The structure of citizen opposition

Empirical explorations of societal discourses in the field of agricultural biotechnology, animal governance and land-use policies

Claar de Brauw
Members of the thesis committee:

prof. dr. J.F.G. Bunders, Vrije Universiteit Amsterdam
prof. dr. H.G.J. Gremmen, Wageningen Universiteit
prof. dr. P. Osseweijer, Technische Universiteit Delft
prof. dr. A.N. van der Zande, Wageningen Universiteit
The structure of citizen opposition

Empirical explorations of societal discourses in the field of agricultural biotechnology, animal governance and land-use policies

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad Doctor aan
de Vrije Universiteit Amsterdam,
op gezag van de rector magnificus
prof.dr. F.A. van der Duyn Schouten,
in het openbaar te verdedigen
ten overstaan van de promotiecommissie
van de Faculteit der Aard- en Levenswetenschappen
op maandag 8 september 2014 om 9.45 uur
in de aula van de universiteit,
De Boelelaan 1105

door

Clara Cunera de Brauw

geboren te ’s-Gravenhage
Promotor:
prof.dr. Tj. de Cock Buning
Table of contents

Chapter 1  Introduction  11
1.1 Citizens opposing policies  11
1.2 The role of citizens in the policy making process  14
1.3 Objective of this thesis and research question  20
1.4 Research approach  21

PART 1:  The structure of citizen opposition  31
The development of models to analyse different forms of citizen opposition

Chapter 2  Improving the precision of the Nimby concept with a new process model of citizen opposition  33
2.1 Introduction  33
2.2 Nimby in the literature  35
2.3 Quadrant model of opposition positions  42
2.4 Local response model  43
2.5 Opposition drivers  45
2.6 Discussion  50

Chapter 3  Nimby, or how do the rural neighbours respond to genetically modified (GM) crops?  53
An exploration of the structure of reactions by inhabitants in rural communities in The Netherlands to the commercial cultivation of GM crops in their community
3.1 Introduction  54
3.2 Analytical framework: the NIMBY model and research questions  56
3.3 Methodology  61
3.4 Round 1: is GM a topic to be discussed in rural communities?  67
3.5 Round 2: the dynamics of the rural GM debate  69
3.6 Local discussions compared with the national debate  72
3.7 Discussion  76

PART 2:  The structure of citizen opposition in detail  81
The results of empirical studies on the role of non-content related factors

Chapter 4  How to decide when information is hazy?  85
The case of GM crop cultivation in the Netherlands
4.1 Introduction  85
4.2 Methodology  89
4.3 Results  93
4.4 Reflection: dealing with uncertain risks in line with Van Asselt & Vos?  100
4.5 Discussion  101
4.6 Conclusions  105

Chapter 5  Does the law trigger citizen opposition?  107
Current and future regulations of citizen participation in land-use decision-making in the Netherlands: an analysis
5.1 Introduction  107
5.2 Reasons and criteria for citizen participation in policymaking  108
5.3 Reflections on citizen-participation in Dutch land-use planning law  114
5.4 The Future: the proposed regulation on citizen participation in the Draft Spatial Planning Act  122
5.5 Conclusions and recommendations  125

PART 3: Foreseeing societal conflict  129
A model as a means to improve constructive deliberation

Chapter 6  Anticipating societal conflicts  133
The development of a theory-based research model to explore future discourses
6.1 Introduction  133
6.2 Exploring future discourses  134
6.3 Building blocks for a research model on future discourses  135
6.4 The future discourse (FD) - model  140
6.5 Two cases studies illustrating the development of the FD-model: the design, data collection and analysis.  144
6.6 Discussion: the value of a future discourse model: modelling complexity.  151

Chapter 7  Future hot topics on animal – human interaction in the Netherlands  157
## A systematic exploration of societal discourses

- **7.1 Introduction** 157
- **7.2 Predicting future societal debate: the future discourse model** 159
- **7.3 Methodology** 161
- **7.4 Animal perception in the Netherlands in 2011: results of the questionnaire** 167
- **7.5 Three-level building blocks to examine the future** 170
- **7.6 Hot or not? Animal themes for societal conflict** 176
- **7.7 Discussion** 178

## Chapter 8 Epilogue

- **8.1 What characteristic mechanisms of (local) citizen opposition can be distinguished?** 182
- **8.2 Reflections on the future discourse model as a method to foresee citizen opposition** 192
- **8.3 Recommendations to improve deliberative governance** 193
- **8.4 From local opposition to national protest – a reflection on the results of this research** 199
- **8.5 Recommendations for further research** 201

## References 205

## Summary 219

## Samenvatting 231

## Dankwoord 243
Account

Chapters 2 to 7 are based on six co-authored articles that have been published or submitted to peer reviewed journals. Therefore, in this thesis, the we-form is used.

Chapter 2
C. de Brauw, M. van Amstel, Tj. de Cock Buning, Improving the conceptual precision of Nimby with a new process model of community opposition, *Journal of Planning Literature*, accepted for publication 2013, pending revisions.

Chapter 3
Tjard De Cock Buning, Claar De Brauw, Mariette Van Amstel, NIMBY or how do the rural neighbours respond to genetically modified (GM) crops? An exploration of the structure of reactions by inhabitants in rural communities in The Netherlands to the commercial cultivation of GM crops in their community, *Geoforum*, 42 (2011) 349–361.

Chapter 4
C. de Brauw, M. van Amstel, Tj. de Cock Buning, How to decide when information is hazy? The case of GM crop cultivation in the Netherlands, *Geoforum*, submitted for publication 2013, under review.

Chapter 5

Chapter 6
Tj. de Cock Buning & C. de Brauw, Anticipating social conflicts: The development and application of a theory-based research model to explore future discourses, *Technological Forecasting and Social Change*, accepted for publication 2014, pending revisions.

Chapter 7
Chapter 1

Introduction

1.1 Citizens opposing policies

Citizens can oppose decisions made by their (democratically elected) government bodies: they can organize demonstrations, draft petitions and even start legal procedures to stop them from being effectuated. Examples are everywhere. Land-use planning is one of the policy-terrains in which virtually every decision seems to result in citizen opposition. Obvious examples include the construction of facilities such as landfills, windmills and prisons and enlarging highways or railroads, but it generally affects all types of land-use planning, including the development of housing, industrial sites, green-areas and facilities such as hospitals and schools. Citizens often also oppose the application of new scientific and/or technological developments. Recent examples of this type of development that resulted in considerable opposition are the construction of a second nuclear power plant in Borssele, plans for underground storage facilities for natural gas near the villages of Bergen and Barendrecht and proposed trials to abstract shale gas in several Dutch communities. But the persistent debate on gene-technologies and animal testing are also examples of citizens opposing government policies.

All these examples refer to citizens actively expressing their discontent or anger with (proposed) decisions; they can do so in many different ways. In addition to mass demonstrations and protest-gatherings, people can create or sign petitions, put-up posters, go lobbying, perform door-to-door visits or start administrative or legal proceedings. In recent years, the internet has added still other means to express discontent over a political cause. While mass-demonstrations and nation-wide campaigns may make the headlines, the vast majority of actions is aimed at local authorities and is thus invisible to the public at large. But it is especially these small scale or local protests that are generally considered a negative phenomenon. Local citizen protests are associated with selfishness, rigidity and a lack of respect for the democratically elected government. Angry citizens are perceived as ‘bad’ citizens, who place their own interest above that of others or society at large, and their arguments are seen as a reflection of the ‘Not-In-My-BackYard’ (Nimby) perspective. From policymakers’ point of view, citizens who object to decisions of their government and stand up for their interests are problematic because their actions prolong decision-making and influence the way in which these decisions can be effectuated. This results in long(er) periods of administrative uncertainty and costs
for those involved. Non-opposing citizens, and especially those who agree with the plan or decision, can perceive opposing actions as a threat: a small group being able block the implementation, or even have the decision adapted to its own wishes. As a result, protesting citizens are often considered a nuisance and set aside as interfering selfishly with democratically made decisions.

At the same time, however, over the last decades a trend is becoming visible towards more participatory, more inclusive forms of policymaking (Hisschemöller, 2005). In these forms of policymaking, more than in traditional top-down procedure, citizens are included in defining and deciding on policies. Whereas their input was traditionally limited to participating in elections, interactive policymaking implies more active involvement of citizens and stakeholders in the policymaking process (Hoppe, 2011, p.163). Citizen involvement has also moved from ‘end of pipe’ (after a decision was taken) to participation in earlier phases of the policy making process (Hajer, 2003). In the most recent development, that is referred to as active citizenship, ‘third generation participation’ (Lenos et al., 2006) or ‘do-ocracy’ (Van de Wijdeven, 2012), citizens are the initiators and executors of a project or plan, while the government only facilitates the process.

Although direct citizen participation is not considered a positive development by all and some even consider it a threat for representative democracy, proponents argue that direct involvement of citizens has positive effects on democracy (Michels & de Graaf, 2010) and contributes to the quality and effectiveness of the decision made (Applestrands, 2002; Woolley, 2010; van Dam et al., 2008). Recent publications of the Dutch Ministry of Interior and Kingdom relations (“De Doe-Democratie - Kabinetsnota ter stimulering van een vitale samenleving” BZK, 2013), as well as the scientific councils and advisory bodies to the Dutch government (WRR, 2012; RMO, 2013) underline the positive stance of policymakers on active citizen involvement.

All in all, when it comes to the role citizens play in policy making, the relationship between citizens and government is not straightforward. Whereas their participation is generally encouraged, their influence through active opposition is criticized. This thesis focuses on citizen opposition responses and aims to deepen the understanding of what happens when citizens protest against decisions of a government. In this research we take the position that citizen opposition deserves to be taken seriously. We concur both with Hajer (2009) who argues that there are at least three deficiencies in the way policy is made that make it is unwise for governments to ignore citizen opposition, and with Verhoeven (2009) who pleads that citizen-opposition should be considered as a welcome correction to these shortcomings. This implies that this thesis takes a constructive perspective on citizen opposition, viewing it as a phenomenon that could provide a positive contribution to policymaking. We will stay away from both the debate on the positive or negative aspects of citizen opposition, and possible means to reduce citizen opposition. Whether it furthers democracy or perverts it, as some claim, is thus not the object of this thesis. Nor is the question whether such protests lead to ‘better’ decisions in any objective sense. The object of this thesis is to contribute to the understanding of opposition-responses to decisions of the government, and to use this insight to reflect on ways in which the government can foresee such responses and respond in ways that reinforce the positive aspects of the phenomenon.
The degree to which citizen opposition-responses occur, the controversial character of these responses and the way in which they are dealt with, ask for a deeper understanding of the phenomenon and the mechanisms underlying it. However, at least in the Netherlands, empirical studies on this subject with a focus on identifying explanatory mechanisms, are fairly limited (Verhoeven, 2009). Recently, Verhoeven (2009) made a contribution to the empirical knowledge that does exist, in a detailed investigation of a specific case of local opposition: citizen opposition to the annexation of villages by the city of The Hague. Other scholars, such as Klandermans (1997), Klandermans & Oegema (1987) and van Stekelenburg (2006) have focused on the motivation of citizens who participate in mass demonstrations.

**Box 1.1: Futrell’s chemical-weapon publication as inspiration**

One of the inspirations for the research presented in this thesis is the 2003 publication by Futrell. The case study presented in that article focuses on the development of a Nimby response over time and through different factors, illustrated by the dispute over the localization of a chemical weapon disposal in the U.S. Central argument of the publication is that positions in a debate can change according to the context of the issue. Though initially, most citizens were doubtful (but not negative) about the local incineration of chemical weapons, a ‘not in my backyard’ position only developed in response to the persistent hazy information and untrustworthy responses by the local government and U.S. army (as initiating party) to questions of local inhabitants. Moreover, the position citizens took against the chemical weapon disposal shifted as the debate developed.

Four aspects of this study were inspiring for the research we have performed and present in this thesis.

1. Futrell’s study focuses on the development of opposition responses as a process over time and specifically on processes prior to the overt expression of opposition. In this publication, a Nimby case was studied as a process, in which “shifts in the context of movement action may lead to revisions in that framing”, referred to as “frame transformations”. We, too aim to understand why Nimby (and other citizen opposition responses) emerge. Futrell’s study inspired us not to consider citizen opposition as a phenomenon, but as a process. Moreover, we agree that the most interesting part of a process could be the stage prior to overt opposition. We agree with Futrell to see Nimby as an outcome, more than the cause of protest.

2. Futrell’s study contests the idea that protest is a fixed position. Instead, NIMBY – or opposition responses - are considered as a dynamic process, in which framings can vary according to the circumstances or context of the dispute. We have taken up the notion of opposition as a (potentially) dynamic response, not only to further specify the Nimby response, but also in the development of a model to foresee topics of citizen opposition in the future. However, where Futrell argues that ‘NIMBYism, has a fluid, potentially changeable character’, we will argue that the dynamic character of the response is essential to qualifying it as a Nimby response and that, for the sake of clarity, Nimby should be distinguished from other responses.

3. Futrell inspired us to look at both content related factors and non-content related factors as stimuli for opposition responses. Futrell argues that the prevailing presumption on Nimby - as a position based on worldviews, attitudes and beliefs - neglects “important social processes and contingencies involved in the emergence of NIMBY claims” (p.360).

4. Finally, the concept of ‘information haze’ is introduced as a potentially important factor in Nimby responses. We took up the suggestion made by Futrell to further study the influence information hazes have on citizen reactions to developments.

During my time at the Athena Institute (from 2007 till 2008 and from 2011 till 2013), I had the opportunity to work on three projects that focused on aspects of citizen opposition. During these
projects, we gained insight into the motives of citizens to oppose a policy-decision and the ways in which these opposition responses develop. Moreover, we collected empirical data that can contribute to the understanding of the role that several factors play in such responses. This thesis presents the insights that were gained in the course of these projects. It also presents the results of a project in which I did not take part in the empirical data-collection (the case on animal testing). I did work on the conceptualization of the model as well as its further development in the following case, the case of animal governance. In that case, I was again involved in the empirical data collection. This thesis explores the field of citizen opposition in order to contribute to the systematic knowledge on the phenomenon and propose methods that can be used to address citizen protest constructively. Before the objectives and research questions of this thesis are presented, some basic ideas on policy-making in the Netherlands as well as some more general developments in Dutch society will be described that we consider to be relevant for the relationship between citizens and the government.

1.2 The role of citizens in the policy making process

1.2.1 Theories on policymaking

Public policies are first developed, subsequently decided on and finally implemented. There are many ways to do this, and different theoretical models have been developed to systematically analyse and compare the ways in which decisions on public policies are reached. One of the most commonly used models divides the policy process into stages or phases. Lasswell’s (1956) introduction of a seven-stage chronological model formed the basis for the now commonly used typology of a policy process in five stages, distinguishing: agenda-setting, policy formulation, decision making (adoption), implementation, and evaluation. Although initially seen as a linear model, it was soon developed into a circular model, in which the evaluation of a policy leads to agenda-setting or formulation of new or adapted policies (Jann & Wegrich, 2007).

This five stage circular model remains the most widely used, despite critical observations by scholars, to the effect that the scope of this model is too limited and does not, for example, include the interaction between different policies, and the observation that in the real world policymaking hardly ever follows the stages of the policy cycle. For our purpose the model is useful to distinguish between different roles citizens (can) play in the policy-process. Hereunder, we will briefly describe each of the five stages. Relevant theories and developments that are relevant to these stages will be discussed in the description of each of individual stages.

**Agenda setting**

Starting point for policy making is to define a (social) problem and classify that problem as a policy problem that requires government attention. In order to end up on the agenda (agenda-setting), a problem must therefore not only exist, but must also be perceived as a problem for which state intervention is needed. Since many problems compete for a spot on the political and policy-agenda,
agenda-setting also implies selection. Although agenda-setting usually refers to the institutional agenda of the government, other institutions and the general public play an important role in selecting issues and defining a problem. Social research on the agenda setting stage has revealed that the selection of issues is not the result of an entirely rational process, but rather the ‘outcome of the interaction between different actors, conditions, information etc. A model that incorporates all these aspects in the process of agenda setting is the policy streams model devised by Kingdon (1995).

In this model Kingdon distinguishes three parallel and separate processes or streams that are important for agenda setting. The first, the problem stream refers to the different social problems or public matters that are relevant at a specific moment and could be given attention to. The idea of a stream suggests how few of these problems can actually receive the attention they might need. Problems can become more visible due to focussing events, or through the efforts of an interest group or other advocate of the issue. The second stream, the policy stream, or solutions stream, refers to the available policy solutions for a problem. As long as there are no options available to address a problem, there seems to be no point in putting the problem on the agenda, or in other words: problems for which a policy solution is available, are prioritized. Political developments take place in the third stream, which is referred to as the stream of political events or the politics stream. Changes in government or administration, as well as the results of elections and shifts in public opinion are examples of developments that can influence the prioritisation of problems on the policy-agenda.

According to Kingdon’s model, an issue is put on the agenda when the three independent streams meet (a policy window). One further essential element in this process is the influence of so called policy entrepreneurs: individuals (or groups of individuals) who promote a problem or solution (or both) over time and in many different places and thereby increase the chance that the problem will reach the policy-agenda. Such entrepreneurs can be professionals such as researchers, lobbyists, journalists or civil servants, but citizens, too, can act as policy-entrepreneurs.

Policy formulation and policy decision
The stage of policy preparation or policy formulation includes the analysis of the problems that have been placed on the agenda in the light of the different needs, wishes and requirements, formulating the objectives for the policy and assessing the potential solutions available. During the stage of decision-making (policy adoption), a formal decision is taken.

Policy implementation and evaluation
The final stages of the policy cycle are the stages of policy implementation and evaluation. During the stage of implementation, the course of action decided on is carried out. Finally, in the stage of policy evaluation, the outcome of the policy process is compared with the policy-problem that it was supposed to solve. Policy-evaluation not only focuses on whether and in what way the intended outcome was achieved, but also on unwanted side-effects and the question whether these should lead to new agenda setting.
1.2.2 Changes in society and implications for citizen involvement in policymaking

At least three changes in society can be mentioned that have affected policymaking and the role citizens play in it. These are (1) the division of power in the policymaking process between state and non-state actors, (2) the type of problems policy has to deal with and (3) the way knowledge is perceived and created. Each one of these changes is discussed in this section.

From government to governance (styles)

In traditional policymaking, authority is centralized and public power is exercised hierarchically through command and control (Hajer, 2003a). The involvement of non-state-actors in this type of policymaking is limited to the right to elect representatives (Hajer, 2003a). The shift from conventional top–down policymaking to more inclusive or participatory policies, also known as ‘new public management’ (Rhodes, 1996), the shift from ‘government’ to ‘governance’ (Hisschemöller, 2005), or shifts in governance (van Kersbergen & van Waarden, 2004) or styles of governing (Stoker, 1998) has been based on the recognition that policy outcomes are not only the result of actions and decisions of the central government (Rhodes, 1996), and that no single actor has enough knowledge or information to solve complex problems (Kooiman, 1993). Although the term ‘governance’ has many different meanings (Rhodes, 1996, Stoker, 1998, van Kersbergen & van Waarden, 2004) scholars refer to ‘a basic agreement’ that “governance refers to the development of governing styles in which boundaries between and within public and private sectors have become blurred” (Stoker, 1998, p. 17). Governance implies “a new method by which society is governed” (Rhodes, 1996, p. 653) that is “pluricentric, rather than unicentric” (van Kersbergen & van Waarden, 2004, p. 151). For this thesis governance is important as a way of policymaking in which citizens can play a (larger) role. The role of citizens in policymaking has been referred to by Lenos et al. (2006) in terms of three generations of participation. Whereas participation in the first generation consists in advising the government or providing information, second generation participation involves citizens in negotiation and deliberative decision-making. Participation procedures of the third generation are characterized by the fact that the government facilitates initiatives taken by citizens in the public domain. This third generation participation, also referred to as do-ocracy (do-it-yourself-democracy), was already mentioned above (section 1.1). Although these generations developed successively over time, they did not replace each other, but can exist simultaneously. Essential difference between these generations of participation is the degree to which participants are involved in and responsible for the final decision. Different degrees of involvement were also developed by Arnstein (1969) in her ‘ladder of participation’, which divides the continuum of public involvement into different stages, ranging from symbolic participation to co-decision.

The different definitions and meanings of the term governance have also led to the differentiation between different governance approaches (van Kersbergen & van Waarden, 2004), versions of governance (Hirst, 2000) or governance styles. An example of the last classification is the distinction that was made in the STAGE project on Science Technology and Governance in Europe (Hagendijk
et al., 2005). As in Arnstein’s ladder, the role of citizens in governance is divided into six categories, ranging from no public input (discretionary government), to full-fledged involvement of citizens in order to reach consensual agreement (deliberative governance). Other types of governance identified in this project are corporatist governance, which recognizes that different interests can be relevant for an issue, but assumes that these can be taken into account in a processes of deliberation that is not open to stakeholders; educational governance, in which governance is oriented towards educating the public, which is perceived as lacking in the knowledge necessary to understand the policies; market governance, that focuses on economic mechanisms of demand and supply as the basis for governance. In this last style the public is perceived as consumers who can influence governance through their decisions on what they do or do not buy. Agonistic governance, finally, is characterised by conflict and confrontation. Policy-making in this style of governance is most likely on topics on which societal positions differ strongly (Hagendijk et al., 2005).

These governance styles are not mutually exclusive, nor are the distinctions between them strict. The empirical research performed in the STAGE project showed that no European state that was included in the study made use of just one of the governance styles. To the contrary: in all cases different problems were handled in different ways.

**Different problems require different governance-styles**

One of the factors that make policymaking increasingly hard is the fact that the problems society is confronted with have become increasingly complex. Many problems are intertwined with other issues (Regeer, 2009). Here we use the term complex problems for what has also been named wicked problems (Rittel & Webber, 1973) or persistent problems (Loorbach, 2007; Rotmans, 2005). Hisschemöller (1993) named these complex problems a special class of policy problems.

On the basis of two characteristics, (1) the degree to which consensus exists on the relevant facts and (2) the degree to which actors involved agree on the norms and values that are relevant to the problem, he made a distinction between structured problems (consensus both on the facts and the values), moderately structured problems (consensus on the values, but not on the facts), badly structured problems (consensus on the facts, but not on the relevant values) and unstructured problems (no consensus on facts or values). Hisschemöller’s typology is relevant, not only because it structures policy problems, but also because it highlights that different types of problems ask for different types of policy-making (governance) (Hisschemöller, 1993; Hisschemöller et al., 2001). Based on two characteristics, the degree of government intervention (high/low) and the degree of public participation (high/low), he also made a distinction between policy as regulation (low government intervention, low public participation), policy as negotiation (low government intervention, high public participation), policy as accommodation or pacification (high government intervention, low public participation) and policy as learning process (high government intervention, high public participation). The types of problems and the type of policymaking to be applied are summarized in table 1.1 below.
Table 1.1: Typology of policy problems and relevant types of policy-making

<table>
<thead>
<tr>
<th>Consensus about values:</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consensus about facts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(knowledge):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Unstructured problem</td>
<td>Moderately structured problems</td>
</tr>
<tr>
<td></td>
<td>Policy as learning process</td>
<td>Policy as negotiation</td>
</tr>
<tr>
<td>Yes</td>
<td>Badly structured problems</td>
<td>Structured problems</td>
</tr>
<tr>
<td></td>
<td>Policy as accommodation/pacification</td>
<td>Policy as regulation</td>
</tr>
</tbody>
</table>

When dealing with unstructured, wicked or complex problems, scholars seem to agree that traditional policy approaches are not appropriate to understand these problems, nor do they lead to their solution (Schön & Rein 1994). When both the relevant values and the relevant facts are contested, neither scientific authority nor value authorities (church, political party, personal interest) can summon up enough support for dealing with the problem at stake. The only feasible policy strategy to deal with these unstructured problems is a ‘policy as learning strategy’. This requires a guided process in which the actors are invited to reflect on each other’s positions, to learn to understand the rationale behind various value-fact arguments and to attempt to find a ‘fair’ third way out. Whereas the three other policy strategies are oriented towards solving the policy-problem, dealing with unstructured problems requires the problem to be structured first. Pushing for a regulation as a solution for an unstructured problem can disregard both the complexity of the relevant facts and the various values at stake. A government applying this type of policymaking to unstructured problems risks losing its authority for failing to take people seriously.

More than other types of governance, deliberative styles thus seem suitable for dealing with unstructured problems. For citizen involvement, these developments imply that, as problems become increasingly complex, their involvement is increasingly necessary, not only for the legitimacy of the policy, but also to structure the problem and the interests involved.

Changing role of science in policy-making

Finally, the relationship between science and society has changed. Although the vast majority of people still trust in ‘science’ more than in any other source of information, it cannot be denied that scientific knowledge is increasingly contested in the public arena. Society has started to speak back to science (Nowotny et al., 2001). Different theories exist on why public trust in science has decreased; most of these theories are associated with the developments of modern society. Beck (1992) criticizes science for being too sceptical and critical of itself, thereby undermining its credibility and ability to influence the public debate. Its inability to provide clear answers for complex problems is also thought to reduce trust in science (Gauchat, 2012).

Moreover, a shift has taken place from science as the only source of knowledge towards other sources that can be relevant for policymakers. Knowledge is no longer the exclusive terrain of scientists. It is now also developed in cooperation with other organizations, institutions and citizens. This change
Introduction

is one of the characteristics of the shift from mode 1 knowledge-production to mode 2 knowledge-production (see Regeer, 2009). Beck (1992) refers to this shift as a movement from scientific knowledge towards socially robust knowledge. Nowotny et al. (2001) use the concept of an agora to symbolize a space where science and ‘the public’ meet and where different views can be expressed and contested. The agora is the place where new networks are formed; it is populated not only by the traditional institutions through which dominant knowledge is generated and traded, but also by various groups who contest, mediate, consult and negotiate the production of knowledge, thereby creating socially robust knowledge.

As a consequence of these shifts in the generation of knowledge, the role of science in policymaking has changed: science is no longer expected to provide certainty, but instead is seen as a provider of new (uncertain) input for discussions (Kupper, 2009). Paula (2008, referring to Groenewegen et al., 1998) distinguished four roles that knowledge can play in policymaking, each related to a type of policy-problems identified by Hisschemöller. In ‘structured problems’, the judgment of experts is considered as the relevant truth and knowledge functions as a problem solver (Paula, 2008). In ‘badly structured problems’, where the relevant facts are not contested but the problem-definition and the relevant values are, the role of science is one of mediation, as it can propose win-win solutions that fit the different values at stake (Paula, 2008). In both ‘moderately structured problems’ and ‘unstructured problems’, consensus on the facts and thus knowledge is limited, not only on the potential solutions, but also on the problem itself. In such problems, science plays the role of advocate of a position (moderately structured problems) or problem informer (unstructured problems) (Paula, 2008).

1.2.3 Changes in the Dutch situation affecting citizen involvement

In addition to the general changes mentioned above, such as the complexity of the problems and the way citizen involvement and science are perceived, recent Dutch studies mention some more changes in society that affect the way in which citizens in the Netherlands are (politically) active.

Firstly, Verhoeven (2009) mentions that the government advocates the idea of a ‘lean government’. According to this current policy, Dutch citizens are increasingly expected to take responsibility for their own position in life and to take the initiative, not only in their private lives, but also in their interaction with the government. The subsequent withdrawal of government involvement in many spheres of life has brought about increased opportunities for citizens to influence governance, both through participation in the development of policy-plans, and by initiating legal procedures over policy-decisions. All these instruments have contributed to citizens becoming increasingly expressive on what they want or do not want from a government.

In addition, the relationship between politics and the media has changed in such a way that political and societal attention is increasingly oriented towards specific events, issues and problems and to the conflicting interests and opinions related to these. Due to these developments, governmental and political power is no longer self-evident and citizens easily become politically activated for a specific issue (Verhoeven, 2009).
1.3 Objective of this thesis and research question

The developments described in the previous paragraph have all pushed towards more inclusive policymaking. As a consequence, citizens have acquired more access to this process as well as a bigger role in it. It could be presumed that, if citizens can influence the agenda setting and can participate in policymaking, they would be more likely to agree with the policies that are the result of this process. However, citizen opposition has not faded. On the contrary, in the 2013 study the Dutch Council for Social Development published on social discontent in Dutch society, the Council argues that the degree to which citizens express their discontent and the space available in society for these expressions of concern seem to have increased (RMO, 2013). Whether this applies to citizen opposition responses in general, is not the focus of this thesis. This thesis is the result of the wish to understand why citizens oppose decisions of their government. What are the most important reasons for citizens to act-up and what makes citizens decide that action has to be taken now?

Verhoeven (2009) suggested that one of the reasons for opposition responses from citizens is that their increased inclusion has made them more aware of their potential influence and thus more likely to speak up against unwanted decisions of the government. The recent report of the WRR (2012) refers to the complexity of society as the reason for the increasing dissatisfaction with politics and policymaking.

Following the reasoning that complex problems can best be addressed by deliberative styles of governance, it could logically be expected that a government would adopt such governance styles with respect to complex problems that could fire opposition. The question then is: how can governments determine whether a policy problem will turn into a complex problem and a topic for public controversy or citizen opposition? And even if this can be foreseen, is enough known about the social mechanisms that give rise to opposition to be able to deal with them in a constructive way? Understanding public opposition and the mechanisms behind these responses is vital if we want to be able to develop options to guide us towards dealing with complex problems constructively.

This perspective is the starting point for this thesis that aims to contribute to a deeper understanding of the phenomenon of citizen opposition. We make use of the ideas developed by Hajer (2003a) and Verhoeven (2009) that citizens go through several stages before they actively oppose policies of a government. We too, see citizen opposition as a process. We will use the concept of mechanisms to refer to the combination of influences and conditions that cause citizens to move to a following stage in the opposition response-process.

The first two parts of this thesis focus on identifying and gaining further insight into the characteristic mechanisms of citizen opposition. For this, we made use of empirical data that were collected in four projects (three of which were commissioned), as well as existing literature. The last part of this thesis is used to discuss experiments we carried out to identify issues that are likely to become the object of citizen opposition (or public controversy), making use of a theoretical model. This model was also used to reflect on ways to approach opposition responses in a constructive way. The objective of this thesis is thus twofold:
1) To gain deeper understanding of citizen opposition responses and the mechanisms that drive them and
2) To propose a theoretical model to help foresee issues that are likely to become the object of citizen opposition and respond in ways that reinforce the positive aspects of the phenomenon.

The main question of this thesis is:

*What characteristic mechanisms can be distinguished in citizen opposition and how can these insights help policymakers to foresee such responses and respond to them in a way that minimizes the negative effects of a conflict and enhances the process of policymaking through genuine deliberation?*

The following paragraph will provide an overview of the research methods applied as well as the case descriptions of the different studies, the sub-questions dealt with in these projects and the contribution of each of these to answer the main question of this thesis.

### 1.4 Research approach

As was already mentioned above, this thesis combines the insights gained in four (non-related) research projects. In each project, one or more elements of citizen opposition were investigated. Each case used a different approach and a (somewhat) different perspective. Below, an overview is given of the different cases included in this thesis and the approach chosen in each of them.

#### 1.4.1 Scope of the thesis

The scope of this thesis is best defined through several key concepts.

A central concept in this thesis is *opposition*. The focus on opposition implies that we look primarily at reactions that challenge a decision of a government. The opposite response, assent or other positive attitude towards the decision, represents the other side of the (same) coin. Thus, one could argue that both responses should be addressed together. Verhoeven (2009) has even made a case for avoiding the notion of opposition altogether, as it has negative associations attached to it. Although we are the first to acknowledge that besides all those who contest a proposal there will also be a group that approves or is neutral. However, we choose to focus on opposition, as it is especially this response that is considered controversial or troublesome for policymakers and assenting members of society. It is therefore this response that needs further understanding.

In addition to the distinction between opposition and acceptance as an attitude, a distinction can be made between ways in which involvement can be expressed. The WRR (2012, p.51) distinguishes three *fields* of citizen-involvement. *Policy-participation*, in which citizens participate in the formulation of a policy, is the first form of involvement. Citizens can also be involved by simply acting in society,
through for example volunteer-work. The WRR refers this second field of citizen involvement as societal participation. The third field of citizen involvement, the public initiative, involves citizens initiating public action, either to stop a development or plan of a government, or to start one up. The distinction is considered necessary as different forms of citizen involvement entail different responsibilities and activities from the authorities. For our study, we make a distinction between citizen activities aimed at influencing a decision before it is taken, which we will refer to as participation, and activities oriented at changing a decision after it is taken, which we will refer to as opposition. However, this is not a strict division, as it is closely related to how citizens perceive a situation. Essential for our understanding of opposition is that it involves an expression of disagreement or discontent. As such, opposition can also take place when a formal decision has not yet been made. Whenever citizens feel the need to act against a plan or decision, we will use the term citizen opposition.

A second demarcation of this thesis is its focus on citizens. Opposition by professional protest groups or institutions is not part of this research. We postulate that there is a difference between citizens and professional interest groups in their ways they express their opposition and in the motives they have for opposing. For organisations representing specific interests, other factors may be important than for ordinary citizens. Again, this division is not strict, as discontented citizens can develop into a (semi-)professional interest groups for a specific cause. For this thesis, however, we focus primarily on individual citizens and groups of citizens that unite over a specific issue. We do not include opposition by professional NGO’s or interest groups such as trade unions etc., but citizens that set up some form of organisation for their protest against a specific issue do fall within the scope of this thesis. We include both opposition performed by individual citizens and collective or community opposition. The psychological characteristics of discontented citizens, however, are not part of the scope of this research.

A third demarcation of this research relates to the object of the dispute, because opposition can be targeted against all sorts of events and decisions. This thesis focuses on opposition directed against a decision or action by a government, be it at the local, regional or national level. All these decisions and actions of a governmental authority will be referred to as policy-decisions. This definition of a policy-decision also includes the decision of a governmental authority to refrain from acting or deciding on an issue, where citizens would want the government to act. Naturally, not all opposition is targeted at policy-decisions. Citizens can also oppose actions of other citizens or companies. An illustrative example this although atypical and not very serious, was the demonstration held in Amsterdam during the summer of 2012 against bad weather.¹ Other, more serious examples include the demonstrations and legal actions taken against the association of paedophiles (‘Vereniging Martijn’), against the cuts insurance companies made in refunding health care costs and against the activities of multinational organisations such as Monsanto.

Again, here, the distinction between opposition against policy-decisions and against other issues is not as strict as it may seem. Many decisions made by companies or individual citizens require some sort of governmental approval. This can be a permit for a specific activity or a policy permitting an activity

¹ http://www.nrc.nl/nieuws/2012/07/21/amsterdam-protesteert- tegen-het-slechte-weer-dit-is-de-druppel/
in general, such as the cultivation of GM crops. Although – as was mentioned before - the focus of this
thesis is primarily on citizen opposition to policy decisions, some protests that are primarily oriented
against an individual or private organisation also fall within the scope of this thesis, namely when the
disputed issue was made possible by a governmental policy or decision. Essentially, the scope of this
thesis thus includes all citizen opposition responses where a governmental authority is perceived as
responsible.

As a final demarcation we need to mention that this study focuses on the Netherlands. Although
international examples from the literature were used in the theoretical parts of this thesis, the
empirical data were collected in the Netherlands.

A schematic visualisation of the scope of this thesis is presented in table 1.2.

<table>
<thead>
<tr>
<th>Opposition</th>
<th>Against government</th>
<th>Against others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>National</td>
<td>Foreign</td>
</tr>
<tr>
<td>By citizens</td>
<td>e.g. Planning of a road or building project in nature park (Nimby)</td>
<td>e.g. Participation in the Iraq war</td>
</tr>
<tr>
<td>By organizations (NGO’s)</td>
<td>e.g. Granting a permit for a nuclear power plant</td>
<td>e.g. Allowing animal testing; prohibiting circus animals</td>
</tr>
</tbody>
</table>

1.4.2 Research approach: cases and sub-questions

The data presented in this thesis were collected in the course of four different research projects, in each
of which a different case was studied. Each project focussed on the phenomenon of citizen opposition
in a different setting and under different conditions. For each of these case studies, relevant literature
was studied and multiple focus-groups were held. In most of the case-studies other research methods,
such as individual interviews and questionnaires were also used. Table 1.3 provides an overview of the
case-studies methods that were used.

