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Still the century of ‘new’ environmental policy instruments? Exploring patterns of innovation and continuity

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We re-examine the political interest in and use of ‘new’ environmental policy instruments and other non-regulatory modes of governance. We start by taking stock of the dynamic debate that has emerged around this topic since the turn of the century. We then contextualise that debate by examining subsequent challenges to, and transformations in, state-led governing and the broader and widely acknowledged rise of ‘new governance’, highlighting the mismatch between the animated discussion of new instruments amongst policymakers and academics and the less active adoption and performance of them in practice. We make an overall assessment of the role of instruments – both ‘old’ and ‘new’ – in the wider debate about governance, and suggest some promising steps that could be taken by both practitioners and scholars better to understand and possibly even utilise more new environmental policy instruments in the future.

Keywords: policy instruments; environmental policy; new instruments; governance; policy innovation

Introduction

The editor’s invitation to revisit our original article (and related special issue) on environmental policy instruments (especially Jordan *et al.* 2003a, 2003b) challenged us to investigate what had happened both to the everyday practices of using ‘new’ environmental policy instruments (NEPIs) and to the ways in which they and other new modes of governance had subsequently been studied by academics. One of our primary motivations for assembling that special issue was to shed light on the mismatch between what was at the time a rather animated discussion of ‘new’ instruments amongst policymakers and certain academics (but especially economists), and the less active and straightforward adoption and use of them in practice (Keohane *et al.* 1998, Daugbjerg and Svendsen 2001, Sterner and Coria 2012). This mismatch between policy innovation in theory and continuity in practice was politically relevant because NEPIs had originally

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promised to address some of the well-known weaknesses associated with the standard instrument of environmental policy – regulation. But it was academically important too. In the late 1990s, scholars had begun to make big, but (we felt) empirically quite thin claims about the transformation of the state and public policies in general. For us, studying instruments offered an empirically more nuanced way to arbitrate between some of the grand truth claims that were being made in relation to the relationship between *government*, which is still widely seen as state-led governing via the ‘command-and-control’ instrument of regulation (i.e. laws), and *governance* that relies instead on horizontal forms of societal self-coordination (e.g. Jordan *et al.* 2005, Wurzel *et al.* 2013).

Was our perception of a mismatch entirely correct, and if so has the mismatch become more or less pronounced since 2003? Certainly the academic study of instruments in general (and NEPIs in particular) has boomed across many areas including political science, law, economics, sociology and international development. New journals such as *Regulation and Governance* have sprung up to meet the demand. The topic of instruments has become enmeshed with a wider study of how societies are governed and how states and state-like entities such as the European Union (EU) have evolved in an era of ‘new governance’ (e.g. Kassim and Le Galès 2010, Héritier and Rhodes 2011). The lead article in our special issue was, we now realise, in the forefront of efforts to get scholars in politics and policy fields to re-engage with the topic of policy instruments, a field of policy analysis that had originally emerged in the late 1970s (e.g. Majone 1978, Hood 1983), but by the 1990s had become somewhat isolated and becalmed. As such, the debate on environmental instruments, which hitherto had been dominated by economists, has moved away from the dominant – and rather narrow – focus on instrument design and modelling in rather hypothetical settings, towards a more holistic and interdisciplinary approach that emphasises political processes and contextual factors in shaping the design, calibration and actual usage of instruments in practice. Our original article attracted a wide readership because, in addition, it drew upon and contributed to several other instrument-related debates – on policy learning for example, policy transfer, policy coordination (Jordan and Lenschow 2008) and policy innovation (Benson and Jordan 2011, 2012). Indeed these debates still excite us and many other scholars (e.g. Jordan *et al.* 2005, Jordan and Schout 2006).

We are still struck, though, by the basic fact that the use of environmental policy instruments in practice remains far less dynamic than the sometimes rather animated debate amongst scholars and other policy specialists would suggest. In other words, the basic mismatch that first motivated us to enter this field of research remains as politically salient as it did in 2003. Yet as this field of research has evolved, we have come to realise that the mismatch is in fact even more complex and multifaceted than we first thought. Indeed from the very outset, we were aware that the ‘new’ instruments were not colonising an empty space and in some jurisdictions may in fact be rather ‘old’. This is one reason why we were very careful to place the term ‘new’ in quotation marks, to indicate that continuity and innovation are place- and time-specific.

