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The Role of Government in Environmental Land Use Planning: Towards an Integral Perspective

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<http://dx.doi.org/10.5772/50684>

Dynamics and developments in the design and implementation of Dutch nature policies

In 1990 the Dutch parliament accepted the Nature Policy Plan (NPP), designed to conserve and develop nature over the next 30 years. The original plan was developed by ecologists and biologists with little involvement of the agricultural sector. Consequently the plan was about plants and animals, about biodiversity and valuable landscapes and about the realisation of a so-called ecological infrastructure that should connect isolated pieces of nature in the Netherlands. Nothing was said about farmers' behaviours related to nature whereas the implementation of the plan asked a lot from the farmers: they should start working in a nature-friendly way, or sell their land in case it had been located in the planned ecological infrastructure.

The NPP, in its original form, was the result of a centrally organized decide-announce-defend strategy (DAD): internally decided upon, publicly announced, and, because of a fierce public resistance, firmly defended. This strategy has clearly resulted in non-acceptance of the NPP by the majority of the Dutch farmers who did not immediately see advantages for them, but from whom cooperation was needed for a successful implementation. Therefore the government decided to realise the implementation of the NPP by means of participation.

A longitudinal study of such a participation process in the Drentsche Aa area in the north of the Netherlands, has shown that the ambition of Dutch nature conservation policymakers to involve multiple actors (farmers, citizens, recreationists) in nature policy processes has resulted in different patterns of citizen involvement (Van Bommel et al., 2008). A group of citizens appeared who wanted to be involved as stakeholders, but found that they had different views than the decision makers. Even though they were allowed to express their views in discussion meetings, it was clear that these views would not be taken into account. Roughly speaking, citizens who did agree upon the proposals were included, whereas those who did not agree were excluded from the participatory process. As a consequence, the process ended up just reproducing the government's dominant discourse. The citizens with different views and perspectives – not coincidentally a group that mainly consisted of farmers – did not feel respected or represented because what was

relevant to them was not part of the so-called formal perspective of the government and thus was ignored. Meaningful participation was no longer possible for them, and this resulted in active, self-organized powerful resistance to the policy.

Today more and more initiatives can be found involving farmers who organize themselves in interaction with other actors in the countryside, sharing similar problems or similar ideals, and explicitly avoiding the involvement of governments. The reason is that they no longer want to be confronted with policies that have been designed without their involvement and thus do not fit neither daily farming practices nor their identity as a farmer. In addition, they do not want to be dependent on the continuously changing rules and restrictions that they encounter when they, for instance, try to apply for a subsidy such as the Agri-Environment Scheme. Instead, they experiment and invest together, in collective management of nature at their farms, in collective meadow ownership, or in new co-operations for the production of biogas as an alternative energy source. These self-organizing initiatives are characterized by high commitment and responsibility, resulting in responsible and sustainable behaviours that go beyond the individual.

1. Introduction

In search of ways to influence citizens' decision making concerning land use, governments are continuously expanding their repertoire of strategic tools to steer people in the desired direction. These strategic tools range from policy instruments such as subsidies and agri-environmental schemes, that are used to reward desired nature related behaviours of farmers, to forms of participation trajectories in which citizens are invited to participate in policy processes related to the design and use of public spaces (Aarts and Leeuwis, 2010); a phenomenon also referred to as governance (Hajer & Wagenaar, 2003).

While such tools might appear promising and seem to offer a wide range of steering options for governments and policy makers, they each have some serious drawbacks that might hinder or even backfire on effective policy making. In this chapter we critically reflect on the downsides of the so called instrumental approach. Participative policy making is discussed as an alternative way of getting things done. We argue that both approaches have their unique fallbacks and share some features that lead them to be sub-optimal. Therefore the network perspective is added, which implies alternative conceptualisations of change, communication and planning. The chapter concludes with a plea for valuing an integral perspective, based on all three perspectives. Such an integral perspective does not offer a 100% guarantee for successful steering, but does enlarge the space for development of policies for land use planning and rural development that are the result of a process of co-creation between government and societal actors, and that therefore have gradually become acceptable, suitable and effective.

2. The instrumental perspective

A common perspective on implementing governmental policies is the instrumental perspective: governments develop policies that are implemented with the help of a set of strategic tools, also referred to as policy instruments.

