Book reviews

Megaprojects and Risk: An Anatomy of Ambition

Bent Flyvbjerg, Nils Bruzelius and Werner Rothengatter, pp. 218, Cambridge: Cambridge University Press, 2003, ISBN: 05210 0946 4 (paperback) £14.95

Ultimately, this book makes for frustrating reading. It does indeed have the makings of a very good book, drawing on a range of disciplines (sociology, technology policy, political science and project management) to examine the difficulties commonly experienced by ‘megaprojects’ (extremely large and costly infrastructure schemes typically requiring innovative technology or organization). The book also suggests measures for improving the processes by which such projects come to be selected, their management and performance. However, there are some key aspects of the discussion that would have benefited from further development. For the authors to have attended to these with any seriousness would have lengthened the book well beyond the 207 pages reviewed here. However, the benefits of doing so would have outweighed the costs incurred; the result would have been a more considered, rounded contribution. This review identifies three strands, which could (and should) have received more careful attention.

First, the authors hope to make ‘risk society less risky’ (p. 142), taking the work of the German sociologist Ulrich Beck as a point of departure. Yet the authors’ treatment of this landmark contribution leaves the reader dissatisfied. Simply put, Beck’s work has been misread. For example, Beck (1992; 1999) actually does attempt to explore and to lay out foundations for institutional change, which could ‘open up the political’, and in so doing enable societies to deal better with risk. Whatever criticisms might apply to Beck’s work in terms of the specification of these developments, it does seem rather unwarranted to dismiss his contribution as merely metaphorical of ‘mature modernity’ (p. 6). In addition, Beck (1999) avers that reflexive modernity has not yet been reached. The authors appear to think (or assume) that ‘it’ has already arrived, in making their proposal for improving society. There is inadequate attention to how such a society could be created; accordingly, themes connected to growing reflexivity/reflection of society and scientists and experts appear only fleetingly in the book.

A second aspect concerns what the authors call the ‘what’ and ‘that’ of megaprojects and risks associated with them (pp. 19–20). The ‘what’ constitutes possible explanations for difficulties experienced by the projects, whereas the ‘that’ merely reflects phenomena which typically mark megaprojects. The ‘that’ of cost overrun, for example, equates to the ‘fact’ that it haunts large-scale technology projects. Flyvbjerg et al. are at pains to suggest that the ‘that’ of megaprojects present a sufficient point of departure for the analysis of risk and its improved management. The authors consider this to be less difficult to predict and thus a better object of study, than to investigate why cost overruns occur (i.e. possible causes). Yet this is an unnecessarily and unfortunately narrow approach to the topic (in any case the whole business of ‘what’ and ‘that’ is left really too unclear to be helpful to the reader). Much research has pointed to the significance of both decision making processes (particularly related to closed decision making) and the content of technology selected
(related to scale and inflexibility) for the performance of such projects. As one example, Collingridge (1992), who the authors cite but barely discuss, argues that to improve decision making and management of potentially risky technology one needs in each case to define and finds way to circumvent likely sources of difficulty. Oddly enough, much of the second half of the book actually does try to do just this type of thing. Moreover, the authors’ main concern seems to be with downstream project risks and management. Attending to downstream matters in itself is not unwise. However, a danger of such an approach is that key aspects of upstream choice and control are neglected. This is unfortunate because the authors do wish to highlight some issues linked to various potentially conflicting roles for the state as it is caught between promoting risky or contentious technology and serving the public interest.

A third area of concern centres on the issue of public involvement/participation in risky technology projects. The latter part of the book proposes measures for enhancing the accountability of megaprojects, taking in questions of the appropriate level of involvement and leadership of the public and private sectors. The authors propose that a combination of market and public policy based initiatives should maximize overall accountability and performance (p. 108). In practice, this would mean strengthening public sector accountability by better engaging the public and other stakeholders and defining related regulatory regimes and public interest objectives. It would also entail reducing public involvement by recourse to the ‘arms-length’ principle, whereby the state does not act as promoter, and by ensuring that it does not financially underwrite the costs of projects. The turn to the market necessitates balancing the benefits of private sector involvement with appropriate checks on its influence. In order to strengthen control via the market, the authors suggest using more private risk capital and private consortia bidding. They balance this by suggesting that private sector involvement should be weakened to the extent that ‘business lobby groups’ enjoy less scope for opportunistic behaviour (p. 110). Such proposals are made on the basis of enabling the best combination of public scrutiny and transparency and exposure to the pressure or discipline of the market. The message concerning the implications for the performance of state-driven mission-oriented technology, or of undue influence on the part of big business, is not unfamiliar. It reflects the findings of much case study research over a number of years and across a number of sectors. What there needs to be more of (both in the book under review and in the wider literature) is a specification of the missing actors relevant to the projects proposed (c.f. Winner, 1977), of how these could be brought into the decision-making process early to affect promotion and control of the technology in question, and of the basis on which involvement is to occur.

