

“Transitions to Sustainable Development. New Directions in the Study of Long term transformative change”, by John Grin, Jan Rotmans and Johan Schot (in collaboration with Frank Geels and Derk Loorbach), New York/London (Routledge) 2010

A short introduction by Stefan Kuhlmann, University of Twente

With their book John Grin, Jan Rotmans and Johan Schot (in collaboration with Frank Geels and Derk Loorbach) address the issue of how to understand the dynamics and governance of what they consider the ongoing major transition of society and economy – the second after the earlier transition between the 1750s and 1890s from a pre-modern to a modern industrial society – in order to ensure “sustainable development”. Today, at least in western societies, the need for sustainable development is almost undisputable. In this book, sustainability and related transitions are assessed adopting a long-term systemic perspective. In doing so, the authors aim to overcome an old issue of scientific analyses: They explicitly aim to bridge the gap between observation and explanation on the one hand and the provision of “intelligence” for a dedicated shaping of socio-economic and technological development on the other: John Grin, Jan Rotmans and Johan Schot provide multidisciplinary analytical heuristics and concepts for policy intelligence, embedded in and drawing on theoretical strands of Science, Technology, Society Studies (STS), of the history of science and technology, of evolutionary economics of innovation and of sociological and political science theories of structuration and agency.

Clearly, this book is necessary reading and will become a major textbook for students and scholars with an interest in sustainable development and long-term transformative change in a systemic perspective. As any good text book this volume oscillates between conceptual perspectives and empirical examples from practice (for instance the reader is invited to delve into issues of regional transition management in the Parkstad Limburg, into problems of Dutch energy transitions, or into issues of the modernisation of the Dutch agriculture industries). The conceptual perspective taken by the book is built on what I would call a “meta-heuristic”: The Multi-Level-Perspective (MLP) on system innovations and transitions.

As many of you will know, the Multi-Level-Perspective aims to analyse how incumbent dominant socio-technical “*regimes*” (a notion originating from Nelson & Winter, 1977) – regimes that are often unsustainable – embedded in wider in cultural, political and economic *landscapes*, are stabilizing and transforming (and *can* be transformed), not at least drawing on innovative concepts developing in “*niches*” and “protected spaces” potentially triggering perturbation of regimes.

Tonight, there is no time to go into the details of this approach. Instead of that, I wanted to share with you an observation I made, on the character and the potential of this perspective: Some 30 years ago Johan Galtung (mathematician, sociologist, and peace

researcher) wrote a paper on “Structure, culture, and intellectual style”¹, comparing what he called Teutonic, Saxonian, Gallic and Nipponic intellectual approaches:

As the Teutonic style Galtung characterised by a pyramid of concepts with a deductive hierarchy led by the ‘Gedankennotwendigkeit’ of a guiding paradigm or even a fundamental ‘contradiction’ (e.g. Marx’ contradiction of capital and work). Typical question: Wie können Sie das ableiten? (How can you deduce this from basic principles?)

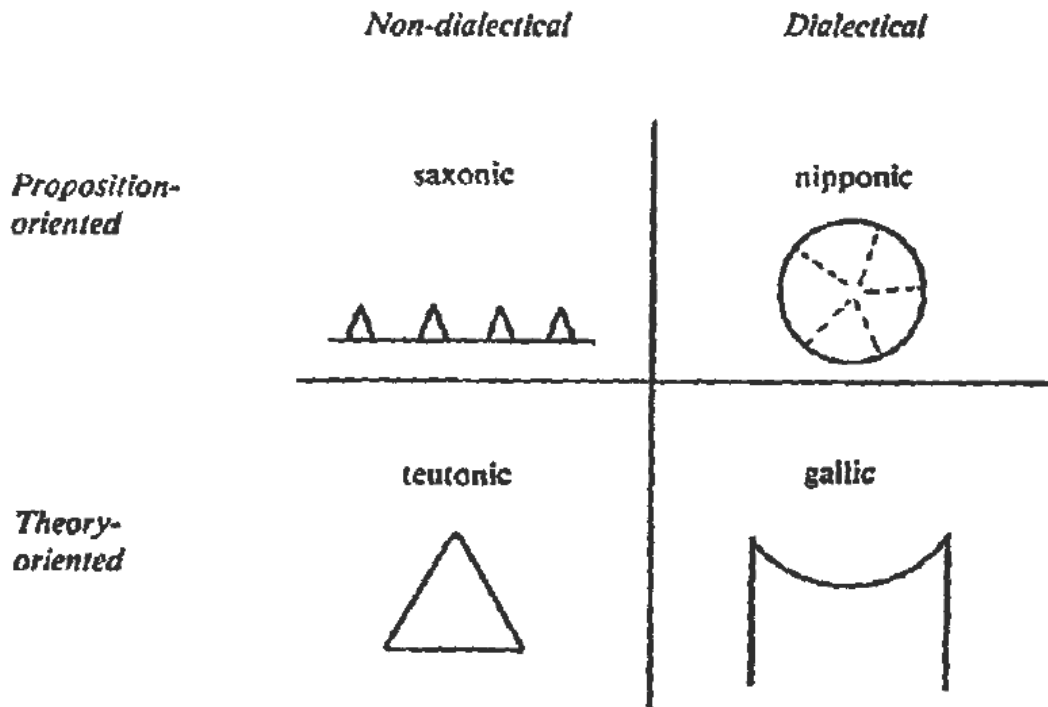
Almost the opposite is the Saxonian style: A saxonian scholar (from the UK or the US) would suffer from vertigo if a theoretical pyramid would rise “five centimeters above the ground ... The highest he would venture would be to Merton’s proverbial ‘Theories of middle range’: a set of small pyramids gathered in the landscape with no super-pyramid overarching them” (828). Typical question: How do you operationalise and document this?