Three projects (case-study 1, 3 and 4) were commissioned: numbers 1 and 4 by the ministry of Economic
Affairs\(^2\) and the third by ZonMW, the Dutch Organisation for Health Research and Development. In
all projects, we were able to examine the process of (budding) opposition in different stages of the
policymaking process and directed against decisions at different levels (see table 1.4).

---

\(^{2}\) During the course of the first project (2007-2008), this ministry was called the Ministry of Agriculture, Nature
and Food safety. At the time the second project started (in 2011), the ministry had been renamed the Ministry
of Economic Affairs, Agriculture and Innovation. The ministry has had its current name since 2012.
Table 1.3: Characteristics of the case-studies included in this thesis and methodologies applied in these.

<table>
<thead>
<tr>
<th>Case study</th>
<th>When performed</th>
<th>Number of focus groups</th>
<th>Other research method applied</th>
<th>Citizens participated in the research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genetically modified (GM) crop cultivation (1)</td>
<td>2007-2008</td>
<td>15</td>
<td>Questionnaires filled in by focus group participants; literature studies; experiment</td>
<td>103; several participants were also member of the community council</td>
</tr>
<tr>
<td>Regulation of land-use decision making (2)</td>
<td>2012-2013</td>
<td>2</td>
<td>Desk research (of regulation and social science literature)</td>
<td>7</td>
</tr>
<tr>
<td>Animal testing (3)</td>
<td>2009-2010</td>
<td>8</td>
<td>Individual interviews (26 in total), desk research</td>
<td>3 citizen focus groups</td>
</tr>
<tr>
<td>Animal governance (4)</td>
<td>2011</td>
<td>22</td>
<td>Questionnaire; desk research</td>
<td>No citizens in the focus groups; but over 2100 via the questionnaire</td>
</tr>
</tbody>
</table>

Table 1.4: comparison of the focus of the case-studies. The cases included in this thesis addressed different stages of the policy cycle: we started with projects on the implementation and decision-making stage. Later on we had a chance to study the earlier stages of agenda setting and to focus on the question of how to foresee which subjects will become issue of public debate or citizen opposition.

<table>
<thead>
<tr>
<th>Case study</th>
<th>Stage in the policy cycle</th>
<th>Local /national data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>GM-crops cultivation</td>
<td>Policy implementation</td>
<td>Local</td>
</tr>
<tr>
<td>Regulation of land-use decision making</td>
<td>Policy decision making</td>
<td>Local/national</td>
</tr>
<tr>
<td>Animal testing</td>
<td>Agenda setting</td>
<td>National</td>
</tr>
<tr>
<td>Animal governance</td>
<td>Agenda setting</td>
<td>National</td>
</tr>
</tbody>
</table>

Each of the case-studies and the research questions involved are described in more detail below.

**Case 1: Citizen responses to the cultivation of Genetically Modified Crops**

The first project concerned the response of citizens living in rural areas of the Netherlands to local cultivation of genetically modified (GM) crops. Genetic modification has been a controversial subject in Europe for as long as it exists. However, the debate on the subject is dominated by organised and specialised interest groups. Insights on the perceptions of private citizens on this technology are mainly derived from European questionnaires. The Incentive for our project was the EU decision to allow the commercial cultivation of certain GM crops within the Union. The main question in the project was: what kind of responses are to be expected from inhabitants of rural communities if a local farmer decides to cultivate GM crops on his land?

This project allowed us to investigate three aspects of opposition responses. Firstly, we were able to make a theoretical analysis of the various responses of local inhabitants. Secondly, we identified factors that can reduce or enhance acceptance or opposition. Then, we were able to study the role of one of these factors, namely that of information.
Sub-question 1: What types of responses can be identified in the Nimby-literature and what factors and mechanisms are found to be influential for such responses?

We then collected empirical data on the responses of a specific type of citizens: the inhabitants of rural communities in the Netherlands, and compared their responses to the arguments presented in the national debate over GM, that is dominated by institutions. As this case-study intended to focussed on citizens that were likely to be directly involved with the implementation of the policy, we included only rural inhabitants. Thereby we were able to find out whether the discussions held amongst rural inhabitants differed from the national debate, and whether social cohesion influences this debate.

Sub-question 2: What position do rural communities in the Netherlands take with regard to the potential cultivation of GM crops, how do these responses differ from the national debate and can factors be identified that help explain these differences?

As the third and final aspect investigated in the GM-project, we assessed the role of information in the response of citizens to GM crop cultivation. Information is generally considered an essential basis for the reaction to a new development such as the implementation of a new technology. We investigated whether the role that information plays in individual decision-making is different if the information is incomplete or uncertain or contradictory.

Sub-question 3: How do citizens use information in their decision to accept or oppose the local cultivation of GM crops, and which factors can be identified that explain the decision-making?

Case 2: The regulations of land-use decision-making

Next to information, ‘participation in the decision-making process’ was expected to be an important factor in opposition responses. In a second case study, we took a deeper look at the way in which citizen-participation in policy-decision-making is organised in the Netherlands, by focussing on the regulations on land-use planning in the Netherlands.

In the Netherlands land-use planning is a highly contested policy terrain. Because of the very limited space available, a decision to grant permission for one project, more often than not will be disadvantageous for another project or use of the area. Consequently, questions over the site of highways and railroads, the expansion of industrial areas or housing projects as well as the development of nature-parks often lead to citizen opposition. Several drastic reforms have been implemented in regulations on land-use decision-making in the last decades, aiming to simplify and increase the efficiency of the decision-making process in this policy terrain. In February 2013, again, a legal reform was announced.

In view of the above, the following question was formulated for this case-study:

Sub-question 4: How do the (legal) possibilities for participation in policy decision-making and the way these are actually put into practice affect the response of citizens to the decisions that are finally reached and what recommendations can be made to improve policy-decision making in the proposed new law on land-use planning?
Chapter 1

Case 3: Social trends on animal testing

The final two projects that are included in this thesis focused on the interaction between animals and humans in the Netherlands and the controversies that are the result of this interaction. In the Netherlands, the way animals are treated – animal testing included – is a subject that leads to controversies and societal debate on a regular basis, not only amongst citizens but also among policymakers. Considering this almost constant stream of policy issues and discussions on animal testing, ZonMw commissioned a project to investigate the trends that could be discerned in the discussion and potential future policy-issues in the field of animal testing. The main question in this research was: what kind of responses can be expected in Dutch society with regard to the scientific developments in animal research?

This project provided the opportunity to analyse ways in which controversial social issues can be foreseen. In the light of the insights gained through the earlier projects, as well as from theoretical insights from future-researchers and transition theory scholars, we developed a theoretical model in which we combined factors that indicate what issues are likely to become the subject of societal debate. The idea behind this model is that policymakers need to understand which issues are critical to citizens and how to deal with these constructively.

Sub-question 5: On the question of animal testing: what theory-based research model can be proposed to foresee potential public controversies and provide an instrument to deal with these responses in a constructive way?

Case 4: Social trends on animal issues

The final project included in this thesis was commissioned by the ministry of Economic Affairs. This project was similar to the project on animal testing, as it also focussed on identifying potential hot issues in animal governance. This time, the project involved a broad variety of animal-human interactions. The main question in this project was: is it likely that animal governance will continue to lead to hot topics for the policy agenda and if so, what type of issues should be prioritized by the ministry? This project provided the opportunity for testing the model we had developed and to collect empirical data to use in the model.

Sub-question 6: Making use of the model, what issues on the interaction between humans and animals can be predicted to become topics of future public controversies?

An overview of the division of the different sub-question over the chapters and parts of this thesis is presented in table 1.5.

The results of the case-studies were not only presented in this thesis, but also in research reports, as well as in six scientific articles. These articles are included in this thesis in chapters 2 – 7. An overview of these articles and the research-team that worked on the projects is presented in table 1.6.
Table 1.5: Distribution of the research-questions over the chapters of the parts of the thesis.

<table>
<thead>
<tr>
<th>Part of the research</th>
<th>Case-study and sub-question</th>
<th>Chapter of the thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1: Systematic understanding of opposition responses</td>
<td>GM crop cultivation - Sub-questions 1</td>
<td>Chapter 2 (theoretical model of citizen opposition)</td>
</tr>
<tr>
<td></td>
<td>GM crop cultivation - Sub-question 2</td>
<td>Chapter 3 (application of the model)</td>
</tr>
<tr>
<td>Part 2: Zooming in on the role of several influencing factors</td>
<td>GM crop cultivation - Sub-questions 3</td>
<td>Chapter 4 (role of information)</td>
</tr>
<tr>
<td></td>
<td>Regulation of land-use decision making - Sub-question 4</td>
<td>Chapter 5 (role of participation regulation)</td>
</tr>
<tr>
<td>Part 3: Anticipating societal conflict by improving deliberative governance</td>
<td>Animal testing - Sub-question 5</td>
<td>Chapter 6 (theoretical model to foresee issues of societal concern)</td>
</tr>
<tr>
<td></td>
<td>Animal governance - Sub-question 6</td>
<td>Chapter 7 (application of the model to foresee hot topics on the subject of animal governance)</td>
</tr>
</tbody>
</table>

Table 1.6: scientific publications based on the research included in this thesis.

<table>
<thead>
<tr>
<th>Project and research team</th>
<th>Title of publication</th>
<th>Date and journal of publication/submission</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizen responses to the cultivation of Genetically Modified Crops. Prof. Tj., de Cock Buning, Dr. M. van Amstel, Drs. LLM. C.C. de Brauw</td>
<td>“Improving the conceptual precision of Nimby with a new process model of community opposition”</td>
<td>Journal of Planning Literature (JPL); accepted for publication 2013, pending revisions.</td>
<td>C. de Brauw, M. van Amstel, Tj. de Cock Buning</td>
</tr>
<tr>
<td></td>
<td>“NIMBY or how do the rural neighbours respond to genetically modified (GM) crops? An exploration of the structure of reactions by inhabitants in rural communities in The Netherlands to the commercial cultivation of GM crops in their community”</td>
<td>Geoforum; published in Volume 42, Issue 3, June 2011.</td>
<td>Tj. de Cock Buning, C. de Brauw, M. van Amstel.</td>
</tr>
<tr>
<td>The regulation of land-use decision-making; C. de Brauw, M. van Amstel, Tj. de Cock Buning</td>
<td>“How to decide when information is hazy? The case of GM crop cultivation in the Netherlands”</td>
<td>Geoforum, submitted for publication 2013, under review.</td>
<td>C. de Brauw, M. van Amstel, Tj. de Cock Buning</td>
</tr>
<tr>
<td></td>
<td>“Anticipating social conflicts: The development and application of a theory-based research model to explore future discourses ”</td>
<td>Technological Forecasting and Social Change; accepted for publication 2014, pending revisions.</td>
<td>Tj. de Cock Buning, C. de Brauw.</td>
</tr>
</tbody>
</table>
Table 1.6: scientific publications based on the research included in this thesis. (Continued)

<table>
<thead>
<tr>
<th>Project and research team</th>
<th>Title of publication</th>
<th>Date and journal of publication/submission</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Societal trends on animal governance; Prof. Tj. de Cock Buning, Dr. V. Pompe, H. Hopster, C. de Brauw</td>
<td>“Anticipating social conflicts: The development and application of a theory-based research model to explore future discourses”</td>
<td>Technological Forecasting and Social Change; accepted for publication 2014, pending revisions</td>
<td>Tj. de Cock Buning, C. de Brauw</td>
</tr>
<tr>
<td>Future hot topics on animal – human interaction in the Netherlands: making use of a systematic model to anticipate social discourses</td>
<td>Journal of Contemporary Law Review, submitted for publication 2013, under review</td>
<td>C. de Brauw, M. van Amstel, Tj. de Cock Buning</td>
<td></td>
</tr>
</tbody>
</table>

1.4.4 Outline of this thesis

This thesis is divided into three parts. The first part focuses on the development of models to analyse different forms of citizen opposition. Following this introductory chapter, chapter 2 presents the results of the literature study done in order to answer the first research question. That study focussed on one of the most well known forms of citizen opposition to local initiatives, the 'Not in My BackYard' (hereafter: Nimby) response. In this chapter (2), this relatively well-documented body of social science literature is analysed, the definition of Nimby and the assumptions behind it are discussed and a theoretical model (a local response model) is developed for studying citizen opposition.

Next, chapter 3 presents the results of the application of the local response model in the case of GM cultivation. Using the models developed in the second chapter, we were able to identify the type of opposition rural citizens of the Netherlands are (most) likely to engage in, as well as the arguments they consider most important for accepting or rejecting GM cultivation in their neighbourhood.

The second part of the thesis presents the results of empirical studies on the role of two non-content related factors in citizen opposition responses. From the literature analysis, two factors that are relevant for governance and policymaking were found to be important influencing factors in citizen opposition responses, notably the role of information and the process through which decision-making over policies, plans or projects takes place.

The role that information plays was investigated in the GM-project. Chapter 4 describes the results of the simulation that was carried out to examine the role that uncertain information plays in the decision-making process.

Then, in chapter 5, we zoom in on a second influential factor, that claimed to play a major role in citizen opposition responses and also essential for policymaking: citizen participation in the policy-making process. The insights presented in chapter 5 provide the first opportunity to draft recommendations to enhance deliberative governance by making positive use of citizen opposition.

In the third and final part of the thesis, we present the attempt that was made to develop a systematic method to foresee issues that are likely to become the subject of public controversy or citizen opposition. Chapter 6 focuses on the development of the model and the ideas and assumptions...
behind it. Chapter 7 presents the results of the first test case in which this model was used. In the last chapter (8) some conclusions are drawn on the main question of the thesis; this chapter also contains some reflections on the implications of the findings to improve deliberative governance and recommendations for further research.
Part 1

The structure of citizen opposition

The development of models to analyse different forms of citizen opposition
Chapter 2

Improving the precision of the Nimby concept with a new process model of citizen opposition

2.1 Introduction

Policy-decisions frequently meet citizen opposition. The opposition expressed by local citizens to developments in their nearby surrounding is generally referred to as ‘not Nimby opposition. In the scientific literature as well as in popular publications, ‘Nimby’ is a familiar acronym used mostly in the context of spatial planning. The acronym stands for Not-In-My-BackYard and refers to a social phenomenon that can be defined – as a working definition – as being in favour of a development or facility in general, but opposed to that same development or facility being located nearby in the own area (after Wolsink, 2000). As such, these citizens in opposition (Nimbies) are often seen as troublemakers that disturb and delay the decision-making process; Nimbies focus on their own -interests and are unwilling to make sacrifices for ‘the greater good’. Examples of facilities that often giving rise to a Nimby response include waste-processing installations, nuclear power plants and wind turbines, but also social facilities such as prisons, refugee centres, homeless shelters and psychiatric institutes. Bailoni et al. (2012, p. 157) state that: “this notion of NIMBY reaction is now widely popularized and used in all works on planning conflicts”. The increase in the number of scientific articles on Nimby – and Nimby-like acronyms – that were published during the past five years also illustrates the growing interest in the phenomenon (Aitken, 2010; Cass et al., 2010). On the other hand, the extensive use of the concept does not mean that there is no controversy surrounding it. In fact, in much of the scientific literature, the use of the term/concept Nimby is regarded as problematic. Major reasons for criticism are that the notion is found to be empirically invalid or inaccurate, unable to explain opposition (Devine-Wright, 2005; Warren et al., 2005; Wolsink, 2006; Owens & Driffil, 2008), or politically ineffective and loaded with negative connotations (Wolsink

1 This chapter is based on the article: C. de Brauw, M. van Amstel, Tj. de Cock Buning, Improving the conceptual precision of Nimby with a new process model of community opposition, *Journal of Planning Literature*, accepted for publication 2013, pending revisions.

2 We start our review and analysis with this “working definition” which will be problematized, analysed and rephrased in the course of the chapter.
& Devilee, 2009; Devine-Wright, 2007; Bell et al., 2005; Burningham et al., 2006; Wolsink, 2000, 2006, 2007). Also, authors have criticized the simplicity of the term and imprecise way in which it is used (Freudenburg and Pastor, 1992; Futrell, 2003; Luloff et al., 1998). This has resulted in many scholars recommending that the term be used more carefully (Burningham, 2000; Devine-Wright, 2005; Gibson, 2005, in Hubbard, 2006; Burningham et al., 2006), or avoiding or abandoned altogether as an analytical concept (Wolsink, 2006; Freudenburg & Pastor, 1992; Futrell, 2003; Piat, 2000; Zippay, 2007; Snary, 2004; Pol et al., 2006; all referred to in: Wolsink & Devilee, 2009; Kempton et al., 2005; Burningham et al., 2006; Bell et al., 2005). Others still, whilst admitting the drawbacks and critical issues, argue that no alternative has been devised that can replace it for research purposes (Devine-Wright 2007). Others again point out that the wide popularity of the concept amongst different users increases the need for further clarification and explanation, rather than rejection (Lulof, 1998).

In recent studies, Wolsink & Devilee (2009) have continued to use the concept in the analysis and explanation of opposition reactions. Although we concede that the term Nimby has not been empirically validated yet and its use is ambiguous, we agree with Hubbard who states that he “cannot subscribe to the idea that the value of a concept is its empirical validation” (Hubbard, 2006, p. 92). Given that it is an intuitively catchy concept, we consider it likely that it will continue to be used in future publications, both scientific and popular. Van der Horst (2007) already observed that, so far, the call by academics to abandon the concept has had little effect. We believe that Nimby represents a specific – and interesting - response as it combines acceptance and rejection of policy within one position. This makes it both relevant and distinctive enough to use – even if only theoretically – in the analyses of different opposition reactions.

For these reasons we opt for clarifying the term and its meaning, rather than rejecting it. The fact that Nimby is a well documented opposition response, led us to study the Nimby literature. A structured search method was used to obtain core reviews. In ISI Web of Knowledge and Google Scholar, we searched on terms like ‘Nimby’, ‘Nimby characteristics’, ‘Nimby factors’, ‘Nimbyism’, community resistance, facility location, community opposition, risk, and participation. A number of articles (Dear, 1992; Schively, 2007; Wolsink, 2000) were taken as a starting point for the snowball method. Titles and abstracts were studied to make a further selection.

The aim of the literature study was threefold. First we wanted to broaden our insight into the essential elements of a Nimby response in comparison to other responses; secondly, we wanted to find out how these different responses develop over time; finally, we aimed to distil mechanisms (or influencing factors) important for the development of these opposition responses.

In order to contribute to systematic research on opposition responses, we used what we found in the literature to develop two models. For the first of our aims mentioned above, we devised a position-model to distinguish between different opposing (and accepting) reactions. With respect to our second aim we developed a process-model in which opposition to a development or governmental decision is seen as a process in which citizens learn about the development and their perspective on it. Paragraph 2.2 presents the findings of the literature study in terms of the essential elements of a Nimby response and the problems in the definition. The quadrant model of opposition positions is
Improving the precision of the Nimby concept with a new process model of community opposition

presented in paragraph 2.3. Then, in paragraph 2.4, we reframe Nimby (and other responses) as a process and develop the ‘local response model’. This model offers detailed insights into the successive steps through which opposition reactions arise (over time) and makes a systematic assessment possible of several distinct types of local opposition reactions. Paragraph 2.5 addresses the factors that play a role in the development of citizen-opposition and how this opposition-response develops. This chapter ends with a short discussion in paragraph 2.6.

2.2 Nimby in the literature

In analysing the Nimby-studies selected for this chapter, we found that some elements seem (to be regarded as) essential to the Nimby-phenomenon. We also discovered that there are some problems with the term Nimby and the way it is used in different studies that reduces its explanatory potential. This paragraph presents both these findings. One of the main problems is that there is no single, fixed and generally accepted definition for the term while, at the same time, everyone in political, popular media discussions seems to know what the label means. We came to the conclusion that clarifying the meaning of the term and distinguishing Nimby from other associated concepts would provide more detailed insights into the onset and course of citizen opposition movements.

2.2.1 Lack of a clear definition

One of the recurring comments to be found in the Nimby-studies is that the term is not clearly defined and is used too easily, without its nature or definition being specified (Burningham et al., 2006; Wolsink & Devilee, 2009; Hermansson, 2007; Hunter & Leyden, 1995). We agree that few studies on Nimby actually define the concept, but we think that the problem is further complicated by the fact that the term is assumed to be self-explanatory. See for example Burningham (2000) who states that “Nimby is now an acronym that needs no explanation” (p.55). Authors that do actually define the concept do so in many different ways and confirm our idea that Nimby is not self-explaining at all. We even found that some researchers use different definitions of the concept in successive publications. All this hinders a clear discussion on the subject.

2.2.2 The backyard and the general attitude: the heart of Nimby

What publications that do present a definition of Nimby agree on, is that the concept refers to local opposition – in other words: resistance against something planned or sited in the (perceived) vicinity. Less agreement exists on whether Nimby also requires a specific attitude towards the facility or technology when sited further away, and if so, what that response should be.

In line with the working definition presented in the introduction, most scholars consider Nimby to combine opposition to a development or facility when applied locally with a non-negative response to the development/facility in general. Some definitions, however, only include the negative local response, without defining the reaction to the application elsewhere. Wolsink (1994) provides an
example of a definition that combines two attitudes: “A positive attitude towards the incineration of waste (equally valid for other facilities), combined with a rejection of, and opposition to, the construction of an incineration plant anywhere in one’s own neighbourhood” (p. 862). Other examples of definitions that also include the combination of social acceptance-local rejection can be found in Pol et al. (2006), defining Nimby as the “social rejection of facilities, infrastructure and service location, which are socially necessary, but have a negative connotation” (p. 44), and Lober (1995, p. 499) “the underlying activity is widely supported while the facility to do it is opposed locally”.

Takahashi (1997, p. 119) provides an example of a Nimby definition in which the general attitude towards the facility is not considered positive: “‘Not-in-my backyard’ describes the organised resistance of communities to the siting of controversial land uses and facilities.” Instead of referring to the facility as generally accepted, this definition considers Nimby as directed against ‘controversial’ land uses and facilities. Kraft and Clary (1991) do not refer to attitudes towards the general technology but, instead, they focus mainly on the trade-off between costs and benefits. They refer to Nimby as an “intriguing political phenomenon associated with citizen participation in cases involving (such) technological risk [...] that residents believe will result in adverse impacts. Project costs and risks are geographically concentrated, while the benefits accrue to a larger, more dispersed population” (p. 300). It should be noted that Kraft and Clary (1991) include the concept of technological risks as an element in their definition, while only indirectly mentioning the attitude towards the development in general.

Amongst those definitions in which the reaction to the technology in general is included, a further distinction can be made between definitions in which a positive attitude towards the technology or facility in general is an essential part of the phenomenon, and definitions that merely require that Nimbies express no opposition to the technology in general – referring to an attitude somewhere on the scale between positive and neutral. For example, Wolsink (2000) considers only those to be true Nimbies who express a “combination of free rider preferences and a positive attitude toward wind energy” (Wolsink, 2000, p. 53). Devine-Wright (2005, p. 126) expresses a similar position in defining Nimby as “the juxtaposition of high and stable levels of general public support with frequent local opposition to actual development.” On the other hand, Wolsink (1994) observed that people who oppose a facility that is planned nearby can also be undecided or not object to a facility in general. Their active concern about the facility is triggered by the plans for placing it nearby. Here, we agree with this last interpretation. As such, the starting point for the process in which an opinion on a development or facility evolves is not necessarily the general acceptance of the facility. It might also be undecided and remain so as long as there are no plans to situate the facility in the direct environment.

Some scholars supplement the Nimbies’ dual position of a positive general attitude towards the facility or technology and the negative attitudes towards siting it in the local environment with the additional wish to site the facility at a different location (Lober & Green, 1994, refer to such a position as YTSEBY – “Yes To Somebody Else’s BackYard”). In this context, reference is often made to the prisoner’s dilemma: all agree that the facility is needed, but no-one wants to have it nearby, and all advocate siting it somewhere else.

Hermansson (2007) presents an example of a scholar explicitly addressing the siting of facilities
Improving the precision of the Nimby concept with a new process model of community opposition

elsewhere. She extrapolates Dear’s definition (1992) by explaining: “the reason why the NIMBY does not object to having the facilities placed in another community is that she or he prefers the facility to be placed somewhere else rather than not being placed at all” (Hermansson, 2007, p. 25). This quote also illustrates Hermansson’s perception that the facilities are generally considered valuable. A similar view is expressed by Benford et al. (1993) who quotes Portney (1991) suggesting that the Nimby label should be reserved for people “who feel it is desirable to site a particular type of facility somewhere as long as it is not where they personally live” (Benford et al., p. 34).

This range of definitions and interpretations among scholars makes the existing research difficult to compare and adds to the confusion. As a way out, we suggest formulating a quadrant in which different positions can be distinguished, by setting out the response position (accept or oppose) against the location of the planned development (in ones backyard or elsewhere) as the two essential elements that make differences between responses visible. The essential aspect of Nimby lies in the dynamic aspect of the position, namely the observation that it involves a flexible perception or position, from a neutral or positive attitude on the development elsewhere to a negative perception on the siting nearby.

2.2.3 Framing: Normative versus descriptive and negative versus positive

In addition to being ambiguous, the acronym Nimby is also criticised for being pejorative towards opponents of siting. This criticism appears to be valid, for when analysing the definitions used in the scientific literature, we found that the concept is mostly used in a normative and negative framing. Although we did find some descriptive definitions and positive framings, they represented the minority. Particularly in its early years and in popular use, Nimby was considered as an irrational, highly emotional and ignorant form of opposition, based on selfish and parochial motives. Dear’s definition (1992) provides a clear example: “NIMBY is the motivation of residents who want to protect their turf. More formally, NIMBY refers to the protectionist attitudes of and oppositional tactics adopted by community groups facing an unwelcome development in their neighbourhood” (p. 288).

Even more explicit are definitions such as: “Nimbys [Nimbies] are noisy. Nimbys are powerful. Nimbys are everywhere. Nimbys are people who live near enough to corporate or government projects and are upset enough about them to work to stop, stall or shrink them. Nimbys organize, march, sue and petition to block the developers they think are threatening them. They twist the arms of politicians and they learn how to influence regulators. They fight fiercely and then, win or lose, they vanish” (Glaberson, 1988, Sec. 3, p.1); or: “The Nimby syndrome is a public health problem of the first order. It is a recurring mental illness which continues to infect the public. Organizations which intensify this illness are like the viruses and the bacteria which have, over the centuries, caused epidemics such as the plague” (Piller, 1991 p. 4). Other examples of normative framings are the referral to Nimbies as free-riders (Hermansson, 2007) or the classification of Nimbies as a social malady (Portney, 1985).

Although most definitions tended to write down Nimby as negative, critics of this way of framing the concept have appeared more recently, challenging the selfishness assumption and the supposed
irrationality of the concept (see below). More recently, explicitly positive perceptions on Nimby have emerged. Burningham et al. (2006) and Van der Horst (2007) demonstrate that many international publications can be found that combine the search terms ‘Nimby’ and ‘proud’. Positive definitions of Nimby highlight the protection of one’s neighbourhood as something of which to be proud (Jay, 2005), they emphasize the legitimate and rational reasons that can lead to opposition (Kraft & Clary, 1991; Lake, 1993; Lullof, 1998), or consider Nimby to be an example of democratic action (McAvoy, 1998). Jay’s (2005) definition is illustrative for a positive, normative perspective on Nimby: “any citizen who tries to defend their home and their neighbourhood from plans which would destroy the view, pollute the environment, overload the transport network, upset the ecosystem and knock £50,000 off the value of their house. When it comes to our own back yard, we are all Nimby, every Nimby deserves respect for standing up to corporate and government giants” (p. 1).

The normative use of Nimby is unlikely to cease entirely, especially since the concept is favoured in the popular press for this specific purpose. However, for scientific purposes, especially for research into the phenomenon of local opposition, it is important to arrive at a definition that describes the concept in an unbiased framing. This requires a term that is neither negative nor positive, but merely describes the characteristics of the phenomenon and the situations and circumstances under which it occurs. Below we will explore the characteristics of Nimby and the assumptions related to the concept in more detail in an effort to separate the normative connotation from the more objective components that could be included in a scientific definition of Nimby.

Normative framings of Nimby have led to debate amongst scholars on the applicability of certain assumptions incorporated in such framings. One of these concerns the so-called selfishness assumption which has been disputed since the early 1990s (Wolsink & Devilee, 2009). The underlying image is that Nimbies would rather have some other community deal with the costs of a development. Over time, the selfishness assumption has been contested, for example by Steelman and Carmin (1998), who quote studies by Lober (1993, 1995), Lake (1993) and Freudenburg and Pastor (1992). They argue that self-interest motives should only be considered as one of the many drivers or explanations for Nimby opposition. More recently, Bell et al. (2005) stress the same point. Other scholars point out that participants in community actions are often more concerned with the collective interest than their own (Steelman & Carmin, 1998) and that Nimby responses can be based on entirely rational arguments alone (Lullof, 1998).

We consider the perspective presented by Hubbard (2006) in his response to Wolsink (2000) as helpful in escaping the normative pitfall. Hubbard states that he is not interested in making a distinction between rational and irrational anxieties that fuel Nimby attitudes or behaviour. Instead, he proposes a focus on the mechanism through which a strong general support for a technology (or facility) transforms into anxieties and local opposition. Bell et al. (2005) refer to the discrepancy between the strong public support for wind power and the low success rate of windmill siting procedures as a social gap. In this conceptualisation, there is no need to exclude (or emphasize) rational, irrational or selfish motives in order to be able to define the characteristics of Nimby.
2.2.5 Other definition issues

Most definitions of Nimby diverge and include different elements. This section will shed light on some of the other, common differences that we found in Nimby-related definitions in the literature.

First of all, most definitions do not include what is to be understood as the ‘backyard’. Although most scholars take the term quite literally as referring to the direct surroundings, others leave this somewhat more open, taking the backyard to refer to situations in which personal interests, in the broadest sense, are involved. Some of the scholars who interpret the term ‘backyard’ very literally have attempted to empirically record the shift in attitude at different distances from trial subjects’ backyard, with varying outcomes according to the definitions used (for a discussion on this issue see: Lober and Green, 1994, Devine-Wright, 2009). In order to come to a definition that is generally applicable, we prefer to use a general, more inclusive wording. What is to be considered ‘near’ can then vary according to the type of development. For example, a wind turbine park located on a distant hill might be as disturbing as a prison planned around the corner. Hence, we opt for a definition in which the backyard refers to spatial nearness in a sense that ‘nearness’ depends on the experienced living world, rather than on actual distance. We will therefore refer to the experienced spatial nearness.

Second, scholars refer to Nimby both as an individual attitude and as a group position. Whereas the acronym literally refers to the individual reaction (not in MY backyard), the concept is also applied to opposition reactions by communities. We think that this distinction is no longer relevant when focus is shifted from the characteristics of the position to the process through which a specific position is developed. The dynamics, constraints and drivers are likely to be comparable for the response by individuals as well as groups. In this thesis, we understand Nimby to refer to a personal perception that develops under the influence of incentives that originate nearby: we will refer to these as ‘nearness motives’. These nearness motives can differ for different individuals. Some may fear the decreasing value of their house; others might be triggered by potential issues of aggression, safety, pollution, smell, etc. Although essentially an individual position, the importance of Nimby for policy and decision-making lies in the merging of these individual awareness-processes into a collective local movement that can have an actual impact on the decision-making.

A third point is the distinction scholars make between Nimby as alternatively a phenomenon, a syndrome, a cause, a response, an attitude or a form of behaviour. We found some scholars defining Nimby as a cause for opposition (too close to the backyard), whereas others see Nimby as the outcome or result (protest behaviour) for which explanations need to be found. Futrell (2003), for example, refers to Nimby as a dynamic collective action that is not the cause of protest but rather the “outcome of discerning interpretations of signals about a project occurring within a ‘multi-organizational field’” (Futrell 2003, p. 361). We think these different aspects can coexist and suggest a more inclusive framing to see these phenomena as different phases of a Nimby development process. Reframing Nimby as a process reveals

---

3 Dear and Tailor (1982) titled their paper on community attitudes to health care ‘Not in Our Street’, referring to a collective response, it was shortly afterwards (1984) that the early scientific publications on Nimby were published (see for example Marks & von Winterfeld, 1984; Portney, 1984).
that it can be separated into several phases: starting from a general (often unconscious) position towards a facility or technology, and evolving through rising awareness of the existence of a specific plan involving the technology or facility, towards the re-evaluation of the previous more general position into a case-specific perception and eventually (perhaps) into the expression of individual or joint opposition action/behaviour. To contribute to the understanding of Nimby, we consider it beneficial to focus on this process and the mechanisms influencing the development of a certain point of view, rather than the final outcome: expressions of discontent, discussion and campaigning.

2.2.6 A spectrum of opposition positions

As a result of the variety of Nimby definitions in which different types of opposition are not always distinguished clearly, Nimby has become a container concept for various types of opposition (see Wolsink, 1994; Wolsink & De Vilee, 2009; Burningham et al., 2006; Hermansson, 2007; Luloff et al., 1998). Interestingly, at the same time, many Nimby-inspired acronyms have emerged in the literature (see box 2.1). These are sometimes different acronyms for the same phenomenon, but can also represent different types of opposition. Moreover, acronyms for accepting positions can be found in the literature.

Box 2.1 – acronyms for opposition and acceptance referred to in the literature

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LULU:</td>
<td>Locally Unwanted Land Use – synonym for Nimby, with the distinction that LULU focuses on the facility/development instead of the person/response (Popper 1985; Wolsink 1994; Schively 2007; Kipp 2002; Colebrook &amp; Sicilia 2007).</td>
</tr>
<tr>
<td>NIMINBY:</td>
<td>Not In My Neighbour’s BackYard – illustrates opposition that a ‘neighbour’ can have (Kipp 2002; Colebrook &amp; Sicilia 2007).</td>
</tr>
<tr>
<td>NIABY:</td>
<td>Not in Any BackYard - general type of opposition against a facility/development, regardless of where it is located (Schively 2007; Kipp 2002; Colebrook &amp; Sicilia 2007); acronyms representing a similar position include NOTE (Not Over There Either - Colebrook &amp; Sicilia 2007), NOPE (Not On Planet Earth - Colebrook &amp; Sicilia 2007), BANANA (Build Absolutely Nothing Anywhere Near Anything - Kipp 2002; Colebrook &amp; Sicilia 2007) and CAVE (Citizens Against Virtually Everything - Schively 2007; Kipp 2002; Colebrook &amp; Sicilia 2007).</td>
</tr>
<tr>
<td>BIMBY:</td>
<td>Build In My Back Yard – the positive reaction of the local community to a facility/development (Smith &amp; Marquez 2000), sometimes called YIMBY (Yes In My Back Yard)</td>
</tr>
<tr>
<td>IABY:</td>
<td>In All Back Yards – the general positive reaction towards a facility/development – the opposite of NIABY, a logical option for a position following from the model described in this chapter.</td>
</tr>
</tbody>
</table>

2.2.7 Towards a Nimby definition for analytical purposes

The previous paragraphs have shown the lack of a standard definition and the varying ways in which Nimby is interpreted. We conclude that this lack of a definition makes scientific studies on Nimby hard to compare and therefore hampers in depth study of the phenomenon. This leads us to strongly support the call for a non-normative, descriptive definition of the concept, that moves
Improving the precision of the Nimby concept with a new process model of community opposition

beyond inconsistency and normative presumptions. In order to stimulate the research community to formulate such a definition, we propose the following Nimby-definition, based on the analyses presented in the previous paragraph:

“Nimby reflects a dynamic perception in which the (experienced) nearness of a facility or technology is opposed, whilst the same type of facility or technology located elsewhere is favoured or not opposed”.

