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Gaberell, Simon; Debarbieux, Bernard

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Simon Gaberell et Bernard Debarbieux

Mapping regions, Framing projects:

A comparative analysis on the role of mapping in the region-building process of two European regions

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Abstract: For the last two decades, publications within the "new regional geography" have given little emphasis to cartography. This paper examines the specific role of mapping, its political stakes and modalities, in the region-building process. It illustrates this with an analysis of mapping and database production in the institutionalization process of two "project regions"—the Alps and Carpathian mountains—and in two related, on-going efforts to promote macro-regional strategies. This paper argues that the production of maps and databases deserves to be seen not only as a technical moment, or simply as one output among others in the region-building process, but rather as a component of the process itself, a component that is especially decisive and complex in that it makes explicit the connection between the territorial and the relational dimensions of region-making. The two cases illustrate that mapping is a significant component of the region-making process for three main reasons: (1) it gives shape to the region, provides arguments for its construction, and therefore is a decisive cognitive and rhetorical tool for territorialization; (2) it contributes to the shaping of relational arrangements for the corresponding region; (3) its contribution is important at all different stages in the region-making process - conceptualization, creation, and consolidation - through various modalities.

Keywords: Mapping, Region-making, Framing, Regional environmental governance, Alps, Carpathians

1. Introduction

In 1991, eight states and the European Union signed the Alpine Convention (AC), an international treaty aiming at promoting common policies on environmental protection and sustainable development. In the 20 years since, the production of maps at the scale of the AC territory has been intensive, but poorly coordinated, and the main organizations responsible for administering the Convention are still determining what kind of spatial monitoring system they should establish. In 2011, on its 20th anniversary, the AC came under strong criticism for its mode of governance and, according to many, limited tangible results (Price et al., 2011). Since then, several actors involved to varying degrees in AC activities have been working on competing scenarios for an Alpine macro-regional strategy in the European Union Regional Policy framework. So far, these stakeholders have been cautious in outlining, on maps, the extent and the content of their respective projects.

A parallel endeavor, the Carpathian Convention (CC) was signed by seven states of Central

and Eastern Europe in 2003. Ten years later, the various stakeholders have at their disposal a wide and very organized set of maps, atlases and electronic databases, displaying the Carpathian region in many different ways. Meanwhile, the main organization responsible for the Secretariat of the CC has been promoting a macro-regional strategy for a wider area, the 'Carpathian Space', strongly relying on complementary work in cartography and the production of databases.

The Alps and the Carpathians are the subjects of similar regional projects, international conventions and macro-regional strategies, but mapping issues have been raised in very different ways in their respective region-making processes. This paper addresses the role of mapping in these regional projects, highlighting issues and some of the reasons for such differences. It argues that the production of maps and databases deserves to be seen not only as a technical moment, or simply as one output among others in the region-making process, but rather as a component of the process itself, a component that is especially decisive and complex in that it makes explicit the connection between the territorial and the relational dimensions of region-making. The two cases illustrate that mapping is a significant component of the region-making process for three main reasons: (1) it gives shape to the region, provides arguments for its construction, and therefore is a decisive cognitive and rhetorical tool for territorialization; (2) it contributes to the shaping of relational arrangements for the corresponding region; (3) its contribution is important at all different stages in the region-making process - conceptualization, creation, and consolidation - through various modalities.

The second section of this paper analyzes the relative under-theorizing of cartography in academic papers and debates in the field of new regional geography, despite a profound renewal of interest in maps and mapping in other fields of geography. The third section proposes a conceptual framework for analyzing the modalities of mapping in the region-making process. The fourth and fifth sections illustrate the role of maps in the construction and consolidation of two regional projects, the Alps and the Carpathians. The paper concludes pointing to the mutual influence of mapping and the institutional framing of project regions. As a whole, the analysis advocates greater attention to the role of mapping in the region-making process.

2. Relational and territorial approaches to region-making

Since the mid 1980s, and owing to the academic project of the so-called "new regional geography" (Gilbert, 1988), regions have widely come to be analyzed as socially and politically constructed entities. Such a constructivist epistemology was advanced in an influential paper by Anssi Paasi, who proposed focusing academic attention on "the institutionalization of regions", this being understood as "a socio-spatial process during which some territorial unit emerges as part of the spatial structure of a society and becomes established and clearly identified in different spheres of social action and social consciousness" (Paasi, 1986, p.83). Subsequently, many authors, including Paasi himself (1991, 2009), refined this way of seeing region-making processes (Gilbert, 1988; Pudup, 1988; Sayer, 1989; among many others).

Building on this constructivist approach to the concept of region, several authors later argued

that globalization and the rise of a world of transnational flows and networks challenged the territorial conceptualization of regions seen as spatially fix and bounded units (Allen et al., 1998; Allen and Cochrane, 2007; Amin, 2004; Massey, 2005). For these authors, new regional configurations are constituted by a variety of dynamic networked relationships and "through the spatiality of flow, juxtaposition, porosity, and relational connectivity" (Amin, 2004, p.34). From this perspective, regions should therefore be understood as "a series of open, discontinuous spaces constituted by the social relationships which stretch across them in a variety of ways" (Allen et al., 1998, p.5).

Understanding regions relationally offered a new reading of regional configurations, where nested, bounded territorial formations were replaced by a dynamic patchwork of softer spatial arrangements, often overlapping, sometimes competing with one another. In this new configuration, regional governance "works through a looser, more negotiable, set of political arrangements that take their shape from the networks of relations that stretch across and beyond given regional boundaries" (Allen and Cochrane, 2007, p.1163). Adopting such a relational perspective emphasized thus, that 'regional actors' are not always based in the given regions, but are rather meeting in a variety of places, pursuing different spatial strategies and "operating in a looser, less centered system, mobilizing through networks rather than through conventional hierarchical arrangements" (Allen and Cochrane, 2007, p.1166).

However, these relational theorists have been criticized for their supposed neglect of the territorial perspective. They have been said to "seriously overstate their case" (Jones, 2009, p.493). Critics from the so-called "realist relationists" (Jones, 2009, p.496) have mainly underlined the persisting relevance of the territorial dimension of socio-spatial processes and have argued that the "radicals' view tends to ignore actual regional differences/particularities, and how/why these differences/particularities persist" (Varro and Lagendijk, 2012, p.2).

Recent studies have suggested that these criticisms were largely overstated (see, for example, Harrison, 2012; Jessop et al., 2008; MacLeod and Jones, 2007; Painter, 2006; Varro and Lagendijk, 2012) and that the analysis of region-making processes should combine both relational and territorial approaches to space and socio-spatial relations. Conceiving regions in such a way makes possible the joining of relational analyses, which recognize that regions are formed "through a myriad of trans-territorial networks and relational webs of connectivity" (MacLeod and Jones, 2007, p.1185), with territorial analyses, which can shed light on how the contiguity of regional elements is approached or even strengthened through institutions and projects mobilized and implemented within the region itself.

