Policy Instruments, Policy Learning and Politics: Impact Assessment in the European Union

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Abstract
One proposition we put forward in this volume is that there is a relationship between policy instruments and mechanisms. To find out how exactly this relationship works, its activators and the causal role of policy instruments, we zoom-in on the case of impact assessment (IA) in the European Union. IA is an evidence-based instrument adopted by the EU in the context of the evidence-based better regulation strategy. The connection between IA and learning is apparently intuitive: IA should bring evidence to bear on the process of selecting policy options, and therefore assist decision-makers in learning from different type of analysis, dialogue with experts and stakeholders, and open consultation. However, we find out that learning comes in different modes (epistemic, reflexive, bargaining and hierarchical) and that the activators, context and results of learning vary across modes. In the conclusions, we reflect on the connections between learning and politics revealed by our approach to policy instruments and varieties of learning.

Keywords
Causal mechanisms, policy design, policy learning, policy instruments, impact assessment, regulation

Introduction

What causal mechanisms generate learning and what is their relationship with policy instruments? It is almost obvious to observe that the type and success of policy learning is related to and mediated by the policy process. In particular, we can think of learning mechanisms as triggered by policy instruments. More precisely, by using certain instrumentation in public policy-making processes, constellations of actors are supposed to make some choices, give priority to some values, enfranchise some interests etc. These activators can potentially trigger some mechanisms, for example monitoring and control, and at the same hinders other mechanisms, for example capture or bureaucratic drift. 'Potentially' means that we have to consider special occurrences, events, actions (the 'activators') as well as the role of context – another dimension we will explore late on. Now it is sufficient to say that, in line with the editors, we stick to the definition of mechanisms as collections of activities or entities that produce some regularity in processes of change that unfold from an origin in time to an end state. In short, mechanisms are what's inside the black box of causality. Yet, the conceptual and empirical connections between policy instruments and mechanisms have never been made explicit.

In this chapter, we wave in the theme of learning mechanisms with policy instruments. At the level of concept formation, we seek the mechanisms associated with learning in different modes. Breaking down learning in this way allows us to understand that the world of policy learning is dappled and full of variation. Learning happens in a range of arenas populated by different actors according to different logics. Similarly, a policy instrument is not a monolith either. To show how a single instrument can trigger different learning types, we use impact assessment (IA) in the European Union (EU) as an exemplar.

In most countries, IA is an instrument to design primary legislation (USA is a notable exception where all IAs are Regulatory Impact Assessments [RIA]). IA systems create appraisals of how proposed legislation will affect stakeholders (broadly conceived). In the EU, this instrument is central to the better regulation strategy of the European Commission (2015). It has three central foci, that is, to examine the effects of different policy options in terms of their economic, environmental and social impact on a wide range of stakeholders, markets, and the environment. The Commission is committed to accompanying its policy proposals (legislative or not) with a document, the IA, reporting on the process that led the officers to

a given definition of the policy problem, the baseline, identification of a range of feasible options, consultation of stakeholders, experts and citizens, the evidence on the likely impacts of the options, the choice of an option according to an explicit set of criteria, and how the new proposal will be monitored and evaluated. The European Parliament and the Council are also committed to the logic of IA via an inter-institutional agreement on better law-making[1]. When they introduce substantial amendments to the proposals made by the Commission, in principle they have to carry out an analysis of how the initial IA will change as a result of the amendments.

While IA is an instrument of policy formulation, it can also be used to examine regulation in force but under scrutiny. Empirical research attests to the malleability of IAs. In the EU, this appraisal process involves a variety of policy actors and institutions who shape it for a variety of purposes (Renda 2006, 2016; Cecot et al, 2008; Turnpenny et al, 2009; Radaelli 2010a, 2010b; for specific sectors see Torriti 2010).

And so, IA has distinct functions and it is common to think in terms of the many usages of IA (Dunlop et al, 2012; Dunlop and Radaelli, 2016). Most obviously, this is an analytical instrument which exists to bring evidence to policymakers before policy design is complete. Yet, IA is much more than an epistemic product. It functions as a process through which publics are consulted and an arena for policy networks and stakeholders can re-shape, negotiate and contest prospective policies. IA also aids regulatory compliance as it begins to emerge in the legal system as the standing justification used by courts interpret the original rationale for a decision or regulation.

We proceed as follows. At the outset, we briefly rehearse the types of policy learning we seek to explain. In section two, we delineate our approach to mechanisms and how IA stimulates them. Using empirical examples from the EU, in section three we uncover mechanisms of learning triggered by the discussions and information IA brings to the policy process. In the conclusions, we reflect on how IA systems be modified and strengthened to support learning mechanisms and on wider implications of learning in regulatory policy for accountable governance.

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[1] Official Journal, L 123 vol. 59, 12 May 2016.

Section 1   Varieties of Policy Learning

To identify mechanisms triggered by policy instruments to generate policy learning, we must first be clear about how we understand policy learning. Let's start with the near-universal definition. Despite using contrasting ontologies and epistemologies, policy learning studies are founded upon a general conception of learning as 'the updating of beliefs based on lived or witnessed experiences, analysis or social interaction' (Dunlop and Radaelli, 2013: 599). Thus, by identifying causal mechanisms, we are capturing the ways in which the knowledge that comes from these experiences, analysis and interaction becomes considered by policy actors. This centrality of the *process* of knowledge acquisition and belief updates reveals why policy learning is amenable to a mechanistic approach. Critical to our interest in mechanisms is that we have something to explain. Though policy learning may be unintentional, it is not random, not all policy processes have the same chance of producing learning outcomes. Thus, any answer to the question 'why does learning happen?' cannot be a statistical one. Rather, it requires analysis that specifies the *processes* by which learning outcomes are facilitated. Here, we are interested specifically in policy instruments as a key part of those process. But, we are getting ahead of ourselves.

With our definition in hand, the next step is to delineate our dependent variable: the possible modes of policy learning. While policy learning is dominated by empirical studies, over the last three decades, there have been various attempts at systematising our knowledge using typologies (Bennett and Howlett, 1991; Dunlop and Radaelli, 2013; Heikkila and Gerlak, 2013; May, 1992). Mechanisms offer an explanatory bridge between theories and evidence, and to identify them we require an explanatory model of learning. The varieties of learning approach has strong attachment both to theory and empirics (Dunlop and Radaelli, 2013 on theory and 2016 for an empirical application), and so offers a promising analytical framework from which we can first extrapolate mechanisms and make the link to policy instruments.