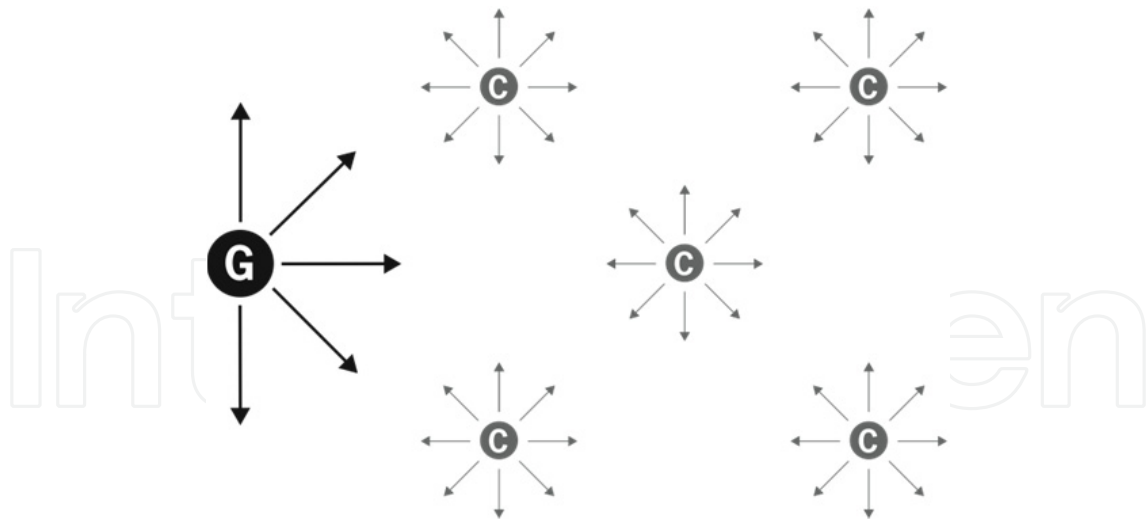


Figure 1. Interaction between government (G) and citizens (C): an instrumental perspective

Let us take a closer look to the instruments a government has available for steering citizens' behaviours.

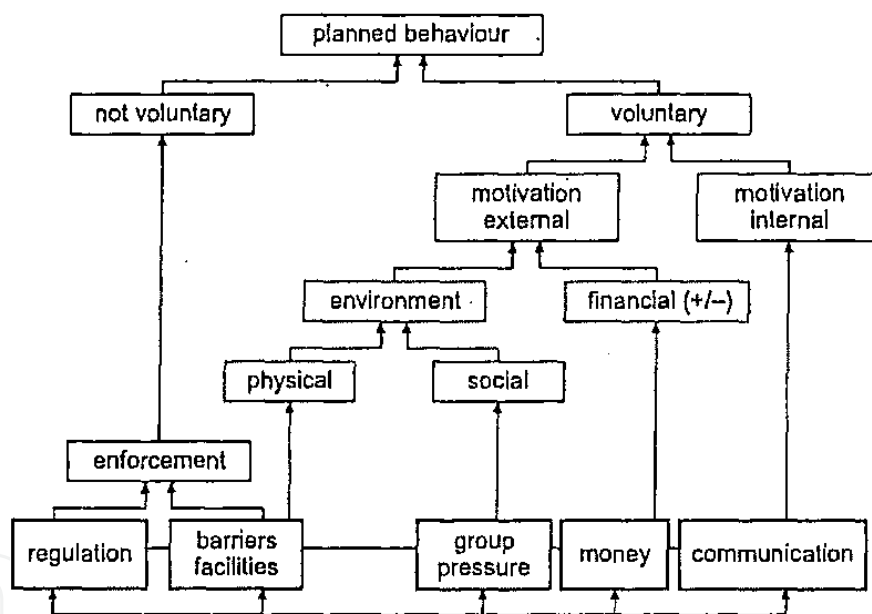


Figure 2. Policy instruments for behaviour change (Van Woerkum et al, 1999)

As can be seen in Figure 2, several policy instruments are available for governments looking to change behaviour. Within this perspective, regulation is not seen as a way to codify existing practices, but rather as an instrument to change the behaviour of people, and to facilitate that change. For several reasons it is not easy to develop and implement new rules. First, developing new regulation takes a lot of time as many different actors are involved in such a process. Second, especially in matters of nature conservation, many citizens, and certainly many farmers, are inclined to react negatively to regulation, for the very reason that such intervention takes place. Regulation undermines their feeling of freedom, ownership, and responsibility for looking after their own environment (Aarts and Van

Woerkum, 1994). The physical environment can stimulate a certain behaviour, for example: playing grounds for children, recreation areas for tourists, museum for learning facilities. It can also hinder undesirable behaviour, for example: fences around valuable natural sites or roadblocks. Governments can try and (re-)design such environments as to promote the desired behaviour. Group pressure can be an important strategy to involve target groups in a policy program, but is hard to organize (for a successful example, see Lokhorst et al., 2010). More often it arises from an effective resonance between the results of other policy instruments. Money can be used as an incentive (subsidies) or as a disincentive (taxes). Finally, communication can be used when not much can be expected from other instruments. Different communication strategies are then applied to persuade people to change their behaviours (Petty and Caccioppo, 1986).

