doi:10.1068/c3106ed

Governing sustainability: Rio+20 and the road beyond

Harriet Bulkeley

Department of Geography, University of Durham, South Road, Durham DH1 3LE, England; e-mail: h.a.bulkeley@durham.ac.uk

Andrew Jordan

School of Environmental Sciences, University of East Anglia, Norwich NR4 7TJ, England; e-mail: a.jordan@uea.ac.uk

Richard Perkins

Department of Geography and Environment, London School of Economics, London WC2A 2AE, England; e-mail: r.m.perkins@lse.ac.uk

Henrik Selin

Department of International Relations, Boston University, Boston, MA 02215, USA; e-mail: selin@bu.edu Received 4 November 2013

Abstract. The United Nations Conference on Sustainable Development, more widely known as 'Rio+20', was a significant global political event, but it left many important questions relating to the future of sustainability governance unanswered. This paper introduces a theme issue on "Governing sustainability: Rio+20 and the road beyond". It is organized around three themes which are addressed at greater detail in the different papers: (i) the current status of governance for sustainability in the aftermath of Rio+20; (ii) whether or not sustainable development still has political and institutional relevance; and (iii) institutional and political opportunities and obstacles for governing sustainability in the future. The paper argues that both sustainability governance and the sustainable development concept are under growing pressure amid a perceived failure to deliver change, but identifies three opportunities to advance sustainability: (i) by reframing the way in which problems of unsustainability are described and approached; (ii) via the formulation of effective sustainable development goals; and (iii) by identifying novel ways to open up the sustainable development debate to more actors and interests.

Keywords: governance, sustainable development, sustainability, sustainable development goals, green growth

Introduction

On 22 June 2012 many of the 44000 participants from 191 countries who had travelled to Rio de Janeiro to attend the United Nations Conference on Sustainable Development (UNCSD) began to make their way home. Originally called for by the UN General Assembly in 2009, the conference marked the 20th anniversary of the United Nations Conference on Environment and Development held in the same city in 1992 (hence the meeting's informal name, 'Rio+20'). The UNCSD was the largest global sustainability conference ever held, formally convened to allow states, intergovernmental organizations, business organizations, and civil society representatives to debate two main topics: the problematic relationship between green growth, sustainable development. Informally, it also provided a once in a decade opportunity for the many delegates coming from all over the world and different sectors to meet, talk, and reaffirm their commitment to the long-term normative project to govern the planet's sustainability.

Well before the attendees had arrived home, many commentators had damned the event as a deep disappointment. Critics pointed out that the seventy-nine heads of states and governments who had attended UNCSD—far fewer than the number of high-level representatives who had attended the 1992 meeting—had done little more than sign up to a political statement entitled *The Future We Want* (United Nations, 2012): a rather anodyne restatement of largely existing commitments and priorities, which some labeled a "missed opportunity" (Biermann, 2013). In fact, the Brazilian host's determination to ensure a commonly acceptable agreement on the huge and sprawling conference agenda by closing the negotiating text early meant that there was little of substance for political leaders and other delegates to engage with once they arrived in Rio. The UN's environmental body—the United Nations Environment Programme (UNEP)—will henceforth benefit from a more secure funding base and a universal membership, but it will be far less than the large, well-resourced UN Environment Organization sought by some participants including the European Union.

As is often the case in the aftermath of global summits, other commentators tried to present the outcome in more positive terms. Supporters, for example, pointed out that large-scale conferences always take time to produce their full effects and that it might be better to reserve final judgment, at least for a while (Linnér and Selin, 2013). In fact, it may be as much as a decade or more before a full assessment can be reached about the impact of longer term processes such as those associated with the formulation of Sustainable Development Goals (SDGs), a significant initiative which will build on the Millennium Development Goals (MDGs) which expire in 2015; the process of seeking alternatives to gross domestic product (GDP) for measuring human well-being; or the activities of the newly established High-Level Political Forum on Sustainable Development, replacing the twenty-year-old Commission on Sustainable Development as the focus for sustainability leadership in the UN. The conference organizers also made a great deal of the 700 or so voluntary pledges made by governments and businesses outside the main political discussions.

The fact that Rio+20 was one of the most well-attended international political meetings ever held makes it 'important' and hence worthy of academic analysis. However, the conference also demonstrated that the sustainable development agenda no longer exerts the pulling power it once had. That so much time and effort have been spent debating sustainability over several decades is a powerful reflection of its importance but also its intractability. Global sustainable development governance has much in common with other major policy areas in that it involves a large number of actors who have different—and sometimes conflicting—interests, agendas, and capabilities (Cooper, 2011; Hoffmann, 2011; Mueller, 2010; Risse et al, 1999). It entails a multitude of normative choices that can have far-reaching implications for different actors. The selection of conference themes and the writing of outcome documents are politically contentious processes, involving a plethora of political issues about who currently gets what, what might constitute a 'fair' distribution of the benefits and impacts of global development, and how to take account of varying responsibilities and burdens that any reforms and changes might bring.

