

BOOK REVIEWS

Ecological Governance: Reappraising Law's Role in Protecting Ecosystem Functionality,
by Olivia Woolley
Cambridge University Press, 2014, 261 pp, £65 hb, ISBN 9781107060456

Anyone who follows world affairs cannot help but notice the importance of economic growth. Even when political leaders say a few nice words about sustainable development, economic growth is the bottom line that dictates which parties will win and which will lose. Considering the structure of modern politics, who can blame the politicians? In most democratic states (and also in many others) the electorate votes for those who promise jobs, quick economic growth, and a bright economic future.

Although people and their governments are told that we are literally destroying our planet (for example, by emitting more and more greenhouse gases and causing climate change), not much seems to change. The roles that science and environmental protection play in our policy making seem fairly minimal, particularly compared with how governments react to financial problems or concerns.

It was, therefore, with slight scepticism that I started reading Olivia Woolley's *Ecological Governance: Reappraising Law's Role in Protecting Ecosystem Functionality* – a type of blueprint for a new governance system that strives to preserve the health of our ecosystems. I queried the use of a model for ecological governance when the world is going in a different direction. Instead of a grand new design, should we not try to think of a more incremental approach to promote ecosystem health in various contexts?

Woolley's argument for a new form of ecological governance proceeds as follows. Firstly, we need to understand the scientific realities of what we are doing to our planet. Ecological systems are degrading at an accelerating pace, and the global movement to take us towards a sustainable development path has clearly failed. Woolley thus calls for a new approach. She eschews the ambiguous concept of sustainable development, which seems to camouflage policies directed at the ever-increasing growth of our economies.¹ Instead, Woolley concentrates on the resilience of ecosystems. For her, resilience is the 'magnitude of disturbance that a system can experience before it shifts into a different state' (p. 27). According to Woolley, our current governance systems are still built on the idea that we can actually determine when we are dangerously interfering with the structures and functions of our ecosystems. Emerging scientific consensus indicates otherwise. Ecological systems are in constant flux, because of both natural and human-induced factors. For Woolley, and indeed for many scientists, we are facing endemic uncertainty over how our actions influence ecosystems at the local, regional, and global levels.

¹ A different view on the contributions of sustainable development is offered in this issue by J. Dernbach & F. Cheever, 'Sustainable Development and Its Discontents' (2015) 4(2) *Transnational Environmental Law*, pp. 247–87.

Woolley also advances well-known arguments for an ecological governance model. She abandons ecocentrism (the abstract search for intrinsic environmental value) as a solution, since it seems to her that the ‘arguments advanced are too remote from the way in which people make value judgments’ (p. 41). The only realistic way for her is to ground ecological governance on anthropocentric appreciation of the value that ecosystems afford us. This provides, for Woolley, a better and more realistic motivation for their protection. The value of ecosystem services is a paradigmatic example.

Her preferred approach in responding to this challenge is to build ecological governance systems on a precautionary principle, although not in the way in which it is currently deployed. Instead, precaution must be the starting point for all decision making because we already know that we are causing significant harm and creating serious risks for worldwide ecosystems today. Precaution should be ‘understood to be a normative concept and one around which legal frameworks for ecological protection should be constructed’ (p. 64). Precaution would thus translate into policy and legal frameworks to reduce the risk to our ecosystems pre-emptively by ‘enhancing the resilience of ecosystems and reducing the stresses that we place on them as ideals to be observed in the conduct of decision-making’ (p. 71). For example, statutes would be written to codify ecological protection as the prime policy objective of the law. Around this, transformed institutional decision-making structures could be constructed.

To establish effective principles of policy for Woolley’s ecological governance would, indeed, be difficult. Firstly, it would be important to reduce existing levels of consumption, which Woolley admits is challenging as it would obviously require changes in everyone’s lifestyles and values. Secondly, the options for development that ought to be preferred are those which would constitute the least threat to ecosystems (the principle of substitution): ‘Options that are assessed to present the greatest threat of harm would be ranked lowest amongst alternatives for meeting policy objectives and their use discontinued if less harmful alternatives are available’ (p. 74). This would also act as a stimulus for developing new technologies.