Most plans in the domain of spatial policies consist of a combination of instruments. They encompass regulation, facilities (like roads, water supply, etc.) and financial measures. As far as subsidies are involved, there is reason to be careful. Lokhorst et al. (in press a) critically review financial compensation in the domain of nature conservation. In Europe, these conservation measures are stimulated by agri-environment schemes (AES). However, as Lokhorst et al. (in press a) argue, financially rewarding conservation practices may create a dependency that is self-sustaining, costly, and therefore vulnerable. First of all, such financial policies are dependent on the current political climate and are thus susceptible to change. Indeed, many schemes on both the country and the European level have been altered or have even ceased to exist over the past years. Second, rewarding a behaviour can cause a decline in intrinsic motivation for this behaviour, a process called the “crowding out effect” (Frey, 1997). In this scenario, receiving a reward for performing a behaviour leads people to attribute their behaviour to this reward, causing a shift from intrinsic to extrinsic motivation. Should the reward then be taken away, people will no longer be motivated to perform the behaviour. Therefore, the vulnerability of financially dependent conservation practices are a threat to their continuity over longer time spans. Preliminary evidence for this idea was found in a study on the social psychological underpinnings of both subsidized and non-subsidized conservation (Lokhorst et al., 2011). In this study it was found that farmers’ intention to engage in non-subsidized conservation was better explained by psychological aspects of their motivation than their intention to engage in subsidized conservation. While their motivation to perform subsidized conservation was driven mainly by their attitudes, when it came to non-subsidized conservation, feelings of moral obligation and self-identity played an important role. That is, farmers who saw themselves as the kind of people who conserve nature, and who felt that this was the right thing to do, were more likely to engage in non-subsidized conservation. For these farmers, conservation had become part of who they are, and their behavior is less likely to be affected by (changes in) financial policies.

Policies that have been developed without involving the people who are responsible for the implementation are not easy to implement. Such policies will only be accepted when people have the impression that they will benefit from the policy. This may be the case when subsidies are applied, however, as we have shown, this leads to a risky and unstable

implementation. We should thus search for different ways of policymaking. Instead of the instrumental perspective in which the government is both the initiator and director of the policy process, the participation perspective, involving stakeholders in the process of policy-development for problem solution, has become a leading paradigm.

3. The participation perspective

The participation perspective can be seen as a response to conceptualizations of steering that reflect great confidence in the malleability of society, but nevertheless do not often give the expected results (Glasbergen, 1995; Aarts and Van Woerkum, 2002; Arts and Van Tatenhove, 2005). Governments invite citizens with the aim to let them contribute to the development and implementation of policies.

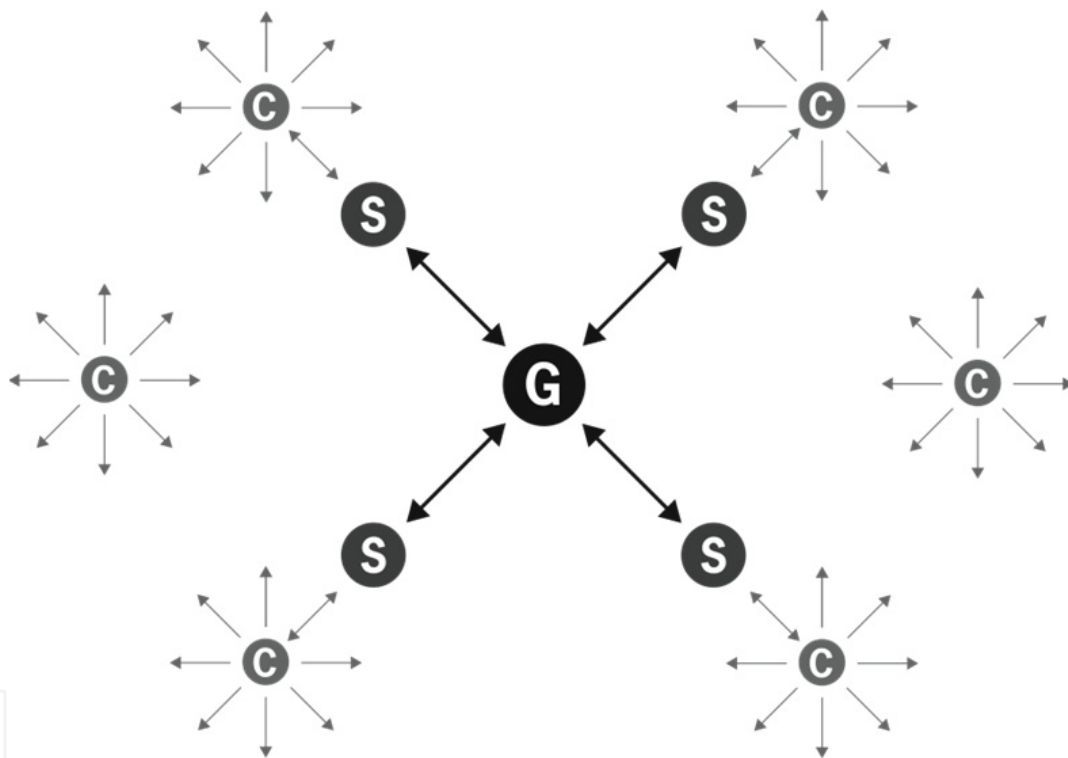


Figure 3. Interaction between government (G), stakeholders (S) and citizens (C): a participation perspective