Until a definition is agreed on, we suggest that scholars keep in mind that Nimby is not a self-explaining concept and that the fact that the term can be used in different ways makes it advisable – if not imperative – to be explicit about the definition in each publication in which the acronym is used. Additionally, we suggest reframing the ambivalent character of Nimby as a dilemma; we think this will help reduce the normative use of the term. Although other scholars, such as Wolsink (2000), have also referred to Nimby in terms of a dilemma, different types of dilemmas were meant. Here, we do not consider Nimby an example of a free-rider - or prisoner’s dilemma, which focuses on the maximum output for those involved, but, instead, as a moral dilemma. In the realm of ethics, a dilemma is described as a conflict between two legitimate ‘goods’. In this case, the dilemma consists of one’s own good (privacy, ‘earned’ privileges, quality of life and right to protect one’s own interests) versus the public good (democratic decisions, betterment for society or the environment). In other words, Nimby refers to a dilemma between the individual (me) perspective and the collective (we) perspective in the broadest sense. Being obliged to make choices in moral dilemmas is generally regarded as stressful (Watzlawick et al., 1967) because the choice for one good implies betraying the other good. Criticism expressed by significant others cannot be wholeheartedly refuted because the value of their arguments is acknowledged at least partially. A dilemma, thus, has no logical, satisfactory solution. A well-known coping mechanism to deal with dilemmas rhetorically is to resort to the fallacy of a ‘false dilemma’: by denying one side of the dilemma or by trying to make the motives of one side suspect. In the debate surrounding Nimby, this involves identifying one side of the dilemma as selfish, egocentric or irrational, the fallacy of ‘ad hominem’, which attacks the character or circumstances of the individual (Cohen & Copi 2005).

Using this perception of Nimby, the position can be defined as a dilemma in which ‘me-interests’ prevail when a facility is applied nearby, while ‘we-interests’ prevail when such a facility is located elsewhere. Acknowledgement of the ambivalent nature of the individual (or group) process in Nimby provides a conceptualization which avoids the abovementioned rhetoric: the ambivalent position of, for example 60% opposed and 40% in favour, cannot be simplified to 100% opposition. Given the dearth of studies that focus on explaining Nimby-like responses and the initiating factors (Futrell, 2003; Devine-Wright, 2005), we developed two models to conceptualize Nimby and Nimby-like responses: the ‘quadrant model’, expressing the different (opposition or accepting) positions and the ‘local response model’, focussing on the development of these different positions. These will be introduced in the next two sections.
Chapter 2

2.3 Quadrant model of opposition positions

The ‘quadrant model’ (figure 2.1) aims to distinguish between the different response positions. In this model, the different potential responses (oppose/accept) are set out on one axis. On the other axis, the key element is experienced nearness (nearby/far away) to the application of the technology. It should be noted that, although the model refers to the category ‘far away’, this category includes all locations that are not considered ‘nearby’ from an individual perspective. Placing the different behavioural positions in this quadrant visualizes the differences and similarities between them. As such, the model shows that whereas Niaby and Iaby represent complete rejection or acceptance of a facility, wherever it is placed, Bimby focuses on the positive local response to a nearby development.

Most importantly for the purpose of this chapter, the quadrant model visualizes the dilemma of the Nimby position, and thereby the ambivalence, shifting from acceptance to rejection. No other position is characterised by such a shift in position. In line with Snow et al. (1986) who stressed the dynamic aspect of participation in social movement organizations, and Furtell (2003) who considers NIMBY protests as “dynamic: actions and claims shift as the context of the dispute changes” (p. 361), we consider this to be an essential element of Nimby. Static – non-ambivalent – positions such as Niaby and Bimby are also included in the model. The definitions explained in box 2.1 are used to classify the response positions in the quadrants.

![Figure 2.1: Quadrant model in which the potential responses (accept – oppose) are set out against distances (nearby – far away). Different characteristic response positions are placed in the model, showing the dynamic character of the Nimby position.](image-url)

In order to understand the difference between the quadrant model and the process model presented in the next paragraph, a distinction must be made between two facets of the Nimby concept that will be used in the rest of this thesis. On the one hand, we consider Nimby a description of the attitude or behaviour that expresses the dynamic position about a development in general and the nearby application thereof. This is referred to as a Nimby position. A position can be expressed through behaviour as well as less overt in the form of an attitude. Other acronyms addressed previously (box 2.1) also reflect positions, such as a Niaby position, a Bimby position and an Iaby position.

On the other hand, we consider that Nimby represents a process. A positive perception towards a
development or facility develops (over time) into a negative position on the application thereof. This interpretation incorporates a learning-aspect and focuses on the re-evaluation of the position that occurs under the influence of specific drivers.

2.4 Local response model

The different positions of the quadrant model are now reframed in a local response model, showing the development of a position (a response) when a general development becomes a specific initiative in the neighbourhood (becomes local). Implicit positive or negative attitudes towards the general development can become explicit attitudes which can then develop into opposition or acceptance behaviour. To be able to analyse such development in oppositional processes, we consider it necessary to gain insights into how they develop. From case studies of opposition responses, such as Futrell’s (2003) study on the development of community opposition to a planned chemical-weapons disposal facility, it becomes clear that opposition reactions do not occur at once but develop over time, under the influence of several factors.

To clarify the development of different local responses and their intrinsic mechanisms in detail, we formulated a four stage model on the process through which responses develop, following similar divisions by Hajer (2003a) and Verhoeven (2009). These stages include (see figure 2.2):

1. Attitude or feeling (= implicit position) towards a facility or development in general. At the start of the process people can have a sympathetic or aversive position towards a facility or development in general, or they can be undecided about their position. This stage is comparable with the standby stage referred to by Hajer (2003a), or the ‘offline’ citizens mentioned by Verhoeven (2009).

2. A trigger event occurs. In the case of traditional Nimby, such an event consists of the plan to locate a facility within the experienced nearness. Hajer (2003a) speaks of standby citizens being ‘ignited’ to become involved or active in this stage. Verhoeven (2009) mentions the need for problematizing a situation for citizens to move from ‘offline’ to ‘online’.

3. A reflection on the position towards the specific facility in the community. As a consequence of the trigger-event, community members are likely to re-evaluate their perception. In this re-evaluation, new arguments relevant for the new situation are also included. As a result of this learning, caused by the new situation and related arguments, an initial positive attitude towards the technology can turn into a negative position towards its application. An evaluation of costs and benefits can also lead community members who were initially undecided to develop a positive or negative attitude. Some might remain undecided, vacillating between the options.

4. Over time and under the influence of several drivers, people can decide to express their positive or negative position in overt (opposition) behaviour. Behavioural expressions of opposition form the visible aspect of opposition reactions and are therefore considered as a separate stage. Stages 3 and 4 are comparable with what Verhoeven (2009) refers to as ‘online’ citizens.

Whereas Devine-Wright (2005) speaks of Nimby in terms of active resistance, we also consider the less
overt – but not necessarily less explicit – level of position reflection (Stage 3) to potentially represent Nimby. Such a Nimby position consists of negative thoughts and opinions about a nearby siting of the facility, without participating in active opposition behaviour. Active resistance is what we label overt opposition behaviour, which includes active opposition to the development by forming action groups, organising and participating in protests, etc.

These four stages are included in the local response model, which is shown in figure 2.2. This model can be used to analyse the development of different (acceptance or opposition) positions.

\[ Figure 2.2: Four successive steps in the genesis of Nimby and other positions \]

Horizontally, the process is visualized in stages over time. Vertically, different responses from positive to negative are set out. People who move through the stages in a horizontal line, represent the static positions visualized in the quadrant model. A person characterised as a NIABY for example moves from a negative position towards a facility in general to a negative position on a specific application of that facility in the neighbourhood. IABY’s go through a similar process on the top part of the figure.

This model further shows the dynamic character of Nimby. While this position starts at the top left as a perception somewhere in the range of ‘positive’ to ‘blank and yet undetermined’, the trigger event and (re-)evaluation of costs and benefits of the local application turn the local citizen towards a negative position towards the facility, which can subsequently develop into opposition behaviour. Figure 2.3 illustrates the process of a Nimby and Niaby response.

This local response model is in line with the vision of Futrell (2003) who observed shifts in attitude, depending on the context of the issue. Hubbard (2006) puts more emphasis on Nimby as a change in argumentation instead of attitude: other arguments become relevant when discussing the nearby
Improving the precision of the Nimby concept with a new process model of community opposition

facility, instead of the usefulness of a facility in general. In our view, these are opposite sides of the same coin, as attitudes are expressed in the debates by critical, exploring or supportive argumentation. These different arguments relate to the perspective which can be typified as individual (consequences and benefits for \textit{me} here) or collective (consequences and benefits for society at large). The expression of a Nimby position would imply the use of positive ‘\textit{we}’ arguments and negative ‘\textit{me}’ arguments. However, in line with the coping mechanism mentioned previously for dealing with dilemmas, Nimbies could also completely shift in argumentation from the me-level to the we-level, arguing for example that they are against these developments everywhere. This way, one of the sides of the dilemma is denied in order to deal with the dilemma, not necessarily because that other side of the dilemma is no longer relevant.

![Figure 2.3: Illustration of the local response model for the development of a Nimby and a Niaby response.](image)

### 2.5 Opposition drivers

While the presented local response model reframes Nimby as a process and shows its ambivalence, it does not include the influences that drive people to move from a positive perception to(wards) a negative position. Why these people make this shift thus remains a question. Various authors propose and discuss opposition drivers that explain why Nimby behaviour is expressed. The distinction between collective (‘\textit{we}’) and individual (‘\textit{me}’) perspectives as two sides of a Nimby dilemma is applied in this section to categorize these drivers systematically. As an additional division, we make a distinction between content-related and non-content-related drivers. Table 2.1 shows six categories of drivers we distilled from the literature. While the category ‘consequences’ is content-related, the other five are not related to the content, but deal with process related issues as well as personal and contextual characteristics.
Table 2.1: Drivers towards opposition mentioned in the literature

<table>
<thead>
<tr>
<th>Category</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content-related</strong></td>
<td></td>
</tr>
<tr>
<td>Consequences</td>
<td>Decline in quality of life/nuisance (noise, truck traffic, odour, etc.); Decline in image of the community; Economic benefits of the development; Perceived risks for health, environment or (unspecified) calamity; Unequal/unfair distribution of the burden; Devaluation of private property; Consequence of precedence: Inability to stop other undesirable land uses after accepting one.</td>
</tr>
<tr>
<td><strong>Non-content-related</strong></td>
<td></td>
</tr>
<tr>
<td>Distrust/Trust</td>
<td>In government, local authority, development organisation, scientists, experts and between supporters and opponents.</td>
</tr>
<tr>
<td>Decision-making process /</td>
<td>Degree of participation;</td>
</tr>
<tr>
<td>Participation</td>
<td>The way participation is organised;</td>
</tr>
<tr>
<td></td>
<td>Participation process;</td>
</tr>
<tr>
<td></td>
<td>Transparency;</td>
</tr>
<tr>
<td></td>
<td>(Perceived) procedural equity.</td>
</tr>
<tr>
<td>Information</td>
<td>Insufficient information, precautionary principle (in dubio abstine);</td>
</tr>
<tr>
<td></td>
<td>(Perceived) contradictory communication by different stakeholders;</td>
</tr>
<tr>
<td></td>
<td>Inadequate communication;</td>
</tr>
<tr>
<td></td>
<td>‘Information haze.’</td>
</tr>
<tr>
<td>Personal characteristics</td>
<td>Emotional commitment to conflict (between personal and general interests);</td>
</tr>
<tr>
<td></td>
<td>Likely to organize and attend meetings;</td>
</tr>
<tr>
<td></td>
<td>Self-confidence about effects of opposition.</td>
</tr>
<tr>
<td>Characteristics of the</td>
<td>Opinions of politicians, media as well as others within the community.</td>
</tr>
<tr>
<td>surroundings</td>
<td></td>
</tr>
</tbody>
</table>

2.5.1 Consequences: costs and benefits

Often mentioned determinants stimulating a local reaction are those related to a new balance between costs and benefits for the local community if the siting takes place. Mueller and Mueller (2005) categorised them into three concerns:
· The impact on the community, such as concerns about road improvements, jobs and increase of traffic;
· The inconvenience in everyday life, mainly involving noise, smell and aesthetic aspects;
· The effect for homeowners related to the value of private property.

Mueller and Mueller’s research showed empirical evidence that factors of inconvenience presented one of the strongest drivers for opposition, and economic losses for homeowners most often generated opposition to a project.

(Perceived) risks are also identified as an important factor for local acceptance or opposition (Futrell, 2003; Schively, 2007). Risks that are mentioned are related to the environment, investments, health and self-identity (Kraft & Clary, 1991; Futrell, 2003; Wester-Herber, 2004; Wolsink & Devilee, 2009).
Two dimensions of risks are the probability of consequences and the magnitude of such consequences once they occur. The perceived probability and magnitude of risks in communities have proven not to be consistent with scientific calculations of such risks (Hansson, 2005; Kaspersion et al., 1988). In fact, Futrell (2003) mentions that opposition is further stimulated if a discrepancy exists between the risk perception of community opponents and that of experts. Also, when the net outcome of a perceived distribution of costs and benefits for a specific community leads to an assumption of inequity and a sense of injustice, opposition may arise. Equity is often addressed in the literature in relation to opposition (Elliot & McClure, 2009; Lake, 1993; Pol et al., 2006; Wolsink, 2007). Mannarini et al. (2009) see a ‘sense of justice’ as a factor which triggers protest.

2.5.2 Distrust/Trust

Distrust is considered an essential, persistent explanatory factor in several studies on Nimby (Elliot & McClure, 2009). The failure to develop trust decreases the community’s acceptance of unwanted developments. There are different actors who can be distrusted (Futrell, 2003; Baxter et al., 1999). Additionally, distrust between opponents and supporters of a development within a community is reported to increase the risk of overt Nimby behaviour.

Important factors in the development of trust between initiators of the development and community members are the credibility and the technological competence of the initiating organization (and its officials). Officials’ inability to address the existing anxieties of community members about past incidents reduced their credibility and perceived competence (Futrell, 2003; Kraft & Clary, 1991). Perceived disinterest in the community, a focus on the management factors of a project, or the use of technical language by officials are other factors stimulating distrust (Futrell, 2003; Elliot & McClure, 2009).

Experts who are considered biased, technical and patronizing (Baxter et al., 1999) are also unable to engender trust. In addition, there are limits to the scientific knowledge of future developments. In matters of scientific uncertainty, such as safety of a nuclear power plant, common sense often prevails over limited expert knowledge (Futrell, 2003).

A participatory process, consistent communication, and the ability to address concerns from the community enhance the perceived credibility of development actors, thereby positively nurturing trust, which eventually decreases the motivation to oppose (Baxter et al., 1999; Futrell, 2003; Kraft & Clary, 1991).

2.5.3 Decision-making process

Two interrelated opposition drivers in the decision-making process are related to participation and procedural equity.

Participation can be seen as a form of public engagement in decision-making processes with the ability to counterbalance opposition attitudes. It implies that some decisive power is distributed to those participating.
One-dimensional types of public engagement like *dissemination* (information sharing by initiator) and *consultation* (community sharing concerns) are less counterbalancing and sometimes even trigger Nimby behaviour. Baxter et al. (1999) found that consultation threatened fiduciary trust and increased the perceived procedural inequity: residents had the feeling that the officials were not listening and did not take community concerns into consideration. In their case, consultation was used by the residents to frustrate a siting process. Futrell (2003) mentions the risk of officials being inconsistent in the dissemination of information, thereby creating confusion and uncertainty. In general, dissemination triggers opposition when the information provided does not match the information required by the public (Baxter et al., 1999; Elliott & McClure, 2009; Futrell, 2003; Kraft & Clary, 1991; Rabe, 1994; Wolsink, 2000; Wolsink & Devilee, 2009). Several authors emphasize a careful design of the participation process because public engagement has often resulted in increased distrust and a sense of injustice (Agterbosch et al., 2009; Aitken, 2010; Burningham, 2000; Kraft & Clary, 1991; Wolsink, 2000, 2007).

Perceived procedural inequity (also referred to as *unfair play*) can result in the decision-making being considered antidemocratic by communities which leads to anger and distrust. In such a case, residents can feel that they are being treated unfairly during the process. These forms of perceived inequity proved to be a powerful motivator to mobilize residents to engage in opposition (Baxter et al., 1999; Futrell, 2003; Mannarini et al., 2009; Wolsink & Devilee, 2009).

Perceived procedural equity explains why some forms of public engagement drive opposition, whereas others diminish such reactions. Although it has been frequently argued that public engagement is one of the best ways to secure perceived fair play (Agterbosch et al., 2009; Aitken, 2010; Elliott & McClure, 2009; Hermansson, 2007; Thornton & Knox, 2002; Wolsink, 2000; Wolsink & Devilee, 2009), it should be acknowledged that this can only be the case if the community actually can influence decision-making by *participation*.

### 2.5.4 Information

Information is considered to play a decisive role in rational decision-making. Participants gain knowledge through information, which they then apply to decision-making in a specific situation (Rogers, 2003). Futrell (2003) suggests that Nimby can be considered a deliberated and rational response (decision), initiated after a period of information-seeking and searching for solutions. The evaluation of a range of information can lead to the conclusion that the project needs to be opposed. Information is an opposition driver when:

1. There is insufficient knowledge – some technological developments are so new that limited information exists on risks (long-term) for the environment. Lack of information hampers communities that ‘don’t want to be the guinea pig’ from balancing pros and cons, in which case the precautionary principle is a safe option.
2. Contradictory information showing complexity – information from industry, governments and non-governmental organisations (NGOs) follows a path of co-evolution in which pro and con
arguments become highly technical, often about environmental or health risks. The mere fact that the information appears to be conflicting creates an ever more complex situation. Hibbard & Peters (2003) report that, within the field of medicine, if the information provided is not usable and understandable, those requested to make the decision can feel unsatisfied and less empowered.

3) Inadequate communication by the initiator – A Nimby reaction can emerge after an ineffective attempt by experts to address the concerns of the community (Futrell, 2003). This further undermines trust in the planning organisation, as authorities remain unable to address questions about the project that were perceived as easy by the public.

Futrell (2003) introduces the concept of ‘information haze’ as a combined concept for these information and communication issues as a driver towards a Nimby reaction. An information haze is “a condition in which there exist conflicting, contradictory, multiparty, multidirectional communications that fail to clarify the risks associated with a project” (p.365).

2.5.5 Personal characteristics

Schively (2007) mentions several typical characteristics of an active Nimby: generally older, highly educated and more likely to organize and attend meetings. Opposition is also more likely when the issue permits a personal identification and sympathy with the costs at stake, e.g. environmental, health and economical risks (Smith and Marquez, 2000). Kraft and Clary (1991) call this ‘the affective component’ of the Nimby concept.

2.5.6 Characteristics of the surrounding

The literature also mentions influences in the surroundings of a person or community as drivers for opposition. Both politicians and media support can be opposition drivers. Politicians who take a stand against a facility stimulate resistance (Futrell, 2003). Futrell suggests that public representatives facilitate the opposition to speak up on behalf of personal damage. On the other hand, the mere existence of complaining citizens can be seen as a driver for politicians to speak up. Similarly, critical reporting on a planned project in newspapers and other media were found to feed local concerns. Both the tone and volume of media reports can be considered as stimuli for an opposition reaction in the community.

2.5.7 Integrating drivers to the me- and we-discourses

In order to classify opposition reactions as Nimby or another type of opposition, we categorized the identified drivers into the individual and collective perspective. The related costs and benefits, for example, are different in a ‘me perspective’ and a ‘we perspective’. Arguments about declining property values or potential health effects for residents belong to the me-discourse as they represent the local interests, while arguments about the general benefits and threats related to the technology or installation involved belong to the we-discourse.
Both content-related and non-content-related drivers can be applied to the me- and the we-discourses. For example, residents can distrust a technology in general or the local application and the initiator. Figure 2.4 shows the different drivers distinguished earlier applied to the me- or we-discourse.

![Figure 2.4: Model of response positions towards new developments/facilities and drivers from the literature. The process in which a position is developed is fed by two distinct categories of discourses (the me-discourse and the we-discourse).](image)

### 2.6 Discussion

In this chapter we aimed to gain a deeper understanding of opposition responses of citizens to policy decisions of governments, through the analysis of the most well known citizen opposition response: Nimby. We performed a literature study to distil the essential elements of Nimby and its distinction from Nimby-inspired acronyms. The different positions were set out in a quadrant model along two dimension: private versus public, and nearby versus far away. One of the essential elements, the dynamic position, attitude and/or behaviour towards nearby and faraway siting of the facility/technology was reframed in a non-conflictual local response model, in which we focussed on the process of attitude development and learning. Having reconstructed the body of literature on Nimby and Nimby-inspired acronyms in a model that describes the observed dynamics in the process leading to Nimby opposition behaviour, the literature was reanalysed to identify and list the enhancers and reducers in the stages towards Nimby behaviour. As such, we provided a research model on the Nimby phenomenon beyond the current definitional cloud. The model offers ample opportunities to formulate model based empirically research questions to investigate the Nimby mechanisms systematically.
Although the starting point of Nimby ensured that this chapter mainly focused on oppositional responses, the mechanisms that were analysed apply equally to accepting attitudes and behaviours. Citizens who are positive about a development in the community (expressing a Bimby position) can also enhance the conflict by using one-discourse rhetoric by stipulating the benefits for the community and set opponents apart as emotional egoists.

One of the essential elements of opposition responses presented in the opposition-response-model is the shift citizens make from unaware and uninterested to aware and aroused (stages 1 and 3). In the description of these stages, reference was made to the description of the process by Hajer (2003a) and Verhoeven (2009). Hajer uses the concept citizens in ‘standby’ that need to be ignited (triggered). Verhoeven (2009) supplements this stage with the stages of ‘offline’ and ‘online’. With the model presented in this chapter, we have provided a theoretical frame to the idea of offline, standby and online citizens. Based on the analysis of empirical literature, we made a clear distinction between different stages of opposition (or citizen-response) development. This model allows for systematic research into different driving factors towards overt opposition (stage 4), as well as the role of triggers (stage 2) and indicators for implicit positions (stage 1).

The process model aims to provide more understanding of opposition responses, while moving beyond the normative framings that have been criticised by many scholars. Reframing Nimby as a process illustrates that both content-related and non-content-related drivers can enhance the opposition response, as well as diminish such reactions. A process approach to opposition responses additionally shows how Nimby is not a fixed position that has to be dealt with but, instead, an unstable, reflective state in which an individual or group seek(s) a position in the dilemma ‘development versus personal interests’.

The model also shows that, although some positions (e.g. Nimbies and Niabies) are expressed in the same behaviour (i.e. opposing the local application of the facility), the perceptions and arguments underlying these positions are very different. The model and framings therefore not only provide insights into what type of opposition is actually at stake, but also supply indications of how to address community opposition processes. We will use these models in coming studies on deliberative and participative governance to investigate the feasibility and efficacy of participative designs to respond to different stages of the opposition process. In the next chapter, we used these models to analyse the process of reflections behind the responses of inhabitants of rural communities to commercial cultivation of GM crops.
Chapter 3

Nimby, or how do the rural neighbours respond to genetically modified (GM) crops?

An exploration of the structure of reactions by inhabitants in rural communities in The Netherlands to the commercial cultivation of GM crops in their community

The analysis of the Nimby response performed in the previous chapter, resulted in the perspective on opposition as a process. We showed that Nimby can be framed as a distinct form of an opposition positions, as it characterizes as a flexible position, caused by a dilemma between two opposing sets of interests. The literature study provided an overview of the key elements, interests and arguments that influence the process through which citizen opposition to policy develops. The driving factors retrieved from the Nimby literature can both enhance the incentive to oppose a policy-decision, as well as reduce the need citizens perceive to act. These insights will be used as a starting point for further analysis in the rest of this thesis.

In this chapter, we will apply the models developed in chapter 2 to systematically analyse rural citizen responses to a specific policy decision (the cultivation of GM crops in the Netherlands) and to empirically identify enhancers and reducers of (rural) citizen responses in that debate.

1 This chapter is based on the article: Tjard De Cock Buning, Claar De Brauw, Mariette Van Amstel, NIMBY or how do the rural neighbours respond to genetically modified (GM) crops? An exploration of the structure of reactions by inhabitants in rural communities in The Netherlands to the commercial cultivation of GM crops in their community, Geoforum, 42 (2011) 349–361.
3.1 Introduction

Since the introduction of genetically modified (GM) seeds for agricultural crops (i.e. maize, cotton) in the beginning of the 1990s, the societal debate on GM has been loaded with polarized opinions. The discussion is mainly structured by institutionalized organizations such as professional NGOs (e.g. Greenpeace, Friends of the Earth), seed companies (Monsanto, Bayer), and political parties (green). In Europe the Eurobarometer program, an EU-sponsored program, regularly conducts surveys among citizens of the different member states of the EU, regarding their perceptions on biotechnological applications and GM food (see the latest Eurobarometer, Gaskell et al., 2006). In addition, there is a barrage of national polls and social surveys that describe the attitude of the citizens to political decisions on issues such as market authorization of GM seeds, labelling of consumer products containing GM-produced substances, and coexistence rules to guarantee the consumer’s free choice (e.g. Gutteling et al., 2006; Marris et al., 2001; MORI, 2003; Poortinga & Pidgeon, 2004). Two main concerns seem to be prevalent: environmental risk and food safety risks. The former concerns outcrossing to non-agricultural plants and nature at large, resulting in unmanageable weeding or impacts on the related ecosystems, including animals, fungi and bacteria. The latter relates to changes in the components of plants that might have detrimental effects on the health of consumers.

The national and international political response was a systematic regulation of these concerns by means of the Convention on Biological Diversity Rio de Janeiro Protocol for Environmental Protection² and the Cartagena Protocol for Biosafety.³ In the context of the latter, it has been agreed globally (UN) that countries should install scientific biosafety committees to assess the safety of GM organisms and to regulate and organize the control of GM products at each border before their entry into the country. However, the situation of the EU is special. In Europe various governance styles regarding public engagement in policy coexist (Hagendijk & Irwin, 2006). As a consequence, each country has its own social dynamics around governmental decisions to authorize the market introduction of GM crops (e.g. in France aggressive actions by protest groups – e.g. ruining GM maize fields – dictated the political decisions, while the farmers of Austria chose for non-GM as a competitive European niche market; Seifert, 2009). In The Netherlands, the typical deliberative governance style gives the government a role as facilitator by engaging institutionalized stakeholders to develop their own coexistence guidelines in a bottom-up way. The project presented here was conducted as an outsourced academic background investigation to assist the government in better understanding the options and pitfalls of democratic deliberative governance in the domain of GM crops.

Since the implementation of directive 2001/18/EC (European Parliament, 2001) in 2002, Europe allows the commercial cultivation of certain GM crops in the member states. At the start of this project

in 2007, Spain and France were the only countries that cultivated GM crops on a commercial scale (89% of 109,498 hectares in the EU; USDA, 2008). In The Netherlands, the cultivation of GM crops, such as MON180 maize, is expected in the near future. Coexistence, an important European policy concept to bridge the deadlock between proponents and opponents of GM crops, aims to regulate the co-cultivation of GM and non-GM crops, without one leading to exclusion of the other (European Commission, 2003). On November 2, 2004, the Dutch agricultural sector and the sector of organic farmers jointly presented their coexistence agreement to the Dutch Ministry of Agriculture, Nature and Food Quality. One of the most hotly debated issues was the minimal isolation distance between GM maize fields and non-GM maize fields; it was ultimately agreed on at 250 meters (Coexistence commission, 2004; summary in USDA, 2008).

Experiments to investigate non-contaminating isolation distances and possible adverse effects on EU-authorized GM crops have been conducted in small field experiments all over Europe (in The Netherlands: Van de Wiel et al., 2008). These experiments were generally destroyed by environmental protesters before they flowered (Gray, 2008). Most protest groups use legal means to demonstrate their concerns for the environment, such as demonstrations, info websites and producing “informational” movies, flyers, reports, etc.

In view of these institutionalized protests, the question remains of how society at large will respond to the legal cultivation of GM crops on a commercial scale. Although the above-mentioned national and international surveys give a detailed insight into the citizens’ perceptions, both for and against, the surveys do not pose specific questions on the acceptability of the cultivation of GM crops in the direct vicinity of the informant, right around the corner.

A small number of studies on the reaction of farmers (France, Austria and the UK) to the introduction of GM crops within Europe have been published (Hall, 2007; Oreszczyn, 2005, 2006, Oreszczyn et al. 2007; Seifert, 2009). No study, however, has described the reaction of their ‘neighbours’, the non-farming inhabitants of rural communities. These inhabitants are the ones who will be confronted physically with the introduction of the technology, without having had a say in those decisions. Considering the Dutch history of frequent destruction of field trials, the question arose of how the local rural communities will respond to the cultivation of GM crops.

This chapter presents the results of a project in which we investigated the citizens’ responses that can be expected to the introduction of GM and more specifically, whether a Nimby response is to be expected. A Nimby response is characterized by an ambivalent position, i.e. a positive (or neutral) attitude towards the technology in general (far away), combined with a negative perception of the technique once it is used nearby (the application). The project was executed in 2007-2008 by the Athena Institute of the Vrije University, Amsterdam, at the invitation of the Ministry of Agriculture,
Nature and Food Quality (LNV) and the Ministry of Spatial Planning, Housing and Environmental Affairs (VROM), which are jointly responsible for the biosafety regulations and market authorization. The project has to be understood in the context of the Dutch deliberative governance style, which grants an important role to public input and engagement in national policy development. The Athena Institute is specialised in transdisciplinary research for sustainable innovations in the health and life sciences (e.g., Cock Bunin et al., 2008). The project consisted of three parts: the formulation of an analytical framework, a qualitative research regarding GM crop positions (focus groups and in-depth, semi-structured interviews), and questionnaires regarding the use and handling of information by rural inhabitants. This chapter focuses on the results of the second part of the project. Paragraph 3.2 briefly introduces the definitions and the model used to describe and investigate the possible responses towards the introduction of GM crops. This is followed by a description of our survey in successive steps and the related results. We conclude with a discussion of our findings with respect to the Nimby model and their relevance for deliberative governance on the issue of GM crops. The main question addressed in this chapter is: What position do rural communities in the Netherlands take with regard to the potential cultivation of GM crops, how do these responses differ from the national debate and can factors be identified that help explain these differences?

### 3.2 Analytical framework: the NIMBY model and research questions

In a pilot, that was part of a master student project, we interviewed farmers and inhabitants in rural communities. In one of them, farmers who occasionally grew small lots of experimental GM potatoes (for starch, not for food) described that they successfully scared off urban-based activists, who intended to protest against GM crops in their fields, with a joint action in which they armed themselves with pitchforks. In other communities anti-GM actions seemed to be accepted as a part of the political debate that happens to target one of the many farmers permitting a GM trial on their fields. This suggests that rural opposition is not necessarily locally organized, and that support for GM farmers could be related to social cohesion.

In order to analyse the reactions of inhabitants of rural communities and the differences between the arguments in the local and the national GM debate, we used the literature to construct an analytical framework that was both broad enough to encompass various types of responses (in order to cover whatever we might encounter in our field study, not necessarily only Nimby) and at the same time concise enough to use in communications outside the scholarly community, specifically within the government. As we wanted to answer the question of whether ‘a’ Nimby response might arise within the rural communities when GM crops are cultivated by local farmers, a model was needed that distinguished among the various expressions of opposition responses and the mechanisms that generate Nimby (and other forms of opposition) behaviour. Below we briefly describe the theoretical model that we developed and discussed in the previous chapter.
Nimby, or how do the rural neighbours respond to GM crops?

3.2.1 Wide spectrum of opposition responses

The best-known reaction to locally unwanted plans is the ‘Not In My BackYard’ or ‘Nimby’ reaction. Nimby behaviour appeared in the literature in the 1980s and seems to have had a revival in last 5 years due to community opposition to siting of wind turbines (see reviews Aitken, 2010; Cass et al., 2010). The concept seems to have a variety of definitions. In 1990, Kraft and Clary define Nimby as an “intriguing political phenomenon associated with citizen participation in cases involving (such) technological risk [...] intense, sometimes emotional, and often adamant local opposition to siting proposals that residents believe will result in adverse impacts. Project costs and risks are geographically concentrated, while the benefits accrue to a larger, more dispersed population” (1990, p. 300).

In a key article published in 1994 (and repeated in his later publications), Wolsink defines Nimby as “A positive attitude towards the incineration of waste (equally valid for other facilities), combined with a rejection of, and opposition to, the construction of an incineration plant anywhere in one’s own neighborhood” (1994, p. 862).

We conceptualized the various Nimby responses in a quadrant, placing the individual positions (accept or oppose) on one axis and the location of the technology/facility (nearby or far away) on the other axis. The typical ambivalent Nimby reaction is depicted as a position opposing placement nearby, other static positions mentioned in the literature4 as variants of Nimby have a place in the model, such as the ‘Not In Any BackYard’ (Niaby) response, illustrative of both general and local opposition, and the ‘In Any BackYard’ (Iaby) reaction, referring to both general and local acceptance. See figure 3.1.

Regarding the genesis of a Nimby-like position, Futrell (2003) is surprised by the limited number of studies performed on initiating factors. Devine-Wright (2005) also states that the existing literature is better at describing the perceptions than at providing substantial explanations.

Wolsink (1994) observed that contrary to the general definition, people who oppose a facility that is planned nearby do not necessarily agree with the facility in general; this is also the case with GM crops. This opposition could be explained by the notion that people only start to think about the

---

4 The frames most often mentioned in the literature are:
- NIABY: “Not in Any BackYard” expresses a general type of opposition against a technology, wherever it is located (Shively, 2007; Kipp, 2002; Colebrook & Sicilia, 2007). The extreme forms of this reaction are BANANA (“Built Absolutely Nothing Anywhere Near Anything”) (Kipp, 2002; Colebrook & Sicilia, 2007) and CAVE (“Citizens Against Virtually Everything”) (Shively, 2007; Kipp, 2002; Colebrook & Sicilia, 2007).
- NIMNBY: “Not In My Neighbor’s BackYard” – illustrates the opposition that a neighbour expresses to activities conducted in someone else’s backyard (Kipp, 2002; Colebrook & Sicilia, 2007).
- When an extended ‘backyard’ is taken into account, this is framed as NOTE (“Not Over There Either”), NOPE (“Not On Planet Earth”) or NIMTOO (“Not In My Term Of Office”) (Colebrook & Sicilia, 2007).
- Smith & Marquez (2000) introduce a positive local reaction, with the acronym BIMBY (“Build In My BackYard”), illustrating that people that are willing to have the installation in their nearby surroundings.
facility or technology when it has an impact on their immediate surroundings. Thus, in the process of attitude formation, the starting point is not necessarily a general acceptance of the facility/technology, it might also be the lack of objection to the facility/technology as long as it is not built in one’s own backyard. Snow et al. (1986) stressed that the Nimby frame is “dynamic, shifting as the context of the dispute changes”.

Futrell (2003) observed shifts in attitude and Hubbard (2006) emphasized the dynamics of arguments:

Nimby is not characterised so much by the actual change in attitude, but by the change in arguments used to shift the basis of the discussion to the general drawbacks associated with the development, instead of personal unease with the development, i.e. a masking of an uneasy individual/personal perspective by a general/communal perspective discourse: criticizing the facility in general (its pretended need for society, its aesthetics, its safety, etc.). But this type of argument vanishes when the facility moves to another community.

Although one could emphasise the differences in the authors’ assumptions, we chose to take up their common point on the dynamic of shifts (whether attitudes, contexts or arguments) and align them in a kind of learning model (see paragraph 3.2.2). Therefore, we made a distinction between two interpretations of the Nimby concepts: Nimby as a description of socio-political position and Nimby as a dynamic learning process, in which a plan (e.g. to locate a public facility nearby) triggers a re-evaluation of an intuitive hunch to make up one’s mind. To clarify matters, we refer to the former as ‘Nimby positions’ and to the latter as a ‘Nimby process’.

