# **The politics of transition governance.** Conceptual understanding and implications for transition management<sup>1</sup>

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#### To appear in:

Int. J. Sustainable Development, vol 14 (2011).

#### Abstract

There has been scholarly criticism that transition theory has hitherto largely neglect the politics involved in transition governance. This article offers an analytical framework for understanding powering and legitimization in a way that does not a priori assume that such politics is bound to inhibit transition processes: it seeks to outline how, and under what conditions, strategies to deal with such politics may constructively interfere with transition dynamics towards sustainability. Based on the application of the framework to a historical transition, the modernization of Dutch agriculture in the decades following World War II, we draw some lessons on transition governance, concerning the need for learning not only during the starting phase of a transition, but also during its acceleration; the opportunities offered by other actors than merely frontrunners; and the need to and the need to nurture, and deal with, diversity.

**Keywords**: transition theory, transition dynamics, transition governance, transition management, power, legitimacy, agriculture, Netherlands.

### 1. Introduction: the governance of transitions and its politics

Many contemporary crises – including climate change, the financial crises, and various pandemics - have in common that they (1) represent the dark side of dominant patterns of socio-economic-technological development, and (2) appear to be very difficult to resolve. The idea of transitions (Rip and Kemp, 1998; Rotmans, Kemp and Van Asselt, 2001; Schot, 1998) takes as its point of departure that the persistence of the problems involved (2) may be explained by the fact that (1) implies that these problems are caused by processes which are firmly embedded in societal structures. The second point of departure is that, as a consequence, their resolution is bound to involve both innovative practices and structural adaptation: system innovations and transitions. Such change, in other words, is fundamental as it goes beyond established practices and the structures which have co-evolved with them.

<sup>&</sup>lt;sup>1</sup> This article has been produced as part of the research programme of the Dutch Knowledge Network for System Innovations and transitions (<u>www.ksinetwork.nl</u>).

A core concept to depict such changes is the multi-level perspective (MLP) (Geels, 2005; Rip and Kemp, 1998; Schot, 1998). Put briefly, it conceives of a transition as interference of processes at three levels: innovative practices (niche experiments), structure (the regime), and long-term, exogenous trends (the landscape). The scale levels represent functional relationships between actors, structures and working practices that are closely interwoven. The higher the scale level the more aggregated the components and the relationships and the slower the dynamics are between these actors, structures and working practices. Only when these different dynamics come together in particular ways may mutual reinforcement emerge as a necessary condition for achieving a transition. Various typologies have been developed on basis of historical research (Geels and Schot, 2010) or system analysis (Rotmans and Loorbach, 2010) for the different routes through which a process of mutually reinforcing change may result.

Grin, van de Graaf, and Vergragt (2003; cf. Grin, 2008) have proposed that, given the structural nature of transitions, it is important to further develop the concept from the perspective of structuration theory. This is particularly necessary in order to attain a proper conception of the interaction between structure and agency – avoiding the traps of both structuralism and voluntarism. From this perspective, transitions essentially become a matter of (1) redirecting the co-evolution of structure (the regime level) and agency (innovative practices, such as 'transition experiments') towards (2) an orientation which goes beyond the control-mode orientation characterizing 'first' or 'simple' modernity (Beck, 1997) and takes sustainable development as a normative orientation, (3) amidst the turbulence of a variety of exogenous trends. Crucial in the process of re-orientation is reflexivity, understood as what Voß and Kemp (2006) have called 'second order reflexivity'. While 'first order reflexivity' captures the unconscious and unintended, 'reflex-like', consequences (side effects and risks) of early modernization processes, second order reflexivity is about the self-critical and selfconscious reflection on processes of modernity. It evokes a sense of agency, intention and change. Here actors reflect on, and confront, not only the self-induced problems of modernity, but also the approaches, structures and systems that reproduce them (Grin et al., 2004; Stirling, 2006).

This takes us to a feature of transitions which is crucial from a governance perspective. Interventions which aim to transform established patterns of action and their structural context are bound to run into resistance and inertia. In addition, realising a transformation with a particular normative orientation – sustainable development – amidst a heterogeneous set of long-term trends implies additional struggle. That struggle essentially involves powering and legitimising.

At first sight, one might see such 'politics' as a mere bother to transition dynamics and attempts to influence it. However, this is too simple. In fact, it is a central claim in this paper that the politics necessarily involved in transitions may become easier to address if one understands how transitions do not only *presuppose* the transformation of power relations and the creation of legitimacy, but may also *help to achieve* these conditions. This dialectic claim may be easily understood once we realise that transitions imply a process of change that may also affect the sources of power and legitimacy.

From this perspective, we may not merely acknowledge the claims of – more or less sympathetic – critics<sup>2</sup> that notions like transition management and strategic niche management in their current versions insufficiently acknowledge politics. More importantly, we may offer a more fundamental understanding of the politics implied in transition governance that may help practitioners to address it.