The building blocks of the varieties model lie in the policy learning literature (for details on the literature underlying the model see Dunlop and Radaelli, 2013: 601, endnote 2). This literature reveals the presence of four learning modes– epistemic, reflexive, bargaining and hierarchical. These types are explained by high or low values on two conditions of the policy-

making environment: the *tractability* (Hisschemöller and Hoppe, 2001; Jenkins-Smith, 1990) and *certification of actors* (McAdam, Tarrow and Tilly, 2001) associated with a policy issue.

Let us zoom in on these dimensions for a moment. Tractability concerns the degree of uncertainty linked to the policy issue. In highly tractable cases, preference formation is relatively straightforward – this is the arena of interest groups and political elites – or policy-making operates on auto-pilot where institutional rules and bureaucratic rules take over. At the polar case, tractability is low. This radical uncertainty results in either reliance on epistemic experts or being opened up to widespread social debate. Learning type is also conditioned by variation in the existence of a certified actor enjoys a privileged position in policy-making. So, we can think of expert groups (epistemic learning) and institutional hierarchies – e.g. courts and standard setting bodies – as possessing such certification (learning by hierarchy). Where an issue lacks an agreed set of go-to actors, policy participants are plural. Just how plural depends on the level of issue tractability. Where this is high we have interest-driven actors (learning through bargaining); where both tractability and certification are low we have the most plural and social of policy arenas (reflexive learning). Taken together, these two dimensions provide the axes along which the four types vary (see figure 1).

Figure 1   Conceptualising modes of policy learning

PROBLEM TRACTABILITY

	LOW	**HIGH**
LOW	2. Reflexive Learning	3. Learning through Bargaining
HIGH	1. Epistemic Learning	4. Learning in the Shadow of Hierarchy

CERTIFICATION OF ACTORS

Source: adapted from Dunlop and Radaelli, 2013, Figure 1: 603.

Section 2   A Realistic Approach to Policy Instruments and Learning Mechanisms

We now move to the connection between learning and policy instruments. At a basic level, the link seems obvious. If learning occurs in the policy process as a result of cause-and-effect relationships, policy instruments must play a central role in mediating how and with what success beliefs are updated and priorities reshuffled. But, we can go deeper than this. Analytically, examining instruments as enablers (one could also examine the opposite case of instruments hindering mechanisms, of course) of learning mechanisms fits the processual nature of policy learning, and offers opportunities for re-design of tools. By discovering more about the nature and success (or otherwise) of the learning triggered by a tool, we can adjust, re-image or replicate those tools in response.

There is also a broader reason to bring these concepts together. As we mentioned, the policy learning literature in social science is huge (see Dunlop and Radaelli, 2013 for a review of political science and Dunlop and Radaelli, 2018a on public administration). This has resulted in many areas of policy analysis exhibiting a 'learning turn' – most notably, organisational design and theories of the policy process (think advocacy coalitions, target populations, narratives). Yet, the potential for policy learning to inform the study and, indeed, design of policy instruments has lagged somewhat. This chapter addresses this analytical gap.

Early studies of policy instruments focused on the characteristics of the big policy levers used to implement policy objectives – e.g. taxation, regulation, etc – and why government decided to use one instrument or another (Hood, 1983; Macdonald, 2005; Salamon, 2002). In these, the emphasis is very much first on the relationship between command-and-control regulation and its alternatives.

The second generation shifted gear towards the interplay between instruments mixes and governance (Eliadis, Hill and Howlett, 2005). The key issue here is how governments manage families of tools, especially in relation to the question of how government steers complex networks of actors towards a given governance goal, such as innovation, legitimacy (Webb, 2005) or sustainability or joined-up government. This second generation is concerned with procedural instruments (Howlett, 2000) – e.g. voluntary codes, partnerships, co-regulation and 'new modes of governance' (Héritier and Rhodes, 2010) – in a context of 'regulatory reconfiguration' of the state (Gunningham, 2005).

Most recently, there has been a renewed interest in going back to the interrogation of individual policy instruments. This has two dimensions. The first concerns empirical focus; authors are increasingly turning attention toward formulation tools associated with policy appraisal (Dunn, 2004; Howlett et al, 2014; Nilsson et al 2008; Radin, 2013; Turnpenny et al , 2009; Turnpenny et al, 2016); and, more specifically, impact assessment systems (for a review of the evaluation of the field see Dunlop and Radaelli, 2016). The second dimension is analytical. Social scientists have moved away from the functionalism implicit in some of the early literature that tracked the impact of instruments against stated objectives, to approaches that acknowledge the mediating role instruments have in policy dynamics. The very process of policy making, and for us policy learning, is shaped by the design of the tool (Dunlop et al, 2012; Lascoumes and Le Galès 2007; Turnpenny et al, 2009). Policy instruments

carry ideas or 'scripts' in part by dint of the 'constituencies' – actors and practices – that enact them (Simons and Voß, 2014, 2018).

Let us now piece together our analytical approach by explicating our take on causal mechanisms. Analytically, mechanisms are tools with which we can model the hypothetical links between events (Hernes, 1998). Keith Dowding helpfully introduces the idea of mechanisms as conceptual 'narrations' that allow researchers to fill the black box of explanation and take us beyond the particularism descriptive accounts (2016: 64). This requires mechanisms of sufficient generality that go beyond reference to specific events or tactics (Hedström and Swedberg, 1998: 10).

Before identifying our mechanisms of learning, we must also think about the analytical level our mechanisms operate (Stinchcombe, 1991: 367; see also Coleman, 1990). In short, what or who are these mechanisms acting on? The pre-eminent way of thinking about this is to treat 'the action being analysed [as] always action by individuals that is oriented to the behaviour of others' (Hedström and Swedberg, 1998: 13). The varieties of learning approach follows the 'weak methodological individualism' of mechanistic analysis (Hedström and Swedberg, 1998: 11-13) placing *homo discentis* (Dunlop and Radaelli, 2018b) – learning, studying and practicing people – at the centre of instrument constituencies. Yet, this does not mean that policy action, and the impact of policy instruments, is located only at the micro level. While we agree that agency is ultimately embodied in individual action, policy learning processes are social phenomena generated by individual action as they encounter and use policy tools at a variety of levels – between powerful elites (micro), in groups (meso) and societal (macro) – which may or may not work in sequence with each other (see Dunlop and Radaelli, 2017). Rather than artificially restrict our focus to the micro level alone, the key to analytical clarity is that our mechanisms levels are distinct from the level of the entity being theorised (Stinchcombe, 1991: 367).