Here we try to bring the whole story up to date by reviewing and commenting on the state of the art in policy instrument research. What, we ask, does the current literature reveal about the mismatch between the way in which NEPIs are debated and the way they are actually (not) used? Indeed, has the usage of NEPIs actually tailed off in the last 10 years vis-à-vis traditional regulatory instruments (in the face of a serious global recession and growing doubts about the efficacy of self-governance), thereby widening the mismatch between instrument theory and practice? Or was the whole debate about NEPIs, as we in fact cautioned in 2003, articulating a governance vision that was far more ambitious about the scope for policy change than was evident in practice?

Our title harkens back to a seminal study of corporatism, a particular form of interest intermediation between the state and interest group, which was published at the very point in time when political interest in this style of governing was receding across Europe (Schmitter 1974). Schmitter's article triggered a substantial burst of academic interest in corporatism and a flood of citations, but its practical effect was rather less impressive because the everyday politics had already moved in another, far more economically liberal direction. Ten years after the publication of our special issue, are we still living in a century of 'new' instruments?

In order to start addressing this question, the next section revisits the key elements of our original special issue, noting our main assumptions and motivations for producing it. The third section explores how both the academic debates and policy practices have moved on in the last decade. Following on from Hood (2007, pp. 133–137), Linder and Peters (1998) and others, we identify four areas of literature, which gradually ascend in their level of abstraction. The first focuses on the intrinsic nature of specific instruments, and includes the work of scholars who champion a particular type of instrument as well as those who seek to link particular instruments to specific policy problems (Linder and Peters 1998, pp. 40–41). The second is interested less in the nature of the policy instruments themselves and more in the political dynamics which shape policy instrument choices in practice. A third literature moves the focus onto the wider political context which shapes and is shaped by many aspects of instrument choice and use. Finally, we distinguish a fourth and final area of work that views policy instruments as a useful prism through which to view changes in wider shifts in governing. The fourth and final section of this paper examines the analytical and academic challenges that confront the environmental policy instrument agenda, together with an assessment of the everyday political challenges that exist for practitioners trying to pursue it.

Why 'new' environmental policy instruments?

In the most general sense, policy instruments constitute the 'myriad techniques at the disposal of governments to implement their policy objectives' (Howlett 1991, p. 2). Put even more simply, policy instruments are the tools used to attain policy goals (de Bruijn and Hufen 1998, pp. 12–13). Kooiman (2003, pp. 29–30,

44–45) argued that policy instruments are the crucial bridge between the policy frame or ‘image’ that informs how policymakers act and their efforts to govern. Policy instruments usually embody particular policy philosophies, goals and outlooks while providing concrete manifestations of policy actions (Hall 1993).

We do not want to give the impression that the political study of NEPIs originated with our special issue. Several path-breaking works already existed, which provided significant insights into the political aspects of instrument design, specifically the importance of political and institutional context in shaping instrument choices (most notably Majone 1978, Hood 1983, and Salamon 1989). Nevertheless, our volume succeeded in linking three different intellectual developments, which exhibited their own distinct *lacunae*, at a particularly appropriate point in time.

First, both practitioners and academics were taking a heightened interest in new policy instruments during the 1980s and 1990s, but few were really focused on the political implications of instrument design and selection, or the wider political and institutional context in which NEPIs were (not) used in practice. In the realm of practitioners, the Organisation for Economic Cooperation and Development (OECD) was busy publishing a series of papers that sought both to categorise the main instruments in the tool kit and map out the emerging pattern of use and, in doing so, cultivate political support for their use. This work had developed a head of steam well before the publication of our volume, driven by a belief that environmental policy and the economy more generally would be better if it were transformed with innovative policy instruments (e.g. OECD 1991, 1993). Much of it was written by environmental economists such as David Pearce, who, while aware of the political dimensions of use, were more at home in the economic world of rational economic agents and well defined preferences. Generally speaking, studies by environmental economists (e.g. Baumol and Oates 1988) dominated the work of the OECD. This work often had a rather narrow technical-instrumental focus on particular market-based instruments. Institutional and political factors were conveniently pushed to one side in an attempt to define and refine effective policy designs. It is striking that only a few scholars really stopped to ask why so few of the NEPIs were actually adopted in their textbook form (Keohane *et al.* 1998). Meanwhile, in the EU context, academic attention initially centred on the relative scarcity of NEPIs at the supranational level (Weale *et al.* 2000, pp. 458–460), or on one particular type of NEPI such as voluntary agreements. This literature tended to comprise of wide-ranging surveys of instruments or of non-cumulative case studies of specific instruments (e.g. Andersen and Sprenger 2000).

Second, impressive typologies of policy instruments had emerged, but without a strong empirical focus, although there were some notable exceptions (e.g. Bemelmans-Videc *et al.* 1997). While originating in the policy sciences, this scholarship also treated the selection of policy instruments as mostly technical choices rather than political decisions (for reviews, see Peters 2002 and Jordan *et al.* 2011), although there were some early and highly influential exceptions (e.g. Hood 1983, Howlett 1991).