In the past, *Environment and Planning C* has published a number of papers on the critical but deeply puzzling relationship between sustainability and governance (Barkemeyer et al, 2013; Beierle and Konisky, 2001; Cherp et al, 2004; Frame, 2008; Jordan, 2008; Kidd and Fischer, 2007). This theme issue builds on that tradition by bringing together some of the world's leading scholars to reflect upon the UNCSD and the status of sustainability governance post Rio+20. The collection opens with a comprehensive review of the historical antecedents of the UNCSD (Linnér and Selin, 2013), followed by papers discussing sustainable development issues from the perspectives of the industrialized (Meadowcroft, 2013) and the developing (Perkins, 2013) worlds, respectively. The subsequent papers examine a number of

thematic issues critical to the sustainable development agenda, including the green economy (Bina, 2013), local responses (Lawhon and Patel, 2013), innovation (Ely et al, 2013), and consumption (Hobson, 2013). The theme issue closes with a paper reflecting on contemporary challenges and the future of sustainable development governance (Biermann, 2013).

After over forty years of global environment and development cooperation, institution building, and policy making, it is important to critically examine the current status and continued relevance of the sustainable development concept and associated governance efforts. In this introductory paper we draw out some of the key points and consider the collective insights that the individual papers bring to our understanding of the potential, and limits, of sustainability governance. It is organized around three themes which are addressed at greater detail in the different papers. The first theme concerns the current status of governance for sustainability in the run-up to, and in the aftermath of, the Rio+20 conference. The second theme relates to whether or not sustainable development still has political and institutional relevance forty years after the United Nations Conference on the Human Development, organized in Stockholm in 1972. The third theme examines institutional and political opportunities and obstacles for governing sustainability in the future.

Reflections on the governance of sustainability

The global sustainable development agenda is extraordinarily broad, multifaceted, and complex. As one of the most challenging political issues of the early 21st century, it defies narrow standard solutions. Linnér and Selin (2013) point out that the current ecological and human development indicators powerfully confirm this. Consumption of natural resources (both renewable and nonrenewable) continues to increase, together with waste levels. Emissions of some pollutants like many ozone-depleting chemicals have been reduced, while release of carbon dioxide and other greenhouse gases is still growing sharply (UNEP, 2012). According to the United Nations (2013), 1.17 billion people continue to live in absolute poverty (on less than US \$1.25 in purchasing power parity terms), while 2.44 billion and 1.27 billion lack access to sanitation and electricity, respectively. Yet, at the same time, a combination of economic growth and domestic and international policy efforts—including those pursued through the implementation of the MDGs—have contributed towards improved basic living conditions in many parts of the developing world (UNDP, 2013).

A major impetus for addressing the plethora of interrelated environment and human development issues over recent decades has been growing political and public concerns with sustainability—of the need to address not only the narrow economic aspects of development but also its environmental and social dimensions (Adams, 2008). Sustainability has acted as an important catalyst to debates and policy making in multiple arenas, from local planning systems to international treaty negotiations (Holman, 2009; Russe-Khan, 2010). At the same time, sustainable development has become an all too common mantra employed by governments, corporations, and communities alike to signal their social and environmental ambitions and intentions without necessarily taking the necessary means to follow through on their commitments. Absolutely central to the ways in which sustainability has been pursued in the many different forums are the governance arrangements through which it has been articulated and contested. The way in which sustainability is conceptualized and governed, in other words, matters hugely.

At the heart of the debates about how to conduct sustainability governance has been a persistent sense that critical institutions have not been sufficiently attuned to the challenges involved and have been limited in the extent to which they have been able to integrate sustainability concerns into mainstream policy making, implementation, and evaluation. As these institutional debates demonstrate, reform issues remain important, but Rio+20 demonstrated that there is little political appetite for any quick or sweeping change.

Any coming changes are likely to be modest and incremental. Yet, a strategy of 'radical incrementalism'—recognizing and strengthening existing elements that work relatively well, identifying the strategic direction of change, and implementing measured and pragmatic shifts—may lead to at least some positive institutional change (Najam and Selin, 2011). Yet as Biermann (2013) and Linnér and Selin (2013) argue in their papers, the Rio conference was mostly a disappointment to those who had hoped for far-reaching structural reforms to the governance system.

Existing debates about the institutional principles for decision making have in many respects simply persisted. Biermann (2013) goes so far as to declare the traditional UN voting system of `one state, one vote' as simply 'outdated'. Yet, changes to UN voting procedures remain highly controversial, as there is no easy way to establish an 'appropriate' and legitimate alternative voting system in major sustainable development forums (Linnér and Selin, 2013). Alongside continuous discussions about principles for state-led decision making, issues of transparency and participation by nonstate actors have moved to the forefront. Over the years, different nonstate groups have undoubtedly been better integrated into UN forums and debates; there were many more interactions between UN processes and civil society groups in Rio in 2012 than there were in Stockholm in 1972. Related to this, Betsill and Correll (2008) chart how various nonstate actors have come to play a more significant role in the process of agenda setting and policy design within the international arenas of sustainability governance.

