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Scientific collectives in region-building processes

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ABSTRACT

During the last 30 years, growing demand for science-based policy making has contributed to the mobilization of scientific cooperation alongside transnational political arrangements for addressing environmental issues. Following the contemporary trend toward regionalizing environmental policy and practice, many of these scientific joint efforts have focused on a regional scale. This article examines regional scientific cooperation in the context of the institutionalization of mountain regions in Europe. Such cooperation can be observed from the Pyrenees to Central Asia, albeit with a degree of variation that largely remains unexplored in scientific research. Sometimes scientific cooperation served to lay the groundwork of a mountain policy initiative, other times it appeared in its wake; some examples appear as loose networks of individual scientists, others are set up as formalized monitoring and observation centers; finally, some scientific joint efforts are formally linked to, or incorporated in a mountain policy initiative, while others are largely independent. The article proposes a new typology for understanding the interactions between regional scientific mobilization and regional policy making and provides up-to-date portraits of six main cases.

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1. Introduction

Policy-making today routinely integrates science not only as a reference and a guide, but also as a source of legitimacy, especially in domains related to natural resources and environmental management (Miller, 2001; Takacs, 1996). Accordingly, an ever-growing number of scientific experts have become influential in public agencies and international organizations, or have entered close relationships with them, and have become involved in all phases of the policy-making process, albeit in different forms (Jasanoff, 1990; Keller, 2009).

Some observers have identified increasing interaction between scientists, political authorities, and global environmental organizations as the first “emergent aspects of transnational politics in environmental initiatives” (Jasanoff and Martello, 2004, p. 4).

The intensification of science–policy interaction at all levels is guided by the widely shared (rationalist, if not positivist) idea that there is a need for “evidence-based policies” (Urban Institute, 2003). The final Declaration of the 1972 Stockholm Conference states that “Science and technology must be used to improve the environment”;

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Agenda 21 adopted at the 1992 United Nations Conference on Environment and Development (UNCED) reiterates that “the sciences should [...] provide information to better enable formulation and selection of environment and development policies in the decision-making process”; and the outcome document of the 2012 United Nations Conference on Sustainable Development (Rio+20) recognizes “the need to facilitate informed policy decision-making on sustainable development issues and, in this regard, to strengthen the science–policy interface.” Since World War Two, the development of scientific knowledge and its transfer to policy-making has been a central element of the international environmental agenda.

During the same time, the global drive to strengthen science–policy interaction was accompanied by the striking growth of environmental analysis and regulation at the regional level (Balsiger and VanDeveer, 2010; Balsiger and Debarbieux, 2011). Between 1945 and 2005, 60% of all new international environmental agreements were of a regional character (Balsiger and Prys, 2014), a trend that has been reinforced by the integration of environmental issues in development policies and by the promotion of sustainable development. At Rio+20, participants acknowledged “the importance of the regional dimension of sustainable development,” suggested that “[r]egional frameworks can complement and facilitate effective translation of sustainable development policies into concrete action at the national level,” and “welcome[d] regional and cross-regional initiatives for sustainable development.” The regional focus is said to facilitate the coordination of national policies whose effects influence neighboring countries; moreover, it draws attention to so-called “natural” entities—river basins, sea basins, or mountain regions—as a propitious locus of concerted action.

This article investigates the parallel unfolding of these two trends—toward science-based policies and toward regionalization. First, it raises the specific question whether and how the regional framing of environmental initiatives and the regionalization of science influence each other, and whether this encounter has inspired new forms of interaction between scientists and policy makers. Second, it offers insights for the specific case of mountain regions in Europe and Central Asia, a choice that can be explained as follows. Many regional institutions covering mountain ranges have been created in this part of the world since the late 1980s (Debarbieux et al., 2013) and therefore constitute a rich empirical domain. Since mountain regions typically do not typically follow jurisdictional borders, corresponding region-building processes characteristically involve scientific efforts to delineate the area of application of a given initiative; hence, mountain regions are representative of the larger trend of ecoregional institutionalization. Finally, all mountain initiatives integrate multiple economic sectors and issue areas, which diminishes the chance that science–policy interactions are biased by the disciplinary idiosyncrasies that may prevail in any particular issue area. The analysis builds on a series of inter- and transdisciplinary research projects and mobilizes data from primary and secondary written sources, as well as interviews, focus group discussions, high-level panels, and participant observation at several regional meetings between 2008 and 2013. Our research makes two distinct contributions.

Empirically, it traces the evolution of diverse forms and modalities of science–policy interaction in a domain previously neglected in the relevant mainstream literature. Conceptually, it helps to refine the concept of science–policy interaction by situating it in a regional context and proposing a typology that can be applied to other domains.

The argument proceeds as follows. Section 2 reviews the literature devoted to science–policy interaction and addresses the role of the regional scale. Section 3 presents a typology of the regional scientific collectives that have been created at the level of European mountain regions. We use the term ‘collective’ to designate a collective body in the most general sense, rather than in the narrow sense of an organization that is owned by the people who work there; our intent is to use a term that is broad enough to encompass different forms of organization, including but not limited to networks, and that suggests some degree of non-hierarchical organizing. Section 4 offers insights from the evolution of science–policy interaction for two of the regional institutions, demonstrating how this interaction has varied over time as a function of stakeholder expectations. Section 5 summarizes the empirical material in light of the article’s conceptual framework and concludes that the adjustment of regional political and scientific bodies is both a matter of research for efficiency and the link between different kinds of regionality and social and professional identities.

2. Knowledge production and mobilization in regional science–policy interaction

The relationship between scientists and policy makers has long been of interest to social scientists, evolving in parallel to other long-standing debates such as over the separation between politics and administration. In the same way that scholars have increasingly recognized the blurred boundaries between politics and administration, the view of disinterested scientists providing neutral advice to policy makers has become outdated. The following section first critically reviews the principal perspectives on science–policy interaction, then suggests how such interactions can shape and be shaped by a regional frame.

2.1. Making sense of science–policy interaction

Scholarship on science–policy interaction has proposed diverse modes of understanding the nature of this relationship. A positivist conception of the contribution of science to policy-making has been foundational in our modern world. In this view, science provides a clear understanding of the reality that politicians can or should translate into policies. While this view is still very present among policy makers and, more generally, in the public sphere, few social scientists support it. On the contrary, social scientists interested in science–policy interaction—mainly political scientists and specialists of science studies—agree that there is no such thing as preexisting scientific knowledge readily available to policy makers. They similarly discount the existence of a priori consensual scientific communities able to share a common vision of necessary policies: “the expectation that politics can

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