The third academic push came from scholars interested in something far broader, namely governance and its various modes. By the mid-1990s, the newer modes – primarily associated with markets and networks – were proving especially attractive in contrast to the older, more hierarchical mode of government (Jordan and Schout 2006), of which regulation was the best known and widely used example. The governance ‘turn’ has since produced a wide range of works (e.g. Rosenau 1992, Rhodes 1996). Scholars generally associated governance with governments’ declining ability to steer and direct societal actors in a hierarchical fashion using ‘command-and-control’ regulation (Pierre and Peters 2000, pp. 83–91, Palumbo 2010). Governments’ reduced steering capability intersected with other prominent themes in the governance literature, such as the increasing importance of multilevel decision-making arenas, the involvement of more stakeholders and thus the formation of policy networks and/or networked forms of governance, so as to arrive at more ‘collaborative’ policy decisions (Benson *et al.* 2013). For us, the problem was that many of the claims made in this literature seemed empirically under-specified. We hoped that an empirical focus on instruments would provide a potentially valuable analytical touchstone to open up and explore the changing role of the state in the new governance.

Our 2003 volume explicitly sought to bridge the first two literatures, whilst at the same time drawing attention to the potential links with the third: the wider implications of instrument design and selection in the policy process (Jordan *et al.* 2003a, 2003b). It posed four questions: What were the conditions that affected the uptake of NEPIs? What were the overall patterns of use in different political systems? How different was the deployment of NEPIs to the traditional modes of governing in particular jurisdictions (i.e. the ‘newness’ or otherwise of the NEPIs)? And could theories of comparative politics and public policy explain the overall pattern of (non) use? (Jordan *et al.* 2003a, p. 5). It covered Austria, Australia, Germany, Finland, France, Ireland, the Netherlands, and the United Kingdom.

We found that all of these countries had made substantive use of at least one type of NEPI, which included market-based instruments (e.g. eco-taxes and tradable permits), voluntary agreements, and informational measures (eco-labels and environment management systems), although certain states were more innovative, that is, following Walker (1969), willing and able to adopt policy instruments that were not already an established feature of their pre-existing policy repertoire. As a rough and ready benchmark, we compared the adoption of ‘new’ instruments against the pre-existing style, structure and content of their existing policies. We quickly discovered that there was very little outright policy innovation. Moreover, the same type of NEPI was often used for different reasons and in different ways, with regulation often playing a dominant role. In other words, everyday practice seemed to depart from the rather black and white pictures painted by economists and an earlier generation of policy instrument scholars, and the equally rarefied debate about the sudden onset of the new governance.

These findings were, of course, meat and drink to scholars of comparative politics. However, we also had a longer-term aim in mind: to bridge the study of environmental instruments with the theoretical understanding of governance. The study of instruments could, we suspected, help us to descend Sartori's (1970, p. 1040) 'ladder of abstraction' and understand how governance plays out in relation to specific modes and instruments of governing. Indeed, much of our subsequent work has sought to push at these broader questions (Jordan *et al.* 2005, Wurzel *et al.* 2013).

Taking stock: the debate about 'new' instruments

Where, when and by whom are they used?

The literature on environmental policy instruments in particular countries has continued steadily since 2003, as has that focusing on instruments of society-led governing (for a useful review, see van der Heijden 2012). Croci's (2005) volume brought together much of the thinking on how voluntary agreements and eco-label schemes work. Brouhle *et al.* (2005) noted the large uptake of voluntary approaches in the United States, but concluded that the evaluation of their effectiveness was too limited to make definite judgements about their usability vis-à-vis regulation. Dutch negotiated agreements are often held up as the model of a systematic approach to voluntary agreements, and include detailed monitoring requirements and sanctions that are normally absent from industry's self-declaratory commitments. But strong leadership from both business and politicians is needed to achieve these wider objectives. Glasbergen's (2004) analysis came to similar conclusions about the ability of Dutch negotiated agreements to improve energy efficiency, although he questioned whether more than incremental reductions in carbon dioxide emissions can be achieved in the absence of enforceable targets. What these studies showed is that, in the real world, instruments interact with one another, often in politically very salient ways. They feed directly into wider question of whether new modes of governance need to be seen in combination with the more traditional regulatory instruments. In other words, to what extent are new modes of governance adopted in the 'shadow of hierarchy' (Héritier and Rhodes 2011, Wurzel *et al.* 2013)?