Another key theme of the debates surrounding sustainability governance has been the difference and division between developing and industrialized countries. Developing countries have long been suspicious of the global sustainability agenda, fearful that environmental constraints (in particular) imposed by the rich, industrialized world might threaten their development aspirations. Indeed, Perkins (2013) argues that sustainable development has been instrumental in forging a sense of unity amongst a disparate group of developing states that have sought to collectively imagineer the idea of a single developing world with shared conditions, problems, and needs distinctive from those of industrialized countries. Moreover, this grouping of developing countries has played an important role in institutionalizing a developing–developed divide in sustainable development discourse, expressed in differentiated responsibilities and commitments under multilateral environmental agreements (Rajamini, 2006). Many key divisions in global sustainability politics continue to be structured along this developmental fault line. At Rio+20, conflicts resurfaced between the two groups around their different conceptions of the green economy and calls for additional financial assistance for developing countries (Bina, 2013).

However, in the twenty years since the first Rio conference the developing world has become more diverse, in terms of both the environment and development issues facing particular countries as well as their capacities for and interests in addressing them. This diversity exists not only across countries but also within them, manifest in highly variegated domestic conditions of deprivation and affluence. In fact, some of the environmental challenges facing higher income communities in certain developing countries share more in common with their equivalents in developed countries (eg high levels of consumption or waste) than those associated with lower income groups in the same territory. Alongside these changes, the geopolitical solidarity of developing countries in matters of global environmental politics shows signs of fracturing, with subgroupings of countries like small island states seeking to better represent their own particular interests. As a result, it is becoming increasingly difficult to talk about a single developing world having a unified approach to sustainability governance. Rather, it is necessary to acknowledge the multiple and fragmented worlds of developing world (Perkins, 2013).

The group of industrialized countries may not have experienced the same kind of internal transformations over the past two decades as the highly diverse set of developing countries. Yet it can nevertheless be argued that industrialized countries have also become more varied (recognizing that they have always had different interests and expressed different opinions on sustainability governance). Some countries have embraced the rhetoric of sustainability more than others, with the EU having made it an overall legal objective in all of its regional policy making for the twenty-eight member states (Compston and Bailey, 2008; Jordan and Adelle, 2012). However, effective cross-sectoral implementation remains elusive, and further reducing industrial country levels of resource use is an essential sustainable development challenge, as their ecological footprints remain high. Many developed countries may have made important progress in dealing with traditional air and water pollution issues, but they have made much less headway in integrating environmental concerns into broader socioeconomic decision making and structures (Council of the European Union, 2009).

One critical aspect of any planetary shift towards sustainability will have to be a greater recognition that the environment and development agenda cuts across spatial scales from UN conferences, regional organizations, and national governments to local town halls and individual households. Importantly, expanded involvement in sustainability governance has increasingly involved subnational governments, including local and regional authorities, which have enabled a greater inclusion of directly elected bodies in the processes of international policy formation. Their many roles in multiscale governance are also recognized in *The Future We Want* (Linnér and Selin, 2013). The framing of sustainability issues as either 'global' or 'local', however, is not simply a straightforward matter of matching the scale of any particular sustainability challenge with an appropriate institution, but rather a matter of politics in which issues become attached to particular scales—for example, that land-use planning is seen as a local matter while climate change is viewed as a global issue—which structures the sorts of responses that are imagined and the kinds of actors who are seen as legitimately involved in decision-making processes (Bulkeley, 2005; Lawhon and Patel, 2013; Whitehead, 2006).

Lawhon and Patel (2013) draw attention to this politics of scale in their paper. Certainly, the multiplicity of sustainability-related initiatives, policies, and plans pursued in different urban and rural contexts point to the vibrancy of the local as an arena within which sustainability is pursued (Middlemiss and Parrish, 2010; Seyfang and Haxeltine, 2012). Yet, Lawhon and Patel (2013, page 1059) argue that "the time is long overdue to be more theoretical, more pragmatic, and more ethical" about what local endeavors entail, as they focus on how Local Agenda 21 efforts have served to create a particular framing of sustainability that has limit the range of options for responding to specific environment and development issues. Behind the mantra of 'think globally, act locally', they suggest, is an uncritical acceptance that local institutions can, and should, be the means through which to enact sustainable development. Such an approach, they go on to argue, has failed to engage sufficiently with the multiple scales through which unsustainability is produced and comes to take effect, and placed too much faith in the expectation that the many initiatives carried out locally would in sum create a discernible impact on global sustainability.

The debate about global and local responses to sustainability has been accompanied by questions about the significance of actions within the private realm. The evolution of sustainability from a little known concept to a mainstream discourse has seen the emergence of various private sector initiatives, many of which have been undertaken on a voluntary basis within frameworks of corporate social responsibility and environmental, social, and governance criteria (Blowfield and Murray, 2008). A related development has been the growth of transnational certification systems (Klooster, 2010), which have been characterized as a form of nonstate market governance (Cashore et al, 2004). This expanded involvement of the private sector has been constitutive of a growing transnationalization of sustainability governance, and the emergence of new hybrid forms of governance such as public–private partnerships (Bulkeley and Jordan, 2012). Yet these trends have proved controversial. While growing private sector involvement has been welcomed by some as an opportunity to leverage the regulatory capacities of market actors in the pursuit of sustainability, others have been far more critical, variously arguing that it represents little more than 'greenwash', a vehicle for neoliberal development, and strategy to maintain a capitalist hegemony (Newell and Paterson, 2010; Soederberg, 2007).

