interact with it. A map therefore allows, not only an intellectual grasp of the territory, its characteristics and dynamics, but also affects the processes of territorialisation that shape it.

Cartographic studies in recent years - beginning with the seminal work of John Brian Harley - have shown that maps are invariably partial and subjective, affected by ideological biases and value judgements. This line of study holds great potential for political science, raising questions pertaining to the intrinsic nature of the geographical map, its propagandistic and pedagogic uses, and the different role it plays in democratic versus authoritarian contexts.

Despite the importance of such questions for geopolitical practice and debate, the study of maps in political science is not very common; in fact even their use seems to be on the

decline. This phenomenon is also responsible, in part, for the relative lack of attention devoted to a number of fundamental issues, fundamental both in shaping the mental patterns of the producers of maps, and in conditioning the perceptions of readers. Specifically, what is the weight of factors such as ideological conviction or prejudice, institutional structure and political pressure.

With regard to the political value of the geographical map and its uses, this research intends to examine:

1) the role maps play in shaping a collective perception and framing the geopolitical debate;

2) the current perception and use of maps by the community of political geographers and political scientists in general. In the latter context, I intend to evaluate whether the cartographic expressions used to represent concepts such as borders, territory and conflict are consistent with the current state of debate surrounding them.

i. Some examples. Maps in authoritarian contexts: the case of Argentina

The cartographic production available in any given country reflects and legitimises the collective geographical perception of its society. Critical geography has clearly shown that in every historical period this perception derives largely from the dominant representation dictated by the interests of the ruling class and its interpretations of the world.

Thus an atlas, rather than being a mere compendium of geographical knowledge, is also an expression of the dominant representation. An essential tool for the dissemination and teaching of geography, but also inevitably subjective and arbitrary, it is often misguidedly trusted implicitly.

Let's now give some concrete examples of instrumental use of cartography by political power, starting with a very clear case as it concerns an authoritarian situation: Argentina.

Geographical maps can be used to promote territorial claims, especially in contested areas. A case in point is that of Peronist Argentina, where, by government decree, maps were made to arbitrarily include within the borders of the state, areas not officially recognised as Argentinian territory, such as Antarctica (on which no state has full sovereignty, as per the provisions of the Antarctic Treaty) and several archipelagos in the Atlantic (the Falkland, South Georgia, South Orkney and South Sandwich islands). This long-standing cartographic tradition fits within the framework of the vast array of actions taken by the Argentinian state

to create a national iconography able to produce and sustain a sense of national consciousness (Dodds, 2000: pp.150-184). A highly significant official move for the exploitation of cartography for nationalistic ends in Argentina was Decree 8944 passed on 2 September 1946, a few months after the election of Juan Domingo Perón to the presidency. The law prohibited the publication of maps which do not include Antarctica as part of Argentinian territory ('que no incluyan el sector Antártico sobre el que el país mantiene soberanía'), thus imposing the representation of an invented country that, through the map, materialized the expansionist aspirations of the authorities while concealing reality, all perfectly in line with the Peronist strategy of celebrating the work of the government through every possible form of popular culture.

Thus the official maps of the Instituto Geográfico Nacional annexed to Argentina territories over which that country did not have full sovereignty according to international law. Figure 1.2 clearly shows the alleged full and legitimate Argentinian sovereignty over Antarctic territories as well as several archipelagos in the Atlantic Ocean, linked to Argentina not only by means of color but also, more explicitly, by the label "Arg."

The direct effect of these maps was to nearly double the surface area of the country, but another, much more dangerous effect, was the indoctrination of the Argentinian population regarding the geographic extent of the state, which contributed to spreading and reinforcing the belief in the legitimacy of these territorial claims. It should be noted that for one of these territories, the Falkland Islands, the Argentinian military regime declared war on the United Kingdom in 1982. Needless to say, the declaration of war met with "natural" approval from the population: 'It's in the maps!'

These imaginary maps served a dual purpose. They boosted nationalist sentiment within Argentina, while, at the same time, communicating to other states the country's aggressive intentions with respect to the claimed territories (Monmonier, 1996: pp.91-94). Rival countries, for their part, responded in kind (figure 1.3).

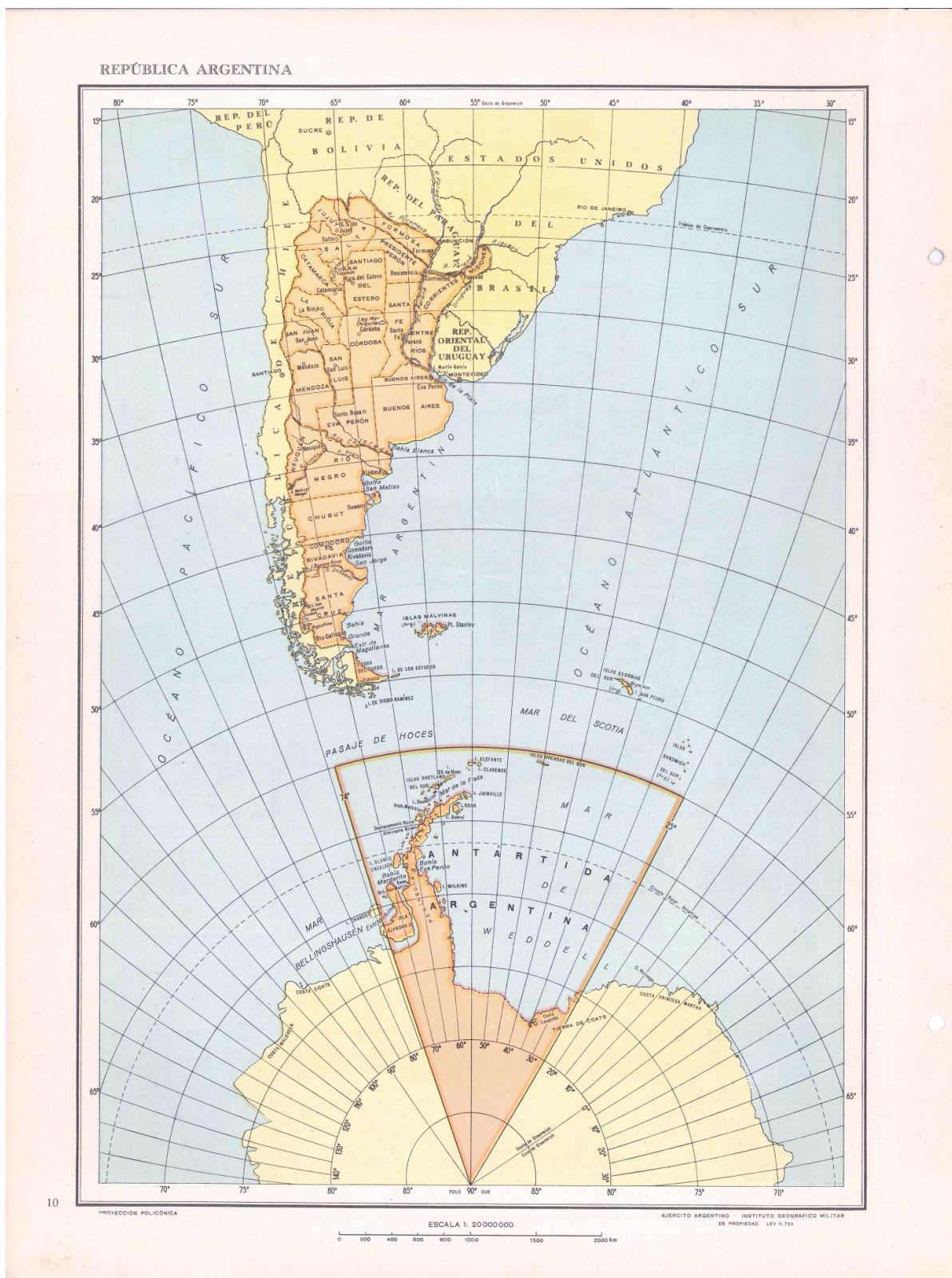


Figure 1.2. Republica Argentina, Atlas de la Republica Argentina, 1954, p.10



Figure 1.3. Territorio Chileno Antartico, Instituto Geografico Militar de Chile, 1972, sheet 42

ii. Promoting national identity through maps

The act of forging an identity is clearly artificial in the case of nations - communities that must be justified by history and rendered clearly identifiable through geography, even at the cost of gross simplifications. So, for example, the political institutionalisation of the Italian state involved downplaying regional diversity to favour the overarching need conveyed by the dominant narrative: the need for citizens to acknowledge the basis of the common project (Banti and Ginsborg, 2007: pp.XXIII-XLI). Modern political maps - with their neat borders delimiting markedly separate, yet internally uniform entities - perfectly serve the objective of concealing the heterogeneity (ethnic, religious, social etc.) that characterises populations in every place on the planet, thus fostering a unified sense of identity. At the same time, these maps emphasise differences between the inhabitants of both sides of each border. The geographical map therefore symbolises and thoroughly promotes national cohesion.

Not surprisingly, contemporary nationalism has made ample use of cartography as a means by which to express the spirit of the nation. There is an extensive body of literature on this topic, concerning such cases as Israel-Palestine (Collink-Kreiner, Mansfeld and Kliot, 2006:

pp.381-408; Bar-Gal, 1993: pp.421-435; Newman, 1991: pp.192-207; Newman, 1995; Medzini, 2012: pp.23-40; Wallach, 2011: pp.358-369; Wood, 2010: pp.231-256) - papers regarding communities having their own nation-state (Kosonen, 2008: pp.21-47; GarcíaÁlvarez, 2013: pp.315-363; Zeigler, 2002: pp.671-686; Edsall, 2007: pp.335-347); Herb, 2004: pp.140-164; Batuman, 2010: pp.220-234; Cairo, 2006: pp.367-395; Sturani, 2009: pp.343-351), as well as studies concerning communities aspiring to have one, who, in the meantime, find it gratifying to see its borders drawn on a map. In so doing, such communities perpetuate the territorial mindset of the nation-state that imposes sovereignty over a piece of land as a necessary condition for international recognition (Esparza Zabalegi, 2011).

These cases illustrate the map's dual role: to claim territory and to embody the unity of the community. Indeed, the very geographical shape of its territory offers the nation-state an easily recognisable icon, capable of arousing an instinctive sense of self-identification in its citizens (figure 1.4).

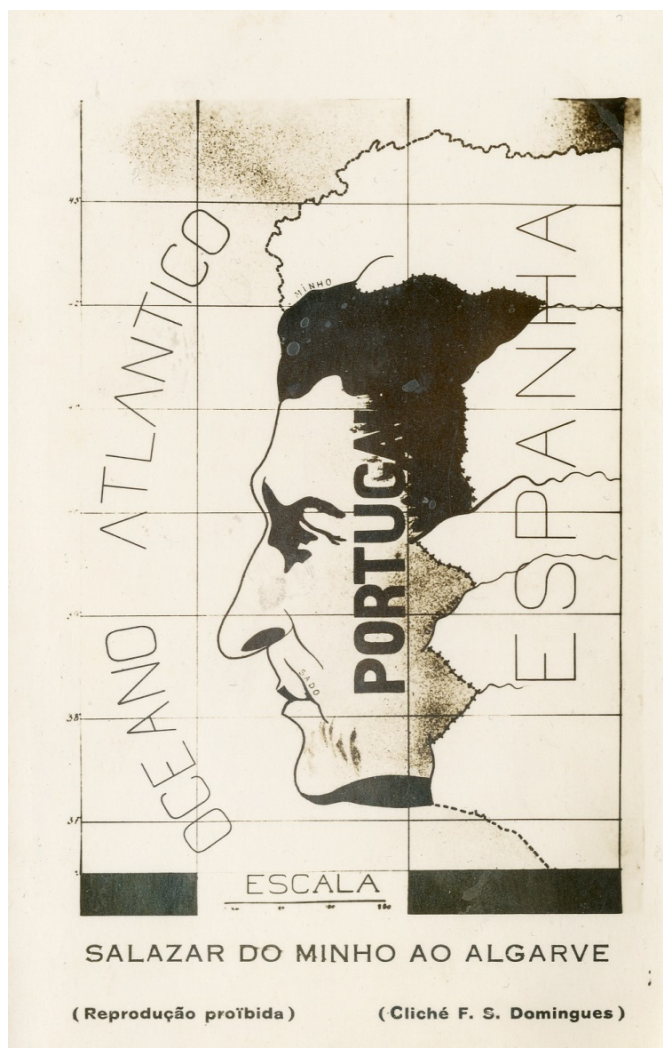


Figure 1.4. F.S. Domingues, Salazar do Minho ao Algarve, Portuguese postcard, c. 1940

The cartographic representation of the state's territory, this silhouette, which has become almost ubiquitous in the visual culture of modern societies, is associated with the very idea of the nation, and has become its symbol. One might say that it acts as the nation's logo (Anderson, 1991: pp.163-185). These maps – designed to highlight the association between a physical place and the sentiments, emotions and values that it evokes – would appear to be the antithesis of maps intended to portray the material reality of a physical place, because, 'la carte invite à voir et à penser ce quel'on ne voit et ne pense pas quand on regarde l'espace réel' (Jacob, 1992, p.50).

Recent analyses of this evocative role of maps have given rise to a new line of research in critical studies on the political value of cartography. This line of research has gradually supplanted the strictly semiotic and deconstructionist approach in vogue towards the end of the 20th century, which, based on a positivist approach, identified and analysed maps as though they were bearers of essentially clear and unambiguous messages, easily decoded once their respective keys had been identified, and attributable to a well defined political actor with precise interests (Wood, 1992; Monmonier, 1991). The more recent, post-structuralist approach, acknowledges that the map generates multiple, not necessarily unambiguous, meanings, while still considering it a conveyor of specific interests but of a more complex nature and a less easily identifiable source (Kitchin and Dodge, 2007; Pearce, 2008). The rational and argumentative nature of the map according to the first interpretation was succeeded by a more processual and evocative one.

Recent empirical studies (Wallach, 2011) suggest that a rigidly argumentative approach underestimates the richness of cartographic language and the complexity of the relationship between this language and power. The processual approach, on the other hand, seems more appropriate for the study of the complex relationships between promoters of narratives, producers of maps and target readers.

The Argentinian example, or other, similar cases that may be cited, should not lead us to facile conclusions. Firstly, one should not assume that the instrumental use of cartography is an attribute of totalitarian regimes alone, as it is notoriously found in democratic contexts as well (Monmonier, 2001). Secondly, it is not to say that this powerful instrument of persuasion is the exclusive province of those who wield political power. An example of this may be found in the context of the aforementioned link between cartography and nationalism. In the course of the 20th century, cartography was often used by small, far-right nationalist groups in Europe; groups that not only were not linked to their respective governments, but also espoused political views critical of their governments and aimed at overthrowing them (Herb,

1997).

The main consideration regarding cartographic propaganda however, follows from Foucault's analysis of the relationship between power and knowledge, and suggests that we exercise caution and avoid mechanically deconstructionist approaches that assume maps to have been commissioned by an agent fully aware of the terms of the discourse, a conscious creator of the narrative conveyed. In other words, although history has provided us with numerous instances of intentional, premeditated cartographic manipulation (for examples see Cairo, 1997; Minor, 1999), these constitute a minority of cases, and represent a far less interesting phenomenon from the point of view of scientific research into the relationship between cartography and power.

Indeed, the map is essentially accepted without reserve inasmuch as it is a collective expression of society, reflecting a view that is widely accepted in the population. This also applies to the Argentinian maps discussed above, despite the fact that the information they conveyed was clearly unfounded. Public opinion tends to give the map unconditional credit, neither treating it with skepticism nor subjecting it to critical scrutiny. Back to our example, the obvious falseness of the maps extending Argentinian sovereignty over territories not recognised as part of that country by the international community did not impinge on their evocative and propagandistic value. This is because, contrary to what one might presume, the persuasive ability of the map does not depend on the reliability of its portrayal of reality, but on its compliance with certain aesthetic norms and, above all, on the prevailing popular sentiment among the members of the national community in question.

Therefore, marking a border or assigning a place-name are acts that bear clear political implications, but neither the reader nor even the author of the map are fully aware of these. An Israeli cartographer marking the borders of the State of Israel, for example, does not stop to question the legitimacy of these borders. Likewise, a Japanese mapmaker would not think twice of the political implications of his labelling "Sea of Japan" the stretch of sea that Koreans call by a different name. Both follow practices and reflect perceptions that are widely accepted in their respective national communities and are constantly reinforced by the dominant narrative. Both are also hardly aware of the political significance of their seemingly innocuous act; a clear expression of "banal nationalism", everyday representations of the nation through which the dualistic view of "us" versus "them" is subliminally transmitted (Billig, 1995). The cartographer, therefore, does not necessarily act in bad faith; he/she is not a professional deceiver, but rather the first victim of the map's "internal power" (Harley, 2001). The mapmaker is, ultimately, merely a mediator, entrusted with the task of applying

previously learned semiotic codes so as to meet social expectations of which he/she is not fully conscious, and that serve the political interests of often-evasive power groups.

This is a crucial point in the study of the relationship between cartography and power. The map, like other representations, is valuable to scientific research not so much for what it tells us about the reality it represents, but for what it tells us about its author. And since maps are, as we have seen, social, collective representations, a given map should not be considered the creation of a particular cartographer, but rather of the social, cultural and political milieu that he/she reflects.

iii. The political value of ethnic cartography

A cartographic genre born within science but then gradually shifting onto politics is that of ethnographic maps. The first modern ethnographic maps appeared in the 1840s (Robinson, 1982: p.137). Initially, and throughout the 19th century, the genre remained limited to scientific study, and was used by geographers, ethnographers and linguists. Later, with the upsurge of nationalist sentiment, ethnic information acquired political value and ethnolinguistic maps became bona fide instruments of inter-national competition (Seegel, 2012).

Their importance culminated in the course of post-World War I peace negotiations, since the redrawing of Europe's political map was based on Wilson's principle of self-determination, involving ethnic distribution as a crucial consideration. The national delegations at the Paris Peace Conference made their respective territorial claims by presenting multicoloured ethnolinguistic maps in French or English. These maps were accompanied by tables filled with ostensibly indisputable data that were, in fact, largely subjective due to the difficulty in attributing communities to precise ethnic groups with scientific rigor. Especially serious problems arose in areas with intricate ethnic compositions such as the Balkans, where inter-ethnic mixing and coexistence was the rule. Obviously, in such contexts, any map presuming to match every geographical area with a single ethnic group is bound to be erroneous and misleading (Crampton, 2006).

Figure 1.5, a reproduction of an ethnographic map used by the Romanian delegation, is a case in point. The map boasts authoritative scientific sources in the title box on the bottom right (note that, incidentally, the then Romanian territory, located further north, is not even portrayed). Six ethnic groups are represented by an equal number of colours. The Macedo-Romanians are shown in red, a color that obviously stands out a lot more than the milder tints

chosen for the other groups: aqua green (for Albanians), faded yellow (Bulgarians), pale pink (Serbians), light blue (Greeks) and ochre (Turks). Beyond the choice of colours, the interpretation of the map is also affected by the expedient of including the “koutzo-valaques” (Aromanians) – a semi-nomadic herding people of the southern Balkans having its own, distinct identity – in the Macedo-Romanian group.

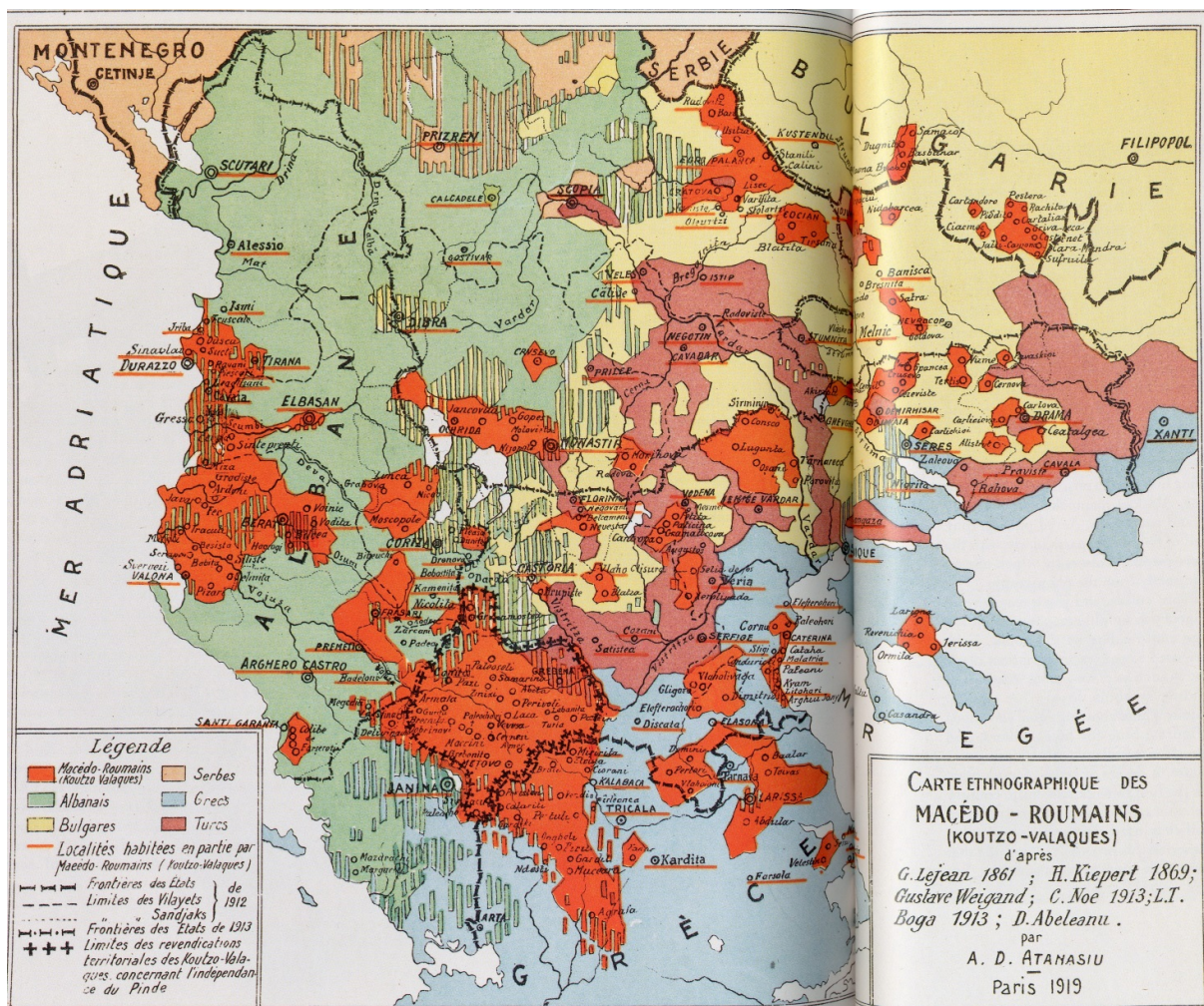


Figure 1.5. A.D. Atanasiu, Carte ethnographique des Macédo-Roumains, 1919

The ethnic criterion, albeit easily challenged, and disastrous from a historical point of view – causing rather than preventing future conflicts – was widely used in the period in question by all national communities wishing to attain statehood, including the Serbs, who aspired to create an extensive and populous state, and whose request was granted with the official recognition, at the end of the war, of the “State of the Southern Slavs”, better known as Yugoslavia. Ethnic maps were invaluable in the promotion of this project in diplomatic circles. An example is the trilingual map (in Serbo-Croat, English and French) shown in

figure 1.6, issued for the Yugoslav Committee in London. In it, a single sign (vertical line) joins Serbs, Croats and Slovenians (an unlikely choice for maps today), as opposed to “foreign settlements within Yugoslav territory”. A table attached to the map shows the ethnic distribution of the region, reiterating the distinction between “southern Slavs” and other ethnic minorities in the region.



Figure 1.6. N. Zupanic, Map of the Yugoslav Territory, issued for the Yugoslav Committee in London, September 1915

The role of entholinguistic maps did not end with the signing of the treaties, however. They continued to be circulated widely, among the general public as well, persistently published by daily newspapers and non-specialised publications (Herb, 1997).

To recapitulate, ethnolinguistic maps were conceived in scientific circles and were initially limited to the academic milieu. With the rise of nationalism, these maps became widely used by politicians and later by diplomats to support the different, conflicting national causes in the

course of the post-World War I peace negotiations – and eventually started circulating among the general public, in support of the nationalist discourse which, after the war, generated heated debate in many European countries. In some cases, the more recent editions were factiously retouched versions of the original maps, but often, the very same maps were simply republished to various ends, and subjected to different readings, accordingly.

This brief reconstruction illustrates the interplay between the different settings in which maps were produced and published, as well as the fact that none of these milieus had a monopoly over the production of this genre of thematic maps. An intricate web of relations connected maps conceived for one purpose and adapted for another, initially destined for a certain public and subsequently converted or revised to suit another. Some leading figures played more than one role in ethnolinguistic mapping. Jovan Cvijic, for example, was involved as a distinguished scholar, diplomat and essayist. Cvijic, an authoritative figure in the Serb national movement and staunch supporter of the Yugoslav project, studied at the renowned Vienna University school of geography. During World War I, he found refuge in Paris, teaching at the Sorbonne (White, 2000, pp.236-238). His academic career put him in contact with numerous scholars who had participated in the Paris Conference, and Cvijic became a member of the official Yugoslav delegation. During that same period, Cvijic was also deeply involved in Serbian politics. Cvijic produced a large quantity of maps, all intent on demonstrating the ethnic homogeneity of Serbs, Croats and Slovenians, and other, “sister” groups in the territory in question, implying they should, by nature, share a common political destiny.

iv. A very successful narrative: the modern State

Our last case of politicisation of cartography concerns the most remarkable one. We could even define it the top historical exploitation of the political value of the map. Indeed, the narrative of the modern state has made the best and most efficacious use of the geographical map in history. This topic has been the object of extensive studies, which have provided ample evidence on the role of cartography in the institutionalisation of the state (Anderson, 1991; Winichakul, 1994; Biggs, 1999; Strandsbjerg, 2008; Strandsbjerg, 2010; Wood, 2010, pp. 27-35; Branch, 2014).

The starting point is the fact that the State is the key dominant subject of western space in modern times. Scholars of political science identify the moment of the assertion of the State as the signing of the Peace of Westphalia, at the end of the Thirty Year’s War in 1648.

According to this view, from that moment the State becomes the undisputed player in international politics, as well as the point of reference and analysis of any examination of the European historic/political context (and subsequently worldwide following the colonial conquests of other continents).

Even if today this approach which saw the State as the sole protagonist has lost its attraction due to the presence of new systems, actors and representations of the world, that does not remove the fact that this idea had a predominant role in the modern forging of territoriality. It consists of the presence of a single actor, the State itself, which acts upon a single territory, through a unique strategy of controlling social relations and the territory itself, using a specific modality of the experience of space: the requirements of control and exploitation of the territory by the modern State indeed induce the development of the idea of a geometric space, which corresponds to the easiest idea for cognitive control of the territory, the exploitation of its resources and the exercise of power.

The scholar who has best investigated this phenomenon and expressed it in a book which has become a classic is David Harvey in *The Condition of Postmodernity*. One of the many statements which synthesise his thoughts and conclusions is the following: “The conquest and control of space first requires that it be conceived of as something usable, malleable, and therefore capable of domination through human action. Perspectivism and mathematical mapping did this by conceiving of space as abstract, homogeneous, and universal in its qualities, a framework of thought and action which was stable and knowable. Euclidean geometry provided the basic language of discourse” (Harvey, 1992: p.254).

This conception of space demanded gnoseological instruments. Harvey continues: “The Enlightenment project took it as axiomatic that there was only one possible answer to any question. From this it followed that the world could be controlled and rationally ordered if we could only picture and represent it rightly. But this presumed that there existed a single correct mode of representation which, if we could uncover it (and this was what scientific and mathematical endeavours were all about) would provide the means to Enlightenment ends” (Harvey, 1992: p.27).

The ability of man obtainable through representation marks a clear difference to the medieval world. Accepted, now, is “the ability of the individual to represent what he or she sees as in some sense ‘truthful’, compared to superimposed truths of mythology or religion” (Harvey, 1992: p.245).

An enormously useful tool in this project, then, was scientific cartography: “The story of Renaissance maps, which took on entirely new qualities of objectivity, practicality, and

functionality, is particularly revealing. Objectivity in spatial representation became a valued attribute because accuracy of navigation, the determination of property rights in land (as opposed to the confused system of legal rights and obligations that characterised feudalism), political boundaries, rights of passage and transportation, and the like, became economically as well as politically imperative [...] Maps, stripped of all elements of fantasy and religious belief, as well as of any sign of the experiences involved in their production, had become abstract and strictly functional system for the factual ordering of phenomena in space. The science of map projection, and techniques of cadastral surveying, made them mathematically rigorous depictions. They defined property rights in land, territorial boundaries, domains of administrations and social control, communication routes, etc. with increasing accuracy” (Harvey, 1992: pp.245-249). The cartographic product which best identifies this model of representation of the world is the classic political map.

In short, the representation of the world as divided into distinct political units, each exercising sovereignty over a specific territory, has legitimised the creation of a system of international relations based on nation-states. The political map as we know it, with its rigid borders, has been a perfect icon for this political order, allowing it to strike root deep in our collective consciousness, thereby serving the interests of the great powers (O’Tuathail, 1996, especially the introduction and chapter 3; Newman and Paasi, 1998: p.201; Paasi, 1998, p.76).

Suffice it to note that a few centuries ago, before this model of political organisation became entrenched, the borders marked on geographical maps combined political and cultural criteria. Separated by borders, on one and the same map, one could find, for instance, Spain, France, Italy and Germany, although the first two were political entities whereas the second two were not (figure 1.7). In European maps of other continents, these combinations tended to occur even more frequently. Side by side political entities such as Turkey and Persia, cultural communities like Tartary or India, or physical regions like the Arabian Peninsula would appear (Lewis and Wigen, 1997: pp.158-162).



Figure 1.7. Nicolas Visscher, Map of Europe, 1640

Later on, as the state gradually became the standard form of political organisation, the political criterion came to dominate the map, to the exclusion of other criteria. Furthermore, the border sign in these maps was attributed solely to one kind of political entity – the sovereign nation-state. This cartography, centred around the nation-state, was produced and controlled by the state itself, which therefore represented political space in keeping with its own interests. The result was a representation of the world according to which: 1) states have full and exclusive sovereignty over their territory; 2) the territory in question is perfectly contiguous; 3) no area is without sovereignty.

The visual hegemony of the state-centered map has deeply influenced our perception of global space, inducing us to think of the world in terms of discrete units (Agnew, 1998). Its underlying mindset, one acquired by the readers during childhood, has become so deeply entrenched, that we have come to take this particular view of political space completely for granted. In his keen analysis on the artificiality of many of the world's states, Jackson reminds us of a simple, but fundamental truth: 'When schoolchildren are repeatedly shown a

political map of the world which represents the particular locations of named states in different continents and oceans they can easily end up regarding such entities in the same light as the physical features such as rivers or mountain ranges which sometimes delimit their international boundaries' (Jackson, 1990: p.7).

The reflections which are now conducted on the close relationship between state subject and cartographic model will be useful in the next paragraph, where we will endeavour to explain the nature of our current political representations of the world.

c. The limits and constraints of our current mapping of international politics

My initial intention in preparing this paragraph on how we currently represent international politics was that of carefully reviewing the universe of cartographic representations used in scientific studies, so as to assess the quality of the maps, by ascertaining whether they follow a number of predetermined formal criteria. I soon realised, however, that this was a rather unrealistic goal, due to the extreme heterogeneity of the material in question. It may be possible to evaluate the quality of a map that belongs to a specific category of spatial representations, corresponding to a particular theoretical model and frame of reference (such as topographic maps, or different categories of thematic maps). When, on the other hand, the subject is maps in general, published in the geopolitical and IR literature, then we are clearly not dealing with a specific category of spatial representations, but rather with a heterogeneous and practically limitless set of maps covering a vast array of topics; maps that do not share a common general model, and cannot be defined in a strict and unambiguous fashion. Under these circumstances, any attempt to systematically assess the quality of maps published in the field of Geopolitics and IR would turn into a purely amateurish exercise, lacking the minimal methodological rigor necessary.

I therefore chose a different path, and decided to proceed inductively. Since I could not work analytically, with a "wall-to-wall" study, nor could I identify "archetypal maps" for Geopolitics and IR, I thought it more useful to concentrate on a specific map that enjoyed wide circulation among scholars, and that, in my opinion, present several problematic elements that have so far received little attention. The map in question have long fuelled the theoretical debate. I refer to the map included in "The Pentagon's New Map" by Thomas P.M. Barnett (2004; the ideas contained in the book and the accompanying map - drawn by

William McNulty, a cartographer who at the time worked for the New York Times - appeared for the first time in an article published by Esquire in March of 2003; figure 1.8).

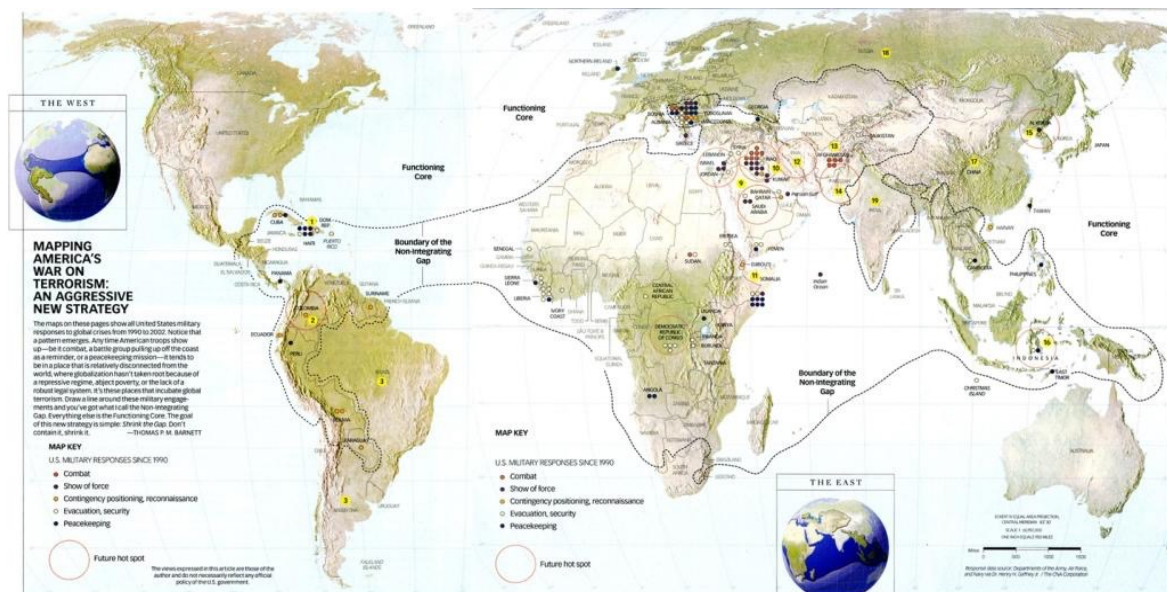


Figure 1.8. The Pentagon's New Map, T.P.M. Barnett, Esquire, March 2003

Since it was first published, this representation has been produced and reproduced numerous times in a wide range of publications (scientific, specialised, popular science, journalistic). Far from passively accompanying the authors' written arguments, this map provides the text with a familiar backdrop, and enhance the credibility of the arguments by capitalising on the natural trust that the public places in the geographical map.

The same holds true whenever the author presents his theses to the public orally (public lectures given by Thomas Barnett, accompanied by his map, reproduced here, are available online, including on his personal website www.thomaspmbarnett.com): here, too, the map plays an important role in favouring the receptiveness of the audience.

The ideas expressed in the book have been discussed and debated at length by scholars. This work has left its mark on the discipline, for better or for worse. Yet, I am not aware of any existing critical analyses of the map in question, despite the fact that this representation must be seen as an essential and integral part of the theses presented. It seems that nobody has yet pointed out that this map influences the viewers' spatial perception of the world on a fundamental level, if only because it has been drawn based on a number of premises meant to normalise and control the reality represented. The northern hemisphere is located above the southern hemisphere, despite the fact that this is merely a convention, not dictated by nature; a specific cartographic projection is used; the map is centred on Europe and Africa; and the

emphasis on official borders oversimplifies reality, creating the illusion that borders are natural, rather than artificial phenomena, thus overstating the importance of sovereignty and territorial control. In fact, through this map, the author do not present a neutral and objective basic framework (which, obviously, no representation can guarantee!). Instead, he uses a set of cartographic conventions to create a background that would be instrumental in supporting his theses. The interpretation of reality is, thus, “channelled”, from the start, towards a specific set of possible explanations. Such map, having an implicitly purpose-oriented nature, can be termed teleological, namely, a map designed, from the outset, for the purpose of supporting a specific conclusion.

Moreover, the adoption of dominant cartographic conventions, which the reader acquires unconsciously and uncritically, automatically validates such conventions and promotes their further entrenchment in the mind of the public. This has a profound effect on people’s ability to identify the categories and elements most useful to analyse and understand the global political situation. How important, for example, are the sizes of states, and how relevant are states, altogether, as actors in the geopolitical arena? How valuable are state borders for an analysis of the global political situation? And are we not more inclined to think of Europe as a central political actor only because it is positioned at the centre of the map?

i. Conformism in Cartography

Political maps in common use, often present a number of general conformist tendencies resulting in a perpetuation of inadequate, outdated standards. This hampers the map’s ability to effectively portray possible new elements and actors on the political scene. I shall list some of these very common, albeit not generalised, tendencies, which I believe to be problematic points, worthy of the attention of scholars, so as to improve the expressive ability of their disciplines, for - to quote the eminent political geographer Isaiah Bowman: “one map is worth ten thousand words” (cited in Geoffrey, 1980, p.91):

- a. Cartography based on Euclidean geometry predominates; a clear sign of mistrust of alternative solutions full of expressive potentialities, such as sketch maps, territorial schemes and more.
- b. The symbology used is limited and repetitive, completely inadequate to communicate the highly dynamic nature of today’s political reality, which could be conveyed through a wider use of less conventional sets of symbols (e.g. arrows).

- c. Generalisations and superficial designations abound, resulting in products that are hardly representative of reality. The habit of using the same sign (solid line) for all political borders, for example, favours a formal criterion (the institutionalisation of an administrative division) over a substantial one (e.g. permeability, entailing a distinction between heavily controlled borders and borders in the process of “defunctionalisation” such as those between members of the European Union).
- d. The attraction of consolidated mental schemes is strong, as can be seen, for example, in the recurrence of standard choices regarding projections, the centre of the map, or the inclusion of certain traditional elements (e.g. hydrography), even when irrelevant to the political situation.
- e. The state, marked by toponyms, colours, and signs, is omnipresent. This reflects a state-centred approach which conceals the role of other political actors such as political and civil society movements, private economic actors, supranational entities, etc.
- f. A taboo, whereby the map of a region should include only formal political actors present in that region, prevents authors from featuring external players in their maps, even when such entities exercise a decisive role in the region under study. Maps describing the political reality of African or Asian states, for example, often include no reference to very influential external actors (foreign powers, multinationals, etc.). Incidentally, such external players are often extensively referred to in the body of the article, again, indicating the strictly subordinate role assigned to maps vis-à-vis that of the written text.

It should be emphasised that the above tendencies have been around for a very long time, so that recent political maps are not very different from those of the past. The persistence of such tendencies becomes evident when one examines the two maps reproduced below, taken from two famous old textbooks of political geography (figure 1.9 and 1.10).