Studies of other specific types of instrument have also stressed the importance of facilitating conditions and supportive political and institutional contexts (Prakash and Gugerty 2010). Jordan *et al.* (2005), for example, have emphasised the importance of government support for national eco-label schemes, such as Germany's so-called Blue Angel eco-label scheme, a pioneering scheme that operates in a favourable domestic institutional context in which public environmental awareness is relatively high. The role of contextual conditions has been taken up and explored by many other scholars – on which more below.

Turning to another general category of instrument, notably the market-based instruments, a similarly large literature has built up since 2003. As noted above, the

uptake of emissions trading schemes – perhaps the most eye-catching NEPI of all – has, to a significant extent, also been shaped by international regulatory agreements, in the form of the 1992 framework convention on climate change. The 1997 Kyoto Protocol to that agreement subsequently listed three flexible instruments, namely emissions trading, the clean development mechanism, and joint implementation (Wurzel 2008, Jordan *et al.* 2010, Wurzel and Connelly 2010). The United States was the innovator on this occasion, not the states of Western Europe. It had gained practical experience with sulphur dioxide and nitrogen oxide emissions trading schemes as long ago as the 1980s. Hansjürgens (2005) noted that this experience provided a model for others. But what was the primary enabler of diffusion? It was international regulation. As is now commonly known, the United States insisted – against the resistance of the EU and its member states – on the inclusion of emissions trading in the Kyoto Protocol. The EU only became a reluctant emissions trading pioneer (van Asselt 2010) when it adopted the world's first supranational emissions trading scheme in 2003, which became operational in 2005.

The speed at which the EU emissions trading scheme was established stands in marked contrast to repeated failures to agree EU-wide eco-taxes, another type of market-based instrument. Additional momentum for an EU emissions trading scheme was generated by member states (e.g. Denmark and the United Kingdom) which developed their own national schemes ahead of EU-wide emissions trading. Moreover, the imperative for the EU of hitting the greenhouse gas emissions reductions target it had signed up for under the 1997 Kyoto Protocol created pressures on the reluctant member states to accept emissions trading as a novel policy instrument in EU climate change policy.

There are many notable studies by economists of emissions trading, but far fewer have analysed the politics surrounding its use in practice (but see Wettstad 2005, van Asselt 2010). Climate change and energy policy have arguably sparked the greatest post-2000 spurt in new instrument use at the national, supranational and international level. At the same time, however, NEPIs seem to be less prevalent in other important environmental policy areas, such as water regulation. NEPIs are also facing substantial criticism and negative reaction. For example, Kerr (2007) found in his analysis of national climate change programmes that governments made inflated claims about the effectiveness of both their overall programmes and specific policy instruments. A PricewaterhouseCoopers survey of 151 UK businesses concluded that almost three-quarters believed command-and-control instruments were actually more effective than newer instruments such as emissions trading and voluntary agreements (ENDS Europe Daily 2007).

Finally, work on the final type of instrument – regulation – has continued. Gunningham (2011) contended that a core part of environmental policy innovation still takes the form of changes to and/or involving this traditional hierarchical tool – a point to which we shall return later.

To conclude, the literature that has emerged since 2003 suggests that NEPIs play a significant role in particular circumstances and/or for particular types of

problems (e.g. emissions trading for reducing greenhouse gases). But their adoption rate continues to vary between countries, with NEPIs being particularly prevalent in certain sectors and/or countries. At the same time, assessments of the effectiveness of such instruments remain rather few, as do those that assess both the wider political context and overarching approach to governance in specific political systems.

Why are they selected?

Scholars have continued to study the enduringly important question of what actually drives the adoption of environmental policy instruments in the first place. The policy innovation diffusion and transfer literatures have offered a particularly coherent range of responses to this question. As conventionally understood, a policy (instrument) innovation is something which is new to a particular jurisdiction (Walker 1969). Policy diffusion is the ‘process by which an innovation is communicated through certain channels over time among the members of a social system’ (Berry and Berry 1999, p. 171). The policy diffusion literature focuses on the patterns of adoption of an innovation as it interacts with larger, structural forces.

Jordan *et al.* (2005) noted that the pioneering efforts of the aforementioned German eco-label scheme led to the idea of eco-labelling being disseminated to other countries. In a similar survey of a wide range of instruments (including, eco-labels, national environmental plans and eco-taxes), Kern *et al.* (2005) identified the presence of both sufficient national capacity (to adopt and implement the instruments) and adequate demand for these instruments as important conditions for the successful transfer of policy instruments. Other enabling conditions include the presence of pioneering countries, international networks and the specific characteristics of the instrument in question. Tews *et al.* (2003) suggested that the impact of international forums on policy instrument transfer depends on the existence of transnational entrepreneurship and exploitation of first mover strategies; the promotion of instruments by international actors such as the EU can help provide national leaders with an external source of legitimacy (Jordan *et al.* 2012a).