This constructivist way of seeing regions and region-making processes, entailing both relational and territorial approaches, has been especially fruitful for understanding the construction of 'unusual' (Deas and Lord, 2006; Perkmann and Sum, 2002; Zimmerbauer, 2012) or 'ad hoc' (Paasi, 2009) regions; these kinds of entities can be defined as those that respond to a particular problem or need, and facilitate *ad hoc* solutions, before being institutionalized accordingly. Recently, we proposed calling these *project regions*, in order to highlight the fact that, in these cases, the region-making process is driven by a very specific project, distinct from processes leading to constitutional regions (Debarbieux et al., 2013). In fact, the construction of project regions most commonly results from a convergence of

heterogeneous networks of actors, based in different places, and acting according to their respective needs and means: some actors find a place in the organizational and hierarchical settings of states (central governments, sub-national and municipal levels, etc.), whereas others largely transcend these frameworks (e.g. NGOs and to some extent intergovernmental organizations, etc.). Altogether, these stakeholders, connected in various ways, contribute to the shaping of a regional territorial entity for different reasons, while constructing its scalar or horizontal connections with a range of complementary entities.

During the last 50 years, many such project regions arose in Europe, owing to the move toward European integration and, more recently, the EU's wish to promote supranational and transboundary cooperation. Specific tools have been designed for this, such as the INTERREG program, the Water Framework Initiative, and more recently the macro-regional strategies (Dubois et al., 2009). Many of these projects regions have been shaped according to the identification of common issues in environmental governance at the scale of sea catchment areas (e.g. the macro-regional strategy for the Baltic Sea), major watersheds (e.g. the macro-regional strategy for the Danube) or mountain ranges (e.g. the Alpine Space shaped within the INTERREG program). These environmental regions cut across traditional borders and form spatial entities that defy hierarchical neatness and offer new readings of the European territorial landscape.

New forms of institutional arrangements have been set up to manage these entities, for instance international treaties, working communities, and macro-regional partnerships. Moreover, asserting specific expertise on environmental matters, new networks of stakeholders have also joined the traditional institutional players: intergovernmental organizations like the United Nations Environment Programme (UNEP); global NGOs, such as the World Wildlife Fund (WWF); and many others with a more limited geographical focus. These specialized networks of actors have often projected a set of territorial environmental entities at the regional scale, such as WWF's 'ecoregions', through which they shape most of their own projects. Territorial projects in environmental regionalization, which have multiplied in recent decades (Balsiger and VanDeveer, 2010; Balsiger and Debarbieux, 2011), have therefore taken the diversification of actors, perspectives and modes of action into account. They also have required negotiations, entailing different conceptions of the size, nature and position of the region that the stakeholders have wished to promote on various scalar systems (Ciuta, 2008; Gaberell, 2014; Larsen, 2008; Lebel et al., 2005; Sneddon and Fox, 2006; VanDeveer, 2004).

3. The role of mapping in the construction of project regions: a conceptual proposition

Though densely documented, territorial and/or relational analyses of region-making have so far largely overlooked the role of mapping and map-related databases. Indeed, the power of images in the social process of identifying a region was noted early by Paasi (1986) when he analyzed the institutionalization of Finnish sub-state regions. Maps are mentioned in passing by some authors (such as Larsen, 2008; Paasi, 2009; VanDeveer, 2004) as specific tools in the region-building process. For example, VanDeveer argued that "of particular interest are maps and other visual images used by regime participants to illustrate regional environmental

functions, connections, problems, and solutions" (VanDeveer, 2004, p.310); this, however, implicitly limits the role of maps to their capacity to 'illustrate' a project region without being able to act on it. In none of these papers has the role of mapping in the region-making process been put under close scrutiny. Paasi went somewhat further, later, in writing that the institutionalization process of regions requires first "a set of (at times contested) political, economic or cultural discourses [that] are created concerning the possibility of a region. [Then] such ideas are introduced into plans and maps and ultimately regions may become materialized so that they have an effect on the actions of citizens and on broader social practices" (Paasi, 2009, p.134). Finally, though not focusing exclusively on mapping practices, Häkli (2008; 2009) showed that maps could play a decisive role in connecting and building trust between different networks of actors involved in region-making processes by offering a visual representation of the prospective territorial entity and thereby shaping the various discourses around it. These first insights into the cognitive effects of maps, and mapping per se, which were also presented in a more theoretical manner by Painter (2008), did not however lead to a specific analysis of the implications and practical modalities of regional mapping in the region-making process.

This relative absence of interest in mapping within the field of the "new regional geography" is somewhat surprising, since there is a significant literature elsewhere on the role of mapping as a tool for conceiving spatial entities (Farinelli, 2009; Olsson, 1998; Painter, 2008; Pickles, 2004) and in shaping and rhetorically justifying these entities when translated into national or supra-national territories (Anderson, 1991; Foster, 2013; Gregory, 1994; Krishna, 1994; Paasi, 1996) or urban projects (Söderstrom, 1996). Regarding data, the growing influence of datasets, databases and Geographical Information Systems (GIS) in the objectification of scientific entities and spatial processes (Bowker, 2000; Strasser, 2012), on ontological statements related to spatial objects (Leszczynski, 2009) such as ecoregions (Olstad, 2012), and in policy-making, especially in planning (Davoudi, 2006; Dühr and Müller, 2012; Faludi and Waterhout, 2006), has been under scrutiny in various fields of research for several years, but never in regional studies.

Though quite heterogeneous, a common feature of these publications is that they depart from a positivist posture, and they criticize the common (modern) belief in maps and databases as merely capable of describing a reality as it is and to ground objective discourses about it. It has been argued, however, following and deepening the ground-breaking work of Brian Harley (1989), that mapmaking on the contrary should be understood as a set of practices which greatly influence the reality they ostensibly depict. A broader view on the cognitive and socio-political role of maps has led some authors to invoke the concept of mapping for underlining how "acts of visualization, conceptualization, recording, representing, and creating spaces graphically" (Cosgrove, 1999, p. 1) take part in the shaping of knowledge, social arrangements, and, further, geographical reality. As Wood suggests, we should ask "not what the map shows or how does it show something, but what does the map do? What does it accomplish?" (quoted in Pickles, 2004, p.56). Or, following Pickles, a map can be said to be "not a representation of the world, but an inscription that does work in the world" (Pickles, 2004, p.67). Therefore, maps should be seen as performative mediators, in the sense that they "transform, translate, distort and modify the meaning or the elements they are supposed to carry" (Latour, 2005, p.39), and mapping as an active way of shaping reality, in so much as

they are key elements within broader practices leading to the production of new spatial entities. The focus on practices which forms part of our understanding of cartography, was elevated even further by authors such as Kitchin and Dodge (Kitchin and Dodge, 2007; Kitchin and al., 2009), who conceive maps in an ontogenetic way, with maps being said to be "of-the-moment, brought into being through practices (embodied, social, technical), *always* re-made every time they are engaged with; mapping is a process of constant re-territorialization" (Kitchin and Dodge, 2007, p.335, emphasis in the original). From this actor-oriented and practice-oriented perspective, maps should be considered to be the result of historically-contingent processes, emerging through a multitude of practices, performed in various – sometimes contested - ways, and perpetually in-becoming. Therefore, following Kitchin et al. (2009), "the map does not represent the world or make the world, it is a co-constitutive production between inscription, individual and world; a production that is constantly in motion, always seeking to appear ontologically secure" (Kitchin and al., 2009, p.21).

