



The Internationalisation of Managerial Environmentalism: Globalisation, Diffusion and Territorialisation

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Abstract

A remarkable feature of the past half century has been the emergence, diversification and diffusion of managerial environmentalism across large parts of the globe. This article examines how globalisation has been implicated in these internationalisation processes and outcomes. A central theme is that the ways in which aspects of managerial environmentalism have diffused are complex, multi-dimensional and defy simple generalisations about the constituent mechanisms and spatialities. Moreover, the international diffusion of environmental innovations has been shaped by the domestic geographies of place, resulting in uneven and hybrid patterns of managerial environmentalism across space.

Introduction

On 1 January 2008, and in the run-up to the Olympics, the authorities in Beijing mandated the so-called Euro IV emission standard for new passenger cars sold in the city. Modelled directly on the standard implemented across the European Union (EU) a mere three years earlier, Euro IV prescribes comparatively stringent limits for key tail-pipe pollutants. Yet Beijing is not alone. Over the past two decades, a growing number of developing country governments have followed in the footsteps of developed countries such as the US, Japan and Germany, who introduced national tail-pipe emission regulations in the 1970s and 1980s. As in China, many of these countries have copied the EU, often following its lead in introducing more stringent vehicular standards (Table 1).

That such a diversity of countries should be adopting the same emission standards, and often at far lower levels of income than in the past, is revealing. Not only does it point to a growing internationalisation of environmental policy in terms of the spread of similar environmental innovations to a growing number of countries. What is more, it hints at the existence of transnational spatial dependencies, in that the uptake of policy instruments in one country is influenced by prior adoptions in others. Indeed, according to a number of observers, examples such as automobile emission standards need to be seen as part of a broader story, whereby aspects of managerial environmentalism are diffusing internationally as a consequence of globalisation (Angel and Rock 2005; Grainger 2005; Hebb and Wójcik 2005; Hilton 2001; Perkins 2007).

Managerial environmentalism describes environmental commitments, policies and practices aimed at addressing environmental impacts in instrumental ways which do not fundamentally challenge dominant patterns of human–environment relations. The term overlaps with weak versions of ecological modernisation with their emphasis on incremental, technocratic approaches (Murphy and Gouldson 2000). However, managerial

Table 1. Passenger car emission standards, selected countries only.^o

	Euro I	Euro II	Euro III	Euro IV	Euro V
EU	1992	1996	2000	2005	2009
Argentina	—	2004	2007	2009	—
China	2000	2004	2007	2010*	—
India	2000	2005	2010	—	—
Russian Federation	1998	2006	2008	2010*	2014*
Thailand	1996	1999	2006	2012*	—
Vietnam	2001	2007	2010*	—	—

Notes: ^odates refer to year of country-wide implementation which may lag sub-national entities, e.g. while Beijing has implemented Euro IV, the standard is only likely to be implemented across all of mainland China in 2010; *planned implementation date; — non-adoption of respective standard.

Source: Author, based on multiple sources.

environmentalism refers to a broader category of regulatory approaches, including conventional directive-based ones rejected by proponents of ecological modernisation.

This article examines the processes and outcomes associated with the diffusion of managerial environmentalism, and focuses on how globalisation has been implicated in these dynamics. We argue that the ways in which aspects of managerial environmentalism have diffused are complex, multi-dimensional and defy simple generalisations about the constituent mechanisms and spatialities. Moreover, the international diffusion of environmental innovations has been shaped by the domestic geographies of place, resulting in uneven and hybrid patterns of managerial environmentalism across space.

Globalisation, Diffusion and Geography

Definitions of globalisation abound. Indeed, different authors have conceived globalisation in different ways, variously portraying it as a process, a structural force, a condition and an outcome (Luke 2009). Within geography, recent contributions have tended towards the former, treating globalisation as a process of growing interconnection and integration through which people, organisations and places become enmeshed in geographically distanciated networks of interaction, influence and authority (Woods 2007). As should become apparent later on, however, different conceptions of globalisation have been brought to bear in how analysts have sought to understand the internationalisation of managerial environmentalism.