In contrast, policy transfer approaches examine the process by which knowledge about policies, instruments and administrative arrangements operating in one time and place are used at another time and/or place (Dolowitz and Marsh 1996) (for recent summaries, see Benson and Jordan 2011, 2012). Policy transfer is normally conceived as occurring horizontally between states (or between sectors or across time periods within one state), but regional and international organisations provide additional significant opportunities for vertical movement.

One of the core questions for scholars of European public policy is what role does the EU play? Bulmer and Padgett (2005) modified Dolowitz and Marsh’s original scheme to elaborate a number of conceptual categories: emulation/copying, where a policy is transferred from one political system to another without

alteration; synthesis, combining elements of policy from two or more different jurisdictions; influence, a weaker form of transfer involving a policy system taking inspiration from an external system but creating an entirely home-grown version or building on existing domestic forms; and ‘abortive’ transfer, a blocked attempt to transfer by actors in a given domestic context. Bulmer and Padgett hypothesised the importance of hierarchy in achieving stronger and more enduring forms of transfer. Negotiated governance will, they argued, tend to trigger weaker forms of transfer, perhaps some synthesis and influence, while facilitated unilateralism will at best lead to a weak form of mutual influence (Bulmer and Padgett 2005, p. 106).

Jordan *et al.* (2003c) suggested that institutional dynamics in the EU may lead to substantial policy emulation, but may often result in weaker forms of transfer reflecting the bargaining process at the EU level and the vagaries of member state transposition and implementation. Pedersen (2007, p. 71) placed more emphasis on the subsequent process of legitimation, arguing that the eco-tax innovation that occurred in Denmark, Norway and Sweden was less the recognition of the idea of taxation (something that was well established already in other sectors), but rather learning on the part of policymakers about how to frame the instruments as being legitimate and rational. The knowledge itself was less decisive, as prior experience with taxation gave experts ammunition for those attacking the extension of eco-taxation (Jordan *et al.* 2012a). Nye and Owens (2008) found two equally compelling reasons why UK industry was so willing to embrace emissions trading: desire for a more amenable alternative to the UK Climate Change Levy (i.e. tax and the implied threat of steadily more stringent reduction requirements); and the desire to be ‘symbolically involved’ in a voluntary trading scheme that included incentive payments and relatively little financial risk.

To conclude, the public policy literature has made great strides in understanding how policy instruments move within and between different jurisdictions. However, it has proven difficult to reduce what are in effect complex combinations of factors into a small number of variables, a gap which may eventually be filled by larger ‘n’ analyses. We return to this point in the next section, which addresses the role of contextual factors. Finally, while most of the diffusion- and transfer- inspired literature has tended to focus on the learners (or, more often, policy entrepreneurs) in the policy instrument selection process, Bomberg (2007) argued convincingly that one should also focus on the teaching role played by environmental non-governmental organisations in new EU member states.

Instrument selection: the role of contextual factors

There is a growing appreciation amongst instrument specialists of the need to situate instrument choices alongside broader contextual factors that affect *all* aspects of the policy process (e.g. Peters and Nispen 1998, Lascoumes and Le

Galès 2007). These include institutions such as voting rules, dominant ideas and policy paradigms, the political power of industry and, of course, other policy instruments and their associated constituencies – in other words, the very elements that are the stock in trade of conventional public policy analysis. There is a growing awareness that, together, these contextual conditions are likely to hold the key to explaining the mismatch described earlier.

In this respect, Mol *et al.* (2000) have offered an elegant study of how both deregulatory and ecological modernisation pressures are channelled through domestic institutions in three EU member states (Austria, Denmark and the Netherlands) and three policy sub-sectors (industrial energy efficiency, packaging waste and the labelling of organic food products) for voluntary agreements. They repeatedly emphasised the important role played by contextual factors. For example, they discovered that the rigid, traditional meso-corporatist features of Austrian environmental policymaking and the strong emphasis on consensual policymaking have led to a comparatively low number of voluntary agreements when compared, for instance, to the consensus-orientated politics of the Netherlands (Mol *et al.* 2000).