Owing to these explorations of the social, cultural, and political dimensions of mapping and database building, it has become possible and fruitful to study their influence in the often controversial process of territorialization, maps being important components of territorialization itself and of "strategies and relations of power-knowledge" (Crampton, 2001, p.10-11) related to the mastering of space. Since the analysis of mapping and the creation of databases in the new regional geography has hitherto been relatively under-theorized, this paper aims to create a bridge between two fields of geography: on one hand, constructivist and relational analyses of the processes of region-making, and on the other, analyses of effective practices in mapping and the assembly of corresponding databases. In doing so, we build upon a central question: how does mapping influence (or orientate) the region-making process? We argue that the production of maps and databases deserves to be seen not only as a technical moment, or simply as one output among others in the region-making process, but rather as a component of the process itself, a component that is especially decisive and complex in that it makes explicit the connection between the territorial and the relational dimensions of region-making.

To develop this argument, we will build on the concept of framing. During the last three decades, it has been common in social science to refer to this concept when focusing on the process according to which individual, groups and organizations evaluate a situation, identify problems and mobilize resources to address these (see among many papers on the topic Benford and Snow, 2000). In the field of regional geography, scientists have often referred to framing in approaching the cognitive and rhetorical dimensions of region-making processes (see for example Ciuta, 2008; Häkli, 1998; Lagendijk, 2007; Larsen 2008). In so doing, however, they have focused more on narratives and discourses than on data, images, and specifically maps. The project of this paper leads us to broaden the notion of framing while at the same time, somewhat paradoxically, lending it more analytical precision. To do so, we have adopted a three-dimensional concept of its modalities in mapping.

Spatial framing refers here to the way a region is shaped, usually through its cartographic delineation, and defined in the context of its spatial environment. For shaping regions, maps are indeed decisive tools: they make possible a direct visualization of spatial objects, which cannot be experienced directly by the senses, as well as the circulation of, and negotiation on, these representations (Latour, 1986). As a visual/spatial mode of framing, maps make a clear

distinction between the places (the so-called region and its immediate surroundings) that are included in (*in-frame*) and those that are left outside (*off-frame*) the cartographic representation. Finally, as a technical, semiotic, modality for producing meaning, the mapping of a region produces an image which literally frames the spatial entity it represents.

Argumentative framing refers to the rationale and evidence which provide the *raison d'être*, for the proposed region. The making of a project region requires a continuous discourse establishing its usefulness or necessity. In parallel, maps—especially thematic maps and their related datasets— are often mobilized to reinforce the argument and to measure implementation of regional accords. Therefore, most regional maps, whether isolated or part of a set of maps (such as in an atlas), combine delineation, description and monitoring of the entity, focusing on characters which provide selected information which hints at the *raison d'être* of the region itself; in other words, spatial/visual framing states *'This is the region'*, while argumentative/visual framing states *'This is how the region is'* or *'should be'*.

Institutional framing refers to the set of stakeholders (including the relations they have with each other), which are part of the region-building process. In comparison with spatial and argumentative modes, institutional framing is a less common way of applying the notion of framing. It is useful, nonetheless, for apprehending how a certain arrangement of stakeholders is initially defined and evolves through time. Accordingly, we argue as a complementary hypothesis that mapping is a moment and a modality in the region-making process influencing the evolution of the related institutional configurations, since the need for maps throughout the whole process influences the set of stakeholders as well as the relations that they develop among themselves.

Taken together, spatial, argumentative and institutional framings can be understood as three complementary dimensions through which the region-making process engages mapping, and by which the project region is shaped, displayed, justified, monitored and legitimized. These three modalities of mapping are consistent with Metzger's proposition that regional institutionalization refers "to the processes through which propositions for regionalization are increasingly stabilized through delegation into more durable socio-material forms than discourse" (Metzger, 2013, p.1375). However, we propose here to refine the temporal understanding of what Metzger calls "stabilization". We would underline that whereas regions may be successively conceived, created, and then consolidated, they nonetheless are perpetually in-becoming, never fully stabilized and always subject to contestation and reterritorialization. We suggest that the analysis of regional institutionalization and the role of cartography should take into account the ever-changing arrangement of stakeholders, as well as the arguments and visual depictions they put forward, from the time a region is first envisioned, and then throughout the densification of institutional relations. In this process the region not only "hardens" (Metzger and Schmitt, 2012); it becomes "thicker".

Given this typology, we can rephrase the main hypothesis of this paper: mapping is a decisive component of the region-making process for the three following reasons: (1) owing to its cognitive and rhetorical virtues, and the spatial and argumentative framing it makes possible, mapping is decisive for the process of territorialization; (2) since it requires the competencies of various partners acting at different scales and located in different places, mapping is also inseparable from institutional framing, as its very nature as a social practice is relational; (3)

mapping plays a different role at the initial stage of a region-making process – when the three framings make the case for the region's legal and political creation – and at the following stages – when it contributes to the region's consolidation.

This hypothesis will be tested by way of a comparison of the role of mapping in the region-making process in and around the Alps and the Carpathians. The analysis is based on iconographic documents produced during the last 50 years by a range of institutions, and selected to illustrate the various ways maps and databases are mobilized in the region-making process; interviews realized within two distinct research projects corresponding to the two regions; and a close familiarity with the daily work of some of the individuals who were involved in decisive moments of both region-making processes¹.

4. Mapping and framing the Alps

4.1 Initiating an ecoregional approach: CIPRA as a prolific mapmaker

The project of creating a regional political institution for the whole Alpine range began in 1952 when representatives of Austria, France, Italy and Switzerland, together with German conservation and mountaineering organizations and the International Union for Conservation of Nature (IUCN), created the *Commission Internationale pour la Protection des Alpes* (CIPRA) to promote the protection of the range. At the time, CIPRA was one of the first organizations to introduce an ecosystem approach to politics (Balsiger, 2007; 2009).

In recent decades, one of the tools used by CIPRA to promote the Alps as a single natural entity (spatial framing) meriting concern and protection (argumentative framing) has been to create and disseminate a diversity of maps which are framed so as to give a full vision of the range. These maps otherwise have been quite varied: some basic ones give a quick glance of the range as a whole (FIGURE 1), whereas some others, such as those produced for periodic reports on the 'state of the Alps', may be more detailed. Still others, published later when CIPRA was particularly active building transnational networks (of municipalities, cities, companies, etc.) to promote sustainable development, were designed to illustrate these networks, and were sometimes made out of unusual materials (for example, giant cakes depicting the region, or maps sculpted into wood) and designed to capture public attention at public events aiming to promote the networks being developed by CIPRA (FIGURE 2). Thus, for over half a century, CIPRA has actively sought, to use maps and associated text to convey a conception of the Alps as a coherent entity and as a region forming a common territory whose management should be guided by principals of nature protection and sustainable development.

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¹ The analysis is specifically based on eleven interviews realized by the authors and two by Raphaël Pieroni, a PhD student, in a related project. Representatives of the Carpathian Convention (3) and of the Alpine Convention (2), technical partners of the Conventions (4), and representatives of regional scientific networks (4) were interviewed within the research projects. Some interviews were completed during four months of participant observation at the UNEP Vienna office, which acts as the Interim Secretariat of the Carpathian Convention. All the quotes from the interviews are left anonymous in the article. A wide range of iconographic documents, including reports, scientific testimony, promotional documents, and more than a hundred maps were collected by the authors. Eight maps have been identified and selected as illustrations of the different stages of the two region-making processes.

