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Journal of Risk Research

Risk, Uncertainty and Policy: towards a social-dialectical understanding

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Abstract

This editorial introduces a special issue devoted to studies of risk and uncertainty in their relation to policy and policy-making. The special issue comprises a rather diverse collection of six original research articles, each taking up a distinct perspective in scrutinising interfaces between policy, risk and uncertainty. The purpose of this editorial is to present some broader themes in the literature before moving on to sketch out a basic model for dialectically connecting risk and uncertainty to policy, as a basis for relating the respective insights which emerge within the six empirical articles. The editorial concludes with an overview of these six studies which appear in the special issue.

Keywords: Institutions; policy; risk; uncertainty;

Risk and Policy: From institutional perspectives to claims-making

The six original research articles appearing in this special issue were initially presented at the first mid-term conference of Research Network 22 – Sociology of Risk and Uncertainty – of the European Sociological Association, which took place at the Risk and Crisis Research Centre at Mid Sweden University, Östersund, in March 2011. A large number of papers from the conference were put forward for this special issue, with these six finally chosen following various selection rounds and processes of peer review. A brief glance at the contents-page of the special issue will immediately alert the reader to a rather heterogeneous subject matter, in terms of ‘levels’ of policy-making being considered, the design and methods of research employed, not to mention the different empirical contexts where policy-making has been explored and the diverse theoretical lenses invoked. Before going on to give an overview of each of these six articles, we first sketch out a broader theoretical framework which will be useful in then understanding the contribution of each of the articles and their relationship to one another. In presenting this framework we are also seeking to draw together and begin to extend some of the existing work on policy-making, uncertainty and risk. Partly influenced by Berger and Luckmann’s (1967) conception of a social dialectic, though also considering risks from a critical realist perspective

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(Tulloch 2008), we begin to explore some of the manifold ways in which policy and risk interact amidst a growing emphasis upon the uncertainty and limits of policy intervention (Taylor-Gooby et al. 1999).

Policy and policy-making are bound up with risk and uncertainty in myriad ways. Whether policy is being developed at the transnational or municipal level, in order to run a government, a university or a shop, a whole array of uncertainties are faced by policy-makers and increasingly their response to such uncertainties can be described as pertaining to notions of risk. The latter involve a particular rational-calculative model of considering the uncertain future, with a common recourse to using pooled observations from the past as a means of (probabilistically) planning for the future (Renn 2005; Zinn 2008; Aven 2013a; Austin et al. 2013). In this sense risk has become a particular tool of policy-making, in order to cope with tensions between intractable problems of uncertainty on the one hand and, on the other, “the nature of modern culture, especially its technical and economic substructure, [which] requires precisely such ‘calculability’ of consequences’ (Weber, 1978:351).

There would seem to be an important causal relationship between these latter pressures and demands (as referred to by Weber), as they are increasingly placed upon policy-makers’ shoulders, and the use of risk frameworks as institutional-organisational tools for decision-making (Rothstein 2006). In policy-making contexts where failures are increasingly emphasised and keenly criticised, risk governance emerges as ‘a simultaneous attempt to manage threats to society as well as reflexively manage the negative institutional externalities of governance itself’ (Rothstein 2006: 217). Risk has therefore become a potent ideological device of legitimisation, rather unique in its pretence at scientific-rational neutrality while veiling the reconfiguration of accountability, interests and thus blame, through which risk becomes potently and insidiously political (Alaszewski and Brown 2012). As a tool for managing institutions’ vulnerability amidst uncertainty, risk governance develops certain patterns which are very much driven by the organisational and survival interests of policy-makers: ‘By transforming decision-making into probabilistic assessments of success and failure, the concept of risk resolves the dilemma of imperfect control by explicitly anticipating the possibility of failure within decision-making’ (Rothstein 2006: 217).

As Rothstein (2006) argues and as Figuié (2014) explores in this special issue, the momentum towards, directions in and formats of risk governance are saliently analysed through a lens which focuses upon institutional interests and competition for resources. Yet we can also benefit greatly from taking a step away from policy-making organisations themselves, to reflect upon beliefs and attitudes towards various uncertainties across broader society. We have already caught a glimpse of the influence of these wider beliefs and attitudes in terms of the accountability and legitimacy demands placed upon policy-making institutions. The need to maintain legitimacy within the public sphere may compel policy-makers to tackle certain social problems, increasingly though not solely framed as risks, which may have previously not been defined as problematic (Spector and Kitsuse 1973; Lodge and Hood 2002; Bröer et al. 2014). The ability of certain actors and events to shape or set the agenda of public sphere discussions

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may, within certain conditions (Kasperson et al. 1988; Kingdon 1994), accordingly become highly salient for how governmental policy-makers come to develop policy in relation to certain newly perceived 'risks'. Myriad claims, which might be expressed through an array of lenses, are prone to be framed as 'risks' due to the various legitimating features of such conceptualisations (Alaszewski and Brown 2012).