There are, of course, several approaches to mechanisms in the social sciences and, closer to home, analytical sociology and political science (Gerring, 2007 lists nine distinct meanings; see also 2010; Hedström and Swedberg, 1998). As mentioned, we stick to a definition of social mechanism as causal relationship between causes and effects in a given context. In this volume, we argue that there is a relationship between activators and mechanisms. Activators are occurrences, events, or decisions that trigger or stimulate mechanisms. We follow the

editors in their differentiation between first-order and second-order mechanisms. The first-order mechanisms alter the behaviour of individuals, groups and structures to achieve a specific outcome. The second-order mechanisms are central for our analysis of policy learning. These mechanisms describe the response or reaction of individuals, organizations and systems to the deployment of an activator. Conceptually, we can have second-order mechanisms like learning and counter-mechanisms, like negative framing or contestation.

Second, we understand mechanisms as part of a context, following a realistic ontology of the social sciences (Pawson, 2006; Pawson and Tilley, 1997): a mechanism generates an outcome in a given time or space context, but not in other contexts. For example, a mechanism of prime ministerial leadership may produce effective decisions in a Westminster system with single-party government but not in a parliamentary system with coalition governments.

Third, given a certain historical, political, administrative context, we accept the possibility that more than one mechanism may be at work. As mentioned, a certain mechanism may be counter-acted by another mechanism. Think of the well-known case, explored by Charles Sabel (1994), when learning in a system is muted by the presence of monitoring in that same system. In fact, monitoring may suppress innovation and serendipity, and limit the learning options of policy actors. Thus, in our analysis of learning modes, a mode may work inefficiently because the underlying mechanisms are incoherent (on dysfunctional learning see Dunlop, 2017).

Fourth, mechanisms do not just happen all the time given a certain cause and a certain outcome variable affected by the cause. They have their own activators. Thus, if we say that a policy instrument designed for accountability promotes trust in government, we have to specify what is it exactly that makes an accountability device 'productive' in terms of trust. It can be something about the structure of the policy context (in which case we are back to the analysis of context and its effects on mechanisms) or something about agency – in particular, the style of interaction within a constellation of actors or instrument constituency. The two are related: interaction is affected by decision-rules, and these are often given by the structural properties of a policy system.

In both cases, unless we fully theorize causality and say how mechanisms affect the outcome, we only have a very partial causal story about mechanisms. There are different options

available, and indeed we find notions such as the 'power' (of mechanisms), 'disposition' or 'capacity' in the literature (Cartwright, 1999; Salmon, 1990). To simplify matters, we direct our theorization towards triggers and hindrances effected by policy instruments. As mentioned, the search for triggers and hindrances covers both structure and agency. This is our take on the much more complex discussion of whether mechanisms belong to the structural or to the agency properties of a system – a debate that we cannot rehearse here (see Wight, 2009).

A social mechanism, then, 'is a precise, abstract, and action-based explanation which shows how the occurrence of a triggering event regularly generates the type of outcome to be explained' (Hedström, 2005: 25; Hedström and Swedberg, 1998). Mechanisms define tendencies and probabilities of certain outcomes. Consequently, they belong to a type of social science that has the ambition to generalize (Gerring, 2010). As Mill put it in 1844, mechanisms describe a tendency towards a result, or 'a power acting with a certain intensity in that direction' (as cited by Hedström, 2005: 31).

We acknowledge that there is a big debate out there concerning whether mechanisms are compatible with any notion of empirical observation of reality or, as Bunge (1997: 421) once put it, 'no self-respecting empiricist (or positivist) can condone the very idea of a mechanism' (cited by Gerring, 2007). Our analysis certainly doesn't answer the big question, but we are clear about the concepts about mechanisms that guide empirical observations. We say this to be explicit about our aims and motivation as researchers: for us it does not make sense to provide a conceptual apparatus if it does not allow us to go out in the field and make observations. Note that we do not say that to 'go mechanistic' means to deny the value of other aspects of causation – such as equifinality or correlation. All we need for our analysis is to accept that mechanisms are a sufficiently interesting aspect of causation to deserve our attention. We believe that, although the mechanism itself is theorized and cannot be falsified, we can systematically make empirical observations about:

- the identification of a learning mechanism. This is the 'what mechanism is this?' question. Especially in policy analysis, we cannot simply say that there is a mechanism determining learning. We want to know whether this is a mechanism of, say, conflict or dialogue;

- the key resource and activators involved in learning as second-order mechanism, be it information, experience, knowledge and so on, and;

- how IA as a policy instrument mediates mechanisms in three regards:

    o activators;

    o the content of the second-order mechanism, in our case what is learned, and;

    o the value or quality of a given mode of learning, or what is learning good for? Within policy processes, different modes of learning are productive of different qualities such as exploiting the gains of cooperation or problem-solving.

In the next section, we go in the detail of each dimension in our discussion of learning modes.

Section 3   Mechanisms for Policy Learning and the Role of Impact Assessment therein

With these definitions and dimensions, we are ready to begin our discussion of mechanisms in the four modes or types of learning, starting with epistemic learning (see table 1).

Table 1   Unpacking policy learning modes

Learning as …	Epistemic	Reflexive	Bargaining	Hierarchical
Predominant actors …	experts	citizens	interests	courts and standard setters
Activator	evidence	communication	negotiation	compliance
Policy instrument activates…	teaching through evidence-based rationality	dialogue via participation	exchange through consultation	Monitoring and scrutiny
What is learned?	• cause and effect relationships • policy-relevance of science	• exposing norms • learning how to learn	• composition of preferences • costs of cooperation	• scope of rules • significance and rigidity of rules
What is it good for?	• reduction of uncertainty • opening up the peripheral vision	• upholding and renewing legitimacy • conflict resolution	• exposing the Pareto frontier • intelligence of democracy	• predictability • control

Source: Authors' own.

Epistemic learning is found in situations where issue intractability is high and decision-makers need or want to learn. When this is coupled with the existence of an authoritative body of knowledge and analysts who are willing and able to teach, teaching has fruitful ground. The activator is evidence, or more precisely the use of evidence – in turn, this usage can be instrumental, linked to how to deal with a given problem, or 'enlightening', that is opening the peripheral vision of policy makers.

Teaching involves the translation and transmission of new ideas, principles and evidence by socially certified, authoritative actors. The search for cognitive authority and evidence may be driven by either side – for decision-makers this could be a technological problem or complex disaster and, for experts, the push may be a scientific breakthrough and diffusion of innovation.

