

GETTING EA RESEARCH OUT OF THE COMFORT ZONE: CRITICAL REFLECTIONS FROM THE NETHERLANDS

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Introduction

In this contribution, we describe and reflect upon current Environmental Assessment (EA) research and practice in the Netherlands.¹ We will argue that EA research and practice, both in the Netherlands and elsewhere, will benefit from

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¹ With the term Environmental Assessment we refer to both project-based Environmental Impact Assessment (EIA) and to policy-, plan- and programme-based Strategic Environmental Assessment (SEA).

taking a broader perspective, in other words, from getting out of its “silo”. Engaging in ongoing debates in other fields of research (e.g. regarding science-policy interactions or environmental governance in general) may enrich both EA research and practice, and might push the boundaries of EA research into other directions.

EA Research and Practice in the Netherlands

EA expertise and research is primarily found at the Netherlands Commission for Environmental Assessment (NCEA; see www.eia.nl). This institute is formally charged with quality review of EIAs and SEAs and also provides advice on good practices — e.g. scoping. The NCEA mobilises experts (academics and professionals) in order to tap from expertise that is required in specific EIA cases. The NCEA not only provides expertise for the Dutch EA practice, but also supports low and medium income countries in developing EA legislation and in building capacities. Apart from the NCEA, the Dutch Association of Environmental Professionals (VVM; see www.vvm.info) plays an important role in providing training courses in EA and in disseminating knowledge related to EA.

Despite the importance of EA as an instrument of environmental governance, research in this area at Dutch universities is sparse. There is no real academic EA tradition in the Netherlands. Some academics do research on EA — especially at the universities of Utrecht and Groningen — but EA is usually not their main research focus. Moreover, there have never been specialised research and education units for EA at Dutch universities. It can be argued that this is the case because EIA was introduced only when Dutch environmental regulations and practice was already extensively developed — therefore EIA has only been seen as an “add-on” and not as a distinct topic of research — and because of the dominant role of the NCEA in the Dutch EA field — both nationally and internationally. In academic teaching, EA has no explicit role, either. Although there are various programmes that are related to EA, and some courses at Dutch universities are dedicated to EA, similar to many other countries no programmes exist that solely focus on EA (Gazzola, 2008; Fischer and Jha-Thakur, 2013; Runhaar, 2009).

However, there have been various academic studies analysing EA: evaluating effectiveness or other aspects of EA (in the Netherlands), in part based on formal evaluations of EA and in part based on PhD research (e.g. Mostert, 1995; De Valk, 1997; Ten Heuvelhof and Nauta, 1997; Niekerk, 2000; Pokorný-Versteeg, 2003; Soppe, 2005; van Dijk, 2008; Jesse, 2008; Arts *et al.*, 2012; Runhaar *et al.*, 2013). These studies suggest that over time EA effectiveness (in terms of contributing to environmental awareness and to environmental protection) seems to have

remained quite constant. An important explanation for the effectiveness of EA is its legal status, making EAs mandatory for particular initiatives. The fact that EAs have to be conducted based on a predefined procedure contributes to the distinct character of EA which in turn may explain the silo approach in EA research.

Specific issues have been explored in detail, such as the EIA Commission by Mostert (1995) and follow-up by Arts (1998). An ongoing PhD research by Kolhoff addresses capacity building for effective EA in low and medium income countries (Kolhoff *et al.*, 2009, 2013). In addition, various MSc theses have been written focusing on EIA practice (some of which have been published as articles, e.g. van Loon *et al.*, 2010).

There have been some international comparative studies, in which the Dutch system was compared with the UK system (Arts *et al.*, 2012), the UK and German system (Fischer, 2002) the Danish system (Lyhne *et al.*, 2015) and other systems (Uttam, 2014; Pokorný-Versteeg, 2003). Given that EA is now spread all over the world (Fischer and Noble, 2015), more comparative research has the potential of identifying best practices. All in all, Dutch research on EA is rather incidental; there are neither groups specialised into EA, nor are there structural research programmes devoted to EA.

Critical Reflections on EIA Research in the Netherlands and Elsewhere

Is the lack of an academic tradition in EA in terms of research or teaching a problem? We don't think so. EA is only one of the tools of environmental governance. Moreover, in many studies into environmental governance and policies conducted inside as well as outside the Netherlands EA case studies are analysed (e.g. Nooteboom, 2006; Annema, 2008; Knegtering, 2009; Wejs, 2013) — therefore, a meta-analysis of EA case studies in (PhD) research could be interesting. This could help identifying “best practices” — e.g. ways in which the use of EA in decision-making or EA as a design tool can be enhanced (Arts *et al.*, 2012). We think it is important to teach students in environmental studies and in environmental science the broad set of governance tools available, and their relative strengths and weaknesses, rather than to specialise into a few of them. When graduates enter the labour market and become environmental professionals, they can obtain practical knowledge about EA via the NCEA or VVM² (Runhaar, 2009).