Against this background, my objectives in this article are to explore the interaction between transition dynamics on the one hand, and powering and legitimising in transitions on the other, and to elucidate the implications for the governance of transitions, in particular for transition management. In the next section I will present a conceptual understanding of powering and legitimising in transition governance - in particular the approach of transition management (Loorbach, 2007; Rotmans, Kemp, and van Asselt, 2001; Rotmans and Loorbach, 2010) - which acknowledges this dialectic relationship.

In the next two sections, I will explore an empirical example; in order to benefit from the advantages of an *ex post* analysis that relates an episode of governance to its long term outcome. More specifically, I will draw on an example from the transition to modern agriculture in the Netherlands, in the first decades after 1945. The case study will be a secondary analysis, drawing on a wide range historical studies which themselves rely on large numbers of documents, interviews and other primary sources.<sup>3</sup>

Although we know (van Merrienboer, 2006; Westerman, 1999) that the central figure, Minister and later the first Agricultural Commissioner of the EU, Sicco Mansholt, was a strategic, reflexive leader, we may obviously not assume that he deliberately followed a transition management approach *avant la lettre*. Yet, we may consider Mansholt's attempts to promote the transition towards modernisation of agriculture as a case of planning through structural adaptation, the family of governance approaches of which transition management is a young member (Voß, Smith, and Grin, 2009). In section 3, I will present a simple account in these terms. After discussing the case in more depth, with due attention to the politics involved, I will present more precise account (section 4), which generates crucial lessons on how politics may express itself and be dealt with in transition management (section 5). In the final section, I will briefly reflect on how these findings may be translated to the contemporary transition towards a sustainable society.

### 2. The dialectic relation between transition dynamics and its politics

Regarding *power*; inspiration is taken from Arts and van Tatenhove (2005) in order to appreciate that the various levels of the multilevel perspectives entail different types of power (see table). At the level of innovative practices, the focus is on *relational* power, which has to do with differences in competences and ability to draw on the regime between agents level. The regime embodies *dispositional* power, embodied in rules, resources, actor configurations and dominant images of the issues involved. This, in Bourdieuan language, "positions" agents at the level of experiments. These agents, in more Giddensian terms, may "draw on" these

<sup>&</sup>lt;sup>2</sup> E.g. Berkhout, Smith, and Stirling., 2005; Kern and Smith, 2008; Meadowcroft, 2007; Shove and Walker, 2007;2008; Hendriks, 2008.

<sup>&</sup>lt;sup>3</sup> A much fuller account of the case story, with more source references, has been published in Grin (2010, pp. 249-264, pp. 285-314).

elements. Finally, at the landscape level we find *structural* power in the form of (Bourdieu, 1977) symbolic

and economic capital or (Giddens, 1984) orders of signification, legitimisation and domination.

Type of power	Focus	Level in MLP
Relational (transitive and intransitive)	Achievement of outcomes by agents in interaction.	Experiments
Dispositional	Positioning of agents in a regime, comprising rules, resources, actor configurations and dominant images of the issue involved.	Regime
Structural	Structuring of arrangements, from changing orders of signification, domination and legitimization.	Slowly changing landscape

This helps us to conceive the dialectical relationship between power dynamics and transition dynamics. On the one hand, the dispositional power implied in the incumbent regime may privilege established practices and confront innovative practices, such as transitioin experiments, with inertia and resistance. But, the other way around, to the extent that some elements of the regime change (that may have been ignited by landscape trends or transition experiments), the implied change in dispositional power may stimulate these and further innovative practices. Especially when interplaying with wider societal changes at the 'landscape' level, these changes in dispositional power may then contribute to further regime change, and so on.

Concerning *legitimacy*, it is quite common to distinguish between input, throughput and output legitimacy (e.g. Scharpf, 1997). Clearly, given the long-time horizon involved, output legitimacy will generally be utterly inadequate, as long before the results may start to be convincingly visible, the process towards them may have lacked of legitimacy (Grunwald, 2000a; 2000b). In general, input legitimacy will be hard to obtain. Transitions are unlikely to result from traditional, democratically legitimated governmental action. And fora specifically created to legitimise transitions, such as transition arenas or experiments, are deliberately composed in a way which cannot produce ex ante legitimacy: they tend to primarily involve actors who are a priori sympathetic to the idea of the transition.

What such fora can do, however, is co-produce legitimacy in the process of designing and realising transitions. In order to do this, those promoting the transition may point to the fact that the novel practices they work help the stakeholders involved to prepare for changes in the regime which are likely to occur due to ongoing landscape developments. Alternatively, they may demonstrate to those involved that such practices are not only a proper way to resolve a persistent problem, but also may be facilitated by emerging regime elements and produce appreciation in the eyes of "relevant others". Similarly, proposals for structural change may be legitimised by referring to innovative practices that demonstrate the possibility to resolve persistent problems, but run into problems implied by the incumbent regime. It is not difficult to conceive of other tactics that share with the one just mentioned that they seek to make legitimacy building and multilevel dynamics reinforce each other. An earlier analysis in the trail suggests that in many cases this occurs at the interfaces between a transition practice and other spheres (Hendriks and Grin, 2007).