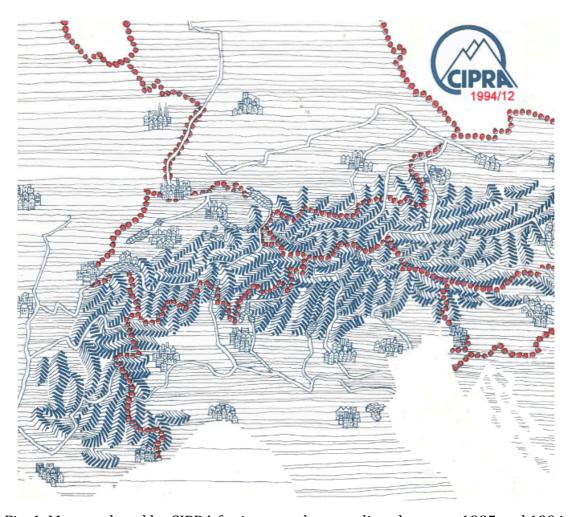


Fig. 1. Map produced by CIPRA for its annual proceedings between 1985 and 1994.

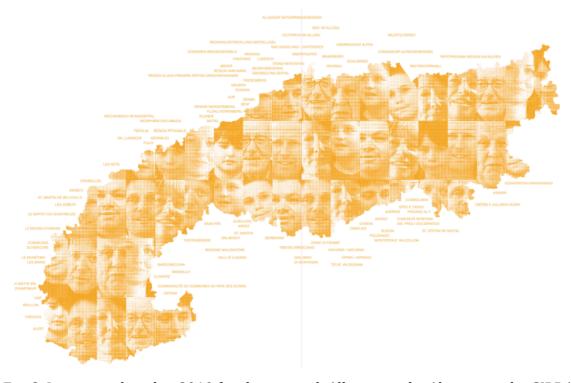


Fig. 2. Image produced in 2010 for the network Alliance in the Alps, set up by CIPRA.

4.2 The legal shape of the Alps: drawing the perimeter of the Alpine Convention

Toward the end of the 1980s, the incessant pressure of CIPRA began to bear results, and in 1991 an international treaty, the Alpine Convention (AC), was signed by the Alpine states² and the European Community (Price, 1999). Article 1 of the Convention begins by mapping and spatially defining the related entity: "The Convention shall cover the Alpine region, as described and depicted in the Annex." The Annex was a very simple map (FIGURE 3) and a list of municipal territories covered by the project. The related spatial framing (191,300km²), somewhat larger than most scientific definitions of the natural region, resulted from a set of political negotiations at national and regional levels.

To produce this map, national representatives agreed on basic criteria for inclusion in the region, and then ordered a topographic map of the Alps based on those criteria. Each was then asked to make formal consultations in order to adapt this draft topographic delineation to their particular political context. In some cases, such as in Italy and France, the spatial framing of the Convention borrowed from existing national delineations drawn in light of their respective regional policies. In some other countries, decisions led to the inclusion of entire legal districts, despite at times being only partly mountainous, such as "Landkreis" in Germany. Switzerland refined the initial proposal with its own set of databases, arriving at a delineation including only municipalities that were truly considered alpine in the Swiss context. National adaptations were adopted without question by the AC institutions.

In this context, mapping appears to have been a decisive process in envisioning and then constructing a common space, enabling the territorialization of shared sustainable-development policies across Member States.



Fig. 3. Map of the Alpine Convention annexed to the International Treaty, 1991.

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² Austria, France, Germany, Italy, Liechtenstein, Monaco, Slovenia and Switzerland

4.3 Monitoring the Convention: the painful birth of the SOIA

Once the area was delineated, another cartographic issue arose. Article 3 of the Treaty specified that "the Contracting Parties shall agree to: (1) cooperate in the carrying out of research activities and scientific assessments; (2) develop joint or complementary systematic monitoring programmes; (3) harmonize research, monitoring and related data-acquisition activities". This section of the Treaty essentially pointed to the need for shared databases, but also to the need for shared and effective cartographic tools for depicting and monitoring the region. It quickly became clear to some researchers and technicians involved in the process that these databases and maps would also serve for "giving more consistence to the Alpine area [...] showing that the Alps exist and are able to define themselves in comparison to other massifs3".

As early as 1992, the national Ministries represented in the AC institutions decided to create what from 1994 forward would be called the System of Observation and Information of the Alps (SOIA). In order to implement the project, the national delegates involved in the Convention asked national administrations in charge of environmental and socio-economic data to organize and contribute to the database, which would be under the supervision of an European research center based in Ispra, Italy.

As explained in detail by Pieroni and Debarbieux (2014), SOIA failed to produce tangible results because of a lack of common will. One factor was that the nations party to the Convention, which each assume a rotating two-year presidency, were prone to orientate the project according to their own vision, sometimes bending to national interests. Moreover, some national authorities proved reluctant to share data or to build tools which would reveal whether their countries were genuinely implementing effective protocols as demanded by the treaty⁴. At the same time, some members at the executive level were reluctant to share databases, partly for legal reasons, but mostly for cultural or economic ones: as one participant observed, "some administrations had become used to either selling their data, thus becoming reluctant to make these available for free, or to restricting their dissemination, favoring a kind of 'cult of secrecy'." All these factors contributed to there being little significant development in the SOIA project for its entire first decade.

4.4 How science and policy failed to meet in the Alps

The intentions of Article 3 of the treaty were quite clear: the AC expected to promote and benefit from a close link between the scientific world and policy-making. Indeed, the existence of the AC motivated the establishment of a pan-Alpine network of scientists, the International Scientific Committee for Alpine Research (ISCAR) which has organized a major event – the Alpine Forum – every two years since 1994. Additionally, an International Scientific Committee for Alpine Research was created in 1999 and is recognized by AC national representatives. However, the connection between scientists and policy-makers never

³ Interview realized within the research project by Raphaël Pieroni

^⁴ Ibid.

⁵ Ibid.

reached the level envisioned. One result—a low level of cooperation in database management and map-making— reflects this deficiency.

From the very beginning of the SOIA project, the scientific community was expected to be a major contributor of data as well as a user of the resulting database; yet, as one participant acknowledged ten years later, "we didn't really talk about research (while establishing SOIA), it was really a database, a foundation of information for conducting Alps policy. That was the heart of the project." Commenting on the limited engagement of scientists with SOIA, a politician reasoned: "scientists have their own needs, their own freedom. They are engaged in the challenges of research and don't feel beholden to a political document."

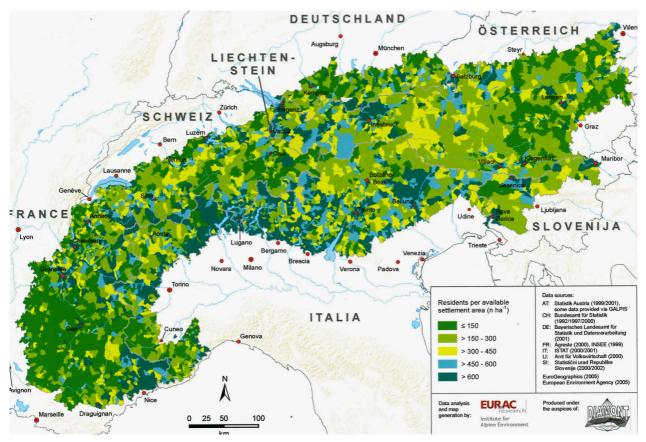


Fig. 4. An example of the maps available on the DIAMONT website.