The idea of public participation is not new. Since the late 1980s, public participation in land use issues has become the dominant discourse, in the Netherlands, but also outside the Netherlands (see Idrissou et al, 2011). Public participation may take place at (or across) various government levels. At the Dutch national level for instance, public meetings have been organized to discuss with citizens issues such as genetic modification of food products and nature conservation policies. In addition, citizen panels of the Ministry of Food and Nature are regularly consulted for the development of policies for sustainable food production. At the local level it is common that citizens are consulted for the design of public space in their neighbourhood.

Practices of public participation, however, do not always result in success. In the first place, we can notice a limited reach in society. Concrete efforts to organize participation in most cases do not involve more than a selected group of citizens, namely the so-called stakeholders that have an interest in the problem domain of which representatives are invited by the government to discuss and negotiate problem-definitions and possible solutions. There are many citizens who are not willing or not able to get their problem perceptions on the agenda of the government. Research of the way governments act in cases of conflict in public space shows that several preconditions have to be met before policy-windows are opened (Van Lieshout et al, 2008; see also Kingdon, 2002). The problem should be well-defined and solvable, and the political context should ask for dealing with the issue. We touch upon the phenomenon of self-referentiality as an inherent characteristic of governments, reducing reality to what is measurable and solvable (Wagemans, 2002).

Second, related to public participation, both in literature and in reality, a rather limited view on how people actually behave can be experienced. Public participation often starts from rather simplistic and prejudged ideas concerning people's motivations, possibilities and restrictions as well as how they behave in groups. Very limited attention is paid to what actually happens between people, including, for instance, processes of community development, processes of inclusion and exclusion, and processes of changing power-relationships, both within and between different groups in society. In addition, the reasonability and intelligence of people are systematically underestimated. Instead people are more often than not viewed as if they always behave in a completely selfish way, only concerned about money. For problems to be solved people only should change their behaviour: they should be open, honest, perfectly listening to each other and be ready to give in. In other words, it is not about understanding actual behaviours of people, but about striving after a sort of ideal behaviour that has to bring solutions.

Third, within the public participation model, instead of capitalizing on differences and diversity, we find a striving after consensus. In cases of complex land use issues this is in most cases neither realistic nor does it contribute to effective problem-solving because it takes away a lot of creativity and easily results in unsolvable impasses (Aarts and Leeuwis, 2010).

Finally, and maybe most important, efforts of public participation keep showing an obstinate illusion of central steering. It is still the government who defines the problem, including the direction for solution. The most important dilemmas of steering by participation concern matters of responsibility for the final result and of realizing ambitions, mainly expressed by the plea for the so-called 'primacy' of democratically elected bodies which is vested in the constitution. In the context of land use planning these dilemmas are often solved by simply denying people who bring in ideas that do not fit with the ambitions that have already been formulated by the government beforehand (Van Bommel et al, 2009; Turnhout et al, 2010). This may result in citizens that do not want to participate anymore, and instead start organizing themselves to realise their own ambitions in their own way. In other words, on the one hand, the government, in spite of their participation initiatives sticks to their power to decide what to do. On the other hand, by simply placing them

outside the formal process, groups of citizens regain what Foucault has called productive power (Van der Arend, 2007: 53), referring to a certain amount of autonomy and freedom. The risk is that governments who apply public participation as an additional form of instrumental steering - which is the case when space for negotiation is lacking - create their own powerful antagonists (Turnhout et al, 2010).

It can be concluded that both the instrumental perspective and public participation that starts from a fixed policy tend to neglect the idea of citizens being active agents, interacting with each other and organizing themselves in order to attain their goals, for themselves and for others in their environment (Aarts & Leeuwis, 2010). A more advanced form of participation is the organizing of public commitment, in which an individual is asked to make a commitment to certain behaviour(s) in the presence of other people. In the social psychological literature, commitment-making is generally seen as a promising intervention technique (Abrahamse et al. 2005; De Young 1993; Dwyer et al. 1993; Katzev and Wang 1994) and has been shown to influence a wide range of behaviours. Public commitment can influence behaviour in a number of ways (Lokhorst et al., in press b). First, it can change people's self-image such that the new behaviour becomes a part of their self-identity. Second, it can evoke a willingness to conform to either a societal or personal norm to engage in the behaviour in question. Third, it can set in motion a process generally referred to as cognitive elaboration (Petty and Cacioppo 1986), a process whereby the individual elaborates on the possible reasons to engage in the behaviour and strategies to accurately perform the behaviour, resulting in a strong positive attitude towards the behaviour.