Understanding the politics of changing power relations and legitimacy as partly intrinsic to processes of profound change opens up the possibility that the politics involved in the governance of transitions do not necessarily work against the transition; or, more accurately, it helps to understand how, and under what conditions, strategies to deal with such politics may constructively interfere with transition dynamics towards sustainability.<sup>4</sup> Let us now further explore this conceptualisation on basis of our case study.

### 3. The transition to modern agriculture

In the late nineteenth century, the primary sector in the Netherlands faced severe problems in meeting the competition from other countries in Europe and the United States. This increasingly affected Dutch farmers, also on account of the increased mobility of people and goods. Simultaneously, a second exogenous development - the Industrial Revolution had largely bypassed the Dutch agricultural sector. In response to the new challenges, Dutch farmers started to organise themselves, while their concerns prompted the government to interfere in the agricultural domain. Increasingly, government formulated provisions for research and education, and it began to vigorously promote modernisation. These efforts, which basically amounted to being the first steps away from traditional agriculture, also affected the particular type of society which agriculture had co-constituted (rural, familybased, and small-scale). It is no surprise, then, that these changes were far from uncontested and they were certainly not embraced by all farmers, many of whom feared the demise of the family farm and strongly opposed modernisation. Even amongst those who wished to participate in the modernisation process, there was major contestation on the direction it should take. As in other domains, agricultural modernisation was contested. (Schot, Lintsen, and Rip, 2010)

Yet, the modernization process would gain additional momentum between about 1945 and 1970. After two world wars and a major economic crisis, there was a strong desire to work towards ensuring a domestic food supply. Simultaneously, however, there was a perceived need to free as much labor as possible for the industrial sector, from which most of the badly needed economic growth was expected to come. In order to reconcile these competing demands, further modernization was promoted by governmental policies that sought to structure agricultural practices towards modernisation - indeed, they were called agricultural *structure* policies. They comprised, first, institutional measures, tailoring both the polity and the knowledge infrastructure to agricultural modernisation; and, second, policies that adapted the physical (infra-)structure: changes in water management that increased the carrying capacity of the land to accommodate machinery and higher cattle densities; land consolidation, enabling scale enlargement; and market and price policies, most notably

<sup>&</sup>lt;sup>4</sup> For instance, by developing routes of action beyond what stakeholders could initially imagine, one may convince them that there is more in it for them than they were tempted to think. Or, to mention another example, to the extent that resistance is embedded in incumbent structures, the fact that these structures are changing may help to break resistance. Avelino (2009) has elaborated the notion of empowerment in transition management, based on a similar conceptualization of power.

product subsidies that enabled farmers to earn better incomes while ensuring affordable prices to consumers.

These policies were very successful. As a result of these concerted efforts, productivity dramatically increased, as did farmers' incomes (Bieleman, 2000; Priester, 2000). The primary sector's share in the labour force decreased from 19 % in 1947 to 5 % in 1990; land use for the primary sector diminished by some 30 %; and the amount of capital goods (machines; cattle; buildings) used by the primary sector increased by some 80 %. A main focus was on exporting animal produce. Domestic production of food in the Netherlands increased from typically 15-20 % of the domestic demand in 1945, up to typically 200-300 % half a century later.

At first sight, it seems clear how this transition to modern agriculture got direction and speed. In both the late nineteenth century and the decades following World War II, the cultural dimension of modernisation was particularly crucial for the precise ways in which multi-level dynamics operated. Central to that dimension was a belief that social and economic progress could be realised through science and technology. They could make farming more efficient and, especially in the course of the second half of the twentieth century, could increase productivity by increasingly controlling plants, animals and the conditions under which they live, through intervening in nature's negative effects on productivity (e.g. through the use of pesticides and vaccinations), through stimulating productivity (e.g. with specialised manure and genetic optimization) and through adapting plants and animals to the demands of machinery (e.g. with 'milkable udders' and 'combinable grain') (Bieleman, 2000; Bos, 2004). To be sure, in the late nineteenth century the take-off was triggered by economic problems, related to several landscape trends (peasant autonomy, international mobility and trade). These were part of a wider depression, which had followed the first Industrial Revolution. However, the particular response formulated, called modernisation, can only be explained by another landscape trend, the second Industrial Revolution:<sup>5</sup> that has provided the pressure to leave the deeply embedded, traditional small, family-owned farming businesses that were at that time a cornerstone of the social order (Bieleman, 2008).

Similarly, during the postwar years, the hopeful, hardworking reconstruction mood and the "American" notion of benefiting from technological advance led to a major acceleration. In this phase, the cultural dimension was the inspiration of a variety of actors. Farmers were proud of their contribution to postwar progress through what they happily called "refinement agriculture". Researchers had high expectations concerning the opportunities they could help open up (Priester, 2000), and retailers and food processing businesses were enthusiastically promoting a new sort of society, in which new concepts like the supermarket and the penetration of relatively new technologies such as refrigerators and cars started to reinforce each other (Van Otterloo, 2000).