A number of scholars have made the observation that aspects of managerial environmentalism would appear to be internationalising. Harmonisation at the international or regional level, whereby sovereign states agree to abide by common multilateral rules – via environmental agreements such as the Montreal Protocol – governing their behaviour, is one important factor behind these trends (Gareau 2008; Sonnenfeld and Mol 2002). However, our focus in the present article is on another broad class of mechanisms, widely termed diffusion. As it is used in the present article, diffusion describes a process involving the spread, dispersal or dissemination of a particular innovation amongst a growing number of members of a social system over time (Elkins and Simmons 2005; Stone 2004).

Within the literature, diffusion has been invoked to account for the spread of environmental norms, policies and practices, originating in developed economies, in a growing number of developing ones (Hilton 2001; Perkins 2007). More generally, it has been implicated in the uptake of similar environmental innovations amongst geographically

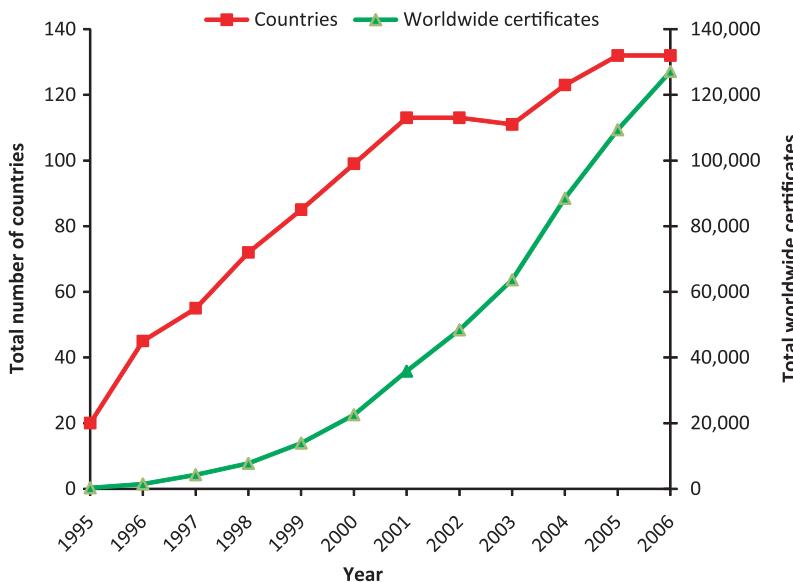


Fig. 1. International spread of ISO14001 certification. Source: Author, based on data from ISO (2007).

dispersed actors, both across developed and developing economies. Hence, diffusion is said to account for “striking” resemblances in regulatory approaches (e.g. directive-based), instruments (e.g. ambient command-and-control) and specific standards (e.g. permitted levels of suspended particulate matter) adopted by governments in different countries (Busch and Jorgens 2005; Hironaka 2002; Perkins 2007). Similarly, the uptake of non-state forms of managerial environmentalism across different countries, such as corporate reporting and codes-of-conduct, has been attributed to diffusion-type processes (Klooster 2006; Neumayer and Perkins 2004; Stringer 2006). Included here is ISO14001, the voluntary international environmental management system (EMS) standard, which has been adopted by a growing number of organisations in a growing number of countries since its release in 1995 (Figure 1). Although the adoption of such organisational practices may sometimes be largely symbolic, and merely intended to generate the impression that “something is being done”, their geographic spread is nevertheless a significant trend.

There is nothing new, of course, in managerial environmental innovations diffusing from one country to another. Scholars have documented, for example, how conservation ideas, policies and practices were exported by Europeans colonial powers to their overseas colonies in Africa during the nineteenth century (Adams 2001). Yet it is apparent that the pace, diversity and extensy of internationalising managerial environmentalism has accelerated over recent decades.

An important corollary of diffusion-type explanations of these phenomena is that the spread of managerial environmentalism across geographic space is not the result of independent processes, but dependent ones, with the uptake of environmental normative commitments, policies and practices by actors in one place influenced by prior adoptions in others. Within the quantitative literature, such spatial dependencies have been modelled as cross-national spillovers, whereby uptake of a particular environmental innovation in one country alters the optimal choices for actors in other countries (Perkins and Neumayer 2010). Yet, as detailed further below, such approaches have tended to underplay the complex spatialities and political character of diffusion processes.