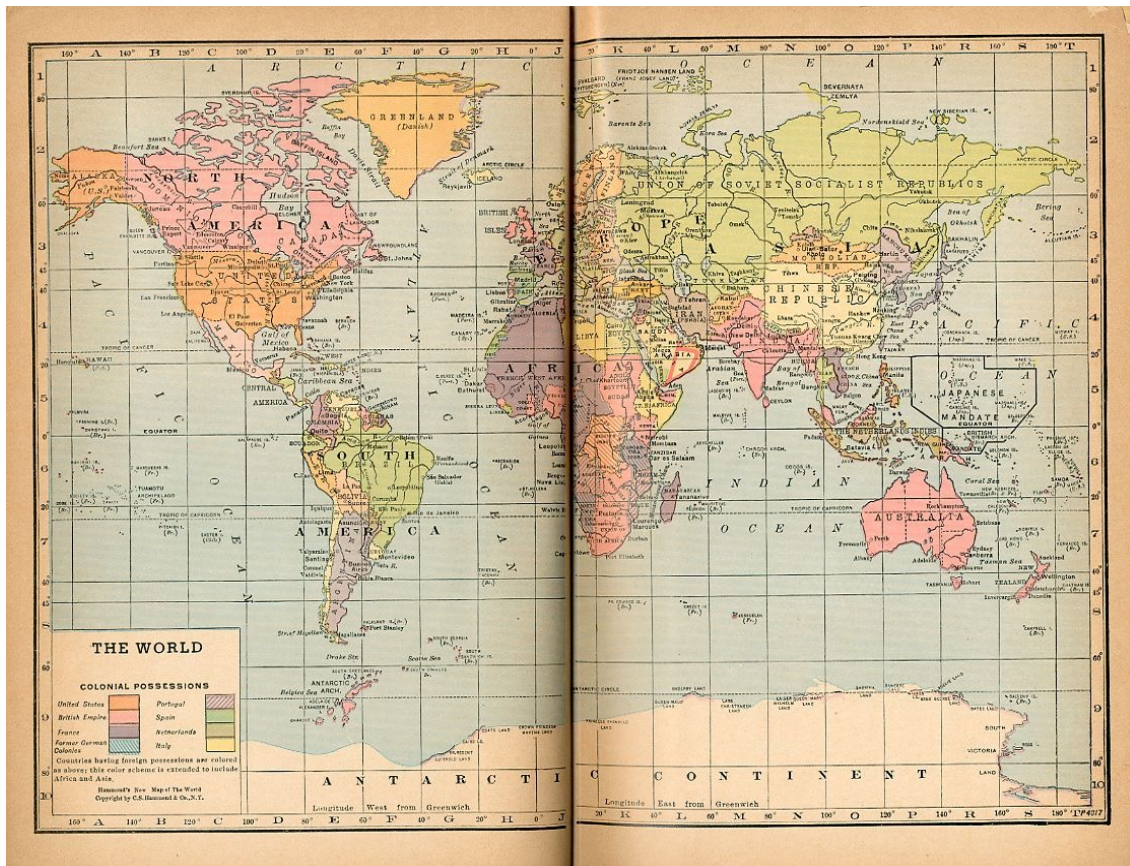


Figure 1.9. From: Samuel Van Valkenburg, *Elements of Political Geography*, 1949 (1st edition 1939)

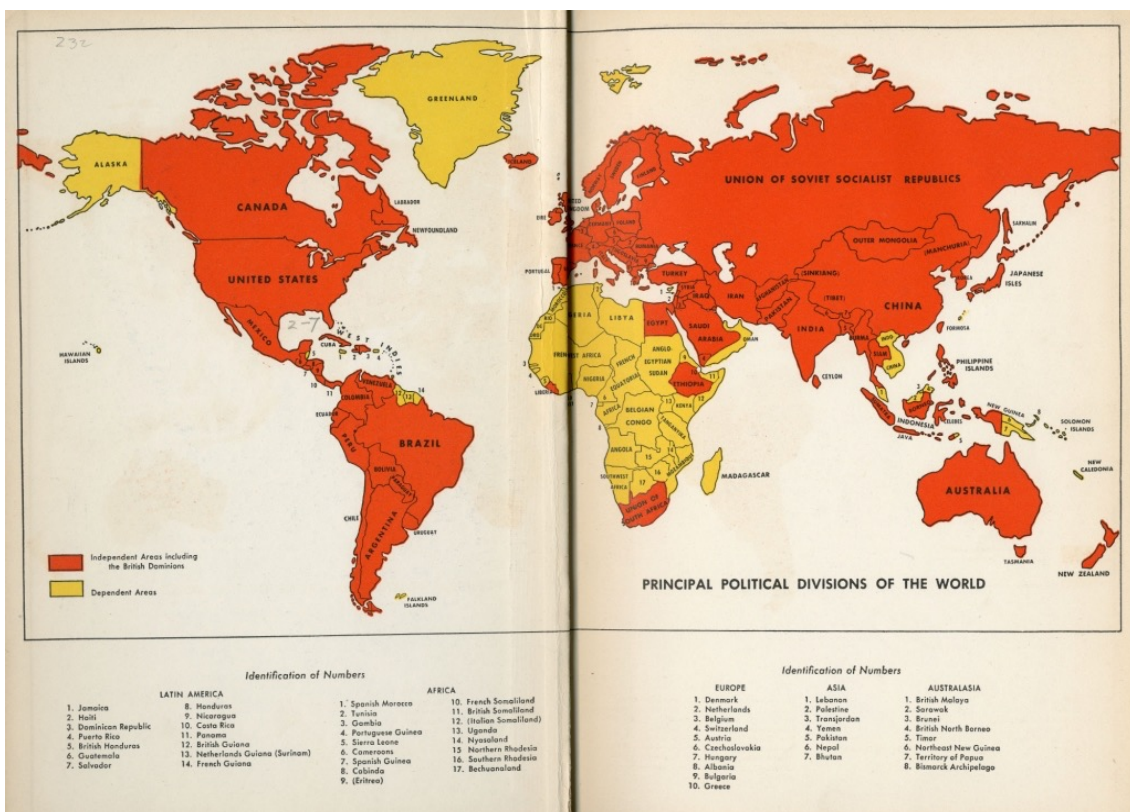


Figure 1.10. From: G.E. Percy and Russell H. Fifield (eds.), *World Political Geography*, 1952 (1st edition 1948)

Scholars and stakeholders adopt different solutions to map political space and power, but the classical political map remains the main model used as an interpretive and descriptive tool. This model, however – governed by Euclidean geometry – impose a specific, rationalistic view, of political space, characterised as continuous and isotropic. Such a map presents a very specific view of the political situation: that of an orderly world, regular and uniform, a unified and standardised vision of space. This basic framework – fixed, structured and orderly – gives the impression that political reality is based on some intrinsic rational order. An image of the world emerges, that is normalised, regulated, disciplined; an ideal world.

Moreover, the adoption of dominant cartographic conventions, which the reader acquires unconsciously and uncritically, automatically validates such conventions and promotes their further entrenchment in the mind of the public. This has a profound effect on people's ability to identify the categories and elements most useful to analyse and understand power and the political situations.

And yet, today's international political reality is very different from that which existed at the time of Van Valkenburg and Percy & Fifield. How could we have neglected to adequately address, in our political maps, such crucial phenomena as commercial and cultural globalisation, the multiplication and diversification of geopolitical actors or the changed significance of borders? Is it not clear that globalisation has challenged the spatial and temporal categories used thus far to study and explain social phenomena? Evidently there is something which has prevented the updating of the cartographic apparatus to our times.

The traditional political map still enjoys absolute hegemony in the universe of political representations of the world, giving it a clear advantage over any other form of representation thanks to the force of tradition. When we look at a map we activate all of the notions acquired, often unconsciously, while examining other, similar, maps. We are already familiar, to a large extent, with the language of the traditional political map, from the meaning of its symbols to that of its colours etc. The use of a coding system perceived as "official", facilitates its reading but also, by evoking recognised authority, inspires the trust of the reader, thereby increasing its credibility. As pointed out by Christian Jacob (1992: pp.368-369), the likelihood that a map will be understood and valued largely depends on the reader's past experience, that is, on his or her ability to recognise it and interpret its language, on whether he or she possesses the key to deciphering it. This helps explain why, although we can clearly see that these maps are inadequate, we continue to read them uncritically; it is the sense of familiarity with their language.

But the existence of a dominant expressive model incapable of adapting to reality's changing analytical and descriptive needs entails far more serious consequences than the mere uncritical acceptance of maps by readers. Indeed, cartographic inertia raises not only questions regarding the map's interpretive abilities, but also doubts as to its true nature. Is it simply a tool for the description and understanding of reality or also an instrument for the perpetuation of an established political order?

This question, coupled with the considerations discussed above, regarding Barnett's maps, brings to mind one of John Brian Harley's most important insights. In explaining how a dominant interpretation "enters" a map, he distinguishes between external and internal power. The former refers to official centres of power ("individuals, such as a monarch or a minister of the Crown, state institutions, and the institutionalised Church", Harley, 2001: p.111), able to steer cartographic production - to their own advantage, of course - through "a marked influence on the organisation and practice of cartography" (Harley, 2001: p.111). This kind of influence, however, was deemed limited even by Harley himself (Harley, 2001: pp.113-117).

Internal power, on the other hand, which pertains to cartographic processes and practice, has a much stronger potential to affect mapping: "Compilation, generalisation, classification, formation into hierarchies, and standardisation of geographic data, far from being mere neutral activities, involve power-knowledge relations at work." (Harley, 2001: p.112). In other words, the procedures involved in the preparation of maps are based on a series of conventionally accepted schemes and models prompting implicit assumptions that are decisive in one's reading of the political situation.

The classical political map is a good case in point. With the world divided into numerous states, each separated from the others by clear borders, and assigned its own, single colour, such a map presents a very specific view of the international political situation: that of an orderly world, regular and uniform, where the political actors are states, and official borders are of great importance. We are induced to look at the world as made up of entirely distinct, and at the same time internally homogeneous areas, obliterating any sign of diversity, shades or "grey" areas. Such a unified and standardised vision of space calls to mind the Wilsonian ideal of an isotropic world in which the dominant (one might say, the sole) political actors are states; a vision that, looking further back in time, had been instrumental in the conception of the European powers' expansionist plans (Ó'Tuathail, 1996).

On top of this basic layout, the author can later add his or her personal interpretive contribution. He or she might, for example, divide the states into categories or arbitrarily highlight some element over others. The basic framework, however – fixed, structured and

orderly – remains in place. The classical world map, a puzzle of as many coloured patches as there are states, gives the impression that states are uniform, and that political reality is based on some intrinsic rational order. An image of the world emerges, that is normalised, regulated, disciplined; an ideal world.

We know full well, however, that this image is based on false premises. Different states are neither comparable between them, nor internally uniform, if only for the striking economic and social inequalities within states, which become absolutely astounding when we compare different states. Moreover, in the international arena, different states may carry very different political weights. Indeed, some states, so diligently represented on paper, are in fact little more than empty shells, internally shattered by competing powers (the fragility of African states is but one example). Traditional political maps, however, do not simply hide reality in this case. By placing subjects of very different levels of importance on equal footing, they actually distort it. This is a clear example of their inclination to arrange reality with the aim of normalising it. Once more, Harley identifies the cartographic agents of such operations: “Rules, specifications, techniques, and regular arrays of conventional signs were tools of normalisation. The map maker used these to reinvent or redescribe reality in the process of making the world known to society. He produced an artificially simplified world” (Harley, 2001: p.113).

To summarise, we can say that the traditional map is founded upon detailed assumptions of positivist thought:

- A. The reproduced objects have an existence which is independent from that of the author of the map
- B. The reality of these objects can be expressed in mathematical terms
- C. Cartographic truth can be reached only thanks to systematic observation and measurement
- D. This truth is objectively and independently verifiable

The assertion and spread of the positivist scientific model in cartography has produced profound consequences in our way to graphically represent international politics:

- A. It has completely eliminated the artistic dimension of the map
- B. It has led us to believe that such scientific cartography should necessarily be immune to the influence of any social factor
- C. It has consolidated the trust in linear progress, or the conviction that, thanks to the

application of scientific principles, the produced representations would be ever more faithful reconstructions of reality

The hegemony of this model of representation, the significant expression of Western mentality, has obviously influenced judgment about maps which did not satisfy its underlying criteria, whether they were produced at other times, by other peoples or indeed produced in the West but on different techno-cognitive bases (Boria, 2015). In any case, all of these maps which we can define as ‘non-compliant’ or ‘alternatives to the cartographic norm’ (Papotti, 2012) or even “maps-like objects” (Dorling and Fairbairn, 1997) were considered ‘inferior’, whether explicitly or not. This is because the assumption of ‘scientificity’ is the exclusive prerogative of geometric maps, the only ones which would provide guarantees of integrity rather than ideological and value contamination. On the contrary, attributes of neutrality, objectivity, impartiality, universality and comprehensiveness belong to no map of any type, as they were commonly attributed to geometric maps.

The cultural levelling which derives from this process is evident. Yet it is even more important to note that the geometric-mathematical paradigm, as a scientific assumption within positivist thought, is and remains the full expression of a given culture in a given moment in history.

d. Why we should go beyond: space-time reassessments and revolutions in mapping

We have said that we learn from models, we reason through models and we communicate through models. But models of knowledge are not stable and given once and for all. They depend on scientific paradigms and therefore modify over time.

The relativity of the models of representation has already been well underlined by Ernst Gombrich (1985; pp.200-253), who reported that all of the representations are conventional, but some are more naturally acceptable by virtue of their visual properties accepted in the social context. The perception of space is thus a typical historical variable of any society, and therefore they are equally considerable as the mystic spatiality of the Middle Ages or the mathematics of the Renaissance. Not only, therefore can we not clearly speak in some way of an absolute science of territorial representation which with simple technical progress produces

results ever closer to reality, but we must also admit that in times of crisis the scientific paradigm of reference assists in the co-presence of hegemonic and other secondary theories, alternative and not compatible with the former. The preference towards hegemonic theory is therefore only temporary and should not be attributed to its supposed inherent superiority, but to the degree of harmony with the scientific paradigm of its time.

In the peculiarity of spatial representations Arthur Robinson addressed the topic of revolutions in the history of cartography. He tells us that “the revolutions primarily involve shifts or changes in the intellectual aspects of cartography, namely, the mental models, concepts, or paradigms that motivated the cartographers, and only secondarily the technical operations employed in making the map” (Robinson, 1982: p.13).

With regard to the first aspect, that which concerns the mental models of space, is today in vogue after a long period of neglect of the thought of Carl Schmitt, a true pioneer of reflection on space and time. In his most important work on the subject he affirms: “Every time that, thanks to a new advance of historical forces and the liberation of new energies, new lands and new seas make their entrance on the human collective conscience, even the historical existence of spaces changes. New parameters, new dimensions of historical-political activity, new sciences, new orders and a new life of new or reborn people are born. This expansion can be so profound and surprising as to entail a change not only in the measurements and parameters, not only of the external future of human beings, but also of the very structure of the concept of space. Then one can talk about a spatial revolution. Yet already every large historic transformation almost always involves a change in the image of space. This is the true essence of great political, economic and cultural change that is realised” (Schmitt, 1942: pp.58-59).

The idea that space is a social category subject to the changes of history is quite clear to many disciplinary traditions, from sociologists who would discover it with Émile Durkheim to scholars of image history who are dedicated to analysing the transition from pre-modern to modern thought: “It is essential to remember that members of primitive society understood space and time not as a set of neutral coordinates, but rather as mysterious and powerful forces, governing all things – the lives of men, even the lives of the gods. Hence both space and time are axiologically and emotionally charged: time and space can be good or evil, beneficial for certain kinds of activity, dangerous or hostile to others; there is a sacral time, a time to make merry, a time for sacrifice, a time for the re-enactment of the myth connected with the return of primordial ‘time’; and in the same way there exists a sacral space, there are sacred places or whole words subject to special forces” (Gurevich, 1985: p.29).

Some historical phases therefore undergo a clash between cultural models in the perception

of space and time, and this antagonism naturally affects the interpretation of political spatiality.

Since, as is well known, international relations are not only a matter of hard power but also of soft power which includes cultural models as one of the issues at stake in the confrontation, there is then a cultural battle which regards hermeneutic models of geopolitical thought. It is the battle for the interpretation of political space.

One can take the example of the preceding paragraph: modernity has imposed a reading of the geopolitical equilibria based on nation states, a reading in which the reference grid is formed by States. This has consequently led to the assignment of a series of characteristics to political space, regarded as a homogenous, absolute, abstract and isotropic space. This vision has been helpful to imperialist and colonialist interests of modern states, as it has naturalised the existence of sovereign entities on a precisely demarcated territory. Geometric-Euclidean cartography was the graphical tool of this approach, useful not only to modern states but also to capitalist interests of the bourgeoisie which required instruments for the exact individuation of property rights.

So, the political map as we mean it today, that is to say aimed at the representation of the plurality of sovereign subjects on territories of their proper and exclusive competence, takes its form in modern cartography, which is when states become truly sovereign and the international space fundamentally assumes the characteristics which we recognise to this day.

With the passage of time, however, the distinction of a political space is defined more fully at the supranational level on two levels: transnational and international. The first is one of economic, financial, religious and cultural relationships which spontaneously transcend state boundaries and occur on a space which is only weakly related to states. The second, on the other hand, is precisely centred on states and refers to the relationships that these entertain on the basis of sovereignty that they possess on a defined territory. It is clear that these two spatial dimensions develop differing and opposite logics: a network structure for transnational space; a juxtaposition of sovereign territories for international space, which sees the most significant geographical object in the border.

The geographical study of political space refers to both of these two spatial dimensions, but their cartographic representation has seen the prevalence of international over transnational space.

Today, the relative weakening of the former in favour of the latter requires an effort of reflection on the modality of representation of transnational space and on its nature.

To give an example, maps treat the border - as well as any political figure - in the same

way as a natural element: but while a mountain preserves its fundamental attributes over time (always the same altitude and the same absolute position), the interpretation of the political figure changes with the passing of time. It should, therefore, appropriate the dynamism of social phenomena in cartographic representation.

Cartographic descriptions of politics continue to pay homage to an old tradition of rationalist planning: they focus on stable elements and materials rather than those which are changing and immaterial. In other words, the cartographic idea which is obsessed by elusiveness and inexpressibility of the immaterial elements, resolves the issue by excluding and suppressing them. It only shows the visible, and the material, which however has little to do with the spatial dimension of politics in modern societies.

By observing the shortcomings of the cartographic model which is in force, comes an invitation to wonder if such a model of representation is appropriate and if we are not already in the presence of a new cartographic revolution. The current topographical model dates back several centuries, when the reasoning of the Enlightenment imposed a topography based on Euclidean geometry. Modern cartography is therefore developed from the classical paradigms of political science, with its categories (sovereignty, borders etc.) and its protagonists (states, bureaucracy etc.). Today, however, globalisation throws into question the spatial and temporal categories on which it was previously based, to produce knowledge and to explain social phenomena. Manuel Castells speaks of new relationships between space and time, and Harvey of space-time compression: “I mean to signal by the term [time-space compression] processes that so revolutionise the objective qualities of space and time that we are forced to alter, sometimes in quite radical ways, how we represent the world to ourselves” (Harvey, 1992: p.240).

The need to think of power in terms of relationships allows us, and requires us, to abandon the classical paradigm and set out the cartographic representation of another, other than the centralised model of sovereignty exercising an absolute power through the imposition of its decisions from on high. Let us remember the words of Claude Raffestin: “The representation, the denotation or the description are effective when they are able to grasp, through the appropriate means, meaningful relationships” (Raffestin, 2009: p.51). The traditional map then seems to be a decrepit instrument, so much so that Franco Farinelli writes that “today reality no longer obeys the rule of maps” (Farinelli, 2003: p.36).

Jacques Levy also expresses doubts over the current model, stating that “Le paysage actuel de la cartographie fait apparaître un triple paradoxe : nous produisons de plus en plus de cartes et pourtant I. celles-ci intéressent de moins en moins d'utilisateurs; II. la divergence

entre les ‘cartes savantes’ et les ‘cartes populaires’ s’accroît ; et III. On observe un écart croissant entre les cartes dont nous disposons et celles dont nous aurions besoin pour mieux comprendre le monde qui nous entoure. [...] En matière de cartes, en bref, on ne peut que se sentir frustré de ces décalages béants entre le nécessaire, le possible et l’actuel [...] des cartes pertinentes et originales se rencontrent parfois – sinon surtout – en dehors du champ de la cartographie savante d’aujourd’hui” (Levy, 2004 : pp.1-2).

Further ahead still, with reference to the traditional map: “On pourrai être tenté de proposer l’affirmation suivante : la carte a constitué un bon util pour représenter et servir un monde rural, ancré au sol, guerrier et autoritaire. Vu du monde développé contemporain, que reste-t-il de ses avantages dans un contexte urbain et mobile, où la guerre s’éloigne et la démocratie rend possible de nouvelles libertés ? Sous la profusion, on assisterait à l’obsolescence de la carte, à son décrochage progressif vis-à-vis de la demande sociale. Les espaces densément peuplés, qui se trouvent submergés par les étendues vides, les réseaux, dont les points et les lignes entrent mal dans la logique de surface qui domine la ‘feuille’ cartographique, la complexité et l’entremêlement des espaces, subjectifs et objectifs, matériels et idéels, qui se retrouvent laminés par la représentations plane, seraient les victimes incontestables de cette dérive radicale [...] La carte est-elle en train de renoncer à la part la plus informative de sa mission : décrire par l’espace le monde d’aujourd’hui ?” (Levy, 2004 : pp.10-11).

Furthermore, there is another obvious limitation of traditional cartography: its static character. The need to revitalise the image is tolerated with great impatience by scholars. In his apocalyptic view of the world as a chaotic place, shaken by subversive forces, Robert Kaplan warns that “war-making entities will no longer be restricted to a specific territory” (Kaplan, 1994). He then goes on to outline a “new map”, which he calls the “Last Map”: “The map of the future, to the extent that a map is even possible, will represent a perverse twisting of Ritter’s vision. Imagine cartography in three dimensions, as if in a hologram. In this hologram would be the overlapping sediments of group and other identities atop the merely two dimensional color markings of city states and the remaining nations, themselves confused in places by shadowy tentacles, hovering overhead, indicating the power of drug cartels, mafias and private security agencies. Instead of borders, there would be moving ‘centres’ of power, as in the Middle Ages. Many of these layers would be in motion. Replacing fixed and abrupt lines on a flat space would be a shifting pattern of buffer entities, like the Kurdish and Azeri buffer entities between Turkey and Iran, the Turkig Uighur buffer entity between Central Asia and Inner China (itself distinct from coastal China), and the Latino buffer entity replacing a precise U.S.-Mexican border. To this protean cartographic hologram one must add

other factors, such as migrations of populations, explosions of birth rates, vectors of disease. Henceforward the map of the world will never be static. This future map – in a sense, the “Last Map” – will be an ever-mutating representation of chaos”.

One notices the imaginative effort of innovation in the field of cartographic representation to adapt to the accentuated dynamism of geopolitics in today’s world. It is a path which in part started many years ago with the first geopolitical maps of the 30’s (which we will cover later), but was then suddenly interrupted. Today the necessity to introduce abstract aspects of political phenomena and notions, such as forms of political control, pressure, conditioning, or the value and role of a country on the international political arena, in representation. This need requires new specific graphic solutions to represent them. These are the challenges which geopolitical cartography has before it today.

The enormous difficulty that representations of the world meet in overcoming a logic of space born at the dawn of modernity, may appear incomprehensible. It must nevertheless take into account that this logic, however insufficient it is in the face of reticularity and the dynamism of globalisation, simultaneously fulfils another characteristic on which globalisation is founded: the homologation and the loss of the diversity of places. This trend leads toward the cancellation of any spatial roughness and therefore dovetails nicely with the Euclidean vision of space reduced to pure metric, which is precisely the vision of modern cartography. The “flat world” of Thomas Friedman (2005) and the “end of history” of Francis Fukuyama (1992; the ideas contained in the book appeared for the first time in an article published some time earlier by the magazine “The National Interest”) are metanarratives of success, examples of this vision of a standardised world. The original forces of modernity have thus joined with the forces the contemporary world, which have opportunistically been grafted on the same spatial logic, and have powerfully revived. The effect is a serious crisis of valid representative paradigms.

Against the homologous actions of forces so strong, one feels the need of a cognitive epochal transformation similar to that registered with the transition from the Middle Ages to Humanism. It is a transformation which is able to restore humanity to the idea of space. This transformation is perhaps already underway and new forms of mapping are announcing great changes.

Today the status of the map has changed: from a tool for a few to a common object able to take part in the public debate. This change has extended its uses and challenged its traditional practices.

The need to overcome the limitations of the classical map in the absence of a unified

theoretical framework, induces stakeholders and researchers from a wide range of disciplines, methodological traditions and schools of thought, to work on the development of alternative modes of representation, based on a heterogeneous and multidimensional perception of space, and on topological metrics (e.g. anamorphic maps).

In addition to scholars and ordinary individuals, other professional groups use maps extensively in their discourse and they develop their own ways of mapping politics (e.g. opinion makers, military men, consultants of important institutions, journalists, etc.). Moreover, these professionals play a decisive role in shaping the public's perceptions of politics.

Exploring how all these groups employ maps, mapping concepts and spatial representations and how they influence each other, involves ethical issues which deserve to be investigated.

As we see, the functions and subjects of cartographic communication expand. An interpretation of the map which exclusively takes into account geometrical accuracy excludes any possible recognition of its wider function. What is being questioned here is the same object of representation as well as how it has been intended in rationalist cartography until now, where the place was simply a portion of the earth's surface, in its natural and material reality. But nothing prevents us having, in addition to maps of places intended in their materiality, maps of immaterial (imaginary) places, or real places which are not exclusively depicted in their material features but also in the topophilia of those who live there (ideas, sentiments, emotions etc.). In this final case the role of representation assumes a more precious value and a more significant meaning; as Adalberto Vallega reminds us, "the referent of the representation is not the place itself, but the how the place lives in the existential sphere of the subject" (Vallega, 2008: p.80).

This line of reflection brings the communicative and geographical act, and the relationship that develops between the cartographer and recipient, to the centre of reflection. In this regard, Emanuela Casti (1998: pp.157 ss.) argues that the advent of Euclidean cartography has reduced 'freedom' as much for the author of the map as for the user: the first is downgraded to a technical executor and the second denied his right to criticism. Therein lies the power and limits of Euclidean cartography: "The technical innovations introduced in the map from the eighteenth century codification ... are a consequence of the codification which the experimental protocols suffered at the turn of the eighteenth century: through the adoption of procedures for the gathering and cataloguing of data, the rules from which science must be inspired are established. This helps us to comprehend how the map becomes a product of the

culture of codification, whose paradigm is that of the measurement marked by geometric-mathematical rules. This paradigm does not exclusively assign the assumptions on which cartography is built, but it extends to any sign of the map. This means that apart from establishing precisely which should be the constructive rules of cartography, it also decides that the signs must respond to geometric parameters, or it decrees the death of the figurative sign and the adoption of the abstract one. From this moment the icons are made up of figurative and numerical surrogates which refer to the dimensions of the object; the chromatic dimensions, losing the analogy with reality, are used to create a conventional correspondence: green for vegetation, blue for water, red for roads, black for artefacts, brown for reliefs etc. In short the transition from the figurative drawing to the abstract one eliminates the possibility of understanding the aspects which identify the object within empirical experience” (Casti, 1998: pp.161-162).

Casti continues, arguing that the decisive element in the affirmation of Euclidean cartography is the legend, an “interface necessary to deal with the transformation that the sign has suffered in the transition from an analogical to digital system [...] In the moment in which cartographic language is subjected to the codification-abstraction procedure (formal, graphical, iconic)... the deeper meaning is compromised because the selection is aimed at exalting only few and limited quality materials of the object” (Casti, 1998: p.163).

A legend that, to provide a historical and not secondary fact, dates back to the Renaissance, when a conventional repertoire of signs makes its appearance, first sporadically and then permanently, within cartographic representation. The first use of a legend can in fact be traced to a map written in Franconia in 1533 (Lodovisi and Torresani, 2005: p.138).

The transition in geographical maps from the prevalence of icons to that of symbols, which was slowly yet surely consumed over the course of modern history, represents a decisive element in understanding the dynamics of development of the discipline. One indeed hides behind two opposing strategies of representation.

The map primarily composed of icons intends to reproduce the real world, while that composed primarily of symbols offers a normed reproduction which makes use of standard categories to group items which have the same characters. The first case is intended to be “true to nature”, obeying the strictest possible accuracy in the depiction of the world as is shown before the eyes of men. In the second case, instead, a model is created which is useful for the comprehension of its mechanisms, in which the signs on the map represent archetypes: a sign on a map in the shape of a small ball of a certain size does not show a city which exists in nature but its archetype, or a typical or ideal city. It concerns, therefore, two completely

differing scientific attitudes which are emblematic of two different interpretations of the relationship between man and nature: in the case of the iconic map, a relationship that implicitly denotes a sense of admiration and contemplation, in which the understanding of the universal must necessarily pass the minute analysis of the detail, in full detail. In the case of the symbolic map, we instead face a more active philosophy, one that is more confident of the ability of man to penetrate the mysteries of nature and reach their full understanding by means of templates, i.e. reconstructed in the laboratory.

It is critical at this point to clarify that the observer who finds himself in front of a symbolic map does not necessarily perceive it as “less faithful to reality” than the iconic map. This is demonstrated by the fact that, despite the maps of today’s atlases being almost exclusively composed of symbols, common sense continues to consider the map as a faithful reproduction of reality. This is thanks to those fundamental devices that are the conventions: there is no need for a motorway to physically resemble its real materialisation, it is sufficient that the observer knows that that continuous sign which is wider than all the others indicates a motorway. To already know it, and avoid having to go through the legend to look up that symbol, one must have learned it previously. Just like with any language, even in cartography the widespread knowledge of conventions thus becomes a crucial factor in its success.

For these reasons the symbolic map owes much of its fortune to standardisation, a process which had its greatest intensity between the end of the 19th and beginning of the 20th centuries, alongside similar processes of standardisation in other field of science. Significant in this regard was the establishment in Germany of the “Physikalisch-Technische Reichsanstalt”, which was placed directly under the Ministry of the Interior, which was intended to guarantee the maximum standardisation in experimental sciences (Cahan, 1989).

“Geographical iconism is therefore a typical product of pre-modernity, while geographical symbolism characterises the modern way of representing places. By itself, the fact does not lead one to believe that, from a cultural point of view, the former constitutes a “minor” way of representation compared with the second. It simply possesses different characters and aims, thus is placed on a different level in the production of knowledge. Instead of being marginalised because it does not respond to criteria of proximity, the icon deserves to be reconsidered, because it allows one to represent places on the basis of cultural elements alternative to those of modern representation” (Vallega, 2008: p.129).

It is paradoxical, but in an era of supposedly homologous globalisation, we are facing the greatest degree of spatial heterogeneity that there has ever been: in the same spaces communities coexist which are different regarding their history, religion and ethnicity; in the

same places strong concentrations of power and manifestations of acute poverty coexist. As Bertrand Badie ably highlights (Badie, 1995), the coexistence of the globalisation of economies and the rediscovery of local identities is producing complex processes of supra-territorial interdependence and regional differentiation.

This is a situation which is very different from what occurred in the past, when in their studies on the spatial dimension of politics the specialists could concentrate almost exclusively on a unique territorial structure (the state), on a delimited and substantially continuous space (the state territory) and on a single authoritative centre (the capital). The geographical objects which are favoured today in the studies of Geopolitics and International Relations are, therefore, no longer seats of power but the networks of power. Territorial continuity is no longer a prerequisite of political bodies, hierarchies fluid in their competences and prerogatives are instead adopted. The weakening of the territorial principle once again proposes a near return to the pre-modern conception of authority: the body politic tends to accommodate those who identify themselves to it and identify with it, irrespective of where they work or reside.

The crisis of the Westphalian state, sanctioned by the questioning of the principle that the State exercises total sovereignty within its defined territorial limits, underlines the emergence of new centres of power (from below, such as in cities and regions, or from above, such as in international and multinational organisations). It is necessary to represent these new centres of power, which are playing a role of ever increasing importance in the democratic life of contemporary societies and in the taking of political decisions. Not counting however on a well-defined sovereignty such as that of the State, their territoriality puts the traditional mode of graphical representation in crisis: how do we represent the reticular and invisible nature of a terrorist organisation?

On the difficulty of liberating ourselves of the traditional vision for which the fundamental actors of world political events are States weighs undoubtedly the map, which constitutes the cultural foundation and the legitimising base of such a vision. The political map of the world divided into states, which we cognitively acquired since childhood, contributes to normalising and making us take a certain way of thinking of political space for granted.

The challenge which the scientific community has before it is of great importance because the inadequacy of the topographical model risks penalising our understanding of contemporary political phenomena. Nor can we renounce graphical representation as an instrument of knowledge because “whatever shape the world takes in the coming decades, there is still no substitute for a good map” (Khanna, 2016: p.14). Today more than ever, given

the flow of connections which dominate the world recognises their visualisation on graphical form more than through other languages. We know that the production and circulation of knowledge is increasingly taking place through graphics and digital animation than through traditional text languages. The direction is therefore clear, though bearing in mind the inherent limitations in any cartographic representation, and as remembered by Jeremy Brotton: “We can never know the world without a map, nor definitively represent it with one” (Brotton, 2013: introduction).

2. Main epistemological shifts in the academic studies of international politics in relation to cartography

The academic studies of international politics have been recently involved by a generalised re-evaluation of the spatial dimension, in line with the constructivist notion that beliefs and ideas explain the construction of any political system (Wendt, 1999). Yet, political scientists seem somehow limited in their ability to elaborate spatial information. In general, it is largely acknowledged that although maps are replete with elements that evoke politics and political power, their use in political sciences has been rather sporadic and extremely heterogeneous so far.

Paradoxically, the same happens with geopolitical studies, despite their roots being deeply embedded within geographical science. Therefore, both International Relations and Geopolitics could benefit from analyses taking on these subjects systematically.

This situation calls for analyses aimed at a better understanding of the reason preventing such an appreciation and at the same time able to explore the potential of cartography for the study of Geopolitics and IR.

a. Geopolitics and cartography

i. The “most famous map in the geopolitical tradition” is creaky

The relationship between cartography and Geopolitics is multilevel, and involves various professions: maps act both as a working tool for those who deal with the subject of Geopolitics (be it scholars, statesmen or columnists), and as an object of study for the analysis of power narratives.

Over time, this relationship became increasingly more complex. Initially, maps were only meant to show the geographic distribution of strategic factors and concepts. This is, for example, the use of the “most famous map in the geopolitical tradition” (O’Tuathail, 1996: p.31), the map with which John Halford Mackinder presented, for the first time, his concept of Heartland (Mackinder, 1904: p.435; figure 2.1). In this context, the map becomes a useful heuristic and analytical tool allowing the reader to visualise, and therefore perceive, significant spatial aspects and relationships relevant to geopolitical analysis.

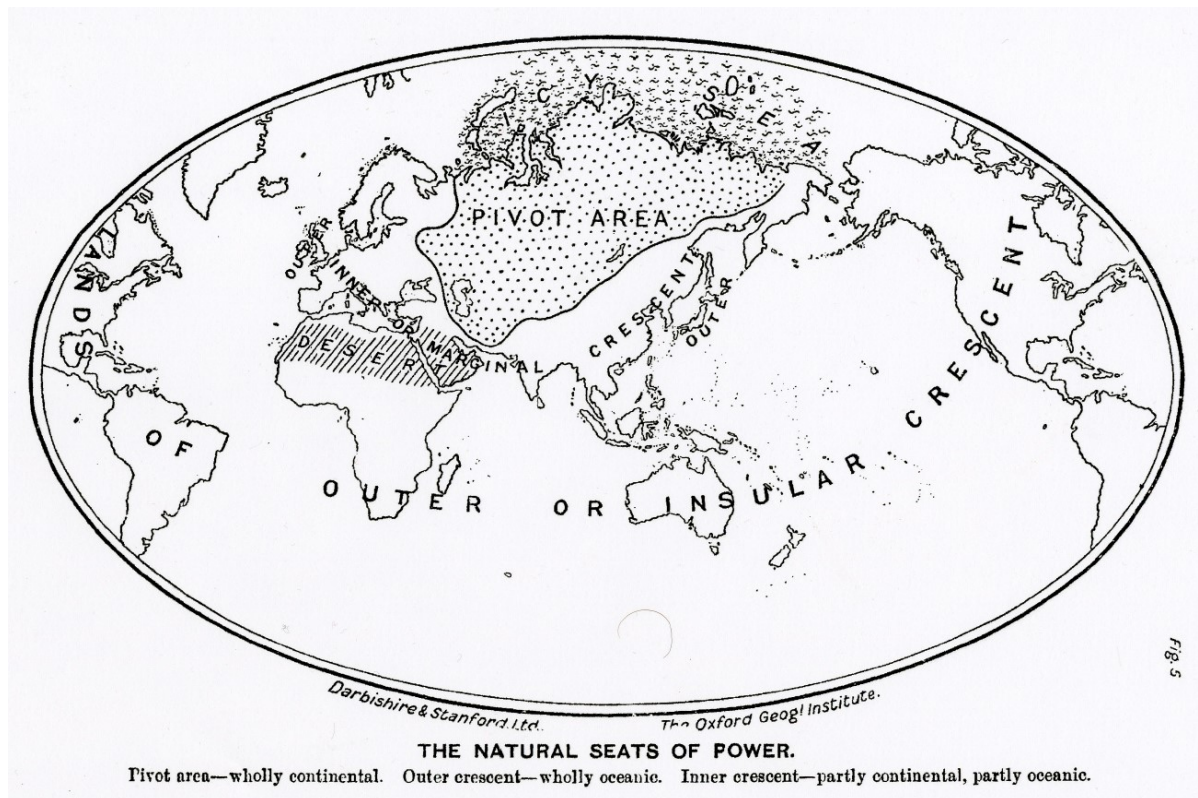


Figure 2.1. The natural seats of power, from Mackinder J.H., *The Geographical Pivot of History*, in *The Geographical Journal*, XXIII, 4, p.435, fig.5

The map demonstrates the contrast between land powers and seapowers, with the former barricaded in the Heartland, which the map defines as a “pivot area”. Its relevance is determined by a variety of factors: geographical-environmental (its inaccessibility for seapowers, or protection thanks to the highest mountain ranges in the world), technological (rapidity of connections via railways), historical (a tendency to exert outward pressure as demonstrated over the passage of time since the Hunnic, Avar and Mongol Invasions). A fixed pattern in the political evolution of the planet evolved from such a strategic framework, and although it has been accused of being overly simplistic and deterministic, it held the great advantage of analysing, for the first time, political structure of the world as a whole. It was not therefore an incoherent mosaic, but a unified framework whose organic nature implicated interdependence among events.

If the importance assigned by Mackinder to the Siberian area on the international political balance appears in hindsight to be distinctly overestimated, not least on the basis of his reasoning, it contains a fascinating intuition which was strongly representative of a new sensitivity which was emerging in those years: the idea that the world was becoming smaller and more unified, which demanded to be thought of in global terms.

However, “despite the extraordinarily innovative concept it attempted to convey,

Mackinder's map was not particularly original or self-explanatory [...] Ultimately, while recognising Mackinder's considerable merit for having been the first to theorise the unity of global political space, it could be said that he may not have had much cartographic imagination. Rather than using an ordinary projection, which keeps the continents apart and the heartland in a marginal position, the idea of a compact and unified world could have been conveyed more clearly and compellingly on a polar projection" (Boria, 2017: p.143).

With the only, brief but significant, exception of geopolitical cartography between the two World Wars (Boria, 2008: pp.78-108; Herb, 1997), maps continued to play the same role throughout the long period of hegemony of classical Geopolitics: Nicholas Spykman used them exactly as Mackinder did, to illustrate his concept of Rimland (Spykman, 1944, p.52, map 46; figure 2.2).