Thus, our story seems a straightforward case of multilevel dynamics as we know it from transition studies, where transitions are explained as resulting from the mutual

<sup>&</sup>lt;sup>5</sup> The modernisation program reflected all features attributed by Schot, Lintsen, and Rip (2010) to the "second industrial revolution": the emergence of new key technologies, such as the internal combustion engine and technological infrastructures; the emergence of large firms and associate management technologies; the development of consumption society; the development of the intervention states; and (as part of all previous four) the increasing knowledge intensity of technology.

reinforcement of innovative 'niche' practices, changes in structure (the 'regime') and exogenous trends ('landscape developments'). Several landscape tendencies put pressure on existing practices: the ongoing second industrial revolution, increasing international competition in the primary sector, and the cultural inclinations of a post-war reconstruction mood in general, and 'Americanisation' in particular. As a response to these pressures, policies were put in place that led to institutional and physical changes in structures - regime changes.

These governance efforts could be seen as an example of 'planning through institutional adaptation' in the trail of Lindblom (1999), and Meadowcroft (2007) and Wildavsky (1979). Looking back into "a century of planning", Lindblom (1999) explains its quintessence by pointing out that the most successful cases of planning have been those in which government has subtly shaped the market, not only through regulative interventions, but also through creating the societal conditions under which the market might operate. Based on a range of empirical cases – including taxation, economic mobilization for the Second World War, research and development and city planning – he notes that they imply four lessons, identified in his earlier work (Lindblom, 1979): First, do not plan in order to organise *x* but plan to alter the existing social mechanisms, whether market or not, that govern x Second, show some modesty: focus on just a well-defined segment of life, specialised, even narrow, rather than vast, synoptic and broad. Focus on specific practices. Third, planning rarely succeeds through a big step; rather it should aim at "an endless succession of short and fairly rapid steps" in a process of "trial-and-error" learning or "serial adjustment". Fourth, "there may be - we do not yet know enough – big differences between a succession of short rapid steps that is influenced by a long term perspective, and one that is not, the former probably being the more successful form of planning and decision-making" (Lindblom, 1999, pp.47-48).

At first sight at least, the significant successes realised by post-war modernization policies may be simply explained by referring to how, in Lindblom's (1959; 1979) wording, these policies changed the mechanisms that governed practices, benefiting from landscape trends. This account underlines that, and explains how and under what conditions, transition management, as a deliberate attempt to influence social-economic development, may be successful – *contra* simplistic claims that society is not malleable. Yet, the story is much more complex, and may teach us much more on transition management. This we discover once we open it up, looking into the politics which accompanied these planning efforts.

## 4. Successful, yet far from smooth: agricultural modernization's politics

Central to the story is the first post-war minister of agriculture, later the first European Commissioner of agriculture, Sicco Mansholt. This gentleman farmer had attained authority during the war through his leadership in the underground resistance movement. He was involved in food supply during the "Hunger Winter", and provided shelter to many important Social-Democratic leaders (Westerman, 1999). After liberation, he won further authority by immediately organizing the food supply.

Such authority he could use well. Mansholt felt that structural change was urgently needed, given the changes in international markets and the development of technologically advanced production methods in countries which had been experiencing less damage from the war, especially New Zealand, Australia, England, Canada and the United States. Inducing

such structural changes was obviously a significant challenge. Also, being convinced that economic growth in this difficult period would have to come from industry rather than agriculture, he felt that labour should be moved from the primary to the secondary sector. His vision was to respond to these challenges by drastically modernizing Dutch agriculture through rationalisation and scale enlargement.

Importantly, Mansholt could achieve legitimacy for these reforms through building on the plans that the leaders of farmers' organisations had been drafting already during the war. The leaders of the liberal, Protestant and Catholic farmers' unions had frequently met in secret to discuss how in a postwar Netherlands a new corporatist system could be established to govern the primary sector. On May 5, 1945 – the very day the country was liberated – they created a small joint bureau to coordinate further efforts, and soon after, the Foundation for Agriculture was founded, on July 2, 1945. Mansholt, who had already expressed his support before that date, invited its Board to discuss how to transform the Foundation into a corporatist body with regulative authorities (Breeman, 2006, pp.74-78). Also, he decided to deliberate on agricultural policies with the Foundation's members on a monthly basis. The Foundation brought some coherence between the many co-operative organisations that had started to develop. Simultaneously, it confirmed and strengthened corporatism, and this soon triggered the emergence of more corporatist organisations: within a year, more than 50 had been formed.