In the domain of nature conservation, commitment making has been shown to affect people's intention to engage in conservation. In a study by Lokhorst et al. (2010), farmers were invited to participate in study groups in which they received feedback on their current conservation efforts. In this setting, farmers were asked to publicly commit to improving these efforts. A year later it was found that those who had made such a commitment showed actual improvement in terms of intention to conserve and area of (semi-)natural habitat. Commitment making seems like an effective tool, but requires working together with local groups and small-scale networks in order to truly be effective. It needs, in other words, to be realised in direct interaction with the people involved. This invites us to explore a third perspective: the network perspective.

4. The network perspective

Already in the seventies the policy-scientist Scharpf (1978) argued that governments would lose their central and steering role. Scharpf referred to the tendency of increasing interweaving and organizational fragmentation within society. He predicted that governments would not be able to function without the co-operation of countless organizations and institutions. As a result, policy processes would have a 'network-like' structure (Scharpf, 1978).

Today, the idea that policies are shaped by 'pulling' and 'pushing' in complex interactions between different stakeholders has become commonly understood. Policy-processes are

considered as on-going negotiation processes of which it is difficult to predict the results. Not only do circumstances change continuously, the figurations that people form on the base of their mutual dependences, continuously change as well (Elias, 1970). They shift, according to what is happening between them and in the world around them.

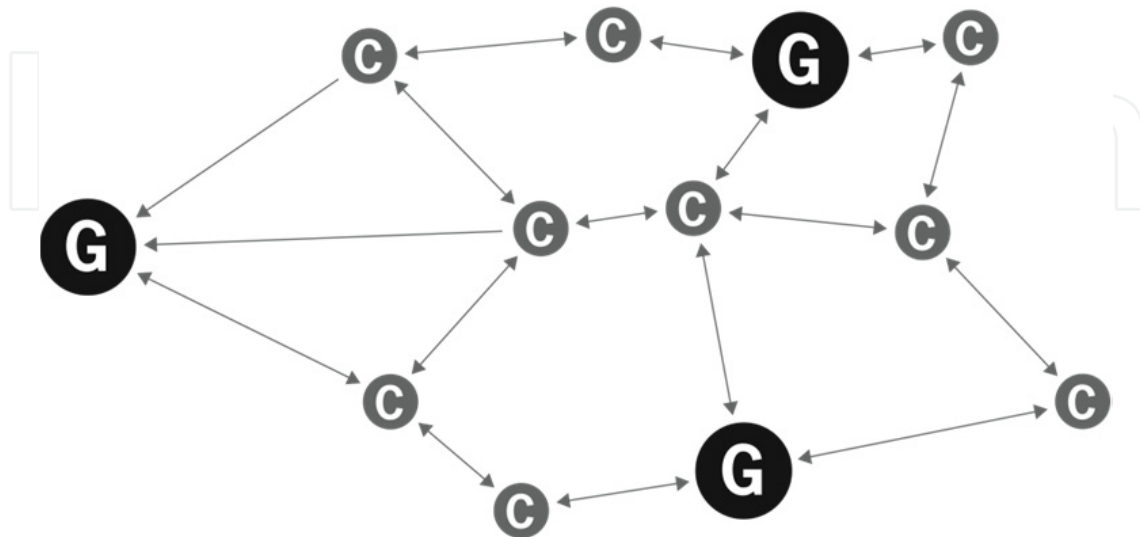


Figure 4. Interaction between government (G) and citizens (C): a network perspective

In view of unexpected developments decisions can (and will) be revised continuously. Thus, policies will eventually take shape in the interactions between different parties, involved in a network of a specific policy-domain and constantly trying to influence the process. This insight asks for further exploring the significance of a network perspective for the development and implementation of land use policies.

The network perspective refers to an endless collection of what Manuel Castells (2004) calls 'interacting nodes', either people who have a special position or a combination of roles and functions that enable them to connect different networks, or specific technologies or policies that make different networks become active (Van Dijk et al, 2011). Such networks are neither centrally steered nor fixed, but instead constantly shaped through the pushing and pulling by different stakeholders who continuously do efforts to influence the situation. The network perspective thus starts from the assumption that people, instead of being passive and opportunistic, are active agents, interacting with each other and organizing themselves in order to get things done. In this perspective the role of governments is not to organize and manage a top-down or bottom-up process, but rather anticipate and make use of the self-organizing ability and initiatives of people. Operating in this mode has important implications for how a government interacts with society in order to get things done. It implies that governments must be alert, and constantly gather information about what happens in society, paying attention to informal networks. In doing so, it must develop a sensitivity for coinciding developments, and create room for experimentation especially 'where rules are not applied or are not yet developed' (Hüsken and De Jonge, 2005: 7). It may also need to redirect emergent developments at an early stage in case these are likely to go against the public interest and / or have unacceptable effects for specific groups of future

generations. This requires a pro-active attitude in contacting societal actors and opening negotiations with them. In short, governments must, on the one hand, 'set free' and, on the other hand, 'stay connected'. This third mode of operating is in part an alternative to the instrumental and the participation perspective, in that there may be domains in which a government wants to delegate responsibility to societal forces without the deliberate organization of a participatory process. However, even when a government chooses for an instrumental mode or wants to organize a participation trajectory (e.g. for reasons of creating legitimacy and / or formal commitment), there will be a need to make use of a network perspective. As we have seen, self-organizing dynamics will emerge, whether a government likes it or not. Hence, governments will have to develop the capacity to apply the three perspectives in an alternating way, and forge connections between them when needed.