In an attempt to cut through the thicket of cause and effect, Jordan *et al.* (2012b) took the choice affecting variables identified by Linder and Peters (1989), and related them to three main bodies of public policy theory: *ideational*; *institutional*; and *episodic* (Jordan *et al.* 2003c). They argued that each theory emphasises a slightly different aspect of ‘context’ in its relationship to choices. Thus *ideational* approaches regard ideas as the main driver of change, and *institutional* approaches argue that the institutional context in which instruments choices are made is more important. *Episodic* theories suggest that instruments are shaped by an unpredictable assortment of ideas, problems, solutions and decision-making priorities jockeying for attention. Jordan *et al.* (2003c) used these theories to offer different explanations for the EU’s selection of climate change instruments. They found that none is sufficient on its own. Hence, the EU’s ongoing struggle to govern by multiple instruments represents an ideal context in which scholars of policy instruments *and* of the EU can engage in mutually beneficial theory development and testing activities.

Heinelt and Töller (2001) offered a somewhat similar comparison, but focused more on the uptake and implementation of two EU informational instruments (environmental impact assessment and the eco-management and audit scheme). Their explanation for national differences also centred on the diverse national policy styles as well as national differences in the economic structure (e.g. the size of firms) and interest group representation.

In their 2007 special issue, Lascoumes and Le Galès (2007, p. 11) claimed that policy instruments can in turn uncover deeper, underlying changes in the contextual conditions, a position which we adopted in 2003. This is because:

[p]ublic policy instrumentation reveals a fairly explicit theorization of the relationship between the governing and the governed. In this sense, it can be argued that

every public policy instrument constitutes a condensed and finalized form of knowledge about social control and ways of exercising it.

In effect they suggested that analysts should turn their telescopes round and use instruments to view changes in contextual conditions. A subsequent special issue by Kassim and Le Galès (2010) developed this approach by using instruments to investigate the multilevel political system of the EU. There, Halpern (2010, p. 54) examined policy instruments in EU environmental policy while arguing that the EU has ‘a tendency to import policy instruments from other political systems in order to legitimise its environmental policy competence’. In effect, they remind us that policy innovations are not invariant: they are continually reinvented as they are adapted for use in particular contexts.

One other important aspect of ‘context’ that should not be overlooked is that concerning other policy instruments. We are now much more aware that any attempt to study NEPIs should be sensitive to pre-existing patterns of instrumentation. In their edited volume, Héritier and Rhodes (2011) argued that new modes of governance usually emerge in the shadow of hierarchy. Gunningham (2011) has also convincingly argued that efforts to improve the implementation of regulation – his primary focus – do not follow a single strategy either. Instead, policy actors adjust their own particular circumstances as well as their own capabilities and motivations. In doing so, he suggested a mixed (or hybrid) approach of combining instruments and fitting them to the prevailing context (see also Gunningham and Grabosky 1998). Whether this equates to a more nifty approach to policy design or just plain old muddling through, is an open question.

Instruments, government and governance

Building on the discussions described above, many scholars have tried to relate the study of instruments to changing patterns of governance more generally, particularly as revealed through the adoption of new modes of governance (e.g. Héritier and Rhodes 2011, Wurzel *et al.* 2013). Salamon (2002, pp. 1–2) claimed that in the United States and other parts of the world a ‘massive proliferation ha[d] occurred in the tools of public action, in the instruments or means used to address public problems’. For Salamon, this transformation reflected a paradigmatic alteration in the nature of public management and policy instruments. The new governance paradigm reflected a shift from the more hierarchical agencies and programmes exercising discretion to a proliferation of tools developed and implemented by organisational networks (Salamon 2002, pp. 9–18). These networks will involve public and private actors working together through processes of negotiation and persuasion, rather than command-and-control.

Héritier (2002) adopted a similarly emphatic tone in arguing that a new mode of governance was developing in the European context – one focused on non-binding targets and soft law, subsidiarity and the inclusion of all actors with a

stake in the decision. She focused on two types of instruments: actors voluntarily setting targets, akin to benchmarking where the publication of information gives incentives to protect reputations and to learn (the EU's so-called Open Method of Co-ordination being a good example); voluntary agreements either created by private organisations on their own or involving public actors to meet negotiated targets. Héritier argued that such instruments constitute the minority of existing EU policy instruments. Her findings also suggested that new modes of governance may have shifted away from hierarchy, but hierarchy continues to play a significant enabling role in their adoption and in certain situations may eventually produce a 'hybrid' mode of governance.

Several scholars have sought to articulate this hybridity in more specific terms. For example, Eberlein and Kerwer (2004, p. 136) helpfully distinguish between four forms of interaction between traditional tools of government and new modes of governance: *co-existence*; *fusion*; *competition*; and *replacement*. Other types of interaction could be envisaged such as layering, drift, displacement, conversion and exhaustion (Streeck and Thelen 2005). The possibility that 'old' and 'new' environmental policy instruments co-exist or form hybrids through the fusion of (elements of) traditional regulation and (elements of) new modes of environment governance has also been acknowledged by others (e.g. Gunningham and Grabosky 1998). For example, Jordan *et al.* (2005) found that there was little evidence that NEPIs were replacing traditional tools; instead co-existence seemed to be the most prevalent pattern in European environmental policy (see also Holzinger *et al.* 2006). This finding was very much confirmed by Holzinger *et al.* (2009, pp. 60–62), who, on the basis of a careful summation of all the relevant instruments at EU level, concluded that while hierarchal governance had witnessed a relative decline, it remained the dominant mode of governance.