With the Foundation – and later its successor, the Landbouwschap – at its core, these organisations formed one corner of the so-called 'Iron Triangle', which further comprised the Dutch Ministry of Agriculture and agricultural specialists in Parliament. It enabled an intimate communication between policy making and agricultural practice. In addition to the Iron Triangle, Mansholt also promoted rationalisation by significantly improving research, education and agricultural information programs through transforming the agricultural innovation system. Thus emerged a second institutional arrangement geared to the rapid development and dissemination of agricultural knowledge and technology, the so-called 'OVO triad'.<sup>6</sup>

Drawing on these emerging institutional arrangements, he attempted to pursue policies which would further change the structural context for agricultural practices. Yet, especially during the first decade following the war, many of these policies were strongly contested, both in the primary sector and in the political arena. Mansholt was facing severe resistance, for instance, against his plans for major national investment in large-scale mechanisation and physical planning of the rural areas. In spite of the enthusiasm with which he presented this program, both parliamentarians and farmers doubted that these measures would improve farming practice, arguing that price and income policies should have priority. After economists disputed the underlying economic assumptions (Breeman, 2006, pp85-86), Mansholt had to withdraw the plan. Contestation would remain for a prolonged time, and the polity Mansholt had created hardly provided the support he might have expected from it. In spite of the Iron Triangle's prehistory, its primary sector representatives were rather reluctant to take up the position they had attained in this arrangement, as they would not be able to achieve legitimacy amongst their constituencies. The attempt to ensure input legitimacy

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Dutch acronym for research, information and education. See Chapter III.3 for further explanation.

through a reformed polity appeared to merely displace the struggle for legitimacy from the political arena to the primary sector's organisations.

How, then, did post-war policies nevertheless succeed, eventually? Drawing on our understanding of how the dynamics of power and legitimacy and the dynamics of transitions are interrelated, we will investigate, first, how Mansholt managed to transform power relations and to generate legitimacy and, second, how these processes affected the learning processes which are supposed to be central to such planning efforts. To sharpen our analytical eye, we will compare three such policies: one which was promising from its inception (the establishment of price and income policies), one which met with moderate acceptance (mechanisation) and one which initially encountered strong resistance (scale enlargement).

*Price and income policies* started virtually immediately. While, in order to prevent wage increases, a maximum was set for consumer prices and export levies were imposed, farmers were rewarded by guaranteed minimum prices for their products (from 1951 onwards, only basic products). Although farmers initially found prices too low, they noticed that their incomes were growing at the same rate as that of other societal sectors, and this soon increased their trust in the measures.

*Rationalisation policies* proved more controversial. In the years before World War II, mechanisation had penetrated much less in agriculture in the Netherlands than it had elsewhere, partly because Dutch family farms often were too small to be able to afford expensive machinery (Priester, 2000, p.74). Only a minority of about 20-25 % of the farmers, mostly young, innovative ones, shared Mansholt's vision of modernisation and enthusiastically engaged in novel practices.

Following the war, most farmers, however, felt the long-term policies proposed to be much less urgent than their primary needs: simple tools and machinery, which in many cases they had lost during the war or had not been able to repair. While parliamentarians initially supported this element of Mansholt's plan, they grew more skeptical about long-term investments and instead advised the Minister to first focus on income policies.

In response, Mansholt tried to raise support by sticking to his point. Referring to the changing international market situation, he argued that the farmers would soon face much bigger problems without structural change. Yet, simultaneously, he exploited farmers' focus on short-term concerns in order to swiftly launch a policy tailored to the wants and needs of these farmers. First and foremost, he started to promote mechanisation through, among other things, investment support and information services. This was greatly welcomed within the primary sector. Although before the war Dutch farmers scarcely procured tractors, they had grown familiar with the idea of mechanisation. In the mid 1930s, a variety of local innovators had converted old cars into "workhorses" for farmers. This development had been taken up by Professor Visser, who contributed a great deal to promoting this kind of "motorisation" (Priester, 2000, pp.74-75). Since the 1930s the tractor had developed into a general-purpose machine, while also becoming much less expensive. Tractors made it possible to do most of the work on farms in a far less labor-intensive way, at a time when labor forces rapidly became more expensive, due to competition from industry. They also set aside land that earlier was needed to feed the horses for producing marketable products.

Yet, as Priester (2000, pp.79-81) has argued, this is not enough to explain the very large increase of the number of tractors right after the war: specifically, within 5 to 10 years, the number of innovative tools and advanced machines had doubled or tripled (Breeman,

2006, p.81; Priester, 2000, p.78). The experience of many farmers in the 1950s (as corroborated by several studies) was that the total costs of labor and capital were higher on motorised farms than on traditional farms. That farmers nevertheless chose to "motorise" was tied to a variety of reasons: farmers' sons began to pursue careers in other industry sectors; in other cases, farmers made cost-risk calculations, considering that the increased work speed enabled them to reduce damage in the event of bad weather. Also, there was social pressure: a sense had spread that "motorisation" was to be positively appreciated as "modern."

The increase of farmers' income led to increased trust and to increased capacity to invest in innovative farming methods and tools. Simultaneously, and ironically perhaps, the fact that mechanisation often led to increased costs convinced many farmers of the benefits of the road towards for instance higher yields, replacement of horses by cattle and innovations geared to maximising farm output (Priester, 2000, p.80). In doing so, they drew on structural provisions created for modernisation.