For Flyvbjerg et al. broadening public involvement is required to prevent capture of the decision-making process by special interest groups likely to benefit from the project and is needed early in the life of a project to avoid polarization of debate when the public (formally or informally) eventually do get involved. Moreover, the authors state that public involvement should form part of a new type of planning process, which does not get bogged down in the pros and cons of alternative technical options. Instead, the approach should be to develop a planning process which is more focused, in the early stages, on reaching ‘as far as possible, consensus’ on issues such as ‘economic performance, environmental sustainability and safety’. Only once such objectives have been established should the identification of technical solutions commence (pp. 89–90).
The means for enabling public involvement and the transparency of decision making are elaborated over just three pages and two diagrams of the book (pp. 111–15, including Figs 10.1 and 10.2). Amongst the mechanisms suggested are citizen juries, public hearings and scientific, expert and extended peer review processes in which lay people are ‘knowledge generators’, not merely ‘impacted’ groups. Such processes could be (and are being) employed to assess feasibility studies, cost estimates and environmental impact. However, the principles underlying their use, at least in this book, relate to the search for consensus and the elimination of the ‘democracy deficit’ (p. 115). Thus in addition to a lack of detail regarding the proposed mechanisms for eliciting public involvement/participation (or deficiencies thereof), there are two further issues in question. First, the search for consensus may not be as helpful a starting point for making decisions about risky technology as is the development of means for airing and clarifying areas of dispute among actors. Perhaps there should be more concern to improve the capacity of actors to probe each other’s fundamental values and preferences (c.f. Lindblom, 1990; Lindblom and Woodhouse, 1993). Secondly, attention to correcting the democratic deficit should involve an exploration of the implications for practice of invoking and making operational alternative visions of civil society and citizen participation. Again, the book addresses these issues all too fleetingly.

Overall, the good work done by the authors in bringing together thinking about risky technology projects from disparate disciplines is undermined by ill-attention or misreading of key ideas and themes having a bearing on our understanding or improvement of practice in the area. This makes Megaprojects and Risk a less substantial and essential read for advanced scholars than it could have been and diminishes the contribution the authors would have liked to have made. It is an accessible book, however, and could provide a useful introduction for students, for example, though preferably not as a stand-alone text.

References

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Changing Regulation

B. Kirwan, A. Hale, and A. Hopkins (eds), pp. 288, Pergamon Press, 2002, ISBN: 00804 4126 2 (hardback) £90

This book is a timely study of the changing nature of ‘safety’ regulation. The prime focus of the book is on the transformation of health and safety regulation from a system of
detailed technical regulation and inspection of one organization by another, to a privatized system of risk management, in which the role of formal regulators is to require a ‘safety case’, encourage ‘goal-setting’, and monitor firms’ own enforcement of their own safety management.

The collection originates in a workshop held by the New Technologies and Work [NeTWork] study group. This is its main defect: a number of the contributions have the feel of seminar papers rather than book chapters. One gets the bullet points, but there is a strong impression that the explanation and analysis has been left in the seminar room as asides and commentary. There is also considerable overlap among some of the papers. For some, such as Gerhard Becker and David Maidment’s chapters on regulation on the German and British railways respectively, this allows for comparison, analysis and lesson-learning. For some chapters, however, such as the trio of papers on safety regulation in the nuclear industry, a high level of particular detail combined with a variety of analytical approaches makes it difficult to draw meaningful comparisons between the countries. While the editors’ ‘narrative’ introductions to each chapter and their comprehensive conclusion do try to bridge these gaps, ultimately it is left to the reader to construct the comparative analysis.

Despite this, there are some fine papers within the collection. Teemu Reiman and Leena Norros’ chapter on regulatory culture neatly marries a theoretic based on organizational culture with empirical observations of regulatory behaviour in the Finnish Nuclear Reactor Regulation body. Harry Gundlach’s chapter on certification adds to an increasing literature on the regulatory role played by private sector organizations, providing not only a critique of private sector certification, but more importantly practical recommendations to remedy its deficiencies. The chapter by Becker on railways raises important questions about the application and misapplication of risk privatization. Although these could have been more fully developed, the key issue he raises is that moving to a safety case, especially when this has in practice been tied to the introduction of competitive pressures, introduces behavioural changes in organizations. This in turn means that common assumptions about safety management may need to be revised. Meanwhile, in his own chapter, Hopkins applies two safety models to the 1998 Longford Gas Plant Accident in Victoria, Australia. Although his counterfactual analysis could be open to criticism, he does provide a convincing justification for applying different risk management approaches for different industries, depending upon the nature of the risks in question; in particular whether they are known or unknown, man-made or natural, coupled or decoupled (that is, whether the emergence of one hazard increases risks in other areas).