Sustainability: still relevant after all these years?

Expectations were relatively low at the start of UNCSD, but even so many commentators' immediate reactions to Rio+20 were nonetheless of deep disappointment (Pattberg and Mert, 2013, page 305). Meadowcroft (2013) and Biermann (2013) certainly adopt this tone. Similarly, Bina (2013) argues that progress on the green economy—which was supposed to be something that everyone could agree upon—was modest at best. Yet, as we set out in our introduction, it is important not to leap to immediate judgments of major conferences, because they may slowly shape subsequent activities and decisions in a multitude of direct and indirect ways (Biermann, 2013; Ely et al, 2013; Linnér and Selin, 2013). As highlighted by Death (2011), major political conferences can perform wider roles, such as demonstrating major actors' ongoing commitment and communicating particular expectations and norms of appropriateness. In this respect, it was important that so many public, private, and civil society representatives from all over the world traveled to Rio to express their continued support for the sustainable development agenda (Meadowcroft, 2013).

Yet it is hard to escape the feeling that Rio+20 found it hard to gain political traction. It was held at a time when other political issues—of austerity and national security—dominated the international agenda. Governments continue to make economic growth the number one priority; and, notwithstanding the use of a slightly new language around green growth, few fundamental changes have been made to macroeconomic structures and policies after Rio+20. This, together with the fact that many major sustainable development issues remain inadequately addressed, raises questions about the continuing relevance of sustainable development to a large number of governments. Many national sustainability strategy processes have ground to a halt, sustainability commissions and advisory bodies have been dismantled, and attempts to integrate environmental thinking into cross-sectoral decision making have floundered (Jordan and Lenschow, 2010; Kidd and Fischer, 2007; Steurer and Martinuzzi, 2005). A consultation exercise organized by the EU, a self-declared champion of sustainable development, on the post Rio+20 follow-up, attracted a grand total of 125 responses, only 50 of which were from individuals (ENDS, 2013, page 44).

More fundamentally, the UNCSD raised fresh and pertinent questions about the continuing usefulness and political relevance of the sustainable development concept per se. For decades, the concept of sustainable development has been a powerful motivator of thinking and action, but it has undeniably started to lose some of its global appeal and hence policy purchase. Right from the beginning, dominant conceptualizations of sustainable development portrayed opportunities, rather than obstacles, to improve living within ecological limits. Meadowcroft (2013) argues that the original 'genius' of the sustainable development concept—heavily promoted by the Brundtland Commission (WCED, 1987)—was that it focused attention on development as part of a process of positive change. That is, sustainable development would not only involve better environmental protection, but also at the same time improve fundamental economic and social conditions (not least for the world's poorest). Similarly, Bina (2013) discusses how much of the more recent green economy discourse has been dominated by the positive message of greening capitalism for everyone's benefit.

In this 'weak' version of sustainability that seeks to offer win–win solutions, improved resource use will benefit the economy, as sustainable development is portrayed as providing opportunities for new markets and continued economic growth (Hultman et al, 2012). Weak conceptualizations of sustainable development also often include a focus on enhanced efficiencies in consumption and production, the innovation and commercialization of a new generation of technologies, together with policies incentivizing individuals to make more environmentally friendly choices. Hobson (2013), Meadowcroft (2013), and Bina (2013) each discuss how industrialized countries have continued to focus on modifications that can green the economy within the framework of the capitalist economy. Ely et al (2013) explore how ideas of both technical and social innovation have been a key feature of the environment and development debate dating back to the 1972 Stockholm conference. More recently, visions of 'low-carbon' societies build upon significant technological progress (often downplaying the need for considerable individual and political change and sacrifice).

For Bina (2013), the priority given to the green economy agenda is symptomatic of a growing economization of the sustainable development discourse, wherein the environmental crisis is framed as a potential opportunity for further capitalist accumulation. These win–win narratives have also gained increasing prominence in contemporary development debates and policy. Within the increasingly common discourse of green growth, environmental sustainability is framed as a means for developing countries to increase productivity, foster innovation, and build resilience in ways which support progress in addressing human development needs (OECD, 2013). Similar thinking underpins recent efforts by a number of emerging economies to pursue a green industrial strategy with a view to improving their international competitiveness, take advantage of new markets in environmental technologies, and strengthen domestic energy security. More radical calls for change and proposals, including those associated with the degrowth growth movement and similar ideas of living within environmental limits (generally falling within the category of 'strong' sustainability), remain largely peripheral.

