Constructing collaborative communities of researchers in the environmental domain. A case study of interdisciplinary research between legal scholars and policy analysts

Silvia Bruzzone[a,*], Corinne Larrue[b], Marleen van Rijswick[c], Mark Wiering[d], Ann Crabbé[e]

[a] Ecole Nationale des Ponts et Chaussées (ENPC), France
[b] Ecole d'Urbanisme de Paris, Université Paris Est Créteil, France
[c] Utrecht University, The Netherlands
[d] Radboud University, The Netherlands
[e] University of Antwerp, Belgium

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ABSTRACT

The article offers an analysis of the interactions between legal and policy science researchers within a European project on flood risk management using a "Policy Arrangement Approach" (PAA). While interdisciplinary research is increasingly becoming a 'must' in environmental governance, under what conditions is cooperation possible and desirable? Our analysis shows that the PAA is not mobilized as an interdisciplinary method, but offers a framework for researchers from different disciplines to learn to work together on a subject such as flooding, requiring interdisciplinary insights. The paper shows the steps that are progressively put in place to reach a common language and reformulate issues by benefitting from each other's view and approaches. The article concludes by drawing attention to new means of knowledge production relating to so-called "messy" or "wicked" problems, such as environmental issues. Within this framework, interdisciplinary work is not considered to be a pre-condition for the study, but rather the result of the research process itself. The analysis draws attention to the actual (working) conditions established to create an interdisciplinary community of flooding practices by challenging disciplinary borders.

1. Introduction[1]

The relationship between legal and policy sciences emerges as being especially meaningful in new and complex policy domains such as environmental policy, where cooperation between legal scholars and policy scientists is fundamental (Hegger et al., 2014). Moreover, interdisciplinarity is a *passage obligé* for the principal funding institutions at both a European and national level (Bruce et al., 2004). Nonetheless, important epistemological differences – especially in the approach to knowledge and knowledge production – may be a hindrance to interdisciplinary research (Luhmann, 1983, 1987; King and Thornhill, 2003).

Whereas in the case of policy sciences and social sciences in the broad sense methodological choices represent the core of any analysis and inform what epistemological posture the analysis will be built on, most legal practice seems to assume that methodological positions are implicit, and the focus is much more on sound analytical and logic argumentation based on data that are freely available to everyone. The specific role of the literature in the construction of legal thought, research and practice must also be mentioned in this regard. In the past in fact, law was viewed as characterized by a certain degree of intellectual impenetrability: legal methods, conceptualizations, theory and practice were considered sharing an internal coherence (Riesman, 1962; Aubert, 1963; Campbell, 1974) which represented a burden towards external cooperation and acknowledgment. In reaction to those critics, legal scholars show a more complete picture of legal research, the scope of which is much broader. It encompasses not only existing law (legislation and case law) as its field of research and its theoretical and philosophical underpinnings but also studies how law comes about (which is more than the study of

* Corresponding author.
E-mail address: Silvia.bruzzone@enpc.fr (S. Bruzzone).

policy alone) and what the impact is of law on social interaction (and vice versa) (Quist, 2014; D'Amato, 1984; Sugerman, 1986; Luhmann, 1988, 1993; Brouwer, 2000). The latter is the field of empirical legal research, including the sociology of law, the psychology of law and the economic analysis of law. Indeed, law is not exclusively studied in isolation without regard of its intellectual and social context and is much keener on multidisciplinary research.[2]

Indeed, although some authors have recently written about new disciplinary convergences between legal and policy research at an empirical level (Raynaud, 2009; Van Hoecke, 2011; Hutchinson and Duncan, 2012), cooperation may still prove difficult. Accordingly, while interdisciplinary research is increasingly becoming a 'must' at the European and national levels, under what conditions is cooperation possible and desirable?

In order to answer this question, we take flood risk management as an example to illustrate our argument. Because of the increasing numbers of flood events, the issue is important for all levels of government, and requires a rather innovative policy approach that lies at the crossroads of different policy domains such as spatial planning, water management, engineering, ecology and civil protection.

We will use the research work carried out in the context of the STAR-FLOOD project.[3] This project, gathering legal researchers and policy scientists, aims to evaluate national flood risk policies and provide design principles for the improvement of flood risk governance arrangements in six European countries.