Alternatively, where existing risk governance frameworks already operate, particular actors or 'claims-makers' may successfully change the nature, format and focus of governance approaches by (re)typifying the extent or nature of problems in a new manner (Spector and Kitsuse 1973; Cohen 2002; Hamilton 2014). He and colleagues' (2014) research in this special issue denotes the relative absence of critical debate about the risks of nuclear power within China's public sphere until rather recently and, correspondingly, the lack of challenge to risk governance policies for the building and running of nuclear power plants. A range of human and non-human factors are described as salient in this gradually changing context, including the relatively recent development of nuclear power facilities, a previous dearth of transparency legislation, limited NGO activity, and a lack of critical media coverage (He et al. 2014).

This interesting case points towards the relevance of both intransitive non-human objects, which exist and function more or less independently of our knowledge about them (Bhaskar 1986:5-6; Pierides and Woodman 2012), and a whole array of claims-makers whose combined presence are necessary, albeit not sufficient (Kasperson et al. 1988), for risk-framed problems to emerge within the public sphere. While the existence and agency of claims-makers – as structured by their relative power, money and creativity – are often considered vital in bringing certain 'problematic' conditions into the media spotlight and thus the broader public consciousness (Best 1995), the challenges faced in the management of the Fukushima nuclear power station, following what could be seen as a natural disaster, is a salient example of an event which attracted significant media attention in light of its characteristics, as defined in light of previous media 'templates' (Kitzinger 2004; Alaszewski and Brown 2012). In this instance, no claims-makers were required to bring nuclear power concerns into the media spotlight. International media-reporting has itself become an important agenda setter and has been influential in informing and shaping public attitudes regarding nuclear safety in China and elsewhere, with certain shifts in policy resulting from this (He et al. 2014).

From claims-reception and policy to public awareness

Even where potent claims are made and public awareness and debate grow, various case studies have shown that this alone is not sufficient to render policy responses. Claims-making is only one side of the story and 'claims reception' (Brown 2006) is also necessary – involving the 'selective hearing' of policy-makers which render them more prone to acknowledging and acting upon particular claims. Meanwhile other claims, which may also be loudly and effectively made, apparently fail to achieve influence (Brown 2006). Interests and ideology are important in explaining this selective hearing, in that when a claim fits neatly with the prevailing ideological

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template, its 'resonance' (Bröer et al. 2014) and legitimacy with groups of policy-makers is all the more likely (Alaszewski and Brown 2012).

Alongside the legitimacy and resonance of certain ideas, more practical factors also influence which apparent problems or perceived risks are taken seriously by groups of political decision-makers, whereby new policy results. Kingdon (1994) emphasises the need for 'problem' recognition to coincide with the existence of feasible policy solutions and, moreover, conducive political circumstances in order for new governmental legislation to be enacted. This tension between claims-making and the way information is received and acted upon (or not) is usefully illuminated by Barbi and Ferreira (2014) in their analysis of climate change phenomena and politics in certain local contexts within Brazil. In spite of popular claims, including some rather compelling scientific evidence, regarding changes in climate, precipitation and sea-levels which impact significantly upon coastal towns in Sao Paulo state, a 'climate change' typification/attribution of the problem fails to result in consistent and significant regulatory interventions to limit climate change. This failure to preventatively intervene would seem partly due to the influence other frames and interests of policy-makers, but moreover is due to limited confidence in the feasibility of climate-change interventions at the municipal level. Instead floods, due to changing rainfall patterns and rising sea levels, are problematised at the local governmental level in a largely reactive manner: coping with climate variability; as opposed to preventing climate change (Barbi and Ferreira 2014).