In sum, integrating the three perspectives results in a set of relevant points of attention for governments when relating with society in order to develop and implement environmental land use policies:

1. being constantly alert, by watching and being continuously informed about what is happening in society;
2. providing the opportunity for coincidences to take place, by promoting and valuing diversity;
3. creating room for experimentation, by leaving some space between rules and reality;
4. connecting to what moves people, by co-constructing recognizable and understandable stories;
5. problematizing the issue of societal accountability, instead of being focused only on rules and legislation;
6. intervening if needed which implies a clear feeling of direction (see Aarts et al., 2007);
7. working together with existing local groups and small-scale networks

5. Alternative views on change, communication and planning

In line with the dominance of the instrumental approach, we have become used to interpreting processes of change as goal-oriented activities where the use of a certain set of instruments will lead to the desired effect. However, most changes come about in a very different way. When looking to society from a network perspective we become aware of the fact that in many cases it is not as much the causality that determines the course of things, but rather the confluence of events at a certain point in time. In other words, it is the specific context that is the deciding factor. Moreover, whether it is a marriage, an economic crisis, the image of an organisation, or the design and use of land, structures and changes cannot be understood or explained by the behaviour of an involved individual (Elias, 1970, p. 148). Mutual interdependence between people and the way in which this is formed ultimately determine the course of things. People's activities and behaviours must therefore be understood and explained from the social bonds they have formed via the networks they are part of. In the words of Norbert Elias:

'From this intertwining, from the interdependence of people comes an order of a very specific nature, an order that is more compelling and stronger than the will and reason of each individual person that forms a part of the entwinement' (Elias, 1982, p. 240).

The focus on interdependence and interaction in relation to change also creates the necessity for a broader view of communication. Thinking in terms of individual senders and receivers, messages and channels, misses the target when we aim for an integral perspective on land use planning. In a broader view of communication, the interactions between people and groups of people are the unit of analysis. It is in such interactions that meanings are constructed, confirmed or contested. The dynamics brought about by communication are part of a whole variety of networks in which meanings are continuously negotiated.

The emphasis on interactions as the source and carrier of change stands in sharp contrast with the tendency to plan in terms of goal / means that characterises our society and in which many planners still seem to believe. It is high time that we start applying the alternative planning models that have been developed by now (Whittington, 2001; Stacey & Griffin, 2005; Stacey, 2001). The common essence of these models is that they encompass context and dynamics.