For their part, although implicitly recognising that domestic developments in managerial environmentalism have been shaped by exogenous influences (Bridge 2002; Hughes et al. 2007; McCarthy 2006), geographers have tended to steer clear of framing these dynamics in terms of diffusion. However, rather than something that is unique to environmental geography, this lack of engagement with diffusion would appear to reflect a wider neglect of the concept in the discipline. With a number of exceptions (e.g. O'Loughlin et al. 1998; Perkins and Neumayer 2005), diffusion has largely fallen out of favour with many geographers, following early interest in the concept during the 1960s and 1970s (Chorley and Haggett 1967). One possible reason for this state of affairs is diffusion's close association with the quantitative revolution in geography, positivism and the apolitical character of statistical diffusion research (Bridge 2002). Another possible reason is that diffusion carries the implication of convergence outcomes and therefore runs counter to the place-based tradition in geography with its emphasis on difference (Bailey 2007).

Despite largely avoiding mentioning the term directly, geographers have nevertheless had much to say about diffusion (e.g. Peck 2003; Wilson 2008), including its mechanisms and spatialities. It is to these matters that we turn our attention in the next two sections.

How Does Globalisation Diffuse?

Accepting (for the moment) that the internationalisation of managerial environmental innovations is a consequence of globalisation raises an important question: how precisely does globalisation contribute to the spread of new innovations? In order to answer this question, the literature has identified a number of ways in which extra-local communication, engagement and exchange drives, conditions and facilitates the diffusion of environmental norms, policies and practices (Bernstein and Cashore 2000; Busch and Jorgens 2005; Holzinger and Knill 2005). We focus here on four of the most important.

One oft-cited way in which globalisation has been implicated in the diffusion of managerial environmentalism is through the exercise of power. Power is a multi-dimensional concept (e.g. Griffin 2007), but is used here to describe the control of one actor by another actor. Within the present context, globalisation has variously been treated as a source of power (e.g. via multilateral organisations and transnational advocacy networks), as well as providing the conduits for the transmission of power (e.g. via commodity supply chains). Either way, it is assumed that innovations diffuse as a result of imposition, coercion and conditionality by more powerful forces or actors, whose origins lie beyond the adopter's own territory (Busch and Jorgens 2005). As examples, geographers have variously described how coercive pressure from foreign business customers, financial institutions, and international organisations has led to the spread of new environmental innovations, particularly from developed to developing countries (Essex and Chalkley 1998; Grainger 2005; Hadfield-Hill 2007; Hirsch 2001; Klooster 2006; Neumayer and Perkins 2004; Perkins 2007; Stringer 2006).

Another way in which globalisation has been identified as giving rise to diffusion is through competitive dynamics. Specifically, by creating networks of interconnection interaction and interdependency through which geographically dispersed actors are brought into the same competitive "space", globalisation creates incentives for these actors to adopt similar, competitiveness-enhancing innovations. These include environmental innovations which provide real or anticipated benefits in terms of cost savings, differentiation or reputational enhancement. For example, drawing from ideas of competitive emulation, it is suggested that corporate managerial innovations (e.g. codes-of-conduct) may diffuse across

borders as domestic firms copy the practices of their foreign rivals believed to provide them with a competitive advantage (Neumayer and Perkins 2004; Stringer 2006).

A third way in which globalisation is said to underpin the spread of new innovations is by fostering learning between geographically distanced actors (Bulkeley and Betsill 2005; Stone 2004). Most fundamentally, diffusion is assumed to take place via technical learning, with domestic actors acquiring knowledge about the availability, potential applications and benefits of managerial environmental innovations through extra-local communication. Lesson drawing, where domestic actors draw from the policy experiences of other jurisdictions, is one vehicle for technical learning (Stone 2004). Additionally, learning may come about as a result of policy promotion by actors such as think tanks, consultancies and non-governmental organisations (NGOs), together with elite networking and collective problem-solving by transnational communities of practice (Amin 2004; Beder 1996; Bomberg 2007; Holzinger and Knill 2005; Stone 2004).

The literature, particularly outside geography, has also ascribed a significant role for normative learning (Meyer et al. 1997; Park 2005). Core to its assumed importance is the constructivist argument that domestic actors' interests and obligations are not endogenously pre-configured, but, rather, evolve through external interaction, communication and socialization (Finnemore 1996). Within this frame, Haas (2002) describes how domestic political elites' engagement in international environmental conferences has been instrumental in the emergence and transmission of shared norms, which prescribe environmental protection as a legitimate and worthy state goal. While these normative commitments have not always readily translated into substantive policy action, evidence nevertheless suggests that socialization has been important in jump-starting state environmentalism in several developing countries (Hochstetler and Keck 2007; Perkins 2007).