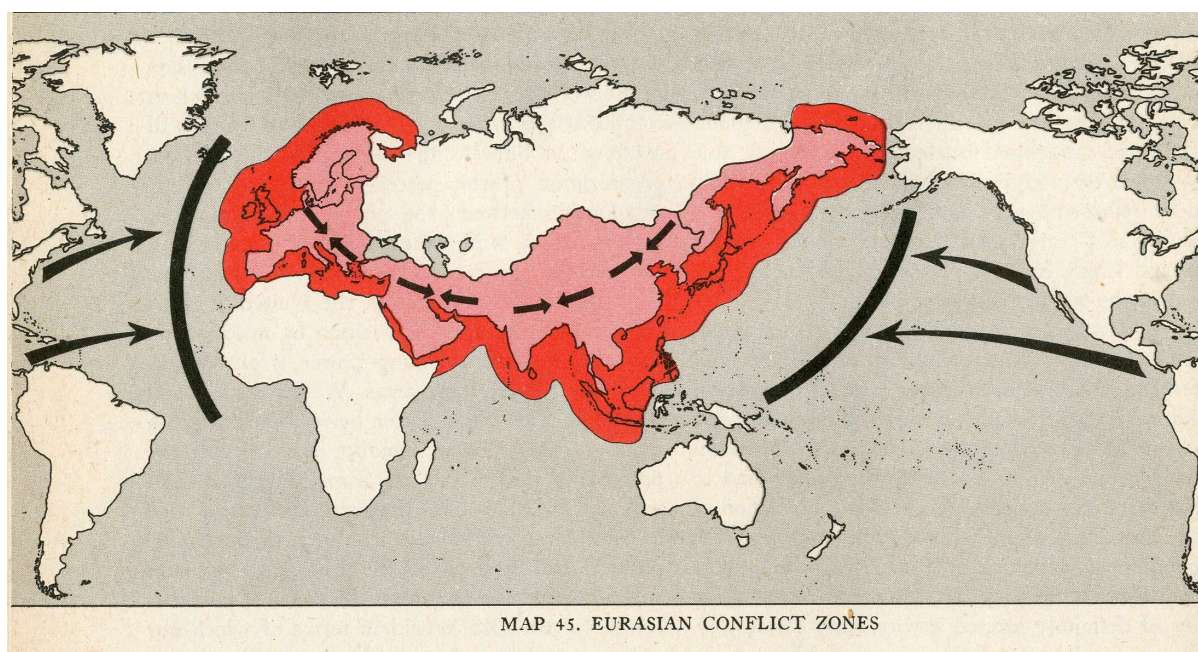


Figure 2.2. Eurasian conflict zones, from Spykman N.J., *The Geography of the Peace*, 1944, p.52, map 46

Only with the advent of postmodern approaches, sensitive to the issue of representation, did maps cease to be considered exclusively as the product of rigorous mathematical procedures, shielded from the risk of being conditioned by cultural values and perceptions. From that moment on, the relationship between Geopolitics and cartography became increasingly complex, entailing new and stimulating intellectual challenges, made even more demanding by the fact that, in a society that tends to favour visual over verbal language, Geopolitics, too, is bound to use forms of visual communication such as cartography.

ii. The new horizons for political cartography opened up by critical and popular Geopolitics

During the '90s Geopolitics underwent an intense inner turmoil which produced a sharp break from the patterns and experiences of the past, widening the field guidelines which otherwise appear highly heterogeneous today. “O significado de *geopolítica* è bastante variável, prestando-se a distintas interpretações e confusões: desde logo, são imensas as definições e conceitos de geopolítica (ver, p. ex., Correia, 2008 e 2002: 100-108; e Dias, 2005: 61); depois, são frequentes as ‘derivações semânticas’, como salienta Pezarat Correia (2008; e 2002: 97 e 101-102); acresce que para sistematizar as muitas abordagens e a interpretação da evolução da geopolítica entrontramos inúmeros esquemas diferenciadores” (Tomé, 2010: p.50).

Here however one does not add yet another definition of Geopolitics to the many which have already been proposed, thus abandoning an exercise which appears purely nominalistic and inevitable frustrated by the intrinsic versatility of the term. One instead prefers to go directly to the heart of the issue, focusing on innovations related to the relationship between Geopolitics and cartography. Innovations which arise predominantly from a new direction which is known as *critical Geopolitics*.

This trend has developed a radical critique of classical Geopolitics, demolishing its aspiration to be an objective and neutral science, which is also endowed with its own internal coherence, and instead presents Geopolitics as a wealth of practices and representations which are instrumental in serving as a specific political line. It is therefore a discipline which offers strategic and functional knowledge to power. From this derives the need to clarify the distinction between formal Geopolitics (of intellectuals) and practical Geopolitics (of politicians and government strategists; Tomé, 2010: pp.53-55).

Moving from an openly critical perspective, the entire conceptual corpus of classical Geopolitics is swept away, starting from the principle that the State is the dominant player of the international political scene; instead certain hitherto forgotten protagonists are highly regarded by critical Geopolitics, such as pressure groups, think tanks, financial powers and media corporations.

At the same time, critical Geopolitics proposes new themes, such as popular culture, through which those representations which, transformed into common sense, are conveyed and accepted by public opinion as self-evident and not problematic, but instead play a fundamental role in the legitimising the actions of dominant groups.

At the heart of critical Geopolitics lies the net refusal of the traditional conception of

Geopolitics at the service of politics, and it indeed intends to challenge dominant political elites, by which we mean it intends to unmask the instrumental uses of discursive practices capable of producing convenient visions of reality. To contextualise (events) and to deconstruct (plans) are therefore the buzzwords of the theories produced within the field of critical Geopolitics.

The critical approach leads us to consider every vision of the political framework as partial and objectionable, and impossible to reduce within established patterns, regularity or legal trends. Hence the decisive denial of the great, all-encompassing theories on the topic such as those of Mackinder or Spykman. Politics is considered an arena in which differing interests compete with specific visions; the one which emerges as the hegemon imposes the true one.

Although vaguely inspired by previous and distant experiences of objection to traditional paths of academic geography (in particular the lessons of Yves Lacoste), critical geography expresses itself only in the mid-90's with the publication of the seminal text of Gerard O'Tuathail (1996) that it defines the epistemological status and tracks the objectives of the new approach. Other authoritative exponents of this current are Klaus Dodds, Simon Dalby and Joanne Sharp, yet the magazine *Political Geography and Geopolitics* provides a fundamental support, helping to animate and diffuse it.

The changes wrought in the field of geopolitical studies by the advent of critical Geopolitics are also reflected in the relationship between the discipline and cartography. But before we address them specifically, it is prudent to give an account of another line of thought which has animated geopolitical studies in recent years: popular Geopolitics.

The above mentioned decisive turn in the history of Geopolitics, brought about by the advent of so-called critical Geopolitics in the 1980s and '90s, resulted also in the emergence of a new area of research – popular Geopolitics, 'wherein scholars study the everyday experience of Geopolitics' (Dittmer, 2010: p.XVIII). Its *raison d'être* ultimately rests on a rather basic consideration: any political project aiming to assume and exercise power needs to garner consent. This explains the need of modern political actors to acquire legitimacy in the eyes of ordinary citizens. In general, one might say that any political project with ambitions must gain the public's confidence and support. This occurs through the social communication device termed "narrative" – an all encompassing discourse promoting a particular view of reality. Once such representations become common sense, they are accepted by public opinion as self-evident and play a crucial role in determining power relations.

Narratives contribute to create a favourable background that legitimises the political project by making its underlying assumptions seem natural. Understanding how narratives are

constructed, which interests they serve, which linguistic codes or cultural processes drive them is thus more than just an intellectual exercise. It is a strongly felt need among scholars today, not least among geopoliticians, for whom power is a central object of study.

The need to consider this wealth of practices and representations that determine power relations and their association with reality on the ground has drawn the attention of scholars dedicated to the study of Geopolitics in general, and popular Geopolitics in particular, to a wide range of cultural expressions – from cinema, literature, music, painting and photography, to more popular forms, such as comics, satire, animation and geographical maps. Indeed, the latter, considered more effective in conveying geopolitical narratives to the general public, have aroused more interest.

Both as an intellectual activity and as a strategic endeavour, Geopolitics constantly produces representations that fuel narratives. For this purpose, the discipline – that, as implied by the prefix “geo”, is sensitive to the spatiality of phenomena – uses geographical maps as well.

For a political actor, the exercise of power over a given territory means not only physically controlling it, but also being able to represent it, that is, communicate it to the public in a way that is consistent with its interests. This is why, in constructing narratives of power, the geographical map proves to be an extremely useful tool, especially valuable thanks to a number of communicative characteristics it possesses: performativity, for example, which encourages readers to bring individual and collective choices in line with what the map expresses, reifying that state of affairs (Wood, 1992; Dematteis, 1985: pp.95-103); or subliminality, i.e., the ability of the map to affect readers without them being fully aware of such conditioning (Harley, 1988). The map presents us with a reality, inducing us to regard it as natural, when in fact it is a social and intellectual construct.

Even the apparently innocent representation of a state in a political map disguises the classification and hierarchisation into predetermined schemes and categories. The resulting effect tends to normalise, in the eyes of the reader, a very specific view of that state and its place in the international system which, again, is a pure social construct.

Maps are able to illustrate a viewpoint, convey a message, convince the reader, thanks both to the high degree of reliability that the public instinctively attributes to them, and to their conventional quality which makes mere common practice appear natural and inevitable.

The use of maps has always had direct bearing on Geopolitics, especially where Geopolitics approaches geostrategy. However, due to the above mentioned fact that the scientific discipline of Geopolitics has, in the past few decades, undergone a significant epistemological and

methodological postmodern shift, we cannot today address military or strictly operational maps only. While a few decades ago Geopolitics regarded cartography as aimed primarily at offering strategic knowledge for political action, and would thus have addressed maps mainly as tools for the exercise of state power, today it adopts a considerably different approach. Just like the whole field of geography, the words of Denis Cosgrove are worth for Geopolitics too: “now, mapping holds an expanded sense, that is ‘organising, documenting and representing spatial knowledge in graphic form’” (Cosgrove, 2008: p.177).

Today the interest of geopolitical analysis in cartography lies elsewhere. This is due to the fact that, increasingly, the discipline tends to acknowledge the importance of the intangible dimension of political action. In other words, the idea took hold that the exercise of power and its relationship to territory are largely governed by symbolic tools consisting of a vast array of means of communication that evoke power and constantly remind people of its presence. In short, beyond the study of the structures, factors and material elements of power, research into intangible elements – most notably, representations – has now become commonplace. The geographical map, being a graphic genre capable of producing politically significant representations, is an integral part of this phenomenon.

As far as cartographic material is concerned, Geopolitics could thus no longer limit itself to the analysis of military, administrative and diplomatic maps issued by the state. To capture the discursive potential of maps and their public role, the discipline had to extend the scope of its research to include less studied cartographic genres such as maps published in newspapers and textbooks (Kosonen, 1999; Monmonier, 1989; Vujakovic, 2002).

More importantly, it had to change its approach. Today, in geopolitical studies, maps are no longer considered strictly operational representations: ‘Maps do more than represent. They are also discursive tools, which reflect, express, and help create geographic knowledge, political agendas, and social stereotypes’ (Culcasi, 2006: p.680). This is a relatively new development in Geopolitics, a discipline that long considered geographical maps to be a neutral, objective technical instrument. Only since John Brian Harley’s seminal studies on the history of cartography was this status questioned, and critical research on the complex relations between cartography and power undertaken (Harley, 1989).

iii. But still a long way to go

The turbulent events that have characterised the international political scene from the end of the Cold War on have heightened the interest in Geopolitics and increased the demand for

useful tools for the comprehension of factors underlying the behaviour of political entities. Nevertheless, maps continue to be undervalued in this literature. Even now, the expression “geopolitical cartography” implies bias and bad science, and thus is quietly banned in the circles of official Geopolitics. This consideration however, calls into question the methods used by geopolitical scholars today to communicate their science. One need only leaf through their scientific journals, their conference proceedings, even some of their textbooks to notice how limited the space dedicated to maps is, even though technological progress should have facilitated their widespread use. Currently, geopolitical scholars fail to put cartographic language to good use, wasting the most obvious and efficacious instrument at the disposal of Geopolitics.

The dictionary of Geopolitics edited by John O’Loughlin has no entry for cartography, let alone for subcategories such as suggestive or geopolitical or propaganda cartography (O’Loughlin, 1993). The same holds true for the dictionary of Geopolitics by Philippe Moreau Defarges (2002). Even Yves Lacoste (2005: pp.380-382), who opened the eyes of many generations of scholars to the strategic potential of the geographical map, in his dictionary dwells upon the secrecy of military maps, but does not go beyond expressing his (previously articulated; Lacoste, 1993) distrust of choromatic focus maps.

It almost seems as though the geographical map were no longer useful in the representation of the territorial dimension of politics; as if politics were somehow detached from the spatial element and become completely disembodied. This risks blurring the distinction between Geopolitics and other disciplines, such as IR, political science or political sociology.

Must geopolitical cartography inevitably be, as Ignacio Ramonet put it, “a journalistic genre fallen into disuse” (introduction to the 2006 edition of the atlas *Le Monde Diplomatique*)? Must professional geographers inevitably be indifferent to geopolitical cartography, as they were 70 years ago, confining it to popular magazines?

The ostracism of geopolitical cartography is based on two fundamental errors:

- 1) It is believed that geopolitical cartography can have no purpose other than that of convincing; that it would distort the facts and sacrifice spatial representation for convenience. But this problem is not unique to geopolitical cartography. It is inherent in every mode of communication. It is not the medium itself but the content that distorts. On the other hand, every expression of thought, regardless of the communicative channel used, tends to become persuasive when politics and ideology are in question. Before persuading, a geopolitical map may be useful to illustrate a situation, clarify a certain point of view or show links between phenomena and places.

- 2) The relationship between geopolitical cartography and scientific cartography is misinterpreted. The two should absolutely not be considered mutually exclusive. There is no danger that geopolitical cartography will demand legitimacy, undermine the role of scientific cartography or even go so far as to threaten taking its place. These are two completely different modes of spatial representation – one detailed and systematic, the other selective and synthetical.

b. International Relations and Cartography

Foremost among scholars to address politics from a spatial point of view are political geographers. Members of this discipline, being geographers, have an obvious sensitivity to the spatial dimension phenomena and are accustomed to the use of maps. The geographer departs from the map and then goes back to study its possible theoretical explanations. Mackinder, Siegfried and Haushofer, although very different between them, are examples of such scholars.

But the range of disciplines and sub-disciplines interested in the relationship between space and politics – and thus in its graphic representation as well – is broad. It thus follows that in order to analyse the relationship between political studies and spatial representations, we cannot limit our analysis to a single, clearly defined disciplinary tradition, but must take a wider look and include a heterogeneous group of scholars.

In the three classical scholarly sub-disciplines that make up political science – political philosophy, comparative politics and international relations – the use of maps tends to be minimal in the first, modest in the second, and substantial in the third. Despite the clear spatial aspects of political phenomena, the fact that political philosophers have never made much use of maps is not surprising, as their field is concerned mostly with principles and values and less with the physical reality of a particular geographical area.

The situation is different for scholars of comparative politics, who, on the basis of the concepts and general principles developed by their philosopher colleagues, delve into the concrete workings of political systems – political actors (élites, institutions, parties and other political forces) that confront each other on the ground, obtain legitimisation from local populations, express their interests and participate in the administration of the area.

The influential work of Stein Rokkan belongs to this group (Rokkan, 1980, 1983). By

identifying links between political behaviour and its spatial distribution, Rokkan introduced the map in tabular form into the political sciences. Two examples of the graphical solutions adopted for his comparative diachronic study of the interdependencies and contiguity between the many regional political systems of Western Europe are in figure 2.3 and 2.4. They are tabular in form, yet they respect the relative positions of the elements, both in latitude as well as in longitude.

Finally, scholars of international relations, especially political realists, depart from politics, but then naturally tend to “end up” in geographical reality to prove their theses. For scholars like Nicholas Spykman and Saul Cohen, to name two, maps are a very useful tool to illustrate their theories, as they are able to show the concrete ramifications of these theories readily and succinctly.

The 'state-economy' dimension: West-East axis

The 'state-culture' dimension: South-North axis	Territorial centres City networks	Weak Weak	Strong Strong	Weak Strong	Strong Weak	Strong Weak
	Geopolitical type	<i>Seaward Peripheries</i>	<i>Seaward empire-nations</i>	<i>City-state Europe</i>	<i>Landward empire-nations</i>	<i>Landward buffers</i>
	Conditions of consolidation		Distant from city belt Close to city belt	Integrated into larger system Consociational formation Fragmented until 19th c.	Close to city belt Distant from city belt	
	Protestant	Iceland Scotland Wales	Norway England Denmark	Hanse Germany	Sweden Prussia	Finland
	Religiously Mixed		Netherlands Switzerland	Rhineland	Bohemia	Baltic territories
	Catholic	Ireland Brittany	France Spain Portugal	'Lotharingia' Burgundy Arelatum Belgium Catalonia	Bavaria Austria	Poland Hungary

* Europe comprises the territories and nation-states of the Roman Catholic part of Europe after the Schism of 1054. Territories recognised as sovereign, 1648–1789, are in italics. Arrows indicate changes in geopolitical position.

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A Model and Conceptual Map of Europe

FIGURE 13. A 'conceptual map' of 16th–18th century Europe

Figure 2.3. A 'conceptual map' of 16th-18th century Europe, in Flora, P. (ed.), *State Formation, Nation-Building, and Mass Politics in Europe: The Theory of Stein Rokkan based on his collected works*, Oxford University Press, 1999, p.142

	Seaward peripheries	Seaward empire- nations	City belt	Landward empire- nations	Landward peripheries
IV:T: Timing of unification/ secession - early					
Protestant - late	<i>Iceland:</i> deep split	<i>Norway:</i> split early 1920s	<i>Reich-Prussia:</i> deep split during Weimar Republic		<i>Finland:</i> deep split
V:C: Church/ state relations - alliance			↑ ↓		
Catholic - conflict		<i>France, Spain:</i> deep splits	<i>Reich-Prussia:</i> deep split during Weimar Republic		
			<i>Italy:</i> deep split		

FIGURE 46. A 'conceptual map' of the cases of deep communist-socialist split

Figure 2.4. A 'conceptual map' of the cases of deep communist-socialist split, in Flora, P. (ed.), *State Formation, Nation-Building, and Mass Politics in Europe: The Theory of Stein Rokkan based on his collected works*, Oxford University Press, 1999, p.339

Figure 2.5 shows, for example, Cohen's conceptualisation of a division of the planet into homogenous geostrategic regions, moved by interests of widespread research within International Relations to analyse the configuration which the spatialisation of the world assumes.

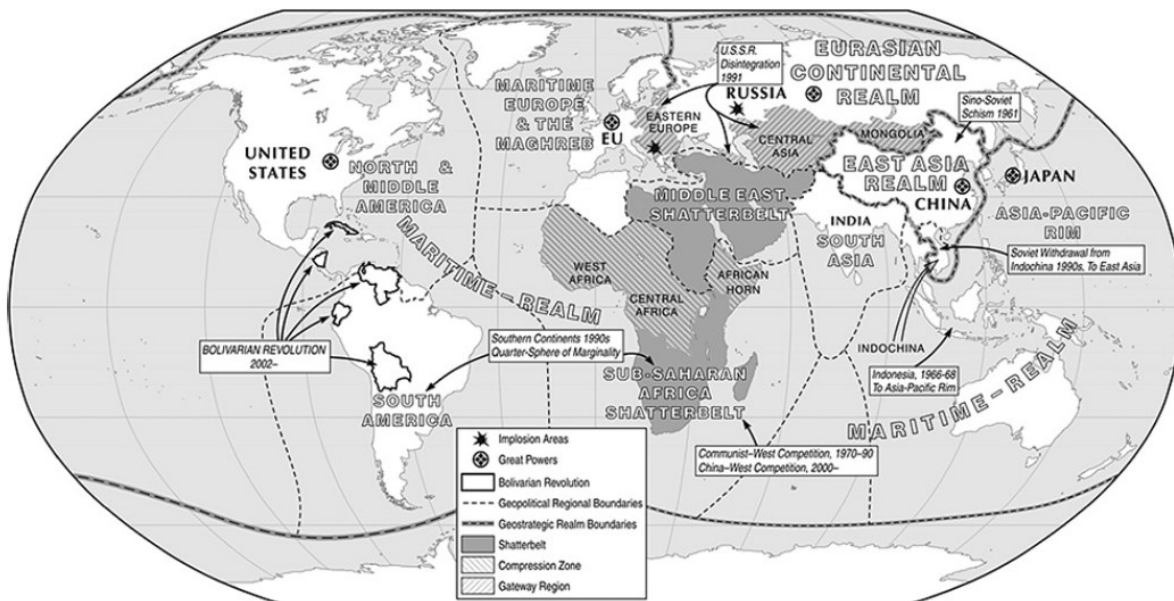


Figure 2.5. Cohen S.B., Realm and regional changes from end of World War II to present, in *Geopolitics*, vol.15, issue 1, 2010, p.164

Nevertheless issues related to vision and visibility have received inadequate attention in political science so far. If we look in particular at the field of International Relations we easily realise that it still needs a deeper engagement with spatiality, as well as with visibility (Strandsbjerg, 2010). This phenomenon calls for due concern towards an accurate assessment aimed at comprehending its reasons. Moreover, it would be useful to know more precisely all kinds of advancements these confrontations could provide to this branch of the humanities.

Specific issues to be addressed include the following:

- Have there been links between political science and cartography more advanced or sophisticated than the use of maps as a simple aid to the visualisation of geographical factors (such as climate, raw materials, fertility of agriculture, access to trade routes, absolute and relative position or borders)?
- Why do concepts and theories of spatial relevance developed by political scientists often fail to translate into maps?
- Are political scientists somehow limited in their ability to elaborate spatial information, or does the problem lie in the models proposed to them by cartographers?

i. Some applications of maps in studies on international politics

A first, fundamental, and probably intuitive use of maps in IR, was the outlining of the distribution of geographical factors. This use of maps is best understood in light of the

following passage from a classic of political thought by Paul Kennedy, in which he discusses power politics in eighteenth century Europe: “What is meant by that term [geographical factor] here is not merely such elements as a country’s climate, raw materials, fertility of agriculture, and access to trade routes – important though they all were to its overall prosperity – but rather the critical issue of *strategic location* [italics in original]. Was a particular nation able to concentrate its energies upon one front, or did it have to fight on several? Did it share common borders with weak states, or powerful ones? Was it chiefly a land power, a sea power, or a hybrid – and what advantages and disadvantages did that bring? Could it easily pull out of a great war in Central Europe if it wished to? Could it secure additional resources from overseas? The fate of the United Provinces in this period provides a good example of the influence of geography upon politics” (Kennedy, 1987: p.86).

In this context, the map becomes a useful heuristic and analytical tool allowing the reader to visualise, and therefore perceive, significant spatial aspects and relationships relevant to the analysis of the phenomenon under study (figure 2.6). For example, the mapping of an alliance allows the reader to comprehend the geographical location of the allied parties, and thus help them raise issues or questions of interest and improve their understanding of the organisation of the political space studied. Similar considerations apply to maps showing the geographic distribution of ethnic groups, languages and religions, so abundant in literature on nationalism (figure 2.7).



Figure 2.6. Europe at the Height of Napoleon's Power, 1810, in Kennedy P., *The Rise and Fall of the Great Powers: Economic change and military conflict from 1500 to 2000*, New York, Random House, 1987, p.128



Figure 2.7. Guy Héraud, *Peuples et langues d'Europe*, Denoël, 1968

A subject area in which geographical maps frequently make an appearance is that of the study of nationalism. It should however be recognised that even in this case that maps are used in a purely descriptive and functional manner, to assist the reader in locating the geographical area of interest. On nationalism in maps there at times emerges a contradiction: in them it indeed emphasises state borders even if the nationalist phenomenon goes beyond the state plan, as the territory in which a nationality resides often does correspond to that of a State. However, this contradiction can be useful, as drawing attention to state borders allows one to highlight the lack of overlap between political and cultural borders – for example due to minorities within a State or for the presence of external national communities that the State has the majority of. Figure 2.7 shows an example which clearly highlights this case.

Continuing on the subject of national identity, many maps present studies regarding diasporic communities, in which the perception of national sentiment widely overcome the

narrow limits of State borders: the classic model for these maps provides an array of arrows which join the territory of origin with all the other places in the world in which there are significant clusters of the community. Despite the particular dispersed nature of such communities, however, the map perpetuates a message of their continued unity and indissoluble bond with the original territory.

This message exerts its influence, in as much as recent studies on collective identities – of a strictly sociological nature – have highlighted the decisive importance of the apparatus of images and symbols in the construction of identity. Among these one also finds maps, which have been much studied in the context of ‘nation’ (the most noted work on this subject is that of Anderson, 1991; in the context of geography, an innovative line of thought on these topics was opened by Paasi, 1986, which in Finland launched a rich production of stimuli for other national contexts; the Italian case has been repeatedly dealt with by Maria Luisa Sturani, 1998a, 1998b, 1998c, 2008).

Specific attention has been reserved for national maps which convey opposing narrations (Boria, 2011). Consider for example, the case of Kosovo, contested between Serbs and Albanians. That territory is home to symbols which are differently perceived: the Orthodox monasteries are in fact flagged as an inalienable part of the collective community by Serbs, and symbols of oppression by Albanians. The opposing readings of the history of the region have produced opposing national narratives, which led to the advent of cartographic representations which stand in opposition to each other, with Serbian maps which abound in marks which draw attention to the religious value of those places (for example, though icons which take the form of the profile of a religious building with a cross above). The effectiveness of these maps thus depends not only on the personal cultural base of the reader but also on the emotionally roused input from the map markings, aimed to ensure the connection between a given place and the values it conveys. To this end, it resorts primarily to icons, which are more able to rouse empathy in the reader than a symbol, strictly bound to rigorously predetermined general meanings.

We have seen some examples of maps used in the study of international politics, to assist the reader in the identification of mentioned geographical elements.

One might ask, however, whether there have been other, more technically advanced or conceptually sophisticated links between IR and cartography, than the use of maps as an aid to the visualisation of geographical factors – a link that is important but, after all, rather obvious. Can we disprove the claim, made more than a century ago, to the effect that “political science had shown no inclination to think geographically, apart from asking

geographers to provide them with better maps or statistics” (the claim is Friedrich Ratzel’s, according to Natter, 2005: p.179)?

We may also wish to approach the issue from another angle. Rather than asking to what extent political scientists used maps, we might ask whether, and to what extent, they contributed to the creation of spatial representations. The answer is not obvious. While in some areas, such as electoral studies and international relations, interesting examples of spatial representation have been proposed (as shown above), many theories and concepts of a clearly spatial nature that have been developed in political science have not been matched by corresponding cartographic work. For example, the Loss of Strength Gradient theory, whereby military strength is inversely related to geographic distance from the centre of power, proposed by Kenneth Boulding in 1962 (Boulding, 1962: pp.227-276), was not backed by a single cartographic representation.

On other occasions, spatial concepts have generated different kinds of charts, graphs and illustrations, but nothing akin to geographic maps. One example is Herbert Spiro’s analysis of US foreign policy choices (Spiro, 1974). The spatial aspect of this analysis translates visually into a diagram, not a map, lacking any kind of positionality (figure 2.8).

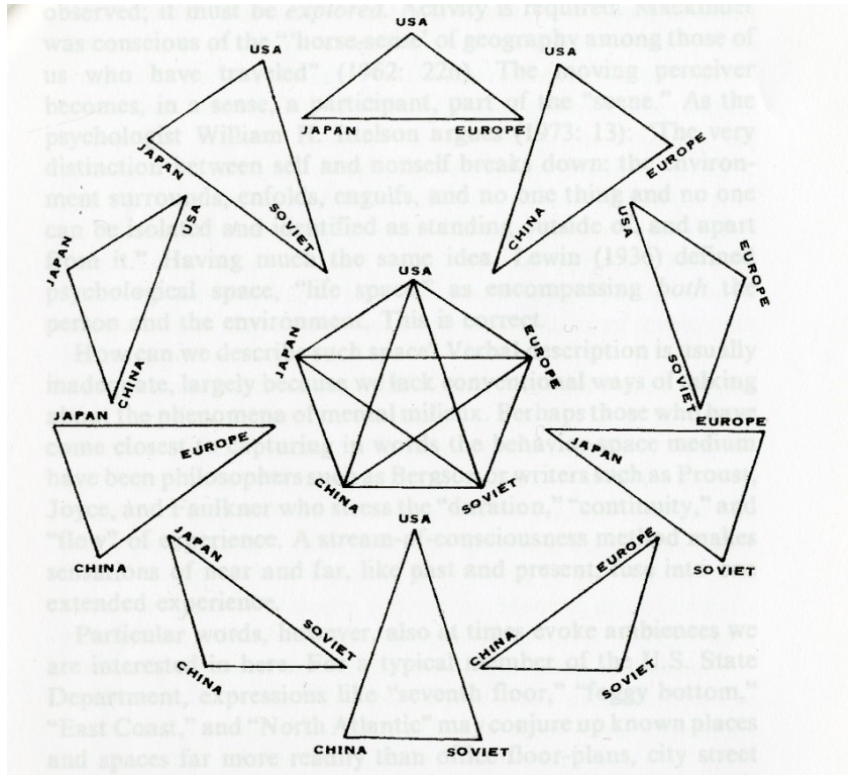


Figure 2.8. Spiro H.J., *Interdependence: A Third option Between Sovereignty and Supranational Integration*, in Ionescu G. (ed.), *Between Sovereignty and Integration*, London, Croom Helm, 1974, p.161

**ii. Cartographic shortcomings of a classic in political science:
“The Clash of Civilizations” by Samuel Huntington**

Paradigmatic indeed, in the use of cartography in the academic studies of international relations, are the maps present in the celebrated essay “The Clash of Civilizations” by Samuel Huntington, which exercised and continues to exercise a great intellectual influence. Exhibited for the first time in 1994 (*The Clash of Civilizations and the Remaking of World Order* was the title of the book in which Huntington, 1996, fully enunciated his thesis, but as always happens, it followed some earlier formulations: see in particular the intervention of 1992 at the American Enterprise Institute, a neocon think tank, and the article “The Clash of Civilizations?” published in *Foreign affairs*, 1993), the idea of a clash of civilisations seemed to find a dramatic confirmation in the attack on the Twin Towers on the 11th September 2001, launched by Islamic terrorists at the symbol of American power. The event seemed to usher in a new mode of international confrontation which perfectly exemplified the theory of Huntington: a conflict between cultures rather than nation states.

The innovative strength of the theory lay in prefiguring a world which was no longer dominated by the traditional distinction in sovereign states, but in the great cultural areas. Nation states would certainly have remained as important actors in the political framework, but they would have given vitality to a solid network of alliances based on the cultural ‘belonging’ of each country.

The great cultural areas which Huntington identified were: Western (United States and Europe), Orthodox (Russia and Slavic countries), Islamic, African (limited to the non-Islamic parts of the continent), Latin American, Chinese, Hindu, Buddhist and Japanese (figure 2.9).

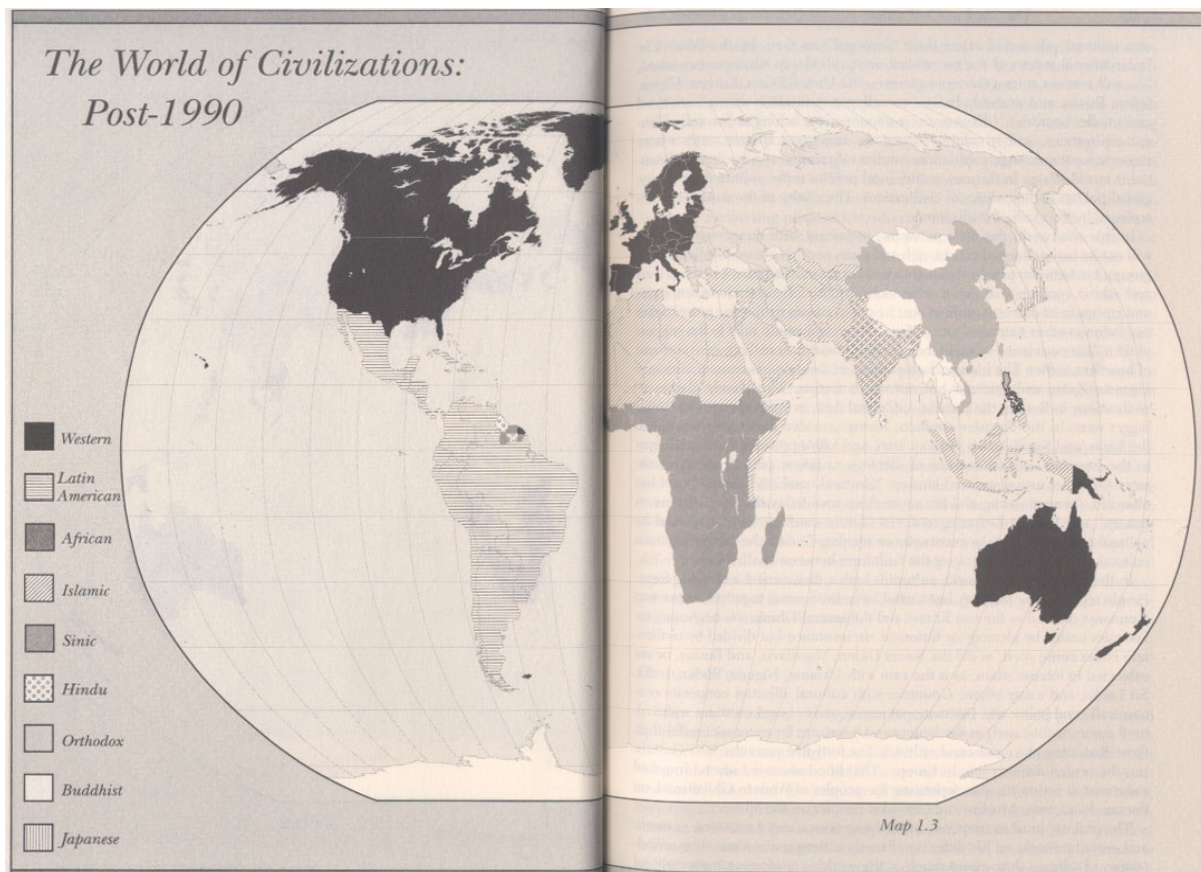


Figure 2.9. Huntington S.P., *The World of Civilizations: Post-1990*, from *The Clash of Civilizations*, New York, Simon & Schuster, 1996, p.26

The intrinsic incompatibility between these culturally homogenous areas would be the primary source of instability in the international system and of all conflicts.

The thought of Huntington puts the geopolitical spotlight onto factors which the previous phase of ideologies had sought to put aside, such as ethnic affiliations and religious beliefs, considered more important not only than ideologies, superseded by the end of the Cold War, but also than economic interests and military power. From the geopolitical point of view the theory, specifying the large cultural areas in perpetual conflict with one another, came to identify the future areas of conflict on the planet, that is the fault lines or cultural divisions between a civilisation and another. In those areas populated by communities attracted by more distinct cultural models, international tensions would be discharged more violently. Within this category of countries at risk of conflict, Huntington operated on some distinctions: “divided countries” were those traversed by disintegrating tensions in as much as they were subject to the influence of two or more concurrent cultures; “countries in the balance” were instead those with a single cultural reference which was dominant but continuously relocated by political elites of a differing civilisation. It therefore concerns a society which is

experiencing great difficulty in defining its own specific cultural identity.

In the speech of Huntington, the study of the company attracted to cultural models is aimed at highlighting the potential for cultural conflict. Those regions subject to the influences of two external cultures which are the expressions of two powers with hegemonic ambitions are therefore analysed. In the same region the two powers find the ground of competition which does not necessarily assume military forms but, surely, is manifested in the clash between two alternative cultural references. In the reasoning of Huntington the territories which present the highest level of culture clash are those marked by religious differences: not surprisingly, the “Islam-Christianity” opposition is at the heart of the debate that such reflections have unleashed on the supposed “clash of civilisations”.

Like all successful geopolitical theories, Huntington’s too counted on a reality which seemed to confirm it; in the last decade of the XX century the bloodiest conflicts were unfolding right in the areas which corresponded to the characteristics of fault areas by the Huntingtonian definition: the war in Former Yugoslavia, Chechnya and Afghanistan are the clearest examples.

It should be added that in the vision of Huntington the system of international organisations based on the United Nations would be inherently unable to provide effective responses to the needs of the world order, as it is the fruit of an exclusively Western vision, and is perceived by other cultures as a disguised form of hegemony.

As we see, it was a highly original theory which had enjoyed great success. Yet, if we look at the maps present in the book “The Clash of Civilizations” (among which figures 2.10 and 2.11), we can repeat the same critical analysis which had already been formed for the maps of Thomas Barnett: indeed the same dominion of banal conventions and the same cartographic conformity prevail. Starting already from the most obvious yet by all means natural conventions of putting the northern hemisphere at the top of the paper and Eurafrica at the centre.

The originality of the contents does not correspond at all with originality in the graphical presentation: it is a banal map not intended to clarify the pushed theory, but is lazily flattened on traditional canons.

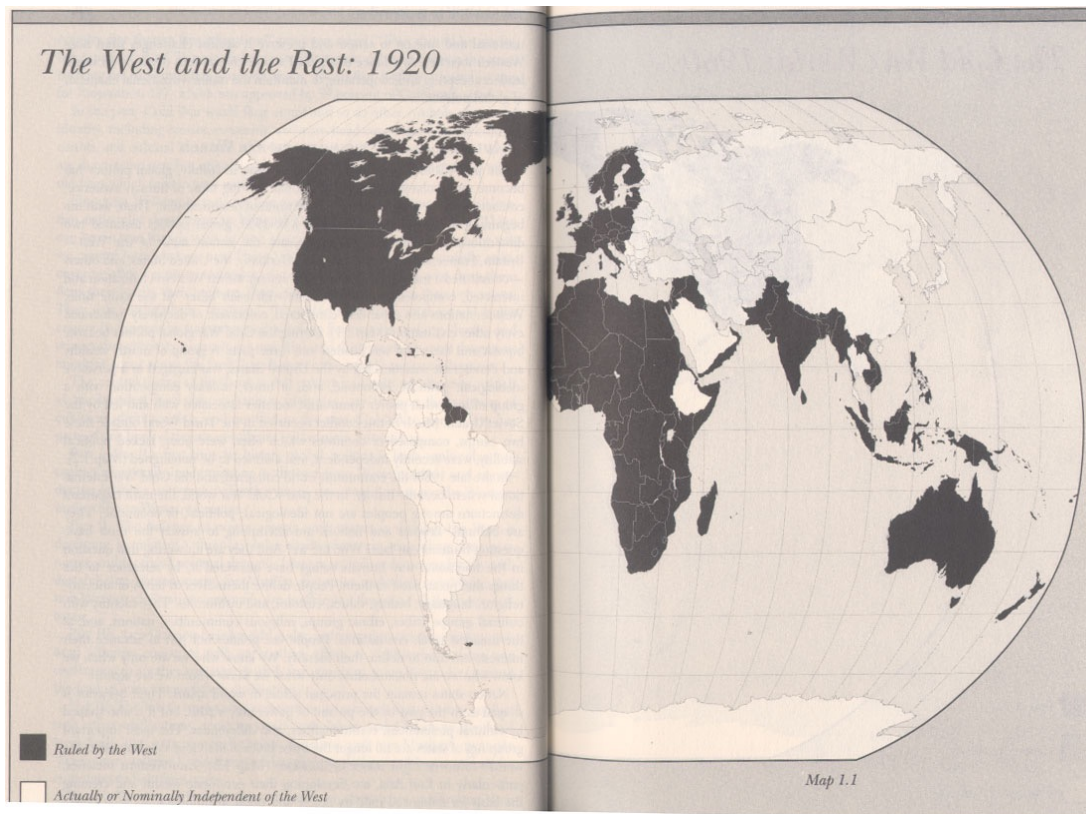


Figure 2.10. Huntington S.P., *The West and the Rest: 1920*, from *The Clash of Civilizations*, New York, Simon & Schuster, 1996, p.22

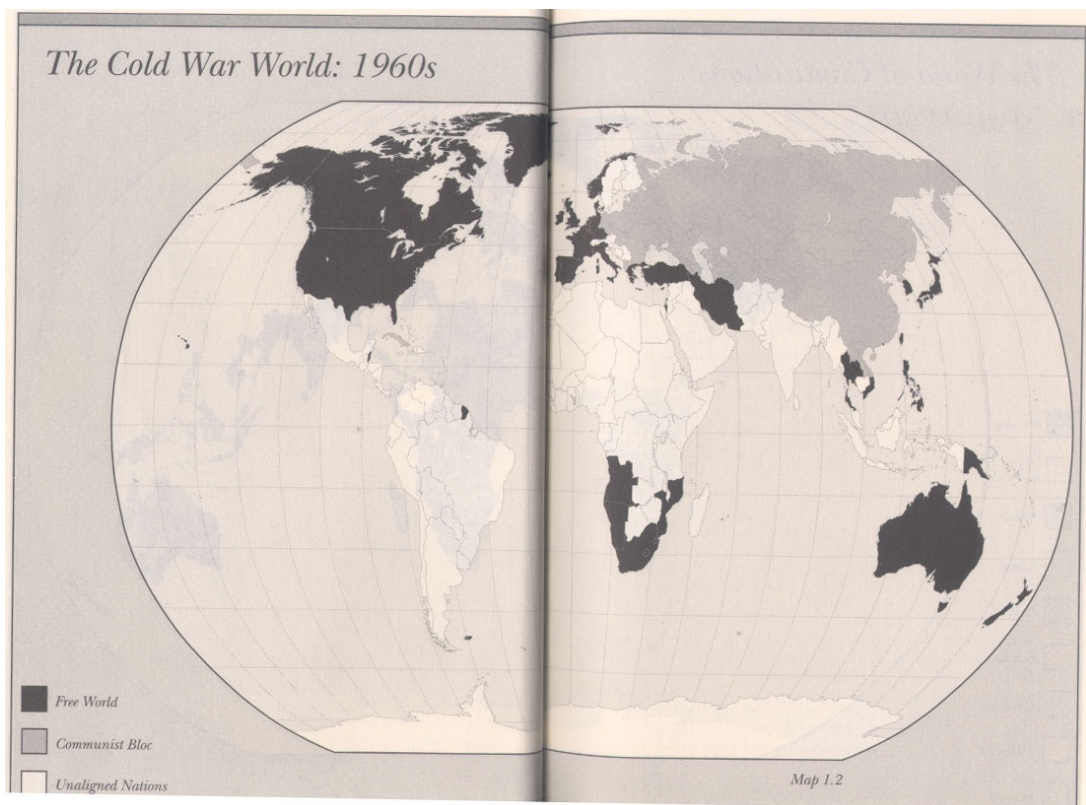


Figure 2.11. Huntington S.P., *The Cold War-1960s*, from *The Clash of Civilizations*, New York, Simon & Schuster, 1996, p.24

iii. Inadequacies of our cartographic model

In general we can say that International Relations for a long time tended to consider the strictly territorial context as a given, as a fixed parameter, and not as a variable. As a result of this erroneous perception which was fiercely contested by Jean Gottman who conceived geography as the static opposite of dynamic politics (Gottman, 1973), scholars of politics have primarily used the map to a limited extent and merely to localised ends, in the manner which is similar to that seen in the quotation of Paul Kennedy at the beginning.