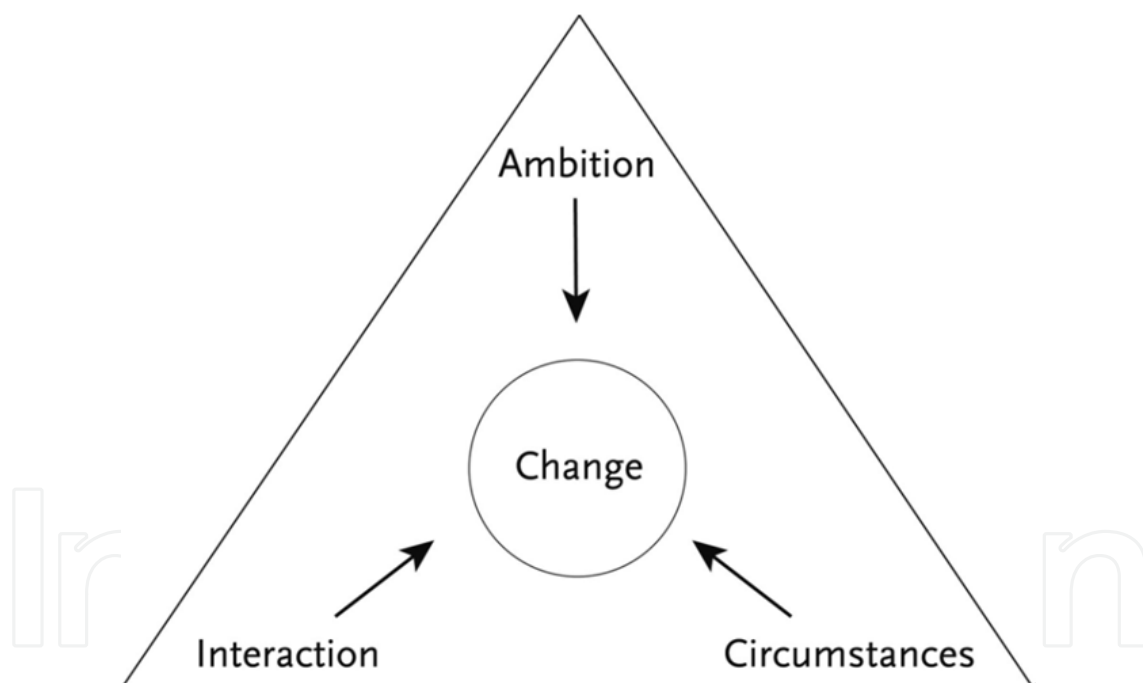


Figure 5. Planning change

Contingency planning is a well-known concept, the basis of which is concrete situations and work is done from one moment to the next. Related to this is incremental planning, dubbed 'muddling through' by Lindblom (1959). The thought behind this is that causal patterns in both social and physical reality are so complicated that centrally driven, top-down interventions have too many unintended and therefore undesired effects. Such encompassing interventions are also undesired from a normative perspective because they assume that there is one regulating point of view and preclude all other rival views.

Incremental planning is based on the presumption that we may make mistakes and miss things (Frissen, 2007). With processual planning, we do have a goal (strategic intent), but the way to get there is not determined. We bet on probable situations, act and reflect on the outcomes. Furthermore, creativity, empathy, a sense of timing and even humour are important preconditions for a constructive process.

These views of change, communication and planning make clear that there are no recipes or methodologies for strategic planning, nor are there guarantees of success. However, if we take dynamics and relative unpredictability as our basis, we are better able to act consciously and respond to specific contexts more adequately. In other words, *we can become better planners if we take into account our limited ability to plan*. A good strategist is like a coach who follows a game closely, looks at what the players are doing and, based on that, gives instructions for moments at which action can be taken. After all, ambitions are realized in interactions with the players, and optimal use is made of the circumstances as they occur at particular moments.

6. Conclusion

Governments will never be 100% successful in steering their citizens; self-organized dynamics and other unexpected developments will continuously emerge. Therefore governments need to recognize the added value of an integral perspective and develop the capacity to apply this perspective. Although a lack of control may be uncomfortable for planners and governments, unpredictability is also an opportunity for the emergence of unexpected perspectives and ideas that may support the solution of problems in the domain of environmental planning. Several developments in the world of planning are already oriented to a broader perspective on society. Our contribution is meant to support this new thinking in a meaningful way

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7. References

Aarts, M.N.C. & C.M.J. van Woerkum (1994). *Wat heet natuur? De communicatie tussen overheid en boeren over natuur en natuurbeleid* (What is nature? Communication between

* Corresponding Author

- government and farmers over nature and nature policies). Wageningen: Wageningen University, Communication Strategies Group.
- Aarts, N. & C. van Woerkum (2002). Dealing with uncertainties in solving complex problems. In: Leeuwis, C. & R. Pyburn (eds.) *Wheelbarrows full of frogs. Social learning in rural resource management*. Van Gorcum, Assen,. 421-437.
- Aarts, N. , C. van Woerkum & B. Vermunt (2007). Policy and Planning in the Dutch Countryside: The Role of Regional Innovation Networks. *Journal of Environmental Planning and Management*. 50, 6, 727-744.
- Aarts, N. and C. Leeuwis (2010). Participation and Power: Reflections on the Role of Government in Land Use Planning and Rural Development. *Journal of Agricultural Education and Extension*, 16, 2, 131-145.
- Abrahamse, W., Steg, L., Vlek, C., & Rothengatter, T. (2005). A review of intervention studies aimed at household energy conservation. *Journal of Environmental Psychology*, 25, 273-291.
- Arts, B. & Van Tatenhove, J. (2005) Policy and Power: A Conceptual Framework Between the 'Old' and the 'New' Policy Idioms. *Policy Sciences*, 37, 339-356.
- De Young, R. (1993). Changing behavior and making it stick. The conceptualization and management of conservation behavior. *Environment and Behavior*, 25, 485-505.
- Dwyer, W. O., Leeming, F. C., Cobern, M. K., Porter, B. E., and Jackson, J. M. (1993). Critical review of behavioral interventions to preserve the environment: Research since 1980. *Environment and Behavior*, 25, 275-321
- Elias, N. (1970) *Was ist Soziologie? (What is Sociology?)* München: Juventa.
- Elias, N. (1982). *Het civilisatieproces. Sociogenetische en psychogenetische onderzoeken (2) (The civilization process. Sociogenetic and psychogenetic studies)*. Utrecht, Het Spectrum
- Frey, B.S. (1997). On the relationship between intrinsic and extrinsic work motivation. *International Journal of Industrial Organization*, 15, 427-439.
- Frissen, P. (2007). *De staat van verschil. Een kritiek van de gelijkheid (The existence of difference. A critique of equality)*. Amsterdam, Van Gennep
- Glasbergen, P. (Ed.) (1995) *Managing Environmental Disputes. Network Management as an Alternative*. Dordrecht: Kluwer Academic Publishers.
- Hajer, M. & Wagenaar, H. (2003) *Deliberate Policy Analysis. Understanding Governance in the Network Society*. Cambridge: Cambridge University Press.
- Hüsken, F. & De Jonge, H. (Eds) (2005) *Schemerzones & Schaduwwijden. Opstellen over ambiguïteit in samenlevingen (Twilight Zones & Flipsides. Essays on Ambiguity in Societies)*. Nijmegen: Roelants.
- Idrissou, L., N. Aarts, A. van Paassen & C. Leeuwis (2011). The Discursive Construction of Conflict in Participatory Forest Management: The Case of the Agoua Forest Restoration in Benin. *Conservation and Society*, 9, 2: 119-131.
- Katzev, R. D., & Wang, T. (1994). Can commitment change behavior? A case study of environmental actions. *Journal of Social Behavior and Personality*, 9, 13-26.
- Kingdon, J.W. (2002) *Agendas, alternatives, and public policies*. Longman, New York.
- Lindblom, Ch.E. (1959). The Science of Muddling Through. *Public Administration Review*, 19, 79-88