A fourth way in which globalisation has been implicated in the internationalisation of managerial environmental innovations is by creating an opportunity structure. Transnational and international connectivity, awareness and comparison are said to provide windows of opportunity for territorially-bound actors to advance their pre-existing interests (Howlett and Ramesh 2006). Hence, globalisation is depicted as enabling domestic actors – such as NGOs – to exploit extra-local developments in environmental norms, policies and practices, as well as to make use of extended networks of resistance in pursuing their organisational goals (Bernstein and Cashore 2000; Börzel 2000; Cole 2003; McCarthy 2005). Either way, such processes may contribute to the international spread of managerial environmentalism, as domestic actors attempt to download environmental innovations from beyond their territory.

It is important to acknowledge the flip-side of activism. As well as acting as agents of diffusion, domestic actors may resist the incorporation of new environmental commitments, policies and practices, especially where they are seen as having been imposed by "foreign" actors. A good example of such resistance can be found in the nationalist backlash in Brazil against international pressure to institute environmental protections for the Amazonian rainforest (Hochstetler and Keck 2007).

Thus, globalisation has been identified as contributing to the diffusion of managerial environmentalism in a number of different ways, although the nature of globalisation has sometimes been conceptualised differently in these accounts (Table 2). Hence, globalisation has been conceived as an evolving structure which creates conditions for the operation of discrete causal diffusion mechanisms (e.g. via transnational communication networks), but also as a diffusion mechanism in its own right (e.g. a coercive force). Similar multi-dimensional understandings of globalisation are apparent when we consider the spatialities of diffusion.

Table 2. Mechanisms and pathways of diffusion operating via globalisation.

Mechanism/ pathway	Description	Example
Power	Innovations spread as a result of coercion, conditionality and imposition by more powerful actors	Adoption of environmental management practices by public-sector Indian power and steel producers in order to meet conditions of World Bank loans (Perkins 2007)
Competition	Dynamics of competition between geographically dispersed actors creates incentives to adopt (potentially) similar competitiveness-enhancing innovations	US firms copy the climate change strategies of their European and Japanese counterparts, fearing that they might otherwise suffer a competitive disadvantage in the long-term (Levy 2005)
Learning	Technical learning about the availability, performance and application of new innovations; normative learning whereby actors incorporate new values, commitments and obligations in ways which redefine interests and obligations	Major environmental NGOs promote uptake of new environmental policy instrumental in EU accession countries by acting as policy teachers, diffusing knowledge about instrument costs, benefits and feasibility (Bomberg 2007)
Opportunity	Actors strategically exploit extra-local developments in environmental commitments, policies or practices to advance their interests	Brazilian NGOs draw on international discourses of sustainable development and environmental justice to advance domestic environmental protections (Hochstetler and Keck 2007)

Spatialities of Diffusion

Broadly speaking, thinking about the spatiality of diffusion via globalisation can be divided into vertical, horizontal and multi-level perspectives. A starting point for orthodox, vertical accounts is the idea of fixed, hierarchical scale, whereby different scales are layered on top of one another, with the global at the top and the local at the bottom. Within this frame of reference, early accounts tended to portray globalisation as a top-down force, driving, conditioning or incentivising conformity amongst actors at lower scales. A good example of such thinking can be found in the work of sociologists who have theorized the development of managerial environmentalism at the state/sub-state level as having been constituted from above by global processes of socialization (Finnemore 1996; Meyer et al. 1997).

More recently, top-down accounts have been joined, and sometimes displaced, by bottom-up ones. Resonating with ideas of globalisation as an opportunity structure, bottom-up accounts conceive the diffusion of environmental innovations taking place as actors at the national/sub-national scale “pull” innovations down from the global/regional scale to the local one (Adams 2001; Howlett and Ramesh 2006; Perkins and Neumayer 2004; Van-Alstine 2009). Vertical conceptions have also been invoked to describe multi-directional engagement, interactions and learning between actors at different scales, e.g. between domestic governments and international organisations (Stone 2004).