As noted by Barbi and Ferreira (2014), scientific research is an important source of claims in this context, though often one facing the selective hearing of policy-makers and where the uncertainty expressed within evidence may become politicised. This tension within claims-reception at the 'science-policy interface' is further interrogated within Linke and colleagues' (2014) research into environmental risk governance of the Baltic Sea. In their fisheries case study, the presentation of research evidence by the scientist-claims-makers, often emphasising uncertainty and complexity, does not fit with the interests and practices of the claims-receiver-policy-makers who require 'precise numbers' in order to legitimate their decision-making within broader EU political circles. The multiple forms of unknowns emerging within this science-policy interaction leads to a politicisation of particular uncertainties in various ways. This is partly dependent on the level of uncertainty expressed by scientists but also on the multiple interests which bear upon policy-makers, as well as the extent to which policy-makers are charged with directly implementing certain decisions as opposed to making guidelines which are implemented by others (Linke et al 2014). Uncertainty therefore represents a problem but moreover is an important resource for policy-makers, in the way it may be emphasised and problematised in certain contexts (Linke et al. 2014) or ignored and/or assumed away in others (Aven 2013a; Figuié 2014), depending on the interests and legitimacy of policy-makers and other stakeholders.

One of the more paradoxical formats through which uncertainty is dealt with by policy-makers is via the precautionary approach, by which *possible* events are planned and intervened for regardless of evidence from the past (Alaszewski and Burgess 2007). The lack of prior events and therefore the impossibility of probabilistic approaches renders perceived uncertainty especially high, yet

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often these potential events are acted upon in a manner which overlooks uncertainty and by which ‘the possible’ becomes established as ‘the real’ within ‘risk’ governance. These tensions are highly visible within Figuié’s (2014) analysis of recent governance shifts in relation to ‘emerging infectious diseases’. ‘Emerging’ is the key notion here, whereby pre-pandemic governance regarding ‘what could be’ is employed to place new demands for precaution, transparency and participation upon national-level agencies.

The manner in which representations of uncertainty, probability and risk are blurred or distinguished within policy discussions (see Aven 2013a for a critical disentangling), as a tool of legitimisation, may come to shape experiences of uncertainty and vulnerability by those affected by the policy. This impact of policies may occur through the influence of the broader rhetorical discussions and/or via the more material impact of policy interventions. The subjects who become influenced by policy may include other policy-makers and stakeholders within particular institutions, or citizens in everyday life, but both may experience uncertainty and vulnerability in new/different ways due to the influence of policy interventions and rhetoric¹. In responding to certain assertions of validity by claims-makers, the reception of and reaction to claims by policy-makers may in various ways legitimise the ‘reality’ or invisibility of these claims and the perceived likelihood of their experience. Amidst this policy discourse, the awakened attentiveness of the subject towards particular ‘risks’ is well recognised within the governmentality tradition (O’Malley 2008), alongside various subjectivities of resistance within those referring to Foucault’s later work.

In exploring the varied effects of policy upon subjectivity and awareness, Bröer and colleagues (2014) go somewhat further in emphasising the variation in impact of policy upon everyday consciousness, both empirically and through their useful conceptualisation of ‘resonance’. In a nuanced consideration of various ways in which policy may find consonance and/or dissonance, while also maintaining the possibility for autonomy – for those unaffected by discourse (see also Corrigan and Watson 2002) – the notion of resonance is useful in exploring the interwoven framing and feeling rules which policies may interact with, strengthen and/or undermine.

Bröer and colleagues (2014) explore the existence and absence of ‘resonance’ between macro policy formulations of ‘risk’, as emerge within policy rhetoric and interventions, and individualised perceptions in light of cross-country comparative survey data. Working at a rather different level of analysis, Hamilton’s (2014) research into policy rhetoric interrogates a particular disassembling and reworking of risk – from collective risk-pooling to individualised risk-bearing – within recent policy documents and pronouncements. The specific examples of labour market policy and welfare reform which are referred to demonstrate the potential for policy rhetoric to powerfully draw upon broader discourses to reframe and re-emphasise a particular patterning of uncertainty and vulnerability. In various senses these rhetorical and ideological processes serve to legitimise the individualisation of risk within welfare policy, but perhaps above all they serve to distract consciousness away from risk of unemployment more generally – burying previously existing concerns with insurance against misfortune beneath typifications of idleness and fecklessness.