According to Woolley, substitution would not be enough to tackle the current activities that present significant threats to ecosystem health, and hence sunset principles to phase out some of the most harmful practices are required. These principles would find their way into policy and practices through the assessment of alternative policy options. One alternative would be to require a study to ‘identify those options that would present the lowest collective threat of harm to ecosystem health’ (p. 78).

All this, according to Woolley, should then be translated into significant institutional reforms. The enactment of laws that would prioritize the functionality of ecosystems would be a good starting point. However, they would need to be complemented by a ‘whole of government’ approach in which a cross-governmental body would assess alternatives, create strategies and develop policies towards the goal of ecosystem health. Since ecosystems and governments are in constant motion, the

holistic governmental approach would need to review policy towards ecosystem health on a regular basis. Government policy on ecosystem health would be overseen by an independent advisory body. Although this body would act in an advisory capacity, its advice would need to be seriously taken into account. According to Woolley, in an ideal case, if government were to reject the advice from the advisory body, it would not only be required to provide reasons as to why it chose to deviate from the advice, but also 'why its chosen approach would better advance the statutory objective than that which it rejects' (p. 102).

How, then, would all these ecological principles and policies that are central to the structure that Woolley advocates be implemented? She sees importance in the role of the state in directing the transition towards ecological governance at all levels of government. She spends considerable time explaining why and how local, regional and state levels can work together towards common goals. The state is needed since it has authority over a large area, within which it can provide guidance to its sub-units. Local and regional levels (and non-governmental organizations) are important, given that they are concerned mostly with a certain region and how its ecosystems are protected. Woolley argues:

A system of ecological governance would need to establish a new relationship between lower levels of government and the state in which the former are given more scope to shape policy initiatives whilst the latter would retain the authority, through indirect and direct means, to influence and oversee the outcomes of decision-making process (p. 117).

These all meet in ecological planning, wherein the roles of central and local governments are clarified, and enable them to plan in favour of ecosystem health (Chapter 5).

Woolley sets her faith in the potential of democracy to take us towards ecological governance, and she trusts in public participation when it is done on the basis of deliberation. Obviously, these matters are preconditioned on an entrenched priority for ecosystem health, within which the democratic system and public participation would need to find their own means of expression. Woolley provides a nuanced view on how the public can participate and voice their opinions, within the constraints of an ecological state.

Even if she builds her model for ecological governance on the idea that science cannot provide us with all the answers (given factors such as multiple stressors and the inherent complexity of ecosystems), she does advocate conducting more scientific research on the status of ecosystems. This still provides more information for decision makers who need to constantly monitor conditions and make new decisions in response to changing ecosystem states – a process which will also foster more understanding of how our ecosystems are functioning, and which will benefit us in many ways.

It is important to note that Woolley does not believe that the model for new ecological governance that she proposes is necessary everywhere. Her model is for developed states, 'whose economies, standards of living and related demands on

natural resources are the principal drivers of ecological degradation within, and beyond, their national borders' (p. 5), and in line with common but differentiated responsibilities. Yet she also suggests that very ambitious decision-making principles – for example the under-utilization of resources – would be appropriate for all major contributor states to combat the global deterioration of ecological systems, as would the employment of a normative precautionary approach in decision making.

Although the book ends with no warning (and no conclusions), the reader is well informed throughout as to how it will unfold. The executive summary at the beginning of Chapter 1 and the introductions to each chapter provide the reader with a good road map and explanation of how each relates to the overall argument of the book. There is a certain amount of repetition, despite this being a very compact book (261 pages). However, this redundancy is necessary because of the complex challenges it poses in thinking about how we can translate our current scientific understandings into politico-legal structures.