However, new developments in the social sciences have arisen in recent years as a result of renewed interest in spatiality and territory. This general re-evaluation of space as a fundamental dimension of knowledge, known as “spatial turn”, has prompted many disciplines to discover or rediscover concepts and analytical perspectives developed by geographical thought.

Political scientists have finally understood that territory is not simply the scenic background upon which power manifests itself, but it is one of its constituent factors both in a material and symbolic sense. Political space is therefore a heterotrophic space not only due to the presence of physically demarcated on the terrain, but also because the political universe, territories and places are loaded with symbolic significance.

Due to the necessity of investigating the spatial dimension and territorial dimension of politics, scholars are employing ever more widely used concepts of spatial nature, for example that of the border, in its different shades of frontier, the limit, the periphery and barrier etc. For many reasons, therefore, researchers who focus on political studies feel the need to also represent the spatial and territorial dimension, both in the analysis phase and in the presentation of results.

However the approach which has dominated Western cartographic representation since the dawn of modern thought, i.e the geometric-Euclidean approach, does not allow – or does not do with much attention – the demonstration of the spatiality of phenomena, but as said ‘simply’ shows the material elements of the territory. Since political sciences do not begin with territory – if anything it will come to prove the statement – the dominant cartographic model does not fully meet the needs of political scientists.

In fact, obstinately remaining faithful to the Cartesian paradigm, according to which there is an objective knowledge which can be reached through the identification and analysis of the individual material components of a system, modern cartography has refused to consider any representation derived from subjective perceptions, which are not considered scientific. Thus

this cartographic model went into crisis at the moment in which the social sciences enhanced the discursive dimension of politics (symbols, languages and ideas). There was an attempt to adapt the model to the new reality, but rationalist cartography, in reporting invisible and abstract objects performs a deceitful operation as it naturalises them, that is to say it renders them as intrinsic data in the territorial reality even if, clearly, it deals with social constructs.

Epistemological shifts in Mapping Studies

The so-called “visual turn” has deeply affected humanities and in particular social sciences, entailing a new consideration of the weight of images in human life and knowledge production. This call for a reorganisation of knowledge around visual paradigms can be found in diverse spheres of contemporary Western thought (Mirzoeff, 1994).

This phenomenon came together with a generalised re-evaluation of the spatial dimension in social sciences which can be attributed to several contemporary scholars, including Frederic Jameson (1991) and Edward Soja (1996).

Mapping Studies have been through a deep epistemological turn in the last 25 years. The emergence of critical cartography (Harley, 2001) and geo-cultural interpretations of maps (Cosgrove, 1999) during the 1990s has put the emphasis on the inherent power of cartographic representations. Deconstructionist methodologies have been put in place to contextualise and discover the hidden meanings and performative value of mapping.

A wide number of studies have been devoted to specific cartographic products and schools. However, this critical turn in the study of cartography has not yet yielded any effort towards a systematic history of the relations among these different experiences and connections, nor to any in-depth analyses of the spatial concepts they used.

Let us then briefly review the successive main schools of thought in Mapping Studies, which brought excitement in this scientific domain. We are going to start with the neo-positivist approach, dominating the field until the Eighties; then we pass on to the structuralist school of thought, the critical cartography proposed by John Brian Harley and finally we close with the most promising intellectual tendency of our days developed within the non-representational turn, i.e. the phenomenological approach to mapping.

c. The Neo-positivist approach to the study of mapping

The interpretative positivist model predicts that all phenomena are linked by their connections based on the principle of cause and effect, and we should rule out any explanation which introduces the notion of “chance”. In this light, the spatial distribution of phenomena offers

important keys to understanding, and the map is an absolutely objective tool as it is based on legitimate procedures by mainstream science (figure 3.1).

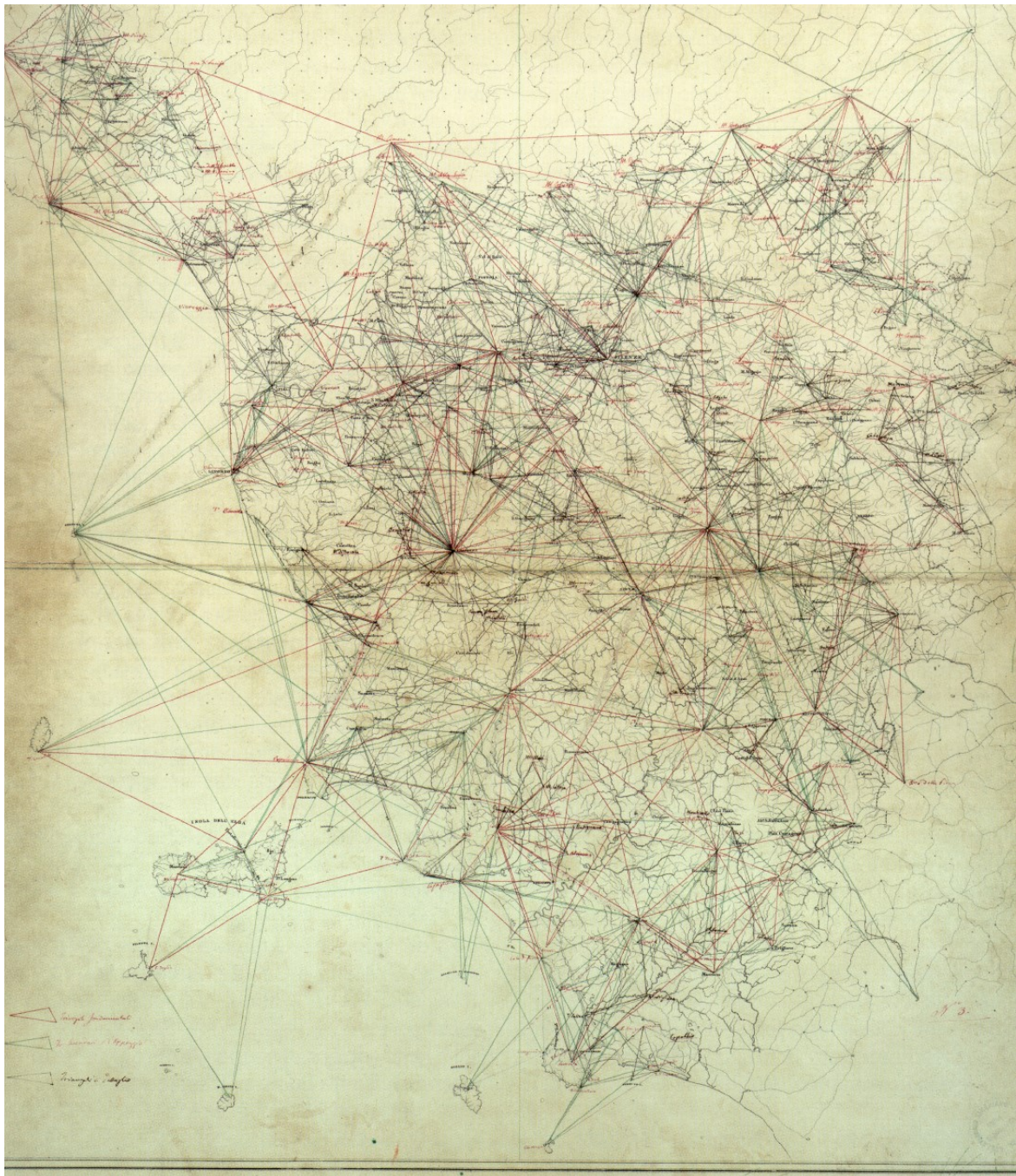


Figure 3.1. Chart of Tuscan trigonometric network by Father Giovanni Inghirami, Firenze, Osservatorio Ximeniano, in Cantile, A. (ed.), *Toscana geometrica. La prima cartografia geodetica regionale e il contributo dell'Osservatorio Ximeniano*, Firenze, Istituto Geografico Militare, 2008, p.61

The main focus of Mapping Studies carried out through the neo-positivist approach is then on the figure of the cartographer and on the history of cartographic techniques.

The research is based on the material look of the map (the substance the map is made of, the technique adopted etc.), on its classification in the catalogues and on mathematical accuracy.

A typical example of this approach is in the classic work on thematic cartography by Arthur Robinson (1982), which was severely criticised by Denis Wood stating that we have to look at the cultural context in which the map is employed rather than developing an arbitrary classificatory grid.

Since in the neo-positivist approach the world can be objectively known and faithfully mapped, the evaluation of a map is based accordingly, i.e. exclusively upon its content. Moreover, maps bear a fix and univocal meaning, and they are considered artifacts.

From this derives an evolutionary conception of the history of cartography, which would be directed towards a progressive and unstoppable technical improvement.

d. The Structuralist school of thought

In reaction to positivism the structuralist direction lays claim to an autonomous space for man and for the creative dimension of human nature which goes beyond the narrow limits of the positive sciences; from here a reflection begins on the diversity between the conventional definition of space and the human experience which is put into practice in the attempt to introduce a new form of cartography which is not merely limited to representation of what is visible to the eye. The dimension of personal experience enters geographical representation, approaching the medieval experience of a symbolic space which Renaissance cartography had cancelled, replacing it with a logical space made of purely mathematical relationships.

The structuralist approach is based – as the name indicates – on scientific notions of structure, which were born at the beginning of the 20th century in the field of linguistics with De Saussure. The tendency to assign the whole to everything, a quality different to the individual parts which compose it, derives from the holistic principle and represents a reaction to the reductionism of the positivistic matrix. One cannot understand a reality purely from isolated analyses of its components, it is necessary to have a unitary overview of the whole, because every spatial object assumes a value only in relation to the overall situation. On the basis of these statements structuralism is founded, as methodological orientation which is

heavily engaged in the field of representations, so much so that one of its most noted applications is in the psychology of Gestalt.

In the field of Mapping Studies, the influence of semiotics implies to get map design as the main focus. Therefore, the aim is to establish the syntax and semantics of signs in visualisations in order to evaluate the relevancy and efficiency of cartographic decisions, both finding how spatial information is best displayed and understanding the effects of design choices on the minds of map users.

The basic idea is that, through a precise identification of user needs, an optimal map design might be produced, so to meet those needs and let the map reader better able to receive the cartographic message (figure 3.2)

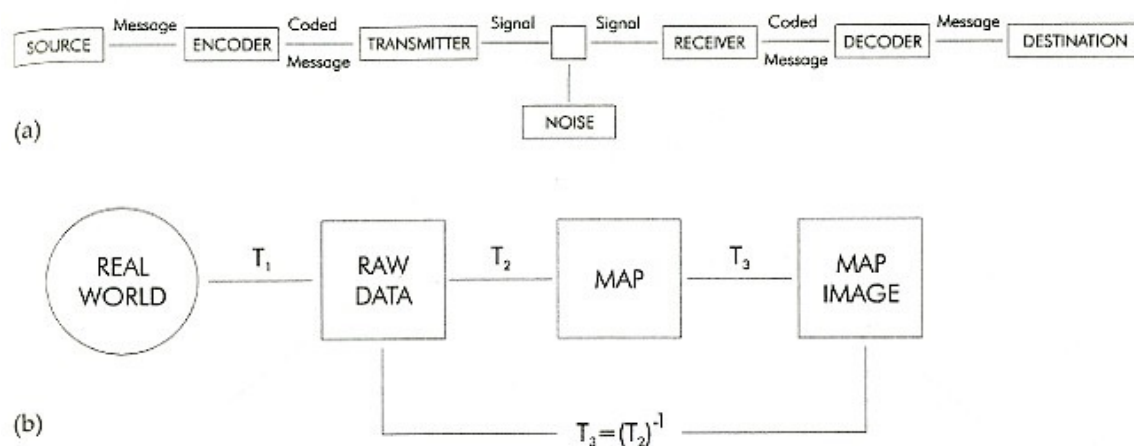


Figure 12. (a) The linear model of electronic communication, after Board (1967, 673), and (b) the analogous linear model of cartographic communication, after Muehrcke (1972, 3–4). As Muehrcke noted, the goal of academic cartographers was to perfect the “efficiency of the cartographic process” by ensuring that the final transformation, T_3 , from map to user, is the exact inverse of the cartographer’s transformation T_2 , from selected data to map.

Figure 3.2 The models of cartographic communication after Board C., “Maps as models”, in R.J. Chorley and P. Haggett (eds.), *Models in Geography*, London, Methuen, 1967, pp. 671-725; and after Muehrcke J.P., *Thematic cartography*. Washington, DC: Association of American Geographers, 1972

To which graphical solutions did the adoption of a similar approach in spatial representation lead? Clear structuralist traces are to be found in the French *chorematique* or in other functionalist studies, where the intention to emphasise the concept of network appears evident. Similar to the human eye, which does not conduct a scan of the surroundings but evaluates and selects objects to be memorised, the map shuns the simply listing of localised geographical objects in the conviction that such an exercise does not lead to understanding, but aims to make more significant elements of the whole emerge (figure 3.3).

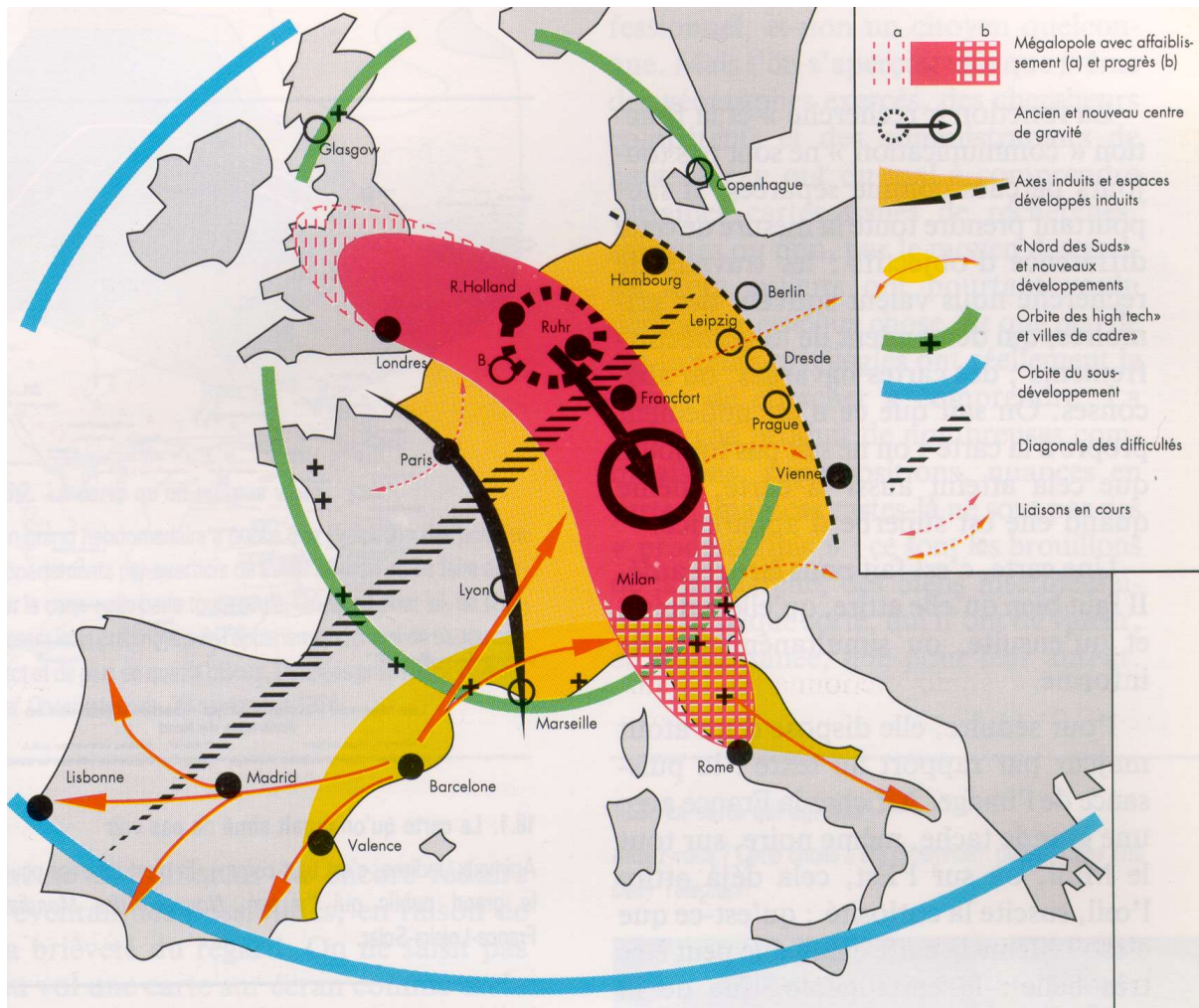


Figure 3.3. L'Europe sous-jacente structures et dynamiques.

Brunet R., Les villes «européennes», Montpellier-Paris, La Documentation française-Datar, 1989, no page

Typical examples of this structuralist approach is Jacques Bertin's *Sémiologie graphique* (1967). Born as a cartographer according to the most canonical of educations given to him at the School of Emmanuel de Martonne at the Geographic Institute of Paris (Palski and Robic, 2014), Bertin ended up on an entirely innovative path of research, opening a new era of spatial visualisation of quantitative information. He indeed inserted cartography within a general movement of semiotic analyses of the image which in the 60's and 70's also extended to photography, cinema, artistic and advertising images. For this reason, his fundamental theoretical contribution to the extension and enrichment of semiotics in the 60's links it to authors of the calibre of Roland Barthes, Louis Marin, Ernst Gombrich and Erwin Panofsky.

e. Origins and development of critical cartography

In the 80's, at first timidly and then with more conviction, cartographic studies opened to social sciences, which moved towards overcoming the Cartesian paradigm and thus took into account the partial and subjective nature of every representation. This opening led to new post-modernist and post-structuralist sensibilities. The social sciences were traversed in those years by two breakthroughs which reconfigured nature – the cultural turn and the spatial turn. The first certified the linguistic complexity of the map and the idea that it is a useful tool for penetrating the cultural context that it produced. The spatial turn, which attracted thinkers of various extractions (philosophers such as Deleuze and Guattari, urban planners such as Edward Soja, writers such as Frederic Jameson and many more), demonstrated that the cultures are in the way of considering space and spatial models as a distinctive element.

The changes of the scientific paradigm arising from these lines of thought enhanced the typical spatial knowledge of the map, with its overview and relationship between objects. However, investing in Mapping Studies forces them to take up the challenge to leave the technical comfort zone to become a true social science, elevating the level of reflection on space. On the whole, the notion of the map undergoes a net distortion, losing its historic characteristic of being an objective description.

The key figure of this epochal transformation was John Brian Harley, who died prematurely in 1991 at the moment of his maximum creativity and scientific productivity (figure 3.4). After having received a doctorate in Geography, Harley dedicated himself to the study of cartography according to the most traditional patterns of the positivist approach and content analysis, and by his works he earned a strong reputation as a serious and competent scholar. Certain original proposals were already to be found at the end of the 60's (1968), with an empirical method for the analysis of ancient maps, in which three aspects were distinguished:

1. The “*evidence on maps*”, consisting of the external aspects of the map (the attribution of its date through chemical tests on the watermark, the authorship, the mathematical accuracy relative to its scale and projection and the correctness of the toponyms, etc.);
2. The “*evidence about maps*”, which aims to reconstruct the original context of the work, the sources, the mapmaking (regarding issues such as surveying, drafting and engraving), the cartographer's intention and contemporary assessments (opinions of users);

3. The “*evidence of maps*”, or what the map tells us, how it makes us see the territory and how it produces the meaning of the map and which message it transmits.

Only the first point was in line with classical guidelines of cartographic studies. The second, and especially the third, were highly innovative and openly critical.

In the 70’s, Harley’s attraction towards Foucault and post-structuralism was a prelude to the total challenging of the traditional academic approach which would come in the 80’s, before interrupting his brilliant career with the consecration of his professional environment.

His main focus on the hidden meanings of the map pushed him to consider cartography as ideology, maps as tools serving political projects which can be unmasked by deconstruction, investigating the rhetorical and persuasive devices of the manipulation of information.

Obviously this perspective led him to reject scientific objectivity paying attention to dominant representations, discourses and narratives.

Driven by a strong ethical tension, evident in *Cartography, Ethics and Social Theory* (Harley, 1990) and *Can there be a cartographic Ethics?* (Harley, 1991), Harley provided a highly innovative contribution to the exploration of the relationship between cartographic language and other languages (the artistic one, for example), between producers and users of maps, between diverse mapping technologies and between diverse intellectual approaches to the history of cartography.



Figure 3.4. John Brian Harley (1932-1991)

f. **John Brian Harley and the legacy of deconstructionist research methods**

Followers of Harley, among whom Denis Wood and Mark Monmonier with his *How to lie with maps* (Monmonier, 1991), developed the critical line of thought which he began.

Their main focus has been the relation between cartography and power. Maps are treated as élite discourse, serving as a discourse for the powerful, for the benefit of national identities (Anderson, 1991), capitalism (Harvey, 1990) and private ownership.

By listening to the post-colonial line of thought, critical cartography challenged the Eurocentric inclination with which scholars have always told the history of cartography, searching on the other hand to re-evaluate Non-European cartographies. This approach gave emphasis to social justice from a politically radical and post-colonial perspective for a renewal of cartographic practices.

Alongside cartography another line of thought developed, which we could define as hermeneutic. Taking inspiration from Jean Baudrillard “C’est désormais la carte qui precede le territoire” (Baudrillard, 1981), here the main focus is on the epistemology of cartography and the so-called cartographic reason, that is the logic of geodesic cartography based on geometrical-mathematical criteria (Pickles, 2004; Farinelli, 1992; figure 3.5).

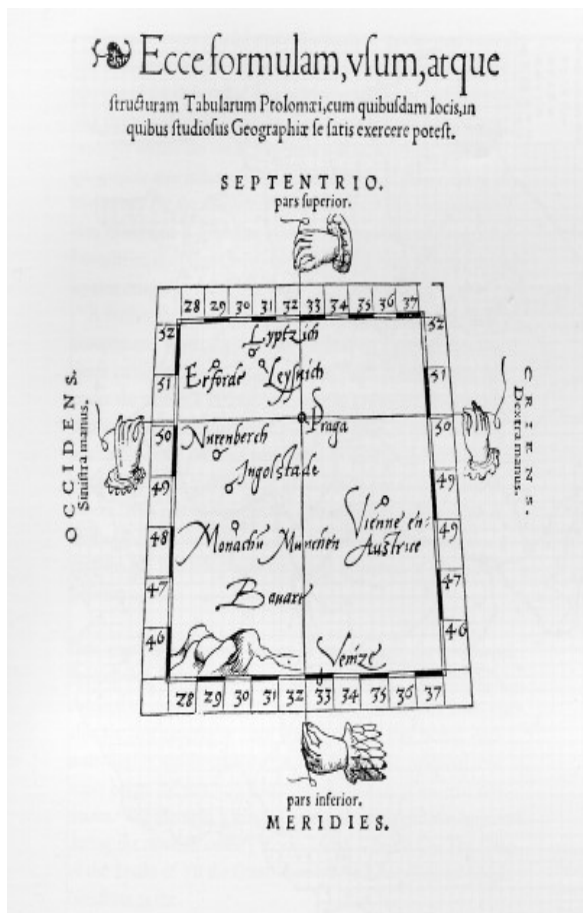


Figure 3.5. Geometrical grounds of modern cartography. From: Petrus Apianus, XVI century

Meaningful of the view of this scholars “beyond maps as truth” is this statement by one of them: “I have always had the utmost respect for the craft cartographers I have known. But it has not been, for me, the technical practice of cartography that interests me. I’m interested in cartography as a particular kind of social practice that produces worlds for us in various ways and shapes the possibilities and some of the limits within which we can think about the world” (John Pickles’ citation from Crampton, 2015).

Among the foci of studies of this line of thought are the models and cartographic codes, as inspirers of the organisation of space because the map is not a representation deprived of effects but it does generate consequences, i.e it induces actions which intervene in the territory to adapt it to its spatial logic.

Modern history, so these authors argue, is full of examples of the uses of territory which follows the same logic of modern cartography: easy examples of concrete updating of the

geometric abstraction expressed by the Cartesian logic of the map are visible in the rigid orthogonality of the urban fabric of North American cities, as well as in the administrative mesh with the geometric borders of the States (figure 3.6).



Figure 3.6. Plan of Salt Lake City by The Automobile Blue Book Pub. Co.

The map thus demonstrates itself as a formidable ontological instrument of the production of reality, and as a highly effective agent of the construction of places which pretends to give a representation of reality, but in truth actually helps to build it.

g. The Non-representational turn and the phenomenological approach to mapping

The final line of thought which we present is the most up to date and stems from the advent of the phenomenological theory of the “non representational”, introduced by the geographical thought of Nigel Thrift. His theories in the field of cartography had their first expression in a work of 2007 (Kitchin and Dodge, 2007), which later found a more complete formulation two years later (Dodge, Perkins and Kitchin, 2009).

Its main focus is on mapping, meaning an attention upon the process of mapping rather

than upon the mapped outcome: “Understanding maps from a critical cartography perspective requires more than simply deconstructing their creation and associated power dynamics, but also how they are used in practice to produce identities and spaces” (Kitchin, 2014: p.4).

Therefore, maps become performances, that is contingent, contextual and fluid:”The cultural uses of mapping are particularly complex: it is read in different ways in different contexts, but the same map may mean different things” (Perkins, 2009: p.126; figure 3.7).



Figure 3.7. Private photo-album. A trip Rome-Budapest-Warsaw, October 1974

We then need to pay attention to creative everyday practices instead of dominant representations. Maps are part of a story to be created and enacted with freedom of cartographical practices: “If the subject is part of the discourse rather than a force ‘behind’, then there can be no ‘mask’, no ‘veil’ behind which the map functions, no ‘hidden agendas’” (Belyea, 1992). As Kitchin and Dodge state: “Maps are conceived as being always of-the-moment, brought into being through practices (embodied, social, technical, political), always re-made every time they are engaged with... Maps are practices” (Kitchin and Dodge, 2007: p.333).

The object of research is the exercise of mapping in banal everyday context, where consumers and producers blur their borders: “Once published the mapping then started a new life” (Kitchin, Gleason and Dodge, 2013: p.488). This brings instability to the meaning of maps: “N’est pas de carte dissociée de ses usagers et de ses concepteurs” (Jacob, 1992).

Denying the ontological nature of the map, the non-representational approach undermines

the comforting certainties offered by the positivist interpretation, which considers it an objective representation of territory. The result therefore is a direct attack on the same epistemological cartography.

This line of study was certainly facilitated by the technology which opened new horizons upon participatory cartography. Furthermore, it looks curiously on the contamination of other languages, believing that “mappings work in conjunction with a range of discursive forms” (Kitchin, Gleason and Dodge, 2013: p.493).

This open and plural approach represents a decisive breakthrough which is also crucial for the study of the history of cartography. The new history of cartography highlights diversity of mapping traditions: “Instead of a supposed universal endeavour that determines spatial thought and that ineluctably expresses state-focused, juridical power, we can study the several modes of mapping practices, each part of spatial discourses differentiated by their various spatial conceptions” (Edney, 2015: p.9).

4. Back to the future: inspirations from the most innovative period in the history of political mapping

To understand whether we are undergoing a transformational phase in the paradigm of representation of international politics, a useful test would be to compare the current phase with a particularly innovative period from the past in order to verify if the same conditions occur and if common symptoms appear.

Without a doubt, the period which should be used for this comparison is the beginning of the twentieth century, which saw important changes in the evolution of the way of conceiving and interpreting maps (Monmonier, 2015).

We already dealt with the exploration of the potential of cartography for the study of Geopolitics and IR. Following this line, this chapter has the aim to present the most advanced results, in terms of political spatiality, obtained within a short space of time at the beginning of 20th century. Finally, the next and last chapter, working towards new areas of common ground, aspires to give new impetus and renewed foundations to critical thinking towards mapping political space in various fields of political sciences and humanities at large.

a. Reassessments in the perception of time and space

Changes in the common perception of time and space at the turn of the twentieth century already have an established body of literature behind them, and today appear to be on solid ground from which to investigate this historic phase (Kern, 1983; Harvey, 1992). Despite varying interpretations of the causes, one can consider as accepted the conclusion that “the whole world of representation and of knowledge underwent a fundamental transformation during this short space of time” (Harvey, 1992: pp.28-29). These upheavals in the way of feeling and perceiving time and space also had repercussions in the field of cartographic production: maps undoubtedly reflected new sensibilities which emerged in those years.

The twenties and thirties indeed bore witness to turmoil in the world of political cartography destined to definitely change the role of it in society. In those few years it was

bestowed with new and highly original methods for graphical representing politics. Such a successful combination of scientific initiative and explosive imagination did not occur by accident. Evidently the cultural climate of this historic period proved to be fully suitable in this regard.

In general one can say that as early as the mid nineteenth century, through an alternation of phases characterised by strong and weak innovative intensity, ways of representing territory had appeared which extended the scope of the field. A way of thinking which until that moment had been dominated by topographic cartography produced by the organs of the State, which had established itself in the 17th century, been perfected in the 18th century with the monumental work of the Cassini family and thus imposed during the 19th century as the dominant cartographic model, official in the sense that it was legitimised by the authority of state power and correct in that it was validated by academic science. This pedigree earned the topographic model not merely primacy, but undisputed hegemony, and the complete monopoly of cartographic production. Everything which did not respect the methodological principles and formal canons of geometric cartography has never received attention. Lacking the seal of guarantee bestowed by official science, a multitude of territorial representations have unjustly been labelled as varied source material of scant historical interest, at the most attributed to the history of customs but not that of science.

This research strongly contests the principle according to which cartography, to truly declare itself as such, must obtain the recognition of official science and must necessarily be immune from the influence of any social factor. A viewpoint, directly derived from Cartesian scientific thought, whose rationalist and absolutist setting produced the hegemony within cartography of a model strongly marked toward the application of the mathematical process: the geodetic-topographical model. Geometric formalisation and geodetic precision determined the birth of mathematical cartography. As Emanuela Casti recounts, Euclidean cartography 'bases its precision on the identification of points on the Earth's surface obtained through geodetic calculations and on the surveying of its dimensions via trigonometric methods' (Casti, 1998: p.57).

Just such a hegemony lies at the root of a substantial (and serious) trend, still widespread among scholars, toward reducing the semantic width of the term 'cartography', with which one should correctly intend the whole 'branch of science which has as its objective the reduced representation of the Earth's surface and of phenomena which are observed on it and which take place on it, and therefore the preparation and construction of maps' (www.treccani.it/vocabolario/tag/cartografia). Instead, for too long scholars of the history of

cartography have referred to a single model, which '*a specific culture* (Western) has developed in a *specific historical moment* (the modern era) to respond to *specific political requirements* (preparing battles, collecting land taxes and administering territory)' (Boria, 2009: p.117). We are talking, indeed, of the geodetic-topographical model.

We tended to identify a specific tradition - that of the topographic map - with an entire 'branch of science' - cartography; a single product even - the topographic map - with an entire production. This has caused a grave - and probably still largely unwitting - prejudice: that some maps are more 'maps' than others, that is more precise and implicitly more 'true'.

But such an approach which recognises just one legitimate way of graphically representing territory is to be rejected: the recognition of the existence of a multitude of representational models is instead a fundamental requirement for opening the study of the history of cartography to a beneficial reconsideration of its richness and multiformity.

Alongside the geodetic-topographical model, over the course of time 'other maps' have been developed, representative of conceptions of space different from those which generated that model; these maps are the result of alternative formulations of concepts of distance and position, of original criteria of attribution of meanings and symbols, of unusual choices regarding the formal devices of the map. It is not so much 'badly done' cartographic production, but simply 'done differently', i.e. - outside the official cartographic rules: 'differently abled maps', we could call them. Re-evaluating this little explored legacy would open the doors of the disciplinary research of a complete reconsideration of cartography, which will finally no longer be considered as a mere technique but as a way of thinking, incessantly redefined to consider space and territory.

From this working perspective, the beginning of the 20th century appears to be a period very rich in turmoil for the history of cartography, with a proliferation of new proposals which in some cases even heralded new cartographic genres. The conducted research has identified three phenomena which played the role of fundamentally nodal points, allowing the advent of 'new' maps at the dawn of the 20th century: scientific progress, artistic renewal, technological development and the consequent advent of mass society. The next three sections will be dedicated to them.

These are three phenomena which reflected upon cartographic production, diversifying the form and broadening their functions. They are phenomena which trace their origins to the epochal upheavals and real revolutions of thought which ushered in a radical change in society from which the map could not be excluded. Cartography indeed discovered in those years new forms of mapping, which supplied novel solutions such as the coexistence of many

points of view on the same spatial representation and the awareness of a multitude of reference systems. These advances opened the field to forms of the popularisation of maps as yet unheard of.

i. Scientific progress

On a conceptual level the new proposals for the representation of space, which we will see shortly with reference to the impact on political cartography, found inspiration in the revolution of far-reaching thought which began in the mid 19th century with the attack which was launched on Euclidean geometry following the discoveries, quite independently, of the Russian Lobachevskij and the German Riemann. This discipline, which represents the branch of mathematics most directly interested in the nature of space, made way for ideas of non-Euclidean geometry equipped with multidimensional spaces which opposed the flat surface of the two-dimensional geometrical plan of Euclid. It was then Physics which initiated the demolition of the conventional sense of space, with the theory of relativity. Proclaiming the principle that bodies change their shape when they move with respect to a fixed point of reference, the validity of the Cartesian method began to crumble, based on the ordinate geometry of a system with fixed coordinates (Einstein, 1905).

These innovations on the nature of space, in which the widespread idea that it was homogenous was questioned, opened new avenues in a large number of different disciplines, in which the attack on the rationalist principles of the traditional scientific paradigm is resolved in the refutation that a single point of view is sufficient to allow an understanding of things: 'Biologists explored the space perceptions of different animals, and sociologists, the spatial organisations of different cultures. Artists dismantled the uniform perspectival space that had governed painting since the Renaissance and reconstructed objects as seen from several perspectives. Novelists used multiple perspectives with the versatility of the new cinema. Nietzsche and José Ortega y Gasset developed a philosophy of "perspectivism" which implied that there are as many different spaces as there are points of view' (Kern, 2003: p.132).

It is clear that at the base of the innovations, which are of interest here for the consequences for the evolution of political cartography and which involved the whole world of knowledge at the beginning of the 20th century, the fundamental changes in philosophical thought of those years are to be found. Compared to the events within cartography of these years, criss-crossed by intense upheavals brought about by critical innovators towards

Cartesian rationalism, it should be noted that the philosopher most engaged in a redefinition of the concept of space is Martin Heidegger. In his philosophical conception, ‘Space cannot be that geometric and positional entity objectified by the physical sciences, in which objects are defined by their positioning with respect to a system of fixed and absolute coordinates’ (Nicola, 2005: p.446).

Compared to cartographic production, scientific progress has therefore resulted in, among other things, dynamism (which has produced a quantum leap in the genre of communicational maps; figure 4.1), the preparation of the instrumental apparatus of scientific investigation (such as cartograms; figure 4.2) and a sense of verticality (which has imposed new viewpoints, such as the bird’s eye view; figure 4.3). The perspective views and the tradition of panoramas date back to the 16th century with cartographers such as Sebastian Munster, Ferrando Bertelli, Francesco Valegio, Georg Braun and Franz Hogenberg, but multiply around the mid 19th century. Alfred Guesdon is among those who bestowed more fame upon the genre. The English magazine “Illustrated London News” offered its readers beginning in 1843 great bird’s eye views, and immediately afterwards it was followed by its rival, Pictorial Times (Hodgkiss, 1981: p.148).