*Scale enlargement* was the element of Mansholt's policies that was least popular – it was flatly unpopular amongst all farmers, except for some of the modernisation enthusiasts. Initially, Mansholt claimed that farmers needed substantial acreage if they were to improve the efficiency of their operations. However, this met with fierce resistance, reflecting the fear that family farms were under threat – a fear not just prevalent among the Catholic segment of the Dutch farm population (Breeman, 2006, pp.81-85). Mansholt circumvented the resistance by denying that his objective was to rid the sector of small farms. On the contrary, he stressed that the logic was to help small-scale farmers become more efficient through land consolidation. For many years to come, concerns about the fate of small farms would accompany his efforts.

Meanwhile, scale enlargement had to remain a "verboten goal" (Yanow, 1996, pp.197-199) implicit in land consolidation policy. This policy also included the possibility of relatively small farm extensions. Also, Mansholt implemented a "small farmer's policy", which provided financial support to the pragmatic 50 % of the farmers, enabling them to invest in rationalisation and expansion of their farms. Once they did so, economic logic did the rest: investment required scale enlargement, which required further rationalisation and thus greater investment and so on.

In most regions, state agricultural information services advised farmers to specialise and scale-up. Also the other institutional provisions created for the modernisation programme facilitated such development. Although cooperative enterprises, such as milk processing factories jointly undertaken by farmers in one region, mitigated some of the pressure to grow, this trend contributed to the wider dynamics of yielding agricultural modernisation its momentum. (Bieleman, 2000, p.160).

## 5. Transition dynamics and its politics: lessons from the Mansholt case

In this section, I will draw some lessons from the historical case study for transition management in contemporary society.

### On the dynamic relationship between transition dynamics and its politics

Compared to the simple picture of section 3, our case study shows that there were at least two major roads to modernisation. This reflected the fact that Mansholt's vision of modernisation was certainly not seen as legitimate by all primary producers. In fact, it was only a minority of frontrunners who enthusiastically shared that vision. It would be wrong, though, to see this as a confirmation of the advice to merely focus on frontrunners when promoting a transition. As the case shows, others started to move as well and relatively soon *de facto* joined the first route. How may we understand this in terms of the interaction between powering and legitimisation on the one hand, and transition dynamics on the other?

That modernisation eventually became the dominant development thus was because of mutual reinforcement between the structures associated with the modernisation program, the practices of those enthusiastically joining the party, *and*, after a while, the practices of those who more hesitantly followed. It all started with a 'fly wheel' of mutual reinforcement between regime elements (institutional provisions and structural policies) tailored to modernisation, and the practices of those sharing the vision of modernisation. Important exogenous factors were Europeanisation and the cultural trend to embrace, "in the American way", the opportunities offered by potential changes in food production and food consumption.

When about half of the farmers appeared much less inclined to partake in this process, Mansholt eventually acknowledged their views by creating structural provisions more tailored to their needs. Economic logic rather than cultural appeal helped to create a second fly wheel, between this secondary regime and the practices of the more pragmatic farmers. After another decade or so, this logic drove this much larger group of farmers into much further modernisation, enabled by the provisions Mansholt had created in the first place. So, within 15-20 years, most farmers had embarked the journey towards modernisation.

Yet modernisation remained contested, especially among those who favored the smallscale, family farm business. While some of them simply dropped out, others kept actively resisting the Iron Triangle, especially its central player, the *Landbouwschap*, while some entrepreneurial, innovative farmers, in spite of the lack of institutional support, pursued their own course. A quarter of a century later, many of the latter would be amongst the frontrunners for the next transition - the transition towards sustainable development.

### Lessons on planning through structural adaptation

Opening up the transition process with due attention to its politics, thereby reveals our portrayal of the case as an example that planning through structural adaptation is simplistic. Let us return to Lindblom's four lessons, and see what this re-view of the case adds to that understanding. Concerning the first lesson, the central insight is that diversity of the practices (' $\dot{x}$ ') must be acknowledged. Actors from different practices may respond differently to the same changes in structures that, as Lindblom puts it, 'govern' these practices. More specifically from the viewpoint of an interest in *radical* change, it is risky to merely focus on creating the conditions that may support the practices of the radicals supporting such change. This is, of course, easy to grasp from an interpretive understanding of policy implementation (Van de Graaf and Grin, 1999; Yanow, 1996, chapter 2), which teaches that the responses generated by policy measures co-depend on the way in which they are being interpreted. What

our case adds is that it may be both possible, and advisable, to create diverse structures so as to influence diverse practices – to create 'policies in plural'.

Regarding Lindblom's third lesson, we have seen that it is not only planning that may proceed through a succession of short and fairly rapid steps, which need be monitored in a process of serial learning. Our case suggests that, in fact, one round of planning may generate a succession of short and fairly rapid changes in the *practices* it seeks to influence. This may especially occur if and where the mechanisms brought about by the policy maker are changing the dispositional power of actors in these practices. This should not be taken as another indication that Lindblom's incrementalism is unduly conservative. Rather, his claims that those seeking to influence practices should be aware of principal limits (limited information, bounded rationality) to the capacity to fully and correctly anticipate what such attempts may bring about should draw attention to the *risks* of such a rapid succession of changes in practice, induced by a change in dispositional power. A lack of correct anticipation may lead to a lock-in of (partly) undesired practices.