### 3.2.2 The genesis of a Nimby response framed as learning process: the local response model

At the start (see figure 3.2), people might have an undetermined attitude towards the issue at stake, or an unarticulated, sympathetic or aversive attitude to the issue in general (indeed, not necessarily negative; Wolsink, 1994). In the next phase, there is a trigger event: GM crops or windmills are planned in the neighbourhood. Information is distributed by all kinds of parties, and some of the undetermined community members develop a positive or negative attitude that can evolve over time.

![Figure 3.1: Quadrant model of response positions: NIABY: Not in Any BackYard expresses a general type of opposition against a technology, wherever it is located; likewise, In All Backyards (IABY) refers to a general positive position; BIMBY: Build In My BackYard, illustrates a position that is willing to have the facility in the immediate surroundings. NIMBY: Not in My BackYard is the only dynamic position, shifting from acceptance far away, to opposition when the facility is planned nearby.](image-url)
Nimby, or how do the rural neighbours respond to GM crops?

into a more or less explicitly positive or negative position on the issue. Some others might remain undetermined, vacillating between the options. They will probably experience the dilemma of the issue most consciously, the double-sidedness of the coin. By emphasizing the process by which various types of positions are arrived at, we reframe the core of the Nimby reaction as a dilemma between personal (local) and communal/general (national and international) interests: a ‘me’ versus a ‘we’ perspective. As a dilemma has no satisfactory solution, except for denying one or the other side, the trade-off is partly driven by previous basic attitudes and value orientations, and pro and con claims and arguments. By taking part in the debate, it evolves from a stage characterized by mixed arguments to a stage where either national or local arguments prevail. During this process the ambivalence of Nimby might turn into a predominantly negative (Niab) or positive (Bimby) position regarding the planned facility (prisons, waste incinerators, nuclear power plants, asylums, pig farms or GM crops).

Figure 3.2: Four successive steps in the genesis of Nimby and other positions

In the next step, we used the Nimby literature to collect explanatory factors that might influence the move from Nimby towards a specific positive or negative position. We clustered these factors into two categories: those arising in a personal me-discourse representing personal interests in the local context (for me is important…) and those founded on a we-discourse representing the general or common interest in the national/international context (for our society we should…). Within both discourses, four main types of arguments can be distinguished: arguments referring to distrust/trust, positive/negative consequences, personal/institutional characteristics and quality (lack) of information. In the final step, we adapted this generalized ‘local response model’ to our case, i.e. ‘GM-crop response model’. We then filled the four general classes of factors with specific arguments collected from the literature on the GM debate and the results of an explorative pilot at two rural locations, adding social
Chapter 3

cohesion. Based on the literature addressing urban-rural differences in relation to cooperation and aggression (e.g., Lavis & Stoddart, 1999; Putnam, 2000; Sampson et al., 1997; Stafford et al., 2003), we surmised that social cohesion might be an important determinant for the type of discourse and positions taken. Social cohesion can be defined as “the networks, norms and trust that bring people together to take action” (Lavis & Stoddart, 1999, p.8). A strong social cohesion in a community will thus result in the use of more me-discourse arguments, stressing mutual dependencies with known persons and institutions, and fewer arguments stemming from the (inter)national discourse, stressing (dis)trust in (inter)nationally operating institutions and systems. And if a strong social cohesion exists, it can be hypothesized that arguments deriving from the (inter)national discussion will have less effect on the community. Intense and cherished social networks between members of the community create trust and a shared vision, which we hypothesize will function as a counterweight to the information coming from the (inter)national discussion.

See figure 3.3 for the final integrated and adapted ‘GM-crop response model’ and the type of changes we made, i.e., ‘building sites’ became ‘GM fields’, ‘project managers’ became ‘GM farmers’ and ‘seed companies’. We focussed on communities in which GM crops have been cultivated (in field trials).

Figure 3.3: Model of determinants from the literature and response positions towards the introduction of GM crops adapted from a generalized model. The ambivalence of the Nimby response is placed in a pending position in the middle: struggling with the dilemma between acceptance of the technology in general or far away, but opposing the application nearby. The process in which one finally takes a position (the typical proponent and opponent, e.g. Bimby, laby, Nimby, Niaby) is fed by or expressed in two distinct categories of discourses (me-discourse and we-discourse). Classes of specific arguments added for this project are reproduced in **bold**.

This model enabled us to classify various positions towards the introduction of GM, and it is instrumental for the research questions of this study. First of all, to what extent is a Nimby response characterized by an equal distribution of positive arguments regarding the technology in general and negative arguments concerning the local growth of the GM crops; a Niaby response by negative
arguments, on both the technology and its application nearby; an laby response by the use of positive arguments on the application of the technology somewhere else, as well as the application nearby. Second, the model allows us to trace and categorise the factors that might steer the individual towards a certain response.

### 3.2.3 Research question

The discussion on GM is mainly held on an (inter)national scale, where it is dominated by institutions (NGOs, ministries, universities). Herring (2008) recently showed how a relatively small group of people (mainly international non-governmental organisations – INGOs) has had a large influence on the national GM discussion, by reframing transgenics in terms of ecological risks, corporate power and threats to food safety. This can have a great influence on the mass public, which has difficulty understanding its own interests, the underlying science and its uncertainties. This mass public is thus influenced by the debate that exists mainly between these INGOs and advocates such as seed corporations, farmers’ groups and political parties stimulating innovation in agriculture. For these reasons, we characterized this type of GM debate in our model as a ‘national’ discussion expressed in a collective perspective: a ‘we-discourse’.

For the part of this research that focuses on the character of the GM discussions in rural communities, we investigated (1) to what extent the local discussion differs from this ‘national’ discussion, and (2) which factors might influence the process of taking a position in favour (Bimby/laby) or against (Nimby/Niaby) GM crops in the communities. It is conceivable that people in rural communities are relatively more focused on personal (me-discourse) aspects since they are more likely to be directly confronted with the commercial cultivation of GM, and the farmers are their neighbours and community members.

### 3.3 Methodology

As we planned an explorative study, focused on gathering in-depth information on the type of arguments put forward by rural inhabitants in a small number of communities, the focus group methodology was used in combination with questionnaires (Dürrrenberger et al., 1999; Fiorino, 1990; Kupper et al., 2007). Focus groups can be characterized as guided group discussions or group interviews with a small number of participants (Dürrrenberger et al., 1999). Essential to a focus group is the interaction among the participants, which distinguishes this methodology from other types of interviews (Barbour & Kitzinger, J, 1999). According to Dürrrenberger et al. (1999), focus group research can increase the qualitative insights into attitudes and behaviour, especially in areas where limited social science research exists. This methodology has been used in the past to assess the reasons why the public feels positively or negatively about biotechnology (Cock Buning et al., 2008; Martin & Tait, 1992; Priest, 1994; Barns et al., 2000; Marris et al., 2001).
3.3.1 Selection of rural communities in the Netherlands

The selection of the localities for this research was based on three inclusion criteria and one exclusion criterion:

1) The selected locations should have housed a field trial with GM crops in their community. Therefore, the inhabitants of the communities will have had some experience with the cultivation of GM crops nearby and the possible consequences.

2) Based on a pilot, indicating the explanatory power of demographic variables for the local opposition, the four selected communities should embody rural variance in the following key demographic variables: the percentage of the population working in agriculture, soil type/community culture (sand, peat or clay), types of crops cultivated, average age and political leaning of the population, while being comparable in the ‘ruralness’ as defined as relatively small communities in a predominantly agricultural area.

3) In order to shed some light on the question of whether the national or local arguments will be used in the communities, a variance in the gradient of the sphere of influence of the national discourse was sought, e.g., the actual and/or perceived ‘distance’ to institutions that broadcast the national arguments in the GM debate on crops (most based near the national political centre: the Randstad, an area including Amsterdam, The Hague, Rotterdam, Utrecht).

4) Communities in which a controversy about or local opposition to GM already existed at the time this research started were excluded. This was confirmed by checking local newspapers and the political discussions held in the communities.

Based on these criteria, the following four communities were selected for the study:

- **Community A**: located in the eastern province of Drenthe (2-3 hours’ travelling time from the Randstad by car or public transport, no direct train connection), 26,000 inhabitants distributed over 25 small villages (range 51-5,000 inhabitants). Large proportion of the elderly inhabitants migrated recently from the Randstad to this rural area. AVEBE, a global starch company located near the community, has performed several tests with GM potatoes that have not been authorized by the EU.

- **Community B**: located in North Brabant, just south of the city of Rotterdam and near the national park ‘the Biesbosch’ (1/2 hour travelling time from the Randstad by car or public transport, direct train connection), consists of six villages and 27,000 inhabitants. Field trials for pollination of BT maize were situated in the middle of this region.

- **Community C**: the youngest and largest of the four communities, located in Flevoland (1/2-1 hour travelling time from the Randstad by car or public transport, no direct train connection). The three villages of the community are home to a total of 36,000 people. Although an agricultural community since it was founded on the new land reclaimed behind the dykes in 1967, it now houses a large proportion of commuters who work in the Randstad. A field at the border of community C was part of the BT pollination tests with maize.
Nimby, or how do the rural neighbours respond to GM crops?

- Community D: located in the south of the Netherlands in the province of Zeeland (2-3 hours travelling time from the Randstad by car or public transport, no direct train connection), this community consists of eight villages and 25,000 inhabitants. A relatively high percentage of inhabitants live according to strict Christian rules, and hardly anyone has moved there from the Randstad. Field trials for the pollination of BT maize were situated in the middle of this region.

3.3.2 Recruiting participants

Two successive rounds of focus groups were held in every community, each round was conducted with two groups of participants simultaneously, resulting in four sessions per community in total. In each location, one group consisted of representatives of the local council, and the other group was made up of inhabitants of the community that responded voluntarily to an open invitation. In line with Kupper et al. (2007), we tried to go beyond the well-known opinions of key actors in the GM debate, to reach for the still unarticulated opinions of society. Inviting people to a discussion on GM was expected to invoke a strong selection bias of well-informed people using arguments similar to the ones of the institutionalized key actors. So instead, we recruited participants without mentioning the GM issue explicitly in the invitation. The local council group was contacted through its own secretarial office. This usually resulted in the participation of representatives of most of the political parties. The ‘public’ was invited through flyers and posters that were put up in central locations in the community such as libraries, snack bars, pubs, restaurants and supermarkets. Additionally, local hobby, sport and cultural organizations were sent an invitation. Although open invitations increased the chance that only the more active citizens would volunteer, they are also more representative of the subpopulation that might eventually stand up against or be committed to developments in the community. This possible bias is therefore regarded as unproblematic within our research design.

In total (see table 3.1), 15 focus group sessions were conducted, with an average of seven participants each. The planned 2nd focus group with the members of the local council in A had to be skipped as our simulation case (‘What is your policy when some citizens demand a GM-free status for this community?’) became a reality in this community. Instead, we observed the real world process and arguments put forward during the local council meeting on the question.

The first round of focus group sessions generally consisted of more people than the second and overall, more men than women participated in the meetings. The average age of the participants was 55.0 years old, with slightly younger participants in the first focus group round (average age 54.5 years) than the second (average age 55.9). The citizen groups of communities C and D matched well with our intention to reach inhabitants not actively engaged in the GM debate, allowing us to study the process of genesis from Nimby towards Niaby or Bimby. In the community A citizen group, some inhabitants had recently migrated from the Randstad participated, introducing critical arguments from within the national discourse and in community B some farmer participants distanced themselves from the national discourse, enabling us to distinguish various inputs in the learning process.
Table 3.1: The groups that were formed using the above-mentioned recruiting policy and characteristics of the participants (questionnaire data).

<table>
<thead>
<tr>
<th></th>
<th>Community A</th>
<th>Community B</th>
<th>Community C</th>
<th>Community D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Citizens</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Com. council</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No of participants 1st focus group</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>No of participants 2nd focus group</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Average age (range)</td>
<td>57.7 (31-68)</td>
<td>52.1 (41-63)</td>
<td>49.6 (35-69)</td>
<td>55.3 (33-67)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>64 (39-78)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52 (30-66)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>47.4 (41-57)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56.6 (41-70)</td>
</tr>
<tr>
<td>Sex</td>
<td>6m, 3f</td>
<td>7m, 2f</td>
<td>6m, 1f</td>
<td>5m, 1f</td>
</tr>
<tr>
<td></td>
<td>5m, 3f</td>
<td>-</td>
<td>6m, 1f</td>
<td>3m, 1f</td>
</tr>
<tr>
<td>Born in the community</td>
<td>33%</td>
<td>11%</td>
<td>57%</td>
<td>100%</td>
</tr>
<tr>
<td>Years in the community</td>
<td>41.4 (7-68)</td>
<td>20.6 (11-41)</td>
<td>38.7 (4-69)</td>
<td>53 (33-65)</td>
</tr>
<tr>
<td>Job in agriculture</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Family in the community</td>
<td>67%</td>
<td>33%</td>
<td>86%</td>
<td>100%</td>
</tr>
<tr>
<td>Religion/ world view (WV)</td>
<td>0% Chr</td>
<td>70% Chr</td>
<td>71% Chr</td>
<td>50% Chr</td>
</tr>
<tr>
<td></td>
<td>50% WV</td>
<td>0% WV</td>
<td>50% WV</td>
<td>40% WV</td>
</tr>
<tr>
<td></td>
<td>50% none</td>
<td>19% none</td>
<td>50% none</td>
<td>60% none</td>
</tr>
</tbody>
</table>
3.3.3 Genesis of local opposition

All groups were consulted twice with an interval of two months. In the first round, participants were asked to write down three issues of personal concern regarding their specific community and to explain to the others why they considered them to be important, then they were invited to discuss and vote for three aspects of the community that they most wanted to change or conserve for the future. Next, in order for us to obtain a picture of the relative importance of GM crop cultivation, participants were asked to choose three issues from a list of 12 topics in the national debate that they considered relevant for their local situation. The topics on this list (see box 3.1) were chosen by the researchers from a number of themes mentioned as contemporary topics on the websites of different national ministries, such as the Ministry of Housing, Spatial Planning and the Environment for us (VROM), the Ministry of Agriculture, Nature and Food Quality (LNV) and the Ministry of Health, Welfare and Sport (VWS). The topics were chosen to include technologies as well as controversial topics.

Box 3.1: 12 topics of (inter)national discussion

- Genetically modified corn, potatoes or sugar beets cultivated in your community;
- The increasing influence of project developers in your community;
- The production/use of biofuels in your community;
- The exodus from the countryside;
- A terrorist attack in your community;
- Increased aggression in your community;
- The establishment of the ‘broad school’ concept in your community (a cooperation between parties that are occupied with children such as education, day care, sport facilities, culture, libraries, etc.);
- Increased alcohol consumption among adolescents in your community;
- The so-called “islamisation” of society and its influence on your community;
- Your village as a “museum village” (a village in which traditional ways of living are restored, resulting in a “living” museum to attract tourists);
- Multifunctional agriculture (farming, +camping, +care, +shopping, etc.) as a future for your community;
- The proportional increase of ageing inhabitants in your community.

Once we knew the relative perceived importance of GM, the potential for local opposition could be estimated. Nimby, Niaby and Bimby reactions are assumed to be plausible, according to our model, when the local community is aware of the applications of GM crops in general and at the same time of the local experiments in the community.

3.3.4 Rural discussions on GM

In the second round, a role play was held in which the citizens, acting as a citizen council, had 20 minutes to come to a unanimous agreement about whether the community should become a GM-free zone. The parallel group of community-council members simulated a crisis centre. Given the same amount of time, they had to come up with an action plan to prevent a developing crisis, caused by local farmers intending to grow GM crops and opposition to this plan by a local protest group that advocated declaring the community GM-free.
In advance, the participants received 4 short texts with some information from the main stakeholders (the Dutch government, NGOs, research institutes and industry) to make sure all participants had comparable inputs on the topic, thereby facilitating an argumentative discussion. In both focus group sessions, time was taken afterwards to reflect on the situation as it really exists in the community. The arguments put forth in the reflections were listed on post-its and clustered and labelled by the participants. This division of the arguments into labelled categories enabled us to compare the rural discussions in the different communities to each other and to the types of arguments in the Nimby model, i.e. distrust/trust, consequences, etc.

In addition to the reflections of the participants themselves, the original tape-recorded arguments in the 20-minute discussions were labelled by us afterwards according to the four quadrants of the model, i.e. as positive or negative in the national we-discourse or regarding the application of GM nearby (local, me-discourse). This led to an assessment of the types of discourses to be found in general and in each of the communities specifically.

3.3.5 Assessing social cohesion

The degree of social cohesion in the different communities was assessed by a questionnaire handed out as participants entered the first focus group meeting; it was based on the questionnaire used by Stafford et al. (2003) in which both the quantity and the quality of the social interactions among citizens were measured.

First, the quantity was determined by measuring the structural aspects. They give an indication of the number of networks that exist in the community. The social cohesion is assumed to rise when people are tied closer together by these structural aspects. The following ones were measured in the survey: the number of family and friends that live in the area, membership of community organisations such as churches and clubs, whether people actively participate in the community and whether people have a bigger network inside than outside the community.

Second, cognitive aspects indicate the quality of the interactions among a certain group of people. Stafford et al. (2003) included four categories of cognitive aspects: the perceived ‘attachment to the neighbourhood’, ‘trust’, ‘practical help’ and ‘tolerance and respect’. To measure these aspects, Stafford et al. (2003) formulated 16 statements to be scored on a 5-point Lickert scale.

In addition, we added some questions to probe the ‘personal characteristics’ driving an emotionally involved me-discourse: the numbers of years people had lived in the community, whether they were born in the community (and how many generations had lived there), the degree of focus on the community, e.g. working in the community, commuting to a regular job in the city or enjoying retirement in the countryside.

3.3.6 Factors influencing the dynamics

During the reflections on the discussions in the role play at the end of the second round of the focus group meetings, we evaluated with the participants what would influence their actual behaviour to start or abstain from local opposition to GM cultivation.
3.4 Round 1: is GM a topic to be discussed in rural communities?

The open invitation procedure for the citizen groups resulted in two groups of inhabitants not previously in touch with the GM debate (communities C close to the city and D at a distance) and two groups in which some participants appeared to know more about the GM discussion: in community A at some distance from the city, 4 of the 9 members were connected to the local organic food shop and in community B close to the city, 5 of the 7 members were farmers. This distinction should be kept in mind when the results of the group discussions are analysed.

As mentioned above, the first round of focus groups investigated the topics of interest to the inhabitants of the rural communities by asking the participants the open question: what are relevant topics in this community? These topics were then discussed to uncover the underlying arguments. For each of the communities, the three most important issues are listed in table 3.2 below.

Table 3.2: Three main topics of interest emerged through an open inventory and were subsequently prioritized in focus groups held in four rural communities.

<table>
<thead>
<tr>
<th>Local council</th>
<th>Citizens</th>
</tr>
</thead>
</table>
| Community A   | - Ageing population  
|               | - Maintain quality of life  
|               | - Innovation & pioneering function  
| Community B   | - Quality of life in the individual villages  
|               | - Nature recreation  
|               | - Sufficient employment  
| Community C   | - Accessibility & sustainability  
|               | - Quality of life  
|               | - Economic activity, employment  
| Community D   | - Quality of life  
|               | - Fellowship & tolerance  
|               | - Tranquillity & space |

- Genetic modification  
- Political accountability  
- Quality of life, maintain characteristics  
- Creeping urbanisation  
- Maintain agriculture  
- Maintain social networks  
- Housing adapted to ageing population  
- Better contact, social network  
- Keeping up facilities  
- Shortages of sufficient housing  
- Quality of life & identity  
- Small enterprises

Apart from the group of citizens in community A, none of the focus groups spontaneously mentioned genetic modification when asked to list relevant topics. Interestingly, while the community A citizen group participants expressed their concerns regarding the cultivation of GM crops within their community, simultaneously the local council group of the same community mentioned GM as one of the innovations they would like to stimulate.

All groups listed similar topics such as the quality of life, the lack of housing for both the young and ageing population as well as the reduced availability of public transportation and other facilities necessary for pleasant living. All agreed on the importance of open spaces, tranquillity and region-specific rural landscape, as well as the social network.

This picture emerging from the open exercises was subsequently confirmed by the topics the participants chose from the list of 12 national topics. Only in the community A citizen group did GM
reach the top three. All groups chose the topic of the introduction of the ‘broad school’ concept, the exodus from the countryside and the increasingly ageing population. Group B (farmers) stood out in its emphasis on agriculture, while group C was the only one concerned with issues such as the islamisation of the community. The top three topics in each group are listed in table 3.3.

Table 3.3: Items most selected from a list of 12 topics belonging to the national political agenda (urban wediscourse).

<table>
<thead>
<tr>
<th>Community</th>
<th>Local council</th>
<th>Citizens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community A</td>
<td>- Broad school concept</td>
<td>Genetic modification in the community</td>
</tr>
<tr>
<td></td>
<td>- Exodus from the countryside</td>
<td>- Exodus from the countryside</td>
</tr>
<tr>
<td></td>
<td>- Proportional increase of ageing inhabitants</td>
<td>- Broad school concept</td>
</tr>
<tr>
<td>Community B</td>
<td>- Proportional increase of ageing inhabitants</td>
<td>Multifunctional agriculture</td>
</tr>
<tr>
<td></td>
<td>- Broad school concept</td>
<td>- Proportional increase of ageing inhabitants</td>
</tr>
<tr>
<td></td>
<td>- Multifunctional agriculture</td>
<td>- Exodus from the countryside; increased influence of project developers</td>
</tr>
<tr>
<td>Community C</td>
<td>- Broad school concept</td>
<td>Broad school concept</td>
</tr>
<tr>
<td></td>
<td>- Proportional increase of ageing inhabitants</td>
<td>- Proportional increase of ageing inhabitants</td>
</tr>
<tr>
<td></td>
<td>- Islamisation of society</td>
<td>Use of alcohol among adolescents</td>
</tr>
<tr>
<td>Community D</td>
<td>- Broad school concept</td>
<td>Broad school concept</td>
</tr>
<tr>
<td></td>
<td>- Increased influence of project developers</td>
<td>- Exodus from the countryside</td>
</tr>
<tr>
<td></td>
<td>- Use of alcohol among adolescents</td>
<td>- Proportional increase of ageing inhabitants</td>
</tr>
</tbody>
</table>

Based on these open discussions on the relevant topics and the topics selected from the list, the conclusion is that only two groups (notably within the same community A) of the eight consider GM cultivation a topic that is relevant for their community life. Of these two groups, the citizens expressed this as a concern, whereas the local council mentioned it as an opportunity for the community. When we inquired why the other participants (in communities B, C, and D) did not choose GM as a relevant topic, it appeared that only a small number was aware of the fact that GM crops were cultivated in their community. Participants stated that they neither thought nor cared about it and often lacked any technical knowledge of genetic modification. However, participants did frequently mention that some other inhabitants of their community were known to be concerned about the topic, adding that these groups were small and did not represent the community as a whole.

In order to oppose a GM development in the community, it is necessary both to know about this development and to have taken a critical stance against it. Based on the observations made in the first round of focus groups, the conclusion could be drawn that since the inhabitants of communities C and D were not aware of the cultivation of GM crops in their community and did not place the topic high on their agenda, no specific position had been contemplated or adopted.

The situation was different in communities A and B. Some of the citizens in the focus groups were both aware of the cultivation of GM crops and concerned about this development, indicating that in these
communities, local debate could potentially arise. However, the concerned participants of community A stated that they were a small minority and not representative of the community.

Shortly after the first round took place with focus groups in community A, local opposition became a fact. A member of the council representing the Green Party (GroenLinks) proposed declaring the community a GM-free zone to the local council. Pending the discussion of this proposal in the local council, an evening was organized and advertised by this Green Party. The movie ‘The farmer and the gene’ (Boer zoekt gen) was shown, and interested citizens could discuss this issue with a forum of experts from NGOs, academics, government and companies.

3.5 Round 2: the dynamics of the rural GM debate

In this section, the analysis is presented of the arguments put forth in the groups in the second round during the role play. The arguments used in each of the groups were transcribed and labelled according to the concepts of the Nimby model. First (paragraph 3.5.1), they were grouped into the discourse categories (me- or we-discourse). Second (paragraph 3.5.2), the modality in which they were used in the reflection and decision process was analysed.

3.5.1 Aspects of the GM debate raised by rural inhabitants

When the arguments used in the exercise (to decide whether the community should agree with a proposal to declare the community GM-free) were labelled according to the types of arguments within a local me-discourse or a national we-discourse (without making a distinction between positive or negative connotations and disregarding repetitions of an argument), figure 3.4 shows that all groups mainly used arguments belonging to the national we-discourse.

The type of we-discourse arguments used most dealt with uncertainties regarding risks and benefits with respect to health and the environment (consequences: health + environment: 49%; range 31-62%) and whether economic competition could be controlled by governmental processes (distrust: process + economy: 14%; range 6-19%).

Specific aspects that dominated the debate in group C were the advantages related to the GM technology and its innovative character (opportunities: economy: 22%). “Due to the openness of the new polder, many innovations have already taken place here.” The participants of group D stressed the unnaturalness of the technology and the need for control measures (consequences: environment + health: 49%). “I fear that we shall destroy ourselves by developing technologies which we cannot control.”

In the community A group (including critical participants), aspects of importance were the consequences for the environment and health (62%) as well as economic consequences for farmers
regarding the monopoly of multinational seed companies (16%). “GM is a disaster. Research showed that bee colonies will die out.” “These large seed companies want only power and money.”

![Image](image.png)

**Figure 3.4:** The distribution of me/we-discourse arguments in focus groups of inhabitants from the four communities under study. Analysed from the second round exercise, in which the participants had to decide whether the community should agree with a proposal to declare the community GM-free: arguments were labelled according to the types of arguments within a local me-discourse or a national we-discourse (here without distinguishing between positive or negative connotations, and disregarding repetitions of an argument).

The participants in group B (including farmers) were not that concerned about the perceived lack of knowledge about GM in the community (of farmers), they were more worried by the lack of scientific knowledge about the GM technology among people involved in decision-making, which might lead to problems when selling their products, whether organic, regular or GM (information: 25% and economy: 23%). “More information is necessary regarding food safety, the consequences for entrepreneurs and the consequences for other organisms.” “Someone should decide clearly about GM crops and their use, otherwise it will lead to competition counterfeiting.”

Regarding the personal arguments, belonging to the me-discourse, participants wrestled with the apparently conflicting information (information haze and mixed me-arguments: 11-26%) and mentioned a lack of trust in rules and local procedures, the consequences for farmers and safety issues (12%). Group B, consisting mainly of farmers, was the only group stressing trust in the abilities of the farmer to handle those new technologies in mutual cooperation (social cohesion: 11%). “If you decide as a farmer to refrain from GM, and your neighbour steps into the business, you are not amused.”

Growing GM crops might affect the social cohesion in community D, where such a development was considered to create a problem for religious groups in the community. “GM might be quite a problem for inhabitants with a specific religious background.”

Overall, all groups included other applications of the technology in their debate, such as GM-produced medicines and GM food products. Those participants that objected to the cultivation of GM crops
indicated that their rationale was not based on the local economy or environmental consequences for the region, but on a perceived dislike of GM food products (not natural, luxury) and therefore resistance to the technology in general, which is regarded as implying opposition to its cultivation close by (Niaby). “Say, my daughters consume GM food, when they are at the age that they would like to have children, I will be very worried.” (Group D)

3.5.2 Positions taken by rural inhabitants in the GM debate

When faced with the decision of whether the community should become a GM-free zone, the participants were forced to take a position in the debate (see table 3.4). When all arguments used in the discussion were classified into positive or negative attitudes towards the technology in general and its local use within the community, the debates of groups C and D appeared to contain a balanced number of pro and con arguments. In contrast, the number of negative arguments was more than double the number of positive arguments in groups A and B. Not surprisingly, in the discussions that were dominated by negative arguments it was concluded that the community would be declared a GM-free zone. In the debates in which the arguments were balanced, the community was not declared a GM-free zone.

Interestingly, the same groups that brought up an equal number of positive and negative arguments still mentioned a general feeling of uncertainty about the subject (mixture of concerns and lack of knowledge). Groups A and B, that decided to declare the community a GM-free zone, contained participants who had already been dealing with the issue for some time: the farmers of group B because of their profession, while some of the citizens of group A had been informed by the debate that was held previously in the community.

Table 3.4: The decision and related characteristics of the discussion in the focus groups of inhabitants.

<table>
<thead>
<tr>
<th>Community</th>
<th>Positive arguments</th>
<th>Negative arguments</th>
<th>Arguments related to uncertainties</th>
<th>Informed participants</th>
<th>Decision</th>
<th>Method of decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community A</td>
<td>18</td>
<td>45</td>
<td>Little</td>
<td>Yes, local discussion</td>
<td>GM-free</td>
<td>Majority of votes</td>
</tr>
<tr>
<td>Community B</td>
<td>18</td>
<td>33</td>
<td>Little</td>
<td>Yes, profession</td>
<td>GM-free</td>
<td>Majority of votes</td>
</tr>
<tr>
<td>Community C</td>
<td>25</td>
<td>25</td>
<td>Many</td>
<td>No</td>
<td>Not GM-free</td>
<td>Consensus</td>
</tr>
<tr>
<td>Community D</td>
<td>34</td>
<td>31</td>
<td>Many</td>
<td>No</td>
<td>Not GM-free</td>
<td>Majority of votes</td>
</tr>
</tbody>
</table>

However, as table 3.4 illustrates, apart from group C, these decisions were not taken unanimously, but by a majority of votes. This indicates that in most groups, the exchange of arguments did not convince the other members of the group enough to lead to a consensus in the discussion. The debate thus remained undetermined, leaving no other option but to decide by a majority of votes.
As mentioned above, the local councils were assigned the task of designing an action plan to cope with a developing crisis. The discussions held in these simulations appeared to be focussed on procedural arguments and on the legal possibility for a community to declare itself a GM-free zone. The policy came down to (a) organizing hearings with all stakeholders, (b) in the meantime inviting the authorities to inform the local council members about the risks and legal options and responsibilities, (c) informing the community when a decision is placed on the agenda. In community A, the local council actually used the same procedure in real life, which resulted in a vote that turned down the Green Party’s proposal.

3.6 Local discussions compared with the national debate

Although the typical “we should/should not” construction of arguments of the national we-discourse dominated all groups, regardless of whether the groups were relatively well informed about GM crops (A and B) or uninformed (C and D), the proportion of national we-discourse arguments was seen to increase when the community had a large proportion of recent migrants from the Randstad: notably in community C, a recently booming rural area for commuters to the Randstad, or community A, a favoured rural settlement for urban professionals. The small proportion of migrants into the religious rural community D seems consistent with this line of interpretation, for it had the smallest proportion of we-discourse arguments.

The community B citizen group consisted mainly of farmers, this differed from the situation in A, C and D. Their outspokenly critical attitude towards Randstad migrants (“young families moving in and out”) and the local/national authorities (“those who will decide which crops will be sold”) gave us a glimpse into the relevant arguments for the owner of the ‘backyard’ (in discussion with the community members). Indicative were the use of terms such as: our competition, our freedom of entrepreneurial activities, my options for innovation, risks to selling our GM products, power play by government and environmental groups. At the end of the day, they voted for a GM-free community, mainly to avoid possible risks for their investments if activists succeeded in convincing politicians and consumers to prohibit the trade of their GM products. Remarkably, this was the same set of arguments that had been put forward during the meeting of the city council of community A, with this difference that the majority of the board was in the hands of the parties linked to farmers’ interests. The city council decided that a ‘GM-free community’ would impose an unjustifiable limitation on the freedom of farmers to innovate in an age that already put such huge financial burdens on their shoulders. The only vote of the Green Party was massively overruled, not withstanding the well-filled benches of public supporters.

Since we interpret the affinity with national we-discourse arguments as originating in an exposure to the national discussions and interests, the question arises whether and to what extent the opposite
can be found in our material: do local me-arguments originate from local values and interests? In other words, is there a local variable derived from our model (local distrust in processes and farmers, social cohesion, safety/health, information haze, emotional involvement) that might explain the growth of me-arguments in the sequence of the communities C, A, B, D respectively (see figure 3.4). Looking at the composition of groups C, A and D (setting the farmer group B apart for the moment), the ‘information haze’ was greater in the communities in which there were more participants uninformed on the GM crops issue at the time when we provided them with our summaries of typical arguments from the government, industry, environmental groups and scientists. This might explain the large proportion of mixed Nimby arguments in C and D. Personal perspectives on safety were mostly discussed in relation to GM food, and no distrust issues popped up regarding local farmers or the local administration and politics. The social cohesion variable appears to correlate best with the rise in the number of me- and mixed arguments (or the decrease of we-discourse arguments) in relation to the other types of arguments in our model (figure 3.5).

The social cohesion score was based on the questionnaire by Stafford et al. (2003). With this assessment, communities B and D were characterized as having a relatively strong social cohesion; community C had a relatively weak social cohesion; and community A lay in between these two (see figure 3.5):

- In the discussion in group C, a community with a relatively low social cohesion plus a strong orientation to the Randstad, the most we-discourse arguments were used.
- In the discussion in group D, a community with a high social cohesion and a strong inward orientation, the most me-discourse arguments were used.
- The discussions in groups A and B, communities with either a high social cohesion or an orientation towards the Randstad, lie in between the other two communities, as far as the proportion of me- and we-discourse arguments is concerned.

In group A the national discussion might have affected the local discussion indirectly, due to the large number of ‘new’ inhabitants who had migrated there from the Randstad and joined our focus group. These newcomers brought in the national we-discourse, pushing the more local and personal me- and mixed-discourse arguments to the background.

In community B, close to the Randstad, we noticed a prevalent resistance to ‘the city’ (in both citizen and local council groups), instead of the Randstad-oriented attitude that we saw in community C and had expected there, too. At the same time we observed that there was a strong focus on their own identity among the participating farmers, resulting in a relatively high social cohesion score and more me-discourse arguments than in community C.
3.6.1 Rural reactions and the Nimby model

We triggered the reaction of rural inhabitants to the cultivation of GM crops in their community by means of a simulation exercise. By analysing the arguments they used for their position, we investigated whether it was possible to trace their learning process (figure 3.2) starting out from being neutral/ambivalent and evolving towards one of the positive or negative Nimby-like positions (figure 3.3), i.e. Nimby, Niaby or Bimby. Recalling the definition we used earlier (see also figure 3.1): a Nimby response is characterized by an ambivalent position, i.e. a positive (or neutral) attitude towards the technology in general (far away), combined with a negative perception of the technique once it is applied or located nearby (the backyard).

Concerning the technology itself, both positive and negative arguments were found in all discussions. The participants of all groups showed some mixed arguments tending towards positions like Niaby and Bimby in which the Niaby appeared to be related to the feeling of being powerless with respect to a larger scale introduction (distrust in national decision processes) and seemingly leading them to do the only thing they felt they could do: oppose the development locally. “The technology is already so developed that we are unable to stop it” (group D). The Iaby/Bimby position was typically formulated in statements of local interest leading to the conviction that these developments should
not be obstructed (trust in national processes), like the need for regional innovations (positive effects). “The opportunities for GM crops are there but have to be organized in a controllable way” (Group C). However, when asked which argument was decisive for their individual positions, the participants of the better informed groups A and B were more outspoken. Their typical local argument against nearby GM cultivation was related to the consequences for other non-GM farmers in the community and the possible liability for GM farmers (social cohesion). In group A the dependence of local farmers on multinational seed companies (monopoly of multinationals) was an argument against GM (and towards Niaby), while the farmers in group B balanced this differently. Considering the number of objections to the technology in general and the positive local arguments of acknowledging the farmer’s personal responsibility in selecting GM crops to grow (social cohesion), the final position in this group resembled a kind of reverse Nimby: acceptance of the application nearby “in our own hands” (local trust + social cohesion), but no specific interest or a negative perception of the technology in general (Bimby).