A more sophisticated analysis of these dynamics can be found in the work of geographers into scalar politics (Swyngedouw and Heynen 2003). Departing from orthodox

conceptions, a defining feature of these contributions is the assumption that scale is not pre-given, but is actively constructed, re-produced and transformed as part of socio-political struggles and strategies. Thus, geographers have documented how communities have sought to overcome the constraints of place, enframing local issues as national, regional or international ones, with a view to leveraging extra-local support networks (Hirsch 2001; Perreault 2003). Likewise, they have shown how domestic actors actively draw from regional and/or international norms, commitments and practices in political struggles, (re-)constructing these scales as providing legitimate sources of domestic policy action (Campbell 2007; Cole 2003; McCarthy 2005). In short, scalar political accounts highlight how human agency may be used to territorialise (i.e. ground in particular territorial spaces) new environmental protections, policies and practices, manipulating scale in ways that contribute to the diffusion of managerial environmentalism.

A second way in which scholars have conceptualised the spatiality of diffusion is as a horizontal set of processes. Core to these perspectives are actor networks which bind together individuals, groups and organisations across geographic space, and act as conduits for international flows of ideas, knowledge and pressures. A major focus of recent work in geography within this horizontal frame has been on the bilateral (i.e. country to country) spread of managerial environmental practices via cross-border economic networks created by international supply chains and foreign investment (Angel and Rock 2005; Bridge 2002; Hebb and Wójcik 2005; Klooster 2006; Perkins and Neumayer 2008; Stringer 2006). Another set of horizontal networks which have attracted considerable attention amongst geographers are created by transnational advocacy networks (Mason 2005; Routledge 2002). Together, these networks have been interpreted as constituting new spatial-organisational forms of transnational environmental governance, exerting distanciated influence, authority and control in ways that transcend traditional territorial scales of regulation (Amin 2004; Angel and Rock 2005). Also within a horizontal frame, the international relations literature has emphasised how interpersonal networks created between political actors in inter-governmental conferences foster learning, giving rise to new environmental knowledges, subjectivities and normative commitments (Haas 2002).

While a vertical/horizontal distinction is heuristically useful, many accounts increasingly acknowledge both dimensions. A prominent example of such thinking can be found in the concept of multi-level governance, which describes how public and private networks of actors interact, negotiate and co-operate across multiple scales in environmental governance processes (Himley 2008). Although multi-level governance has rarely been applied to the diffusion of managerial environmentalism *per se*, it nevertheless usefully highlights some of the complex vertical and horizontal networks through which new norms, knowledge and pressures may spread across geographic space (Bulkeley and Betsill 2005).

What emerges from this brief review is that a complex set of spatialities have been implicated in the diffusion of managerial environmentalism. This complexity, in part at least, stems from the different ways in which different contributors have conceptualised the same diffusion mechanism. For example, some authors have treated normative learning as a top-down process, others as a horizontal process, while still others have emphasised both elements (Haas 2002; Stone 2004). Yet complexity also reflects the fact that the internationalisation of new managerial environmental commitments, policies and practices – in all of their variegated manifestations, from the spread of codes-of-conduct by private corporations through to the incorporation of new ideologies, discourses and beliefs by state elites – defies simplistic mono-dimensional explanations which privilege either vertical scales, horizontal networks, or single examples of these, e.g. the global scale or civil society networks (Bulkeley 2005). In reality, understanding the multiplicity of diffusion

processes, pathways and outcomes not only requires scholars to acknowledge a diversity of mechanisms, but also that diffusion takes place within and across a range of networks and scales.

As should be apparent from the above, an important factor underlying the complex spatialities of internationalising managerial environmentalism is the wide range of actors involved. Traditional, territorially-scaled governmental actors retain an important role. Yet key to understanding the multiple spatialities of internationalisation is the growing role of other actors whose influence, scalar configuration and/or geographic sphere of influence do not correspond to conventional scales, sources and hierarchies of sovereign state authority (Amin 2004; Bulkeley 2005). These include transnational networked actors – e.g. advocacy groups, corporations and municipal authorities – who constitute relational communities spanning, penetrating and integrating territorially bounded spaces (Bulkeley and Betsill 2005; Klooster 2006; Mason 2005). They also include international organisations – such as multilateral banks – whose influence and authority is regionally or globally-scaled (Park 2005; Stone 2004). Although the impact of these actors can be exaggerated, they have nevertheless played an important role in diffusing managerial environmentalism, both independently and through their influence on territorial state actors.