Finally, the book would have benefited from more rigorous editing. At times, the use of language is opaque to say the least. At its worst, linguistic errors by non-native English speakers have gone uncorrected (‘produkts’?), while the index, to chapters not pages, is of little use. (‘Safety management’, for instance, points to eight, but only eight, of the book’s 15 chapters). Overall, the book has the feel of a draft, which is a shame. With a more thorough reworking, and probably a second seminar, this could have been a valuable contribution.

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Environmental Governance in Europe. An Ever Closer Ecological Union?

Albert Weale, Geoffrey Pridham, Michelle Cini, Dimitrios Konstadakopulos, Michael Porter and Brendan Flynn, pp. 542, Oxford: Oxford University Press, 2003, ISBN: 01982 9708 4 (hardback) £67.50; ISBN: 01992 5747 7 (paperback) £24.95

This book provides an in-depth assessment of the ‘system of environmental governance’ (p. 1) which has emerged within the European Union (EU) during the last three decades. Its ‘central contention is…that over the last thirty years the European Union has created a system of environmental governance that is multilevel, complex, incomplete, and evolving’ (p. 437). What makes this book stand out from conventional accounts of EU environmental policy is that it focuses on the member state and EU level. Moreover, it also draws on transnational and international developments whenever relevant. Albert Weale and colleagues have attempted a mammoth task by presenting an in-depth analysis of the environmental policy systems of six member states (Germany, Greece, Italy, the Netherlands, Spain and the UK) and how they impact on the EU’s environmental governance system and vice versa. They also present a policy analysis of the different sectors (water pollution control, air pollution control and packaging and packaging waste). This book offers a novel analytical framework of the European multilevel environmental governance system. It will be of great interest not only to environmental policy specialists but also to scholars of EU integration and politics. Country specialists will also learn a great deal about the Europeanization of member state environmental policy systems, policy learning and diffusion as well as trends of convergence and divergence within the European environmental governance system.

This book is divided into four parts. Part one assesses the origins and functioning (as well as occasions of malfunctioning) of the EU environmental governance system and explains that many of the early EU environmental policy measures were strongly linked to the creation of the Single European Market (SEM) in which different national product standards were perceived as a barrier to trade. The authors provide a succinct analysis of the EU’s environmental action programmes, its core action guiding principles and the role of the main policy actors. They also explain that detailed technical harmonization, which dominated EU (environmental) policy up to the late 1980s, was supplemented by mutual recognition in order to revive the flagging SEM project (p. 34). This triggered a phase of regulatory competition between high regulatory member states which were keen to achieve a ‘level playing field’ within the EU in order to avoid negative economic consequences due to the adoption of relatively stringent national environmental standards. Weale and colleagues conclude that issue linkage is a necessary but not a sufficient explanatory variable for the development of EU environmental policy. Environmentally minded member states (for example, Germany during the 1980s) and other EU institutional actors (especially the European Parliament, the Commission’s Directorate General for Environment, the European Court of Justice and the Environmental Council) have also played an important part in the dynamic process of the EU environmental policy-making. For Weale and colleagues ‘European environmental policy has been characterized by the cumulative expansion of European-level competences and an increasingly proactive role for the European institutions in the
governance process’ (p. 130). The authors argue that an assessment of the powers of EU actors and the interinstitutional power game within the changing wider political context is essential for an understanding both of the dynamics and stalemates within the European environmental governance system.

Part two compares the environmental policy systems of six member states while focusing on trends of convergence and divergence between the different national environmental policy systems within the wider European environmental governance system. The choice of the selected member states is convincing because it includes the North–South, founding member–latecomer, environmental leader–laggard and large–small state dimensions. Issue characteristics, state-related, society-related and international variables are introduced as central explanatory variables (p. 146) in order to explain the dynamics and stalemates in EU environmental policy-making. The reader learns why the state of the art (Stand der Technik) ‘occupies more or less the same logical space in German environmental discourse as the principle of best practicable means occupied in British discourse’ (p. 157) and how tensions between these conflicting action-guiding principles are resolved on the EU level.