- Lokhorst, A. M., Staats, H., Van Dijk, J., Van Dijk, E., & De Snoo, G. (2011). What's in it for me? Motivational differences between farmers' voluntary and subsidized nature conservation practices. *Applied psychology – an International Review*, 60, 337-353.
- Lokhorst, A.M., Van Dijk, J., Staats, H., Van Dijk, E., & De Snoo, G. (2010). Using tailored information and public commitment to improve the environmental quality of farm lands: An example from the Netherlands. *Human Ecology*, 38, 113-122.
- Lokhorst, A. M., Staats, H., Van Dijk, J., & de Snoo, G. R. (in press a). Biodiversity on farmlands: the crucial role of the farmer. In: Kruse, L. (Ed.). *Naturschutz und Freizeitgesellschaft*.
- Lokhorst, A. M., Werner, C.M., Staats, H., Van Dijk, E., & Gale, J. (in press b). Commitment and Behavior Change: A Meta-analysis and Critical Review of Commitment Making Strategies in Environmental Research. *Environment & Behavior*.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.
- Scharpf, F.W. (1978) Interorganizational Policy Studies: Issues, Concepts and Perspectives. In: Hanf, K. and Scharpf, F.W. (Eds). *Interorganizational Policy Making: Limits to Coordination and Central Control*. London: Sage, 345 - 370.
- Stacey, R.D. (2001). *Complex responsive processes in organizations. Learning and knowledge creation*. London, Routledge
- Stacey, R.D. and D. Griffin (eds) (2005) *A complexity perspective on researching organizations*. London, Routledge.
- Turnhout, E., S. Van Bommel and N. Aarts (2010). How Participation Creates Citizens: Participatory Governance as Performative Practice. *Ecology and Society* 15, 4: 26. [online] URL: <http://www.ecologyandsociety.org/vol15/iss4/art26/>
- Van Bommel, S., Turnhout, E., Aarts, M.N.C. & Boonstra, F.G. (2008) Policymakers are from Saturn . Citizens are from Uranus. Involving Citizens in Environmental Governance in the Drentsche Aa Area. Wageningen: Statutory Research Tasks Unit for Nature and the Environment.
- Van Bommel, S., N. Röling, N. Aarts & E. Turnhout (2009). Social learning for solving complex problems: a promising solution or wishful thinking? A case-study of multi-actor negotiation for the integrated management and the sustainable use of the Drentsche Aa area in the Netherlands. *Environmental Policy and Governance*, 19, 6, 400-412.
- Van den Arend, S. (2007). *Pleitbezorgers, procesmanagers en participanten. Interactief beleid en de rolverdeling tussen overheid en burgers in de Nederlandse democratie (Advocates, Process Managers and Participants. Interactive Policy and the Role Division between Government and Citizens in Dutch Democracy)*. Delft: Eburon.
- Van Dijk, T., Aarts, N. & De Wit, A. (2011). Frames to the Planning Game. *International Journal of Urban and Regional Research*, 35, 5, 969-987.
- Van Lieshout, M. & N. Aarts (2008). "Outside is where it is at!" Youth' and immigrants' perspectives on public space. *Space and Culture*, 11, 4, 497-513.

- Van Woerkum, C.M.J., M.N.C. Aarts & M.M. van der Poel (1999). Communication in policy processes: reflections from the Netherlands. *European Spatial Research and Policy*, 6, 75-87.
- Wagemans, M. (2002) Institutional conditions for transformations. A plea for policy making from the perspective of constructivism. In C. Leeuwis and R. Pyburn (eds) *Wheelbarrows full of frogs. Social learning in rural resource management*. Koninklijke Van Gorcum BV, Assen, 245 - 257
- Whittington, R. (2001). *What is strategy and does it matter?* London, Routledge