Critical Perspectives on Diffusion

The image of similar environmental innovations spreading by contact, communication and interdependency amongst a growing number of geographically dispersed actors across the globe is certainly seductive. Yet such portrayals are not without their problems and risk obfuscating the complex geographical processes, uneven territorialised outcomes and spatial geometries of innovation diffusion.

One potential problem lies with distinguishing real diffusion from so-called spurious diffusion. According to an established literature, countries may well adopt similar innovations, but do so independently (Kelemen and Sibbitt 2004; O'Loughlin et al. 1998). Although appearing to be a function of diffusion processes, the cross-national spread of innovations may actually be the result of similar contextual attributes across countries, which lead domestic actors to make similar choices. As a consequence, there is a problem deciphering underlying causality, and determining whether a particular innovation has actually travelled across space via diffusion. A good illustration of these issues can be found in Howlett (2000) who describes a parallel move in the US and Canada towards more market-based and voluntary environmental policy instruments, with a greater emphasis on multi-stakeholder and collaborative approaches. According to the author, convergence in broad policy styles has not so much been associated with one country copying another, but rather 'precepts of "new public management" thinking, transmitted to both countries through trans-national elite networking' (pg. 306), leading policy-makers to develop similar policy approaches. Howlett's account resonates with scholarship in geography examining how the international diffusion of neoliberal ideology has been instrumental in informing, propelling and legitimising new forms of market-based and self-regulatory environmental regulation across a growing number of countries (Gareau 2008; Himley 2008; McCarthy 2006; McCarthy and Prudham 2004).

A central implication of these works is that the spread of underlying normative commitments, ideologies and institutional rules can foster elements of homogeneity in managerial environmental approaches across countries. In this sense, globalisation may be instrumental in "conditioning" the internationalisation of similar approaches to managerial environmentalism, notably through its role in fostering the diffusion of a favourable

underlying context for particular choices. Subsequently, domestic actors may opt to develop their own regulatory innovations, or may actively search for, learn from and adopt environmental innovations grounded in other countries which are compatible with underlying abstract preferences and high-level policy goals. The important point is that it is not always clear as to what is actually diffusing. That is, is it “hard” innovations in terms of specific instruments, standards or organisational infrastructures, or is it “softer” normative principles, ideologies and rules which institutionalise particular preferences, or indeed both? We would lean towards the latter. Either way, such observations should caution against hyper-globalist accounts, and remind us of the domestic sources of innovation. Thus, despite accounts depicting the emergence of environmentalism in developing countries as a result of globalisation processes, there are countless documented examples of domestic forms of environmentalism which have deep-seated, indigenous roots independent of extra-local influences (Mawdsley 2004).

Another potential problem with the image of internationalising managerial environmentalism is that it risks downplaying geographic variability. Although managerial environmentalism may well be diffusing, evidence points to significant cross-national variations in the uptake of particular environmental innovations, both amongst state and non-state actors (Busch and Jorgens 2005). For example, the uptake of market-based emission trading schemes has largely been restricted to the EU, North America, and a handful of developing countries (Tao and Mah 2009). Likewise, while ISO14001 has diffused to the vast majority of countries, large differences exist in the number of adopters in individual states (see Figure 2). Indeed, such variations raise important questions about the geographic breadth and depth of diffusion, and the degree to which we can legitimately talk about particular aspects of managerial environmentalism as truly “international” or “global” phenomena. They also draw attention to the importance of the domestic context in shaping internationalisation. Recent research suggests that variations in the uptake of globally mobile innovations can be explained in terms of differences in