The differentiation between formal compliance (i.e. the formal transposition of EU directives into national laws) and actual implementation of EU directives allows the authors to explain why compliance with EU environmental laws does not automatically imply convergence between member states (p. 295). The assessment of the quantitative data on the transposition of EU environmental laws is supplemented with a short but very useful qualitative assessment of typical implementation problems on the ground in all of the selected case countries. Unfortunately some of the country assessments are not as up to date as they could have been. This is the case for Greece where the text presents the developments only up to late 1997 (p. 310). It is therefore not mentioned that Greece became the first member state to be fined for ignoring an ECJ judgement which ruled that it had persistently failed to implement certain EU waste regulations.

The EU is generally seen as having had a ‘beneficial effect’ because it promoted ‘monitoring and impact assessment in individual countries’ (p. 329). Weale and colleagues argue that divergence continues in terms of implementation although they warn that ‘it is too simple to speak of a basic north-south dichotomy’ (p. 330).

Part three offers detailed case studies on water and air pollution control as well as an analysis of packaging and packaging waste. This conforms to the traditional focus on different environmental media (i.e. air, water and soil) that was characteristic for early EU and member state environmental policy measures. Unsurprisingly the actions of the main environmental laggards (e.g. Britain) and leader states (e.g. Germany and the Netherlands) figure prominently in the assessment of developments in the 1970s and 1980s. Cross-media and procedural issues (such as environmental impact assessment and access to environmental information) are addressed in other parts of the book. This has the advantage for the authors that they are able to take a longitudinal perspective when assessing the impact of the EU on national policies and vice versa. Most of the EU’s cross-media and procedural measures have been adopted only in recent years. However, the selection of case studies introduces a certain bias into the research findings. It is especially the cross-media and procedural measures which have caused considerable adaptation pressures in some member states (including the former environmental leader state Germany).
Weale and colleagues conclude that ‘co-evolution’ between EU and national (and partly international) measures is dominant for water pollution control (p. 375–76). The EU seems to have been able to carve out a bigger role for itself in air pollution control (p. 407–8) while the experience with the packaging directive suggests that ‘the diversity of national situations means that waste management problems are perceived differently in the member states’ (p. 427). Weale and colleagues provide sound empirical data for their assertion that divergence is overall still dominant although there are indications that some of the recent EU laws (e.g. the water framework directive and the so-called auto-oil programmes) have caused significant adaptation pressures in member states.

The final part of the book analyses the implications of the European multilevel environmental governance system, its North–South dimension and instance of policy diffusion and learning as well as regulatory competition between different models of environmental governance. Weale and colleagues conclude that ‘the basis upon which European political unification developed was economically liberal’. However, they find that, paradoxically, the EU’s environmental policy is based mainly on ‘illiberal instruments’ (p. 458). Traditional ‘command-and-control’ regulation still makes up the bulk of EU environmental policy measures. This explains why the EU has often been called a regulatory state which has largely failed to adopt market instruments (such as eco-taxes) in order to tackle what economists term market externalities. Another ‘pathology of the status quo’ (p. 490) is that powerful veto actors can demand concurrent majorities which thus bring about decisional delays or even deadlock. However, relatively progressive environmental measures are usually adopted during periods of high issue salience. According to Weale and colleagues the dominant European policy-making pattern is therefore best described as ‘immobilisme punctuated by activism’ (p. 491).

It is difficult to find fault with a book that succeeds so well in explaining the new European environmental governance system. Possible weaknesses of this book include the decision to attach an appendix to the packaging and packaging waste chapter. It would have been better to integrate the information in a more succinct and reader friendly manner into the main text. In the chapter on air pollution it would arguably have been better to mark the beginning of the auto-oil programmes in 1992 as the start of a new phase in European car emission regulation or even air pollution control because the Commission’s intention had been to launch a new approach for EU environmental policy. Readers would have benefited from a more comprehensive index which would have made it easier to use the book as a research tool.

Weale and colleagues’ assertion that neofunctionalist and intergovernmentalist theories ‘may be complementary, at least in certain aspects’ (p. 19) and their decision to treat them as ‘general conceptual maps’ rather than ‘well informed empirical theories to be tested against the evidence’ (p. 21) will, no doubt, raise eyebrows within these schools of thought. It causes methodological tensions which are not easily resolved. This fusion of what is conventionally regarded as competing and opposing theories may not be acceptable to purists amongst neofunctionalists and intergovernmentalists. However, it could help to transform the dialogue of the deaf between these two schools of thought into a proper scholarly debate about better theoretical explanations of European governance in general and European environmental governance in particular. Weale and colleagues make a brave attempt to offer a novel
analytical framework which requires further research in order to prove its analytical robustness.

The strengths of this book far outweigh its weaknesses. It can only be highly recommended. The new paperback edition should help it to attract the wide readership which it deserves.

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