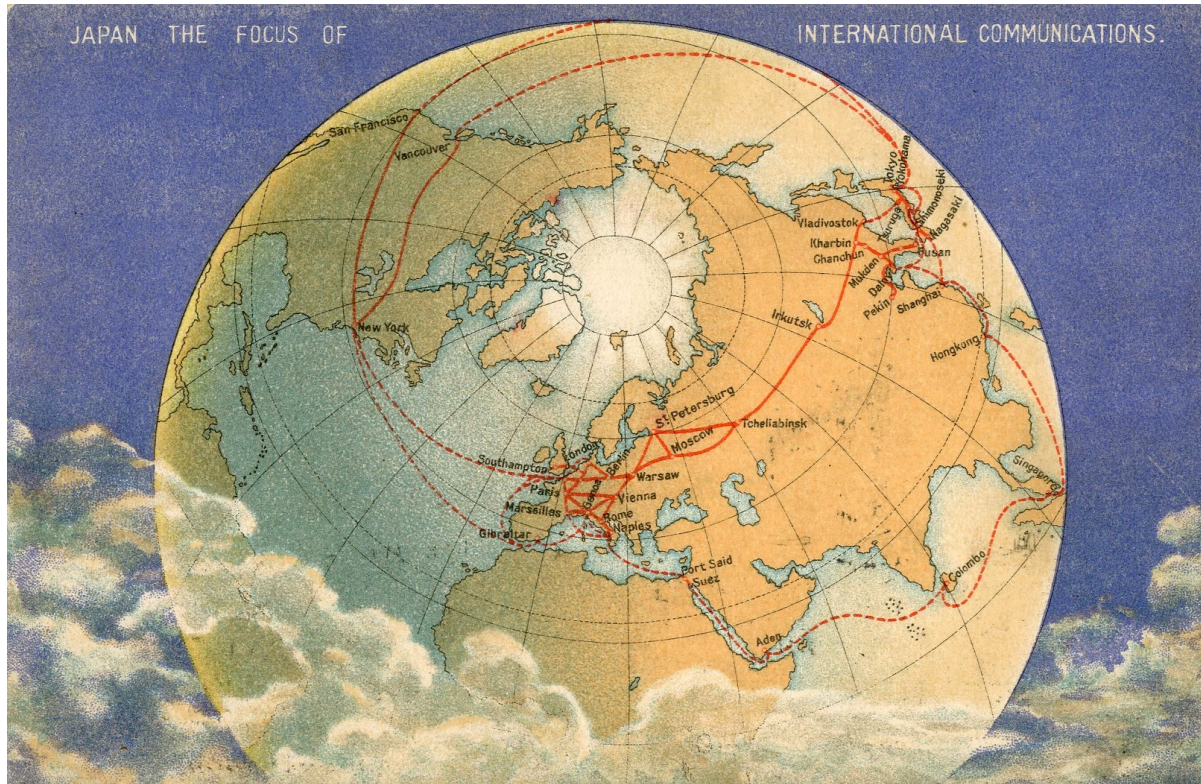


Figure 4.1. Japan the focus of International Communications, issued by the Imperial Government Railways of Japan, postcard, c. 1905

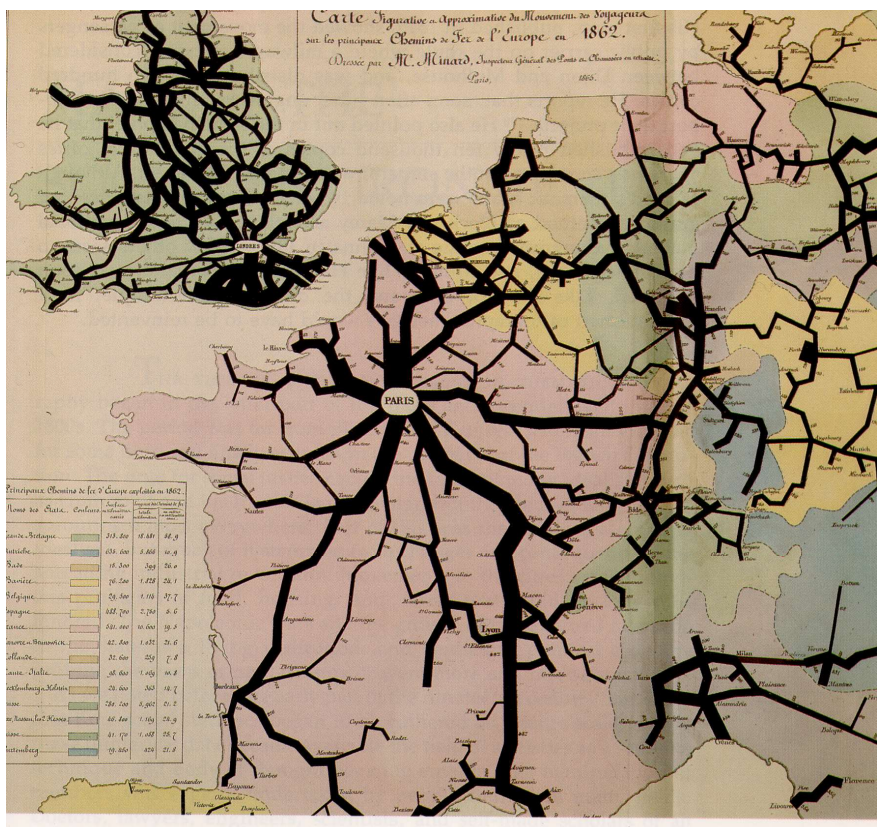


Figure 4.2. Detail from Joseph Minard's 1865 map of the movement of travelers in 1862 on the principal railways of Europe

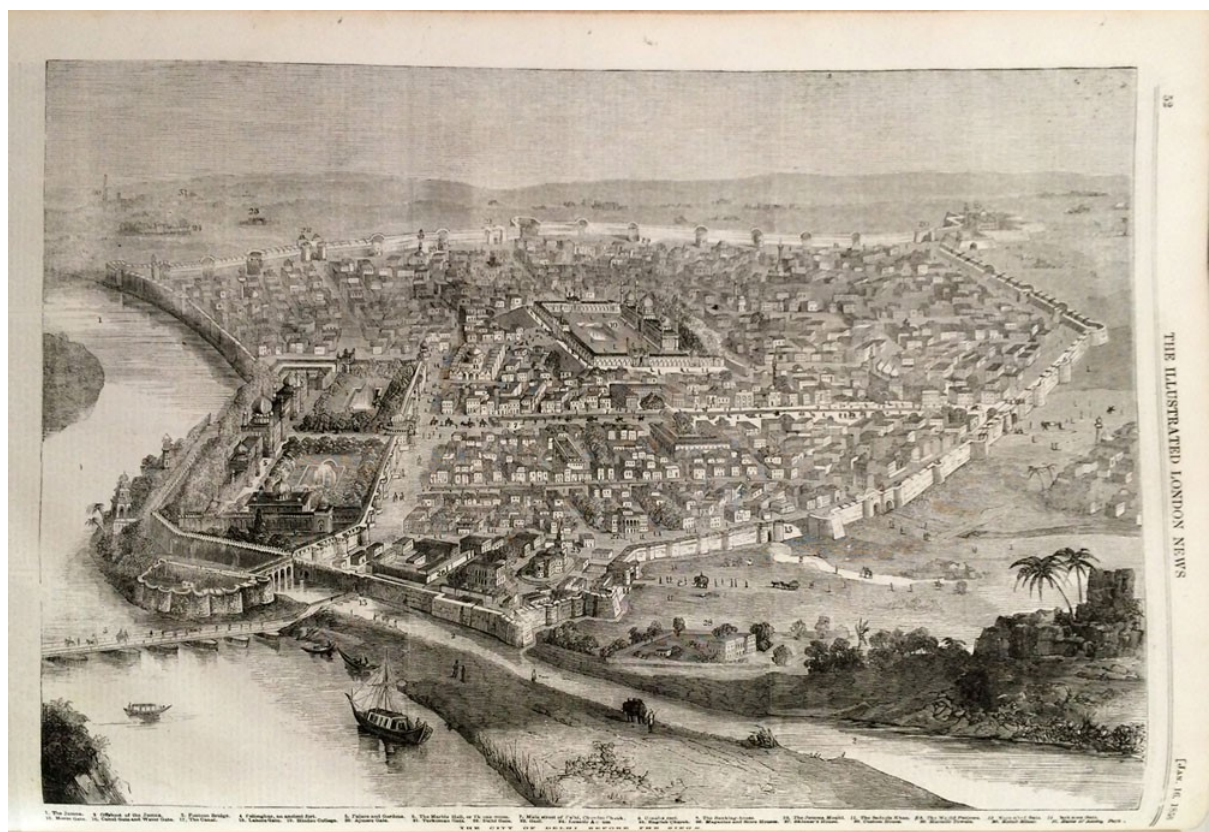


Figure 4.3. Illustrated London News, 16-1-1858

The upheavals of the scientific paradigm convulse all Europe but would have a particular emphasis in the German speaking world. One can indeed say that ‘that radical process of the change of cognitive paradigms and modes of representation which were consumed at the end of the 19th century [had] particular intensity within Central European culture’ (Pulvirenti, 2009: p.171). It was therefore no coincidence that in this cultural context geopolitical cartography would be born, as we shall see further on.

ii. Artistic renewal

The second phenomenon identified by this research as one of the causes of the turning point in cartographic production has clear connections with scientific progress and regards the appearance of new sensibilities in the field of the arts, which would culminate in the break with tradition expressed by the avant-garde of the first years of the 20th century (figure 4.4).



Figure 4.4. Giacomo Balla, *Il pugno di Boccioni*, painting, 1917

It is important to place the history of cartography within the visual and artistic culture of modern Western thought because it allows us to consider cartography no longer as a simple technique but a true and proper way of thinking about space.

From this point of view, particular interest in the study of the evolution of cartography dates to the beginning of the 20th century, because there one observes the rapprochement, for the first time since the Medieval era, of cartographic representation and artistic fields (painting, visual arts and graphics). The boundaries between cartography and other disciplines, techniques or arts become blurred and hazy once more. An ancient dialogue forgotten for centuries returns to life.

The entire spectrum of the visual arts is shocked by the scientific insights described in the previous section. Martine Joly speaks of the beginning of the 20th century as a 'particularly rich period regarding reflection on visual representation' (Joly, 1999: pp.74-75). Pierre Francastel, identifying in the Renaissance and in the first years of the 20th century two historic moments of intense mutation in the history of visual representation, hypothesises that such mutations correspond to profound changes of sensitivity toward to the 'visible' element of society and to new conceptions of space (Francastel, 1957).

The first revolution was marked by the advent of the rules of perspective, as conceived by Filippo Brunelleschi and codified by Leon Battista Alberti, which valued the proportion and regularity in a purely mathematical and rational space formed by metric relations (height, width and depth) to create a three-dimensional abstract structure. The second revolution began with a violation of these same rules, which the Impressionists began to break. Introducing new points of view and new plays of light, they began to create novel compositions in which the same object was depicted from multiple perspectives. The premonitions of this way of conceiving space was the result of the exceptional sharpness and sensitivity of isolated geniuses, such as El Greco, who demonstrated this in his highly original spatial vision in the painting 'View and Plan of Toledo, 1610-1614', one of the first examples of artwork representing a map relating to a real place. Yet it was only thanks to the Impressionists, and above all to Cézanne, that the conception of a truly heterogeneous space in the same picture becomes the norm. A conception which leads to incorporating the same individual perceptions from a multitude of observers within the same vision.

The innovations in the consideration of space produced by Impressionist painting were propagated by Cubism and Futurism at the beginning of the 20th century (Picasso's 1907 'Les Femmes d'Alger' and the 1909 'Futurist Manifesto'). Now space is infinitely fragmented and the viewer took on a role ('We shall place the viewer at the centre of the

canvas', thundered Boccioni in the 'Futurist Manifesto'). With the advent of abstract painting (commonly identified in a 1910 watercolour of Vassily Kandinsky) the object tends to lose its material physiognomy and is no longer identifiable.

We will see that similar interventions also characterise the cartography of these years; just as painting is no longer considered a faithful representation of things, cartography too no longer exclusively concerns itself with imitating the world but attempts to imagine it.

Following principles that were asserting themselves in the artistic avant-garde (the three-dimensional value of reality and the centrality of the subject with respect to the object), some authors of cartographic representations affirmed in their works the idea that the map too should not be regarded as fixed and immutable, but rather available to adapt itself according to the interpretations of the author. Confidence in the geometric map wavered, calling into question its capacity, not so much to describe, as much as to help and understand the world and the spatial dynamics that pervade it.

It is significant that the reflection of Martine Joly on Cubism contains important parallels with the history of cartography (Joly, 1999); indeed, all three of the elements listed by the scholar for synthesising the paradigmatic rupture introduced by new representations with respect to the former are found in the most advanced experiments of the first years of the 20th century: 1) [the beginning of the century] 'would reject the laws of perspective and of the singular view of the Renaissance', such as for three-dimensional maps in architecture' 2) 'would reject the submission of visual representation to the representation of space and instantaneousness', such as for the French albums of statistical graphics (figure 4.5); 3) 'would claim the liberty to manipulate the instruments in such a way that they give themselves to be seen', such as for geopolitical and journalistic cartography.

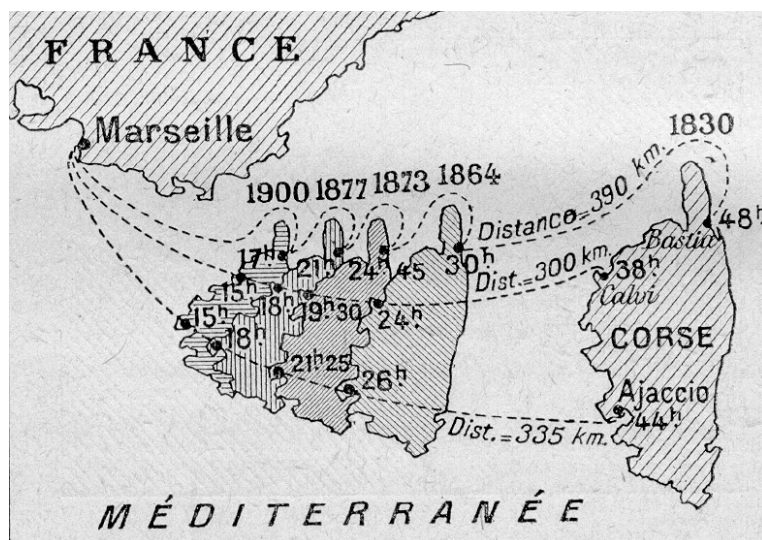
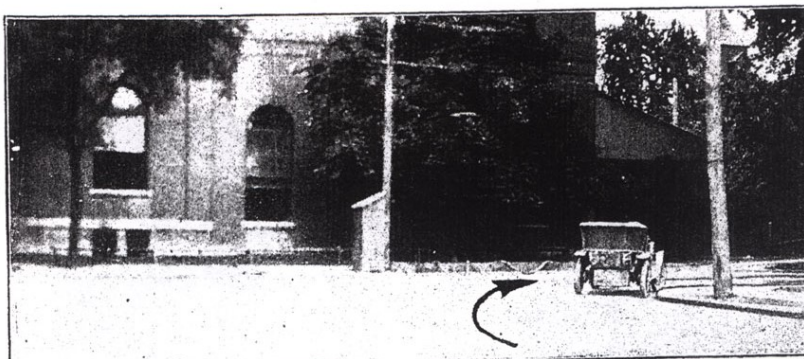


Figure 4.5. Album de statistique graphique de 1906, Paris, Imprimerie Nationale, 1906, reproduced in Bruhnes J. and Vallaux C., *La géographie de l'histoire*, Paris, Alcan, 1921, p.11

We must then consider the role of technological progress: new techniques provided decisive stimuli for innovation in the field of spatial representation, where we witness, for example, the advent of applications which combined cartography and photography (figure 4.6).

PHOTO-AUTO MAPS—TOLEDO TO DETROIT.

No. 4B



MONROE

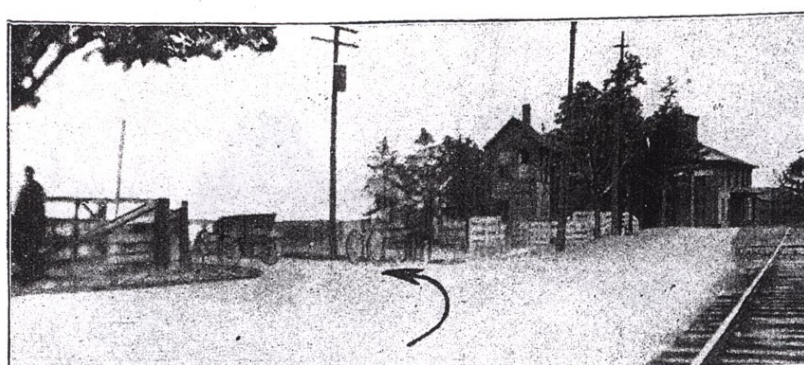
Turn RIGHT and East at end of street. Power house on left after turning. Next photo eight-tenths of a mile.

Memo

.....

.....

No. 5B



Turn LEFT and North before going over second railroad crossing. Two railroad bridges on right. Next photo seven-tenths of a mile.

Figure 4.6. Photo Auto Maps. Albany. By Chapin Gardner S. and Schumacher Arthur H., Chicago, Rand McNally, 1907

Photography presents itself as the principle ‘culprit’ before the charge levelled at the static quality of the map. In the moment in which the image is etched for the first time on a sheet, the destiny of the visual arts remains deeply affected. All genres that had until then been characterised by an imitative attitude regarding the visual representation of reality as it displayed itself in its materiality, soon learned that the new tool of restitution of the real world was much more powerful than they were. They took note by adapting themselves. The best known case is that of painting, which would discover abstractionism.

The novelty was substantial: painting was no longer considered as an imitation of a visible world and independent of it, but as a means to reveal intangible qualities produced by the gaze of the painter. In general, there is no artistic or scientific genre which remains immune to the advent of photography, able to portray material reality in a more faithful way than any other previously used. Among the scientific disciplines the advent of photography transformed working methods. The greatest scientific feat of the Enlightenment, the old *Encyclopédie* of Diderot and D’Alembert, even with its formidable array of images, pales before modern encyclopaedias which replace that array of drawings with real photographs; the reader is no longer constrained to imagine the dress of American Indians through the drawing of an imaginative illustrator who has received a brief description, most probably from someone who did not have direct information but only second hand. The reader can now see them as they really are thanks to a photograph, which above all links the subject to their authentic context, with the huts and real natural environment in which those Indians live.

One such revolution in the field of visibility also profoundly affects cartography. The topographical model, derived from Euclidean geometry and stretched to portray the materiality of natural forms and the accomplishments of man on the territory, must now compete with photography, which offers a much more realistic and credible reproduction of those very objects: the photograph of a mountain against a small ball corresponding with its pinnacle; the panorama of a city taken from a surrounding hill against a collection of geometric signs which would pretentiously depict the buildings and streets. So then cartography, just as painting, reacts to this attack which undermines social and scientific utility, turning to other dimensions of the life of man, now not only material but also symbolic.

This explains the advent of new cartographic genres which, liberated from the constraint to reproduce geographical reality as it is, now hurls itself into the discovery of the emotions, values and suggestions that such a reality produces. Geopolitical cartography will be among these, the same as the cartography in patriotic propaganda and in advertising (figure 4.7).



Figure 4.7. Advertising poster of "Portugal Society", c. 1900

The novelties of these years struck at the foundations of geometric cartography: German geopolitical cartography attacked the static quality by introducing dynamism (figure 4.8), an anonymous British engineering draftsman broke down the shackles induced by scale (figure 4.9), the maps in newspapers liberate the imagination relative to the visual perspective (figures 4.10 e 4.11).

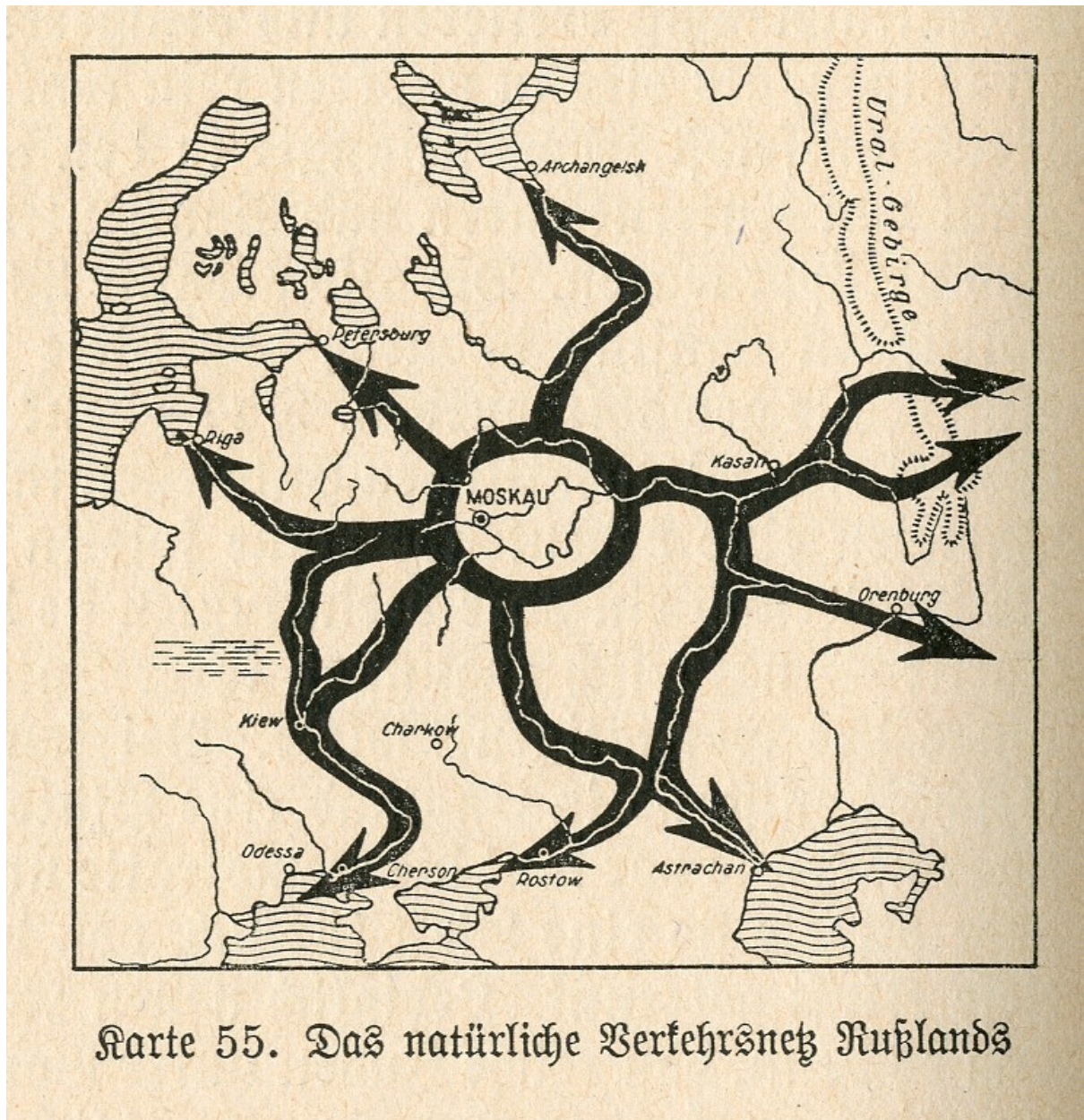


Figure 4.8. Arnold Hillen Ziegfeld, in Schmidt E.L., Volk und Boden.
Band III, Braunschweig, Westermann, 1942, p. 226

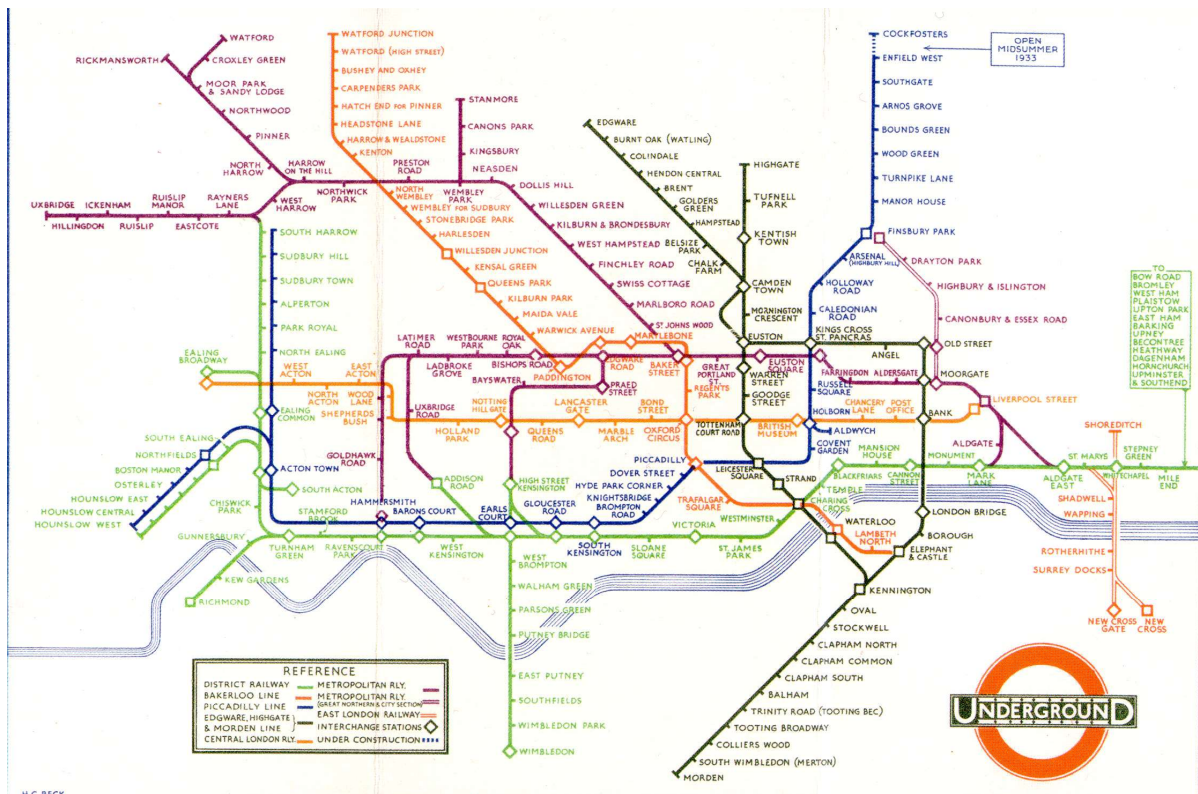


Figure 4.9. Harry Beck, London Underground rail system, 1933



Figure 4.10. Le Miroir, n. 80, 1915

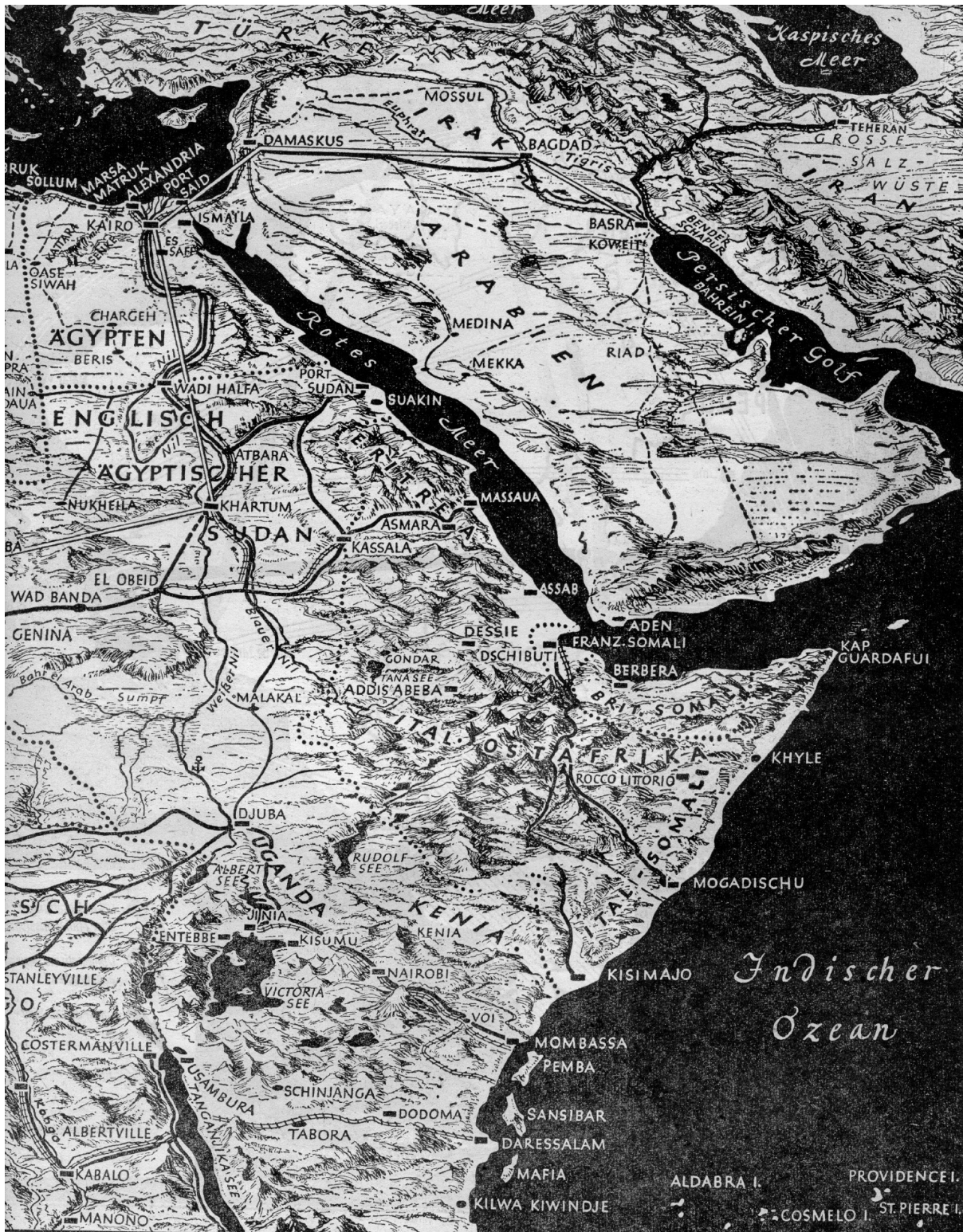


Figure 4.11. Portion of a large map of Africa which appeared in *Das Reich* of 2/5/1943 and republished by the Illustrated London News

Just as at the beginning of the 20th century art passed from the figurative to the abstract, cartography too undergoes a simultaneous development in the same direction: both the artist and the cartographer no longer claim to represent reality but become aware of bias and

subjectivity in their works, and thus feel free to systematically and deliberately violate the official rules.

We can therefore conclude that the theoretical and applied research of those years in the sector of abstract art produced influence and a stimulus toward experimentation in the field of cartography. Also in the successive attempts of Roger Brunet and Jacques Bertin to prepare a theoretical basis for spatial representations it is possible to observe the impact of studies on the representation of forms in motion, from the pioneering ones of Etienne Jules Marey to those of Bauhaus, cubists and futurists.

iii. Technological advancements and the coming of the mass society

So, what happened at the end of the 19th century was a broad reconsidering of the sense of space in science and in art, which could not fail to involve cartography. But we should not forget a third phenomenon which is able to stimulate new cartographies: technological progress and the advent of mass society. In maps, this phenomenon has gradually introduced the feelings of the public (manifested, for example, in cases of revisions of official toponyms to replace them with administrative denominations in popular use), and its needs (consider, for example, the development of scholarly cartography produced by the rise in mass literacy; figure 4.12).



Figure 4.12.
Cover of I. Lanier, C. Rogeaux and A. Laborde,
La France et ses colonies, Paris, Belin, 1904

In the new cultural context in which space tended to be considered a multiple and subjective, the object which was to be reproduced in the map could no longer be the absolute ruler. Even the author and end user, with their personal spatial sensitivity, became subjects 'present' in the same map. In this regard, the advent of mass society represented a phenomenon of fundamental importance.

A prime element in this direction marked the arrival of a new art: cinema. Both during shooting and assembly the director acquired the complete power to manipulate space, modifying at will the point of view and the distance from the action; this freedom of action was denied in theatre, where space was an immutable element for the entire duration of the work. Naturally, also the spectator, despite always observing the scene from a fixed point in the theatre like in the cinema, sensed a new spatial dimension in film, one that was various and heterogeneous.

But a second key element was introduced in this historical era: the rapprochement between artistic and public object. For example, stage design eliminated the clear separation between stage and public which for centuries characterised the artistic genre. The historian George Mosse has analysed such a phenomenon as a manifestation of the general process of nationalising the masses (Mosse, 2009, pp.126-127). The advent of cabaret is a further symptom of this process. In short, the relationship between artistic and scientific product and its user was changing; it was beginning a process that would soon lead to the birth of the mass society, where every public product tends - not necessarily with a negative connotation - to be popularised.

The turn of the 20th century should also be noted as a period, characterised by incessant technological development in the field of transport: from the bicycle to the airplane and the car, the train and the tram, a rapid and irreversible process of space-time compression, the perception of European society as a whole was produced in just a few years. It was a process further enhanced by the amazing innovations in the field of electronic communications, where between the beginning and the end of the century we moved from the introduction of the telegraph, which allowed long distance communication, to the telephone, which allowed instantaneous communication between millions of people.

It is easy to see how these innovations redefined the perception of space by a significant section of society, as was recognised even at the time by its most acute witnesses: 'The mountains, the lakes, the seas were no longer as distant as they once were. The bicycle, the car and the electric tram shrunk distances and gave the world a new sense of space' (Zweig, 1945, p.166).

Scholars have strongly highlighted the effects of this historical process of revising the category of space: 'These changes in the experience of space opposed the idea that convention and habit could prescribe points of view, places or privileged forms: on the contrary, everything had to be put to the test of the processes of life, chosen by the eye of an artist, recognised according to values and current needs' (Kern, 1983: p. 260).

Those same concepts which had hitherto permeated the perception of spaces inevitably suffered consequences, such as the concept of state borders, which now tended to lose importance since it proved easy to pass over them with new forms of technology, such as aircraft and the telephone. An emblematic testimony of this phenomenon was the abolition of passports in many European countries, which generally speaking had been introduced after the French Revolution, but were now perceived, as admirably described by Stefan Zweig (1945, pp.327-329), as a backward legacy (France eliminated them in 1843, Belgium in 1843, Spain in 1863, Germany in 1867 and Italy in 1889; Kern, 1983).

In general, the spatial vision of individuals tended to extend itself to a complex of phenomena of diverse origins: from cultural pressures to technological innovations to historical events such as those pertaining to the exploration of other continents. The result was a valorisation of open spaces. In the United States F.J. Turner found great success with his theory of the beneficial effects of the grand open spaces of the West for the mentality of American society (Turner, 1893). In geography, the ideas of Frederick Ratzel were affirmed, ideas which, in the elaboration of concepts such as *Lebensraum*, implicitly praised open spaces, seeing them as sources of political power and economic prosperity for the nation.

It is no coincidence that the first global geostrategic visions date to this period, where the entire planet is the stage of the clash between powers. The maps which accompany such studies would inevitably extend to the entire world: what has been defined as 'the most famous map in the entire geopolitical tradition' (O'Tuathail, 1996: p.31), i.e. that with which John Halford Mackinder exhibited for the first time his concept of Heartland (1904), dates to these years and takes a planetary scale. If the importance assigned to the Siberian area on the international political balance appears significantly overstated in hindsight, the basis of Mackinder's reasoning contains a fascinating intuition which is strongly representative of a new perception which was emerging in those years: the idea that the world was becoming smaller and more unified, which demanded to be considered in global terms.

In general, we see a change in scale in the vision of spaces, to which the cartography of those years testifies with the increase in small-scale maps on atlases (world maps and continents). If one compares a French atlas from the beginning of the 19th century with one

from the end of the century, one realises that while in the first maps of departments numerically dominate, in the second the space for the continents and large areas increases.

The new conception of the world as a unified space and unitary body had the inevitable consequence of desiring to map it in its entirety according to a standardised system. The project was officially institutionalised through the 1904 foundation of the 'International Committee for the Map of the World'. Driven by concrete needs of knowledge of extra-European territories arising from colonisation, the project was launched with great enthusiasm and enjoyed considerable financial resources. However it failed miserably as national jealousies proved to be stronger than the ideal of universalistic momentum that had motivated it (Heffernan, 2002).

b. The popularisation of maps at the beginning of the 20th century and during WWI

An important reflection of what has been stated in the previous paragraphs is the dramatic increase in the demand for cartographic products that occurred in Europe in the 20th century.

Until then maps were destined for a restricted audience which possessed a solid cultural bases. From that moment, instead, a happy combination of various concomitant elements produced a leap forward in the entire sector. Important among these were certainly the broadening of the reading public to the middle classes and the transformation of the publishing industry in a modern sense.

Furthermore, there were consistent advances in the technical processes of printing, such as the spread of offset and rotogravure procedures which favoured the increase of maps within educational publications and therefore also a spread of cartographic images in popular literature (newspapers and periodicals).

The success of the cartographic product received unexpected aid from the First World War, which increased the demand for maps (and correspondingly the earnings of companies within the industry) both from institutions (military leaders and offices of state; figures 4.13 and 4.14) and the public (figure 4.15), hungry for information about the theatres of war and the changing fortunes of the armies in the field, as told by a witness of the time: 'From the beginning of the First World War my interest in geography grew even more with the appearance of detailed maps of the frontline. After all, the curiosity was not merely my own;

the events of the war aroused a general interest and everyone wanted to carefully follow the events taking place at the front' (translated into English from the Italian version: Radó, 1972: p.27).

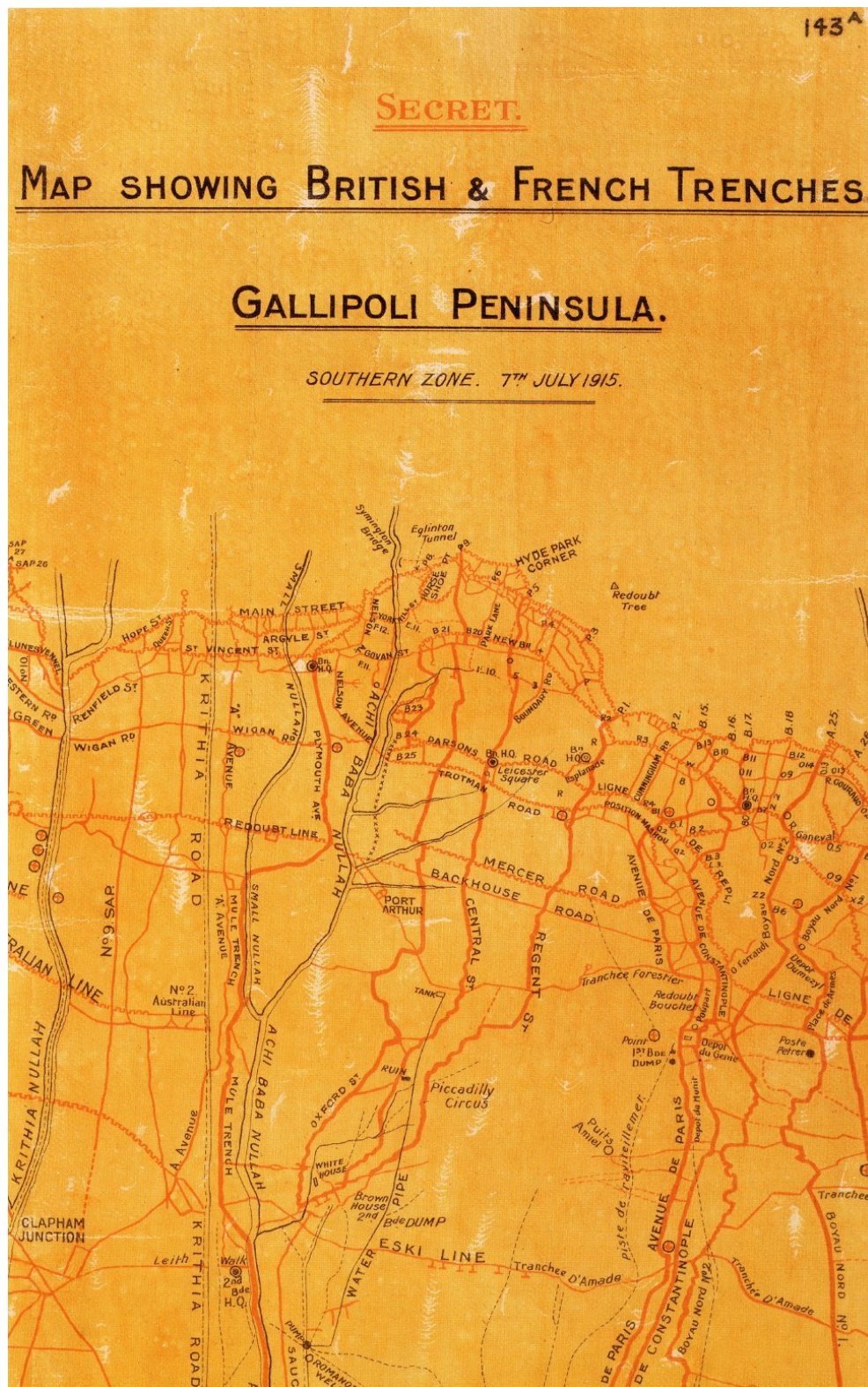


Figure 4.13. Classified map of British and French trenches in the Gallipoli Peninsula. British Army, 1915



Figure 4.14. General Paul von Hindenburg, Kaiser Wilhelm II, and General Erich Ludendorff standing at a table, examining a large map, c. 1915



Figure 4.15. Crowds read of the war on a map on a Parisian street during the First World War

It is important to reflect on the role played by cartography in the years of the First World War, not so much for the benefit of military strategies as much as a communication tool between the ruling classes and public opinion. That is to explore the public dimension of maps, which is the real innovation of cartographic language of the 20th century, when the map definitively ceases to be the legacy of a small and wealthy audience, opening itself to the general public by diversifying its aesthetic forms and enriching them with unprecedented functions.

Among these functions was the use that was made of it in political communication, which exploited the persuasive value of the map. Indeed, behind the widespread cliché that holds that it is the product of an exclusively technical and therefore rigorous process, the map possesses, as we have seen in previous chapters, a strong persuasive capacity. Thanks to its intrinsic value, maps represent a potential tool for mobilising the population. The years around the First World War offer us many examples of this, with the exploitation of the map for propaganda purposes by those in power and political movements (figures 4.16 and 4.17).