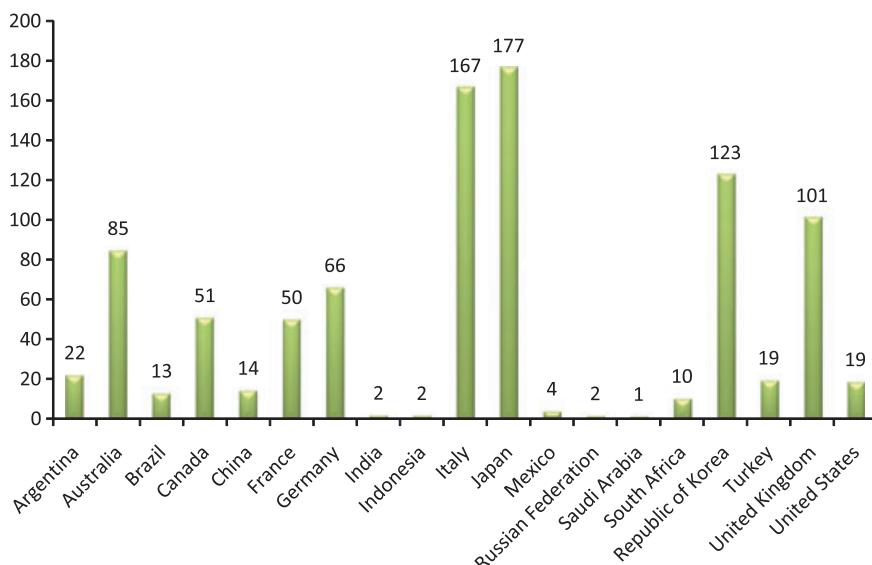


Fig. 2. Cross-national variations in the number of ISO14001 certificates per one million inhabitants, G20 economies only (year = 2006). Source: Author's own calculations, based on data from ISO (2007) and World Bank (2008).

countries' engagement with and exposure to various international and transnational influences, as well as place-based factors which influence domestic actors' receptivity and responsibility to these influences (Perkins and Neumayer 2010).

Yet just as important as variations in uptake are differences in domestic implementation. Actors in two different countries may well have adopted the same generic environmental policy approach, instrument or standard. Yet the way in which these innovations are incorporated, applied and implemented by domestic actors will often vary, sometimes quite significantly. A good case in point is that of developing countries. Thus, despite having adopted a whole series of environmental laws, many low income countries have often made only patchy progress in implementing and enforcing these in practice (Adams 2001; Hochstetler and Keck 2007). The result is that particular environmental protections (e.g. designated park status) may be in name only (e.g. so-called "paper parks"), contrasting with developed economies, where similar environmental laws, commitments and policies may be far more seriously, rigorously and effectively put into effect. A common explanation for these variations is technical and/or administrative capacity (Dasgupta 2000; Perkins 2007; Tao and Mah 2009). Going further, recent work has increasingly focused on the role of domestic politics, national institutional arrangements and policy styles which are said to shape the territorialisation of innovations in ways which reproduce place-based institutional diversity, governance arrangements and geographically-embedded interests (Bailey 2007; Börzel 2000; McCarthy 2006).

From a geographic perspective, differences in domestic incorporation are important, in that they challenge the idea that globalisation gives rise to cross-national convergence. Thus, in a revealing contribution, Radaelli (2005) describes how a basic discourse of regulatory impact assessment (RIA) has spread across EU states. Yet, rather than bringing about convergence in regulatory practice, uptake has varied across countries according to how domestic policy-makers have chosen to interpret and deploy RIA. Taken together, these insights suggest that it is unrealistic to assume that globalisation processes are contributing to the homogenisation of space, and a single, globally uniform model of managerial environmentalism. Rather, internationalisation is best understood as giving rise to the emergence and evolution of multiple nationally and/or regionally idiosyncratic managerial environmentalisms, constituting hybrids of various extra-local and place-based influences.

A final caveat concerns the spatial geometry of diffusion processes. Within the literature, a handful of environmentally progressive developed countries have often been portrayed as the source of institutionalised environmental commitments, policies and practices, which subsequently diffuse into other, less environmentally progressive countries, especially developing ones (Hilton 2001; Huber 2008; Sonnenfeld and Mol 2002). Yet this neat characterisation of managerial environmental innovations diffusing bilaterally from environmental pioneers to environmental laggards belies the complexity of diffusion processes. For a start, it is apparent that domestic actors learn from, or otherwise emulate, managerial environmental innovations adopted in a wide range of countries, and not simply countries where they were first applied (Albuquerque et al. 2007). There is some evidence, for example, that certain developing countries are drawing lessons from the environmental policy experiences of other developing countries (Wang et al. 2004). What is more, with the growth of environmental management in developing countries over recent decades, it is also likely that innovations will increasingly travel from what are today's developing countries to developed ones.