In terms of his fourth lesson, the initial difference in tempo between the first and the second route lends some support to his careful suggestion that a vision may indeed make planning through structural adaptation more successful. It was to a significant extent through the appeal of the modernisation vision that the first route gained momentum so quickly. Where incumbent structures provide too little guidance, and new structures are still under development and do not yet self-evidently guide practices, a vision may initiate, orientate and accelerate joint action (cp. Grin, 2000). Our case suggests that indeed 'directed incrementalism' (Grunwald, 2000a; 2000b) may more rapidly induce momentum. So, in terms of Hughes' (1983) notion of momentum<sup>7</sup>, frontrunners generated *speed* at the fastest pace.

Yet, the other side of the coin is that visions may not play this role for all actors, but only to those who a) see it as legitimate and b) deem themselves capable of actually realising it in practice. For others, other discursive (in our case: material) structural changes that appeal to their concerns may bring about a - slower - process of successive changes in their practices. While initially, this trajectory developed less speed than that of the frontrunners, it did contribute most to the other factor of momentum, mass. This finding suggests opportunities to overcome the concern (Berkhout, Smith, and Sterling, 2005) that visions may be shared only by a small group of frontrunners. The art and craft involved is to make this mass go to into the right direction (the third aspect of momentum, direction) - to select those changes in dispositional power which may privilege more moderate steps towards the vision, creating a succession of such steps which may help generate legitimacy for the more radical vision. Here again, serial learning should be part of the process – both to help avoid undesired lock-ins, and to help understand how to create the right changes in dispositional power. Interestingly, as we have also seen in a case study on the current sustainability transition (Hendriks and Grin, 2007) it may be precisely contested legitimacy of a particular vision that gives rise to novel options, which may also contribute to the transition.

#### Lessons for transition management

<sup>&</sup>lt;sup>7</sup> Drawing on physics, Hughes (1983) understands momentum as being the product of two factors, mass and speed, and as possessing direction.

The above lessons have implications for transition management (TM) as a specific, recent elaboration of planning through structural change. But before we are able to draw these lessons, we need to discuss historical contingency. Obviously, there are both differences and similarities between the context of post-war agricultural modernisation and the present context, in which there is some attempt to realise the transition to a sustainable agriculture.

One important characteristic of the period following World War II was that there was an important window for profound change because of war damage and a *Zeitgeist* (spirit) of support for re-construction of society and economy. One might argue that current societies are also facing profound changes through landscape trends like progressing individualisation, the emergence of network/information society and changes in the global economy, by no means least in the agrifood sector. Yet, many of the practices seen as expressions of these trends show significant continuity with earlier practices; it requires reflexive agency (e.g. through redefining guiding visions) to go beyond these practices (see e.g. examples discussed in Grin and Grunwald, 2000). Similarly, a secondary analysis of what institutional changes are being brought about by the trends mentioned in modern societies' polities, innovation systems and market places has shown that the eventual outcome will depend on such (distributed) agency (Grin, 2010, pp.37-48).

The same analysis has shown that, while (contrary to what is sometimes claimed) the state has not become a much less central, sovereign player since then it is true that civil society has been penetrating these institutional realms. This had added novel loci and mechanisms for both contestation and legitimisation of transitions.

On the other hand, in the first post-war decades, agency – both by Mansholt and by others – mattered. As we have seen, modernisation was contested amongst farmers, farmers' organizations and politicians. The main difference may be the degree of effort to further open up and exploit the policy window. We have seen that post-war conditions were important, albeit in different ways for the two main groups that joined modernisation: the frontrunners were inspired by the optimistic *Zeitgeist* and the Vision of Americanisation; the others were persuaded partly by the necessity to remedy war damage. Thus, while Mansholt faced significant challenges in persuading the second, largest, group, he could refer to circumstances that farmers faced every day. As noted, to what extent these conditions may be compared to contemporary conditions. Moreover, as argued, the impact of these conditions partly depends on agency. What remains the same is that a lot may be won by acknowledging diversity.

We may now formulate various lessons and add insight to the important work done on TM by Rotmans, Loorbach and others. First, given the power of material dynamics, TM would do well to emphasise learning not only during the take-off stage of a transition, but also during the acceleration stage. Our case may help to elaborate the notions of punctuated equilibria and "periods of instability and chaos" (Rotmans and Loorbach, 2010, pp.145-146). It is of significant importance to understand enough of the rapid processes of structuration in such periods to be able to see how some learning capacity could be installed to avoid undesired lock-ins. Further analysis of the above case from a complex adaptive systems perspective may be of significant help here.