Figure 4.16. Czechoslovak propaganda poster: “Don’t give to foreigners what is yours, Czech people!”, c. 1920

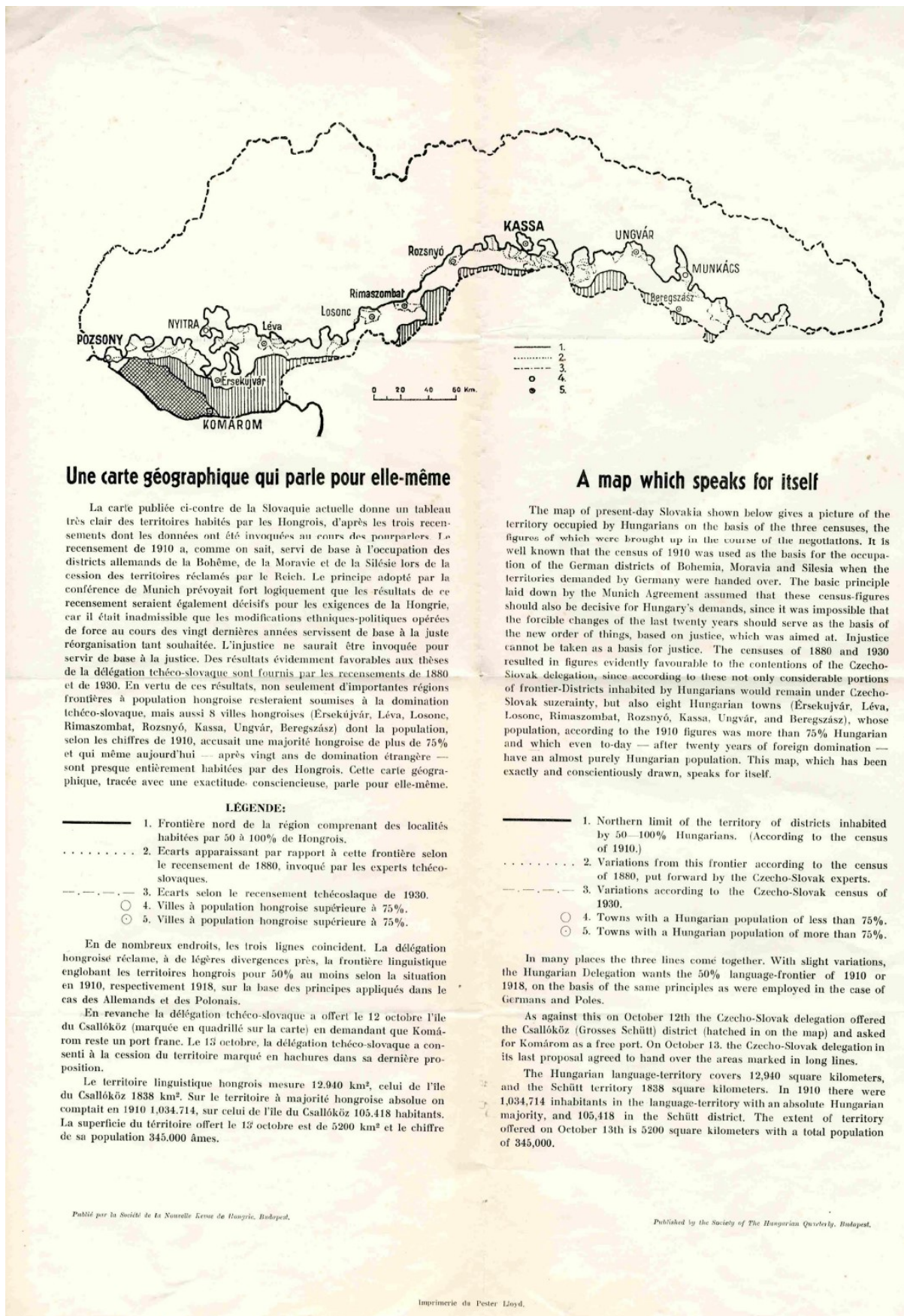


Figure 4.17. Poster of Hungarian claims on Czech territories in French and English, Society of the New Magazine of Hungary, Budapest, c. 1920

Under the effect of these changes in language, and the increased economic standard of the middle classes which allowed them to approach culture and therefore geographical knowledge, cartography underwent a fundamental innovation: the emergence of new genres which enriched the scope of cartography and introduced new aesthetic forms. Completely new genres joined with the topographical map which had dominated the scene in the 19th century: for example, the tourist map (figure 4.18), prompted by the increased mobility of the population for seasonal tourism and the weekend away, or educational cartography which, stimulated by widespread schooling, allowed an increasing number of students to become familiar with maps (figure 4.19).



Figure 4.18. Guide panorama des Bord du Rhin Mayence-Cologne, c. 1920



Figure 4.19. First page of a French history textbook by D. Blanchet and J. Toutain, *Histoire de l'Europe et particulièrement de la France*, Paris, Belin, 1897

The various stimuli to the question of maps would lead to a huge increase in production compared to previous periods, to which the war also contributed. Indeed, the extensive involvement of the civilian population in the conflict, unprecedented in modern history, implied the need to develop new forms of public communication which had to reach out to citizens on an extensive and continuous basis. There had been prior experience of popular cartography designed to inform the public at home regarding theatres of war in the 19th

century, in particular with the Franco-Prussian War, but with the First World War the phenomenon reached an entirely uncharted dimension. The war widened the channels of the diffusion of maps, which now also appeared regularly in newspapers and non specialised magazines (figures 4.20, 4.21, 4.22 and 4.23).

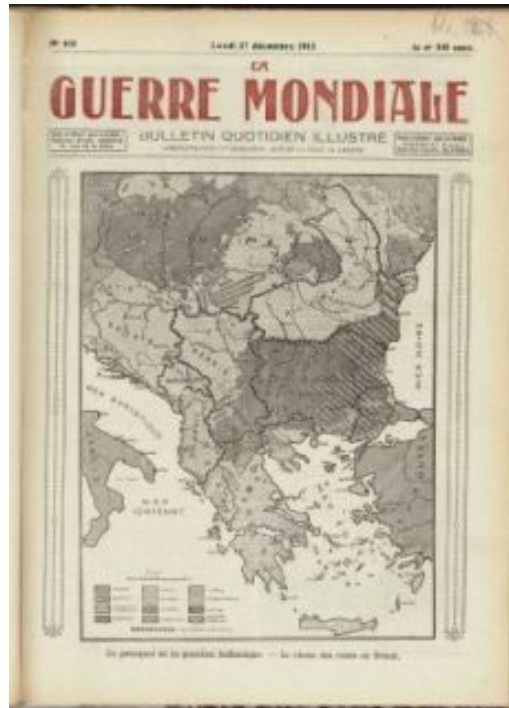


Figure 4.20. La guerre mondiale. Bulletin quotidien illustré, n.410, 1915



Figure 4.21. La guerre mondiale. Bulletin quotidien illustré, n.421, 1916



Figure 4.22. J'ai vu..., n.195, 1stFebruary 1919 during the Conference of Versailles



Figure 4.23. The New York Times mid-week pictorial, vol.3, n. 20, 1916

Yet the change was not merely quantitative. The war expanded the same functions of maps, which could not be limited to informing the public by telling of the conflict to those who stayed at home. The necessity to actively mobilise a population called to contribute to the national cause with a sustained effort over time involved a new duty for maps, which also had to serve to mobilise the spirit. Propaganda had discovered a new tool: the map.

In an environment which saw the radical transformation of political communications, the map was proposed as a suitable visual instrument of representation, principally for two reasons: the first is that it was able to clearly communicate to the general public - most of whom was still illiterate - since it expressed itself through images and therefore used the evocative force of visual communication; the second reason is that the map was best able to graphically render the concepts of nation and state, which were central to the political debate of the time, and were exalted by the climate of war. The maps, in fact, visually expressed the implicit territoriality in both of these concepts and contributed toward making 'Sacred Soil' a sacred symbol of the rhetoric of propaganda with its mystique of the war. The map thus found itself wed to a specific political cause - Nationalism.

Momentous changes were taking place. The advent of new forms of communication in the years around the First World War is the symptom of the emergency of new sensibilities and new needs on the part of areas of society - in particular the urban bourgeoisie - which claimed their cultural spaces and access to positions of influence. One of the expressive forms which took on the moment of change of this social class was visuality, which formed the protagonist in the arts, for example Futurism with its clear appeal to the transformation in languages and in the forms of artistic communication. Cartography participated in this process of enhancing visuality, discovering novel genres and forms.

Furthermore, it was affected by and recorded the profound political changes taking place in society. The novelties which cartography would meet in a time of strong political tensions and social transformations confirms and provides further evidence of the fact that the forms of representation of territory are a cultural variable which are highly sensitive to political and social changes. The period of the First World War is the exemplary witness to this.

c. The controversial tale of Geopolitik and its maps

Among the genres of cartography which Jacques Lévy would define as popular (Levy, 2004) there is one specially designed to illustrate the structures of power which is exercised over a territory: it is called geopolitical cartography, and it is practised in that anomalous field of studies somewhere between scientific discipline and the kind of broad dissemination which is Geopolitics, which perhaps for its ambivalent position could not help but invent itself as an original cartographic instrument. A fundamentally unconventional instrument, so much so that it had to openly violate some principles of traditional cartography in order to fulfill its duties. This is the reason of its controversy: on the one hand we have the undoubted innovations that it introduced into the history of political cartography, while on the other the flagrant violation of the rules of scientific cartography and the adherence to totalitarian ideologies.

Karen Culcasi defines ‘geopolitical maps’ as ‘maps that represent geopolitical disputes or issues’ (Culcasi, 2006: p.686). So, just as with tourist maps we intend maps referring to the theme of ‘tourism’, i.e. maps addressed to those who are involved with tourism (operators and travelers), so for geopolitical maps we intend maps centered on geopolitical themes which are aimed at those interested in these topics (from specialists to simple enthusiasts). Therefore they are maps conceived to better highlight geopolitical dynamics (conflicts, tensions and alliances etc.) and the motives behind clashes (resources or territory). Speaking about the history of cartography therefore means tracing the evolution of cartographic methods through which man (in the West) has represented international politics.

This history begins on Germany with the end of the Great War, and is abruptly interrupted after the Second World War, only to regain momentum after the fall of the Berlin Wall. A significant alternation of interests, high in moments of intense political tension and low in those of international political balance (Boria, 2008).

One cannot say that until the First World War that political phenomena were absent in traditional cartography, but their treatment appeared inadequate to present territorial political entities and their relationships. What Susan Schulten said of the geopolitical studies of the 1940s probably applies to geopolitical cartography of the same period: “The emergence of Geopolitics may have distorted the realities of international relations during and after the war, but its popularity reflected the need to understand the implications of a global war and far-reaching technological advancements” (Schulten, 2001: p.136).

After the war geopolitical cartography, like the entire geopolitical literature of the time,

was ignored for decades. The reasons are well known. It was associated with the Nazi and Fascist regimes, and thus had to be denied and silenced (the reboot can be traced back to the first edition of Kidron and Segal, 1981 which was soon followed by Kidron and Smith, 1983 and Kidron and Segal, 1987; from this side of the Atlantic we find similar products from 1983 onwards similar to the work of another couple, the French Gérard Chaliand and Jean-Pierre Rageau, 1983, 1984, 1988, 1989, 1991, 1993; if those from the early years were not particularly innovative regarding graphical choices, they were important nonetheless because they focused attention on the visual treatment of geopolitical issues, while in recent years publications of this kind have evolved considerably in graphics, and multiplied). Thus this is a tormented history which begins to rebuild only in our years in a systematic way, and it refers to these works for a more detailed account of this historical event (Herb, 1997; Boria, 2008).

At the end of this section a significant review of examples of these maps will be presented (from figure 4.24 to figure 4.52). The geometric schematisations of geopolitical cartography in the '20s visually translated the decisive transformation which gripped the political sciences between the end of the 19th century and the beginning of the 20th century (of which Kjellen and Mackinder are fine interpreters) in relation to the way of thinking about territory: from a physical, natural and tangible element which in the most radical determinist perspective could uniquely affect political life and the historical destiny of nations, the territory became an abstract, passive and simplified element, the mere theatre of political actions. Territory, on other words, made space. But no longer a space conceived according to traditional philosophical canons, i.e. with a uniform nature independent of the characteristics of objects, but a Leibnitzian space, whose rules of operation are subsequent to its construction.

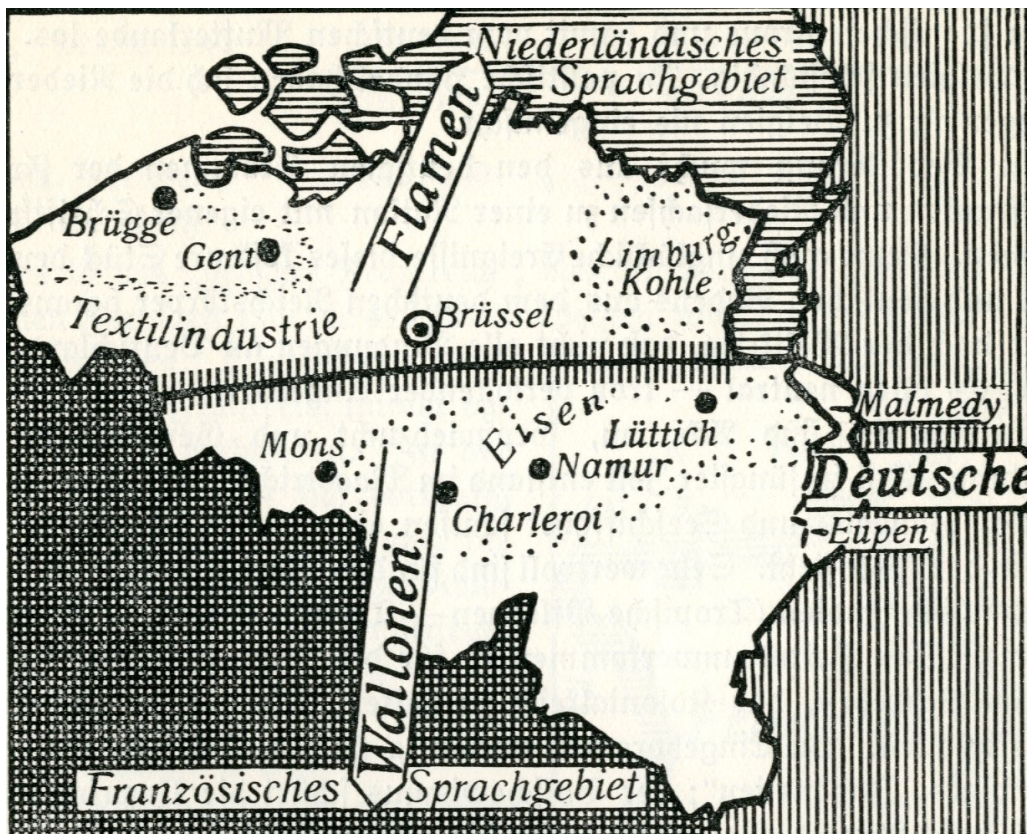


Figure 4.24. author: Franz Knieper, Belgien Bevölkerung und Industrie, in Knieper F., Kleine Staatenkunde von Europa auf Geopolitischer Grundlage, Schoeningh, Paderborn, 1936, p.41

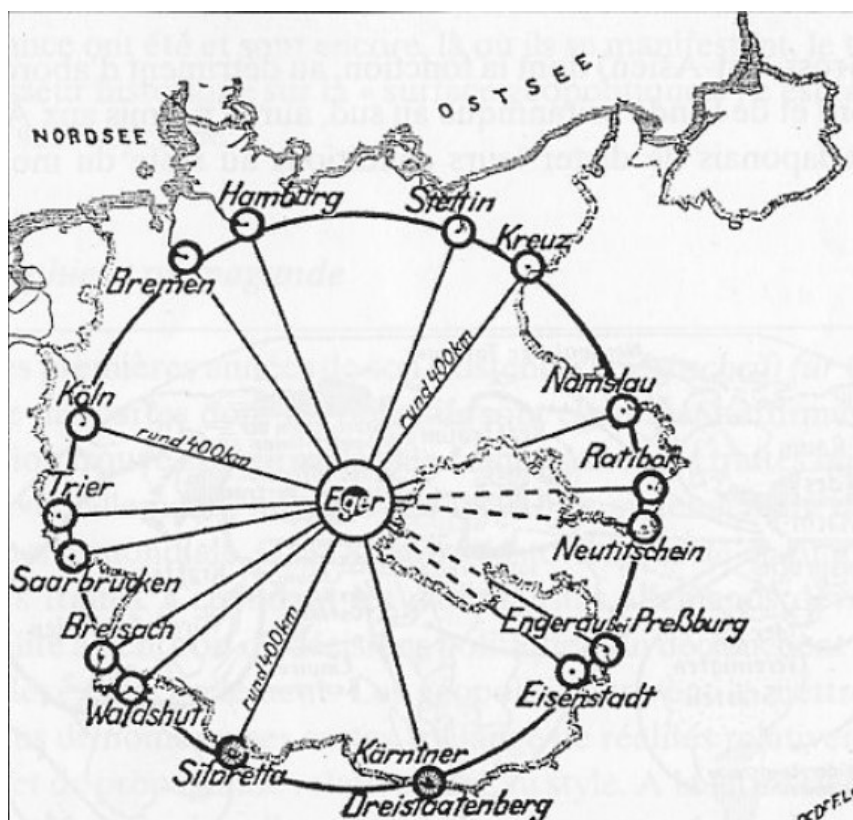


Figure 4.25. Author: Friedrich Lange, Mittelpunkt des Großdeutschen Reiches, Wille und Macht, n. 23, 1938

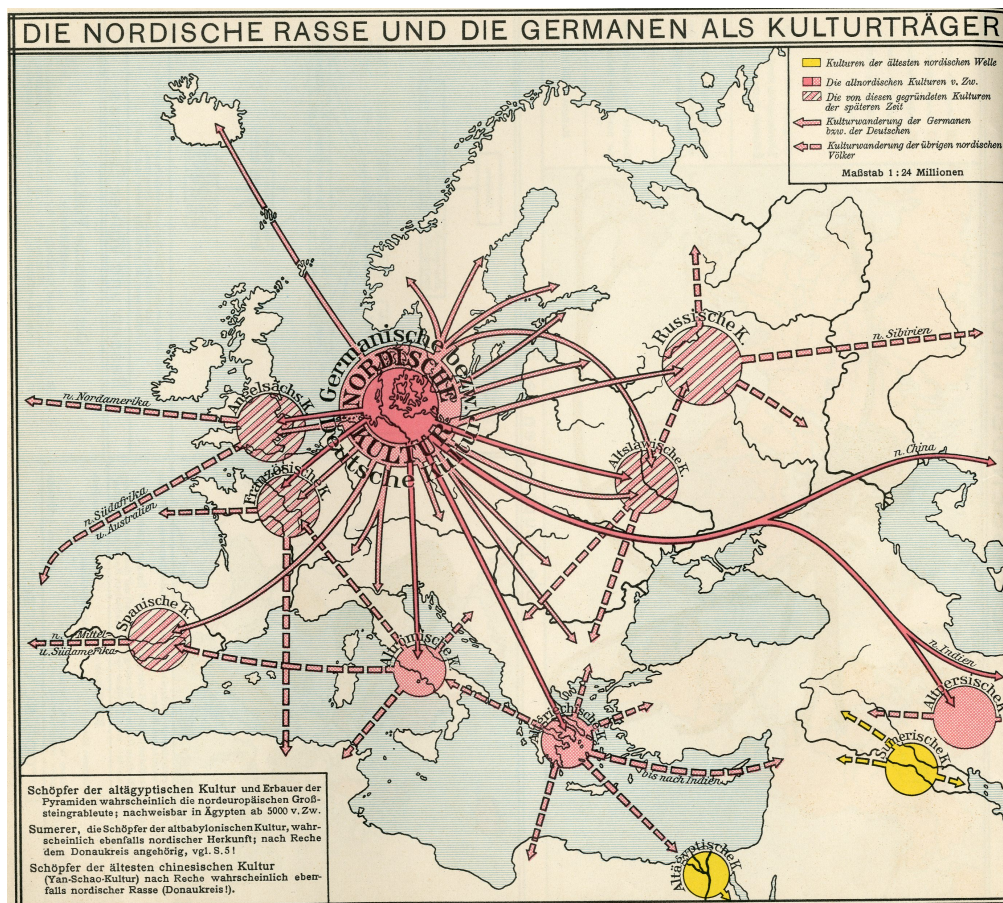


Figure 4.26. Dr. B. Kumsteller, *Werden und Wachsen*, Westermann, 1938, p.2

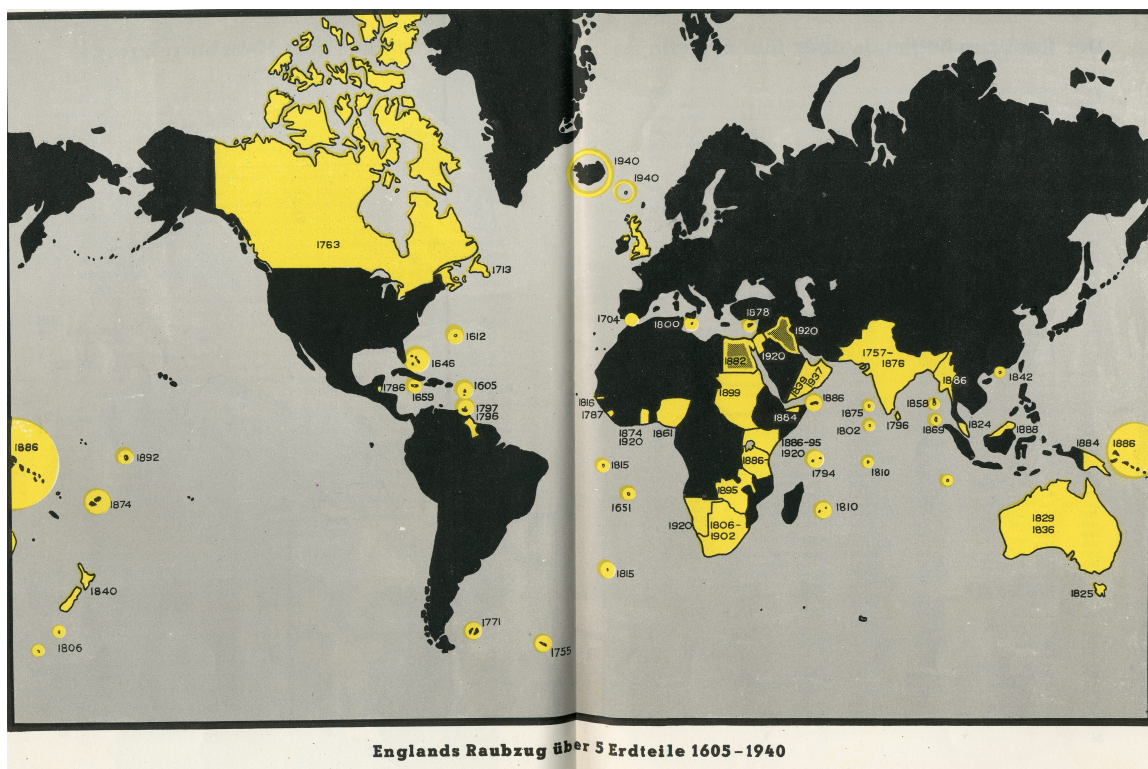


Figure 4.27. Author: Alois Moser, in G. Wirsing, *Der Krieg 1939-40 in Karten*, München, Knorr & Hirth, 1940, pp.34-35



Figure 4.28. author: Karl Haushofer, Japans Weh nach Süden, in K. Haushofer, Weltmeere und Weltmächte, Berlin, Zeitgeschichte Verlag, 1941, p.194



Figure 4.29. Das ganze Deutschland soll es sein!, in Franz Knieper, Geopolitik für die Unterrichtspraxis, Bochum, Kamp, 1934, p.41

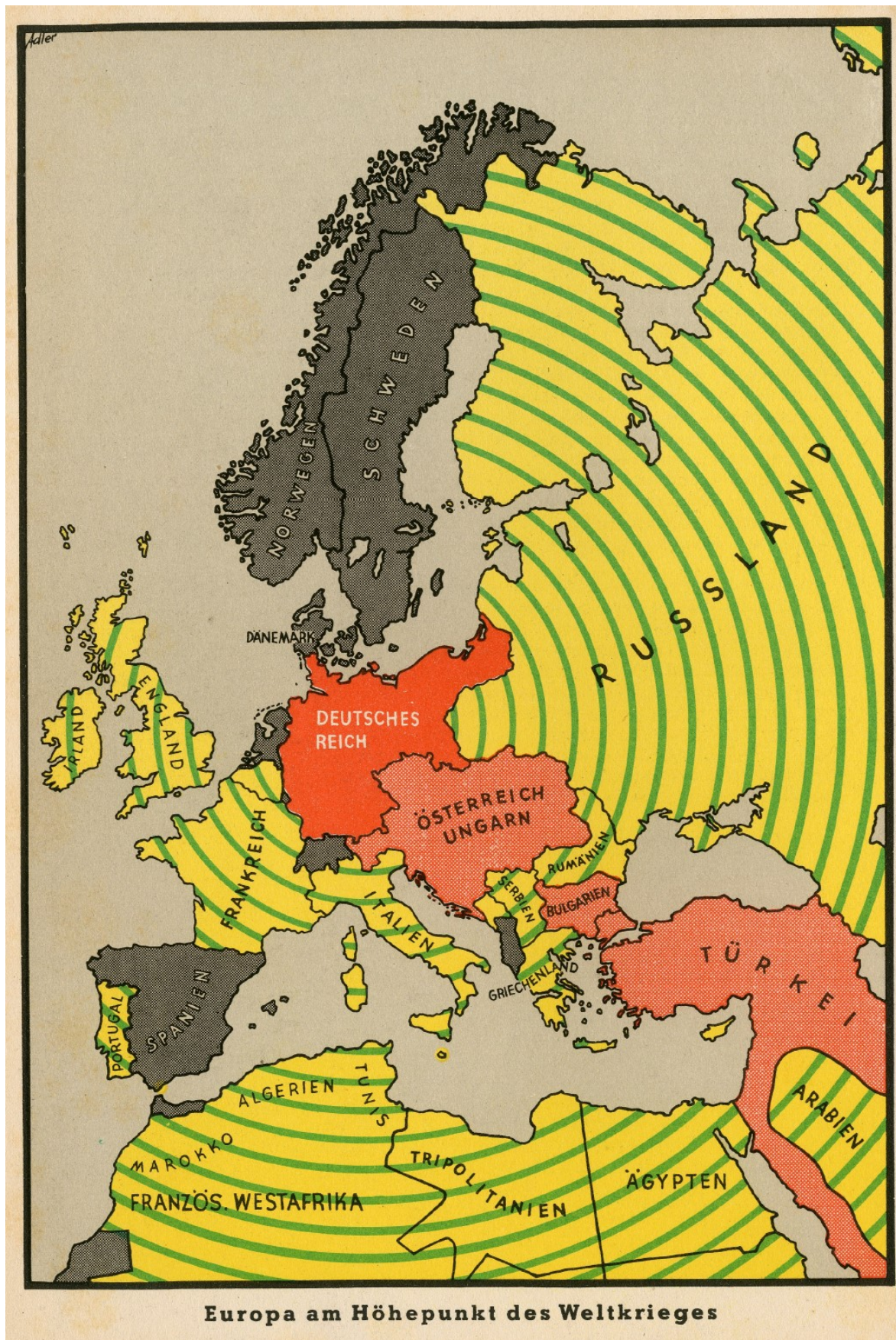


Figure 4.30. Author: Ernst Adler, Europa am Höhepunkt des Weltkrieges, in G. Wirsing, Der Krieg 1939-41 in Karten, München, Knorr & Hirth, 1942, table 1

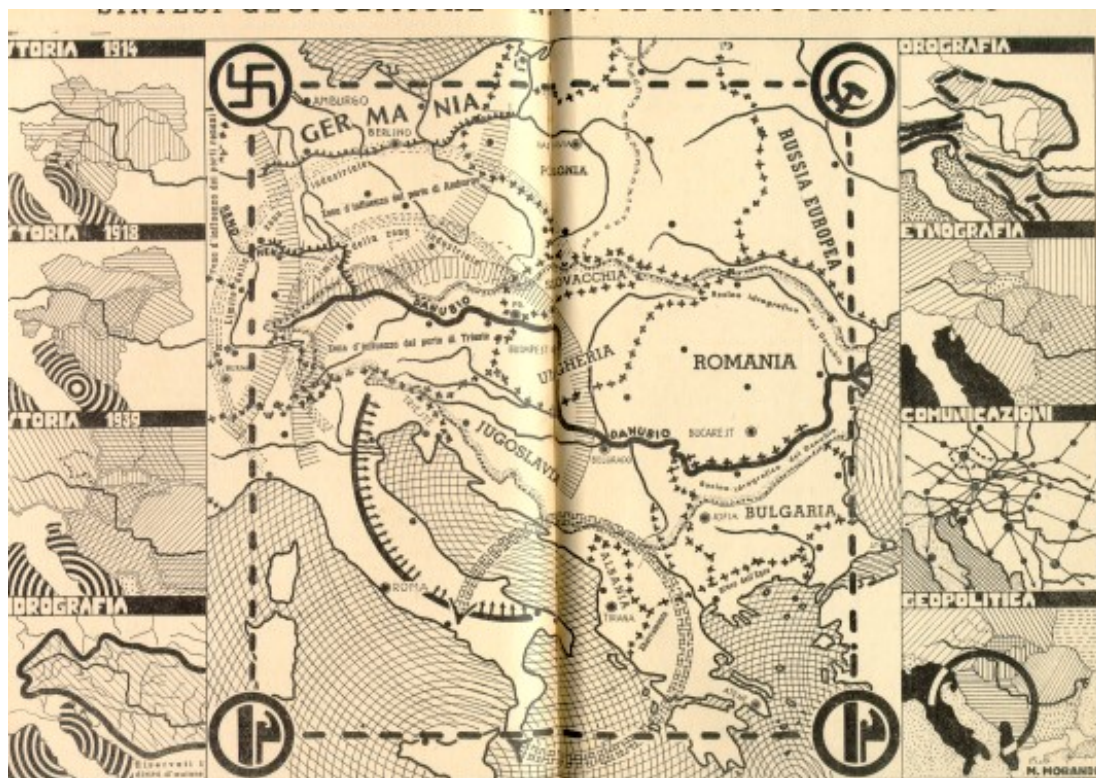


Figure 4.31. Author: Mario Morandi, Il bacino danubiano, in Geopolitica, anno I, n.12, December 1939, pp.628-629



Figure 4.32. Author: Mario Morandi, Il Mediterraneo Americano, in Geopolitica, anno I, n.9, September 1939, pp.480-481

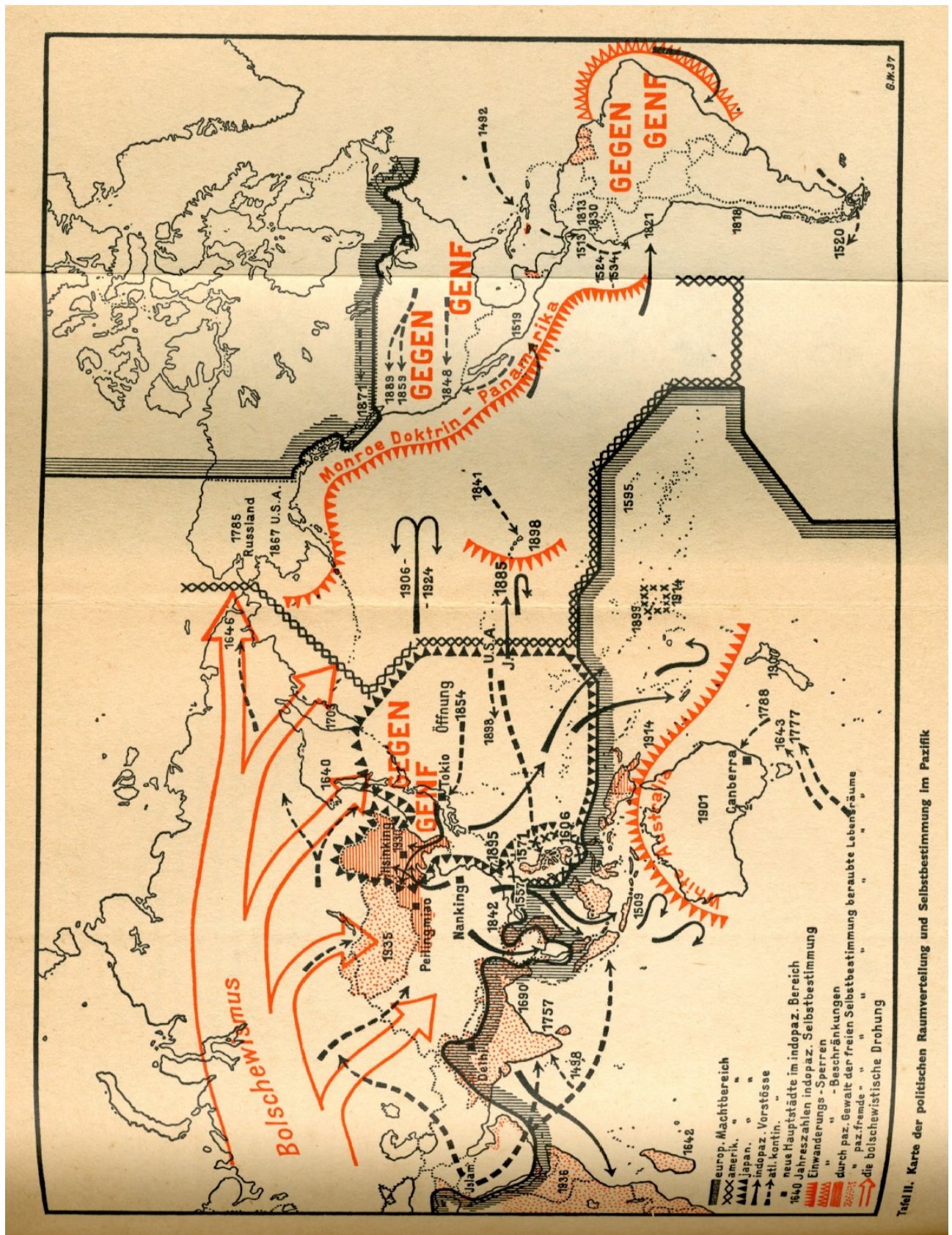


Figure 4.33. Author: Giselher Wirsing, Karte der politischen Raumverteilung und Selbstbestimmung im Pazifik, in K. Haushofer, Geopolitik des Pazifischen Ozeans, Berlin, Vowinkel, 1938 p.95

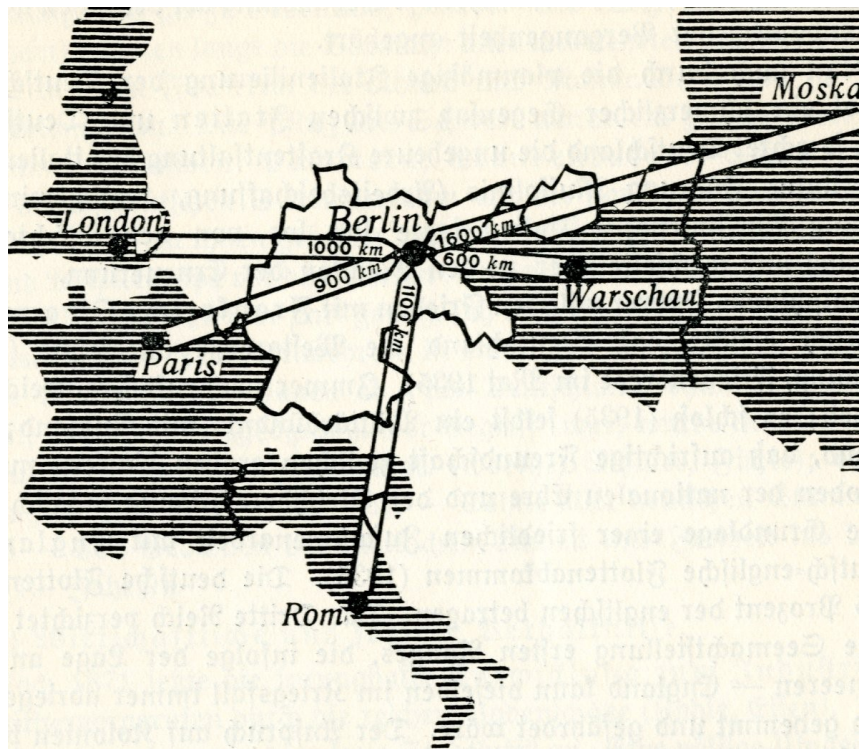


Figure 4.34. Author: Franz Knieper, Die Lage des Drittes Reiches zu den Großstaaten Europas, in Knieper F., Kleine Staatenkunde von Europa auf Geopolitischer Grundlage, Schoeningh, Paderborn, 1936, p.15



Figure 4.35., Großbritannien als Mittelpunkt der Welt, in K. Haushofer, Weltmeere und Weltmächte, Berlin, Zeitgeschichte Verlag, 1941, p.29

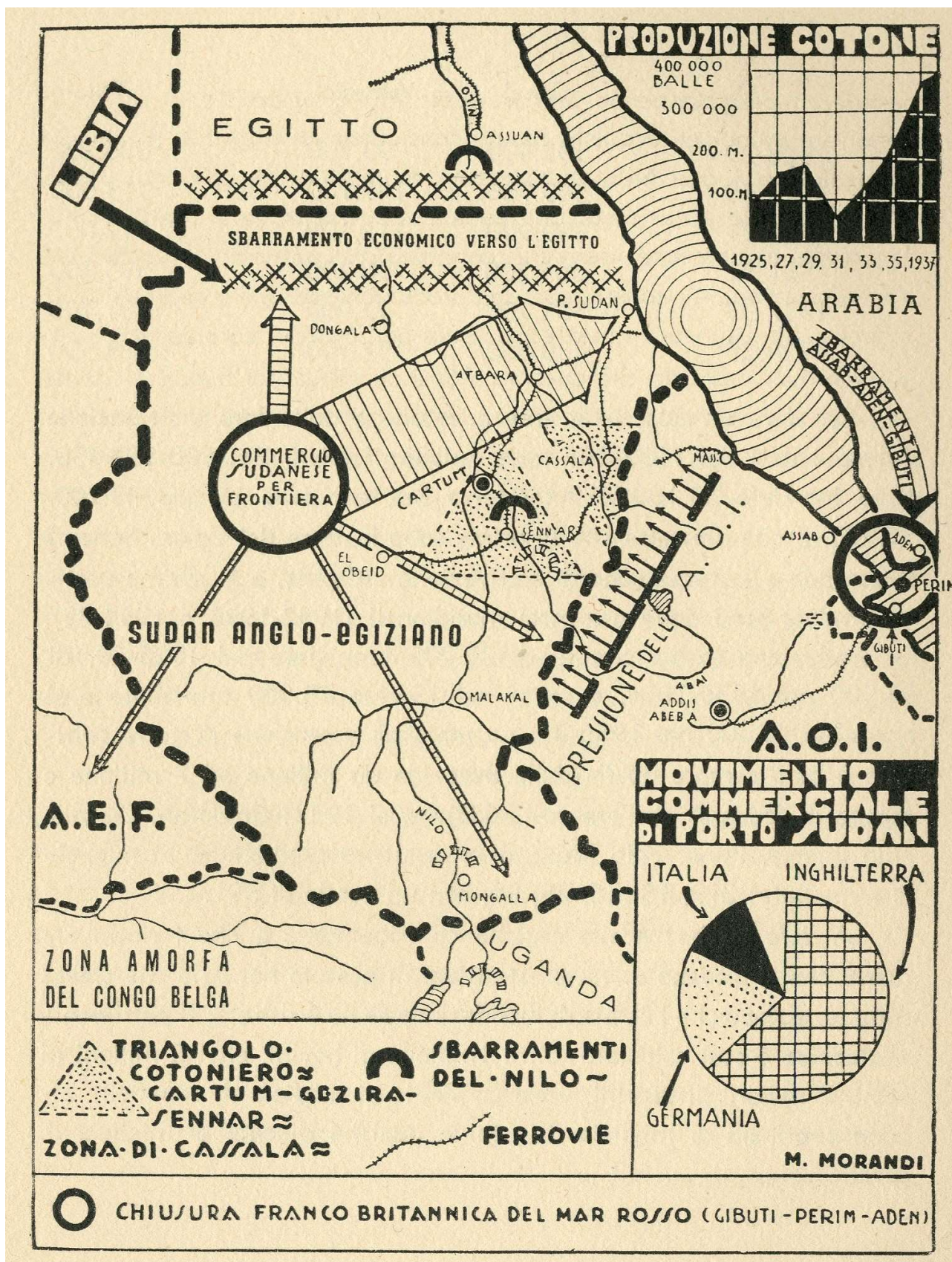


Figure 4.36. Author: Mario Morandi, in P. D'agostini Orsini di Camerota, Sui confini dell'Africa orientale italiana, Rome, Palombi, 1940, p.31

26. LA ÉPOCA DE LOS DESCUBRIMIENTOS

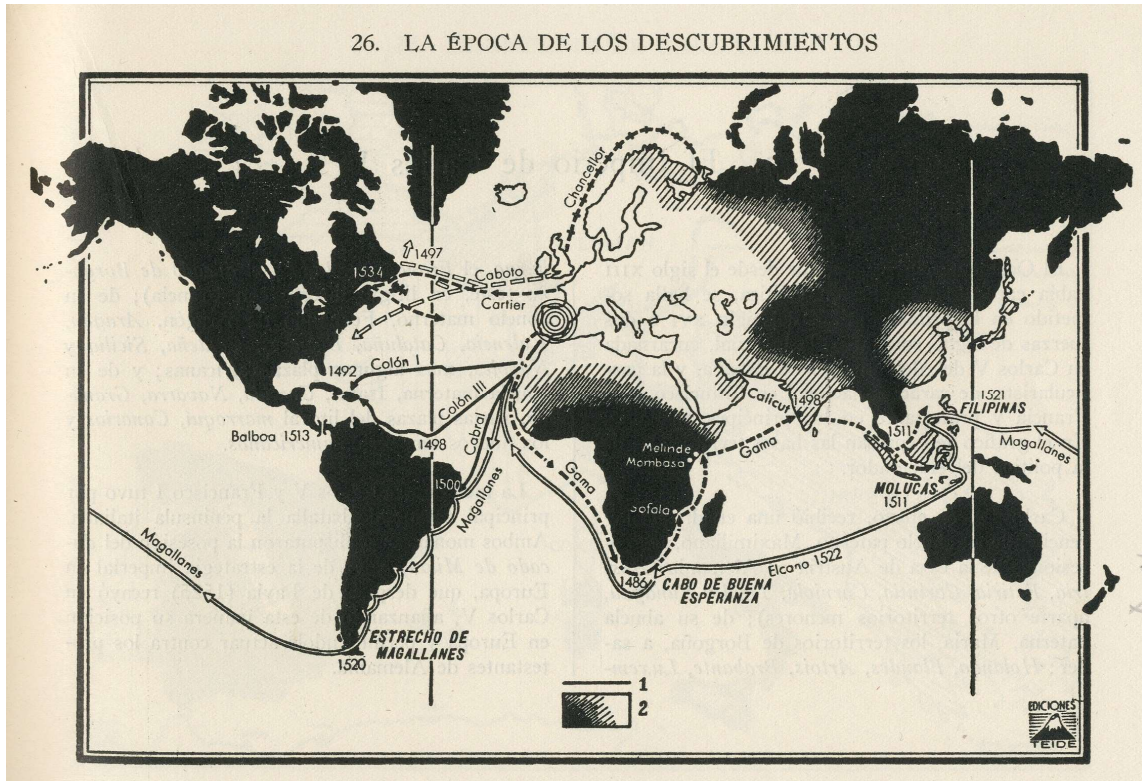


Figure 4.37. La época de los descubrimientos, in J.Vicens Vives, Atlas y síntesis de historia universal, Barcelona, Teide, 1945, table 26