More important still, the sources of environmental normative commitments, approaches and policy templates that have underpinned the internationalisation of

managerial environmentalism are not always territorial, but are also non-territorial, or at least territorially dislocated. Hence, returning to the example of international environmental conferences introduced earlier, normative learning can be seen as having taken place in a territorially-disarticulated cosmopolitan space of engagement. To the extent that normative commitments are likely to have their origins (in part, at least) in the evolving commitments of actors located in particular countries, internationalisation may involve some degree of spatial dependence, but of an indirect sort. A similar story applies to the influence of international organisations such as the World Bank which, although non-territorial in nature, has nevertheless been instrumental in diffusing environmental commitments originally uploaded from particular states such as the US (Wade 2004). The important point is that the spread of managerial environmentalism involves multiple geometries. The diffusion of environmental innovations takes place bilaterally between actors grounded in different territorial states, transnationally and multilaterally in interstate spaces between groups of actors from different countries, and vertically between domestic actors in territories and non-territorial global/regional actors (Stone 2004).

Conclusion

A remarkable feature of the past half century has been the emergence, diversification and geographic spread of managerial environmentalism across large parts of the globe. As recently as the 1960s, few countries had much in the way of public environmental policies or regulatory bodies, and examples of non-state regulation were comparatively rare. Today, the vast majority of states have public regulatory infrastructures, and a growing number of firms – mainly in developed, but also developing countries – are adopting various tools of corporate environmental management. Moreover, evidence points to considerable similarities in the managerial approaches, policies and practices adopted in different countries, indicating that recent trends are somehow linked. Indeed, consistent with this story of spatial dependence, evidence suggests that the internationalisation of managerial environmentalism is closely bound-up with globalisation processes (Angel and Rock 2005; Grainger 2005; Hebb and Wójcik 2005; Hilton 2001; Perkins 2007).

While the basic story of internationalisation via globalisation is straightforward enough, a core theme of this article is that the constituent mechanisms, spatialities and outcomes associated with the diffusion of managerial environmentalism are far more complex. As argued above, one reason for this complexity is the different ways in which scholars have interpreted the same phenomena, together with different conceptions of what constitutes globalisation. Yet complexity also reflects the reality that diffusion comprises a deeply geographical set of processes, which involve a whole series of actors, influences, scales and networks, and whose territorial outcomes are subject to the contingencies of place-based geographies.

Geography has made, and indeed continues to make, an important contribution to understanding these complexities. With its central attachment to place, for example, recent work in the discipline has provided valuable insights into how innovations territorialise in ways which reproduce existing place-based institutions, interests and capabilities (Bailey 2007; Hughes et al. 2007; McCarthy 2006). Yet, in moving forwards, we point to three possible areas where geographical scholarship might productively focus. First, greater attention could be paid to the actor geographies of diffusion, focusing on the constituent spaces of engagement, interactions and processes through which individuals, groups and organisations actively diffuse environmental innovations. For example, we know comparatively little about how specific actors carry, share or promote knowledge

about new environmental innovations, or how recipients come to incorporate and/or re-make this knowledge in the process of technical learning. Another area which merits further examination is disentangling the role of domestic and extra-local influences in producing apparent similarities and, indeed, differences, in patterns of managerial environmentalism across different countries. As highlighted earlier, many questions remain about the sources of domestic change, suggesting that more work needs to be undertaken into understanding precisely how particular environmental commitments, policies and practices emerge, diffuse and mutate across space.

Third, in addressing these and other geographical questions, we argue that geography should engage more with other social science disciplines (e.g. Albuquerque et al. 2007; Finnemore 1996; Howlett and Ramesh 2006; Meyer et al. 1997). For example, geographers could potentially learn a greater deal from the international relations literature, which has made important advances in understanding how environmental norms are generated, transmitted and incorporated (e.g. Park 2005). By integrating insights from such disciplines and, moreover, synthesising them into frameworks which pay attention to the processes through which the extra-local is inscribed into place, geographers should be able to make better sense of the complexity of internationalisation processes and outcomes.

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Note

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