From a strong sustainability perspective, current efforts can be regarded as "fundamentally flawed—suffering from technocratism and an ignorance of the social" (Cook and Swyngedouw, 2012, page 1975), neglecting fundamental issues of environmental justice and social reform (see also Lawhon and Patel, 2013). According to Hobson (2013), degrowth involves downgrading 'the economic' from its current pole position in societal and political agendas, and often includes calls for the relocalization of economies, a renewed emphasis on citizenship and new forms of democracy, and a reorientation in values surrounding consumption. Certainly, there are examples of initiatives which seek to realize some of these goals. A case in point is Transition Towns, a social movement which seeks to respond to the challenges of peak oil, climate change, and economic instability by increasing resilience, lowering carbon emissions, and a reduced reliance on long supply chains (Scott-Cato and Hillier, 2010). However, perhaps unsurprisingly, such innovations remain largely marginal. Along similar lines, Meadowcroft (2013) highlights how mainstream discourse and debates over sustainable development have largely ignored population growth, which he sees as indicative of a deeper reluctance to confront underlying 'limits to growth'.

Nor does it seem likely that strong variants of sustainability will achieve greater political prominence in the near future. The '10 Year Framework of Programmes (10YFP) on Consumption and Production Patterns', which was formally adopted as a global framework of action at Rio+20, exemplifies the ongoing dominance of weak sustainability. According to Hobson (2013), 10YFP is likely to follow prevailing discourse which accepts "resource efficiency as a viable pathway to sustainability" (page 1087). Underpinning it is a politics of the possible and the difficulty of questioning traditional notions of economic growth.

Current approaches to addressing sustainable consumption therefore emphasize individual choice and responsibility, with the state's role increasingly relegated to the provision of information, creating the 'right incentives' and 'nudging' people to make environmentally beneficial choices. Yet it is doubtful whether such approaches alone are likely to bring about a substantive change in current patterns and trends of consumption.

In recent years, new types of discourses have emerged attempting to address sustainability without becoming trapped in binary debates about relative merits of strong and weak definitions. These seek greater political traction by focusing on specific issues within the broad spectrum of sustainability (Turner, 2010). Gibbs et al (2013) argue that new imaginaries are taking root in cities and regions around the world, replacing weak and strong versions of sustainability with the rhetoric of new urbanism, compact development, and smart growth. Others argue that sustainability is increasingly being translated into notions of risk, resilience, and security. For Hodson and Marvin (2009, page 194), "we are now seeing a 'race' to try to 'secure'— produce and consume—(increasingly scarce) resources to maintain and enhance economic growth" which is giving rise to a new politics of securing critical infrastructure and promoting the resilience of particular urban systems. For Stumpp (2013, page 165), reflecting on discursive shifts within planning policy,

"sustainability has lost its job to the promising new colleague [resilience] and probably finds itself in a serious crisis of meaning, wondering what it did wrong. What has happened is that it failed to deliver. Planners kept it so busy, "party-hopping" from one event and one discipline to another, that it missed the chance to get something done."

To conclude, advocates of sustainability have got used to arguing that the strength of the concept lies in its breadth and almost infinite flexibility to incorporate different perspectives and interests. Many analysts and policy advocates continue to think that this argument still has purchase after Rio+20. After all, tens of thousands of people were mobilized to attend the conference, the United Nations now has the development and implementation of the SDGs in its sights, and the term self-evidently continues to attract widespread support. But in recent years the combination of the continued dominance of a weak account of sustainability, which amounts to little more in policy terms than calls for resource efficiency and the development of new markets, together with an ever more urgent search for a lexicon that can address the deep social, economic, and environmental challenges facing society, also suggests that this argument is being challenged like never before. Perhaps Rio+20 will be remembered as a critical point in time when sustainability advocates realized that the concept's greatest strength, its tremendous flexibility, may also be one of its core weaknesses.

The road beyond Rio: old obstacles and new opportunities?

Over forty years of global politics and policy making on environment and development have resulted in a great deal of institutional development (Linnér and Selin, 2013). The UN conferences as well as other forums have produced a large body of organizations, political documents, action programs, and road maps. While much scholarly emphasis is all too often on the real or assumed shortcomings of sustainable development, it is noteworthy how far the concept has achieved salience in policy-oriented discourse and practice. The issue is not so much one of a lack of ideas and policies, as one of implementation gaps. There is plenty of evidence to suggest that governments have failed to live up to their international commitments under the aegis of sustainable development (Butchart et al, 2010). Both developed and developing countries have struggled to integrate sustainable development into policy and practice (Adams, 2008; Lawhon, 2013; Russel and Turnpenny, 2009). Likewise, it is clear that the rhetorical commitments of private sector actors towards sustainable development have frequently run ahead of substantive action, resulting in claims of hypocrisy (Frynas, 2008).

Complicating the picture further is the fact that the economic and development contexts of both the Global North and the Global South are, as noted above, in transition, challenging historic assumptions about needs and responsibilities. After a long period of rising economic prosperity, significant parts of the industrialized world have recently endured recession, or else comparatively sluggish economic growth. This, in turn, has dampened the enthusiasm for renewed political efforts to address the sustainability agenda in a serious and fundamental manner. Developed countries, moreover, continue to live beyond ecological limits (European Environment Agency, 2010). It is clear that considerable shifts in resource use and consumption patterns are needed to achieve sustainability in the industrialized world, including better integration of environmental objectives across other policy areas such as industrial production, energy generation, transportation, urban planning, and agriculture. In addition, developed country consumption is a major driver of pollution (including emissions of greenhouse gases) and ecological degradation in many developing countries (Peters and Hertwich, 2008).