Policy instruments: what has been achieved and where next?

Our broad conclusion is that a policy instrument perspective has led to significant new empirical insights into the *realpolitik* of governing in the twenty-first century. It has reaffirmed that policy instruments are not technical devices devoid of politics. Instrument choices are anything but epiphenomenal; they are often an important and enduring outcome of intense political struggles to govern society, and an important generator of new forms of politics and policy at many different levels of governance (i.e. policy feedback) (Pierson 1993). The sudden emergence of the EU emissions trading scheme and the controversies surrounding its operation have powerfully confirmed the importance of this point, as has continuing inability to adopt the policy instruments needed to keep climate change within tolerable levels.

To answer the question posed in the title of this paper, NEPIs *are* continuing to play a significant part in the environmental governance of states, particularly in OECD countries, but their role is far more constrained by contextual factors – including

but not limited to the presence of other instruments – than the early literature seemed to suggest and many of the advocates of NEPIs initially hoped. Academics are still thinking through the implications of this empirical pattern of ‘bounded’ policy innovation (Weir 1992). Is it because regulation performs better than some of the early and somewhat stylised critiques of it suggested? Or is it because the NEPIs are not as effective as their proponents claimed? Or is it because thinking in mono-instrumental terms was always artificial and that, in reality, instruments tend to cohere in much more messy ‘packages’ that require careful and ongoing management (Gunningham and Grabosky 1998)? These questions are very topical, particularly in the current era of austerity-driven deregulation, on which more below.

The mismatch between academic debate about instruments and everyday practices therefore remains, although it is not nearly as stark as it once was, particularly with respect to particular instruments such as eco-taxation and emissions trading. In fact these instruments now have their own constituencies of specialists, which span the policy and academic worlds. Crucially, these constituencies draw on many disciplines – law, politics and policy, as well as economics. There is, though, a lurking sense in which scholars of public policy and governance are still not as heavily integrated into these constituencies as they could and perhaps should be. After all, the failure of high profile NEPIs such as the voluntary agreement with EU car manufacturers, the struggle to get emissions trading adopted in Australia (Bailey *et al.* 2012) or the problems afflicting the EU emissions trading scheme, are largely to do with highly politicised issues of policy (re)design Skjaereth and Wettestad (2009), which political scientists are uniquely placed to comment on.

Going forward, the research agenda for policy instrument scholars is therefore extensively populated with many politically highly relevant items. But, in order to make their voices better heard, political scientists and public policy scholars will have to re-double their efforts to find underlying explanations for the limited uptake and/or unexpected performance of NEPIs, for example by working more effectively across disciplinary boundaries and by widening the scope of their empirical work. On this agenda we sense that there are at least five priorities. The first relates to something that we underlined in our original special issue, namely the need for systematic, detailed and comparative research on specific types of instrument. Much of the early literature on environmental instruments tended to focus on one or two types in a few countries. But this is no longer sufficient to address new research questions. For example, how much difference does the design of specific instruments make? And what are the key political and economic conditions that shape both their adoption and implementation? By answering them, scholars will be able to furnish a far better understanding of the mismatch between high ideals and ‘messy’ practice that first motivated us a decade or so ago.

A second priority is to secure a more systematic comparison of environmental policy with other policy sectors. Studies by Bähr (2010), Capano *et al.* (2012), Héritier and Rhodes (2011) and Kassim and Le Galès (2010) have made

an extremely useful start, but more systematic comparisons are needed to understand how unique the trends described above are to environmental policy. Scholars have traditionally viewed environmental policy as an inherently regulatory policy sector, dominated by command-and-control regulations in which national governments and/or the EU stipulate in law detailed standards. Do we also see similar patterns in other regulatory areas where, perhaps, technological change and scientific uncertainty are significant? If we consider the other basic types of policy, do distributive and redistributive policies (e.g. welfare, agricultural) reveal different patterns of policy instrument adoption and governance mixes, and to what extent do these exert an influence on policy impacts and outcomes (Bauer *et al.* 2012)? Finally, is there something particular about policy instruments (and perhaps governing more generally) which leads politicians to make inflated claims that end up mismatching with everyday practices? The limited evidence that we have of the non-use of ‘detector’ (as opposed to ‘effector’) instruments (Hood and Margetts 2007) in formal policymaking, such as computer models, cost–benefit analysis and scenarios, suggests that there might well be (Nilsson *et al.* 2008).