In order to achieve this purpose, the research team used an adapted version of the so-called "Policy Arrangements Approach" (PAA) (Van Tatenhove et al., 2000). Although this approach was not originally designed for interdisciplinary purposes, STAR-FLOOD mobilized and adapted the PAA dispositive to build an interdisciplinary research framework at the interface between policy and legal analysis. To what extent can the PAA be considered to be an interdisciplinary approach? What can the STAR-FLOOD experience teach us about interdisciplinary research on environmental policies especially between law and policy researchers?

The article is organized as follows. After the section on methods, we describe how the PAA has been mobilized within STAR-FLOOD to develop a common research programme and interest. The third part provides details of the practices implemented by the STAR-FLOOD researchers. The final part draws some preliminary conclusions stemming from this experience, and provides insights into the way collaborative and interdisciplinary research on environmental policies can be carried out.

2. Methods

This study is based on an analysis of the interactions between legal and policy researchers in the implementation processes of the STAR-FLOOD project.

It was immediately apparent that the work done on the development of the assessment framework of the STAR-FLOOD project (Work Package 2: Larrue et al., 2013) would be an interesting process deserving specific attention. Therefore for this Work Package 2 a newly-recruited researcher, a sociologist and leading author of this paper has been appointed. The "external" view proposed by the newcomer turned out to be critical for shining a reflective light on the research work undertaken in STAR-FLOOD up to that time. In order to do this, she undertook two types of work: firstly, a reconstruction of the process of adjustments of

the PAA to fit both legal and policy analysis in the development of STAR-FLOOD's theoretical framework and research programme; and secondly, observation of the daily practices of the researchers in both disciplines when implementing the project.

The data used in this analysis are mainly the result of:

1) interviews conducted by the newcomer with previously-involved STAR-FLOOD researchers, both senior and junior;
2) the newcomer's role as a participating observer of the STAR-FLOOD project as a member of a national team attending the regular meetings organized with all the research partners;
3) Three questionnaires sent to all STAR-FLOOD researchers to encourage researchers to provide their experiences within the STAR-FLOOD project.

In particular, the first questionnaire focused on the preparation of the assessment framework in general, and was intended to acknowledge the difficulties encountered by researchers in implementing the project. The last two were developed specially for this article: the first one was more generally focused on understanding interdisciplinary research within STAR-FLOOD, while the second had the specific intention of clarifying certain practical aspects of their day-to-day work: how social and legal scholars work together, how they organize their fieldwork, etc.[4]

Last but not least, this contribution is also the result of the intense and lively discussions among its co-authors on the "STAR-FLOOD research methods".

One final methodological note is appropriate here: although STAR-FLOOD is an international research programme, the international "variable" has been omitted from this analysis. This means that when we refer to "legal" and "policy" researchers, we do not mention their nationality. Although the topic is a highly interesting one, we decided not to integrate it into this analysis, thereby avoiding having to open the "Pandora's box" of the development of specific disciplines and academic cultures within each country.

3. Framing PAA categories within STAR-FLOOD: burdens and potential

As a theoretical framework, the PAA (Van Tatenhove et al., 2000), is the result of discussions within the Political Sciences of the Environment group (Milieu en Beleid) at Radboud University, Nijmegen at the end of the 1990s. This group studied the dynamics of environmental policy at a national and European level. The PAA therefore focuses explicitly on the *dynamics* of policy arrangements. A policy arrangement has been defined as the 'temporary stabilization of the content and organisation of a policy domain' (Van Tatenhove et al., 2000). It is structured in four dimensions: actors, resources, rules of the game – meaning formal institutionalized rules and informal rules – and the policy-relevant discourses that determine the character of the policy arrangement (see Table 1). The central idea of this institutional approach is that it becomes possible to characterize policy domains and provide detailed information on stabilization of or changes to these dimensions, and therefore to the features of policy domains. It is therefore suitable to analyse and assess policy arrangements in the framework of the STAR-FLOOD project which aims to develop improved policy design principles for flood risk governance

The marriage between the PAA and STAR-FLOOD then continued as a Dutch story. The idea of building an interdisciplinary

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[4] We received eight answers to the first questionnaire (five young researchers – who mostly answered jointly as national team – and three senior researchers) and five answers (four young researchers and one senior researcher; three joint answers and two individual ones) to the second.