In groups A, C and D the participants rejecting the local cultivation stressed their concerns regarding GM food products in conjunction with the rejection of the technology as such (me + we-discourse on consequences of health and safety), resulting in a more or less general position against GM crops, outside the local community (Niaby).

### 3.6.2 Factors facilitating local opposition

The results of the discussions showed that, apart from some of the participants of community A, the rural inhabitants in the survey were unlikely to oppose GM cultivation in their community actively. Analysis of the arguments used in the discussion also indicated that there were inhabitants with critical perceptions of GM cultivation in all communities. An interesting question is to what extent having critical perceptions actually leads to action. The perceptions appear in the statistics of general polls on GM (e.g., Eurobarometer; Gaskell et al. 2006), the actions in the media.

What is known so far (Hall & Moran, 2006) is that the resistance to GM crop cultivation has been initiated by people who might be regarded as urban-based activists and at times takes the form of radical actions such as the destruction of fields of GM crops. It is not recorded whether these kinds of Niaby actions were initiated and executed by local rural community members.

To gain more insight into these processes, we analysed the burgeoning opposition process in community A. The participants of the citizen focus group were asked to give their view on why the opposition developed in their community, and an interview was arranged with the local council member of the political party that had proposed a GM-free zone for the community. This interview revealed that the rise of opposition was a coincidental convergence of three independent avenues. One month before we arrived on the scene, the local political party had been informed by a concerned citizen that the government had granted a number of permits to test GM crops within the community. Considering this a topic with which the party could show its involvement in the local community, the party consulted its members in another community in the middle of the Netherlands which managed

3
to declare itself a GM-free community. At the same time, a movie discussing the consequences of GM crop cultivation was released by A-Seed (Amsterdam), along with a discussion tour. In addition, a workgroup related to the local organic food shop took up the issue of GM food. There were indications that social cohesion not only increased the discussion in the community through the numerous intertwining networks, but also that it stopped people from carrying out local opposition. Because people knew each other and were linked in a social network, they tended to avoid internal conflict. This resulted in less public and aggressive opposition by local inhabitants than the activism in urban areas might express. Or as one of the citizens of community A expressed it: “We will continue to organize protest marches and inform the community, but we disagree with destruction. That is up to those activists from the cities.” The participants from community B mentioned that opposition was only to be expected from the new inhabitants of the community, who had moved in from the big cities.

3.7 Discussion

Targeting participants without a consolidated position on GM, we used an open invitation for participation in this survey, i.e. “the future of your community”. The citizen focus groups of communities A and B included several participants who were already familiar with the GM debate. Especially in the second round their input in the role play exercise reflected a more evolved position away from the Nimby ambivalence in the other communities (C and D).

Considering the in-depth inquiry method we chose, the small numbers of participants did not create a problem for the contextual validity of the qualitative results. The two designs for successive focus group rounds allowed for a spontaneous input of issues by the participants in the first round, and in the second round for guided reflection on the topics known to play a role in Nimby and GM discussions (Hall & Moran, 2006; Hall, 2007; Grove-White et al., 1997). This methodology enabled us to follow the learning process within the groups, i.e. how the topics were interrelated and gained or lost individual weight during the open but systematically facilitated process of reflection.

From the results, it appeared that the participants in 6 of the 8 groups did not spontaneously mention GM crops or GM technology at all, and gave this issue the lowest priority on a list of socio-political issues. Even when the technology had already been applied in their vicinity, it was not considered a relevant personal or community topic. However, when invited to reflect on the issue and to take a position, a different picture emerged. In order to analyse the genesis of Nimby-like positions, and what aspects might trigger or prevent inhabitants from taking action, we analysed the types of arguments used in the discussions (me-discourse vs. we-discourse, distribution of negative vs. positive arguments) and the steps towards positions in the GM debate. Together with the participants of community A we also analysed what triggered them to move into opposition.

Although our data show that a higher degree of social cohesion correlated with a larger proportion of mixed Nimby discourse, this does not seem to have greatly influenced the genesis of positions
Nimby, or how do the rural neighbours respond to GM crops?

that inhabitants tend to take regarding the GM-free community. Those communities in which the participants were already familiar with some of the pros and cons of the technology (community A due to the organic food course held locally and community B because of the informed farmers among the participants), the negative national we-discourse arguments clearly outnumbered the positive arguments, leading to the majority vote for the GM-free community. In the less informed communities C and D, in which the process of reflection and positioning evolved during our focus groups sessions, equal numbers of positive and negative arguments were brought into the deliberations. Even against a general background of feelings of uncertainty and worries, participants rejected the proposal for a GM-free community (C unanimously and D by majority). We interpret this according to the concepts of our model as an on-going, ambivalent Nimby response to the information haze. This is a vulnerable state. Any player who is able to step up at that moment will be able to tip the balance towards Niaby or Bimby, as we saw in the community A and B focus groups. An interesting detail from the forum discussion organized by the Green Party and A-seed was the difference in communication policy used by the two ministries in question. The Ministry of Agriculture, Nature, and Food Quality forbade its staff experts to accept invitations to participate in such local forum debates. The Ministry of Housing, Spatial Planning and the Environment (responsible for biosafety assessment and market authorization of GM seeds), on the other hand, stimulated its staff experts to engage in these kinds of meetings. Especially in relation to the recurrent (dis)trust type of arguments in both me- and we-discourses, i.e. distrust in local and national governance, it should be of the utmost importance in a deliberative democracy to publicly explain and defend the policy lines taken by the central government. Moreover, the three other local councils showed in their role plays in the second round that the government-supplied information on those specialized issues was indispensable for their local policy. This observation supports the need for further investigation of the impact of information, e.g. flows, sources and quality, on the rural inhabitants and local politics.

One other aspect of the rural GM discussions appeared to be vital: the focus on the implications of GM foods. Although we explicitly asked the participants to discuss the local cultivation of GM crops, many arguments all of the discussions revolved around the introduction of GM products in the food chain, GM foods and the consequences for human health. In fact, the objection to cultivating GM crops often seemed to be based on the aversion to GM foods. Participants appeared to reason that since they did not want to eat GM foods (me-discourse), such crops should not be cultivated in general (we-discourse). The non-farmers in the rural communities seemed to behave more as a concerned consumer of agricultural products, stressing both the ‘me’ perspective and their distrust that rules and government could guarantee GM-free product chains (we-discourse). In contrast, the economic and environmental advantages of GM cultivation appeared most important for the farmers in community B (expressed as positive me- and we-discourse).

In this study we conclude that active opposition in rural communities is plausible in cases where farmers are interested in applying the GM crop technology and an active group of inhabitants exists.
that has an orientation towards the national we-discourse. However, the existing social cohesion in
the rural community seems to scale down the actual level of action: against the technology in general,
but acknowledging the choices of the local farmers, resulting in a reverse, ambivalent Nimby position.

Although the possible increase of GM crops in rural agricultural areas and public reactions in opposition
to this seem to match the colloquial interpretation of ‘not in my backyard’, one might also consider it
quite different, conceptually speaking, from the Nimby responses in planning cases. For instance, in
the Nimby literature, a typical me-discourse argument against the planning of a facility is the decline
in value of one’s own property (Dear & Taylor 1982; Dear, 1992). This argument was not mentioned in
any of the GM focus groups. There are some distinct differences between the Nimby response in the
planning cases and in cases of agricultural biotechnology:
1. GM crops are difficult if not impossible to distinguish visually from non-GM crops. This is different
from traditional Nimby triggers. One of the most important concerns causing Nimby behaviour,
mentioned by Schively (2007), i.e. the aesthetically objectionable characteristics of the facility,
does not count in the case of agricultural biotechnology.
2. The meaning of ‘backyard’ was already a flexible concept, e.g., a highway through a quiet residential
area, a windmill park 3 km from the city. But in the GM crop case, this backyard stretches to
the size of a region (or even province or country). It expands beyond its own local meaning and
transforms easily into the national debate on the pros and cons of the technology for the state or
the world.
3. Nimby-inducing projects are defined by Wolsink (1994) as “multi-prisoner dilemmas”, since
multiple locations are suitable for the project and only one is needed, e.g. one garbage incinerator
can serve many communities. This serves as an incentive for each of the locations to withhold
compliance, hoping that another community will sacrifice itself. This is not the case with GM crops;
the fact that one local farmer decides to grow GM crops does not stop another farmer in the next
community from doing so.
4. Growing GM crops does not depend on plans made by a specific agent alone, e.g., the local or
national government or some private player. The target of opposition is not as clear as a project
developer or energy company. It is more complicated. Although the central government might
be perceived as the agent licensing GM seeds for the Dutch market, local opposition is directed
against a decision made by another inhabitant of the community: a local farmer, whose decision
is, however, acknowledged as an entrepreneurial liberal freedom. This takes away one of the key
factors that unites opposition: unfairness executed by an empowered agent, i.e., the decision-
making process and the way the public (local) has been bypassed (Frey & Oberholzer-Gee, 1996;
Lake, 1993; Rabe, 1994). However, it is highly conceivable that this current complexity might turn
into a genuine Niaby opposition when a multinational seed company offers community farmers a
profitable contract.

It is important to note the double role farmers play in the cultivation of GM crops. First, they are the
Nimby, or how do the rural neighbours respond to GM crops?

professional implementers of the technology, meaning that it is up to them to decide whether they want to grow GM crops or not. Second, they are also neighbours of the farmers next door and thereby affected by the decisions those farmers make, i.e., organic, regular or GM (focus group B). In our opinion, it is mainly the combination of these two factors, *trust in local process* and *social cohesion*, that increases the threshold for the opposition: standing up against the development also means confronting members of the community. This was observed in community A where the *social cohesion* mechanism united farmers in their political voice (keep options open for innovation) and inhibited critical inhabitants from more radical actions.

Another factor that increased the threshold for local opposition seems to be procedural: inhabitants do not think it useful to oppose cultivation in their own community when this has no influence on farmers in neighbouring communities. Local opposition therefore condenses to a symbolic act: voicing an opinion more than blocking the development at the (inter)national level, because that is hardly possible, as all participants stated reluctantly.

Although it is questionable whether this community resistance matches the specific Nimby phenomenon, it is of the utmost importance for the conceptualisation and model development around Nimby to distinguish the generalized core mechanisms from the particularities of the cases. Above, we presented an example of how to define a generalized Nimby genesis model explicitly and apply it in design and analysis successively, in order to come to a better understanding of the drivers in this family of innovation-related community arousal.5

5 Recently, Devine-Wright (2009) published a relevant awareness-model much in line with our local response model (figure 3.2), linking environmental psychology theory on place with social psychological theory on social representations and identity processes. His stages include becoming aware, interpreting change, evaluating change as threat or enhancement, coping responses and, in certain circumstances, behavioural resistance or support.
Part 2

The structure of citizen opposition in detail

The results of empirical studies on the role of non-content related factors
The application of the local response model to the case-study on GM crop cultivation (chapter 3) showed that many of the content related drivers distilled from the planning literature, came up in the debates on GM as well. Although the dilemma between local application and general technology was present in the debates, none of the participants were found to express Nimby opposition. The debates held amongst rural inhabitants also provided an indication that social cohesion can play a role in the last stage of the process. While it does not keep citizens from developing (pronounced) negative perceptions on an issue, social cohesion does appear to temper their readiness to take action: they are less likely to oppose the cultivation of GM crops when this is done by their neighbour than when the cultivation is done by an anonymous company. Social cohesion can thus be added as a factor influencing the final stage of the process (chapter 3).

These findings lead to the question how other, (non)content related factors, e.g. structural and process related factors, affect citizen responses. In the introduction, it was mentioned how policymaking processes and the role that science plays in the realm of policymaking have changed over the past decades. As such, we wonder what role information and the decision-making-processes play in the development of citizen opposition. This led us to inquire into role that information plays in the development of citizen opposition and in how far the decision-making process itself contributes to opposition.

We assume that these factors are especially important in the transition from stage 3 (conscious perception) to stage 4 (overt behavior). In the following chapters, we analyze these factors in specific cases. The role of information is investigated in chapter 4. Chapter 5 then addresses the decision-making process and specifically the role of citizen participation. The findings of these chapters will be used to formulate some recommendations for improvement of deliberative governance.
Chapter 4

How to decide when information is hazy?

The case of GM crop cultivation in the Netherlands

4.1 Introduction

In the decision-making process on innovations, one of the functions of information is to minimize uncertainty on the risks involved. In some cases, such as innovations relating to the genetic modification (GM) of crops, the potential risks for humans and the environment are considered to be amongst the most relevant information (Hansen et al., 2003; Lassen & Jamison, 2006). Theories of decision-making argue that information is essential for forming an opinion. It is through the arguments and facts presented in information that potential users or the general public can form a perception (e.g. Rogers, 2003). Decision making theories generally consider decisions to be made rationally: based on factual arguments. On the other hand, several studies have shown that the link between knowledge and innovation acceptance is more complicated, as more knowledge has been correlated both to a more positive attitude towards an innovation (Brossard & Shanahan, 2007; Covello & Merkhofer, 1994; Barling et al., 1999; Miller, 1982; Priest, 2000) as well as the opposite (Brossard and Shanahan, 2007; Amin et al., 2007).

In today’s society, information cannot always provide conclusive facts and arguments to minimize uncertainty. Information can be unavailable, overwhelming, or contradictory. We use the term ‘information haze’, coined by Futrell (2003), to refer to: “a condition in which there exists conflicting, contradictory, multiparty, multidirectional communications that fail to clarify the risks associated with a project, thus rendering lay interpretations of a situation increasingly vague and difficult” (2003, p. 365). It is probable that decision-making processes in such situations differ from the traditional, rational schemes of decision-making. One of the reasons why it is difficult to provide certainty is the rapid growth of available information from all sorts of sources through the Internet. Another is that innovative technologies and projects are increasingly complex having global or long-term effects and

1 This chapter is based on the article: C. de Brauw, M. van Amstel, Tj. de Cock Buning, How to decide when information is hazy? The case of GM crop cultivation in the Netherlands, Geoforum, submitted for publication 2013, under review. A previous version of this chapter was presented at the Conference ‘Moral Emotions and Risk Politics’, University of Technology, Delft, August 20 - 22, 2012.
making it hard to provide hard-and-fast information. When information cannot provide certainty, the role it plays in decision-making processes is of interest. In this chapter, we analyze this phenomenon. We examine how groups of non-expert, rural inhabitants use information provided to them in a collective decision-making process on an uncertain risk: the local cultivation of GM crops. The case of GM crops is of particular interest because surveys in the UK and Canada have shown that opinions on GM crops are decided, even among people who had little knowledge about the technology (Frewer et al., 1994; Frewer et al., 1996; Powell, 1998). Differences in opinions and the differences in decision-making on GM between experts and non-experts (lay people) have been studied before (see for example Brana et al., 2012; Deckers, 2005). Here, we focus on the way non-experts come to a group decision on whether to accept or oppose the cultivation of GM crops in their community.

4.1.1 Information and innovation decision-making

The relationship between information, opinion-forming and decision-making can be described as follows: in order to be able to form an opinion and make a decision about anything, one needs to know what the object of decision making is. Rogers (2003) developed a model for decision-making on innovations that describes the acceptance or rejection of innovations by potential users as a process of five stages. Knowledge is considered stage 1, followed by persuasion (2), decision (3), implementation (4) and confirmation (5). In stage 1, the individual is exposed to the existence of the innovation and acquires an understanding of how it functions. In stage 2, the individual forms a negative or positive attitude towards an innovation, while stage 3 consists of activities that lead to a choice to accept or reject the innovation.

Our study focuses on the first three stages of this model (stage 0 to 3). We supplemented Rogers’ model with the stage of information (0) prior to the stage of knowledge.

We make a distinction between knowledge and information. The meaning of ‘knowledge’ and how it is acquired is subject of ongoing debate within epistemology. Central to this discussion is the relation between the notion of knowledge and concepts such as belief, justification and truth (see for example Kirkham, 1984; Gettier, 1963; but also the theory of knowledge by Russell, 1992). A definition of knowledge is therefore not easily given. In this chapter we define knowledge as the understanding gained through processing information. Information as a concept is commonly used in theories of communication. In that context, and in an attempt to quantify the capacities of different systems to
transfer information, Hartley refers to information as “a group of physical symbols, such as words, dots and dashes or the like, which by general agreement convey certain meanings to the parties communicating” (1928, p.536). In other words, information refers to data (both facts and opinions) and (more broadly) messages. As such, it will also be used in this chapter. Rogers also makes a distinction between the two concepts when he states that “the innovation-decision process essentially consists of information-seeking and information-processing activities, in which an individual is motivated to reduce uncertainty about the advantages and disadvantages of an innovation” (Rogers, 2003, p. 172).

Although scholars generally agree that information is an important source of knowledge, the process by which information becomes knowledge largely remains in a black box. Here, we focus on the way lay people use information to make group decisions. However, we also explore the way in which information is processed into knowledge. We assume that changing information into knowledge is more difficult in cases where information is contradictory and incomplete (hazy). Rogers (2003) introduces the reduction of uncertainty as a crucial factor into the decision-making process. According to van Asselt (2000), uncertainty is a feature society feels uncomfortable with. To overcome this obstacle – and limit uncertainty – decision makers need information about the level, distribution and impact of the uncertainty.

Futrell (2003) argues that an information

4.1.2 Trust

Scientists have spent considerable attention to the role of trust in situations of knowledge uncertainty and specifically in the context of public acceptance of agricultural biotechnology (Brossard & Shanahan, 2007; Hansen et al., 2003; Brossard & Nisbet, 2007). Trust in a source of information can influence the way that information is perceived or used (see figure 4.2). As such, trust can:

1. function as a substitute for the process of converting information into knowledge (Hansen et al., 2003). Decisions are based on choices made by trusted sources instead of knowledge (Priest et al., 2003);

2. validate the sources of information used to provide knowledge. Here, trust functions as a guide. It helps to simplify decisions in case of large amounts of contradictory, uncertain and incomplete information (Savadori et al., 2004). As individuals are more open to information provided by trusted sources. Hertzum et al. (2002) have shown that in an information-seeking setting, the trustworthiness of the source is an important factor for choices.

Our study measures trust in sources to find out to what extent trust guides participants in an information haze. In particular, we wanted to gain insights into whether trust in sources is important for decision-making when information does not provide knowledge (see figure 4.2).
4.1.3 The role of values, worldviews and emotions

Next to information and trust, scholars have investigated the role that values, worldviews and emotions play in the decision-making process. We will discuss each of these factors in turn. Over time, many different interpretations of values as a concept have been championed (Schwartz, 2009). In this study, we define values as core beliefs or ideals on what is right or wrong that shape the attitudes and perceptions of individuals and motivate their behaviour (free after Schwartz, 2009 and Trzyna, 2001). Values can be ethical, reflecting either principles of a moral duty or what is considered desirable or useful (Trzyna, 2001). Distinctions have also been made between basic values (identified by Schwartz, 2009) recognized by all people in all cultures and values specific to a certain subject, time and space. Different definitions also exist of the term ‘worldview’. Generally, “worldviews consist of a set of presuppositions which we hold about the basic makeup of our world” (Sire, 2004, p.19). These presuppositions can include both knowledge of how the world works and value judgements. In this study, we consider worldviews to be the latter, namely the collective of beliefs and values through which the world is perceived. Finally, no distinct definition of emotions exists (Zeelenberg et al., 2008). However, Zeelenberg and colleagues found that scholars do agree on some aspects of emotions, such as that emotions are relatively short-lived responses to something or someone and, most importantly for our study, “typically arise when one evaluates an event or outcome as relevant for one’s concerns or preferences” (Zeelenberg et al., 2008, posted on website – no page numbers available). This last aspect links emotions to values and worldviews, as these also represent one’s preferences and concerns. Expression of emotions can be expected when one’s interests and values/worldview are challenged by new developments.

Although most scholars agree that – at least in non-institutional decision making – emotions and values play a role, they disagree on what that role is. In the context of risk perception, (Kahan, 2008) distinguished between three viewpoints: emotions interfere with rational decision making; emotions are a by-product of decision-making; or emotions are an expression of values and, therefore, are an important guideline for the decision. Others (Dunn, 1981; Frijda, 2007; Zeelenberg et al., 2008; Kupper, 2009) have shown that emphasis on different sets of values, such as respect for nature rather
How to decide when information is hazy?

than freedom of research, results in different tradeoffs in the decision, such as what is regarded to be knowledge. In the domain of administration and governmental policy, Dunn (1981) defined complex unstructured policy problems (wicked problems) as a class of problems that suffers from conflicting viewpoints on which facts matter and which guiding values matter.

4.2 Methodology

Studies of the publics’ perceptions on biotechnology mostly rely on questionnaires and interviews. Unfortunately, these do not allow for an exploration and analysis of the actual use of information in decision-making procedures. No studies were found that addressed non-expert decision-making in information-haze situations. This study aims to add to the understanding of the role of information in decision-making in a typical information-haze case: the cultivation of genetically modified (GM) crops in four Dutch municipalities an experiment was carried out to examine the use of information in deliberation and decision-making in information-haze situations. We selected the topic for several reasons: GM is a topic in which risks and uncertainty play a major role; the debate is well documented; there are numerous arguments for and against it the matter is urgent, given that the commercial cultivation of a limited number of GM crops has been authorised within the European Union.2

4.2.1 Genetic Modification

Since the introduction of GM seeds for agricultural crops, the debate has been characterized by polarized positions. The discussion is dominated by professional organisations, such as environmental non-governmental organisations (NGOs) (Greenpeace, Friends of the Earth), companies (Bayer, Monsanto) and political parties (Green parties). In Europe the Eurobarometer, an EU-sponsored program, conducts regular surveys on perceptions on GM applications among citizens of the different member states of the EU (see most recent Eurobarometer 73.1, 2010; Gaskell et al., 2011). In addition, there is a large barrage of national polls and social surveys that describe the attitude of the citizens towards political decisions regarding issues like market authorization of GM seeds (Zechendorf, 1998), labelling of consumer products containing GM-produced substances, and coexistence rules to guarantee the consumer’s free choice (i.e., Gutteling et al., 2006; Marris et al., 2001; MORI, 2003; Poortinga and Pidgeon, 2004). Concerns over safety, environment and worry over the unnaturalness are persistent, as is the perception that the technology lacks merit (Eurobarometer 73.1, 2010; Gaskell et al., 2011).

4.2.2 A simulation as research method

Our research was carried out in a simulation setting. Four small groups of citizens were asked to decide

---

2 EU Regulation No 1829/2003 and Directive 2001/18/EC form the basis for the case by case authorisation of GM seeds.
uniformly whether they would like their community to be a GM-free zone. This method was chosen in order to study the process of group decision-making in a controlled setting. These groups and their discussions represent the unit of analysis in this study. The group-level is of interest because it is at the level of groups or communities that response-positions are built that are of relevance for innovation decision-making. While individual resistance to an innovation is to be expected within a diverse population, group opposition is likely to have a substantial effect on the diffusion of the innovation, particularly when the group represents the majority of a nation’s citizens. We do not focus on the individual argumentation of participants but, instead, distill and compare patterns in group discussion, especially in relation to the texts provided and the final decision made by these groups. Participants were not informed about which topic would be under discussion until the start of the meeting.

Selection of municipalities and participants
The simulation was held in four Dutch municipalities in which trials with GM crop cultivation had taken place in the recent past. The municipalities were selected to represent a variety of Dutch rural municipalities. Municipalities that were already engaged in controversial debate about GM crop cultivation were excluded. More information on the specific characteristics of these municipalities can be found in chapter 3. In each municipality, a group of 4-8 local citizens was recruited by placing leaflets in central places, such as libraries and shops, and by publishing an invitation in the local newspaper. The subject of GM crops was not mentioned during recruitment. Instead, we issued a more general and open invitation to discuss ‘local concerns’. In line with Kupper et al. (2007), we aimed to go beyond the well-known stances positions of actors in the GM debate and avoid a disproportional participation of GM advocates and opponents.

Design of the simulation game
Participants in the simulation were asked to act as a citizen-council and decide whether the community should become a GM-free zone. This collective decision-making process was set up in several steps, following the innovation-decision process of Rogers (information → distillation of knowledge/ perception-forming/persuasion → decision). Prior to the simulation, participants were asked to fill out a questionnaire on the perceived trustworthiness of different sources of information.

As a first step in the simulation, each participant received a portfolio with four short texts from different sources that, together, contained 61 arguments of the GM debate (see table 4.1). Texts were selected that were easily accessible to citizens. Some had been published in newspapers, but most could be found on the internet. The sources were visible to the participants and consisted of information provided by (1) government, (2) academia or research institutes, (3) environmental NGOs and (4) industry.

These texts functioned as information input. A prior meeting with the participants revealed that most had little knowledge of the GM crop debate (See chapter 3 and De Cock Buning et al. 2011). Given
How to decide when information is hazy?

Table 4.1: Arguments in the information portfolio

<table>
<thead>
<tr>
<th>Summary of the arguments per topic provided in each text included in the portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
that participants were generally uninformed about GM crops at the beginning of the simulation, the impact of possible prior knowledge on the decision-making process was minimal and we were able to compare the relative importance of different sources and arguments provided during the simulation. Participants were given 15 minutes to read the portfolio; a limited time for reading the extensive portfolio was chosen to simulate the overload of information available in real-life. Participants were asked to highlight the arguments they considered relevant and irrelevant by means of yellow and pink marker pens, respectively (step 1). This task served two purposes: it stimulated participants to read the provided information carefully; and it identified the arguments in the information which participants took into consideration. In order not to complicate the task, we did not ask participants to highlight neutral arguments. As such, not-highlighted arguments can either be considered neutral or were not recognized by the participants.

After reading and highlighting the portfolio, participants were asked to discuss whether their community should become a GM-free zone (step 2) and to come to a unanimous decision. By emphasizing the need for a unanimous decision, we tried to stimulate the group to use the discussion to convince each other, restricting the option for an easy process solution such as a majority vote based on the individual perceptions.

This discussion resulted in a decision (step 3), followed by a reflection (step 4) on the process and the outcome of the simulation. In this final stage, participants were explicitly asked to identify the arguments that, in hindsight, they considered to have been essential for their decision.

**Data analysis**

Each step in the decision-making simulation provides insights into how non-experts use information to come to a group decision in an information-haze situation. We used the results of the questionnaire as an indication of the degree of trust each group had in different sources of information. We compared these results with the way participants dealt with the information, namely highlighting arguments from trusted sources in yellow and/or non-trusted sources in pink, in order to see whether there was reason to believe that participants used trust in a source as a substitute for knowledge. The guide function of trust was assessed by comparing the relative distribution of yellow (relevant) and pink (irrelevant) highlighted arguments in the texts with the stated trust in the different sources in the questionnaire. Both the questionnaire and the highlighting of arguments allowed us to study the way participants deal with the information that they were provided with. Based on the literature, our hypothesis was that, in absence of conclusive information, participants would be likely to orient themselves towards information from trusted sources. Also we kept track of the distribution of supportive and critical statements that were highlighted. The discussion phase of the simulation (step 2) corresponds with the persuasion stage of Rogers’
process. We hypothesized that the arguments that were brought-up during the discussion would be the ones that persuade the participants to adopt a certain position. We thus analyzed to what degree the arguments used in the discussion corresponded with arguments in the portfolio and also whether the arguments used in the discussion had been highlighted as relevant in the texts. All arguments used in the discussions were listed and labelled as a ‘portfolio’ or ‘other source’ argument. Portfolio-arguments were classified according to the text from which the argument was derived. Additionally, open labelling was used to characterise each argument used in the discussion (value, other knowledge, etc.).

Finally we analyzed the outcome of the unanimous group decision and the arguments which were referred to as most decisive for that outcome.

Figure 4.3: Stages of Rogers’ information-decision making model (grey arrows) and the steps in our study (white blocks)

4.3 Results

4.3.1 Trust in sources

Graph 4.1 illustrates how seriously the different information sources were taken in the four municipalities. The scores present the percentage of participants in the focus group that thought that the source should be taken ‘(very) seriously’, ‘neutrally’ (neither seriously, nor non-seriously), or ‘not seriously (at all)’.

All communities considered almost all sources to be ‘serious’ or ‘neutral’ sources of information, but there were differences. For example, participants in community A took information provided by NGOs and academia very seriously, but considered information from businesses ‘neutral’ at best, while community B took almost the opposite position. Communities B and C were most positive about the government as a source of information. Community D had the highest score for overall trust in all sources.
Graph 4.1: Average trust in different sources per community, as indicated in the questionnaire

4.3.2 Highlighted arguments – a reflection of trusted sources?

On average, each participant highlighted 19 arguments in the portfolio presented. Participants of Community A highlighted the most arguments (31 on average), followed by Community D with 18 arguments and Community C with 16 and Community B with 12. More arguments were highlighted as relevant, 12 (ranging between 18 in Community A to 7 in Community B), than irrelevant, 7 (ranging between 12 in Community A to 5 in Communities B and D). Overall, more arguments were highlighted in the texts from the government and NGOs than in those from academia and business (see graph 4.2).

Graph 4.2: Average number of arguments highlighted as relevant and irrelevant, and not highlighted arguments per community (A – D) per source
How to decide when information is hazy?

Community A

<table>
<thead>
<tr>
<th>Trust in sources</th>
<th>Highlighted arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>business</td>
<td>Businesses</td>
</tr>
<tr>
<td>ngos</td>
<td>NGO's</td>
</tr>
<tr>
<td>academia</td>
<td>Academia</td>
</tr>
<tr>
<td>government</td>
<td>Government</td>
</tr>
</tbody>
</table>

Community B

<table>
<thead>
<tr>
<th>Trust in sources</th>
<th>Highlighted arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>business</td>
<td>Businesses</td>
</tr>
<tr>
<td>ngos</td>
<td>NGO's</td>
</tr>
<tr>
<td>academia</td>
<td>Academia</td>
</tr>
<tr>
<td>government</td>
<td>Government</td>
</tr>
</tbody>
</table>

Community C

<table>
<thead>
<tr>
<th>Trust in sources</th>
<th>Highlighted arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>business</td>
<td>Businesses</td>
</tr>
<tr>
<td>ngos</td>
<td>NGO's</td>
</tr>
<tr>
<td>academia</td>
<td>Academia</td>
</tr>
<tr>
<td>government</td>
<td>Government</td>
</tr>
</tbody>
</table>

Community D

<table>
<thead>
<tr>
<th>Trust in sources</th>
<th>Highlighted arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>business</td>
<td>Businesses</td>
</tr>
<tr>
<td>ngos</td>
<td>NGO's</td>
</tr>
<tr>
<td>academia</td>
<td>Academia</td>
</tr>
<tr>
<td>government</td>
<td>Government</td>
</tr>
</tbody>
</table>

Graph 4.3: Average percentages of relevant and irrelevant arguments highlighted as well as non-highlighted arguments in the different texts, compared to the proclaimed trust in each source.
The pattern of highlighting does not confirm the substitute function of trust for knowledge. Instead of acting in accordance with their stated trust (which would require only yellow markings in trusted sources and/or only pink markings in non-trusted sources), participants of all groups were found to mark both yellow (relevant) and pink (not relevant) arguments in all texts. Only three participants of Community A highlighted the NGO text in such a way that it can be interpreted as regarding the source as a substitute for knowledge.

Although graph 4.3 shows some marked differences between proclaimed trust in the questionnaire and the highlighting of texts, the patterns of trust and highlighting in most communities are quite similar. In Community A both the results from the questionnaire and the highlighting in the portfolio show a preference for NGOs and academia over business and governments. Both Communities B and D highlighted very few arguments of business as relevant, whereas they claimed to trust this source highly in the questionnaire. Similarly, Communities B and C highlighted very few arguments of the government as relevant, whereas both indicated that they trusted this source in the questionnaire. Community B even highlighted relatively many arguments of the government as irrelevant.

From our analysis of the highlighting, we conclude that the trust in sources seems to provide some guidance to participants on how to assess the information provided. Participants do not follow a preference or antipathy for a particular source completely, but the identification of relevant arguments does show parallels with the proclaimed trust in the sources, indicating that participants are more likely to agree with sources they trust and disagree with sources they do not trust.

### 4.3.3 Use of information in discussion

Before addressing the arguments used in the discussions, a remark must be made about the character of the discussions. Instead of an exchange of ideas based on the arguments from the texts, or other arguments individual participants came up with, the discussions consisted mainly of individual perception statements. Occasionally, such statements were countered or supported by others, but mostly they were just followed by a perception statement from another participant.

The main result of the analysis of the discussions held in the simulation was that, contrary to what we would have expected, none of the groups of non-experts based their discussion on the pro- and con-arguments from the portfolio. In all four discussions, a total of 138 arguments were used, only six of which referred directly to an argument from the texts. What’s more, the text-arguments were not used as a ground for the final decision.

Graph 4.4 shows the relative distribution of arguments used in the discussions. Labeling of the arguments resulted in five categories. A small number of arguments were excluded from analysis, as it was impossible to label them or they were irrelevant for the discussion (meta-arguments). Considering that most participants claimed to be uninformed about the subject and that all participants read and highlighted arguments in the texts immediately prior to the discussion, we assumed that arguments similar to an argument in the portfolio were based on the portfolio. Next to arguments that could be traced back to the provided texts (‘text’), participants used arguments that reflected factual
information not provided in the texts (‘other source’) and ones representing a value, worldview or emotional commitment (‘value’). As we set out above, these concepts each have a different meaning; here we use all of these terms to refer to arguments that reflect a conviction on what is good or bad, what ought to happen or what ought not to. In the fourth category of arguments, a considerable number were qualified as ‘stuck in the haze’ arguments in which participants expressed continuing uncertainty regarding the acceptability and their understanding of the innovation. Finally, a category was formed of arguments that refer to the diffusion of the innovation (in this case GM) as inevitable. Such arguments were labeled as ‘There Is No Alternative’ (‘TINA’).

A total number of 138 arguments were labeled in all four discussions (range 24-41 in each discussion). In none of the groups did the text arguments form the largest part of the discussion. In Community A the most text arguments were used, making up 27% of the discussion. In Community B, this was only 16%. In Community A, information from other sources formed the largest share of the discussion, while Community D was dominated by TINA arguments and Communities B and C by ‘stuck in the haze’ arguments. In all groups – with the exception of Community A - arguments reflecting a value outnumbered the text arguments.

Text arguments
Of the 30 text arguments mentioned in the discussions, only 6 explicitly referred to the texts. Direct referral was made to the academia text on flies. Safe co-existence distances between GM-crops and organic crops to avoid spreading of GM seeds, as explained in the government text, were mentioned three times (once in Community A and twice in Community D). Interestingly, though, this argument was consistently questioned or referred to as untrue. In fact, including Community B which disqualified the coexistence distances during the reflection phase of the simulation, all groups except Community C doubted the reliability of the distances mentioned in the government text.

As was mentioned before, this category also includes all other arguments that resembled one provided in the portfolio, even if participants used a different phrasing. In some cases, the arguments
used resembled the ones in the portfolio closely. Examples include: “100% certainty does not exist in life, so neither with GM” (Community D, resembles the (business) argument that zero risks do not exist) and “the problem of world hunger is irrelevant to the discussion, because it is a distribution problem” (Communities A and B, reformulating an NGO argument on food distribution). In other cases, arguments were used differently than in the texts, or were supplemented with personal views, making it questionable whether they were, in fact, based on the portfolio. Even so, they were included in the category of text arguments. An example of such an argument is that “it is weird that people are still afraid of GM, even though it has been sold in the US for many years” (Community C; the participant seemed to use a critical NGO argument on America’s use of GM crops without researching health effects, to come to this positive argument).

**Values, worldviews and emotions**

In each discussion value arguments that reflect both positive and negative attitudes towards the innovation as well as other values were used by members of all groups. In this category, we made no distinction between expressions of emotions, references to values or worldviews. All arguments that, in essence, reflected one of the above, were placed in this category. The use of value arguments was found to outweigh that of text arguments in all discussions except in Community A. Examples of such arguments are: “it is an inner fear, without actual evidence” (Community C), “I am supportive of new techniques” (D), “People quickly oppose change – some developments need a chance” (Community B), “My feeling tells me that the health of people is less important than money and power of businesses” (Community A).