Towards a longer-term social-dialectical understanding of risk, uncertainty and policy

The general framework sketched above makes apparent the interweaving of two dialectical processes, whereby on the one hand policy-shaped discourse potentially ‘objectivates’ certain socially meaningful definitions of reality, with these then becoming present within the lived subjective experiences of everyday citizens (Berger and Luckmann 1966: 145). Meanwhile, on the other hand, claims which are powerfully made within the public sphere – through their normative weight and apparent validity – often compel policy-makers to act in ways which serve to further legitimise and thus reproduce the problematisations and typifications of the claims-makers. We see here a social dialectical relationship between risks and policies in the sense that:

It is correct to say that theories are concocted in order to legitimate already existing social institutions. But it also happens that social institutions are changed in order to bring them into conformity with already existing theories, that is, to make them more ‘legitimate’ (Berger and Luckmann 1966: 145).

These dialectic relations between policy and societal beliefs, and societal beliefs and policy (see also Spector and Kitsuse 1973), are a useful starting point for considering the longer-term interactions between risk, uncertainty and policy. But of course, in the foregoing, we have noted a whole host of factors which complicate such a straightforward model:

- a. This more constructionist perspective also needs to be combined with a more realist sensibility towards the various ways in which – as with Fukushima or climate change in Brazil – non-human processes continue to surprise (Pierides and Woodman 2012; Aven 2013b), ‘irritate’ (van Loon in Brown and Heyman 2013) or in other ways attract social and political attention, often in interaction with prior human interventions.
- b. A dialectical process involving both claims-makers and policy-makers, who interact partly via mass media, becomes less clearly delineated when (in reference to the last point) media reporting (following earlier ‘templates’ – Kitzinger 2004) comes in some cases to set the agenda itself. Further blurring takes place in terms of the distinction between claims-makers and policy-makers where, for example, the World Health Organisation and the World Organisation for Animal Health (see Figuié 2014) can be seen in certain senses as both (re)defining claims-maker and increasingly influential policy-making authorities.
- c. The dialectic process undergoes various processes of warping, through the selective reception and appropriation by both policy-makers and others (citizens and claims-makers) in the public sphere. This in turn is due to the underlying influence of existing interests which shape existing frames and emotional tendencies (Bröer et al. 2014). This means that claims may fail to resonate with policy-makers (Brown 2006)

while, moreover, policy discourse may fail to resonate with citizens (Bröer et al. 2014).

- d. Flowing out of this preceding concern, the (re)conceptualisation of vulnerabilities and uncertainties in terms of particular ‘risks’ is highly contingent and involves more agency than the simple dialectical model (above) implies. Embedded within powerful interests and knowledge frameworks, actors (citizens or policy-makers) are nevertheless rather creative in the way uncertainty is (de)emphasised within their conceptions and experiences of ‘risk’. Processes of categorising and valuing particular outcomes, as often veiled beneath the scrutinising or neglect of uncertainty, render ‘risk’ a highly pliable tool in the hands of citizens and policy-makers alike.

In spite of, or perhaps in light of, these important caveats, we can consider a number of ways in which policy-making, risk and uncertainty feedback upon one another over longer periods of time. The warping influence of interests, as we have noted, may in many cases lead to perverse understandings of ‘legitimate’ policy-making, as these different but related social constructed understandings of particular ‘risks’ increasingly come to distort one another.

Evidence-based policy-making could in certain cases lead to more positive, virtuous circular effects in these dialectic processes of meaning-making. However many of the articles in this special issue, along with the work of Rothstein (2006) cited above, paint a somewhat more pessimistic picture. Linke and colleagues (2014) work in particular emphasises the limitations of, and normative assumptions around, straightforward translations of scientific research into effective policy. Further institutional concerns were noted towards the start of our analysis, by which a growing concern with second-order ‘risks’ (the risks of legislating for risk) may encourage various skewed foci and decision-making amongst policy-makers (Power 2004: 45; Rothstein 2006).

One further layer of this risk-policy social-dialectic, which would begin to become more apparent within longer-term/historical analysis, would be the manner by which the structure and output of policy institutions shape broader social relations – for example through welfare state arrangements – with these patterns of social interactions gradually impacting on certain emotional and psychological sensibilities (see Bröer et al. 2014 for a shorter-term approach). In turn these internalised dispositions, not least in terms of emotional habitus towards or away from certain risks or practices, would then have longer-term effects on social relations, claims-making and policy-making (Elias 2000).

There are of course many further qualifications and nuances which might be added to this rather general framework. The primary goal of what has been outlined above is to provide a broader structure in which the specific contributions of the articles in this special issue can be considered, especially in terms of how these relate to one another. We have touched briefly on aspects of each of the six articles in the sections above. We now conclude this editorial with a summary of each paper in turn.