In 2004, when SOIA was close to being abandoned, a new project called DIAMONT, funded by the INTERREG IIIB program⁸, was launched by a pan-Alpine network of scientists. This project was led by the European Academy of Bolzano, Italy (EURAC) and the University of Innsbruck, Austria. At the time, EURAC was developing expertise in regional databases, first for the Alpine region, and later for Eastern Europe. DIAMONT researchers collected and processed a huge amount of data at the municipal level, mostly purchased from, or provided by, national and regional agencies. Furthermore, they made significant progress toward standardization, published an atlas (Tappeiner et al., 2008), and created a website from which much

⁷ Ibid.

⁶ Ibid.

⁸ The INTERREG IIIB program was adopted in the late 1990s within the EU regional policy framework as a tool to facilitate cooperation between partners drawn from large areas drawn within the European territory. The Alpine Space, one of these operational areas (and larger than the Alps themselves), promoted the building of common knowledge and the exchange of experiences at this wide territorial level.

information and many maps (FIGURE 4) could be downloaded. The official objective of the project was to "allow stakeholders to carry out benchmark analyses of their respective municipalities in comparison with others across the Alpine Convention area." In a sense, the scientific community was showing that it had achieved a high capacity for networking across the Alps, coordinating databases, and generating maps for the target region.

The DIAMONT outputs provide an excellent illustration of the added-value of visual framing and argumentative framing in the region-building process. The atlas and the set of maps available on the website allow the reader to visualize the area covered by the AC and the major thematic issues which have been discussed in promoting sustainable development at this scale. However, though the initiative was explicitly intended to "relaunch SOIA," the DIAMONT project never led to closer cooperation between scientists and AC institutions. Indeed, the whole project was designed to receive updated data from national statistical sources, whenever possible, and to become the official monitoring system of the AC. In fact, the Permanent Secretariat of the Alpine Convention (PSAC), created in 2003 by the Alpine states to coordinate transnational action, was already pursuing an alternative by the time of DIAMONT's inception. Being aware of the growing institutional importance and technical know-how of the European Environment Agency (EEA), which collects and standardizes data mainly provided by national and EU administrations, the Secretariat abandoned the idea of building its own database. Since then, regional monitoring has been based in part on data provided by the EEA, which has been processed for thematic reports¹¹ whose priorities are selected by the conference of Alpine states in accordance with the goals of the AC. In sum, the AC institutions, NGOs and the scientific community never succeeded in constructing a common database to link these different worlds toward a unified vision for the Alpine region. Though the major stakeholders were aware of the need for reliable databases and map sets during the decade following the signing of the Alpine Convention, in order to consolidate information and representations of the alpine territory, no common project ever emerged because the relational system between these stakeholders proved to be too weak. This failure has been part of a broader failure: the continued weak institutional framing of the Alpine Convention.

4.5 Re-scaling the Alps: Towards an Alpine macro-regional strategy?

Since 2009, several stakeholders have been exploring the possibility of building an alpine macro-regional strategy, framing the region differently. This initiative has been led by a set of actors that includes some sub-national regions (e.g. Bavaria, Lombardy, and Rhône-Alpes) and several significant institutions at the municipal level which are openly critical of the AC. Since the latter is the result of an international treaty, they cannot directly contribute to or alter its policies, and they find that its focus on environmental issues does not take economic development issues sufficiently into account. These actors are presently working on a macro-regional strategy, which would cover a much wider region than that delineated by the Alpine Convention, including major cities located at the foothills of the range. The PSAC and CIPRA

⁹ Http://diamont-database.eu/ accessed 3 September 2012.

¹⁰ Ibid.

¹¹ For a list of these reports, see www.alpconv.org/en/publications/alpine

have each in their own way become involved, promoting their own vision for such a macroregional strategy so as to valorize what has already been accomplished in the frame of the Alpine Convention. Yet a third scenario for an alpine macro-regional strategy has also been launched by a group of sub-national alpine regions. Even if we are presently witnessing a strategic convergence of these projects in order to promote a common vision in EU institutions¹², the rescaling of a regional project still appears to be highly competitive and controversial in terms of spatial, argumentative and institutional framings.

It is revealing that the spatial framing of the proposed macro-regions has remained blurred so far. Cartographic representations of the entities have been nearly non-existent. Among the many documents which have emerged so far outlining such a macro-regional project (see for example Gloersen et al., 2012), none has given a delineation or an iconographic representation of what the macro-region could entail.

The absence of maps in this most recent development of the alpine region-making process illustrates the fact that the effective deployment and use of maps—with their considerable power to spatially, argumentatively and institutionally frame project regions—requires a sufficient consensus and shared interest so as to represent their proposed entity as a contiguous and thematically illustrated area on a map. Since the balance between objectives in terms of "economic development" and "sustainability" is still to be found within a shared macro-regional strategy, it has been difficult to achieve consensus around a vision of this new regional entity and represent it on maps.

4.6 Synthesis: how mapping is a decisive component of the institutional framing of alpine projects

This first case study displays how maps, as representations, have been a major cognitive issue in the alpine region-making process, and how mapping, as the related socio-political process which issues the sets of maps, has been a component of the institutional framing of the Alpine region. Indeed, a huge number of very simple maps have been issued providing a general view of the Alps as a natural entity, depicting clearly its delimitation (spatial framing), while framing the project in terms of environmental protection and sustainable development (argumentative framing). In this sense, they have contributed to the territorialization of the Alps as a whole, providing decisive tools for arriving at the region's legal status, and foundations for a political raison d'être based on a shared vision of the challenges addressed by transnational policies at this scale. However, these maps have been produced by a very diverse set of actors - scientists, PSAC, national administrations, regional NGOs, European agencies, etc. - and have rarely been coordinated. If the international treaty had succeeded in institutionalizing a new regional entity, its structures and implementation never fully succeeded in consolidating the region, i.e. making "thicker" the common agenda of the Member-States and the set of relations between the numerous regional and national, public and private, scientific and political stakeholders who were eager to play a role. The competing visions of how alpine governance should be pursued are reflected in the competing visions of

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¹² Alpine States and Regions as well as the PSAC are about to submit a common proposal for an Alpine macro-regional strategy to EU institutions in November 2013.

how cartography and databases should be produced and applied in advancing the political project. This deficiency, which indicates that the Alpine Convention never fully succeeded in building an efficient network of relations between stakeholders, acting at different levels and in different worlds, has given an opportunity for alternative territorial projects, principally following the macro-regional model, though these have yet to converge and take shape or advance with clear cartographic framing.

5. Mapping and framing the Carpathians

5.1 Initiating an ecoregional approach: WWF's Status of the Carpathians

The idea of environmental cooperation in the Carpathians began to take form in the late 1990s, when WWF, through its Danube-Carpathian Program Office (DCPO) in Vienna, launched the Carpathian Ecoregion Initiative (CERI), which at that time was considered "the first ecoregional experience for WWF in Europe." The CERI assembled a strong network of environmental partners within the region, and under the coordination of WWF-DCPO and the Daphne Center for Applied Ecology, based in Slovakia, it collected a great deal of environmental and socio-economic data in order to promote regional cooperation over the entire Carpathian range.