Industrialization in emerging economies has brought about significant increases in income and human development, as well as growing governance capacities. Yet it has also been accompanied by rising resource use and pollution, arising from both production and increasingly consumption, putting greater pressure on resources and eco systems at different scales (Perkins, 2013). Indeed, much of the growth in greenhouse gas emissions over coming decades will originate from a handful of rapidly industrializing economies, led by China. The participation of these and other major developing economies in international efforts to address unsustainability is a matter of heightened import. The emerging economic powers are also emerging geopolitical powers, with countries such as Brazil, India, China, and South Africa proving increasingly assertive in international debates and fora concerned with sustainability governance. At one level this is an opportunity, in that it opens up the possibility for new sources of political leadership and formations of novel coalitions composed of leading developed and developing countries. However, it could also present an obstacle to more substantive action, particularly within a context where the emerging powers continue to privilege economic development and growth.

It is increasingly clear that, against this backdrop where a number of major emerging economies are experiencing rising prosperity and are the source of increased environmental degradation, developed countries if having to act alone are proving more reluctant to shoulder the burdens of contributing to global public goods. As a result, there are growing demands on developing countries to take greater responsibility for addressing sustainability. As evidenced by recent action on climate change mitigation by the BASIC countries (comprising Brazil, South Africa, India, and China), a growing number of them are indeed taking action. Yet it seems unrealistic to assume that developing countries—including the emerging powers—can be expected to pick up the baton of sustainability. Despite recent progress, lower income developing countries confront significant challenges of human development, and will continue to need international assistance. Further, as highlighted by Perkins (2013), the rising prosperity enjoyed by particular groups in emerging economies such as India belies that large numbers of individuals in these countries who continue to live in poverty and suffer multiple deprivations.

Few politicians in the North or the South are pushing for a significant rethinking of conventional growth models. Bina (2013), however, argues that we "need nothing less than a different concept of socioeconomic progress, based on a new understanding of the relationship between humans and nature" (page 1043). If sustainable development conceptualizations and governance efforts to date do not fully provide a means to attain and implement this new understanding, where might it be found? The contributors to this theme issue identify at least three opportunities to advance governance towards more sustainable living. One opportunity

relates to a possible reframing of the way in which problems of unsustainability are described and approached. As Meadowcroft (2013) argues, in the past there has not been enough debate on securing *absolute* reductions in environmental loadings. But rather than emphasizing who loses by doing this, why not, he suggests, focus on the social goods that it provides in effect making a political virtue out of an ecological necessity? It is partly for this reason that Rio+20 sought to focus on the potential of the green economy, described by UNEP "... as an economic environment that achieves low carbon emissions, resource efficiency and at the same time is socially inclusive" (cited in Ely et al, 2013, page 1065).

A second opportunity to bridge divisions may be found in the work on SDGs and the related efforts to develop new measures of measuring growth endorsed at Rio+20. There has long been criticism of a narrow focus on GDP for measuring economic well-being and growth. Critics argue that many important aspects of natural resource use and social welfare are not captured by the traditional GDP measure (Meadowcroft, 2013). Related to this, Linnér and Selin (2013) point to the efforts to build a Human Development Index and the effort to establish the SDGs and, together with Biermann (2013), see them as something concrete that could help advance the sustainable development agenda. Unlike the MDGs that focused almost exclusively on developing countries, the SDGs will also encompass industrialized countries. This makes them both more challenging and important than the MDGs, especially if backed with review and monitoring processes which are able to hold governments accountable for their commitments (Linnér and Selin, 2013).

A third opportunity relates to the identification of novel ways in which to open up the sustainable development debate, with the UN operating less as an intergovernmental broker and more as a convenor of societal discussion, through more virtual forms of participation and/or people's summits (Biermann, 2013; Ely et al, 2013). The challenge of ensuring meaningful participation is also linked to the growing focus on public–private partnerships. Whether publics are genuinely eager and 'energetic' (Biermann, 2013) enough for such discussions is questionable, given the falling levels of interest in sustainability issues recorded in public opinion polls, but at least some sections of society are definitely 'up' for more dialogue (Barkemeyer et al, 2013). For example, Biermann (2013) discusses the importance of strengthening scientific inputs into policy process, building on the 'Planet Under Pressure' format adopted before Rio, when 3000 scientists met in London to agree on a 'State of the Planet Declaration'. This is not based on a simplistic notion that more scientific information would automatically translate into 'better' policy, but an argument that there is a need for closer integration of scientific assessments and decision making to improve the quality of policy responses to the challenges of unsustainability.

As the papers in this theme issue make clear, addressing the challenges and engaging with the opportunities that emerged from the UNCSD will not occur overnight. In the four decades since the Stockholm conference we have learnt that the governance of sustainability is complex, fragmented, and often unpredictable, taking place over multiple scales and at the interfaces of traditional policy domains and across public and private sectors. What were once regarded as marginal concerns—greenhouse gas emissions from cities, water consumption of major industries, and resource use across commodity chains—have all become mainstream issues. At the same time, the *realpolitik* of economic growth and security continues to dominate. The many faces of sustainability and the current swathe of narratives about the need to rethink the relation between nature and society are indeed testament to the mutability of the idea of sustainability and its chameleon-like qualities that allow it to adopt multiple forms of camouflage. Perhaps the question that remains is whether sustainability can set the agenda for other governance challenges. The evidence from Rio+20, as discussed in this issue, suggests that at least for now sustainability governance remains marginalized, but this does not mean that critical work cannot be undertaken in its name.