**Other sources**

In the discussion of Community A, where the participants had some knowledge of the subject, most arguments were from ‘other sources’. The ‘other source’ arguments used in Communities B, C and D reflected the private interests of individuals and were not directly linked to the GM debate, showing the participants’ relative unfamiliarity with the subject. For example, “everything is relative, organic is not holy either – a lot of heavy metals are used in that [type of cultivation process]” (Community C). Referring to the use of GM in other domains (especially in medicine), participants of Community A mentioned many scientific studies that criticize GM (“the cultivation of GM crops prevents cosmic and capillary flows”, “research in Japan shows that GM has a health effect on children” and “GM cultivation causes monocultures”).

**‘Stuck in the haze’**

In addition to the arguments that could be traced back to the “sources” referred to above, two patterns were found in the arguments used by participants. The first one reflected what we call a ‘stuck in the haze’ situation. Participants introduced issues that were relevant for the topic without knowing what to do with this information. The information provided did not seem to help them out of the haze.
Three types of ‘stuck in the haze’ arguments were identified. First, participants referred to a topic that was relevant for the discussion but introduced it as a question. For example, “Is it true that GM is the same as plant breeding?” (Community C) or “Is GM cultivation controllable?” (Community D). These participants seemed to have recognised a relevant topic in the discussion but found no way to distinguish between the different viewpoints in the different sources and were thus unable to come to a conclusion themselves. Additionally, several participants claimed to need more information, or stressed that more research was needed to understand the technology. All these variations reflect the three types of uncertainties mentioned earlier (section 4.1) as causes of an information haze. Most of these arguments were put forward in Communities B and C, they came up to some extent in Community D, but not in Community A.

‘There is no alternative’ – TINA

Finally, we identified many arguments fitting a ‘there is no alternative’ pattern. These address the inevitability of the technology and (thus) the relative importance of the decisions made on this topic by one community. They were put forward mostly in Community D, but at least one such argument was found in all discussions. TINA arguments seemed to be proposed as a coping strategy to overcome opposing positions. In the next section, we will elaborate on this category of arguments.

4.3.4 Decision

After the discussion, all groups decided whether their community should become a GM-free zone (see table 4.2). Only Community C actually made this decision unanimously. All others decided by a majority of votes. During the reflection, participants of these groups explained that their respective positions were too far apart to be able to convince each other.

In evaluating the simulation, participants stressed the role that their value orientation or worldviews, expressed as feelings, had in their decision-making, as well as the relatively limited importance of the texts provided. Participants claimed not to have paid much attention to the texts, but mentioned gut feelings or a strong intuitive feeling, previously established ideas and values as the main drivers for their decision: “it is more an issue of feeling that makes you an opponent or proponent, additional information does not really work here” (Community D); “I did not use the arguments from the texts, I already had an idea before I read the texts and that idea stayed” (Community B).

<table>
<thead>
<tr>
<th>Community</th>
<th>Decision</th>
<th>Method of decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community A</td>
<td>GM-free</td>
<td>Majority of vote</td>
</tr>
<tr>
<td>Community B</td>
<td>GM-free</td>
<td>Majority of vote</td>
</tr>
<tr>
<td>Community C</td>
<td>Not GM-free</td>
<td>Consensus</td>
</tr>
<tr>
<td>Community D</td>
<td>Not GM-free</td>
<td>Majority of vote</td>
</tr>
</tbody>
</table>
Chapter 4

4.4 Reflection: dealing with uncertain risks in line with Van Asselt & Vos?

The simulations show that in this case of information haze participants do not seem to base their opinion and decisions on information. The question arises how the way the groups did, then, come to their decisions, can be explained. In their 2008 study, van Asselt and Vos proposed that genetically modified organisms (GMOs) are an uncertain risk and assessed how decisions are made on such risks at the European institutional level. In the final section of this chapter, we will analyse to what extent the mechanisms identified in their study are apparent in the discussions that were held in our project. Van Asselt and Vos (2008) identified four mechanisms that illustrate how current governance deals with this uncertain risk: 1) uncertainty intolerance, 2) the inclination to equate uncertainty with risk, 3) boundary work, and 4) technocratic provisions. We think these four mechanisms illustrate two types of strategies for handling decision-making on uncertain risks: (1) information-handling strategies, (mechanisms 1 and 2 of van Asselt and Vos (2008); and (2) decision strategies, (mechanisms 3 and 4). We assumed that these mechanisms also apply in our simulation.

4.4.1 Information-handling strategies

‘Uncertainty information’ is the type of information that is available in uncertain situations and reflects the type of uncertainties that exist, the degree of importance of this uncertainty and whether there are options to reduce the uncertainty. Van Asselt and Vos (2008) observed that various actors in the EU regulatory decision making (Monsanto, the European Food Safety Authority, European Council, the European Commission, NGOs) were intolerant towards such information. Instead of seriously addressing the uncertainty of the information, these actors were found to ignore it and instead construct plausible proof of certainty. This first mechanism is referred to as: intolerance towards uncertainty information.

The inclination to equate uncertainty with risk is a mechanism that is exactly opposite to the first mechanism. When actors equate uncertainty with risks, all signs of uncertainties are interpreted as signs of risks. These equations do not acknowledge that not all uncertainties are relevant and that uncertainty can also lead to positive outcomes.

These mechanisms that were found to be predominant at the EU governance level, were also found in our study. Members of Communities B, C and D expressed their intolerance of uncertainty, mainly by stating that they had too little certainty to make up their mind. These groups tended to equate uncertainty with risks, and then state that certainty is required to approve the technology. The discussion in Community A left no room for uncertainty. Members based their certainty on either the negative or positive character of the technology.

However, some tolerance towards uncertainty was also found. In most groups, the special characteristics of an innovation was stressed, and associated with some room for development and tolerance. Also, in both groups A and D, a participant explicitly mentioned that uncertainty should not be equated with risk as positive outcomes are also possible: “We do not know whether it is dangerous, because that is still unknown – it does not necessarily have to be negative” (Community D).
4.4.2 Decision strategies

The two other mechanisms described by van Asselt and Vos (2008) are more procedural in nature. Actors were found to apply *boundary work* to evade uncertainty, deliberately setting limits to the scope of the assigned task making it easier (or even possible) to make a decision. This resembles European risk experts excluding non-scientific objections in their decision-making allowing for the panel to dismiss non-scientific concerns and to construct plausible proof about the safety of GMOs.

Citizen groups in our study were also found to use mechanisms similar to *boundary work*. It was mentioned before that all discussions included ‘there is no alternative’ (TINA) arguments. For instance, participants declared a GM-free zone to be useless if other communities allowed GM cultivation. In Community D, a GM-free community was compared to becoming Amish, as such a decision would imply complete self-sufficiency. Other TINA arguments stressed that the character of the innovation required the national government to decide on the issue, instead of the individual communities. These arguments change the decision laid before the participants in such a way that an agreement is potentially easier to obtain. Downsizing the decision or its importance facilitates the assigned task. In our study, Communities C and D based their decision on this type of argument, both concluding that, as the alternative was unrealistic, they would not declare their community a GM-free zone.

As the fourth mechanism, Asselt and Vos found that EU institutions make use of *technocratic regulatory provisions*. These are procedural strategies to break the deadlock situations in decision-making. At the EU level, for example, a procedural escape consisted in delegating decision-making to a specific body if no agreement could be reached through normal (democratic) procedures. Although meant for extraordinary situations, van Asselt and Vos found that for decisions on GM application, this escape was applied to every decision.

Participants in our study were also found to apply regulatory provisions to come to a decision. Three of the four communities (Communities A, B and D) changed the rules of the simulation in order to reach a decision: instead and contrary to the instructions, they decided to base their decision on a majority vote. All participants agreed with this procedural change referring to it as democratic.

4.5 Discussion

In complex societal discussions, the available information - or the lack of (clear) information - is often blamed for decisions being delayed or not made at all. When a “lack of available information” is perceived, it will limit the capability or incentive to decide, since “more research is needed before we can decide”. Similarly, the problem of public acceptance is often considered one of ignorance and lack of information (Lassen & Jamison, 2006). With our results in mind, these interpretations can be questioned. Is a lack of information really the problem? Because when information is available, citizens do not appear to use it. Even in the case-study presented in this chapter, many participants stressed the need for more information, but at the same time did not use the information provided. A distinction can be made in the types of ‘information request’. We found at least two different types: (1) a request
for more scientific research in order to understand the technology - representing a precautionary approach and (2) a request for more information indicating that a conclusive argument had not (yet) been provided. We do not claim that the request for more information is false. However, postponing a decision based on the fact that uncertainty prevails does seem a coping strategy leading, inescapably, to deadlocks in a society where uncertainties, fuelled by unknowns as well as contradictions, are ever more dominant.

The results of the simulation support the idea that decision-making is, at least for group decision-making in information haze situations, more complicated than Rogers’ model suggests. Rational argumentation in the sense of debating and validating conflicting or incomplete arguments provided in the texts was limited. Values, worldviews and feelings seemed to be of far greater influence on the decision in an information haze situation. Our study shows that such values become even more important in situations when choices need to be made. This does not mean that the decision-making process is thereby irrational. The role values and emotions play in decision-making has been subject of research by several scholars (Dunn, 1981; Frijda, 2007; Zeelenberg et al., 2008). Increasingly, these studies stress the importance of values and emotions, not as side-effects or bias to rational decision-making, but as elements in building blocks in rational decision-making (see for example Kahan, 2008, referred to in section 4.1.3).

In the case of GM crops we see that participants do not only express their feelings, emotional commitments or values, but also accept these as relevant and even capable of overruling the arguments in the portfolio. It was also mentioned by participants when reflecting on their decisions that these values pushed them towards a certain decision. The fact that both the selection of arguments and the decision take place at value-level might also explain why most groups were unable to come to a unanimous decision: it seems to be hard to compromise on one’s own basic values. Our findings support the addition of “values” to Rogers’ decision-making model.

Our study also provides some insights into the way the individual lay person distils knowledge from information. We already described how all participants were asked to highlight arguments they considered relevant and irrelevant. Analysis of these highlighted arguments shows that a number of participants seemed to follow their trust in the source, at least when highlighting the NGO texts. However, in re-evaluating, we also find indications of a different pattern in highlighting, consistent with a positive or negative attitude towards the technology. Although we cannot conclude from these observations that people had already made up their minds about the technology prior to reading the information (instead of being convinced by the arguments), we hypothesise that on topics such as GM, non-experts do have an unarticulated intuition, fed by their personal values or worldviews.

In the context of how non-experts deal with information, the way participants highlight their texts provides evidence that those who have already made up their minds (be it based on values, worldviews or previous experiences or knowledge) use information differently than those who have not yet made up their minds. Where the first group seems to highlight those arguments supporting their perception, the second group is more open to information, highlighting key-words which will enable them to discuss the topic. Both groups thus seem to learn something from the information, although in a
How to decide when information is hazy?

different way. Participants with pre-existing opinion on the subject seem to filter knowledge from the texts that can be used to support their opinion while undecided participants seem to use the texts to distil information on the issues that are relevant for the debate (for example: scientific certainty, risks of spreading) but they cannot use the contradicting information as a basis for a decision. Instead, they are caught in an information haze.

Focus group research on GM by Lassen and Jamison (2006) supports our idea that lay people use information in hazy situations to find the important topics in the debate. Although there were some differences in terms of procedure, objectives and design, Lassen and Jamison also reflected on GM with non-expert citizens in a focus-group setting. Where our participants received information prior to the debate, Lassen and Jamison presented stimuli, such as cards with information, during the debate. In our study, participants were asked to come to a group decision. Lassen and Jamison’s focus groups consisted of more traditional interviews focussing on concerns of citizens. Many issues that were part of the texts presented to our participants (our ‘text’ arguments) were also mentioned by the participants in the Lassen and Jamison study. Examples are the ‘unnaturalness’ of the technology, the environmental and health risks, the benefits for hunger and poverty, and the power and financial interests of the companies involved. Although the design of the studies resulted in different debates – in our case focussed on the acceptability of the technology, in Lassen and Jamison’s case elaborate reflection on concerns – the issues debated were similar.

Our study shows that non-expert citizens take one of three possible approaches to uncertainty in the case of GM crops, either a precautionary, a preventive or a ‘benefit of the doubt’ approach. The precautionary approach (wait until more is known about the effects, in dubio abstine) was dominant in Community B and also expressed by several participants in Communities C and D (“As long as knowledge is limited, I choose certainty: organic”). Compared to these precautionary positions, the decision of Community A shows a more preventive approach. The majority of participants there were not uncertain because they believed GM to be is ‘wrong’; they regarded the negative consequences to be a certainty, with the decision to declare their community GM-free as result. Communities C and D both gave GM crops the benefit of the doubt, recognizing the uncertainty but considering that this is part of all innovation processes and does not necessarily outweigh their potential future benefits.

The main message of our findings concerns the place, position and role of the values relevant for a topic of societal debate. Our findings support the interpretation that not all requests for more information are equally constructive for the decision process but stress the important role of values for decision-making on societal issues, especially in cases of uncertain risks and information haze. Dass (2004) and Aerni and Rieder (2001) have argued that, in cases of high complexity and increased conflict (such as biotechnology), the public debate shifts from a factual to an institutional and, finally, to a worldview level. At the worldview level, they conclude that values and emotional commitments dominate and factual knowledge is no longer of any importance. Our findings confirm this: participants generally debated at the level of basic values with which they pre-structure the meaningful elements of their perceived world. This is at variance with the persistent focus on rational decision-making and the
ideal of excluding emotions in discussions about policy-making at the EU level (van Asselt and Vos, 2008). The same goes for scientists who dismissed interaction with the public because they expected their reactions to be based on a lack of knowledge and on emotions (Cook et al., 2004). Based on our findings, we recommend that values be acknowledged as a dominant influence on decision-making. We believe that further efforts are required to make such values explicit in decision-making processes.

The external validity of the simulations undertaken in this study, particularly the distinction between the constructed simulation setting and a similar real life situation, is an important issue. The real life situation we aimed to simulate is the response of local inhabitants to cultivation of GM crops in their rural community in the Netherlands. Although citizens are unlikely to be put in the situation we created in the simulation, the question remains relevant. By coincidence, we had the opportunity to observe an actual debate on the issue of a GM-free community in one of the communities involved in this study. It started with environmental NGOs and ministerial policy makers being invited to an ‘information evening’ organized by a local committee of citizens associated with the local organic food store. A critical documentary on GM crops was shown and an expert forum discussed the issue with the audience. At the information evening, the discussion followed the same course as during our simulations. However, in the debate following the information evening, the local council rejected the initiative to become a GM-free community by majority vote. The interests of local farmers led to the rejection of the initiative and the council chose not to prohibit GM crop cultivation, estimating that central government regulation would prohibit GM-free communities (which so far is not the case), and the risk for farmers and consumers would be minimized through regulation by the Ministry of Agriculture. This example provides an additional illustration of TINA and the benefit of the doubt mechanisms.

In technology assessment (CTA) research, focus group discussions with citizens on their perceptions and wishes for a technological development are increasingly common. Our simulations therefore resemble the real-life way in which non-experts are sometimes included in decision making on technological developments. In addition, efforts were made to provide real-life non-experts with real-life information, often part of public hearings on technological developments. Participants were recruited without mention of GM, guaranteeing that simulations consisted of non-expert, real-life citizens and, only accidentally, by informed citizens. The real-life information provided to the participants was taken from public sources (mainly internet, some newspapers). Moreover, we tried to simulate the overload of information available in real-life, by setting a limited time for reading the extensive portfolio. At the same time, the overload of information meant some participants were not able to read all arguments carefully. As most participants started reading the portfolio from the beginning, the last text (business) was most affected by the limited amount of time and considerably fewer arguments were highlighted there. However, we still consider this limitation better than the alternative of sending information to participants beforehand. Sending information beforehand might have led to internet searches and peer discussions at home which would have restricted our perspective on the process of participants’
reactions to the information haze. In addition, participants might have differed much more in background knowledge, possibly disturbing the explorative, open attitude among participants.

Finally, no measurement was made of the knowledge participants had on GM crops prior to the simulation. As a result of this choice, we cannot exclude the chance that some participants were more informed about the subject then they claimed (which arguably applies to some of the participants of Community A). However, we chose to do this because we did not want to influence the participants by the GM-related questions we would have needed to ask. For the purpose of our simulation, it was most important to keep participants as unaware of the GM issue as possible, prior to informing them ourselves.

4.6 Conclusions

In this chapter we analysed the role of information in four perception-forming and decision-making processes on GM crop cultivation by non-experts. We chose GM crops because of the information haze surrounding this issue: there is no clarity on who knows what and whether there is enough information available to construct conclusive evidence on the related risks. The debate on this topic is dominated by scientific and NGO experts with polarized opinions. In a simulation setting, we presented a portfolio texts with the arguments used in this polarized field to non-expert citizens from four rural communities in order to analyse how these non-experts would deal with an information haze situation.

Although decision-making theories argue that trust in sources can function as a substitute for knowledge, the highlighting that participants made at our request, (yellow markings in trusted sources and pink markings in non-trusted sources) showed us that trust in sources seemed to provide them with - at most - some guidance. Participants of all groups were found to highlight both relevant and irrelevant arguments in all texts. Closer investigation revealed that some of the highlighting indicated that participants had a pre-existing positive or negative attitude to GM. We hypothesize that such pre-set attitudes can have implications for the way information is selectively used to become accepted knowledge and could lead to less nuanced decisions. This hypothesis needs further investigation at the level of individuals, namely how individual non-experts transform information into knowledge.

As to how group decisions are made in hazy information situations, we conclude that information is rarely used to support arguments in group discussions and plays no role in the final decision made. We found that most text-related arguments were used in the group that consisted of participants who are relatively knowledgeable on GM crops. However, even in this group, the text arguments used were outnumbered by arguments from “other sources”. Other groups mainly expressed arguments reflecting “stuck-in-the-haze” or “there-is-no-alternative” arguments. The use of these arguments illustrates that the insights provided by the portfolio did not help participants to come to a knowledgebased decision on the unfamiliar subject.
We noted that participants in all groups, even the group consisting of the more knowledgeable participants, followed their emotional commitments, feelings, values and worldviews instead of information. We conclude that the multitude of contradictory arguments, the uncertainties and the absence of convincing trust in a specific source lead citizens to use their values as a compass to base their decisions on. Decision-making processes do not start with individuals as blank sheets. They are influenced by every individual’s inherent value orientations. Early in a discussion, participants were already expressing emotional commitments which reflected these values. In the reflection phase, these values were also referred to as an explanation for the decision. Values were not only a dominant factor in decision-making, they were also found to be resistant to change by arguments in the debates.

Finally, the four mechanisms that van Asselt and Vos (2008) saw institutional decision makers at EU level use to escape from deadlocks on GM decision-making, were also used to analyse the decision-making processes in our study. We conclude that participants of the simulations applied the same four mechanisms to handle the information haze and decision-making. By reframing the decision (downsizing) and changing the rules of the game the participants retained their individual positions on the topic of GM, while the group was still able to make a decision. The use of these decision-making mechanisms can be explained by a deeper drive to safeguard fixed, value-based perceptions.
Chapter 5

Does the law trigger citizen opposition?

Current and future regulations of citizen participation in land-use decision-making in the Netherlands: an analysis

5.1 Introduction

In recent years, Dutch land-use planning law has undergone radical changes and – with another new law in the making - an end is not yet in sight. The adaptations were necessary because procedures in this terrain are widely considered complex and take many years to complete. Despite all the efforts that have been made to integrate the patchy regulations and simplify the procedures all parties concerned with land-use decision-making still criticize the time the decision-making takes, the law suits and the ever uncertain outcome. It all stands to reason, of course: the Netherlands is one of the most densely populated countries in the world where the use of each piece of land is highly debated, so naturally decisions on spatial planning are fraught with problems. Over time, the decision-making process on land-use was made to incorporate a delicate balance of interests; this resulted in ever more complicated procedures that became increasingly time-consuming. One major aspect of the problem is that new plans often lead to citizen opposition.

In chapter 2 we used the literature on the Not In My Back Yard (Nimby) response to draft a model of the way in which citizen responses to policy-decision develop. In the course of that process, that consists of several phases, citizens evolve from unaware and inactive, to aware and active opponents/proponents of a plan. According to social science scholars, several factors play a role in that development, but one of the most important factors seems to lie in the decision-making procedure itself and more specifically, in the way citizens are included in that decision-making.

Scholars have long thought that the opportunity to participate, would, in itself, reduce the need to object, as citizens would be assured that their interests were heard and taken into account.

1 This chapter is based on a paper presented at the Annual Meeting of the Law and Society Association, Boston U.S.A., May 30 – June 2, 2013. A shorter version of this chapter was published as: C. de Brauw, M. van Amstel & Tj. de Cock Buning, Burgerparticipatie in het omgevingsrecht; zet de regulering – nu en in de Omgevingswet - aan tot het instellen van bezwaar en beroep? Tijdschrift voor Omgevingsrecht, Volume 4, 2013.
Chapter 5

(Agterbosch et al., 2009; Aitken, 2010; Elliott & McClure, 2009; Hermansson, 2007; Thornton & Knox, 2002; Wolsink, 2000; Wolsink & Devilee, 2009). However, a number of studies have shown that not all citizen-participation leads to increased acceptance of the decisions. In this context we believe that a distinction must be made between ‘good’ and ‘bad’ participation procedures. Among the latter are the participation procedures that are perceived to be unequal or unfair: these can actually intensify opposition responses instead of diminishing them (Agterbosch et al., 2009; Aitken, 2010; Burningham, 2000; Kraft & Clary, 1991; Wolsink, 2000, 2007). Moreover, researchers who have studied citizen opposition in the Netherlands have argued that the decision-making process in itself can trigger opposition: in other words, involving citizens can prompt them to rise up against the proposed development (Hajer, 2003a).

There are three central questions that will be discussed in this chapter. First of all: what type of citizen participation can be considered as “good” or “bad”: in other words, what elements make for successful citizen participation? Secondly, how do the current Dutch regulations on land-use planning score in this respect? And thirdly, what amendments to the newly proposed ‘Toetsversie Omgevingswet’ (hereafter referred to as the Draft Spatial Planning Act) can be recommended to improve citizen participation (and lessen opposition).

We make a strict distinction between participation and opposition. We use the term participation to refer to a situation in which citizens can contribute to or influence a decision before it is made (for instance voting in elections, taking part in referenda or participatory meetings). Opposition starts after a decision has been made; filing law suits and pushing court cases until the highest jurisdiction is, therefore, a form of opposition.

Our approach in this chapter is as follows. From a study of the relevant literature in the social sciences on the subject of opposition and participation, we try to distill the criteria for successful citizen participation (paragraph 5.2). Making use of these criteria, we will make some critical reflections on the possibilities and limitations of citizen-participation as laid down in Dutch administrative law and as seen by a number of citizens that were interviewed about their experiences with participation (paragraph 5.3). All along, our focus is on citizen participation, even when the legislation covers participation of others as well. Then, in paragraph 5.4, we compare our findings to the proposals in the Draft Spatial Planning Act (‘Toetsversie Omgevingswet’). Finally, in paragraph 5.5, we will recommend several adaptations to this draft law that could lead to more successful citizen-participation.

5.2. Reasons and criteria for citizen participation in policymaking

Participation in policymaking is considered to be one of the key elements in the shift from government to governance (van Dam et al., 2008; de Boer et al., 2007). Three generations of participation can be distinguished since its advent in the 1970s (Lenos, Sturm & Vis, 2006). The first generation could be characterized as advisory-participation: the main role of participants was to make recommendations to the administrative authorities. The second generation of participation, that rose and peaked in the
Does the law trigger citizen opposition?

90s, can be described as interactive policy development or co-decision-participation. Participation in this generation focused on negotiation and deliberative decision-making. The most recent form of participation is characterized by the government facilitating initiatives that are taken by citizens in the public interest. This third generation of participation is also referred to as do-ocracy (do-it-yourself-democracy) (van de Wijdeven, 2012). The essential difference between these three generations of participation is the degree to which the participants are involved in and responsible for the final decision. Different degrees of involvement were also designated by Arnstein (1969) in her ‘ladder of participation’, which divides the continuum of public involvement into different stages - ranging from symbolic participation to co-decision.

But before coming to all that, we will go into the objectives for participation and formulate criteria for ‘successful’ participation. According to the literature that we consulted, such participation contributes to the acceptance of a decision.

5.2.1 Three rationales behind (citizen) participation

Although they use different terminology, by and large scholars point to three rationales or arguments for participation. The first of these is that the viewpoints of people and organizations outside the circle of policy-makers will enlarge the knowledge-base on which the decision is taken and thereby improve the quality of the decision. In the second place, scholars point out that citizens in a democratic society have the right to participate in decisions that are likely to affect them. In this reasoning, participation is seen as an ‘ethical presupposition’ in which citizens are co-owners of the public domain. The final rationale emphasizes the relationship between participation and acceptance of the decision and argues that decisions in which stakeholders or citizens were involved are more likely to be accepted and will therefore be more effective (Cocklin et al., 1998; Korfmacher, 2001). Participants that have been given insight into the decision-making process and have had the opportunity to react, will have a better understanding of the decision and are more likely to accept the consequences, even if these are not what they preferred (Woolley, 2010; Cowan 2003; Korfmacher, 2001). It would follow that participation makes decisions easier to implement and therefore more effective (Appelstrand, 2002; van Dam et al., 2008; de Boer et al., 2007). These arguments will be discussed in more detail below. The advantage of citizen participation is not undisputed. For example, with regard to the last of the three arguments, there are case studies that show that poorly organized participation procedures can trigger citizens to rise up against a proposal (Wetenschappelijke Raad voor het Regeringsbeleid - Scientific Council for Government Policy – hereafter WRR, 2012; Buchy & Hoverman, 2000). Cowan (2003) found that disappointment in the participation process can backlash and become the motive for resistance.

Rationale 1: Public participation leads to better informed policy-making

The main point of the first argument is that groups and individuals outside the policy-making arena can have important information at their disposal (Cuppen 2009; Appelstrand, 2002). This is especially true in the case of complex problems that involve different framings, values and uncertainties (Cuppen,
2009; van den Hove, 2000). Authorities or private initiators cannot be expected to fully understand the positions of different interest-groups or the general public, nor can they be relied on to judge what is socially ideal or desirable (Cocklin et al., 1998). Personal knowledge of local conditions can increase the quality of decision-making (Cowan, 2003; Appelstrand, 2002; Korfmacher, 2001). The perspectives and experiences of citizens will deepen the knowledge base on the problem and inspire solutions that take the values and opinions affected by the decision into account. (Woolley, 2010; Appelstrand, 2002). In terms of the distinction between ‘participation as an end’ and ‘participation as a means to an end’ (Cuppen, 2009), this first argument is an example of the latter. Not the process, but the result of the participation is the aim.

This line of reasoning is not uncontested. Dobson (1996, in Appelstrand, 2002) argues that, in the area of sustainability, participatory processes do not necessarily lead to the decisions that are the most favourable for the public cause. He bases this argument on the idea that, whereas initiatives can be focused on a specific goal (i.e. sustainability), participatory processes are basically a political process. Others have criticized that the focus on the procedure may not lead to a just and adequate decision (Healey, 2003). In other words: participation does not necessarily lead to the best result in terms of outcome. For the participatory process to do so, it must be carefully planned in terms of who participates, who does not and which voices can or should (not) dominate the process (Aitken, 2010, quoting Hillier, 2000 and Kaza, 2006).

Rationale 2: Public participation as a normative right in democratic societies

The second argument sees participation as an end, in the sense that including the perspectives and views of all those affected is vital in a democratic society. In this context Fiorino argues that “citizens are the best judge of their own interests” (1990, p.227) and that they should therefore be able “to participate in decisions that affect (them) and (their) community” (Bachrach 1967, p.26, cited by Fiorino, 1990). Ananda (2007) states that citizens, as “quasi-owners of a resource” (p.535) are to be considered as rightful co-deciders on the use of a resource. In this way, participation reflects the ideal of deliberative democracy, a political right for citizens and a prerequisite for democracy (Cuppen, 2009). Some authors also give ethical arguments (Cocklin et al., 1998) or mention the moral obligation for decision-makers to include affected citizens in decisions (Cowan, 2003). Their rights is also described as the right to know (Cowan, 2003) or a right that derives from basic human rights (Appelstrand, 2002). Critics of this second argument maintain that participation processes do not necessarily enhance democratic decision-making. They point out that the type of participants that is involved can actually reduce the democratic calibre of the decision-making. Bijker (1994) showed that the general public often is not interested in participation processes at all, or only in a very late stage and that broad inclusion of citizens only worked well when it was forced on the public. It is also debated whether including the ‘usual suspects’ - the vocal and organized citizens – in the decision-making leads to a less democratic result than if the decision was taken by elected representatives. To prevent the loudest voice from having its way, special care must be taken to assure that the entire range of interests is represented and that the balance of power between participants is sustained.
Rationale 3: Public participation leads to more acceptable and thus more effective decisions

The basic idea behind the third argument in favour of participation is that, by including citizens in decision-making, they will be more understanding of - and committed to the final decision and therefore more likely to accept its consequences, even if these are disadvantageous for them (see Woolley, 2010, p. 226: “opportunity to reconsider their reactions to the proposed decision based on new information”, and Cowan, 2003, pp. 382/383: “raise public awareness”). Authors seem to agree that effective public participation in decision-making enhances the acceptance of laws, rules and policy-decisions (Appelstrand, 2002; Fiorino, 1990; van Dam et al., 2008; de Boer et al., 2007). Effective participation in this context implies that the decision that is the result of the participation procedure leads to few (if any) court cases.

This effect is not only produced in those who were directly included in the decision-making process. The fact that a wide array of interests was taken into account can lead to increased acceptance by citizens that were not included in the decision, because others with interests similar to theirs were taken into account. Successful participation can thereby increase the chances of smooth policy implementation and decrease the costs of enforcement (Cocklin et al., 1998; Korfmacher, 2001).

Although on the whole this argument is widely espoused - especially in spatial planning issues - it is not uncontested either. As mentioned before: case studies have shown that the participatory process itself can lead to opposition. In other words, a badly set-up participation procedure can have adverse effects (see for example the report ‘Trust in Citizens’ issued by the WRR, 2012). Cohen (2003) also found evidence in her study that the lack of participation in itself can become the focus of opposition. By not including citizens in a (genuine) participation process, initiators thus increase the chance that they will oppose the plans.

Even when citizens are invited to participate in the decision-making, opposition can still be intensified by this process. Buchy and Hoverman (2000) found that not only the total absence of a participation process, but also disagreements about the way in which the process is organized can drive people to oppose the outcome. Woolley (2010) cites several studies to argue that evidence has shown that the ‘decide-announce-defend’ approach, in which the public is placed in the role of critic rather than potential supporters (Bell, Grey and Haggett, 2005), “may turn a potential for conflict into active opposition” (Woolley, 2010, p. 234; Woolley cites: Wolsink, 2007; Wolsink & Breukers, 2007).

In the Netherlands, one further reason for citizen participation exists. In the Netherlands, some governmental decisions cannot be appealed in court by citizens who did not participate in the decision-making. Article 6:13 of the ‘Algemene Wet Bestuursrecht’ (General Administrative Law Act: hereafter: GALA) dictates that an appeal cannot be lodged by a citizen who (can reasonably be reproached that he) did not previously officially voice his point of view, raise objections, or lodge an administrative appeal. In cases ruled by article 6:13 GALA, participation is therefore a necessity.
5.2.2 Essential elements for successful citizen participation

As was described above, participatory processes can be overshadowed by certain interests and ignorance towards others. This can culminate in a frustrating experience for those involved (initiators of a plan and/or citizen-participants) and in an unacceptable result for those who were not. It is therefore important to discover the elements that determine the ‘success’ of the process. In the context of this chapter, we define successful participation as participation that leads to an acceptable outcome with limited opposition responses in terms of legal proceedings before a court (rationale 3). Although the reasons for citizens participation may vary, we found that different studies all listed the same – quite limited – number of elements that they regarded as important for ‘effective’ or ‘successful’ participation (Carson, 2001; Carson & Gelber, 2001; Buchy & Hoverman, 2000).

Wolsink (2007) names two elements that stand in the way of a successful decision-making process, notably: a lack of fairness of the procedure and ignoring arguments essential to opposing citizens. Besides (the absence of) these, the timing of the start of the process is crucial: consulting citizens after a plan has already been announced is far more likely to incite opposition than to stimulate citizens to contribute to an acceptable plan (Wolsink 2007). Bijker (1994) refers to the lack of real reflection on the alternatives citizens propose for a plan, as a threat for the legitimacy of public decision-making. We think these aspects of effective participatory processes can be divided into three categories. We will discuss these below.

Taking the process seriously: Clarity, transparency and fairness

This first category has to do with clarity on the (mutual) expectations. Scholars emphasize that it is important to be absolutely clear on how participants and decision-makers define the concept of participation, the ‘stages’ of the decision-making procedure in which participation is possible, the interests that are at stake for each of the participants (including those of the decision-making authority), the objectives and the expectations of all parties on the participatory process (Cohen, 2003; Cowan, 2003). Equally important is that the participants are clear about their values and worldviews (Buijs, 2009; Carson, 2009), and on what they see as a ‘successful’ completion of the process (Buchy and Hoverman, 2000). A fair process is one that is seen to be nonpartisan (Appelstrand, 2002) and is subject to evaluation (Carson, 2001).

The WRR (2012) has remarked in this respect that citizens expect their arguments to be taken seriously, that there must be an uninterrupted exchange of information and that the authorities must be absolutely clear on what is and what is not possible. This can be challenging. To name an example: the WRR report shows that the authorities still have a negative perception of citizens’ abilities to contribute to public issues; authorities have the idea that citizens communicate vaguely and focus almost entirely on their own interests (WRR, 2012). This kind of perception is counterproductive. Trust between the administration and participating citizens is essential. In this context, Rea & Brown (2009)
Does the law trigger citizen opposition?

speak of suspended trust, referring to a state between trust and distrust, that is easily disturbed: a
failure to keep to the participation-protocol that was agreed on was found to end the suspended trust.

**Taking citizen input seriously: Commitment, flexibility and timing**

A second essential aspect for a successful participatory process is that decision-makers, authorities
and project developers must be truly motivated to take the ideas and wishes of (citizen) participants
into account. This implies that the participation should not take place at the end of the decision-
making process, but should be an integral part of it. A timely start, which will usually mean early on
in the process is one way to make sure that the participants input can be effective (Van Woerkum,
2000; Cocklin, 1998). This requires the authorities to persevere and to be prepared to abandon the
plan of their choice if necessary. In the same way, it is important that they give participating citizens
all necessary assistance (WRR, 2012), for instance by providing the information that enables them to
make a genuine contribution to the decision (Carson, 2009; Appelstrand, 2002).

**Taking the role of citizens seriously: power, influence and inclusion**

The third category of aspects is possibly the most essential. Successful citizen participation requires
that citizens be given the possibility to make a real contribution to the decision-making; that implies
that decision-makers must be prepared to delegate (some degree of their) power to participating
citizens.

Arnstein’s ladder of participation, that was mentioned before, describes different degrees of
participation, with different degrees of influence transferred to citizens. It is generally accepted that,
for effective participation, some degree of decisive power must be delegated (Bijker, 1994; Rea &
Brown, 2009). Case studies have shown that participants do not tend to demand the right to veto a
decision (Cohen, 2003) but also that they are unlikely to participate a second time, if they have the
idea that ‘nothing happened’ with their earlier input (Carson, 2009). Then again, the idea that the
more influence is given, the better, is also contested: Breman et al. (2008) for example mention several
reasons why participants may choose for lower levels of influence, for instance when they have a low
motivation to participate, when the local opinions do not differ greatly or when the problem at hand
is considered difficult.