The database was complemented with a report, *The Status of the Carpathians* (2001), which opened with a map that was the first spatial and argumentative depiction of the Carpathians as a coherent environmental project region. An ecoregional delimitation was proposed to spatially frame the region, following on WWF's global conservation program, 'The Global 200', that prioritized spatial entities (the so-called ecoregions) to structure WWF's actions on the ground. The spatial framing used was merely suggestive, but the map was perceived as a useful tool to "communicate WWF's ecoregional approach in the Carpathians". ¹⁴ The ecoregional map of the Carpathians centers on the Carpathian Mountain ranges and their adjacent foothills, suggesting clearly that mountains are the very essence and core of the region. (FIGURE 5)

The report and its database contained a dozen thematic maps, each constructed on the same model and identifying priorities and fields for cooperation (forestry, biodiversity, tourism, transport, agriculture, etc.). These maps supported the argumentative framing of the report: all implicitly conveyed the unity of this natural region, the shared challenges, and the need for transnational conservation and sustainable development policies. They all conveyed that the Carpathians formed a coherent regional entity in itself, transcending national boundaries, which were intentionally left invisible on the ecoregion map. The maps in this regard worked to solidify an environmentally-defined idea of the Carpathians.

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¹³ Personal interviews

¹⁴ Ibid.

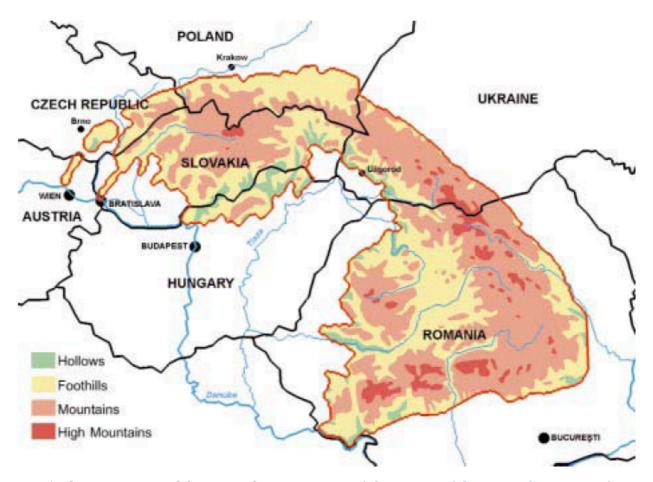


Fig. 5. The WWF map of the Carpathian Ecoregion (The Status of the Carpathians, 2001).

The report and the maps provided a set of spatial data, including visual and textual statements, framing the extent of a Carpathian environmental region and buttressing the arguments for transnational policies. Taken together, these devices reinforced the spatial and argumentative framings being proposed to the Environmental Ministers of the region. The report and the promoted regional vision were indeed specifically "designed for the first Inter-Ministerial Summit on Environment and Sustainable Development in the Carpathian and Danube region,"15 held in Bucharest in 2001 and co-organized by WWF-DCPO, where it was widely distributed and presented to the participants. The Ministers acknowledged in their declaration the contribution of WWF's ecoregional approach to the promotion of Carpathian regional cooperation, and WWF's map served as a foundation for the discussion of an eventual regional convention and later during the negotiation of the region's territorial delineation. By providing and diffusing cartographic representations of the region, WWF's report played a decisive cognitive role in unifying a very diverse network of 'regional' actors around the creation of a territorial entity for promoting sustainable development policies in the Carpathians. Following this event, the government of Ukraine officially requested the Genevabased UNEP Regional Office for Europe (UNEP-ROE) to facilitate an intergovernmental process of regional cooperation in the Carpathians. In Kiev, in 2003, seven Carpathian countries signed the Carpathian Convention¹⁶.

¹⁵ Ibid.

¹⁶Czech Republic, Hungary, Poland, Romania, Serbia, Slovak Republic, Ukraine

5.2 The legal shape of the Carpathians: agreeing on boundaries

Unsurprisingly, and similar to the process that took place in the Alps, maps were used intensively as visual devices to help define the territorial extent of the Carpathian Convention. Fall and Egerer (2004) have shown that the maps produced by UNEP-ROE were intensively discussed and modified by the countries involved in the negotiations seeking a consensus. The map that served as a starting point for discussion was borrowed from the WWF ecoregional delimitation, with a small extension in Serbia, which became involved in the Convention. By the end of these initial negotiations, the spatial framing was reduced to a more strictly mountainous definition of the Carpathians. The parties were unable, however, to reach a consensus, mainly because Romania and Hungary had conflicting conceptions of the affected populations located in Transylvania who were to be included in the spatial framing. Therefore, contrary to the Alpine treaty, Article 1 of the Convention began with a "purposefully vague definition" (Fall and Egerer, 2004, p.98) of this perimeter, in order to move the process forward.

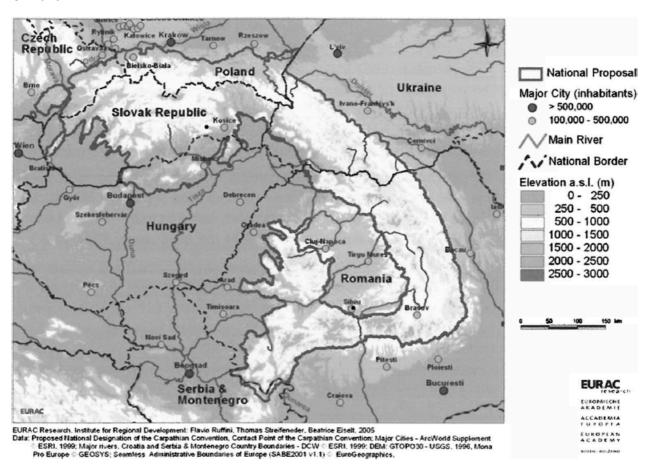


Fig. 6. Proposed national designation of the Carpathian Convention (Ruffini et al., 2006).

Following the signing of the treaty, UNEP-ROE gave EURAC a mandate to prepare a comprehensive report (Ruffini et al., 2006) and a common "scientific" proposal for the territorial delineation of the Convention for the first session of the Conference of the Parties in 2006. Using again the initial map of the Carpathian ecoregion produced by WWF-DCPO as their study area, EURAC experts, following the Alpine model, invited the contracting parties to draft national proposals for the perimeter of the territory covered by the treaty; the seven

countries each applied distinct criteria in delineating their national contribution to the Carpathian region¹⁷, demonstrating once more how the identification and delineation of these seemingly natural regions always entail processes of translation, appropriation and negotiation between the actors involved. (FIGURE 6) If in the early conceptualization stage WWF intentionally left national boundaries invisible in its ecoregional map, once national institutions are brought on board, and the territory began to acquire legal form, national boundaries of course became essential to the spatial framing of the project region. Institutional issues have however remained too controversial in the Carpathian context to fully resolve the question of spatial framing. If maps appear to have been decisive tools in the creation of a project region and a corresponding treaty, the CC has been, since its adoption, an international treaty aiming to define common policies at the scale of an area which may never be legally (and cartographically) defined, due to politically conflicting regional representations.

5.3 Building a pan-Carpathian scientific expertise : The *Carpathians Environment Outlook*

Once the Convention was ratified in 2006, UNEP-ROE was asked to service the Interim Secretariat of the Carpathian Convention (ISCC), confirming the central role of this international organization in the process. Soon after, UNEP-ISCC launched a transnational project funded by the European Commission to "increase awareness among the general public of the state of the environment in the Carpathians, to promote a common visual representation of the region, and to monitor the implementation of the Convention," in brief, to consolidate the argumentative framing of the new regional entity and its institutional functioning.