References

- Adams B, 2008 Green Development: Environment and Sustainability in a Developing World (Routledge, London)
- Barkemeyer R, Figge F, Holt D, 2013, "Sustainability-related media coverage and socioeconomic development: a regional and North–South perspective" *Environment and Planning C: Government* and Policy **31** 716–740
- Beierle T, Konisky D, 2001, "What are we gaining from stakeholder involvement?" *Environment* and Planning C: Government and Policy **19** 515–529
- Betsill M M, Corell E (Eds), 2008 NGO Diplomacy: The Influence of Nongovernmental Organizations in International Environmental Negotiations (MIT Press, Cambridge, MA)
- Biermann F, 2013, "Curtain down and nothing settled: global sustainability governance after the 'Rio+20' Earth Summit' *Environment and Planning C: Government and Policy* **31** 1099–1114
- Bina O, 2013, "The green economy and sustainable development: an uneasy balance?" *Environment* and Planning C: Government and Policy **31** 1023–1047
- Blowfield M, Murray A, 2008 Corporate Responsibility: A Critical Introduction (Oxford University Press, Oxford)
- Bulkeley H, 2005, "Reconfiguring environmental governance: towards a politics of scales and networks" *Political Geography* 24 875–902
- Bulkeley H, Jordan A J, 2012, "Transnational environmental governance: new findings and emerging research agendas" *Environment and Planning C: Government and Policy* **30** 556–570
- Butchart S H M, et al, 2010, "Global biodiversity: indicators of recent declines" *Science* **328**(5982) 1164–1168
- Cashore B, Auld G, Newsom D, 2004 *Governing Through Markets: Forest Certification and the Emergence of Non-state Authority* (Yale University Press, New Haven, CT)
- Cherp A, George C, Kirkpatrick C, 2004, "A methodology for assessing national sustainable development strategies" *Environment and Planning C: Government and Policy* **22** 913–926
- Compston H W, Bailey I (Eds), 2008 *Turning Down the Heat: The Politics of Climate Policy in Affluent Democracies* (Palgrave Macmillan, Basingstoke, Hants)
- Cook I R, Swyngedouw E, 2012, "Cities, social cohesion and the environment: towards a future research agenda" *Urban Studies* **49** 1959–1979
- Cooper N, 2011, "Humanitarian arms control and processes of securitization: moving weapons along the security continuum" *Contemporary Security Policy* **32** 134–158
- Council of the European Union, 2009 2009 Review of the EU Sustainable Development Strategy— Presidency Report 1 December (EU Council, Brussels)
- Death C, 2011, "Summit theatre: exemplary governmentality and environmental diplomacy in Johannesburg and Copenhagen" *Environmental Politics* **20** 1–19
- Ely A, Smith A, Leach M, Stirling A, Scoones I, 2013, "Innovation politics post-Rio+20: hybrid pathways to sustainability?" *Environment and Planning C: Government and Policy* **31** 1063–1081
- ENDS, 2012, "Rio+20 results in few commitments" *Environmental Data Services Ltd Report* 450 41–43
- ENDS, 2013, "Where next for global sustainability" *Environmental Data Services Ltd Report* 460 44–48
- European Environment Agency, 2010 *The European Environment: State and Outlook 2010* Copenhagen
- Frame B, 2008, "'Wicked', 'messy', and 'clumsy': long-term frameworks for sustainability" *Environment and Planning C: Government and Policy* **26** 1113–1128
- Frynas J G, 2008, "Corporate social responsibility and international development: critical assessment" Corporate Governance: An International Review 16 274–281
- Gibbs D, Krueger R, MacLeod G, 2013, "Grappling with smart city politics in an era of market triumphalism" *Urban Studies* **50** 2151–2157
- Hobson K, 2013, "'Weak' or 'strong' sustainable consumption? Efficiency, degrowth, and the 10 year framework programme" *Environment and Planning C: Government and Policy* **31** 1082–1098
- Hodson M, Marvin S, 2009, "Urban ecological security: a new urban paradigm?" *International Journal of Urban and Regional Research* **33** 193–215