IA processes are fundamentally underpinned by a teaching logic, after all this is the archetypal evidence-based policy-making device. In the EU, the potency of IA's lessons is mediated by two important factors. First, and perhaps most obviously, policy-relevant knowledge must exist or be discoverable in the first place. More often than not the key epistemic issue when

it comes to questions of relevance concerns the analytical methods used in the IA. Since its establishment, debates have raged about the more appropriate ways of establishing the impact of policy options. The European Commission has not chosen a hierarchy of methods. For sure, there are advocates of cost-benefit analysis (CBA), but the official toolbox covers other techniques such as compliance cost analysis (arguable more in use at DG ENTR, Renda 2016), and Multi-Criteria Analysis (MCA) (used among others by DG EMPL, DG Justice, DG Regio) (see Renda, 2016).

This issue of contextual 'fit' is critical – if IA analyses do not speak to the political environment the prospects for epistemic learning are limited. Fit is also temporal, the time dimension in teaching matters because it concerns whether decision-makers are sufficient ready to learn or not, and whether their learning objectives (i.e. the policy decision) are truly open. Policy-making timelines are erratic and dynamic. While IA takes place at the beginning of the policy-making process, analysis takes time to form and political pressures may weigh heavily. Here is where Herbert Simon's (1957) famous idea of bounded rationality kicks in – teachers who want to influence their political pupils may have to temper their analytical perfectionism and aim to satisfice.

What is being learned and what is it good for? In an ideal typical manifestation, impact assessment analysis will delineate complex cause-and-effect relationships for decision-makers and how this knowledge can be linked to desired policy outcomes. In this way, IA reduces uncertainty. In more profound ways, epistemic learning in IA can also open up the peripheral vision of policy-makers. Models that integrate the environment, human behaviour and public policy can show how a given policy choice has multiple causal effects and can lead to unexpected consequences once we zoom out of narrow financial analysis and embrace wider cost-benefit analysis and complex modelling tools (Jordan and Turnpenny, 2015).

Reflexive learning is generated by dialogue and debate. This most social form of learning takes place against the backdrop of radical uncertainty about how to move an issue forward. We scrutinise and reform the logic of appropriateness in policy-making through debate: this is how we confront the ideas held by ourselves and others (Majone, 1989). Such exposure, and the scrutiny it entails, makes reason and social consensus possible (Habermas, 1984). Dialogic learning outcomes, in their purest form, are reliant on force-free deliberations – recall, in reflexive settings, the 'how' of learning is more pertinent than the 'what' (Freeman,

2006) – this requires public engagement technologies that occurred as far 'upstream' in the policy process as possible (Willis and Wilsdon, 2004). In IA, consultation processes are central in triggering such dialogue. Activators are occurrences, events, decisions about communication. It is indeed a special type of communication that activates this mechanism.

If communication is the activator, where do we find it? Most likely in the participatory and consultative features of IA. With the 2015 revision of the better regulation strategy of the Commission (Radaelli, 2018), the Commission has invested considerably in consultation, by strengthening its role in IA as well as in other instruments (for example in the retrospective evaluation of EU legislation).

Consultation is in fact a key component of IA (Hertin et al, 2009: 1190; Radaelli, 2004: 733-734) and is mandatory in the EU (European Commission, 2009). But, we should be careful here. Consultation involves two distinct groups of participant: organised interests, private firms and NGOs – commonly referred to as stakeholders – and citizens. The dialogue we are interested in is that generated by the latter (we deal with stakeholders in the next account of learning through bargaining). Despite many best practice guides on how to convene consultations (e.g. OECD, 2005, 2012), there is a good deal of variation in how they are run. Looking across countries, many consultations fall short of a fully plural dialogue where the 'ownership of proposed regulation is shared' with publics (OECD, 2008: 48). Research on US rulemaking has identified the problem of the missing stakeholder (Farina and Newhart, 2013). This means that there are instances where consultation is specifically designed to capture a particularly weak stakeholder, but exactly because the stakeholder does not have familiarity with the procedures of rulemaking and consultation in particular, the formal consultation exercise misses this category entirely.

The European Commission uses a range of tools such as active consultation devices like open hearings, focus groups, citizen juries and more passive ones including online consultations and questionnaires. We have no data on the missing stakeholder in EU consultations, although it is plausible to imagine that the problem exists everywhere, not just in the USA. Bozzini and Smismans (2016) have gathered 800 IAs between 2003 and 2013. With one exception (DG EMPL), in the process of preparing the IAs the DGs tend to prioritize the inclusion of other DGs with specialized competences over the inclusion of external actors. Thus, internal coordination is more important than dense interaction with citizens –

something that most scholars of bureaucracies would not find surprising. A more interesting finding is that the more a DGs produces IA, the more they tend to be inclusive in consultation. This is a learning-by-doing process that chimes with another study, this time on the UK, on the production of IA in central government departments in Britain (Fritsch et al, 2017).

Yet, even in the most limited cases, dialogue has its benefits. Most obviously, engaging publics yields some level of input legitimacy. It provides a single moment where policy proposals are made public and forces decision-makers to think about the wider social context they operate in. Consultations should also provide an opportunity to reach out to hard to reach or marginalised groups who may be disproportionately affected by a particular policy option. Often these stakeholders, as mentioned, are missed but one can look at the case of indigenous peoples whose right to participate in certain decisions is enshrined in the United Nations (UN) principle of Free, Prior and Informed Consent (FPIC) (see Blanc and Ottimofiore, 2016: 156). Intense communication also brings its own compliance dividend – citizens whose views have been taken into account being more likely to comply with resultant regulations (van Tol, 2011).

Dialogue triggered by sophisticated consultation can enable forms of reflexive learning. Open and deep communication is an activator of learning about social norms (Checkel, 2001). This opens up a wide social frontier for debate and value-driven argumentation. This is why the inclusive, energetic debates about fundamental values that fuels reflexive learning is most closely associated with paradigmatic policy change down the line (Hall, 1993). As well as the proto-lessons generated around values, dialogue also holds the promise of deutero or triple-loop learning (Argyris and Schön, 1978; Bateson, 1972). Simply stated, by arguing and debating policy actors may get a clear picture of how we can build consensus and adjust our norms – i.e. we learn about how to learn and develop (Argyris, 1999). In conclusion, reflexive learning is good for stable conflict resolution and upholding legitimacy.