At the same time, the project was also to strengthen UNEP scientific expertise and its role in guiding the institutional framing of the Carpathians. Under the coordination of UNEP-ISCC, the UNEP Division of Early Warning and Assessment (DEWA) – Europe, with the support of EURAC, produced the Carpathian Environmental Outlook (UNEP, 2007), a detailed environmental assessment of the region. The Carpathian Environment Outlook (KEO) provided thematic maps and detailed chapters on sustainable development issues, scenarios and policy options. The argument put forward in the KEO was close to that of the original WWF 2001 report: the Carpathians constitute a single, natural region facing common challenges requiring transnational cooperation and sustainable development policies to protect cultural and environmental diversity. (FIGURE 7) The KEO' spatial framing used a definition strictly based on the presence of mountains, with a narrower focus than WWF's ecoregional map, in accordance with requests made by national governments. Contrary to the WWF report, national borders are visible on every map, reflecting both the intergovernmental status of the UNEP and its connection with the Carpathian Convention.

¹⁷ The heterogeneity of criteria is quite astonishing: geomorphologic classification (Czech Republic), physic-geographic criteria (Hungary), administrative units (Poland), a mix between geology, land cover, climate and topography (Romania), the protected areas (Serbia), and ecoregional criteria (Slovakia).

⁸ Carpathian Project, INTERREG III B CADSES 2000-2006, Neighborhood Program: http://www.carpathianproject.eu/portal, accessed the 28 August 2013

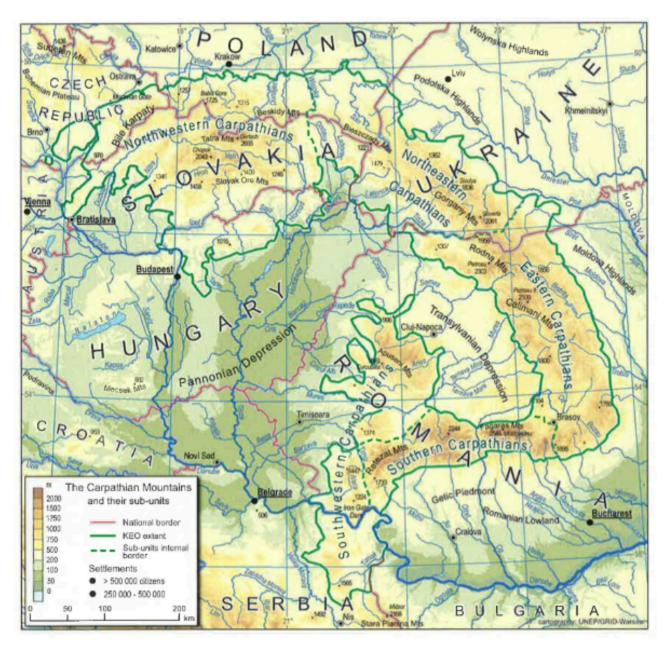


Fig. 7. Map of the Carpathian region produced by UNEP/GRID-Warsaw for the Carpathians Environmental Outlook (UNEP, 2007).

The production of the KEO and its related database was seen by the UNEP-ISCC as a decisive step toward acquiring the scientific basis needed for assuming a significant role in Carpathian regional cooperation. As one member of the organization testified, "if you don't have this scientific backing, nobody will take you seriously in the long term, so you have to show something. [...] In this respect these kinds of maps are crucial¹⁹". Indeed, with the authority of the regional database and the quality of the numerous maps included, the KEO offered a compelling visual and rhetorical depiction of the project region, framing and strengthening the argument for transnational policies aimed at its monitoring and protection. Without formal agreement on the delimitation of the Carpathian Convention, however, this report furthermore remained the principal though unofficial cognitive and visual tool for spatially representing the newly institutionalized environmental region and for consolidating the

¹⁹ Personal interviews

vision being advanced by UNEP experts and their network. The existence of the report enabled the UNEP and its partners to disseminate their strategic vision for the region widely on the European stage: it was officially presented at several international gatherings, it was used as a reference for numerous workshops, and the initial map was reused by international actors in several parallel, more focused initiatives.²⁰

In parallel to the production of the KEO, UNEP-ISCC led the development of a pan-Carpathian network of scientists that was first envisioned as a platform which would support the secretariat by providing data and knowledge necessary for implementing and monitoring projects consolidating the region. Under the impulse of EURAC and the Mountain Research Initiative²¹, a Carpathian network was established called "Science for the Carpathians" (S4C). Though S4C was originally conceived as a means to support the Convention, as it increased its representation from the Carpathian region itself its independence grew. Nevertheless, the importance of assembling and harmonizing a shared pan-Carpathian database in order to consolidate information and monitor the Carpathian region has been identified by both the representatives of the Convention and the S4C network, which signed a Memorandum of Understanding in 2012 to strengthen their cooperation, particularly around this issue. In sum, the development of the KEO and the pan-Carpathian network of scientists helped UNEP-ISCC advance its vision for the argumentative and institutional framing of the region, while consolidating both the project region and UNEP-ISCC's role in the process.

5.4 Re-scaling the Carpathians: 'VASICA' and the definition of a macro-regional strategy?

More recently, in parallel to its services to the Convention, UNEP-ISCC has advocated a complementary framing of the Carpathian region: the Carpathian macro-regional strategy within the framework of EU regional policy. The aim of this initiative is to complement the much wider European macro-regional strategy for the Danube, launched in 2009, and guarantee full recognition of the Carpathians as a major project region within that framework. Once again, the project is led by the ISCC, and one of the main cognitive and rhetorical tools used for justifying and spatially visualizing the strategy has been cartography.

UNEP-ISCC, with the support of a private consulting group based in Poland, issued a new publication, *Visions and Strategies in the Carpathian Area* (VASICA) (Carpathian Project, 2009). Interestingly the publication was organized like a regional geography textbook, following the model used in 1994 for the Baltic Sea Strategy (VASAB, 1994), the first successful macroregional strategy in Europe. To ensure that the vision was compatible with the Convention and consistent with UNEP's earlier publications, VASICA was organized along thematic chapters inspired by the working groups of the Convention, and backed by maps, albeit of varying quality, taken from various sources among UNEP's network of partners, including the Daphne Institute of Slovakia, the UNEP/GRID Warsaw, the EURAC and the KEO. Its spatial framing was based on a wider study area than the Convention, so as to include the region's capital cities—recognized as major engines of regional economic development—and the full

²⁰ See for instance, the European Union project Carpathian Integrated Assessment of Vulnerability to Climate Change and Ecosystem-based Adaptation Measures (CARPIVIA).

²¹ A global network of scientists devoted to mountain studies based in Bern, Switzerland

territories of many subnational regions, so as to raise their interest and facilitate the involvement of their respective political authorities²² (FIGURE 8). Owing to the coordination of the UNEP-ISCC, VASICA therefore clearly aimed to complement the Carpathian Convention with a wider 'Carpathian Space', seeking full recognition for both during the upcoming European Union Territorial Cooperation programmatic period, 2014-2020. VASICA has been widely disseminated in and outside the region, notably among partners of the Danube strategy and in the European Commission.