Furthermore, in terms of research, we think chances are missed when EA is approached too much as a distinct subject. After all, EA is only of the tools of

²The VVM has a working group on EA, which regularly organises workshops, meetings and occasionally training courses on various subjects related to EA.

environmental governance. In a comparison with other ex ante assessment tools such as Cost-Benefit Analysis, Environmental Tests (Jordan and Turnpenny, 2015; Runhaar *et al.*, 2014; van Dijk, 2008; Niekerk, 2000), designing and developing solutions (Arts *et al.*, 2012) or other policy instruments such as technical requirements, rating systems, contracts, taxes or (smart) subsidies (Mees *et al.*, 2014; Arts and Faith-Ell, 2012), lessons can be learned about how to improve EA or how to combine it with other instruments.

More particularly, by confronting EA research and practice with debates in other bodies of literature, new questions may emerge that support a fresh and critical reflection on EA. In the wider field of environmental studies and environmental science, we observe a number of trends and themes that are not, or not sufficiently, recognised in the IA community. We will underpin this statement by means of three examples.

A first theme for instance that has not received much attention in EA literature is deep uncertainty and complexity and adaptive management as a means to deal with these (Allen *et al.*, 2011; see also Lempert and Collins, 2007). Although these subjects have been discussed in EA literature, they could be more explicitly connected and specified for EA practice. Uncertainty and adaptive management literature suggest ex ante assessments are often not accurate or complete, and hence continuous monitoring, learning and adjustments are required in projects that affect our natural environment. EA however is pretty much of a “one shot” process, focusing mainly on the ex ante assessment, despite the fact that follow-up (ex post monitoring and implementation of additional mitigation measures if necessary) is often advocated and in countries such as the Netherlands, required by law (Arts, 1998; Wood, 2003; Morrison-Saunders and Arts, 2004; IAIA, 2007). It would be interesting to explore how EA could be enriched with ideas from the adaptive management literature by further building on the sparse papers in the EA literature that have addressed this issue (e.g. Canter and Atkinson, 2010; Gardner, 1989; Noble, 2000).

A second theme that is under-explored in EA research is the subjective experience of environmental impacts, risks and (deep) uncertainty by citizens and stakeholders. Science and technology studies (STS) and studies on science-policy interactions in general have shown that scientific assessments may differ substantially from citizens’ assessments, resulting in the strategic use of knowledge, controversies and deadlock in decision-making (Van Enst *et al.*, 2014). There is a growing recognition that environmental knowledge, in order to be of use in environmental decision-making, should be credible and salient and legitimate (cf. Cash *et al.*, 2003). As far as we now, however, the translation of these principles to EA however has not yet been made. Despite the importance of public and

stakeholder participation in EA research and practice, the issue of how to reconcile scientific modelling (forecasting), measurements (monitoring) and stakeholder perceptions has received limited attention — in relation to assessment of noise impacts Weber (2013) and Nijland (2008) address this issue. A translation of what has been learnt in the related field of risk analysis (in terms of risk communication, concern assessment etc.; see Huizer *et al.*, 2014) to EA would seem very interesting and relevant both from the perspective of practice and theoretical development of IA.

A third and related theme is that of politics and power. Although this theme was put on the agenda in 2000 by Kjørnøv and Thissen, and also discussed by Nooteboom (2006) and recently addressed in a special issue in *EIA Review* (Cashmore and Richardson, 2013), the majority of EA research stays away from the political aspects of EA. Yet, ignoring the politics during EA procedures may not only undermine the potential of EA to inform decision-making and enhancing the environmental performance of the resulting decisions, it may also threaten EA itself. The most recent evaluation of the Dutch EA, however, showed that politicians are often negative about EA and that the 2010 “modernisation” of EA legislation (in which various requirements were removed) were intrinsically political in nature (Runhaar *et al.*, 2013). Apparently the benefits of EA in terms of structuring decision-making and offering transparency are not communicated well enough by EA professionals, leaving politicians with the idea of EA as an administrative hurdle (Runhaar *et al.*, 2013). Further research into how EA as a governance tool can be reframed would be interesting in this respect.

Ways Forward in EIA Research

The title of our statement is clear: we want to invite EA scholars and practitioners to broaden their perspectives and consider EA as integral part of the multi-faceted decision-making process, and to compare EA with other tools and instruments that are applied in the process. In part this means getting out of the comfort zone: it will mean new approaches, it requires getting familiar with other fields of research, and questioning of what is often taken for granted in EA research and practice (e.g. that EIA is different from SEA, that public participation is always beneficial, that the political aspects can be isolated from rational-analytical assessment etc.). In return, however, it is our conviction that widening perspectives will make EA a more exciting field of research and practice, and will foster learning and innovation.

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