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Overview of the six original research articles

He and colleagues (2014) show that contrary to many other countries, China has continued the recent rapid development of its nuclear industry after the Fukushima accident in neighbouring Japan in 2011. The authors investigate public knowledge, attitudes and trust towards nuclear energy among the inhabitants of the Shandong province and the findings show that even though people were often well informed about the Fukushima accidents, they are less knowledgeable about domestic nuclear power. This does not mean that all respondents have positive attitudes towards the technology, about half of the respondents are critical. Trust in the government and governmental agencies for providing information and managing possible future nuclear accidents is more robust. The article ends with the conclusion that if the Chinese Government does not respond to the growing concern about nuclear energy, this might lead to a lack of legitimacy and acceptance of the development of nuclear power in the near future.

The article by Hamilton (2014) explores certain processes by which risks have been individualised through government policy. Hamilton (2014) shows that the welfare systems in Australia and Britain have changed from emphasising shared responsibility of social risks, into a more individualised responsibility of life course risks – a shift from welfare to workfare policy. By using and interrogating the metaphor of welfare contracts, the author explores how this policy shift was achieved. The analysis reveals, among other things, that the use of the contract metaphor is a deliberate process to legitimise activation policies. Furthermore, it is the metaphor of a ‘new’ contract that is the key to understanding the process of change from welfare to workfare, with the argument that the old contract is obsolete in need of transformation. Hamilton (2014) concludes that the individualisation of risk in policy is legitimised as rebalancing an old contract and thereby adjusting to the normative grounds of contemporary society.

Figuié’s (2014) study analyses recent developments towards global risk governance regimes. With (world) risk society as a theoretical point of departure, alongside literature on public health policy, Figuié (2014) analyses WHO and OIE’s response to avian flu (H1N1). The results show that both organisations took the opportunity to legitimise greater authority to interfere in, while extending obligations of, individual member states. The author concludes that her analysis indicates a globalisation of authority and nationalisation of obligation or, to put it differently, an increased institutional control of countries and populations in the name of global security.

Barbi and Ferreira (2014) explore the relationship between climate change risk and environmental policy in a number of Brazilian coastal cities in the state of São Paulo. Through a combination of analysis of climate change and policy documents and interviews with representatives of local governments, the authors find that even though climate change poses a risk to the local communities, they do not have specific climate strategies. Instead risks related to climate change are managed across different sectors and are interwoven within the more typical problems the local governments are used to managing. One conclusion is that reoccurring and familiar hazards are what local policy-

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makers focus upon, while diffuse risks characterised by uncertainty – as is the case with climate change – are ignored even when known about.

Linke and colleagues (2014) investigate the science-policy interfaces in fisheries and eutrophication governance in the Baltic Sea. In both cases, dependence on science is more or less exclusive given the organisational and institutional structure, but there are considerable differences when it comes to the management of uncertainty and stakeholder disagreement: While consensual science-based advice has shaped policy decisions regarding eutrophication, in fisheries stakeholder disagreements and different interpretations of scientific uncertainties have created serious confusion about the basic role of science in policy, not least because of the large number of stakeholders and the economic aspects of fisheries. The article concludes with a call for the expansion of the definition of what constitutes science and scientific advice, to also include the thus far neglected domains of social sciences. This would involve a transgression of the idea of science-policy interfaces as a mere intersection between facts and values, instead opening up the different perspectives, values and worldviews of all stakeholders involved in a specific governance arena.

Bröer and colleagues (2014) consider the relationship between risk policies and risk perceptions and, more particularly, the influence of health risk policies on citizens' perceptions of health risks in six European countries. The authors compare how risks are ranked on the policy agenda with how citizens rank the same risks. The results show that even though the expected relationship cannot be confirmed as a general phenomenon, there are relationships between policy priorities and citizens' risk perceptions. However, the association varies both across types of risks and countries. In two of the countries, Spain and Slovakia, a positive correlation between policy and perceptions is found, while in the other four countries, the Netherlands, UK, Finland and Belgium, the association is more or less non-existent.

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Cohen 2002

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Figuíé (2014

Hamilton 2014

He and colleagues' (2014)

Kasperson et al. 1988

Kingdon 1994

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Notes

¹ Though analytically it is useful to make this distinction between practical/material intervention and rhetoric, empirically these two are often very much bound up with one another in the experiences of policy implementers and citizens.