- Hoffmann M J, 2011 Climate Governance at the Crossroads: Experimenting with a Global Response after Kyoto (Oxford University Press, Oxford)
- Holman N, 2009, "Incorporating local sustainability indicators into structures of local governance: a review of the literature" *Local Environment* **14** 365–375
- Hultman N, Sierra K, Eis J, Shapiro A, 2012 *Green Growth Innovation: New Pathways for International Cooperation* (Brookings Institution, Washington, DC)
- Jordan A J, 2008, "The governance of sustainable development: taking stock and looking forwards" Environment and Planning C: Government and Policy 26 17–33
- Jordan A J, Adelle C (Eds), 2012 Environmental Policy in the European Union: Contexts, Actors and Policy Dynamics 3rd edition (Routledge, London)
- Jordan A J, Lenschow A, 2010, "Environmental policy integration: a state of the art review" Environmental Policy and Governance 20 147–158
- Kidd S, Fischer T B, 2007, "Towards sustainability: is integrated appraisal a step in the right direction?" *Environment and Planning C: Government and Policy* **25** 233–249
- Klooster D, 2010, "Standardizing sustainable development? The Forest Stewardship Council's plantation policy review process as neoliberal environmental governance" *Geoforum* **41** 117–129
- Lawhon M, 2013, "Dumping ground or country-in-transition? Discourses of e-waste in South Africa" Environment and Planning C: Government and Policy **31** 700–715
- Lawhon M, Patel Z, 2013, "Scalar politics and local sustainability: rethinking governance and justice in an era of political and environmental change" *Environment and Planning C: Government and Policy* **31** 1048–1062
- Linnér B-O, Selin H, 2013, "The United Nations Conference on Sustainable Development: forty years in the making" *Environment and Planning C: Government and Policy* **31** 971–987
- Meadowcroft J, 2013, "Reaching the limits? Developed country engagement with sustainable development in a challenging conjuncture" *Environment and Planning C: Government and Policy* **31** 988–1002
- Middlemiss L, Parrish B, 2010, "Building capacity for low-carbon communities: the role of grassroots initiatives" *Energy Policy* **38** 7559–7566
- Mueller M L, 2010 *Networks and States: The Global Politics of Internet Governance* (MIT Press, (Cambridge, MA)
- Najam A, Selin H, 2011, "Institutions for a green economy" Review of Policy Research 28 451-457
- Newell P, Paterson M, 2010 Climate Capitalism: Global Warming and the Transformation of the Global Economy (Cambridge University Press, Cambridge)
- OECD, 2013 Putting Green Growth at the Heart of Development (OECD, Paris)
- Pattberg P, Mert A, 2013, "The future we get might not be the future we want: analysing the Rio+20 outcomes" *Global Policy* **4** 305–310
- Perkins R, 2013, "Sustainable development and the making and unmaking of a developing world" Environment and Planning C: Government and Policy **31** 1003–1022
- Peters G P, Hertwich E G, 2008, "CO₂ embodied in international trade with implications for global climate policy" *Environmental Science and Technology* **42** 1401–1407
- Rajamini L, 2006 *Differential Treatment in International Environmental Law* (Oxford University Press, Oxford)
- Risse T, Ropp S C, Sikkink K, 1999 *The Power of Human Rights: International Norms and Domestic Change* (Cambridge University Press, Cambridge)
- Russe-Khan H G, 2010, "A real partnership for development? Sustainable development as treaty objective in European Economic Partnership Agreements and beyond" *Journal of International Environmental Law* **13** 139–180
- Russel D, Turnpenny J, 2009, "The politics of sustainable development in UK government: what role for integrated policy appraisal?" *Environment and Planning C: Government and Policy* **27** 340–354
- Scott-Cato M, Hillier J, 2010, "How could we study climate-related social innovation? Applying Deleuzean philosophy to Transition Towns" *Environmental Politics* **19** 869–887

- Seyfang G, Haxeltine A, 2012, "Growing grassroots innovations: exploring the role of communitybased initiatives in governing sustainable energy transitions" *Environment and Planning C: Government and Policy* **30** 381–400
- Smith R, Wiek A, 2012, "Achievements and opportunities in initiating governance for urban sustainability" *Environment and Planning C: Government and Policy* **30** 429–447
- Soederberg S, 2007, "Taming corporations or buttressing market-led development? A critical assessment of the Global Compact" *Globalizations* **4** 500–513
- Steurer R, Martinuzzi A, 2005, "Towards a new pattern of strategy formation in the public sector: first experiences with national strategies for sustainable development in Europe" *Environment and Planning C: Government and Policy* **23** 455–472
- Stumpp E, 2013, "New in town? On resilience and 'resilient cities'" Cities 32 162-166
- Turner B L II, 2010, "Vulnerability and resilience: coalescing or paralleling approaches for sustainability science?" *Global Environmental Change* **20** 570–576
- UNDP, 2013 Human Development Report 2013: The Rise of the South—Human Progress in a Diverse World United Nations Development Programme, New York
- UNEP, 2012 Global Environment Outlook 5: Environment for the Future We Want United Nations Environment Programme, Nairobi
- United Nations, 2012 *The Future We Want* outcome document adopted at Rio+20, http://www.un.org/en/sustainablefuture/
- United Nations, 2013 Global Sustainable Development Report—Executive Summary: Building the Common Future We Want Division for Sustainable Development, United Nations Department of Economic and Social Affairs, New York
- Van Alstine J, Afionis S, Doran P, 2013, "The UN Conference on Sustainable Development" Environmental Politics 22 333–338
- Whitehead M, 2006 Spaces of Sustainability: Geographical Perspectives on the Sustainable Society (Routledge, London)
- WCED, 1987 *Our Common Future* World Commission on Environment and Development (Oxford University Press, Oxford)