The selection of participants is another important element (Ananda, 2007; Cocklin et al., 1998). To
safeguard against one-sided decisions, the different groups or individuals and the different interests
that are at stake must be represented. Furthermore, care must be taken to compensate a possible hiatus
in the expertise that participants have (Cocklin et al., 1998). The assumption that the participation of
all active groups will reflect the full range of societal values is another pitfall, if only because people are
more likely to come into action if they disagree with a proposal than if they agree with it. Key-figures
in a community – those who ‘pull’ a project - are essential in citizen-initiative projects (WRR, 2012), as
active and involved citizens can influence others in the community. All types of participation processes
also need ‘uniters’: people who know how to bring different groups or people together and can unite
the interests and visions of different stakeholders and participants (WRR, 2012). If the participation is
Chapter 5

delegated to a committee, the citizen-members of such a committee risk acquiring too much expertise for non-included citizens to relate to (Rea & Brown, 2009). An eye should therefore be kept open for citizens or groups who are not participating but might be interested in doing so (WRR, 2012).

To sum up the findings from the literature, we conclude that successful participation procedures are processes in which all those who feel involved or affected are involved at an early stage and given the opportunity to influence both the content of the decision and the procedure by which it comes into being. This highly overlaps with the three principles of public participation formulated by Carson, which are ‘representativeness’, ‘deliberativeness’ and ‘influence’ (Carson, 2009; Carson & Hartz-Karp, 2005) and the core values formulated by the International Association for Public Participation3. In the rest of this chapter, we will analyse the degree to which these criteria of successful participation apply to the Dutch regulations on land-use planning.

5.3 Reflections on citizen-participation in Dutch land-use planning law

5.3.1 Background: difficult decision-making on land-use planning in the Netherlands

Decisions in the field of land-use planning in the Netherlands have been a problem for quite some time. We already mentioned that the decision-making procedures are long - ten to twelve years are no exception - and lead to high costs and prolonged uncertainty for those involved. In 2008 the ‘Commissie versnelling besluitvorming infrastructuurele projecten’ (The Commission for acceleration of infrastructural projects), also known as the ‘Elverding Commission’, produced the report ‘Sneller en Beter’4 in which the key obstacles to a faster decision-making were analysed and suggestions were made for necessary improvements. The Commission found problems in the preparatory stage (overburdened and inconsistent administrative bodies, poor preparation and insufficient budgetary resources), in the decision-making process (the lack of an exploratory-stage, unsound planning-stage and a disproportionate number of permits that are required for a single project) and legal problems (complex sector specific laws). To continue on that last point: over the last decades, the regulations that spatial planning projects have to comply with have expanded dramatically. Besides the provisions that are issued by every layer of administration (municipality-, province-, and national legislation), spatial planning projects have to comply with environmental norms on air-quality and water regulations, have to meet standards for noise and smell as well as building standards of all sorts. Furthermore, the Natuurbeschermingswet 1998 (Nature Conservation Act 1998) requires (extensive) research of potential negative effects on protected nature sites.

That the problems associated with land-use decision-making were on the administration’s agenda even before the Elverding Commission can be inferred from the advisory report ‘Inspraak Nieuwe Stijl: maatwerk’ (‘New Style Participation: custom made’) produced by the ‘Werkgroep Inspraak’ (‘Working

---

3 See website www.iap2.org
4 The title of the report translates into ‘Faster and Better’. In this chapter, the original Dutch title will be used.
Does the law trigger citizen opposition?

This working group that was set-up in 2006 by the Dutch Ministry of Traffic and Infrastructure, to recommend improvements for citizen participation. Their recommendations were very similar to those of the Elverding Commission, including the advice to increase the involvement of citizens in an early stage of the decision-making process and the importance of ‘successful’ participation.

In all fairness, it can be said that important steps forward have been made in streamlining the different sector specific regulations. Furthermore, the advice in ‘Sneller en Beter’ has been taken to heart and has led to an enhanced exploratory procedure in the Tracéwet (Infrastructure Act). Even so, much still remains to be done. With a new round of changes of the legal system - notably the Draft Spatial Planning Act (‘Toetsversie Omgevingswet’) - in sight, we wonder whether recommendations can be made to the legislators in order to enhance successful citizen participation. But before we come to that, we will explain the current Dutch regulations that rule decision-making procedures and citizen participation.

5.3.2 Regulation of citizen participation in land-use decision making

In the Netherlands, the relationship between the government and its citizens is predominately regulated in the GALA (AWB) that was already mentioned above. In this relatively new law (implemented in 1983) the general rules are laid down for all procedures by which administrative decisions are taken and the role of each of the different actors therein (including citizens). The term ‘administrative decisions’ requires some explanation as it is a concept that is narrowly defined in the GALA. Not all decisions of administrative bodies are administrative decisions in the terms of the GALA. Firstly, not all governmental bodies are considered to be administrative bodies in the sense of the GALA and secondly, not all decisions - even when taken by the relevant administrative bodies - are regarded as ‘administrative decisions’ as defined by GALA.

In the rest of this paragraph, we will first discuss the possibilities for citizen participation provided in the existing land-use planning laws. Then, we will discuss some recent changes in the land-use planning law that are relevant for citizen participation and conclude on whether these provisions guarantee for successful citizen participation. This section will not pay attention to the possibilities for citizens to oppose a decision once it is taken.

Possibilities for citizen participation provided in land-use planning regulations

Citizen participation in governmental decision-making basically comes down to one specific procedure. This procedure, (hereinafter to be referred to as: ‘the participation-procedure’) is laid down in section 3.4 of the GALA. According to art. 3:15 clause 1 GALA, the participation-procedure is open to those who can be regarded as ‘interested parties’ and to others if this is allowed by the specific legislation governing the decision, or by the relevant administrative authority (art. 3:15 clause 2 GALA). Participation, according to section 3.4 GALA implies that interested parties can express their views and concerns (hereafter: perspectives) on a draft-decision, during a six week period that starts with...
the official notification of the draft decision by the administrative authority. They can do so in writing or orally, to which end a hearing must be organised by the administrative body. The right to discuss a proposed decision with the administration or authority, which was - until July 2005 - laid down in section 3.5 GALA, no longer exists.5

The six week period is strictly enforced (art. 3:16 GALA). Perspectives that are submitted after that period are not taken into account. As was mentioned before, at the end of paragraph 5.2.1, it can be necessary for interested parties to make use of the participation-procedure. Article 6:13 GALA denies access to court to those who want to appeal an administrative decision but did not make use of the participation-procedure. In other words: if section 3.4 of the GALA applies to a decision, the opportunity to submit perspectives must be used if one wishes to appeal the final decision before an administrative court.

The GALA does not dictate the way in which an administrative authority must respond to submitted perspectives. Analysis of case law gives the following picture: the authorities need not respond to each individual perspective that was submitted; a response in the form of a summary of all the perspectives is acceptable.6 The administration must respond to the arguments that were presented,7 but the courts tend to give the administration a wide margin of appraisal in deciding which way the arguments submitted by the interested parties tip the balance of interests. For instance, the district court of Noord-Holland recently ruled that the response of the administration suffices, if it covers the arguments in the perspective. It is up to those who submit the perspective to demonstrate that the response given by the administration was insufficient.8

A decision of the district court of Noord-Holland of March 14th 2013 seems to go even farther. Based on the perspectives that had been submitted by citizens, the administration had decided to refuse the permit. The reasoning behind this decision was that: “In view of the number and content of the perspectives submitted, it follows that many inhabitants of the area are negative towards the (proposed) plan and that the leaders of the parties represented in the community council were against granting the permit. In view thereof and of the limited possibilities that there are to make concessions that will satisfy those who submitted the perspectives, the administration decided to refuse the permit after all.”9 The court ruled that the administration’s decision was taken on incorrect grounds in that it gave decisive importance to the (number of) perspectives that had been submitted, the more so because on an individual basis, the perspectives had all been refuted. In view thereof the court found that all that remained was ‘unfounded resistance’ and provided insufficient grounds to reject a permit.10

---

7 See for example the ruling of the District Court of Amsterdam (Rechtbank Amsterdam) of March 31, 2009, Ljn:BI0881, and the ruling of the District Court of Utrecht, December 17, 2007, Ljn:BC0304.
8 District Court of Noord-Nederland, February 11, 2013, Ljn BZ1953.
9 See consideration 3.5, District Court of Noord-Holland, March 14, 2013, Ljn BZ4722.
10 District Court of Noord-Holland, March 14, 2013, Ljn BZ4722.
Does the law trigger citizen opposition?

The GALA itself does not specify the type of decisions in which the participation-procedure must be followed. According to art. 3:10 clause 1 GALA, section 3.4 applies if the specific law on which the decision is based refers to the section, or if an administrative authority pronounces the section applicable in a specific decision. In spatial planning law, section 3.4 GALA is applicable to a large number of decisions. Many spatial planning acts enlarge the group of ‘interested parties’ (that are permitted to submit perspectives) to include all citizens. On the other hand, many spatial planning acts also contain a provision that allows administrations to rule out the perspective-procedure for certain decisions. Several other laws require administrative authorities to explain if and in what way citizens (or others) were involved in the decision-making. Similarly, the laws on specific administrative bodies, such as municipalities, provinces and ‘waterschappen’ (Water Boards: administrative bodies in charge of water management) require each of these bodies to draw up a regulation dealing with citizen participation (participation-regulation) and to issue annual reports on the activities that have taken place on that front.

In the course of this study, the participation-regulations of two municipalities (‘Graft – de Rijp’ and ‘Westerveld’) and of two provinces (‘Drenthe’ and ‘Noord-Holland’) were analysed to see whether they included provisions that gave citizens opportunities to influence policy-decisions beforehand. All four regulations defined participation in ways similar to section 3.4 of the GALA, stipulating that the administrative body of the municipality/province can decide whether a decision will only be taken with (i.e. after) the participation of citizens. If the municipality/province decides to allow participation in the preparatory phase of a decision, the participation-regulations determine that the participation will take place in accordance with the provisions of section 3.4 GALA. Via these regulations citizens have an extra opportunity to make their perspectives known, but the regulations do not open new ways for them to convey their viewpoints, such as dialogue.

On the basis of this analysis we conclude that the legal possibilities for citizen participation in government decision-making, in point of fact, virtually always boils down to voicing an opinion or a

---

11 Based on the ‘Wet Ruimtelijke Ordening’ (the Planning Act), section 3.4 of the GALA must be applied to the preparation, modification or development of a zoning plan (see articles 3.8 clause 1 and article 3.9a clause 1 of the Planning Act), an integration plan (see article 3.28 clause 2 of the Planning Act) a coordinated preparation (article 3.31 of the Planning Act), the preparation of a business plan (article 6.14 clause 1 of the Planning Act) or the preparation of a decision to designate (see articles 4.2 clause 4 of the Planning Act and article 4.4 clause 4 of the Planning Act). Het ‘Besluit ruimtelijke ordening’ (the Planning Decree) has similar provisions with regard to the preparation, modification or development of a (local) zoning plan, a business plan or a state zoning plan and the preparation of proactive directions of the province or minister (see article 1.2.1a of the Planning Decree). The ‘Wet algemene bepalingen omgevingsrecht’ (Wabo) (General provisions on spatial planning act) determines that the provisions of the GALA shall apply for decisions on the applications for different types of permits (article 3.10 clause 1 of the General Provisions on spatial planning).

12 See for example articles 3.2 and 3.10 clauses 2 and 3 of the General Provisions on spatial planning.

13 For instance the Planning Decree requires an administrative body to report how citizens were involved in the preparation of Structural Visions (‘Structuurvisies’) and zoning plans. The report must also show that citizens (and organisations with a social goal) were able to submit perspectives. See article 1.3.1 in connection with article 2.1.1 of the Planning Decree.

14 See articles 150 ‘Gemeentewet’ (Law on Municipalities), 147 ‘Provinciewet’ (Law on Provinces) and 79 ‘Water-schapswet’ (Law on the Water Boards).

15 See articles 170 of the Law on Municipalities and article 175 of the Law on Water Boards.
point of view (perspective) on a draft decision. Although the provisions are not, perhaps, the epitome of successful participation, and comments could be made to the effect that they are not inclusive (but only open to ‘interested parties’), nor timely (starting only after a draft-decision has been prepared) and do not include some form of delegation of power, it must be said that nothing in the regulations prevents the relevant administrative bodies from going further to involve citizens in decision making. On the contrary. Research of the University of Utrecht (Addink, 2009) and the ‘Nationale Ombudsman’ (2009) shows that in practice, administrative bodies do include citizens in many different ways. However, as these modes of inclusion are not regulated, citizens cannot claim the right to be included and cannot successfully summon the administrative bodies before the courts if they fail to do so in these pre-phases.16

Recent legal developments and their implications for citizen participation

Several adaptations of the regulations on spatial planning have been implemented recently. The current Planning Act (‘Wet ruimtelijke ordening’ - Wro) was revised and implemented on July 1, 2008 and the General provisions on spatial planning act (‘Wet algemene bepalingen omgevingsrecht’ – Wabo), was implemented on October 1, 2010. In an effort to stimulate building and development during the economic crisis, a temporary Crisis and Recovery Law (‘Crisis- en herstelwet’ - Chw) was adopted on March 31st, 2010. This law, that expired in January 2014, included some experimental provisions on procedural law, that became applicable to all administrative decisions under the GALA on January 1st 2013, with the adoption of an amendment to the GALA in the Administrative Procedure Adjustment Act (‘Wet aanpassing bestuursprocesrecht’ - WAP).

Many of these recent adaptations were aimed at reducing both the amount of permits required for one project and the time spent on obtaining them. This led to changes in two directions: on the one hand, a large number of substantive norms that were laid down in a myriad of separate laws are now integrated into one law. On the other hand, procedural norms were adapted to lead to quicker decision-making and final settlement of legal disputes (instead of annulment of the decision and redirection back to the administration for a renewed decision). Due to the limited space available, we will not go into these adaptations any further, especially because these mainly affected the possibilities for citizens to oppose decisions after they were taken and had limited effect on the possibilities for citizen participation. The shift from individual permits to general rules, for instance in the ‘Activiteitenbesluit milieubeheer’ (Environmental Activities Decree), did affect the possibilities for citizens to participate in decision making. Citizens can no longer influence individual decisions. What remains is the right to comment on the draft of one of these general rules (see art. 21.6 clause 4 in conjunction with art. 8.40 ‘Wet Milieubeheer’ (Environmental act – Wm).

Another recent development that is of importance for citizen-participation is the codification of what we call the ‘exploration-procedure’ through the adaptation of the Infrastructure Act (Tracéwet).
Such an exploration-procedure allows for citizen inclusion in specific decisions\(^{17}\) at an earlier stage than the participation-procedure provided in the GALA. This exploration-procedure implements some of the recommendations made by the committee Elverding. A binding ‘initial-decision’, which starts up the exploration-procedure, describes the extent and character of the problem, as well as the ways in which citizens (and other parties) will be involved in the procedure. The exploration-procedure itself focuses on collecting the necessary insights into the problem itself, relevant spatial developments and potential solutions.\(^{18}\) In addition, the Infrastructure Act requires an explicit account of the ways in which citizens (and others) were involved in the exploration.\(^{19}\) This procedure guarantees citizen involvement before a draft-decision has been made and is therefore the most far-reaching form of citizen participation codified in Dutch spatial planning law. The exploration-procedure is a positive development, both in terms of timely participation and in clarity on the role of citizens.

Finally, some short comments on a development in international law that could be relevant for citizen participation. Many European directives, for instance the ‘Kaderrichtlijn Water’ (Water Framework Directive) and the ‘Milieu Effect Rapportage – MER – Richtlijn’ (Environmental Impact Assessment - EIA - directive) both impose citizen participation. On the question of participation in environmental issues, we can also mention the Aarhus-convention in which access to information and the opportunity to participate in environmental decision-making is set down. Specifically for participation in local decisions, an Additional Protocol to the ‘European Charter of Local Self-Government’ was adopted on November 16, 2009 and came into force on July 1st, 2012. According to this protocol participation is the right to ‘seek to determine or influence the exercise of a local authority’s powers and responsibilities’ (art. 1.2) and thereby opens up rights to participate in decision-making by local authorities for a category of decisions that do not fall within the scope of the ‘administrative decision’ of the GALA.

**Interim conclusion: timely, inclusive and influential citizen participation?**

If we compare the possibilities that Dutch laws give to citizens who wish to participate in spatial planning (as set out above) with what was concluded on the criteria for successful participation, we must conclude that the legal possibilities for citizen to bring about real participation are fairly limited.

As was mentioned before, not all decisions of the government are open to citizen input and even when that is the case, this does not automatically apply for all citizens, but only to those who are regarded as ‘interested parties’. Even though several specific laws have enlarged the possibility of participation to ‘everyone’, we still find that the existing body of legislation on citizen participation cannot truly be considered ‘inclusive’, as it does not allow whoever feels involved in a decision to take part in the decision-making.

More important - and more subtle - are the limitations that current legislation sets on the actual influence of citizen input on the decision and on the chance to contribute at a time when that input

---

\(^{17}\) Namely in case of current or future problems on the subject of main roads, railways and waterways.

\(^{18}\) See art. 3 of the Infrastructure Act.

\(^{19}\) See art. 4 clause 1 sub b and art. 10 clause 4 of the Infrastructure Act.
can be effective. The right to participate essentially still boils down to the right to express one’s point of view in a late stage of the procedure. Although governmental authorities are allowed to make further inclusion or participation of citizens in their decision-making possible, no right for citizens exits to exchange views with the authority. Two limitations can be mentioned:

- For the most part, citizen input is only possible after a draft-decision has been published. In that stage, many basic decisions will already have been made, including the choice of a preferred alternative, and the issues that remain for citizens to discuss may very well not be those that are essential to them. The exploration-procedure, introduced in the Infrastructure Act is an exception, as it allows all citizens to be involved in a very early stage. This gives scope for citizens to express their views on the problem and possible solutions in a broader perspective.
- There is no transfer of power or co-decision. The fact that citizens have no way of persuading or compelling government bodies to take their input seriously, may have as a side effect that government bodies are not sufficiently stimulated to make an analysis in depth of which public issues are still insufficiently clarified and should be taken into account in further decision-making.

To find out if the current legislation on spatial planning contains more drawbacks to citizen participation in - and if so, which - we interviewed citizens that had been involved in participation procedures on spatial planning in the past. Their experiences are described in the next paragraph.

5.3.3 Reflection on legal provisions from citizen experiences

For our interviews we selected two groups of citizens that had actively opposed local policy decisions on land-use in the past, by drafting petitions, filing court cases etc. Interviewing members of these groups enabled us to analyse the whole process of participation, to discover the point at which their participation had turned into opposition and to find out what factors had led to that outcome. The interviews took place in two semi-structured focus-groups, each taking three hours, making use of the time-line method (Regeer et al., 2011). Although the number of interviewees – a total of 7 in 2 groups - is too limited for generalizations, we did notice some interesting points.

The first group that we interviewed (group A) consisted of citizens of a municipality in the north east of the Netherlands. This group actively opposed the intention of the local and national government to cut down 400 hectares of forest (in addition to some individual trees) to create a new nature reserve in the area. The second group (Group B) were focused on the protection of a nature reserve in the north west of the Netherlands. The members of this second group opposed the initiative to build houses and infrastructure and to permit damaging farming activities in the protected area.

A first interesting finding was that both groups referred to a similar event as the starting point for their opposition activities. In both cases, this event was an information-meeting organized by representatives of the administrative body, to inform the inhabitants of the area on the planned activities. Several aspects of the way the meeting was carried out triggered the citizens to oppose the proposed plans. Both groups mentioned their dismay in finding out that what they thought was an information-meeting was actually a consultation-event in which they were expected to express their wishes for and concerns about a plan that seemed – from the way it was presented – already decided on. Another aspect that
was mentioned by the group members was the fact that only a limited numbers citizens were allowed
to give their opinion during the meeting and that their comments were not debated on, but only
written-down to be ‘taken into account’ or ‘considered’.
Some members of the groups said that they had already had a (negative) gut-feeling about the
proposed plans or a sense that they would not agree with it. Others, however, said that they entered
the information-meeting with an open mind. The latter came to be informed and make up their minds
on the plan. These members in particular said that they had been irritated by way the initiators tried
to “sell” the project, instead of informing them objectively. Participants perceived the way in which
the plan was thrust on them as a sign that there was no room for them to change the plan, at least
not the main points. The fact that the initiators did not seem to take their input seriously, further
contributed to their anger. Thus, from the beginning, the interviewees started to doubt the objectivity
of the decision-making process. This implies that the way in which a participation process is introduced
and explained is a factor that can contribute to opposition. For Group A, the information-meeting also
functioned as a platform. Citizens with similar feelings on the proposed initiative and the way it was
presented found one another at that meeting and decided then and there that they would join forces
to see if something could be done against the proposed plan.

During the reflection on the information-meeting, we asked members of both groups whether they
could imagine that, if the information-meeting had been led differently, they would not have been
triggered into active resistance. Several said that they felt that this could have been the case. Others,
however, said that they had also opposed the initiative because the basic ideas and beliefs underlying
the plan clashed with their own values and beliefs. These members thought that it would have been
very hard to come up with a compromise-plan in which these basic differences of perspective were
overcome. However, the fact that no room was made for different perspectives on the plan had made
these citizens feels excluded and more inclined to be opposed to the plan. Members of both groups
said that it would have made a big difference if the administration had explicitly acknowledged the
different perspectives and values affected by the plan. That way, the citizens would at least have felt
that their concerns were taken seriously and that a debate on the merits of the plan and the different
point of views would have been possible.

Although the way in which the information/consultation-meetings had been organized in both groups
was found to be one of the essential elements triggering their opposition, we have reason to believe
that the information events also played another important role. The majority of the citizens in our
groups had not been aware of the plans and initiatives prior to the meeting, or at least did not oversee
the size of the plan and its objectives. The interviewees agreed that the information-meeting had had
an important function, in so far that it made those who were potentially going to be affected aware
of the existence of the plans. Participants added that they had not necessarily wanted to be informed
before the information-meeting. They acknowledged the importance of this event for raising their
awareness and understanding of what was going on in their neighbourhood.

As to the type of values and perspectives concerned, we found these to be very diverse. Even within
one group of citizens, all the individual members expressed different basic concerns that had kept
motivating them to oppose the plan. Members of Group A for example, mentioned concerns over climate-change, fear of negative health-effects, anger over abuse of power and disagreement with the idea of a ‘creatable nature’. They didn’t expect their personal values to form the basis of the plan, but they did find it important that at least some consideration was given to the values that they perceived as essential. The interviewees expressed this as the wish to be able to recognize themselves in the decision as well as the decision-making. Considering the variety of values expressed by the interviewees alone, it would have been necessary to incorporate a broad range of values in the decision-making.

On the subject of delegation of power, the interviewed citizens stressed that they considered the preparation of the decision to be a task for the administration. They felt no need to take the actual decision, but again, they did want their interests to be taken into account by those who would ultimately decide.

A final observation is that once their participation has turned into opposition, citizens are likely to remain critical towards the administration for a long time and will (therefore) be more likely to oppose future decisions as well. A participation process thus is not only important for the decision at hand, but also for future decisions.

5.4 The Future: the proposed regulation on citizen participation in the Draft Spatial Planning Act

On the 28th of February 2013, a ‘Toetsversie Omgevingswet’ (Draft Spatial Planning Act) and the accompanying Explanatory Memorandum were presented. According to this Memorandum, the purpose of the law is to improve decision-making in the field of the preservation, maintenance, use and development of the physical habitat. This law builds on previous efforts to simplify and integrate the existing legislation. The transition from a permit system to a system of general rules is, for example, continued. Given the limited space and specific focus of this chapter, we will only discuss the legislative proposal concerning citizen participation in the government’s decision-making.

We will discuss both the perspective on citizen participation that can be made out of the Explanatory Memorandum, and the regulation of citizen participation, as suggested in the draft act.

In order to understand what follows, it is useful to know that Draft Spatial Planning Act distinguishes six key legal instruments. These are: 1) ‘Omgevingsvisie’ (spatial planning outlook): a coherent strategic plan for spatial planning in a certain area; 2) Plans and programs to implement policy aimed at the physical environment; 3) Decentralized regulations by municipalities (‘omgevingsplannen’, spatial plans), water boards (‘waterschapsverordeningen’, water board regulations) and provinces (‘omgevingsverordeningen’, land-use regulations); 4) general regulations at the national level; 5) land-use permits, and 6) project resolutions.

20 Explanatory Memorandum, general section, p. 10.
21 Explanatory Memorandum, general section, p. 10.
5.4.1 Perspective on citizen participation

The Explanatory Memorandum suggests that the legislator is deeply convinced of the importance of (citizen) participation. The tension that exists between the need for a prompt decision on the one hand and a thorough preparation, citizen participation and legal remedies on the other hand are mentioned as the underlying reasons for the new law.\(^{22}\) The legislator repeatedly stresses the importance of participation\(^{23}\), that is not only expected to lead to better decisions but also to greater acceptance and legitimacy of these and therefore to increased trust in the government.\(^{24}\)

As for the role of the citizens, the Explanatory Memorandum contains three perspectives. First of all, citizens can *initiate projects and plans* in the physical environment. Besides this, citizens can have *opinions about the initiatives of others* and the wish to be involved in the decisions on those projects. Lastly, citizens can be affected by a decision and, as such, *oppose decisions by the governmental authority*. In other words, the law sees citizens in three perspectives: as initiator, as participator and as objector. In describing the *premises* and *goals* of the law, the legislator states that the emphasis will be on facilitating citizen initiatives (initiator perspective) on the one hand and on citizen-participation in decision-making on complex projects on the other (participator perspective).\(^{25}\) The Explanatory Memorandum adds that the ‘Sneller en Beter’ method of the Elverding Committee will be implemented in the new law.\(^{26}\) As far as legal remedies are concerned, the basic assumption is that the accent on facilitating initiatives may not reduce legal protection for interested parties.\(^{27}\)

5.4.2 Regulation of citizen participation in the Draft Spatial Planning Act

The opportunity to participation that the Draft Spatial Planning Act calls into being consists mainly in declaring section 3.4 of the GALA applicable. This draft act declares the extended public preparatory procedure (UOV), codified in section 3.4 of the GALA, applicable for, amongst others, the preparation of a spatial planning outlook\(^{28}\), for mandatory and voluntary plans or programs to carry out municipal-, provincial - or national policies\(^{29}\), municipal spatial plans,\(^{30}\) water board regulations and provincial land-use regulations.\(^{31}\) The preparation of some types of land-use permits\(^{32}\) and project resolutions (including the ‘preferred decision’) also takes place under the UOV. The aforementioned plans are

\(^{22}\) Explanatory Memorandum, general section, p. 12.
\(^{23}\) See for example the description of problems in current legislation op page 14 of the Explanatory Memorandum.
\(^{24}\) Explanatory Memorandum, general section, pp. 32/33.
\(^{25}\) Explanatory Memorandum, general section, p.20.
\(^{26}\) See for examples, Explanatory Memorandum, general section, p. 22.
\(^{27}\) Explanatory Memorandum, general section, p.28.
\(^{28}\) Article 6.25 Draft Spatial Planning Act.
\(^{29}\) Article 6.26 Draft Spatial Planning Act; the individual plans and programs are addressed in sections 3.2.2 - 3.2.4 of the act.
\(^{30}\) Article 6.28 Draft Spatial Planning Act.
\(^{31}\) Article 6.29 Draft Spatial Planning Act.
\(^{32}\) Article 6.43, 6.47 and 6.48 Draft Spatial Planning Act.
all prepared in exactly the same way under the current law. As such, the Draft Spatial Planning Act is nothing new.

As far as land use permits are concerned, the Draft Spatial Planning Act could herald a change. The draft makes the normal complaint procedure to the norm. The extended procedure of section 3.4 of the GALA will only be applicable in cases prescribed by specific Orders of Council (AMvB). These still have to be drafted. Although it is likely that such Orders of Council will include the same permits that are currently listed in article 3.10 of the General provisions on spatial planning act (Wabo), this cannot be concluded until the Orders are formulated. The Explanatory Memorandum seems to indicate that the intention of the regulation is to apply section 3.4 of the GALA to fewer activities than is currently the case.33

The way in which the Draft Spatial Planning Act deals with the plan to intensify participation consists mainly in a broader application of the ‘Sneller en Beter’ approach, in other words, of the exploratory-procedure. As we mentioned before, this phase has thus far only been included in the Tracéwet and has therefore only been applicable to a limited number of decisions. The Draft Spatial Planning Act opens the way to wider application of the ‘Sneller en Beter’ approach, which approach is connected to a project resolution, a decision in which all the necessary permits for a complex spatial project can be dealt with in one procedure. Legal remedies against a project resolution are also dealt with in one appeal. In this way, the project resolution replaces the integration plan (of the Planning Act), the route decision (‘Tracébesluit’ of the Infrastructure Act) and the procedures for coordinated preparation (included in the Planning Act, the Infrastructure Act, the Water Act and the Earth Removal Act). According to the draft law, project resolutions can only be taken at the provincial - and national level. Project resolutions cannot be formulated by municipal authorities.

Although it is clear that the new law aims at a broader application of the exploratory-procedure, the draft text does not clarify exactly to what type of decisions the exploratory-procedure will apply. It does exhaustively list the projects to which the procedure applies. Seemingly, that depends on whether a public interest is served with the decision. For a few (categories of) projects, the draft law explicitly requires preparation by way of the exploratory-procedure34; however, not every project resolution has to be prepared in that way. Article 5.34 clause 1 of the Draft Spatial Planning Act stipulates that the governmental authority must publicly announce its intention to do so. From this, we make out that the exploratory procedure is not compulsory. The choice of whether or not to apply the procedure is largely left to the administrative body in question. More or less the same applies for the ‘preferred decision’: Article 5.34 of the Draft Spatial Planning Act allows an administrative body to take a project resolution without a preferred decision (clause 1 under a) or with a preferred decision (clause 1 under b). A preferred decision is only mandatory in cases prescribed by law or decree (article 5.31 clause 3 Draft Spatial Planning Act and article 5.34 clause 3 Draft Spatial Planning Act)35. Thus, although the law

---

33 Explanatory Memorandum, p. 122.
34 The Explanatory Memorandum, page 110 and, for instance article 5.32 clause 2, that stipulates that a preferred decision is mandatory for project resolutions relating to “the construction of a road or highway, a railway or waterway or the alteration of a road or highway or railway with more than two lanes or tracks”.
35 See the example in footnote 15.
Does the law trigger citizen opposition?

opens the way for both an exploratory procedure and a preferred decision, whether these procedures will actually be applied is open to question.

5.5 Conclusions and recommendations

This chapter examined both the current and the impending regulations on citizen-participation in spatial planning issues in the light of insights picked up from the social sciences on successful citizen participation and its opposite: opposition. The purpose of this analysis was to come to recommendations for improving the Draft Spatial Planning Act. Background for this objective was that, currently, decisions on spatial planning still take far too long and that recent adaptations of the relevant laws and regulations, although numerous, have not really speeded up the process. Social science research in the field of public opposition shows that participatory processes – those in which citizens are included in an early stage and are able to influence both the definition of the problem and the possible solutions – can result in an increase in the quality of the final decision and reduced opposition. Conversely, participation procedures in which minimal influence of citizen is allowed, tend to lead to resistance.

With this in mind, some comments can be made on the current regulation of participation in the Netherlands. Under the current regulations, participation is only possible by submitting views or perspectives in accordance with section 3.4 GALA, a procedure that does not apply to all decisions and in which transfer of power to civilians is absent. The extended preparatory procedure (codified in section 3.4 GALA) has as the additional disadvantage that the proposed plans are presented in the form of a draft decision; this gives citizens the idea that the decision had already been largely determined. The exploration-procedure of the Infrastructure Act gives more options, for instance that citizens can take part in discussions on the problem and possible solutions. But there too, no power transfer takes place. All in all, citizen participation that is inclusive, timely and influential is not guaranteed in Dutch legislation yet.

Based on the experiences of the citizens that we interviewed in the course of this project, we can add some further comments. First of all, it is important to recognize that an essential distinction exists between citizens and professional groups, and that this is reflected in the way they are involved in participatory procedures. Citizens are not always aware of an issue and often have to be activated before they become interested. The interviews in this chapter revealed that an information evening where the ideas behind a problem or plan are presented, works as a trigger and can help the participants to form an opinion. That ‘opinion’ is - at least among the citizens we interviewed - largely based on the inner values (value-frame) of each individual. In their study on social movements, Barclay et al. (2011) refer to a similar phenomenon when they speak of collective identity. With Barclay et al. (2011) we believe that citizens object to projects mainly if these go against their inner value system. Interestingly, we found that these inner values differed for every citizen within the interviewed groups. The importance of this personal identity may explain (in part) why citizens often show extremely
persistent behaviour during opposition procedures and it confirms the importance of identifying these values and taking them into account in the decision-making process.

Finally, the interviews showed that the notion of ‘power transfer’ need not be taken literally. Citizens do not always want to make the actual decision; they consider that to be the task of the competent authority. For citizens, the ideal of ‘transfer of power’ is sufficiently served, if they have a real say in the way a decision is reached. In that context it might be an idea to allow citizens to request a study on specific consequences of a proposed plan, or to let them draft an alternative option in the decision making process.

Concerns that stem from an inner value system are often overlooked in project decision-making. Taking these values into account (by making room for them in the procedure) is particularly important in the first stages of the process and can take place in the form of a discussion on the purpose of and need for the project. Unfortunately, the existing regulations (including the recent changes) contain practically no provisions on how citizens should be involved in the early phases of decision-making. The only process for participation that is codified is the possibility to submit perspectives or views on the proposal. There is no place for dialogue or exchange of views. On the basis of these findings, we conclude that, if the regulation is strictly enforced, the current provisions on citizen-participation are more likely to lead to opposition than to acceptance.

So there is much to be gained in a new law! However, on the basis of the proposed text of the Draft Spatial Planning Act, we have serious doubts that this act will make it happen. Although the Explanatory Memorandum stresses that strengthening participation is an important objective of the new law, the present draft does not contain a single method of participation that is not already codified in current legislation. As we see it, the most important change, notably the application of the exploratory procedure for all project decisions, is certainly to be welcomed, but is not enough. The benefit of an exploratory procedure is that it makes it possible to include a wider range of interests, including potentially values, and that the participation starts earlier. However, by connecting this procedure to a project resolution, the possibilities to apply this procedure are unnecessarily limited. We therefore recommend that the exploration procedure be separated from a project resolution, and included in the Spatial Planning Act as an independent procedure. That way, there will be a greater chance of the exploratory procedure being applied broadly.

Next, a recommendation on the exploratory procedure itself. Based on the idea that citizens have to be activated to participate in the process, we see this preparation phase as an important tool to actively involve citizens, and allow them to form an opinion. As such, a distinction should be made between in time and early on. Early participation is useless if citizens have not yet been activated on the subject. Activating citizens, without giving the impression that the decision has already been taken, requires authorities to balance between clearly introducing a specific issue and at the same time remaining flexible about possible approaches and solutions. To that end, we recommend expanding the exploration phase and strictly separating between information - and consultation meetings. To encourage the administrative bodies to remain flexible on the issue at hand, it might also be a good
idea to forbid them to take decisions that can limit the options (e.g. contracting project developers and entrepreneurs) before the exploratory procedure has ended.

We finally recommend to define the concepts of *information meeting* and *consultation meeting* in the proposed law. We expect this to clarify the role citizens have in the different stages participation-procedure. Additionally, administrative bodies could be obliged to report back to citizens (indeed, to one and all) on how their input in the consultation meetings (and all other meetings in which the perspectives of citizens on a proposed plan were sought after) was put to use and how it was weighed in the ultimate outcome, the decision. That is likely to increase the chance that citizen input is taken seriously, and that citizens in their turn perceive this to be so.
Part 3

Foreseeing societal conflict

A model as a means to improve constructive deliberation
Unlike the conviction underlying educational governance styles, the results of the simulation presented in chapter 4 showed that information does not necessarily function as a reducer of potential citizen opposition responses. Information seems most relevant to provide citizens with a (basic) vocabulary on the concepts that are relevant for a topic. Instead of using arguments provided in (written) information, citizens were found to base their decisions on basic values. The importance of values in citizen decisions to oppose a policy (decision) was confirmed also in the case study on land-use decision-making (chapter 5).