As noted above, when I first perused the text my initial assumption was that the book would not meet the needs of environmental law scholars. Do we really need a blueprint for a totally different, ecologically oriented nation-state driven society? Woolley responds to this challenge (and to most of my initial scepticism) by arguing:

I believe that there are good reasons for presenting proposals for [these] legal and institutional reforms ... The first is that, whilst the appetite for change may now be lacking, further evidence of global deterioration in the condition of ecosystems and its consequences may open windows of opportunity during which changes to the status quo would be possible. It is important that templates for change should be available in the event that it is seen as politically important to take active steps for reducing stress on the natural world (pp. 58–9).

I fully agree with this analysis. If most of us agree with her on the deplorable deteriorating states of our ecosystems and the problems that our political systems face, it certainly is important to have design models that can be contemplated if windows of opportunity present themselves. The ecological governance model constructed by Woolley builds upon something that is already there, but which cannot yet find expression. She builds on the responsibility of developed states to take a lead in developing such societal systems, based on the recent findings of science and even some tentative developments in law and policy. She also gives a sufficient number of reasons why such an approach and its details should be adopted, and provides food for thought for any environmental lawyer.

The main substantive shortcoming, in my view, is that Woolley's model to 'change the world' focuses on changing the developed democratic states, and assumes that nation-states operate chiefly within their boundaries. What is lacking is a more global perspective. The majority of the most difficult environmental problems are global or semi-global in origin and need to be tackled by many states located all over the world. Woolley does not really address this issue other than by saying that the model she has built for developed states could, to an extent, apply also to other states. The question remains, however, how these enlightened developed states are to combat such issues

as climate change, ozone depletion, and persistent organic pollutants, as any solutions will require cooperation from outside the boundaries of individual nation states. On the other hand, if these states were to develop into such ecological states, they could certainly be drivers in combating environmental problems of every scale.

A clear substantive problem arises in Woolley's discussion of the 1988 Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA)² (pp. 230–2). She argues that CRAMRA was a pioneering legal instrument in that it 'establishes a threshold of knowledge concerning a proposed activity and its anticipated effects and requires that decisions should be based on adequate information, to enable informed judgments to be taken over their possible impacts'. She then states that 'CRAMRA has not come into force (and is unlikely to do so) because of opposition from Australia and France to the high level of protection it affords to the Antarctic area' (p. 231). She seemingly does not know that CRAMRA would have allowed mining in Antarctica (hence the employment of stringent environmental standards), which was a reason why Australia and France – with the advocacy of Greenpeace – pulled out of CRAMRA and opted later to follow the 1991 Protocol on Environmental Protection to the Antarctic Treaty,³ which prohibits mining in Antarctica.

From a more technical viewpoint, the book has much strength. It is a very compact book, with clear structure and progression. The reader can follow the argument with ease, even though it is substantively dense. From a production perspective, I could find only one spelling mistake in the whole book, which is not of any consequence (p. 91).

This book provides us with a utopian vision. It is obvious that the governance system that Olivia Woolley constructs is 'out of this world', but the seeds of her world are already planted. A utopia is needed, at least to my mind, when our science so starkly deviates from what we see in our politico-legal systems. We need such utopias, as Woolley herself argues, since times may come that are ripe for reform, and in such circumstances we need grand theories to advance new governance systems. The benefit of her ecological governance model is that it builds on what we already have in our governance systems, albeit in incipient forms. I would dearly hope that many from outside the environmental law and policy community will also read this book. It should not only be read by our circles (where many of her ideas are already accepted), but by the current, and especially the future leaders of our societies.

Timo Koivurova

*University of Lapland, Northern Institute for Environmental and Minority Law,
Rovaniemi (Finland)*

² Wellington (New Zealand), 2 June 1988, not yet in force, available at: <http://sedac.ciesin.columbia.edu/entri/texts/acrc/cramra.txt.html>. Though 19 states have signed CRAMRA, it has been ratified by none, and entry into force is not expected to occur.

³ Madrid (Spain), 4 Oct. 1991, in force 14 Jan. 1998, available at: <http://www.ats.aq/e/ep.htm>.