Next comes **learning through bargaining** which is activated by negotiation. Issues are eminently tractable. Authority is plural. These processes are dominated by organised stakeholders and policy networks who must accept there is no settled monopolistic position on an issue. Rather, policy and politics is what they make of it. As such, actions and interactions are underpinned by exchange. Though intuitively, we tend to link negotiation to material outcomes, we think of the way information handled and changed during exchanges

as an intrinsic part of the generation of learning. After all, how actors select, acquire and trade information to inform their negotiating positions ultimately influences what they are willing to 'give' to competitors.

In IA, consultation with organised interests is central in facilitating these exchanges. In the EU, finance ministers and business groups spearheaded the push to more economically focussed, decision-making system (Radaelli and Meuwese, 2010). The result is an IA system whose development is intimately related to the post-Millennium agenda for better regulation and economic effectiveness – with some special tests like the Small and Medium-Sized Enterprise (SME) test (Radaelli, 2004) that are supposed to give priority to this type of stakeholder. Further down the line, environmental and socially focussed NGOs have advocated for an EU's IA system open to social and environmental tests. The official guidelines of the Commission on IA balance economic, social and environmental analyses and tests. Recall that all three dimensions deserve the same attention, according to the Commission's better regulation toolbox[2].

In recent years, the Competitiveness Council of Ministers of the EU has tried to forge consensus on a business impact target for the EU – that would mean that the EU institutions make a commitment to reduce the total regulatory costs on business by a certain pre-defined amount, over a period of time. In a sense, there has been meta-bargaining between some national delegations who have influence in the Competitiveness Council and the Commission over the purpose of IA, with the Commission resisting the uni-dimensionality of the business impact target. In late 2017, the Commission argued that the target 'may lead to undue deregulation because 'necessary costs' to achieve regulatory benefits are not distinguished from 'unnecessary costs'. A burden-reduction policy of this sort will not have the necessary legitimacy among stakeholders' (European Commission, 2017: 44). For the time being at least, this de-regulatory steer of IA has been blocked by the Commission – which interestingly makes an argument about legitimacy among stakeholders in resisting the imposition of the target on EU regulation.

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[2] https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/impact-assessments/better-regulation-guidelines-and-toolbox_en accessed in 27 March 2018

The precise nature of exchange and the learning that is generated is indeed dependent on the context of the interaction between member states and the Commission. At its core, this is bargaining about who is control of the law-making process of the EU, and whether the bureaucracy, the Commission, should be saddled with regulatory targets or free to examine regulations one by one via IA. More generally, in policy issues where stable policy communities dominate, interaction around the IA will be routinized. Here, decision-making risk is calculable. Exchange is underpinned by actors' probability judgements derived from long-standing experiences (for more on decision-making under risk see Elster, 1989: 26). While these calculations will be adjusted and re-calibrated over time, the lessons generated may be thought of as little more as the realisation of expectations as opposed to any new discovery. In such circumstances, though it is never complete, transparency will be sufficient for actors to be able to make an accurate prediction of other parties' stances. On the other hand, where the issue is novel or one-off, or a new actor enters the arena, interactions are underpinned by increased risk and, potentially, reduced transparency. In such contexts of incomplete information, interaction will be marked more by negotiation and bet-hedging. Here, exchanges do not simply create lessons about the most efficient means to secure mutually beneficial outcomes they may create new understandings about the issue entirely.

What is learned, and what is it good for? At a basic level, exchange of information can secure better policy solutions (OECD, 2008). As sector specialists, organised interests and private firms are experts who can help decision-makers avoid controversial policy options or out-dated assumptions. More centrally however the value of involving organised stakeholders in IA rests on the negotiation it triggers. In their ideal form, policy-making gains in efficiency by generating lessons about actors' preferences and the costs of cooperation. Taking preferences first, through bargaining and negotiation we learn about the composition of preferences on an issue, the salient outcomes around which parties can coalesce and about breaking points – the red lines held by ourselves and others beyond which an agreement cannot be forged. We also learn about the cost of reaching agreements (for a deeper discussion of these Elster, 1989: chapter 4). Where policy problems are time-sensitive, policy efficiency is increased where decision-makers understand these red lines and points of potential friction which may threaten future compliance. Learning via bargaining assists constellations of actors in exploring the Pareto frontier – the set of choices that are Pareto

efficient and can only be discovered by repeated interaction and negotiation. Systems of political exchange can work like markets: in a free economy, no individual has all the information necessary to find what the efficient solutions are, but it is sufficient that individuals be allowed to exchange on the basis of the information contained in the price system. Similarly, in political systems no individual or group knows what is good for the community, but partisan mutual adjustment and competition allow constellations of actors to find out what is good for me, given an acceptable initial distribution of resources (this is the intelligence of democracy in a nutshell). In a sense, IA in the European Commission forces all DGs concerned with an issue to bring their own evidence to the table, so that an evidence-based competition over problem definition and solutions is activated. The end result is a choice of policy options that takes a sufficient number of dimensions into account (Radaelli and Meuwese, 2010 for details).

Finally, we consider **learning in the shadow of hierarchy**. Here, the activator we are interested in is compliance. The concept of hierarchy reminds us of the vertical nature of this mode of learning. In that, there is similarity with epistemic knowledge. In the latter, we have a teacher and a pupil, whilst in hierarchical learning we have those who set the rules and those who follow the rules. Compliance is an important dimension of learning – over time policy actors and citizens learn about rules and how they are enforced. These systems of rules cast a long shadow over our lived experiences.

We can relate IA to learning about rule compliance in two main ways. Delegation theorists demonstrate how IA is shaped by political principals who use it to constrain their bureaucratic agents (McCubbins et al, 1987). So, in the EU we can think of this in terms of Member States making use of IAs to tame the political agenda-setting activities of the European Commission. Perhaps a more apt way to use principal-agent reasoning in this learning argument is to consider the role of the Commission's own central oversight body charged with coordinating the IA outputs of the various Directorate Generals (DGs) – the Regulatory Scrutiny Board (RSB). The RSB evaluates the quality of IAs and can place the legislative process on hold by instructing a DG to revise and re-submit their IA. Through this process of monitoring, the RSB pulls and pushes DGs toward compliance and so learning. But in this case again the context of the interaction between Commission and member states is important. Over the years we have seen some member states demanding an independent regulatory oversight body, not

staffed by officers working for the Commission. The latter has responded that oversight on IA is part of its right to identify, appraise and propose new legislation. In consequence, regulatory oversight should be in some ways connected to the Commission and its services, the DGs. At the moment these two different interpretations have found an equilibrium, perhaps fragile, in a RSB that is staffed by three independent experts, recruited for a limited period, and by three Commission officers, and chaired by a senior officer of the Commission. This is yet another indication that the context of learning in the hierarchical mode is identified by the question who has control over the process of policy formulation – the bureaucracy or the member states. The features and mission of bodies like the RSB incarnate the results of this core tension between an inter-governmental notion of the EU and another, more supranational vision of European integration.