The Gallic style is characterized by a hammock suspended between two pylons of opposed ideas or concepts: elegant words are used to foster balance while stimulating dialectic leaps. Typical question: Peut-on dire cela en bon français? (Is it possible to say this in good French?)

Finally, the Nipponic style can be sketched as a wheel, characterised by organic solidarity of scholars, while structured by incumbent leaders, oriented rather towards empirically constructed propositions than to deductive theories. Typical question: donatano monka desuka? (Who is your master?)

¹ Galtung, J. (1981): Structure, culture, and intellectual style: An essay comparing saxonian, teutonic, gallic and nipponic approaches, *Social Science Information*, 20, 6 (1981), 817-856

TABLE 2
Four styles, four figures of thought



Source: Galtung 1981, 839

Well, Galtung's piece of 1981 is inspiring reading stuff – next to the book of John, Jan and Johan, of course! But what has this to do with their book? Is it Teutonic, Saxonian, Gallic, or Nipponic in character? Actually, in his paper Galtung even mentioned the situation of Dutch intellectuals, claiming that they “are exposed not only to Saxonian and Teutonic influences but also to Gallic, and that to be under the crossfire of three intellectual styles is simply too much (...). It would almost be a miracle if creative social science flourished under such conditions” (846).

Now, the miracle has come true, and I clearly disagree with Galtung on this point: When reading the book of John, Jan and Johan I found that meanwhile we could add to Galtung's categories also a Dutch style: This Dutch style could be characterized as a sort of hybrid of Galtung's categories:

- In a way the Multi-Level-Perspective is Teutonic: Striving to launch a grand design, an all inclusive perspective – but establishing no theoretical hierarchy
- Its is Saxonian: Interdisciplinary and problem oriented, proposition-led, and empirically based – but not obsessed with quantitative number-crunching
- It is Gallic: Organising discourse between different theoretical traditions, seeking elegant metaphors and representations (see the compelling design of graphs

- showing transition dynamics, drawn by Johan Schot and Frank Geels) – but the MLP is no l’art pour l’art
- It is even to some extent Nipponic: Searching for organic images and practical solutions – but avoiding building mainly on inherited authority.

In my view the book of John, Jan and Johan is not the only one, but clearly a most outstanding example of this Dutch style of intellectual productivity and problem orientation: Offering meta-heuristics, with a holistic perspective in terms of problem orientation, with co-evolutionary conceptualization of the dynamics at force, with a focus on design and governance, and with an unprejudiced integration of theoretical strands of reasoning: a kind of “world music” approach to the grand challenges of the perceived second major transition of modern society and economy.

Johan Schot and Frank Geels, in their chapters, focus, inter alia, on unfolding the overarching concept of MLP as the underlying meta-heuristic. Their approach is Dutch style because it draws on all of Galtung’s basic styles while driving the emerging hybrid to become a concept in its own right.

Jan Rotmans and Derk Loorbach concentrate on sustainability transitions, explicitly taking a normative orientation of SD into account. Their approach is Dutch style, being quite inclusive and hybrid based on complexity theory, with some elements of Teutonic grand design, while combined with a rather Nipponic attempt at organic practical solutions.

John Grin contributes a dedicated governance perspective enlightened by a reflexive conceptualization of structuration and agency. This approach is Dutch style, being very inclusive, too, here rather as a Gallic-Teutonic cuvée, elegantly playing with tensions between incumbent incrementalism of governance vis-à-vis the promise of grand designs.

Since a couple of years, this Dutch style-designed approach, the MLP, is receiving more and more attention in academic and policy circles. The existence of the KSI is an important example. I am noticing this also in my immediate environment: Recently I had the pleasure of presenting the MLP to the OECD’s Technology and Innovation Policy Group (TIP), as a complement to the prominent “Innovation System Approach” that has very successfully been promoted by this group since the 1990s; also various national governments have shown increasing interest. Beyond I had the pleasure of facilitating the edition of a “Special Section” in the leading journal “Research Policy” with several papers on the MLP and transitions to sustainable development (published in April 2010; edited by Adrian Smith; John Grin; Jan-Peter Voss).

So, we might conclude that the Dutch style-based approach to innovation and large-scale transition to sustainable development appears to become *academic main-stream* (here and there even a guiding device for policy) – not the worst development these days!

(In the margins I dare to mention that important contributors to this meta-heuristic have spent relevant years of their career at my university, the University of Twente, and here in particular at my department STePS (Science, Technology, and Policy Studies) and its

predecessors (Johan Schot, Frank Geels, also John Grin had strong links to this place, and of course our colleague Arie Rip has contributed substantially – and many more creative people ...).)

Finally, it's all about the co-construction of views on the world: Our discussion tonight, the way this book will be received – we all are contributing to what I and others have called the “innovation policy dance of theory, practice, and policy”, a metaphor used in my inaugural lecture at Twente in 2007 and also for a new book on “The Theory and Practice of Innovation Policy. An International Research Handbook” edited by Ruud Smits, Phil Shapira and myself, to be published later this year: Inter alia, we suggest “A System-Evolutionary Approach for Innovation Policy” to long-term changes in innovation systems.

Summing up one could say that the Multi-Level-Perspective on system transitions plays the *world-music for the system-evolutionary innovation policy dance*.

Thanks for your attention!