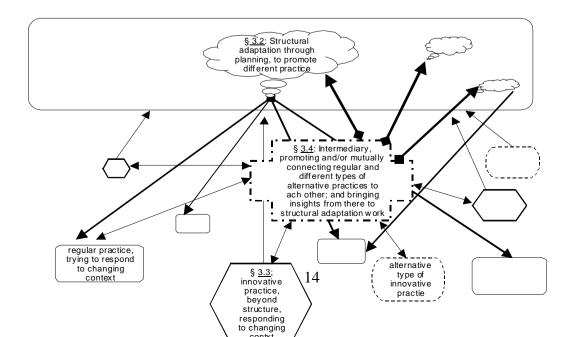
Second, the above lessons call for reconsideration of the strong focus in TM on socalled frontrunners. We have indeed seen evidence for Rotmans and Loorbach's (2010, pp.144-145) claim that such actors may help generate 'dissipative structures', and thus system change, especially when i) guided by a joint vision (their stance on this issue, which is more assertive than Lindblom (1999) and Berkhout, Smith and Stirling (2005) assert, is confirmed by our case; and ii) nurtured by some rudimentary structures (creating a 'niche'). We have also seen that frontrunners' exemplary practices may indeed inspire also others, even those not convinced by the vision. Experiments may thus contribute to legitimisation of the vision of which they are an expression (cf. Geels and Schot, 2010, p.84). TM may be enriched by more explicitly incorporating this additional function of experiments, as well as through the insights on how to bring it about and especially by shaping expectations (*ibid*, Raven, 2005).

Yet, having thus underlined TM's focus on frontrunners, we need to add that it is wise not to focus too exclusively on frontrunners. As we have seen, while frontrunners may help; develop speed, attention to a larger and more skeptical group, may help to gain mass. Further research may help to articulate strategies to make both routes of development reinforce each other so as to contribute to overall momentum, as occurred in our case. This could help to further enrich TM's capacity to promote breakthroughs.

Third, the more fundamental issue behind the previous point is that successful TM may be based on strategically employing diversity. While, other than several critics claim, TM does *not* assume the need for consensus, but proposes the development of diverse sets of images and transition pathways (Rotmans and Loorbach, 2010). This lesson certainly applies to contemporary, diverse societies. It is undoubtedly worthwhile to further explore how TM may make different routes to sustainable development reinforce each other in subtle and implicit, but no less powerful, ways.

### 6. Towards a governance concept for transitions

Although space limits have made us focus on planning through structural adaptation, our very analysis of that process has made clear that such planning may only be successful to the extent that it actively draws on innovative practices. Such planning, by its nature, must be informed trial and error learning, as Lindblom (1999) and others have stipulated. More fundamentally, power and legitimacy appear to result from the interplay between such planning efforts and a diversity of local practices.



**Figure 1.** Different kinds of governance activities, to be discussed in the sections indicated in the boxes. In the terminology of the multi-level perspective, they are located on the regime and the niche level (two types of experiments, belonging to two different niches), as well as in-between. Not included in the figure is the landscape level; events and trends on that level may influence or, often, be strategically used in all these different governance activities. Source: Grin (2010, p.266).

Crucial to success is, first, that connections are brought about between changes at these various levels, in what I have elsewhere called 'dual track governance' (Grin, 2006; Grin, 2010, pp.265-284), where connections may be brought about by agents at the regime level, focusing on planning through institutional adaptation and also, by agents involved in more or less innovative practices, from which they engage in 'institutional capacity building' (Healey, 1997). In addition, as we indeed see in practice, at least in the Netherlands, intermediary organisations (such as the Rathenau Institute, Habiforum and the Innovation Network for Agriculture and Green Space) may play a pivotal role in connecting the two. Such 'dual track governance' has been schematically depicted in figure 1.

Bringing about connections between changes at various levels requires that agents engaged in regime changes and innovative practices recognise the ways in which their efforts may be fruitfully related to each other as well as to exogenous developments. The most central message from this paper may be that the agents may benefit from insight in the twoway relationships between the long-term dynamics of transitions on the one hand, and the associate powering and legitimisation on the other. As we have seen, regime changes may imply different sources of power and legitimacy on which such actors may draw. This may both generate resistance and open up opportunities for pro-active, strategic agency. More specifically on the latter, while regime changes (e.g. changes in rules, or discursive changes) may provide innovative practices with novel sources of legitimacy and power, the reverse is also true: niche practices, by demonstrating what is possible 'beyond the natural' (Giddens, 1984) may help legitimise more encompassing regime changes, and empower those involved in bringing them about.

More research into the two-way relationships between transition dynamics and its politics is needed as a basis for strategies for the governance of transitions in the face of power relations and normative disputes. It is a much more fruitful approach than either neglecting politics in TM, or uncritically assuming that politics is bound to spoil the TM party, as some of the critics of TM, cited in the introduction, seem to imply. It is an approach which makes the literature on policy design - 'the troubled attempt to shape society' (Lindblom, 1990) - central to understanding the governance of transitions (cf. Voß, Smith, and Grin, 2009). In this literature, there is ample attention for the question how to govern societal change not merely from substantive analysis of the problematic. Rather, the idea is to synthesise such substantive analysis with an understanding of the politics involved through

phronèsis, or political judgement in the sense of practical wisdom: both knowing what to do, and how to do it (Loeber, 2004). Essentially, phronèsis means that reflexivity is made to emerge by confronting the tension between what is desired and what is, or that which *may be made* possible.

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