A second vector triggering our compliance mechanism in the European Court of Justice (ECJ). The ECJ increasingly uses IA as *obiter dicta* – material which are non-binding but are nonetheless mentioned in rulings as helpful in establishing the original rationale for regulations (Alemanno, 2011, 2016). The EU's integration of IA in the court system has only just begun and we are some way off any US-style judicialization. IA can be both the subject of legal challenge and invoked in the cases where the validity of the regulation is being considered (Alemanno, 2016: 129). We are interested in this latter usage. The ready availability of policy analysis ensured by IA has resulted in an 'evidence-based judicial reflex' increasingly being exercised (Popelier, 2012: 257 in Alemanno, 2016: 129). Alemanno (2016) offers two examples where the ECJ has noted the content of IAs as an assurance of the proportionality of the regulatory option selected and that various options were considered in the first place. In this way, the IA process becomes a compliance tool – mediating challenges both ex ante *and* ex post in the policy process.

What is this scrutiny and compliance good for? We know, hierarchical rules are indispensable to organized societies. Monitoring and scrutiny of IA are indispensable for the legitimacy of EU regulations. Sanctions like negative opinions of the RSB are lessons for the DGs concerning the expectations about the quality and type of evidence they have to produce to support their policy proposals. Interestingly, other EU institutions, specifically the European Parliament, have invested in scrutinizing the IAs of the Commission to inform and support the work of the committees (Radaelli, 2018), thus adding an inter-institutional dimension to this variety of

learning via IA. In the end, learning via hierarchy provides predictability and allows different actors (from the European Parliament to national delegations and stakeholders) to exercise control on the policy formulation process of the European Commission.

Conclusions

In this chapter we have explored the logic of learning in four different modes: epistemic, reflexive, via negotiation and within hierarchies. By considering the case of the most important instrument for evidence-based policy in the European Union, impact assessment, we have shed light on the relationship between second-order mechanisms, activators and policy instruments. One big question for us at the end of this journey is where is politics in this framework? Does the language of mechanisms and policy instruments bracket politics away? We do not think so. First, mechanisms do not play regardless of the state of institutions but only make sense in a given context. As real features of the world, mechanisms connect and are mediated by wider features of a political system. The Commission has a right to initiate legislation defined in the Treaty (the highest source of law in the European Union): this shapes how constellations of actors learn by using IA in this peculiar system, where a bureaucracy has the right to introduce proposals for new legislation.

At the deeper level, our analysis of mechanisms and policy instruments reveals other fundamental dimensions of politics and inter-institutional conflict. Evidence-based policy and IA in particular are the terrain where a fundamental fault-line about who is in control on the law-making process plays out. We have seen that tensions about the role of regulatory oversight, the freedom of the Commission in carrying out IA, the reach of consultation expose different answer to the question of who is control of the making of EU policies, and who is accountable to. The Commission wants to learn via IA how to coordinate policies and generate legitimacy, by bringing its services (the DGs) in line with the priorities of the President and the stakeholders behind the proposals that are sent to the other EU institutions as part of the legislative procedure. The European Parliament scrutinizes the IAs of the Commission to make it more accountable. The national delegations sitting in the different formations of the Council want to learn how the adoption of a business impact target or an independent RSB would allow more control on the bureaucracy and a more inter-governmental EU.

To us, it does not look surprising that the a policy instrument like IA has moved into the very political territory of learning the boundaries of proportionality (Alemanno, 2016) and subsidiarity – that is, what is more efficiently done at the EU level and what should be left to the member states. In launching the new industrial strategy on 13 September 2017, the President of the Commission, Jean-Claude Juncker announced a new task force led by Timmermans on subsidiarity and proportionality[3]. The task force was set up in November 2017 with members from national parliaments and the committee of the regions. Its task is to clarify the principles of subsidiarity and proportionality and identify policy sectors that should be given back to EU countries or re-delegated to the EU. Writing IAs, defining regulatory oversight bodies, involving stakeholders, launching dialogues with citizens and experts and setting the rules for what should go inside an IA are more than routines of technical, dull, operational, low-politics learning. They are also avenues to learning how to approach inter-institutional politics, accountability, proportionality and subsidiarity, that is, the core political dimensions of European integration.

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[3] See European Commission President Juncker's State of the Union address http://europa.eu/rapid/press-release_SPEECH-17-3165_en.htm

Acknowledgements

References

Alemanno, A. (2011), 'A meeting of minds on impact assessment: when ex ante evaluation meets ex post judicial control', *European Public Law* 17 (3), 485–505.

Alemanno, A. (2016), 'Courts and regulatory impact assessment', in Dunlop, C.A. and Radaelli, C.M. (eds), *Handbook of Regulatory Impact Assessment,* Cheltenham: Edward Elgar.

Argyris, C. (1992), *On Organizational Learning,* Oxford: Blackwell.

Argyris, C. and Schön, D. (1978), *Organizational Learning: A Theory of Action Perspective,* Reading, MA: Addison Wesley.

Bateson, G. (1972), *Steps to an Ecology of Mind,* Chicago, IL: University of Chicago Press.

Bennett, C.J. and Howlett, M. (1992), 'The lessons of learning: Reconciling theories of policy learning and policy change', *Policy Sciences* 25 (3), 275-294.

Blanc, F. and Ottimofiore, G. (2016), 'Consultation', in Dunlop, C.A. and Radaelli, C.M. (eds), *Handbook of Regulatory Impact Assessment,* Cheltenham: Edward Elgar.

Bozzini, E. and Smismans, S. (2016), 'More inclusive European governance through impact assessments?', *Comparative European Politics* 14 (1), 89-106.

Cartwright, N. (*1999*), *The Dappled World: A Study of the Boundaries of Science*, Cambridge: Cambridge University Press.

Cecot, C., Hahn, R., Renda, A. and Schrefler, L. (2008), 'An evaluation of the quality of impact assessment in the European Union with lessons for the US and the EU', *Regulation and Governance* 2 (4), 405–424.