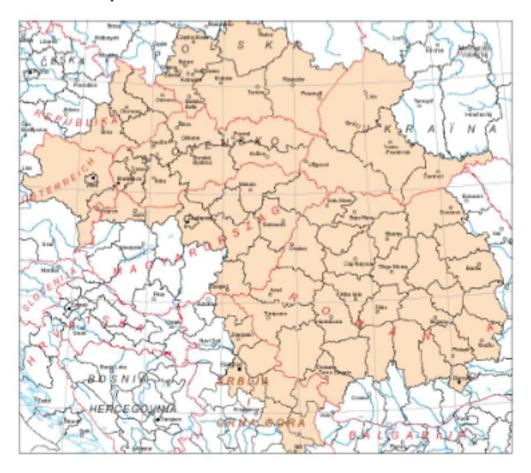


Fig. 8. Map of the Carpathian Space produced by an external consultant for VASICA (Carpathian Project, 2009).

5.5 Synthesis: how mapping is a decisive component of the institutional framing of Carpathian projects

On the issue of mapping's relation to region-building, the Carpathian case reveals broad differences compared to the Alpine one. With the exception of the first environmental assessment produced by WWF, the entire mapping and database production in the Carpathians region-making process has been driven by UNEP-ISCC, which also clearly led the institutional framing of the project region. The maps developed by WWF played a central role in the conception of the environmental region and in raising awareness of the importance of integrated environmental policies at the transnational level; meanwhile maps provided by UNEP-ISCC, drawing from its network of UNEP offices in Europe and its partnership with

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²² Personal interview

EURAC, which has been involved in most of the iconographic reports, proved to be decisive for the creation and consolidation of the region. Owing to its technical abilities and its financial resources, EURAC has become an important technical actor and cartographic producer in the region. Furthermore, by way of its international network and mapping abilities, UNEP-ISCC has been able to widely disseminate its spatial and argumentative framing for the project region, thereby confirming its role in the Carpathians process.

By 2013, the various UNEP offices involved in the region-making process for the Carpathians had devoted considerable time and attention to the production of databases, maps and reports in order to promote the two regional entities (the Carpathian Convention area and the Carpathian Space), and particularly to establish and consolidate the former; collectively, this mapping process was decisive toward the successful assembly of a complex relational network of political, scientific and technical partners that reinforced the institutional framing for the Carpathian territory.

6. Discussion: Mapping and the regional institutionalization process

The two case studies used in this article show similar modes of using maps and databases in their corresponding region-building processes. In both cases, mapping has been first seen as a useful and relevant process for giving visual evidence and argumentative justification for the creation of territorial entities, raising awareness of the entities and serving in negotiations over their ultimate establishment and legal delimitation. Maps and databases therefore have been mobilized for symbolic, legal and strategic reasons, as well as for their capacity to deliver the analytical information required for realizing 'evidence-based' territorial projects.

The two cases studies, however, reveal strong differences in the ways mapping and institutional framing influenced each other. The institutional leadership in mapmaking at the scale of the Alps was unclear until the creation of the PSAC, more than ten years after the signing of the Alpine Convention. Coordination between states in AC institutions suffered from competition and disagreement, which was especially evident in their attempt to organize databases and cartographic instruments. In the field, national, NGO, and scientific initiatives proved to be insufficiently coordinated. Currently, though the PSAC is now sufficiently organized to take the lead in this process, the political will of states is low, and competition from alternative projects and visions has grown. For a long time now, mapping of the Alpine region has been the preserve of many different stakeholders, each with its own objectives and independent of strong, consensual institutional framing.

In the case of the Carpathian region, the sustained leadership first of WWF and then UNEP-ISCC allowed the development of a coherent and enduring mapping strategy, helping to formulate and then serve the goals of the CC. To assemble these maps and databases, partners were mobilized throughout Europe, including EURAC, the various UNEP offices, private companies, universities, and national administrations. This high level of coordination was complemented at the political level. From the beginning, UNEP-ISCC was able to assume and hold leadership for both regional initiatives, the CC and the macro-regional strategy, including the conception and production of iconographic materials.

The comparison between our two case studies, however, should not lead to a simplistic

conclusion opposing one efficient and one not-so-efficient institutional framework; rather, it should underline three main differences between the two contexts. (1) First, the AC was signed 14 years before the CC: GIS and databases technologies and know-how were at a much lower level in the early 1990s than in the mid-2000s. Interviews carried out in the two geographical contexts clearly show that data processing and harmonization, as well as computer-based cartography, encountered greater challenges in the Alpine context than in the Carpathians. (2) Second, the institutional context in the Alps appears much more complex than in the Carpathians: the set of stakeholders is much denser; many are more engaged in power relations beyond the particular region-building project, and the level of technical expertise and experience, overall, is higher than in the Carpathian countries. In this regard, the leadership of UNEP in the Carpathian projects can be understood as consequence, in part, of the relative financial and technical weakness of many of its regional partners. (3) Third, the Carpathian projects have taken place in transition countries, several of which seek or anticipate integration to the EU. This may have contributed to lower the level of internal contestation of the projects, so as to demonstrate that regional stakeholders are capable of fulfilling EU expectations.

Despite these differences, the regional initiatives concerning the Alps and the Carpathians allow us to draw some lessons on the role of mapping in shaping project regions. The case studies clearly show that issues related to the production of maps in the region-making process should not simply be conceived of as technical ones, mainly grounded in the requirements of mapmaking, but as cognitive and institutional issues that the concept of mapping is better able to take into account.

Mapping appears to be an important process for conceiving, creating *and* consolidating project regions: it spatially depicts and delimits such projects, shapes and communicates arguments for their institutionalization, and provides vehicles for their ongoing assessment and monitoring. In this sense, mapping proves to be a significant and sometimes decisive process in the making of regional territories since it makes possible the adoption and development of a shared set of images and arguments which become among the most effective and enduring tools for the justification, legitimization and advancement of the corresponding project.

Regarding the institutional dimension, the two case studies presented in this paper show that the mapping and the institutional framing of a region are mutually dependent. The strength, in the case of the Carpathians, or weakness, in the case of the Alps, of the relational system between stakeholders involved in the making of databases and maps is reflected in the strength and weakness of the related Conventions. Said otherwise, each Convention, being a tool for advancing a territorial project and requiring a strong relationality between the stakeholders involved in mapping, whose work is essential to the effective visual and argumentative framing of the territorial project.

This paper has sought to bridge two fields of geography: on one hand, new regional geography and its territorial/relational debate on the other, the analysis of the influence of maps and mapping in the territorialization process. It concludes that mapping highlights the territorial-relational debate in regional studies in three ways: first, cartography renders an emerging territory visible and controllable; second, mapping shapes the relations between various partners and influences the institutional framing of a project region; third, maps and mapping allow regional projects to gain depth and thickness since, years or decades after their creation, maps continue to work to consolidate regional entities and to engage the stakeholder networks and institutional arrangements that will determine their consequences.

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Figure Captions

- Figure 1: Map produced by CIPRA for its annual proceedings between 1985 and 1994.
- Figure 2: Image produced in 2010 for the network Alliance in the Alps, set up by CIPRA.
- Figure 3: Reconstitution of the original map of the Alpine Convention annexed to the International Treaty.
- Figure 4: An example of the maps available on the DIAMONT website.
- Figure 5: The WWF map of the Carpathian Ecoregion (CERI, 2001).
- Figure 6: Proposed national designation of the Carpathian Convention (Ruffini et al., 2006).
- Figure 7: Map of the Carpathian region produced by UNEP/GRID-Warsaw for the Carpathians Environmental Outlook (UNEP, 2007).
- Figure 8: Map of the Carpathian Space produced by an external consultant for VASICA (Carpathian Project, 2009).