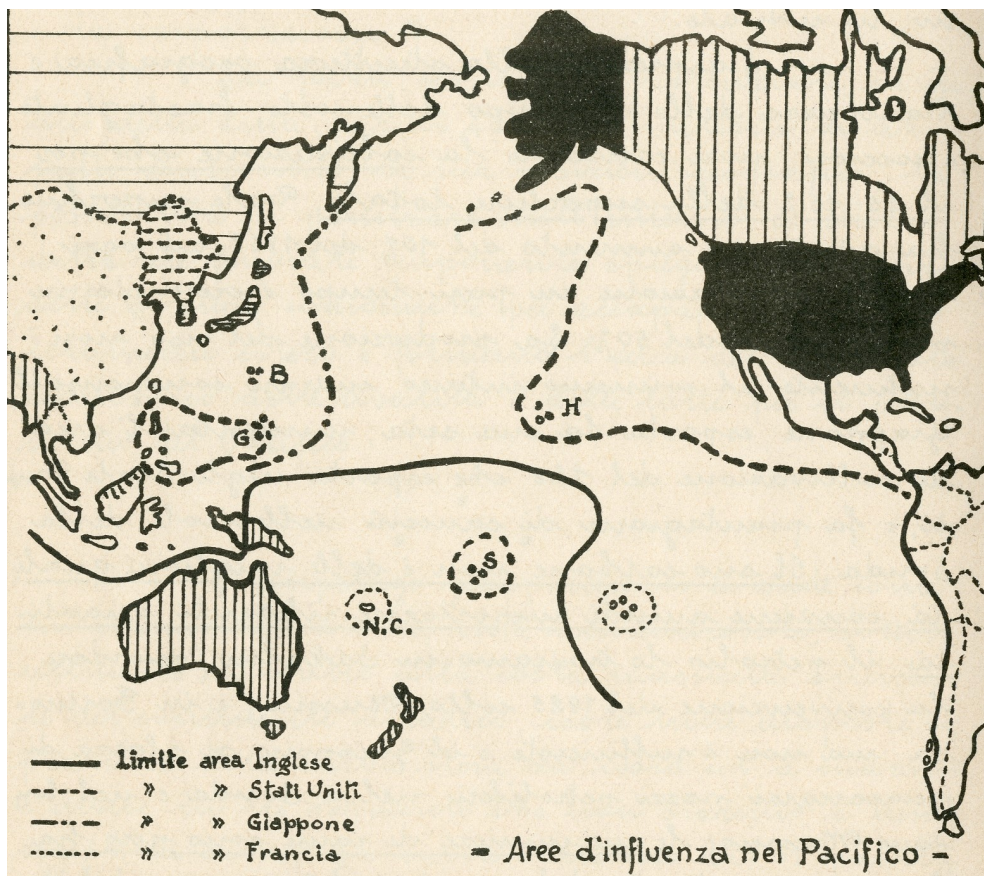


Figure 4.38. Aree d'influenza nel Pacifico, in Roletto G., Lezioni di geografia politico-economica, Padova, CEDAM, 1933, p.54

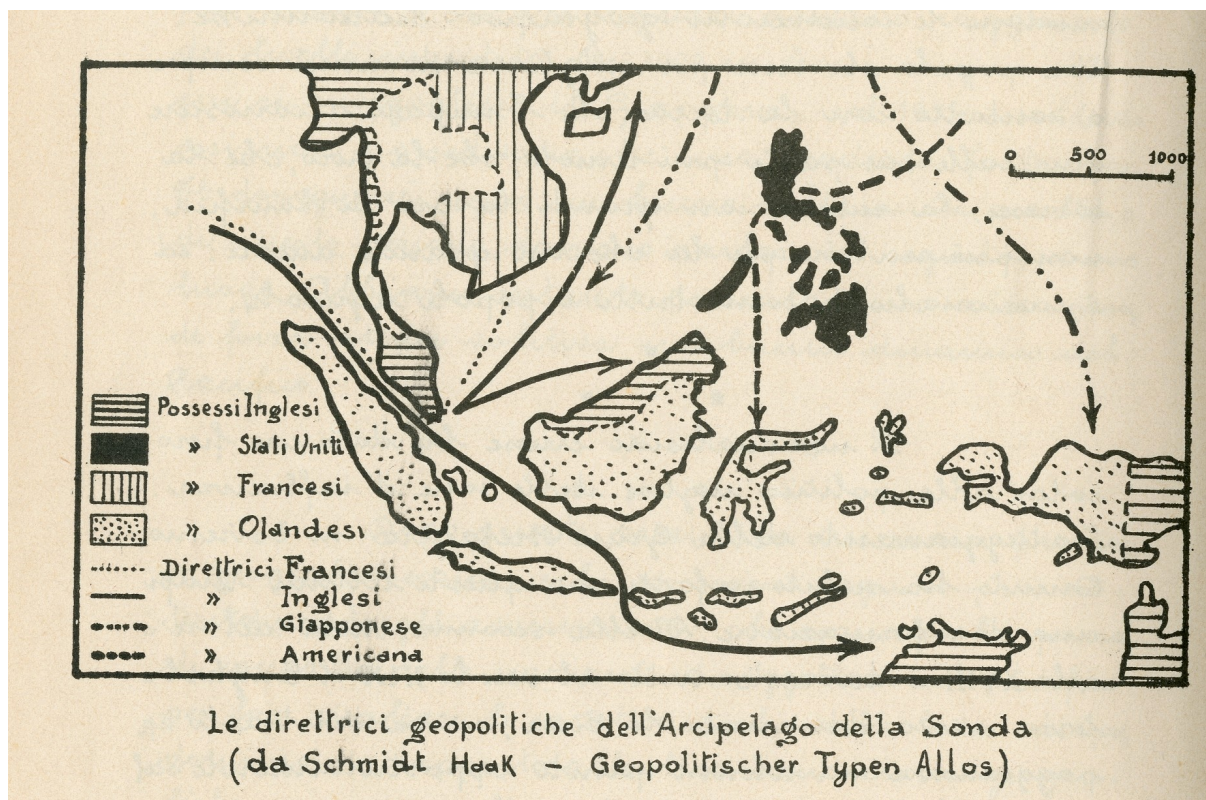


Figure 4.39. Le direttrici geopolitiche dell'Arcipelago della Sonda, in Roletto G., Lezioni di geografia politico-economica, Padova, CEDAM, 1933, p.57

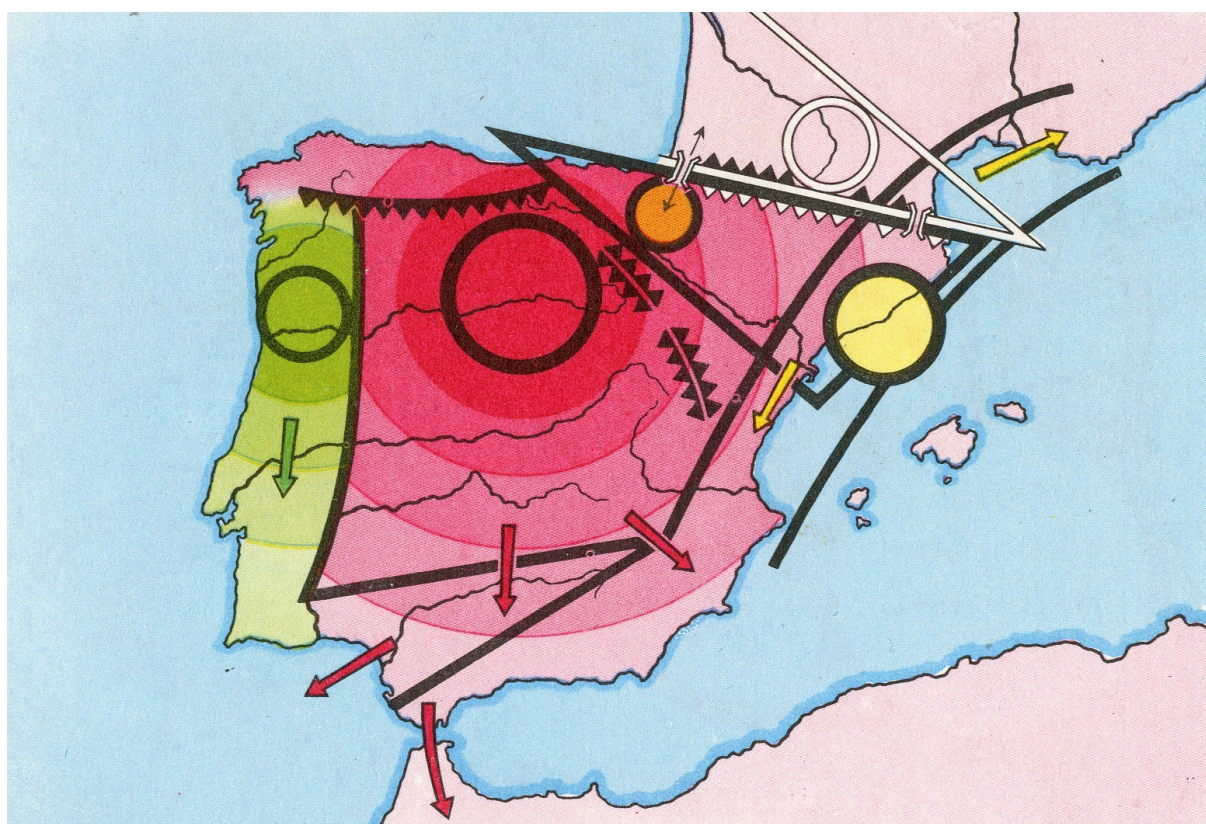
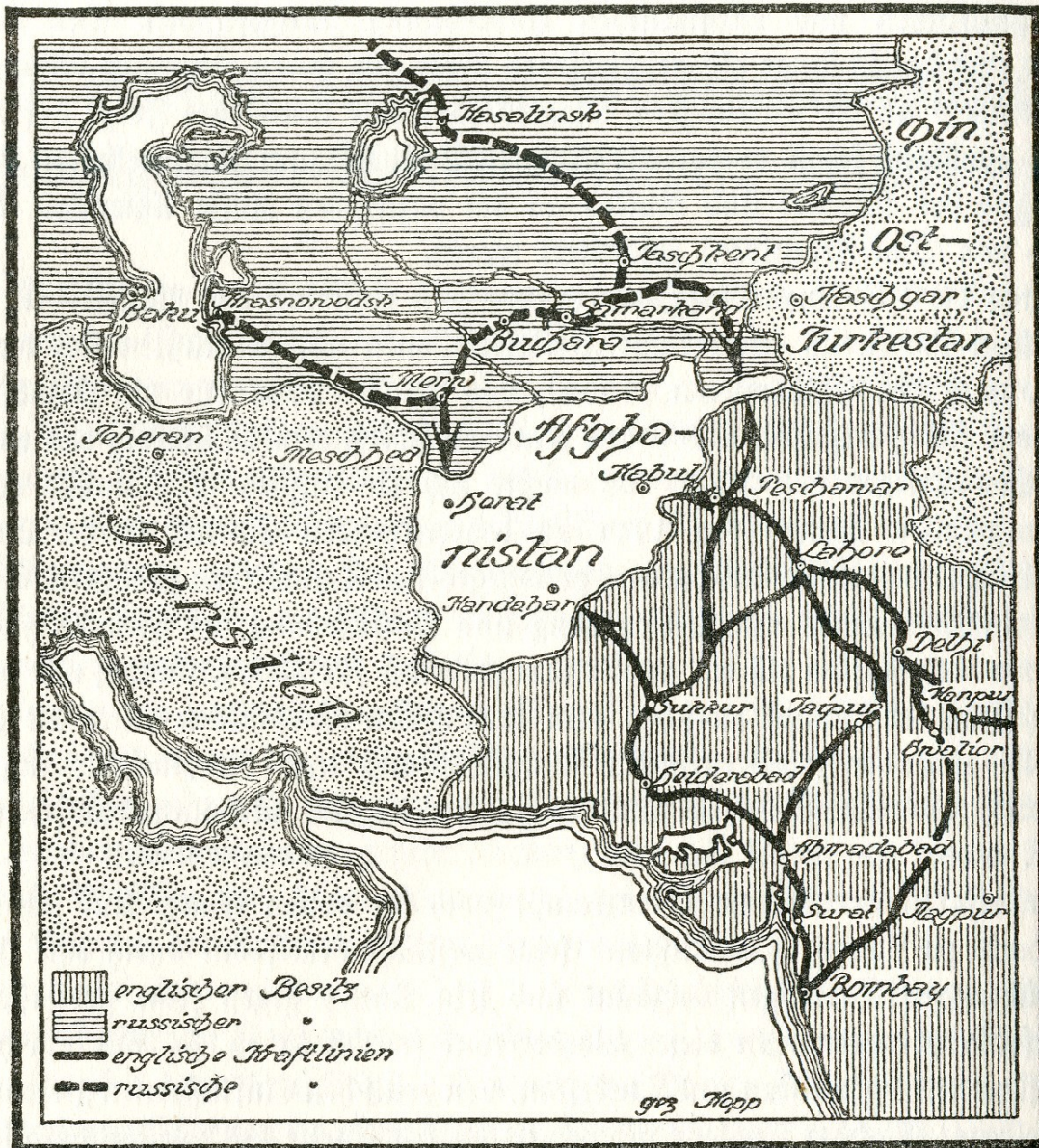


Figure 4.40. J.V.Vives, Entidades geopolíticas, Atlas de Historia de España, Teide, 1977, tav.IV



Nr. 28 Rußland als Nachbar Indiens

Figure 4.41. Rußland als Nachbar Indiens, in Haushofer K., Weltpolitik von heute, Berlin, Zeitgeschichte, c.1934, p.110

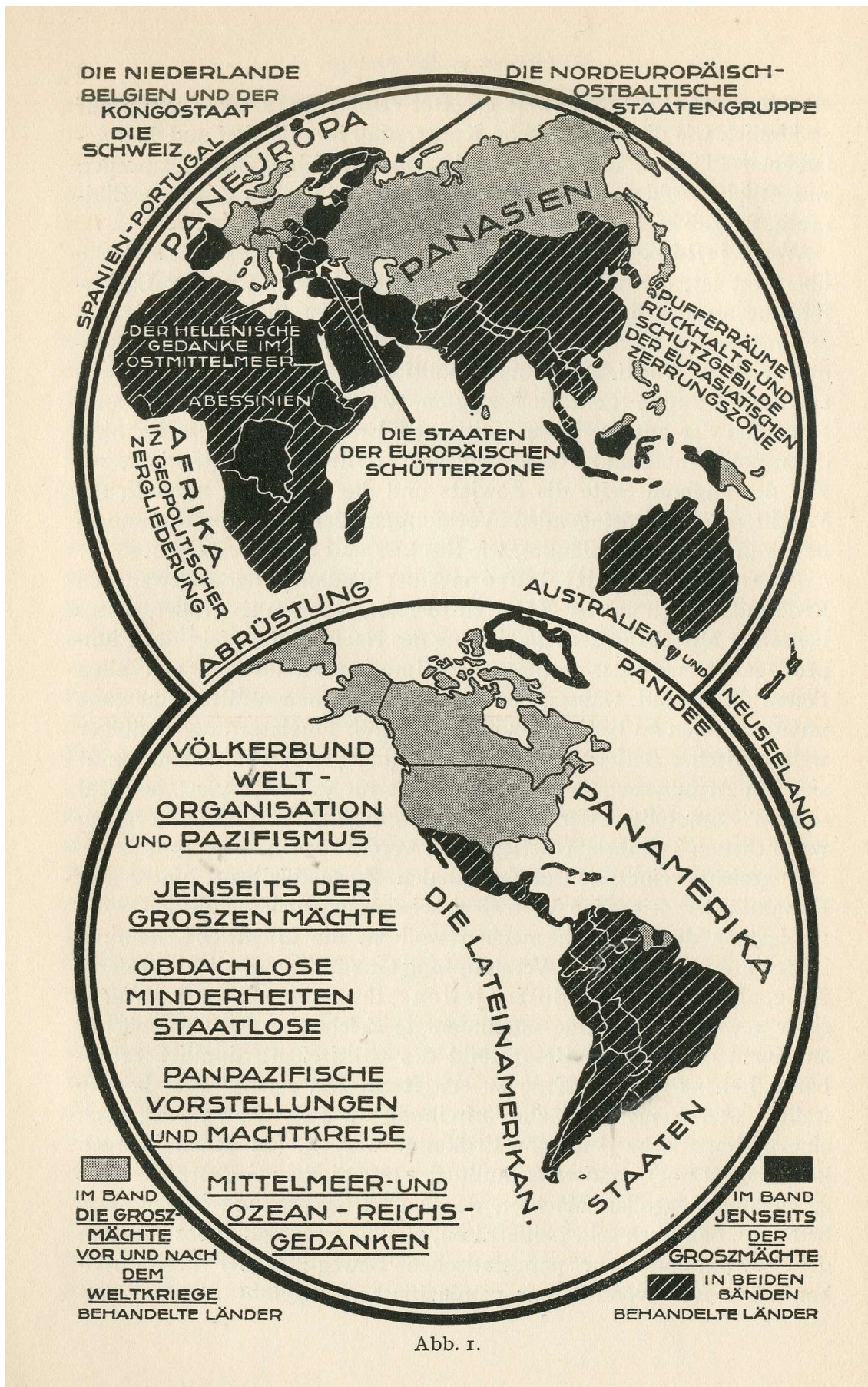


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Figure 4.42. In Haushofer K., Jenseits der Grossmächte, Teubner, Leipzig und Berlin, 1932, p.4



Figure 4.43. Author: Mario Morandi, Eurafrica geopolitica 1940, in Comando.
Rassegna bimestrale di studi politici e militari, anno II, 3-4, 1941, p.247



Figure 4.45. Author: Mario Morandi, L'Islam in Africa, in Comando.
Rassegna bimestrale di studi politici e militari, anno II, 3-4, 1941, p.247

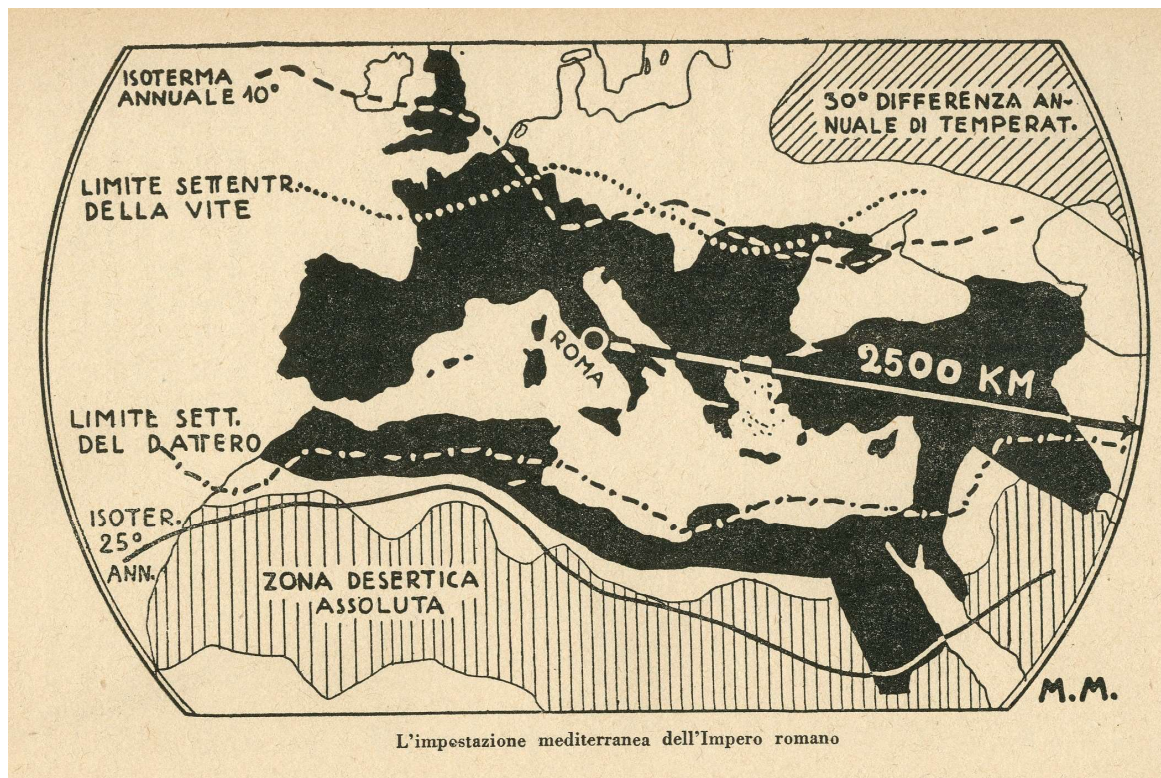


Figure 4.46. Author: Mario Morandi, L'impostazione mediterranea dell'Impero romano, in E. Moleti di Sant'Andrea, Mare Nostrum, E.L.I.C.A., Milano, 1938, p.75

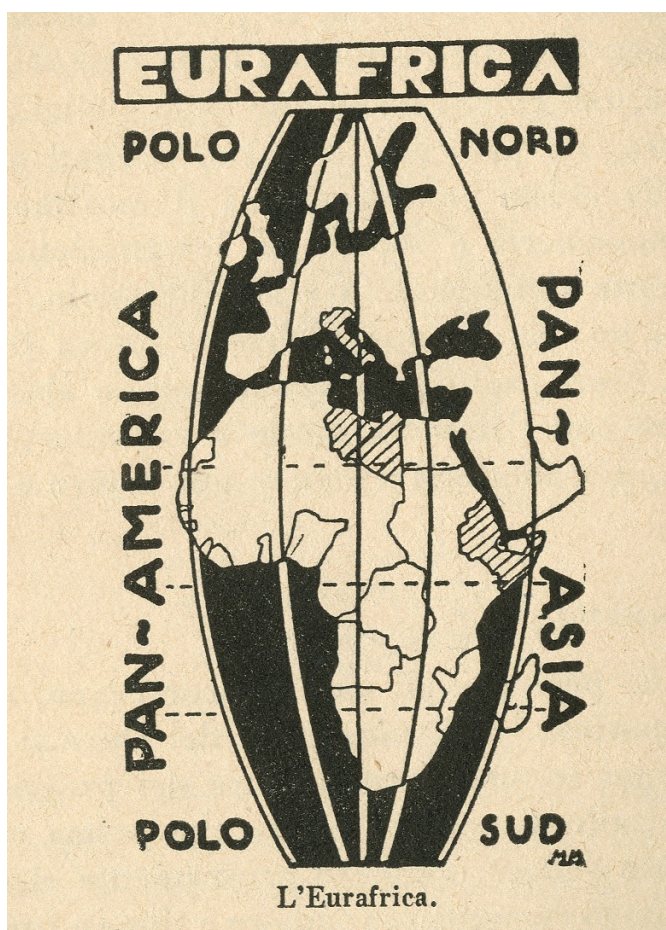


Figure 4.47. Author: Mario Morandi, L'Eurafrica, in E. Moleti di Sant'Andrea, Mare Nostrum, E.L.I.C.A., Milano, 1938, p.291

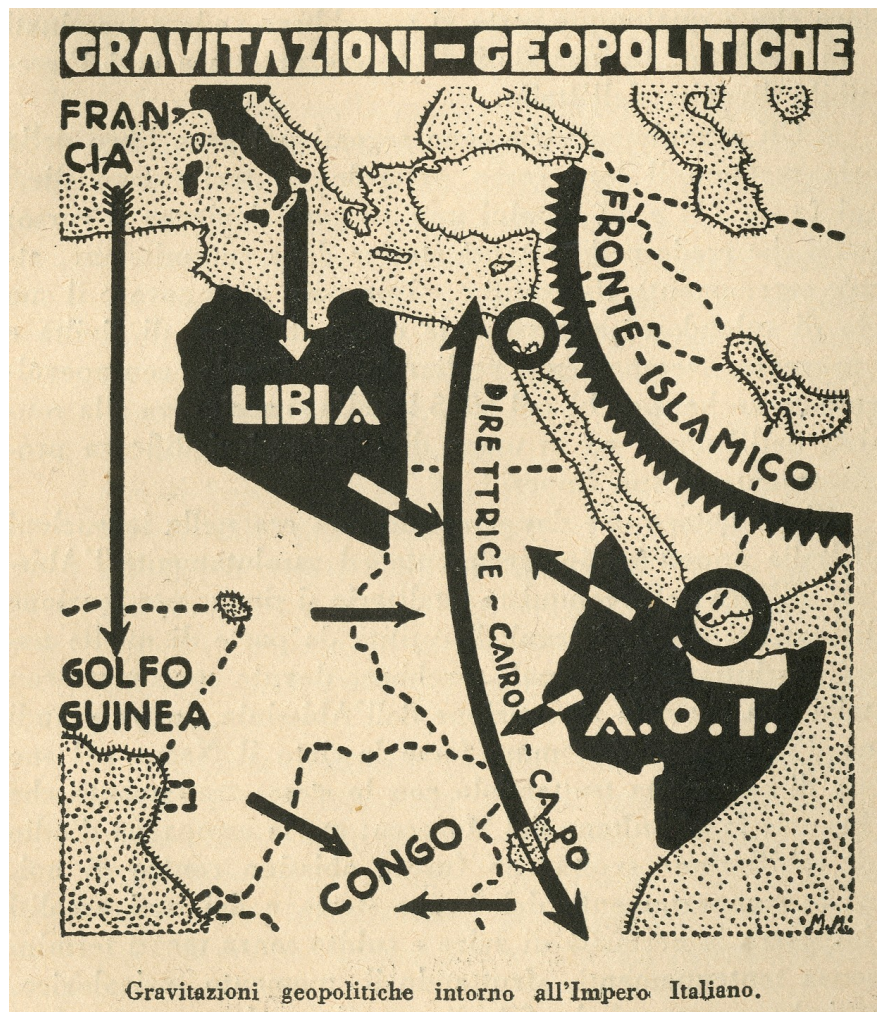


Figure 4.48. Author: Mario Morandi, Gravitazioni geopolitiche, in E. Moleti di Sant'Andrea, Mare Nostrum, E.L.I.C.A., Milano, 1938, p.295

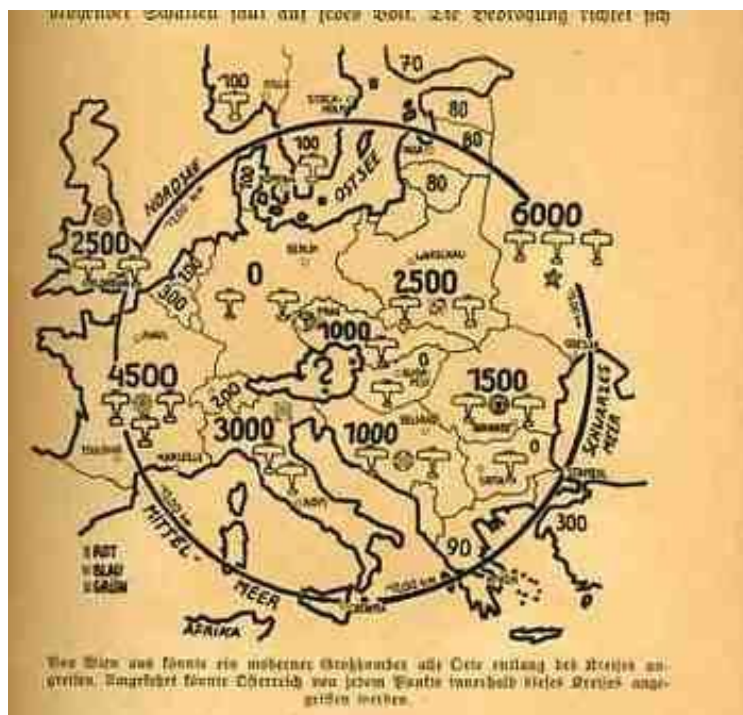


Figure 4.49. Luftschutz durch Selbstschutz, by Luftschutzbund, Hugo Noll, 1935



Figure 4.50. November 1933 issue of the *Illustrierte Zeitung*

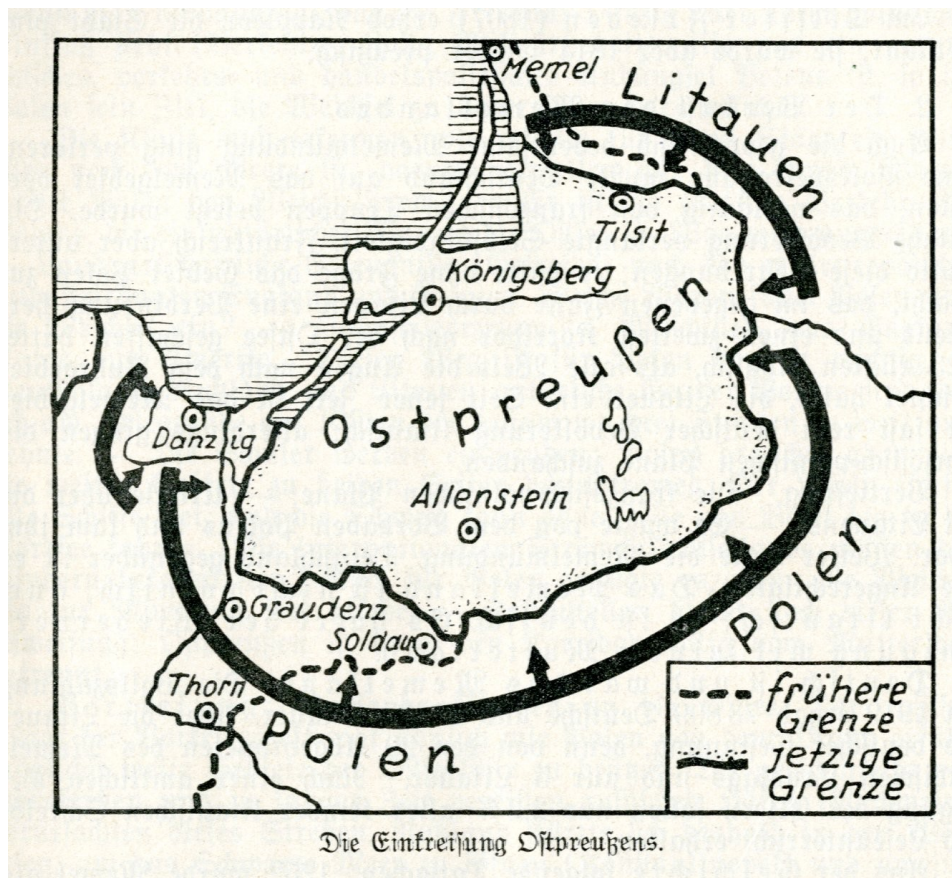


Figure 4.51. Die Einkreisung Ostpreußens, in Franz Knieper, Geopolitik für die Unterrichtspraxis, Bochum, Kamp, 1934, p.68

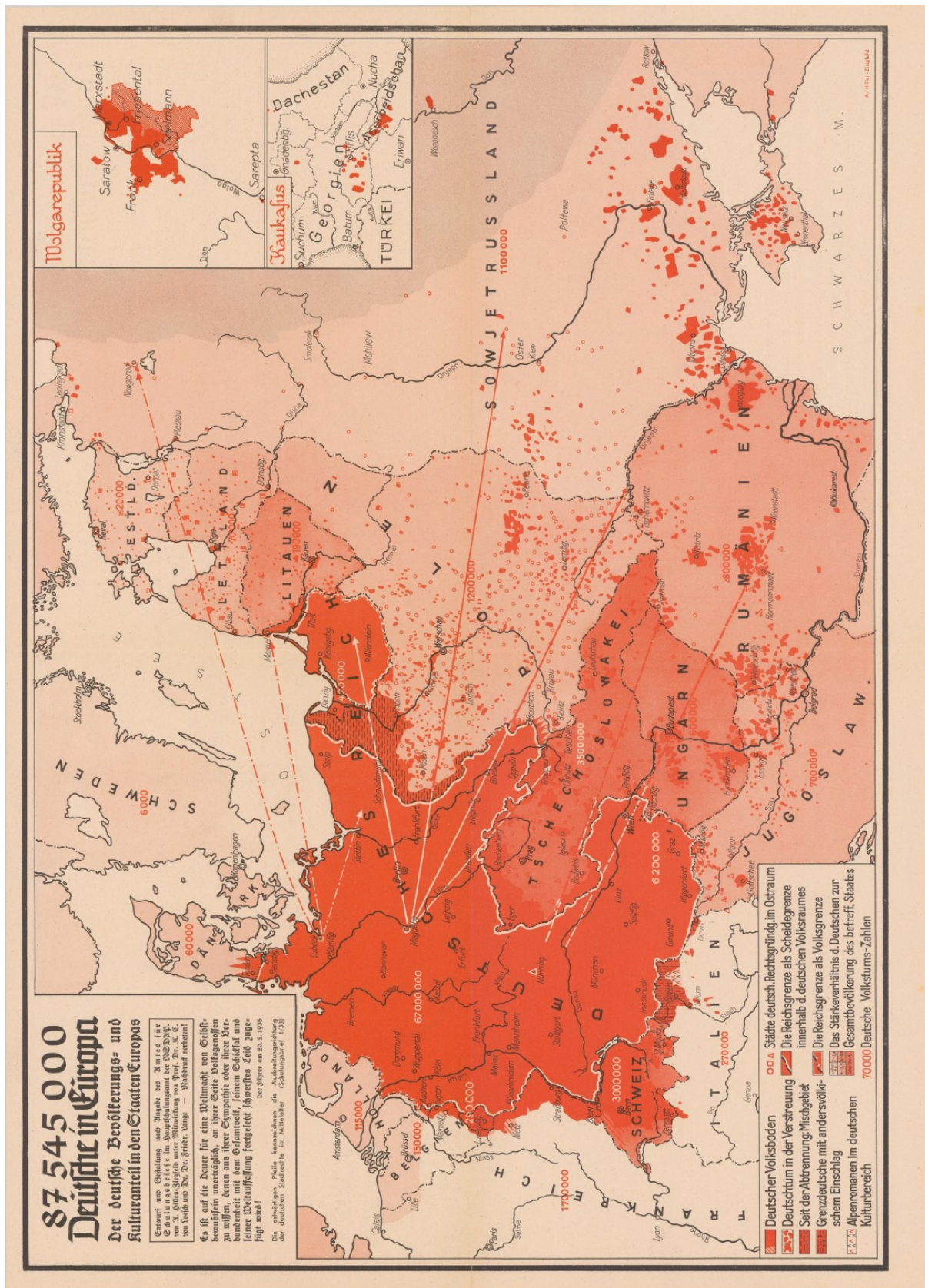


Figure 4.52. Authors: A. Hillen Ziegfeld, F. Lange and K.C. von Loesch, 87.545.000 Deutsche in Europa, NSDAP, 1938



Figure 4.53. Portugal não é um país pequeno, in Enrique Galvão, No rumo do Império, Porto, Litografia Nacional, 1934

i. Formal distinctions between traditional maps and geopolitical maps

In particular, there were two characteristics of the political system that it tried to represent: the dynamism and differentiation between places and areas according to their geopolitical value.

The effect of dynamism was obtained mainly through the widespread use of the arrow sign. In geopolitical maps they were ubiquitous and they were of differing types: thick or thin, arched or straight. The thickness represented the intensity of the phenomenon: the thicker the arrow the more intense the phenomenon; the curvature denoted dynamism: while a straight arrow only indicated a direction, a curved or arched arrow suggested dynamism.

For a better quality of communication, geopolitical maps limited the use of graphical symbols, in part so that they did not need a legend but also to appeal to a conventional and widely diffused symbolism. They were striking ‘maps of impact’. But the reduction of graphical symbols did not necessarily lead to a reduction of the informative capacity of the map. In fact it is well known to scholars of the theory of information that the quantity of information that the reader takes from a graph very weakly corresponds to the quantity of

information which is effectively present in the graph, and indeed an (over)abundance can aggravate its reading. Fewer graphical symbols - this is the paradox - can mean better and more information communicated (Tufte, 1983: pp.123-175).

As for the other aspect, that of differentiation between places and areas according to their geopolitical value, we speak of a characteristic which clearly distinguishes between geopolitical and traditional cartography. While Euclidean cartography assigns the same importance to all places, geopolitical cartography does not, as is natural in a geopolitical analysis, where certain places are more strategic than others. This was demonstrated by Pascal Gauchon and Jean-Marc Huissoud, who dedicated their work to the places considered the most significant for global Geopolitics (Gauchon and Huissoud, 2008). In the work they identified four categories of places or regions according to their importance in global political life: places from which power is diffused, such as New York, an expression of US power and seat of the United Nations, or Brussels, which houses the institutions of the EU; spaces which organise power, i.e. areas which tend to be monopolised by a single political actor; places whose control bestows power, tied to concepts such as strategic interface or control, such as the Strait of Malacca or the Suez Canal; and finally, regions in which powers face each other, such as the Middle East or Afghanistan. So, geopolitical cartography visually translated precisely this discrimination between places based on their geopolitical importance thanks to a systematic selection of locations or regions to appear on the map.

With geopolitical maps cartography returned to resembling the pre-modern type, which privileged expressiveness over representative correctness. As theorised by Adalberto Vallega this element is the true distinction between traditional geodetic maps and others (Vallega, 2004), including geopolitical maps.

To summarise, from the point of view of graphical solutions adopted, the geopolitical map develops a communicative mode which is less specialist and less formalised compared to the traditional map, which renders it more accessible and expressive. Among its characteristic features:

- Essential, clear and synthetic graphic style which allows it to reach the widest audience possible;
- Stylistic of geographical forms, transforming the geographical *topos* into conceptual topos: the Balkans or the Middle East lose the meaning of geographical reality (material, real) and assume that of geopolitical realities (immaterial, abstract);
- Presence of dynamic symbols, which refers this comparison of traditional political maps

and geopolitical maps to a distant *querelle* – on which we shall not dwell - on the presumed dynamic nature of Geopolitics as opposed to the static nature of Political Geography;

- Presence of less abstract symbols, more similar to the represented object that becomes identifiable with greater immediacy;
- Presence of explicitly arbitrary and subjective textual elements (such as the title, toponyms or others), as opposed to the hypocritical nature of the traditional map which, despite promoting and conveying a biased message, dissimulates its own partiality; geopolitical maps are not limited to describing but *openly* tend to convey a specific vision of the represented phenomenon;
- Very specific and finalised thematic focus

On the whole, the operation of simplifying territorial reality, inevitable for any map, appears more targeted towards satisfying the functions of the same map, i.e. the interpretation of factors and protagonists of the political scene. To give an example, while the traditional map uses a standardised codification which imposes prefixed information for every object, inevitably moving towards a loss of representative capacity, geopolitical cartography allows more freedom for the cartographer and therefore allows a greater depth of meaning ('Je réclame la liberté de choix des signes'; Brunet, 1993: p.118).