Checkel, J.T. (2005), 'International institutions and socialization in Europe: introduction and framework', *International Organization* 59 (4), 801-826.

Coleman, J.S. (1990), *Foundations of Social Theory,* Cambridge, MA: Belknap Press of Harvard University Press.

Dowding, K. (2016), *The Philosophy and Methods of Political Science,* London: Palgrave.

Dunlop C.A. and Radaelli, C.M**.** (2017), 'Learning in the bath-tub: The micro and macro dimensions of the causal relationship between learning and policy change', *Policy and Society*, *36* (2), 304-319.

Dunlop, C.A. (2017), 'Pathologies of policy learning: What are they and how do they contribute to policy failure?', *Policy and Politics* 45 (1), 19-37.

Dunlop, C.A. and Radaelli, C.M. (2013), 'Systematizing policy learning: From monolith to dimensions', *Political Studies*, 61 (3), 599-619.

Dunlop, C.A. and Radaelli, C.M. (2016) 'The politics and economics of regulatory impact assessment', in Dunlop, C.A. and Radaelli, C.M. (eds), *Handbook of Regulatory Impact Assessment,* Cheltenham: Edward Elgar.

Dunlop, C.A. and Radaelli, C.M. (2016), 'Policy learning in the Eurozone crisis: modes, power and functionality', *Policy Sciences* 49 (2), 107-124.

Dunlop, C.A. and Radaelli, C.M. (2018a), 'Policy learning and organizational capacity', in Ongaro, E. and van Thiel, S. (eds), *The Palgrave Handbook of Public Administration and Management in Europe,* Basingstoke: Palgrave.

Dunlop, C.A. and Radaelli, C.M. (2018b), 'Does policy learning meet the standards of a theory on the policy process', *Policy Studies Journal* 46 (S1)

Dunlop, C.A., Maggetti, M., Radaelli, C.M. and Russel, D.J. (2012), 'The many uses of regulatory impact assessment: A meta-analysis of EU and UK cases', *Regulation and Governance*, 6 (1), 23-45.

Dunn, W.N. (2004), *Public Policy Analysis*, Pearson Prentice Hall.

Eliadis, P., Hill, M. and Howlett, M. (eds) (2005), *Designing Government: From Instruments to Governance*. Montreal, Quebec / Ontario: McGill-Queen's University Press.

Elster, J. (1989), *Nuts and Bolts for the Social Sciences,* Cambridge, MA: Cambridge University Press.

European Commission (2002a), *Towards a Global Partnership for Sustainable Development*, COM(2002) 82 final, available at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52002DC0082&from=EN (accessed 2 June 2015)

European Commission (2002b), *Communication from the Commission on Impact Assessment*, COM(2002) 276 final, available at http://trade.ec.europa.eu/doclib/docs/2005/february/tradoc_121479.pdf (accessed 2 June 2015).

European Commission (2002b), *Communication from the Commission on Impact Assessment*, COM(2002) 276 final, available at http://trade.ec.europa.eu/doclib/docs/2005/february/tradoc_121479.pdf (accessed 2 June 2015).

European Commission (2009a), *Impact Assessment Guidelines*, 15 January, SEC(2009) 92, available at http://ec.europa.eu/smart-regulation/impact/commission_guidelines/docs/iag_2009_en.pdf (accessed 12 April 2015).

European Commission (2015), *Better Regulation for Better Results: An EU Agenda*, Brussels COM(2015) 215 Final, 19 May 2015 (accessed 27 March 2018).

European Commission (2017), *Overview of the Union's Efforts to Simplify and Reduce Regulatory Burdens*, Staff Working Paper, SWD(2017) 675 Final.

Farina, C.R. and Newhart, M.J. (2013) *Rulemaking 2.0: Understanding and Getting Better Public Participation* Cornell eRulemaking Initiative Publications. Paper 15. http://scholarship.law.cornell.edu/ceri/15 (accessed 27March 2018)

Fristch, O., Kamkhaji, J.C. and Radaelli, C.M. (2017), 'Explaining the content of impact assessment in the United Kingdom: Learning across time, sectors, and departments', *Regulation & Governance* 11 (4): 325-342.

Gerring, J. (2007), 'The mechanismic worldview: thinking inside the box', *British Journal of Political Science,* 38 (1), 161-79.

Gerring, J. (2010), 'Causal mechanisms: yes, but…', *Comparative Political Studies,* 43 (11), 1499-1526

Gunningham, N. (2005), 'Reconfiguring environmental regulation', in Eliadis, P., Hill, M. and Howlett, M. (eds), *Designing Government: From Instruments to Governance*. Montreal, Quebec / Ontario: McGill-Queen's University Press, pp. 333-352.

Habermas, J. (1984), *The Theory of Communicative Action volume 1,* Boston, MA: Beacon Press.

Hall, P.A. (1993), 'Policy paradigms, social learning and the state: the case of economic policy-making in Britain', *Comparative Politics,* 25 (3), 275-296.

Hedström, P. (2005), *Dissecting the Social: On the Principles of Analytical Sociology*, Cambridge, MA: Cambridge University Press.

Hedström, P. and Swedberg, R. (eds) (1998), *Social Mechanisms: An Analytical Approach to Social Theory,* Cambridge, MA: Cambridge University Press.

Heikkila, T. and Gerlak, A.K. (2013), 'Building a conceptual approach to collective learning: lessons for public policy scholars', *Policy Studies Journal* 41 (3), 484-511.

Héritier, A. and Rhodes, M. (eds) (2010), *New Modes of Governance in Europe* Basingstoke: Palgrave Macmillan.

Hernes, G. (1998), 'Real virtuality', in Hedström, P. and Swedberg, R. (eds) *Social Mechanisms: An Analytical Approach to Social Theory,* Cambridge, MA: Cambridge University Press.

Hertin, J., J. Turnpenny, A. Jordan, M. Nilsson, D. Russel and B. Nykvist (2009), 'Rationalising the policy mess? Ex ante policy assessment and the utilisation of knowledge in the policy process', *Environment and Planning A* 41 (5), 1185-1200.

Hisschemöller, M. and Hoppe, R. (2001), 'Coping with intractable controversies: The case for problem structuring in policy design and analysis', in Hisschemöller, M., Dunn, W.N., Hoppe, R. and Ravetz, J. (eds), *Knowledge, Power and Participation in Environmental Policy Analysis. Policy Studies Review Annual Volume 12,* New Brunswick, NJ: Transaction Publishers.

