
COMPTE RENDUS

Jan-Peter Voß, Dierk Bauknecht, René Kemp (eds.), *Reflexive Governance for Sustainable Development*, Edward Elgar, 2006, 480 p.

This book is an attempt to develop a new governance approach based on Beck's concept of reflexive modernization and applied to the problem of sustainable development. The reflexive governance refers to a continuously reacting to change and to a self-critical mode of steering which develops trial-and-error learning capacities and involves a wide range of actors through a participatory non-hierarchical decision-making. Taking into account the complex environmental and societal challenges of today's society, and the fact that actual problem solving and governance methods create negative, unintended side effects called second-order problems, the authors propose a new paradigm of problem handling characterized by recursive feedback relations between diverse actors and steering activities.

In the introductory chapter, the editors emphasize several specific traits of modern society where complexity, uncertainty, heterogeneity, path dependency, ambivalence and distributed control cannot be eliminated, but need to be taken into account and dealt with. Therefore, the authors identify five strategic principles of reflexive governance that they think could be more effective to handle societal and governance problems and to enable sustainable development.

First, with respect to the interlinked and complex nature of society, as well as to the heterogeneity of elements which influence governance outcomes, transdisciplinary research and the transcendence of boundaries between scientific knowledge provided by research institutions and tacit knowledge of social actors will have to evolve into "integrated knowledge production". Second, since it is impossible to predict complex multi-dimensional processes and the overall non-linear dynamics of socio-ecological transformation, "adaptivity" of both governance strategies and institutional structures could provide more flexibility and efficacy through experimental learning. The third strategic element of reflexive governance aims to counterbalance the fact that established structural configurations and societal patterns worked out over time restrict the range of possible directions for changes or policy choices (this idea is called path-dependency). Thus, achieving sustainability requires constant exploration and evaluation of alternative paths and steering choices. This third principle is labeled as "anticipation of long-term systemic effects of measures". The fourth strategy is aimed to cope with ambivalence or coexistence of numerous opposing problem perceptions, values and interests among actors involved in a particular governance issue. The broad participation of social actors in the process of iterative goals formulation, or "participatory assessment", is therefore necessary to deal with ambivalent goals and points of view. Finally, distributed influence and lack of coordination in interactions between heterogeneous actors that are shaping socio-ecological transformations

makes necessary creating networks that will allow to link diverse actors in the process of “interactive strategy development”, respond to the initiatives of multiple stakeholders, and thus foster sustainable cooperation.

In the subsequent chapters, contributors from nine European countries focus on various theoretical and practical aspects related to the concept of reflexive governance, providing both rather abstract critical reflections and in-depth empirically grounded analyses of implementing governance processes applied to societal, environmental, and technological problem handling. Here are some key concepts discussed throughout the chapters:

- transition management, which considers societal transformations as a multi-level systemic change based on innovations, vision-constructing and learning through experiments;
- adaptive management, which views management as a ‘double-loop’ learning cycle including four phases: assessing actual knowledge, developing policies as hypotheses, implementing actions to test the hypotheses, and evaluation of policies’ outcomes;
- adaptive foresight, at the crossroads of conventional foresight and adaptive strategic planning, operationalized as a sequence of steps that allow to develop a portfolio of real options, including technologies and policies, and to assess their adequacy given evolving conditions in order to construct a robust scenario and thus to shape socio-technological transformation;
- niche-based approaches, such as strategic niche management, aimed to promote social learning about sustainable technology use by creating ‘socio-technical’ experimental niches that produce knowledge through experiments and thus allow to adapt subsequent strategies on the basis of their experiences.

Nevertheless, the strength of this book is a quasi-systematic link between abstract theoretical discussion and description of practical experiences involving specific forms of reflexive governance and referring to diverse sustainability issues. Among these empirical instances of reflexive governance applied to practical societal problem-handling, the authors discuss policy planning in energy, agriculture, and sanitation sectors, offer examples from research policy and management, evolution of regional socio-ecological systems, technology development and so on. Strong contemporary examples of reflexive governance supplied by experts from Denmark, Germany and Hungary undoubtedly bring added value to this collective work.

In the concluding chapter, the authors address the “efficacy paradox” of reflexive governance, consisting in a delicate balance between ‘opening up’ problem-oriented interactions to explore various perspectives, analyze long-term effects, and produce robust knowledge, and the process of ‘closing down’ aimed to reduce complexity, select adequate strategies, and act. This requirement of opening up before closing down could, furthermore, be seen as an additional strategic element of reflexive governance, even if “it is more art than science”.

Discussion around the concept of reflexive governance remains open, as it is evidenced by questions raised in the end of this book. Will the strategies of reflexive governance lead to better solutions? What are sustainable development change indicators? At what level should reflexive governance be practiced? The authors admit that more empirical evidence will be needed to give concrete

responses. Yet, the advantage of this book is to introduce, formalize and illustrate this new governance paradigm aimed to find adequate ways to handle problems of sustainable development.

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