The aforementioned differences should not obscure some clear common elements both to geopolitical maps and traditional maps, such as the autonomy of language with respect to a written text and the adoption of a symbolic communicative code. Other analogies, equally obvious, regard the inner nature of each representation: both categories have a persuasive function, such as leading the user towards sharing the communicated content; both utilise a basically monosomic symbolism and therefore tend to reason in categories, creating an order, highlighting regularity and spatial structures. Both ultimately are affected by historical contingencies, and therefore the cultural climate in which they are produced, reflecting the prevailing thought with its conceptual lines and intellectual horizons.

ii. Substantial distinctions: the effects on the content of the message provided to the reader

The presence of some common elements must not, however, hide the profound differences which exist between traditional and geopolitical maps. We briefly summarise the main points here:

- a. The traditional map - created to depict the Earth's surface and therefore originally crafted to transfer physical, visible and material objects onto the map - enters a crisis when it is asked to visualise cultural (such as identity), ideological (such as values) or conceptual (such as centrality) objects, i.e. invisible entities equipped with a liquid spatiality. For the purpose of their representation the geopolitical map is much more suitable since it is not meant to describe a material reality but rather to depict the spatial outcome of a geopolitical analysis (outcome is to be understood *a là Raffestin*, that is as a product of political-territorial practices; Raffestin, 1980). The basic juxtaposition is therefore between the natural aesthetics of the rationalist map, aimed at informing on an objectively considered reality, and the artificial aesthetics of the geopolitical map, which seeks to transmit sensations on an interpreted reality.
- b. In the traditional political map a rational system of signs dominates, where symbols prevail, in order to impose upon the reader a predefined code which refers to strictly predetermined meanings. Conversely in the geopolitical map there is a preference for icons, which refer to variable meanings in cultural relationships. In the interpretation of the sign the reader is more free, and has more degrees of freedom. Not only: in the geopolitical map the sign is concentrated on grasping and semantically interpreting the concept which it intends to express. The collective of signs creates a conceptual field, a network which syntagmatically connects all the traceable signs in the structure and produces a coherent meaning. Hence geopolitical maps, differently from traditional maps, conceive the complete integrity of the field of action, i.e. an organic interconnection both regarding space - for which what happens in a place has repercussion across the whole area - and regarding time - for which the events of the past are reflected in the present and also condition the future. It is quite the opposite of the classic 'here and now' which had for centuries dominated the relationships of man with time and space in maps.
- c. From what has been stated in the previous point, it emerges that in geopolitical maps the territory is understood as a reality of two dimensions (space and time), while the traditional map is limited to only taking the spatial dimension into consideration; therefore, the latter can only produce a fixed image of the territory, where geopolitical maps allow us to instead capture motion, and dynamics. The only faint idea of movement present in the traditional map is given by certain evocative symbols, such as those of the railway and of the road. But the geopolitical map goes beyond, shifting the focus from objects to subjects, applying movement towards abstraction, as a concept (for example, a sphere of influence or lines of force and political pressure) or a simple intentional act (for

example, penetration trajectories). We could say that the geopolitical map consists of two superimposed images: the fixed image given by geographical-physical reality and the mobile image given by the dynamism of the geopolitical actors. The result that arrives at the viewer is a combination which calls both for its baggage of conventional knowledge (common notions on the physical-geographical realities) and its own individual perceptions (at what speed does the flow represented by the arrow move? What exactly is that arrow a metaphor for? Goods, ideas, political powers or something else?). It is clear that while traditional political maps do not take into account the physiological and cultural aspects of the reader, geopolitical maps do call them to participate, soliciting the imagination.

- d. Traditional political maps tend to depict what exists, a mirror of a dominant vision. Geopolitical maps foreshadow the imminent, future evolution, assuming a potentially alternative nature, which is non-conformist and of counter-representation.
- e. The geopolitical map hierarchises territories not according to their position in the scale of state administration but according to their political relevance; and by doing so, it avoids equating, as a traditional map does, subjects of differing importance (for example, Chechnya is not, on the level of political analysis, *any* region of Russia, and Chiapas is not *any* region of Mexico).

We can say that for its formal solutions and the communicative mechanisms it puts into practice, a geopolitical map is not dissimilar to a mind map. The Buzan brothers, in their famous proposal on mind mapping techniques claim that a map more effectively performs its role as much as the visual component is rich and stimulating (Buzan and Buzan, 1993). One can utilise various graphical device, such as arrows, geometric figures, images and colours. In the understanding of information, this type of graphical representation can bring many advantages:

- 1. The central principal idea is shown with immediate clarity;
- 2. The importance of each concept is indicated with precision and the most significant ideas are closer to the centre while those which are less important are further away;
- 3. The arrangement of ideas allows one to affect and represent processes of generalisation and particularisation;
- 4. The link between concepts is easily recognisable;
- 5. the open nature of the structure allows the mind to recognise new connections, to add them easily and to proceed more rapidly toward processes of revision and refinement
- 6. the pleasant look of the map favours memorisation.

In conclusion, the analysis conducted in this chapter has thrown light on a historical period which is particularly rich in innovations in terms of spatial representations: the beginning of the 20th century. In the following we will use this discussion to attempt to understand if the beginning of the 21st century also presents new characteristics of innovation and overcoming the consolidated visual paradigm. The comparison seems plausible because today demonstrates the same elements which induced the changes in the previous period, which fundamentally happened for two reasons: the introduction of new technological devices and the contact of the map with other forms of visibility.

For the first point, we will ask ourselves if the role assumed by photography and cinema in cartographic innovation can be compared to that performed today by the internet, which has already led to the advent of significant innovations such as the creation of applicative web-GIS and participatory maps. As to the second aspect, we will pose the question of whether the current historical phase presents analogies with the past one, when contact with other visual languages enriched and redefined the epistemological framework of cartography.

5. The rebirth of Geopolitics and its maps

After World War Two, the geopolitical balance of power crystallised around the globally scaled conflict between the United States and the Soviet Union. With the exception of few contended (Korea) or non-aligned states (Yugoslavia, India and a few others), the world was clearly divided in two, and remained so for almost fifty years. Political conduct was, thus, relatively predictable, requiring few explanations, and complex dynamism was no longer a characteristic of the international political scene. This reason, coupled with the complicity of earlier geopoliticians with the Nazi regime, rendered geopolitical maps thoroughly dispensable. The map could revert to being static: one bloc here, the other there, marked simplistically by different colours (figure 5.1).

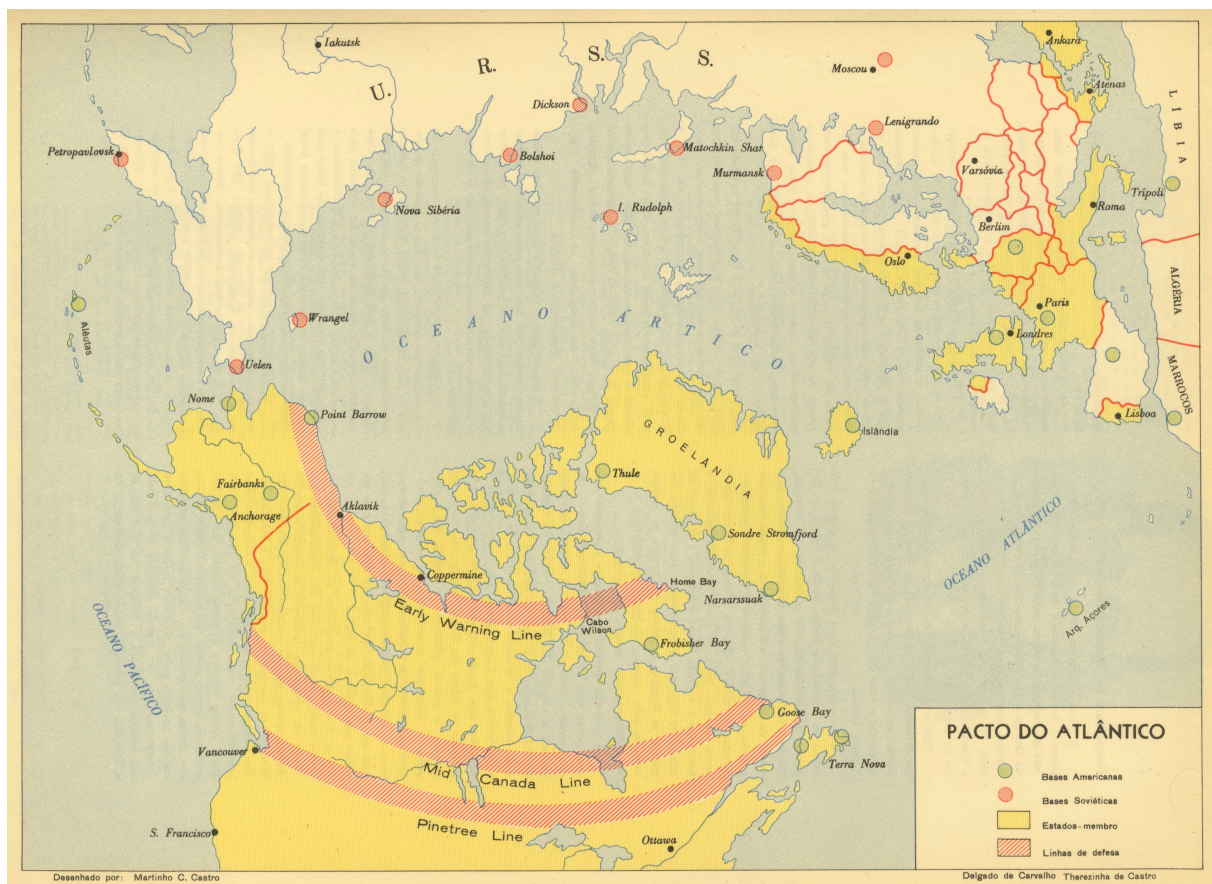


Figure 5.1. Pacto do Atlântico, in Delgado de Carvalho and Therezinha de Castro, Atlas de Relações Internacionais, Instituto Brasileiro de Geografia e Estatística. Conselho Nacional de Geografia, Rio de Janeiro, 1960, p.127

In short, the simplification of the international equilibria, together with the repudiation of Geopolitics which also involved its cartography as described in chapter 4, provoked the exclusive monopoly of traditional maps in the political representation of the world, with all of their explanatory limits which have also been described in previous chapters. For example, it is evident that during the Cold War the fundamental political fracture was between two blocs and that each state, with rare exceptions, was part of a bloc headed by one of the two superpowers. In this situation the lines of state-separation were of little significance: the border between the United States and Canada did not have the same real meaning as that between South Korea and North Korea. Yet the traditional political map of the world which divides it into as many areas as there are states, as if they were pieces of a jigsaw puzzle, represents all borders with the same symbol and therefore communicates to the reader the message that they are all equal.

The harmful consequences of this world vision for discrete and state spaces have been widely revealed today by a wealth of literature, above all of a critical mould, which has shown how modern cartography has not favoured the understanding of the spatiality of the world but has instead carried out a fundamental role in the process of constructing national identities (Strandsbjerg, 2010; Branch, 2014). However, this monopoly of the cartographic model of modernity focused on territorial states today appears to be in the grip of an irreversible crisis induced by the necessity to interpret a new historical period: one symbolically inaugurated on the 9th November 1989 with the fall of the Berlin Wall, a symbol of the ideological opposition of the Cold War. From that moment it changed suddenly, together with the international political situation, along with the history of its cartographical representations.

Within months came the collapse of the bloc of socialist countries, which had been able to challenge and contend with the West for global leadership. An era definitively closed and a new one began which was full of unknowns. The speed with which events happened took international analysts by surprise, who nevertheless felt the need to interpret the new phase of identifying the spatial paradigm underlying international relations. Interpretations of the processes of reconfiguration of regional areas and new relationships between global and regional dynamics followed each other, and with them new attempts to produce cartographic representations useful for understanding and presenting those interpretations.

The necessity to conduct a review of the international political situation called Geopolitics into question, which returned to arouse interest among both experts and the general public: an interest which manifested itself both in renewed editorial production and in the effort to adapt concepts and theories which had hitherto been employed. A need for renewal produced by the

twofold task which has always animated Geopolitics, an ambivalent discipline which has always been adopted both as a theory and as practices: the former solicited the need to interpret a new historical phase; the practices compelled it to drive it.

Since then, we have been living in a world in which, despite the proliferation both of means of communication and of sources of information, interpretation - in terms of interactions between phenomena and between different regions of the world - has become extremely complex. The map constitutes a synthetic and extraordinarily efficient tool of expression, immediate and easily understood. At the same time, technological progress has rendered the drawing of maps quick and easy. However, as the certitudes of the Cold War era waned, culminating in the rapid fall of the Soviet Union, the cartographic representation of the factors of power in international politics could no longer rely on the rudimentary static model of traditional cartography.

Nowadays, the need for dynamic representations of events is as present as ever. This is a world in which the acceleration of historical events quickly changes the international political scene, and where political, economic, social and cultural phenomena rapidly change course. Thus, and all the more so in today's world, it is essential that cartography be capable of adapting in order to answer to these needs. The static images of traditional scientific maps may benefit if accompanied by a representation able to express the dynamism of today's world.

Moreover, the interests of politics scholars, which increasingly transcend the merely territorial dimension to observe the abstract spatiality of phenomena, have failed to find satisfaction in classic cartography, since this favours the visible plane, insisting on the material features of geographical elements, be they natural or man-made, therefore surrendering itself as a precious instrument for the study of the dynamics of power.

Thinking about the difficulties of the traditional map in telling us about the politics of our times, these observations on the aversion of the map towards the representation of non-material elements become all the more serious if one thinks of the tendency of contemporary social phenomena to 'de-spatialise' themselves, i.e. to lose recognisable connotations within a space (thinking for example of the geopolitical role played today by communications and media). The predominantly reticular characteristic of the new political space of our times means that authority, influence and control are spread across territory and centres, from which such properties emerge as strongly interrelated. Power, therefore, is no longer precisely localised but is born by the relationship: more specifically, from the system of relationships which structure space and give consistency to political subjects. Thus, no longer merely the

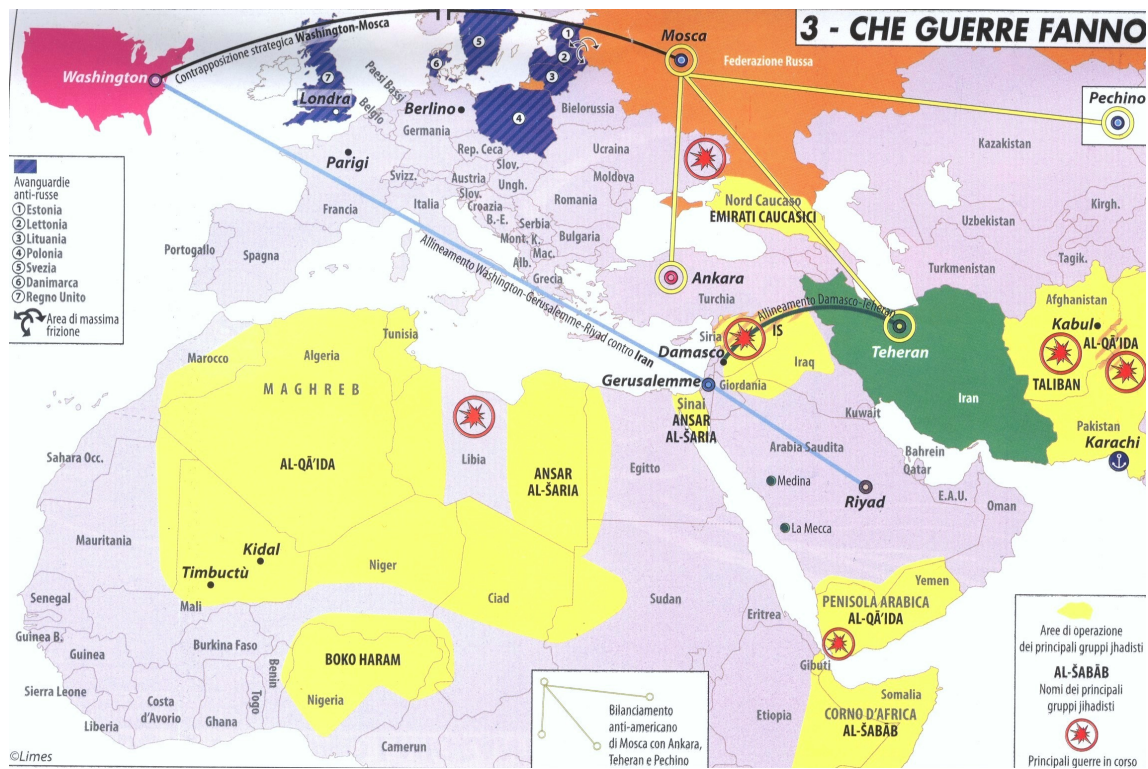
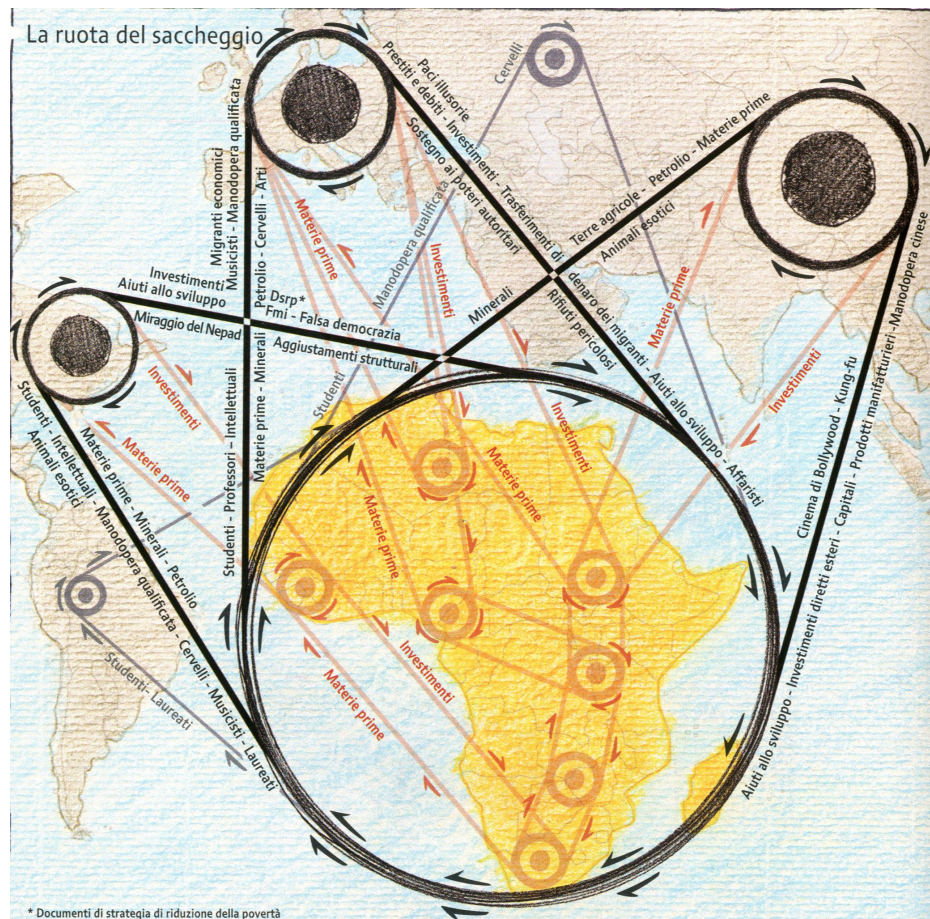
seats of power, but also the networks of power become fundamental objects for understanding political space. Due to the profound transformations which have occurred in the international system, and the aforementioned limits of traditional cartography it becomes ever more difficult to represent the political dimension of society according to the classic political map.

In addition, the sensation that traditional cartography is the only scientifically legitimate and trustworthy cartography produces two fundamental consequences: 1) it naturalises the assumptions upon which it is founded and the results which are obtained, rendering them as given in nature; 2) it conceals the ideological matrix when produces them, rendering it invisible. Therefore, traditional cartography, with its regular and immutable geometric structure on a rationalist basis, leads to a 'tidy' reading of the reality, preparing the reader to obtain harmonic meanings of an overall balance (see paragraphs 1.c and 1.d for a discussion of this aspect).

One must then recognise that a clear gap exists between what traditional cartography has for years acknowledged as its objective - i.e. the description of territory - and how much every spatial representation inevitably conveys, i.e. a specific idea of the territory. We must therefore 'abandon the idea that the map constructed within the Euclidean space is the unsurpassable horizon of geographical representation' (VillEurope, 2002: p.302).

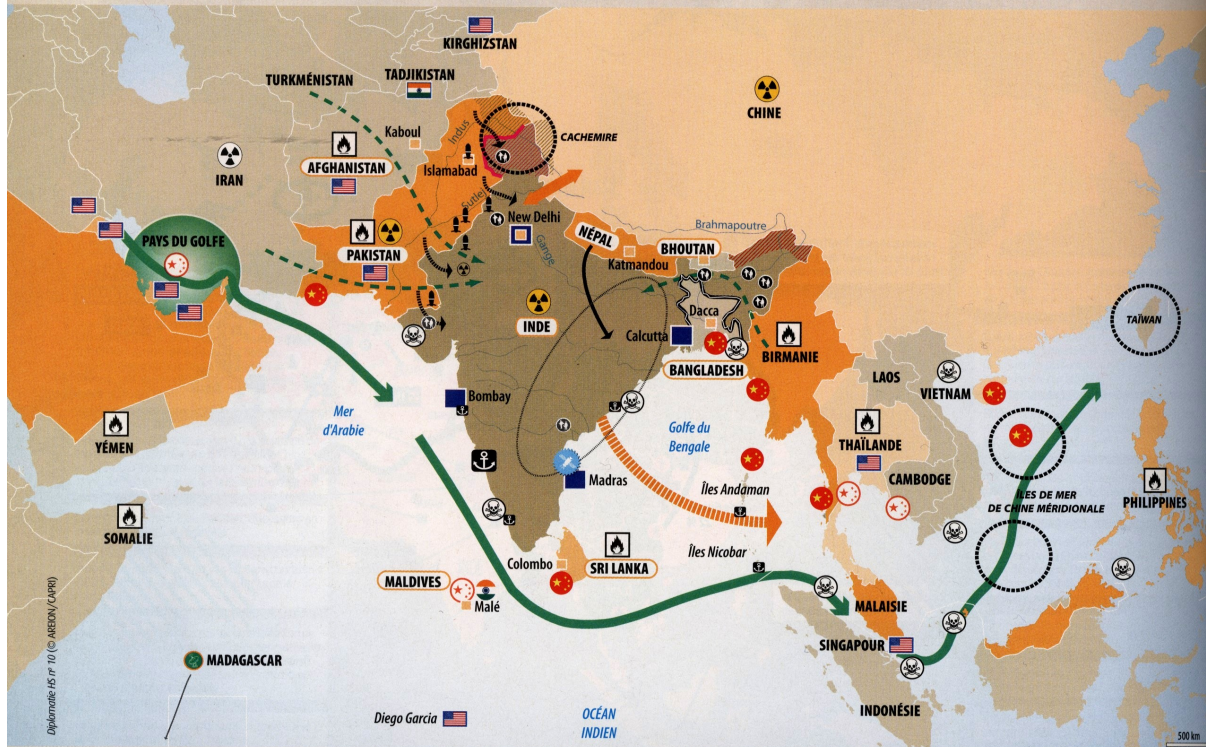
Would it be possible – and we mean no provocation – to salvage something from the experience described in chapter 4 concerning the tradition of geopolitical maps? Or else do we, the political scientists of today – without admitting it and perhaps even without noticing it ourselves – already owe something to that experience? Are our cartographic representations influenced by that model in some way?

We attempt to respond to these questions in an empirical manner, presenting three recent and innovative examples of geopolitical cartography which try to valorise the two aspects of political spatiality which traditional cartography has sacrificed: dynamism and reticularity (figures 5.2, 5.3 and 5.4).



LE MONDE VU PAR LES DIPLOMATES

L'ENVIRONNEMENT GÉOSTRATÉGIQUE DE L'INDE



ENJEUX ÉCONOMIQUES DE L'INDE DANS SON VOISINAGE

Politique économique de voisinage

- Look East Policy : politique de regard vers l'Est, entamée en 1992
- Renforcement des relations bilatérales entre l'Inde et la Chine
- Pays membre de l'Association Sud-Asiatique pour la Coopération Régionale (SAARC)
- Capitale des pays membres de la SAARC

Cœur stratégique de l'économie indienne

- Pôle de croissance moteur de l'économie indienne
- Centre spatial de lancement indien

Enjeux de l'approvisionnement énergétique

- Route asiatique du pétrole
- Projet de gazoduc vers l'Inde
- Principale origine du pétrole importé par l'Inde (66 %)

Le poids de la population indienne et de sa diaspora (en nombre d'individus)

- Inde : 1,166 milliard d'habitants
- Plus de 1 million
- De 250 000 à 1 million
- De 50 000 à 250 000
- Moins de 50 000

UNE ZONE STRATÉGIQUE EN PROIE AUX TROUBLES ET CONFLITS

De nombreux troubles internes

- Présence d'un mouvement insurrectionnel et sécessionniste
- États de l'Union indienne devant faire face à de graves troubles internes
- Corridor rouge : zone touchée par la guérilla d'extrême gauche maoïste

Une zone en proie aux instabilités

- Zone régionale sous tension, pouvant aboutir à un conflit d'échelle régionale ou mondiale
- Pays faisant face à un conflit armé ou à de graves troubles intérieurs
- Principales zones d'actes de piraterie

Un carrefour nucléaire

- Pays disposant de l'arme nucléaire
- Pays suspecté de rechercher l'arme nucléaire

Les influences de l'extérieur

- Soutien à la guérilla d'extrême gauche maoïste
- Influence et soutien auprès des activistes islamistes

De nombreux litiges frontaliers

- Territoire revendiqué par l'Inde
- Territoire revendiqué par le Pakistan
- Territoire revendiqué par la Chine
- Barrière de 4 000 km construite par l'Inde le long de sa frontière avec le Bangladesh pour enrayer l'immigration illégale, les trafics d'armes et de drogues et couper les mouvements indépendantistes indiens de leurs camps bangladais
- Barrière électrifiée installée sur la ligne de contrôle de l'ONU de 1949
- Missiles balistiques indiens et pakistanais présents le long de la frontière

Une zone stratégique convoitée par les grandes puissances

- Pays accueillant sur son territoire une ou plusieurs bases militaires américaines ou offrant des facilités à l'armée américaine
- Poste avancé chinois faisant partie du « collier de perles chinois »
- Poste avancé chinois en projet
- Pays accueillant une base militaire indienne
- Base militaire indienne en projet
- Station d'écoute indienne dans l'océan Indien
- Base navale indienne de Karwar, plus grande base maritime d'Asie
- Autres bases navales indiennes existantes ou en cours de construction
- Site d'essais nucléaires indiens

Sources : ONU ; EIA ; ICC International Maritime Bureau ; IIS ; SAARC ; HIK ; High Level Committee on Indian Diaspora ; Philippe Cadène, *Atlas de l'Inde*, Autrement, Paris, 2008 ; Pierre Gentelle, *Géopolitique du monde contemporain*, Nathan, Paris, 2008 ; Vincent Thébaud, *Géopolitique de l'Asie*, Nathan, Paris, 2006 ; AFP ; RFI ; Austin University
Réalisation : CAPRI (actualisation de la carte publiée dans *Diplomatique* n° 37)

Figure 5.4. L'environnement géostratégique de l'Inde,
in *Diplomatique. Atlas Géostratégique 2010*, Hors-série 10, p.58

We can say that the new focus on dynamism and reticularity represents a resurgence of traditional geopolitical cartography, which is now judged with less and less suspicion because recent studies have been liberated from the ideological bias which for years has conditioned them.

Despite this particular form of thematic cartography being frequently realised in non-academic fields and being not oriented toward a specialised audience, I believe that scholars should pay more attention to it, not only because it is innovative in its language and because the public clearly appreciates it, but also for other reasons. First of all, it deserves attention because it represents one of the primary informative sources for the public on matters of international politics. I could give as examples the Kurdish question, or Darfur, Somalia or Kashmir. These are local crises which are well described by the media through maps, which reveal themselves as clear instruments, and in these cases essential for communicating with the general public.

Of course, geopolitical maps are the result of personal interpretation by the author. On this matter a highly delicate aspect comes into play, regarding the more or less conformist characteristic of this new geopolitical cartography. My opinion is that it contains within itself a potential for 'counter-power' which warrants further study. Unlike traditional political maps, which tend to depict what exists and reflect a dominant view, geopolitical maps foreshadow the impending, future trends, assuming a potentially alternative and nonconformist nature, of counter-representation. Anglo-Saxon literature speaks of 'resistance maps' and 'resistance mapping' (Dorling, 1998) to indicate cartographic practices and plans for themes and purposes which are alternative to the official line. Even the expression 'counter-mapping' assumes the same antagonistic value in the face of official cartography, but in general it is used to indicate projects of identity and local environmental promotion which employ cartographic practices that are specifically adapted to those needs, and therefore opposed to traditional practices imposed externally. In general there is a context of scholars of radical guidelines explicitly linked to the system by contested positions, and who are often active in social movements which are developing harsh criticism towards traditional cartography, and are experimenting with alternative cartographic practices (Crampton and Krygier, 2005; Herb G.H., Häkli J., Corson M., Yellow N., Cobarrubias S. and Casas-Cortes M., 2009). But I do not intend here to dwell on the production of these environments of 'activist cartography', but rather to develop some general reflections on politically focused cartography, which has been spreading in a popular form in recent years, yet does not wed itself to the extremism of activists as it is neither conditioned by ideological prejudices (for

example against the capitalist system or the right of property), nor does it question the basis of the existing system of international relations (the role of states, the function of borders etc.).

I refer above all to widely disseminated magazines, dedicated to international politics but not exclusively addressed to specialists. For example the Italian magazine *Limes* or the French *Carto*. I am of the opinion that their position, even if less radical (or perhaps because it is less radical) contains a strong potential criticism of the established order. These maps, when considering future scenarios, can produce a highly critical action against power, as they imagine situations and alternative hierarchies, and they are highly effective because they do not contest the system on the basis of ideological prejudice, which would risk triggering an instinctive backlash in the reader.

While the dearth of political symbols in traditional maps (essentially borders and distinctive colours for each state) drives them to replicate the order and political/institutional structure of the world, the symbolic richness of geopolitically themed maps, on the other hand, almost naturally drives them to demonstrate what is behind that order, and implicitly to question it. For example, when one openly shows the interests which revolve around oil (through symbols which indicate the oil fields and their transport infrastructure), it invites the reader to reflect on the motives which hide behind the diplomatic manoeuvres and acts of war (figure 5.5).

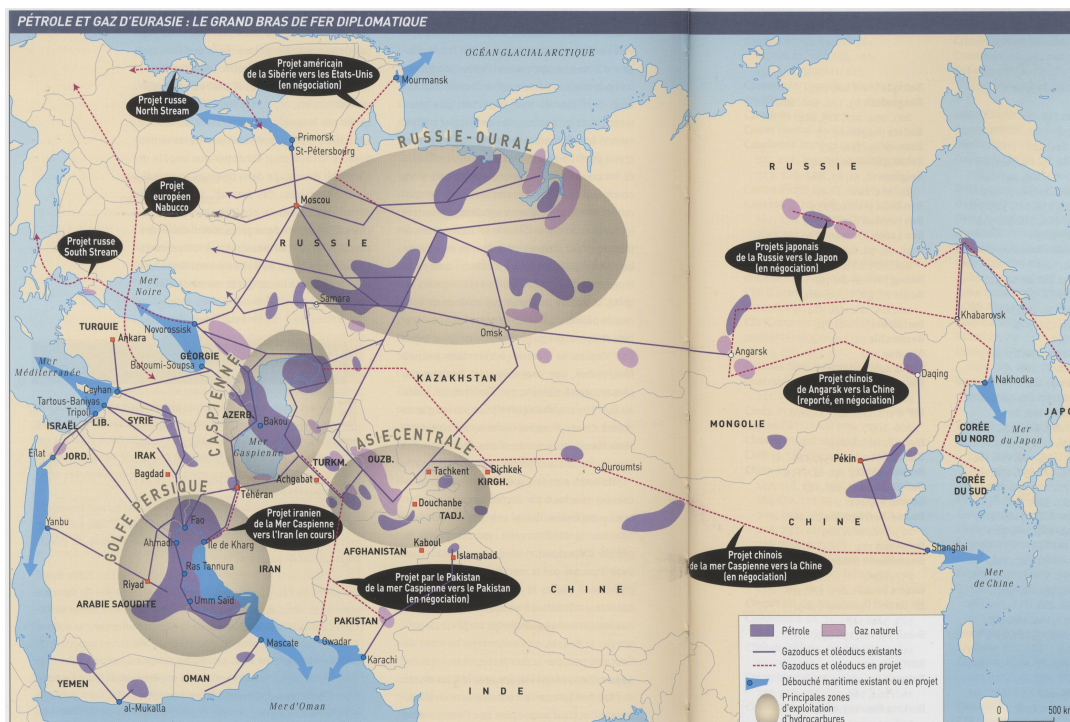


Figure 5.5. Pétrole et gaz d'Eurasie. Le grand bras de fer diplomatique, in Yves Lacoste, *Géopolitique. La longue histoire d'aujourd'hui*, Paris, Larousse, 2009, pp.330-331

Conclusion. Towards a new revolution in space perception and representation

The research question behind this work asked itself whether the ongoing transformations of political space, deriving from the current phase of unrest within the system of international relations, involved a challenge to the canonical model of cartographic representation of international politics, and if so what would be the new guidelines.

In drawing the concluding reflections of my research, I started from the point of detecting the principal aspects of the transformations of the international system which involves spatiality, and these can be briefly summarised as:

- a) the complexification of the framework, with the juxtaposition of subjects traditionally recognised as unique holders of political initiative, i.e. states, with a plurality of actors bestowed with their specific spatial organization and networks (international organisms such as the United Nations, the European Union, the World Trade Organisation and the G20; transnational entities such as multinational corporations, religions and non-governmental organisations; organs of state apparatus such as Regions, Municipalities and Provinces; private subjects such as large industrial and banking enterprises);
- b) the weakening (which does not however mean disappearance) of the constraints of physical geography in the determination of the geopolitical situation due to relentless technological progress since the 20th century in military and communications fields;
- c) the transformation of the nature of power, today no longer directly linked to the possession of a vast territory nor necessary material resources, with the consequent revision and extension of the possible flashpoints of conflict, even including space;
- d) the increasingly clear perception of our planet as a single, large and unified space by global phenomena, such as terrorism and environmental issues.

All of this has not failed to have effects on the redefinition of political space. The clearest example is given by the configuration of a supranational political space into two levels: the transnational and international level. The former is that of economic, financial, religious and cultural relationships which spontaneously transcend state borders and manifest themselves on a space only weakly related to states. The second, on the other hand, is precisely centred

on states and refers to relationships that they entertain on the basis of sovereignty which have a defined territory. It is clear that these two spatial dimensions develop different and opposing logics: a network structure for transnational space; and a juxtaposition of sovereign territories for international space, which considers the border as the most significant geographical feature.

The study of supranational political space refers to both of these two spatial dimensions, but - and here we begin to introduce the cartographical consequences of reasoning - their representation in maps has seen the prevalence of international space over transnational. Today, the relative weakening of the former in favour of the latter requires an effort of reflection on the mode of representation of transnational space and on its nature.

After having highlighted the spatial transformations to which the system of international relations went up against, I had to verify whether a substantial change in the consideration of space as a useful category for understanding the world was in place among scholars. This is because any such changes in the scientific mode of representation pre-emptively require a reconsideration, on the part of scholars, of the logics and hermeneutic categories useful for the analysis. The evaluation of this issue, conducted for certain specific fields of study in chapter 2, has led to confirmation that a comprehensive reassessment of spatiality in social sciences is indeed underway. Examples would be the successes of expressions like *global history* or *spatial turn*, the result of a new awareness of the inseparability of the space-time pairing in human experience.

To give direct examples, historical research, which in the past had the tendency to 'deproblemise' space, treating it in purely empirical terms, now tends to clearly favour a spatially integrated vision whose fundamental element is the relationship which clearly takes place within a space. It is a new approach which understands the highly modern foundation of the social dimension of space, i.e. the idea that space is the product of historical processes and social practices.

The re-evaluation of space is widely present in the new research perspective that assumes designations such as 'transnational history', 'world history' or 'global history' (Conrad, 2013). Some of its tendencies were already visible in postcolonial studies, which had definitely overcome narrow Eurocentric perspectives to embrace viewpoints which valued transnational approaches. The reconstruction of history from a spatial viewpoint is therefore a well established research perspective now, and as said, allows one to believe that it is not

merely a passing fashion, but rather that spatiality truly offers new heuristic and hermeneutic instruments which have now permanently entered the toolbox of historical studies.

If one then passes from the geographical theatres of historical events to the immaterial spaces where power is exercised, one notes that even here the link between space and politics is by now firmly back in fashion among various traditions, from the philosophy of law and politics to international law and the history of political thought. These disciplines are devoted to the study of the forms of political organisations and the relative legal frameworks. In the past they had not seemed particularly interested in the spatial dimension, and indeed had preferred to conceal the link between socio-political organisation and territory. There was, therefore, a passive meaning of space in these disciplines because it would be politics which arranged and ordered space, producing and structuring it, while today we notice a renewed interest in new forms and new ways through which space induces political behaviours and norms. As an example of these new forms I mention the role of spatiality in establishing identities, demonstrating its active role on the political scene.

Faced with these profound epistemological transformations we can affirm that the political dimension of geography no longer resides purely within the arena of political action (military, the governance of territory, exploitation of resources etc.), but also in the capacity to build specific imagery, documenting and representing territory, i.e. the building of a reality which gives order to things and, by doing so, implicitly attributes hierarchies to political subjects. In this context, cartography stands out as the most powerful instrument of geographical knowledge inasmuch as the visual representation demonstrates this imagery and this order with absolute immediacy, thanks to its performative power, as outlined in paragraph 1.b.

As described in chapter 3, this recent space-time reassessment has deeply involved map studies. Cartography in general, and political cartography in particular, are now the subject of profound epistemological reconsideration on the part of postmodern critics, and this debate is surely open to all who study political phenomena, regardless of their specific disciplines.

After having analysed the new spatialities taken on by the international system and ascertained the renewed interest of the social sciences regarding the spatial factor, I was finally able to approach the final question, which asked if the transformations in progress would produce a debate of the canonical model of cartographic representation of international politics.

In this regard it is easy to note the ongoing sunset of the dominant cartographic model, induced by: 1) disputes and repeated criticisms by the academic world of the traditional positivist and state-centric vision of official cartography; 2) the diversification of cartographic production by players outside the traditional professional fields. Crampton and Krygier, among the most attentive observers of contemporary cartographic panorama, come to the conclusion that “cartography has been slipping from the control of the powerful elites that have exercised dominance over it for several hundred years” (Crampton and Krygier, 2005: p.12).

In the past, the presence of a precise official centre of mapping (the State) led to a singular legitimate interpretation of territory, which claimed to be the only ‘true’ image; in that mono-centric vision a ‘reductionist’ vision of territorial complexity prevailed, which limited the interpretation to that which was considered official. Today, instead, lacking a control over production by a unique authoritative centre, designated as the sole source qualified in the act of interpretation and reproduction, any ‘cartographic agent’ (from the private institute to the individual) gives rise to a variety of reproductions.

Consequently, the status of the map has changed: from a tool for a few to a common object able to take part in the public debate. This change has extended its uses and challenged its traditional practices. The need to overcome the limitations of the classical map in the absence of a unified theoretical framework, induces stakeholders and researchers from a wide range of disciplines, methodological traditions and schools of thought, to work on the development of alternative modes of representation, based on a heterogeneous and multidimensional perception of space, and on topological metrics (e.g. anamorphic maps).

In addition to scholars and ordinary individuals, other professional groups use maps extensively in their discourse and develop their own ways of mapping politics (e.g. opinion makers, military men, consultants of important institutions, journalists, etc.). Moreover, these professionals play a decisive role in shaping the public’s perceptions of politics.

However, we can speak of promising but not definitive signs. There have indeed been changes in cartographic representations but they have so far not been sufficient to overthrow the primacy of the modern cartographic model, of state and geometric origin. It can be assumed that this persistence depends on the fact that spatial models, both at a psychological level and a concrete realisation level, are deeply rooted in the collective imagination and possess much inertia which impedes their renewal.

The recent innovative productions of geopolitical cartography have indeed expanded but not completely reformed this field of visual production. The attempt to innovate the

constitutive and formal principles of the map represents a highly troublesome operation, impeded by the normative power of cartographic language which makes the innovation difficult, constituting a mental cage from which it is hard to break free (Harley, 2001b). The clear difficulty in emancipating itself from the dominant model shows that the different way of conceiving and conceptualising political space has not yet generated a complete cognitive transformation in the way of representing it.

Still, such phenomena are of considerable interest not only for the reconstruction of the history of cartography and political science, but also as evidence of the inertial power of representations as narrative tools.

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