Howlett, M. (2000), 'Managing the 'hollow state': Procedural policy instruments and modern governance', *Canadian Public Administration*, 43 (4), 412-431.

Howlett, M., Mukherjee, I. and Woo, J.J. (2015), 'The new design orientation in policy formulation research: From tools to toolkits in policy instrument studies', *Policy and Politics* 43 (2), 291-311.

Jenkins-Smith, H.C. (1990), *Democratic Politics and Policy Analysis* Pacific Grove, CA: Brooks/Cole.

Jordan, A.J. and Turnpenny, J.R. (2015), *The Tools of Policy Formulation*, Cheltenham: Edward Elgar.

Lascoumes, P. and Le Galès, P. (2007), 'Introduction: Understanding public policy through its instruments – from the nature of instruments to the sociology of public policy instrumentation', *Governance* 20 (1), 1–21.

Macdonald, R.A. (2005), 'The Swiss army knife of governance', in Eliadis, P., Hill, M. and Howlett, M. (eds), *Designing Government: From Instruments to Governance*. Montreal, Quebec / Ontario: McGill-Queen's University Press, pp. 203-241.

Majone, G. (1989), *Evidence, Argument and Persuasion in the Policy Process*, New Haven, CT: Yale University Press.

May, P.J. (1992) 'Policy learning and failure', *Journal of Public Policy* 12 (4), 331-54.

McAdam, D., Tarrow, S. and Tilly, C. (2001), *Dynamics of Contention,* Cambridge, MA: Cambridge University Press.

McCubbins, M.D., Noll, R.G. and Weingast, B.R. (1987), 'Administrative procedures as instruments of political control', *Journal of Law, Economics, and Organization* 3 (2), 243–277.

Merton, R.K. (1968), *Social Theory and Social Structure,* New York, NY: Free Press.

Nilsson, M., Jordan, A., Turnpenny, J., Hertin, J., Nykvist, B. and Russel, D. (2008), 'The use and non-use of policy appraisal in public policy making: An analysis of three European countries and the European Union', *Policy Sciences* 41 (4), 335–355.

OECD (2005), *Guiding Principles for Regulatory Quality and Performance*, available at http://www.oecd.org/fr/reformereg/34976533.pdf (accessed 12 April 2015).

OECD (2008a), *Building an Institutional Framework for Regulatory Impact Analysis*, available at http://www.oecd.org/regreform/regulatory-policy/40984990.pdf (accessed 12 April 2015).

OECD (2008b), *Introductory Handbook for Undertaking Regulatory Impact Analysis (RIA)*, Version 1.0, available at http://www.oecd.org/gov/regulatory-policy/44789472.pdf (accessed 12 April 2015).

OECD (2012), *Recommendation of the Council on Regulatory Policy and Governance*, available at http://www.oecd.org/governance/regulatory-policy/49990817.pdf (accessed 12 April 2015).

Pawson, R. (2006), *Evidence-Based Policy: A Realist Perspective,* London: Sage.

Pawson, R. and Tilley, N. (1997), *Realistic Evaluation,* London: Sage.

Putnam, R. (1993), *Making Democracy Work,* Princeton, NJ: Princeton University Press.

Radaelli, C.M. (2004), 'The diffusion of regulatory impact analysis – best practice or lesson-drawing?', *European Journal of Political Research* 43 (5), 723–47.

Radaelli, C.M. (2010), 'Regulating rule-making via impact assessment', *Governance* 23 (1), 89-108.

Radaelli, C.M. (2018), 'Half-way through the better regulation strategy', *Journal of Common Market Studies*

Radaelli, C.M. and Meuwese, A.C.M**.** (2010), 'Hard questions, hard solutions: Proceduralisation through impact assessment in the EU', *West European Politics*, *33* (1), 136-153.

Radin, B.A. (2013), *Beyond Machiavelli: Policy Analysis Reaches Midlife*, second edition, Georgetown University Press.

Renda, A. (2016), European Union', in Dunlop, C.A. and Radaelli, C.M. (eds), *Handbook of Regulatory Impact Assessment,* Cheltenham: Edward Elgar.

Sabel, C. (1994), 'Learning by monitoring: the institutions of economic development', Smelser, N. and Swedberg, R. (eds) *Handbook of Economic Sociology,* Princeton, NJ: Princeton University Press and Russell Sage Foundation, pp. 137-165.

Salamon, L.M. (ed) (2002), *The Tools of Government: A Guide to New Governance*. Oxford: Oxford University Press.

Salmon, W.C. (1990), *Four Decades of Scientific Explanation,* Minneapolis, MN: University of Minnesota Press.

Simon, H.A. (1957) *Models of Man, Social and Rational: Mathematical Essays on Rational Human Behavior in a Social Setting*, New York, NY: John Wiley and Sons.

Simons, A. and Voß, J-P. (2018), The concept of instrument constituencies: accounting for dynamics and practices of knowing governance', *Policy and Society*, 37 (1), 14-35.

Stincombe, A.L. (1998), 'Monopolistic competition as a mechanism: Corporations, universities and nation-states in competitive fields', in Hedström, P. and Swedberg, R. (eds), *Social Mechanisms: An Analytical Approach to Social Theory,* Cambridge, MA: Cambridge University Press.

Turnpenny, J., Radaelli, C., Jordan, A. and Jacob, K. (2009), 'The policy and politics of policy appraisal: Emerging trends and new directions', *Journal of European Public Policy* 16 (4), 640–653.

van Tol, J. (2011), *Summary Analysis of the Risk-Regulation Reflex Entrenched Beliefs and Six Possible Avenues for Solutions*, Paris: OECD Publications, available at http://www.oecd.org/regreform/regulatorypolicy/48654345.pdf (accessed 12 April 2015).

Voß, J.-P. and Simons, A. (2014), 'Instrument constituencies and the supply side of policy innovation: The social life of emissions trading', *Environmental Politics,* 23 (5), 735–754.

Webb, K. (2005), 'Sustainable governance in the twenty-first century: Moving beyond instrument choice', in Eliadis, P., Hill, M. and Howlett, M. (eds), *Designing Government: From Instruments to Governance*. Montreal, Quebec / Ontario: McGill-Queen's University Press, pp. 242-280.

Wight, C. (2009), 'Theorising terrorism: the state, structure and history', *International Relations*, 23 (1), 99-106.

Willis, R. and Wilsdon, J. (2004), *See-through Science: Why Public Engagement Needs to Move Upstream,* London: Demos.