This takes us to a third priority: to understand spatial variations in the (non) use of policy instruments. Comparing different types of jurisdictions (such as federal and unitary states and supranational (e.g. the EU) and international organisations (e.g. the UN)) could generate many new insights into what facilitates and what hinders adoption. As the sections above have detailed, there is a substantial literature investigating the role of ‘context’, but the tendency has been for comparative research to focus on similar political systems within an OECD, and particularly a European or US context. However, Breton *et al.* (2007) have offered a hugely ambitious survey of environmental governance patterns, including instrument usage, for a range of non-OECD countries. The main aim of their volume was to understand the role of federal structures in shaping environmental governance, and specific analysis of instruments was somewhat lacking. Current shifts in economic power towards the BRICs (Brazil, Russia, India and China) in particular make it more urgent to research instrument patterns in rapidly and less rapidly developing countries. Will leaps in economic development in these areas be matched by an increasing use of innovative environmental regulation and new modes of (environmental) governance? How far does the influence of the diffusion of ideas about NEPIs extend to these countries? How much difference do regional and international organisations make to the adoption and implementation of NEPIs? These important questions still await answers.

Fourthly, there is a need for more work on the evaluation of instruments, both singly and in combination, and especially in areas of society-led steering (Prakash and Gugerty 2010, Bulkeley and Jordan 2012). Put very simply, in some contexts NEPIs do seem to work, but in many others their performance has fallen well short of expectations. Instead of adopting a rather static perspective which simply describes the presence and/or absence of particular instruments of governing, future work could usefully explore the causal relationship between

policy instruments and outcomes ‘on the ground’, including technological innovation (for a good example, see Enevoldsen 2005 and Kemp and Pontoglio 2011). If, to paraphrase Rhodes (1997, p. 53), ‘the mix between the modes is what really matters’, we need to know what forms of governing lead to what outcomes, whilst ensuring that they all remain legitimate and publicly accountable. The problem here is that evaluation is very much the poor relation of environmental policy analysis (Huitema *et al.* 2011). Some attempts have, however, been made to identify salient evaluation criteria (Mickwitz 2003); the challenge is to employ them to explore the ‘twist’ that different instruments impart on the operation of policy programmes (Salamon 2002, p. 2). There is certainly ample scope to relate these questions to work on policy feedback (Bauer *et al.* 2012): how policies, once enacted, restructure subsequent policies and politics (Pierson 1993). In other areas of public policy, analysts are beginning to investigate what design features (the scope of calibration of instruments for example) are more likely to ensure the *political* (as opposed to environmental) sustainability of different policy interventions (Patashnik 2008, p. 3). These are debates that would benefit from a policy instruments perspective.

Finally, governance is not the only theoretical topic that stands to benefit from an empirical focus on instruments; so too can the theory of instruments. At present there is no single ‘theory of policy instruments’. Indeed the policy instruments literature has often side-stepped debates about explanation in favour of definitions and classifications (Jordan *et al.* 2012b). Here we have explored particularly two theoretical sub-fields, relating to transfer/diffusion and institutional context. Both have strong merits, but it is arguable that core elements of the policy instrument selection process remain poorly explored (Peters 2002). Works such as Pedersen (2007) and Daugbjerg and Svendsen (2001) are suggestive of new and fruitful lines of inquiry, in asking whether the vital motivator is in fact symbolic (giving the impression to core constituencies that something is being done), rather than policy problem solving. Related to that, we know relatively little about the reform and possible dismantling of existing instruments after they have been adopted (Bauer *et al.* 2013) under the banner of ‘better regulation’. We still do not know whether these are really generating substantive changes in instruments (and thence outcomes), or whether they are essentially symbolic (Bauer *et al.* 2012). Our broader point, though, is that it is probably more productive in the short term to build an instruments perspective into existing and well-tested theories of the policy process than seek to develop an entirely separate ‘theory of policy instruments’ (Jordan *et al.* 2012b).

To conclude, the twenty-first century shows every sign of being another ‘century of new instruments’, although admittedly it is difficult to predict precisely what future instruments will look like (although we sense that they will broadly approximate to the three main modes described above) or the specific kinds of politics that will emerge around them. We are quietly confident about this prediction because the choice and application of different policy instruments has always constituted the very essence of governing (Hood 2007, pp. 142–143),

one of the most extensively debated and discussed topics in the whole of the social sciences.

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