In the final section of this thesis, we take a step back. Keeping in mind the importance of values and worldviews, we explore a way to foresee future issues that could result in societal controversy. In the course of two case-studies, we developed a systematic method to foresee future societal discourses. The way this method was developed is presented in chapter 6. Chapter 7 provides the first empirical results of attempts to apply the method in the field of animal governance.
Chapter 6

Anticipating societal conflicts

The development of a theory-based research model to explore future discourses

6.1 Introduction

Man has always longed to know the future (van ‘t Klooster, 2007; Dagevos, 2000; Bell, 2003). Jules Verne’s futuristic novels in the 1860s and 1870s or H.G. Well’s publications in the beginning of the 20th century are considered the starting point of modern future studies (van ‘t Klooster, 2007; W. Bell, 2003). Structured thinking of the future as a science is more recent, however. Especially since the end of Second World War (Masini, 2006), systematic thinking about the future has started to become institutionalized in different research fields, including social science, history, public administration, economy, science and technology studies (van Asselt et al., 2010). In many countries, special institutes were set up to perform futures studies for the government. Various methodologies were developed; Firat et al. (2008) claims that hundreds of methods were developed, while others go as far as to say that each futures study seems to come up with its own methodology (Van Asselt et al., 2010).

Some scholars have made efforts to integrate the field (Porter et al., 2004), although their analysis is limited to a categorization of the applied approach and methods (van ‘t Klooster, 2007). For example, ‘The Technology Futures Analysis Methods Working Group’ categorized the methods, methodologies and processes used in technology future assessments (Porter et al., 2004). Prominent approaches distinguish among the ‘probable’, ‘possible’ or ‘desirable’ future. The probable future is based on assumptions, facts, expertise and calculations, while the possible future also includes surprises and uncertain events. Studies on the desired future focus on wishes and visions for the future (See: Mimic, 2010; Roelofsen et al., 2008).

1 This chapter is based on the article: Tj. de Cock Buning & C. de Brauw, Anticipating social conflicts: The development and application of a theory-based research model to explore future discourses, Technological Forecasting and Social Change, accepted for publication 2014, pending revisions.

2 The most comprehensive collection of future research methods is published on CD-ROM as part of the Millennium Project. This peer-reviewed handbook describes 37 methods and tools of future research (Jerome C. Glenn and Theodore J. Gordon, 2009).

3 Mimic (2010) describes five approaches to analysing the future. These ‘five glasses’ include the ‘probable’, ‘possible’ or ‘desirable’, ‘creatable future’ and the ‘planned future’.
Limited attention has been paid to the methodology of futures studies and how these should be performed at a more conceptual level. For example, van ’t Klooster (2007) criticized this as it limits process descriptions to a mere referral to the method used, making the results of these studies hard to compare and reproduce. The development of futures methodology is considered a process that requires the sharing of practical experiences (van ’t Klooster, 2007). Others have pointed at the lack of definition of concepts or the development of alternative conceptual models (van Asselt et al., 2010; Dagevos, 2000; Porter et al., 2004).

In this chapter, we introduce a theory-based research model to structurally research the future and describe the way through which this model was developed. The aim of this model is to stimulate conceptual reflection on futures studies and effective methodologies. We introduce theoretical insights from the social sciences, such as transition theory. Scholars of transition theory (Geels & Schot, 2007; Geels, 2010; Grin et al., 2011; Loorbach, 2007; Raven et al., 2012; Schot & Geels, 2007, 2008) have extensively studied the mechanisms of societal change driven by innovation. This knowledge of societal barriers and facilitators deduced from historical cases, and their generalization to mechanisms, allowed us to construct a theoretical research model for a deductive hypothesis of the future.

The model was developed in the course of two projects in a relatively neglected domain of futures studies: the forecasting of societal debates. The ‘future discourse – model’ (FD-model) was first developed in the context of a project focusing on predictable changes in societal debate on the practice of animal testing in the Netherlands. Further development of the model took place in a project that aimed to foresee issues of potential societal debate on human-animal interactions in the Netherlands. These projects were successively funded by the Ministry of Health and the Ministry of Agriculture. In this chapter, we will explain the theories behind the model and illustrate how they were developed in these two societal-discourse projects. More detailed, project-related methods and results of the project on animal-human interactions will be presented in chapter 7.

6.2 Exploring future discourses

The future is a challenging research subject for the obvious reason that it has not happened yet. On

---

4 One project was funded by ZonMW by the research program “Dierproeven begrensd” in order to give the Ministry of Public Health, Welfare, and Sport strategic advice on upcoming societal debates on animal experimentation (in this chapter abbreviated as “Ministry of Health”) project “Maatschappelijke trendanalyse dierproeven” 2010. The other project was funded by the Ministry of Economics, Agriculture and Innovation (project 1400007401 “Denken over Dieren”) to foresee societal debates with respect to practices of animal husbandry (in this chapter abbreviated as “Ministry of Agriculture”). A Dutch version of the project report of the first project – as well as a summary – can be found on the website of ZonMw. The report is available online at: http://www.zonmw.nl/fileadmin/documenten/Dierproeven_Begrensd/Maatschappelijke_Trendanalyse_Dierproeven_2009_deel_B_def.pdf. The summary can be found at: http://www.zonmw.nl/uploads/tx_vipublicaties/samenvatting_trendanalyse_dierproeven_A4.pdf. The Dutch version of the project report of the second project can be found at: http://www.vu.nl/nl/Images/Denken%20over%20Dieren%20eindrapport%202-4-12_tcm9-277615.pdf.
the 25th anniversary of the Scientific Council for Government Policy of the Netherlands, one of the leading analysts of futures studies, Snellen, summarized the most important lessons learned (Snellen, unpublished). One of these lessons was the observation that the prognoses or predictions for the future that were made did not match with reality, stimulating a shift from predictive to exploratory research of uncertain and possibly surprising events. Such explorations aimed at preparing decision-makers for potential futures. For the coming 25 years, Snellen suggests a further shift of focus. Research should no longer be dominated by the question of what events are likely to happen in the future. Instead, attention should be paid to the discourses that will dominate the societal and social-scientific debate, and whether it is possible to predict hot topics for those debates.

The projects, commissioned by the Ministries and reported on in this chapter, were specifically aimed to study shifts in the societal debate, i.e., the response of the public to change. In these projects, as well as in this thesis, societal discourse has a broad meaning: it includes political debates as well as attention paid by media and citizens. In our model, we combined the retrospective Annales approach by Braudel (1993) with discourse and value analysis, as well as the observation that combinations of current activities and initiatives might have constraining or enhancing effects that will extend into the future. These activities will therefore become part of the future, making them semi-stable predictors.

6.3 Building blocks for a research model on future discourses

6.3.1 Complex interactions in society

One of the factors that make future developments in society hard to predict is that they develop through interactions which are complex, nonlinear, dynamic and adaptive (Linstone, 2009). Therefore, we aimed for a model that acknowledges the complexity of society and conceptualizes different influential factors of society in change. Firstly, it should deal with the complex context of the public, i.e., socio-technical change influenced by demographics, innovations and policies. Secondly, it should deal also with the group dynamics within the public, i.e., the stability and changes in discourses, norms and values. And finally, it should deal with the confrontation of those two sets of trends, providing a rational of the public response to a changing world, e.g., accommodation or fierce debate. Such a model should enable us to base our predictions of the future on the deeper mechanism of dynamics and to reach beyond the arbitrariness of accidental informants, opinion leaders and field experts. In this section, the main building blocks incorporated in the FD-model will be described.

Multiple levels of socio-technical change

The Dynamic Multi-Level Perspective (dMLP) on socio-technical change (Geels, 2002) explains why it is so difficult for changes and innovations to become embedded in the system of society, by clarifying under which boundary conditions change might take place. This model was originally developed to understand historical cases of innovation (e.g. from sailing ships to steamships (Geels, 2002), or energy (Verbong & Geels, 2007), and it acknowledges at least two layers that interplay and explains
why small technical niche initiatives (third layer) might or might not break through and rearrange the constitutional parts of the socio-technical system (the regime and the landscape). According to Geels (2002), these levels are “analytical and heuristic concepts to understand the complex dynamics of sociotechnical change” (p.1259).

Regime
A regime is a specific sector of society (e.g., academia, industry, government) which consists of a heterogeneous set of elements such as sector-specific institutions, artefacts, social beliefs, rules and societal actors. Its elements are linked to each other in a regime practice: routines, institution user practices, and cultural and symbolic meanings. Because of this interconnectedness between technical, financial, political, behavioural and cultural elements, a socio-technical regime does not change easily. Changes are usually incremental in nature, preserving the dynamic stability of the socio-technical regime of a certain sector of society (Geels, 2002; Dewulf et al., 2005).

Landscape
The socio-technical regime of a specific sector is cast in a larger landscape, adding a second force of rigidity. The metaphor landscape is chosen to accentuate its relative robustness. Landscapes can change, but (usually) do so very slowly. Changes in the natural environment such as climate change or the loss of natural resources and demographic variations have to be understood at this level. Any changes occurring at this level distort the network of regime dependencies.

Niche
Finally, there are (small) socio-technological initiatives which are original and therefore alien to established socio-technical regimes: the ‘niches’, e.g., initiatives of individual actors, emerging technologies and local practices. In the dMLP model, the existing socio-technical regimes are regarded as the main restraining factor on these niche initiatives, because the institutionalized interests and routines of the established regime actors are often at stake, and because the regimes resist each other’s deviation from routines, as it will shake up all established power relationships.

Transitions
When the socio-technical regime becomes unstable through either their own dynamics or a changing societal landscape, a niche might break through in (or between) a socio-technical regime(s) and reconfigure the alignments between the various regime players, thereby creating a new inclusive arrangement of socio-technical regimes. This is called a transition. We adapted the dMLP by substituting the socio-technical niche initiatives with niches of upcoming discourses.

In our FD-model, we take the MLP as a starting point to analyse, describe and predict (1) how known long-term landscape trends enable new debates (or diminish former debates) at the regime level and (2) the changing tension between institutionalised regimes and their related discourses with
Anticipating societal conflicts

the enabled upcoming discourses at the niche level (see our studies on innovation management and discrepancies in visions between public and scientific genomic soil experts regarding proper ecological management (e.g., Kloet, 2011; Kloet et al., 2013; Roelofsen et al., 2008).

### Triggering events

Kingdon’s stream model (1995) describes the three determinants which can raise societal debate around the governance regime, i.e., the ongoing problem streams of contingent issues of various origins, the policy stream of rational responses supported by legal experts and scientists, and the politics stream underpinning problems from incidentally triggered flashes of unfairness experienced by some parts of civil society and aired by the media and politicians. Even when all three streams merge together into a window of opportunity, an actor is required to push the issue high on the agenda. Depending on the context this ownership declaration can be made by a lobby party, a civil society group or a MP.

From Kingdon’s model we include the idea that whether an issue becomes an acknowledged topic of societal debate depends not only on the perceived problem stream in society and the rational solutions for these problems in the policy stream, but also on triggering events drawing mass attention. These triggers are hard to predict, as are the buzzwords that will be used to communicate the tensions. The former two streams are useful for predicting future discourses as they have their starting points in the current context and can be regarded as two necessary conditions to fire the debate on some ‘trigger-related’ form at a suitable moment in the future. In other words, one can predict to some extent that a specific problem will become ‘hot’, being a discrepancy between the current policy and the ideal situation perceived by the public, but not when it will be.

#### 6.3.2 The agora level

Nowotny et al. (2001) introduced the term agora as a place where science and ‘the public’ meet and the contextualization of knowledge takes place. According to them, the production of knowledge has been radically transformed from an internally driven taxonomy of disciplines (mode 1) to a socially distributed, application-oriented, trans-disciplinary form (mode 2) which is subject to multiple accountabilities (Nowotny et al., 2001). The agora is the place where new networks are formed; it is inhabited not only by the traditional institutions and organizations through which dominant knowledge is generated and traded, but also by various groups who contest, mediate, consult and negotiate the production of knowledge, thereby creating socially robust knowledge. The metaphor agora was deliberately chosen to embrace the political arena and the marketplace — and to go beyond both, in order to conceptualise this new space of knowledge production.

### Praxis

Given the same metaphor, we use the term praxis for a specific ‘market stand’ in the agora. In the praxis, specific matching routines by different relevant actors are discernible. Regulatory structures
and financial flows influence the actual functioning of the praxis. In this chapter we focus on the praxes of ‘animal-human interactions’, and includes actors such as researchers, biotechnicians, veterinarians, animal keepers, cage builders, feed providers, lab architects, regulators, inspection, protestors, etc.

6.3.3 The role of values

Recently (Swierstra & Jelsma, 2005; Boenink et al., 2010), the analyses of conflict around the introduction of new technologies revealed that it is not a value-neutral intervention in a value-neutral society. The assumption of a free and open space for new innovation is questioned. Technological artefacts resulting from long-term R&D (cars, mobile phones) are reported to change our behaviour and directs us in what ought to be the right functional behaviour. At the same time, the success of the establishment of the technology in our society depends on the pre-existing values in that society. For example, the success of biotechnological applications in crops in USA versus the failure to introduce them in Europe could be explained as a result of a different valuation of the concept of ‘naturalness’ (in contrast to ‘man-made) on both continents. Van Asselt et al. (2010) regard the lack of ‘normative futures studies’ as one of the blind spots of existing future research. Normative futures studies do not assess the future as value-free, but instead focus on the variety of values, perspectives and interests. The projects presented in this thesis so far have also underlined the importance of values and/or worldviews in relation to the emergence of societal debate (see especially chapter 4 and 5). In the development of the FD-model, we also included the influence of guiding values.

Although one cannot predict the specific perceptions of societal groups regarding a specific issue in the future, we do know that hot issues are often values driven in politics (due to party values) and civil society (due to conflicting norms). The assumption is that hot issues receive their energy from a deeper layer of value dilemmas. While some are in favour of - for example - liberal measures, others prefer communalistic options. The introduction of new policies or technologies can be regarded as a cause that triggers a response at this basic value level, i.e., whether the proposed policies or developed technology are in line with or contrary to what society (or groups of individuals) consider to be right or wrong. The values that dominate in these dilemmas at a certain moment in time and place can thus be used as an indication of the dominant perceptions in society. Insights into these values and their societal distribution can provide insights into what specific developments might trigger debate.

Contested and hotly debated issues are often labelled ethical, and not seldom as emotional (or equated to each other as ethical ‘and thus’ emotional). From the point of view of classical ethical theories, emotionality is a side effect of a specific class of moral conflicts, i.e., the moral dilemmas. Ethical dilemmas are defined as fundamental conflicts of values that are unsolvable as both sides of the dilemma represent a ‘good’ option (or both, a ‘bad’ option) but are impossible to acknowledge at the same time. Having to make choices in dilemmas is generally regarded as stressful, as either choice...
seems to betray the other good. Although these two sides of a dilemma might appear to resemble the thesis/antithesis approach of Hegel in his theory on dialectic, Hegel’s approach is based on logical rationality, in which it is possible to lift *thesis* and *antithesis* to a conceptual *synthesis*, e.g. *to be* versus *not to be* finds its synthesis in *becoming*. Ethical dilemmas, however, are based on experienced moral/emotional conflict, e.g. valuing an animal as an object or as a subject cannot be solved in Hegel’s sense by constructing the conceptual synthesis that ‘valuation’ is the overarching concept. In a pragmatic sense, dilemmas can be ‘disarmed’ when each value is taken as a guiding vision in different situations (paying tribute to an animal as a subject at home, and valuing an animal as an object when it is slaughtered, or used in research). Still, the dilemma returns each moment that the two practices come together.

In the FD-model we incorporated these dilemmas as ‘value-pairs’ consisting of a value and counter-value. While in society at large, one side of a value-pair can be dominant at a certain moment in time, the other side will always be valued by some groups in society (subdominant). Dagevos (2000) urges future trend researchers to take into account the fact that each trend has an opposite counter-trend. In the FD-model we incorporated the idea of countervailing developments especially by acknowledging that all values in society have their (theoretical) counterparts, which might become dominant in time. In a model that aims to identify existing and future patterns in societal debate, the concept of value-pairs enables us to reframe the various issues of debates. These values - as well as the issues through which they are contested - are located at the ‘agora level’. Although the debated issues might be manifold, the set of basic value-pairs is rather limited, e.g. liberal vs. social, global vs. regional, etc. This is comparable with Hofstede’s work (2001), for instance, in which he distinguishes 5 cultural dimensions. Each dimension consists of a scale between two extremes. A culture can be described by specific positions on these five scales. Similarly, Dagevos (2003) suggested several dynamics of countervailing trends in an essay on the cultural dimensions of food systems. These dynamics include globalization vs. regionalization, rationalization vs. ‘emotionalization’. Analogous to this conceptualization, we presume that a dominant worldview of a society can be formulated through the combination of dominant accents in a set of value-pairs. Working with these pairs of countervailing values helps us to keep in mind that a currently dominant value can determine how society in general feels about issues and at the same time can give insights into what developments society in general is likely to oppose. Moreover, as dominances in values will probably shift over time, working with value-pairs provides specific options for systematic description and analysis over time, and thus insights into the societal position towards new policies and technology (or why current policies do not align anymore).

5 Watzlawick et al., 1967, took up this mechanism and developed the ‘double bound’ concept to describe the psychological consequences of emotional unsolvable choices. He developed the dilemma strategy (double bound) to force patients towards a way out by constructing a dilemma assignment that counters the depressive behaviour.

6 Dagevos (2000, 2003) identified several dynamics relevant to understanding the debates around system innovation in agriculture: globalisation & regionalisation (i.e., praxis-specific trends like McDonaldising, fastfood and alienation); rationalisation & emotionalisation (praxis-specific trends like “real good” versus “feel good”).
6.4 The future discourse (FD) - model

6.4.1 The discourse model

The activities and developments in society that can lead to discourses are vast. In the development of the FD-model, we aimed to acknowledge the complexity of society and focus on changes in society that provide relatively robust predictors for the future. How the model functions as a tool to examine the future will be illustrated in paragraph 6.5. Below we elaborate on the rationale in which the individual building blocks introduced in the previous section interact to predict hot issues or topics of societal debate. These building blocks and their interrelation in the FD-model are illustrated in figure 6.1.

![Figure 6.1: Discourse model as multilevel model relating to societal discourses at Agora level](image)

The societal landscape is situated at the top of the model as the slow driving force behind the societal trends, shaping and constraining both the regime developments (technology and government) and shifting values that dominate the public space (agora). We restricted the regime level here to two regimes: policies and regulations (governance regime) and academic and industry (technological regime), including the stream of technological and scientific discoveries and applications. The agora level is filled with the balances of dominant and subdominant values of the relevant value-pairs. The combination of dominant values at any given time provides the dominant perception of a praxis under study at that time. Technologies, policies or other activities at the regime level are likely to provide ‘issues’ for societal debate when these activities contrast with the dominant values in society.

---

7 A different praxis might contain a (slightly) different set of value-pairs. In the second projects we conducted we added one value-pair as the environmental value did not play a role in the first laboratory animal project, and did play an obvious role in 9 praxes related to intensive farming in the second project (12 praxes): entrepreneurial freedom versus nature conservation.
6.4.2 The debates of the future: conceptualization in the FD-model

Essentially, the model was developed as an analytical tool for a systematic theory-based exploration of societal discourses in the future. Obviously, one cannot predict the future with respect to the unpredictable. However, current insights into the complex dynamic interactions in society make it more predictable than one might realize. Based on the interactions between the building blocks of the future, presented in the previous sections, we assume that – very generally - societal discourses are more likely to develop over developments at the regime level that do not match what society perceives as correct. Therefore, the basic idea of the discourse model is that it provides a rationale to identify the shifts that can be expected in societal discourses, based on already initiated developments at the regime, agora and landscape levels. The model will identify where the perceptions of how things ‘ought to be’ and the way they ‘are’ developing are not (or no longer) aligned with each other, this being a potential class of tensions that might raise heated societal debate. The actual realization will take place under the contingencies as has been analysed by Kingdon, i.e., next to the conjunction of the Kingdon streams, a committed policy entrepreneur has to open this policy windows, which cannot predicted.

Predicting developments at regime and landscape level

In the development of the FD-model, we focused on changes in the context of society that provide relatively robust predictors for the future. They are developments that are visible in current society, and relatively likely to have effects extending into the future. Turns in policies and national investments in (the development of science and) technology belong to a specific class of changes that are well documented and studied (administration and policy sciences, Science and Technology Studies) and result in measurable drivers of change such as new laws, innovation/science/technology investments/grants and product development. Such changes additionally have predictive power, as their effects on society can be assumed to be influential for 5-15 years. For this reason, policy and legal developments at the local, national and international levels and research programs as well as funding for such programs are included as determinants of change in the FD-model at the regime level. Additionally, long-term, slow-moving developments at the landscape level have predictive power for the composition (demographics) and behaviour (individualization) of society in the future. Together, the landscape developments and the developments at the regime level might interact positively, neutrally or compensatory, and thus provide insight into the way society develops regarding chosen combinations of regimes. The potential perceptions of society are represented by the subject-specific value-pairs at the agora level. Where the societal reality (landscape and regime) does not match dominant societal perceptions, debates are to be expected.

Predicting shifts in dominant perceptions in society

Not only society or the practice in society is likely to change over time under the influence of policies and technologies, perceptions of right and wrong in the agora are also likely to shift. These perceptions
are framed in values, expressed in pairs. It was argued earlier that we assume that discourses in (civil) society always (and always will) centre around a known set of value-pairs. However, the balance in each of these value-pairs can shift over time due to changes in society. The eight logical, conceivable shifts in the balances in value-pairs are visualized in figure 6.2. In this figure, the balance within one value-pair at a certain moment in time is represented by situation 1, in which the left arrow represents the dominant value and the right arrow, the sub-dominant value.

<table>
<thead>
<tr>
<th>Sub-dominant value</th>
</tr>
</thead>
<tbody>
<tr>
<td>growing</td>
</tr>
<tr>
<td>growing</td>
</tr>
<tr>
<td>stays</td>
</tr>
<tr>
<td>diminish</td>
</tr>
</tbody>
</table>

Figure 6.2: Eight options for relative growth of values within a value pair. Number 1 is the starting position, dominant value versus sub-dominant value. Dashed lines indicate the starting position.

Over time, changes in the societal landscape, as well as changes in regimes, can increase or decrease the perceived relevance of one or both values. Four options are especially interesting (the numbers refer to figure 6.2):

(1) The relative tension between dominant and sub-dominant value stays the same; the discourse endures in the same manner. When this is already an intense debate, it will endure at that level.

(2) The dominant value gains more weight, the discourse marginalizes the sub-dominant value.

(3) Both values grow in intensity, expanding the discourse in an intensified manner. The controversy becomes more polarized and is likely to attract attention from a wider public, the media and politics.

(4) The sub-dominant value increases in weight, the discourse challenges the dominant position of the dominant value. If the importance of the subdominant value continues to rise, the balance between subdominant and dominant can tip over. Such a shift might structurally change the former support for long-term policy directions and innovations.

The four changes described here only address situations in which the importance of values grows. From a point of view of increasing societal debate, the third and fourth shifts are interesting. Such preconditions are most likely to predict what dilemma topics are likely to become heated societal debates. This allows us to reduce the complexity of all 9 possible interactions between the value and
counter-value to those two which will intensify (3) and challenge (4). Although the focus in this study is on upcoming debates, Figure 6.2 also shows how value-pairs can inform us about values that are likely to decrease in importance.

**Predicting future societal discourses**

The FD-model triangulates the information on how the societal landscape will change over time, what regime developments are pending, and how dominant and subdominant values are likely to develop in society to come to predictions on topics – policies, problems, technological innovations – that are likely to be(come) the issue of societal debate (agora). Figure 6.3 shows how we assume this triangulation works and thus, how our model explores the future.

- **Figure 6.3**: The development of a future social discourse: Blue line at societal landscape depicts the slow changes over time of a given variable (e.g. urbanization). Govern: Governmental policy & legislation. Techn.: Science & technology. Arrows: direction of influence. Stars: tensions. Lower ellipse → rectangle: change of contextual conditions of agora. Grey block arrow: dominant value part of the value-pair. Dashed boxes/circles/arrows at T=2 and T=3: new, still unknown developments. See text for explanation.

T=0 represents the status of societal debates on a certain domain in current society. As we have indicated before, changes are likely to occur over time on all three levels included in the model. However, different levels have different response times. Landscape level changes are slow but continuous, and will have an unmediated impact on society (effects of urbanization will be directly experienced) and on the relative accents laid down in the debates in the agora (dominant and subdominant values). Due to the conserving forces at the regime level, governance and technology are assumed to respond more slowly to landscape changes. As a consequence of these different response times, a change in the landscape will first (T=2) induce a change in the context/conditions of the agora (depicted as a different form) and impact the balance between dominant and sub-dominant values. Due to the conserving forces at the regime level, governance and technology are assumed to respond more slowly to landscape changes. As a consequence of these different response times, a change in the landscape will first (T=2) induce a change in the context/conditions of the agora (depicted as a different form) and impact the balance between dominant and sub-dominant values. In figure 6.3 this influence is depicted as a growing voice of the sub-dominant value, but the type of change can be any of the eight shifts presented in figure 6.2. As the government regime and technology regime continue to communicate their policies in a T=0 fashion, while the landscape and values dominant in society have shifted, these regime messages can become controversial issues in societal discourses (controversies depicted as stars).
When the landscape change continues to develop in the same direction \((T=3)\), this will continue to affect the balance between dominant and sub-dominant values in the agora, which will cause a further increase of the clashes between the technological and governmental reality and the agora (issues). Societal debate on these issues will intensify until the regimes of government and technology re-synchronize with the agora (e.g., new elections, participative policy, technological solutions are discovered to align with new values). Through such synchronization a new and relatively stable situation \((T=0)\) can be reached, although in an altered societal landscape and agora.

Addressing future discourses in this way, it can be specified which values changes are likely to clash with which developments/inertia at the regime level. The roots of issues can be found in specific value-pairs, making the type of controversy predictable, i.e., the dilemma in a specific value-pair. However, precise buzzwords that will be used as icons to coin the debates are hard to predict.

At the same time, this model does explain why simple linear scenario models, or two-axis models, perform so poorly in predicting future developments. Most models assume, wrongly, that the extrapolation of the policy tracks and technological innovations found in \(T=0\) will meet the same agora at \(T=2\) and \(T=3\), with the same type of discourses and the same distribution of existential preferences.

### 6.5 Two case studies illustrating the development of the FD-model: the design, data collection and analysis.

The current state of the FD model was developed and used in two projects. Both projects focussed on potentially hot topics of future societal debate concerning animal-human interaction practices in the Netherlands. The first project addressed the practice of animal testing in the Netherlands. It was within this project that the theoretical background of the model was developed by desk study and expert workshops with representatives of regimes and other social actors. A large part of the project focused on the internal validation and identification of value-pairs relevant for perceptions on animal testing. The second project revolved around hot topics of societal debate on animal-human interaction in a broader sense. In that project, a survey was conducted among 2500 households to obtain a quantitative empirical validation of the distribution of the current balances of values in value-pairs in Dutch society. This section will elaborate on the ways these projects were performed, thereby illustrating the process through which the model was developed. The results in terms of predictions on hot topics of future societal research and advisory reports by the two commissioning ministries (De Cock Buning et al. 2009; De Cock Buning et al., 2012) can be found online. The results of the second project will be addressed in depth in the next chapter.

#### 6.5.1 Illustrations from the study on the laboratory animals-praxis

The first project aimed at the prediction of future societal debates on animal testing (the praxis of laboratory animals). A schematic overview of the research steps taken in this project is presented in figure 6.4.
To select a suitable methodology to make forecasts on discourses of the future, a literature study was performed on the assumptions, theories and methods applied in futures studies, models in complexity and system approaches, innovation and change management. Based on that literature study, it was decided to develop a research model to systematically study future discourses.

One of the starting points for this model was that the concepts of ‘societal debate’ and ‘hot issues’ were reframed into (value-based) dilemmas. This way, the manifold perceptions or trends in society could be reduced to a limited set of value-pairs of which the dominant side is most visible in society and the sub-dominant counterpart always exists as well. Focus group meetings as well as individual interviews were held with futurologists, trend-watchers, sociologists and other societal experts to identify dominant trends in society. Trends and countertrends suggested in the literature (for example by Dagevos, 2003) were used as input in these interviews. The identified dominant trends were translated into societal values, and a counter (sub-dominant) value was assigned by the research team. In subsequent focus groups with animal testing experts, these pairs of dominant and subdominant values were evaluated and translated into relevant value-pairs for the animal testing practice. This led to the formulation of eight relevant value-pairs for the practice, see figure 6.5 and box 6.1 for the definitions.
Figure 6.5: Eight value pairs at the level of general societal dilemmas. Dominant values on the left side, depicted in larger dark arrows.

Box 6.1: Value pairs

Control <> acceptance
1. *Engineering of life*, valuing science and technology as a source, or even duty, to control and optimize nature, life, mind and body, versus *existentialism*: valuing the giftedness of nature, life, mind and body
2. *Risk avoidance*, intention to control and/or avoid all risks (zero risk management), versus *risk acceptance*: acknowledging the existence of risks and adjusting one’s behaviour to it.
3. *Societal responsibility* places the responsibility to organize control/acceptance on societal institutions (parliament, institutes, industry), versus *Individual responsibility* which directs the responsibility to the individual.

Technology <> nature
5. The instrumental use (means) of animals for human purposes: *animal as object* versus *animal subject* as an affective meaning of the relationship with animals.

Individual <> community
6. Shared values that people pursue in the public interest: *citizen norms* versus *consumer norms*, acknowledging choices that are based on our own (personal / individual) interest.
7. Confidence in and attributing importance to (authoritative) knowledge institutions: *institutional knowledge*, versus *post-modern knowledge* relying on self-collected knowledge.
8. The process of global economic, political and cultural integration, *globalization* versus *regionalization*: resistance to integration, and valuation of own history, culture and region.
An additional starting point for the future discourse model was that it had to include developments at different levels. This led to the building blocks for future issues as presented in figure 6.1.

Desk research was performed on landscape developments relevant for the practice of animal testing. General trend studies and futures studies from (inter)national institutes (Versleijen, 2007; TNO, 2004; Verlaan et al., 2007; WRR 2004, 2006, 2008; SCP, 2004, 2006, 2007; RIVM 2006; Gaskell 2006; CBD, 2004, 2007) were analysed to distil general, long-term, slow-moving developments of society. At the regime level, developments in animal-testing-related policies, regulation, research and technologies were analysed in a specially funded co-project (Hendriksen and Komduur, 2009). These results were discussed and validated by practitioners and experts of the practice during an expert meeting and the invitational workshop.

The assumption behind the model was that foreseeable changes in a praxis and slow moving developments in the societal landscape will work on into the future and thus have predictive power. Additionally, we assumed that landscape developments can cause a shift in the (assumed) dominant values of the value-pairs. The value-shifts argued in this line were triangulated with the foreseeable developments at the regime level to identify likely topics for future discourses. See Table 6.1 for a visual example of such a triangulation:

<table>
<thead>
<tr>
<th>Influences from:</th>
<th>Issues in debate</th>
<th>Dominant value</th>
<th>Counter value</th>
<th>Issues in debate</th>
<th>Influences from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape</td>
<td>Safety, Mobility</td>
<td>Risk Avoidance</td>
<td>Risk Acceptance</td>
<td>Luxury is wrong</td>
<td>Landscape</td>
</tr>
<tr>
<td>Infectious diseases</td>
<td></td>
<td></td>
<td></td>
<td>Naturalness is good</td>
<td>Economic crisis,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Loss of nature</td>
</tr>
<tr>
<td>Policy</td>
<td>EU/EMEA rules</td>
<td>Safety, Prevention</td>
<td>RISK</td>
<td>RISK</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Technology</td>
<td>Omic’s research &amp; applications</td>
<td>Age of vaccines, Humane animal use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal exp.</td>
<td>More animals, Refined testing</td>
<td>Humane animal use</td>
<td></td>
<td></td>
<td>Animal rights</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Replacement</td>
</tr>
</tbody>
</table>

Finally, the relative changes in landscape, governmental policies, science & technology and dominant (value) perceptions in society were related to the policy discourse. For the specific praxis of animal testing, three policy themes were identified for future debates: objectives that are regarded as acceptable to license animal experiments, the range of animals that will be subject to animal testing and thus governance (higher primates, mammals, invertebrates) and the codification of scientific conduct in alternative methods (Russell & Burch, 1959). The analysis was finally translated into explicit
and transparent policy formulations, focusing on optimal reduction of the number of animals used, maximal refinement of the procedures to reduce risk of animal suffering and investigation of options to replace animal experimentation (partly) with non-animal experiments (computer simulations, cell tissue cultures). Table 6.2 illustrates the way these predictions were systematically presented, by setting out the developments at regime level, against those at the agora level. Table 6.1 only includes the predictions made on the theme: research objectives that justify animal testing.

At the end of the project, the model and the collected results were discussed and validated by means of an invitational conference (stakeholders) and a futures studies expert meeting. The project was assisted by a guidance committee consisting of the commissioner and representative of the animal protection league, the industry and laboratory animal scientists.

Table 6.2: Illustration of the theme “research objectives that justify animal testing”, showing the interplay between trends at the level of the regimes and the level of the agora. Note, at the level of the agora the different dynamics of values that fuel the discourse by (a) upcoming values (row 1), (b) marginalization of values (row 2), (c) dilemma tension (row 3)

<table>
<thead>
<tr>
<th>Regime level</th>
<th>Agora level</th>
<th>Prediction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal research - goals</td>
<td>Trends/shifts in values (tensions)</td>
<td>Trend of future discourses</td>
</tr>
<tr>
<td><strong>Policy:</strong> Institutionalized and protocolized safety testing efficacy testing</td>
<td>Risk avoidance Societal responsibility <strong>Versus (upcoming)</strong> Risk acceptance, individual responsibility, citizen norms, animal as subject and existentialism</td>
<td>Discussion will raise necessity of some institutionalized safety and efficacy testing: what is ‘need to know’ and what is ‘nice to know’.</td>
</tr>
<tr>
<td><strong>Policy:</strong> Lifestyle-related animal research</td>
<td>Engineering of life, risk avoidance, animal as object and globalization. <strong>Versus (marginalizing under econ. crisis)</strong> Individual responsibility and animal as subject</td>
<td>Critics regarding the “luxury” of research goals related to lifestyle, (new) foods might lose support under the economic crisis. Animal research regarding diseases of elderly and infectious diseases will be supported by the majority of the public (urban population).</td>
</tr>
<tr>
<td><strong>Technology:</strong> Food quality and food basic animal research</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Policy &amp; Technology:</strong> Animal research for human-based infectious diseases</td>
<td>Animal as object and trust in technology <strong>Versus</strong> Animal as subject and trust in nature</td>
<td>More attention paid to animal welfare induces at the same time higher numbers in animal welfare research. Issue will stay on the agenda</td>
</tr>
</tbody>
</table>

6.5.2 Illustrations from the study on the human-animal praxes: empirically validating the value-pairs

In the second project, the model was used to explore future topics of societal debates on human-animal relationships in the Netherlands in general. Within this project, that was titled “thinking about animals” and focused on future discourses caused by a wide variety of animal-human interactions, the FD model and the methodological steps of the first project were repeated over 19 human-animal
practices. See figure 6.6 for a schematic overview of the research steps taken in the project and figure 6.7 for the way in which the FD-model was applied in this second project.

Figure 6.6: Research design of “Thinking about animals” project showing the successive steps to fill the FD-model: (top) desk studies on demographic trends, an electronic citizen survey among 2111 panel members regarding attributed values and priorities in human-animal relationships and dilemmas; and (lower part) focus groups with representatives of 12 different human-animal praxes, agricultural policy experts, directors of research schools regarding current and preliminary research programs, and finally an invitational workshop with expert members (on their own behalf) of the Board for Animal Issues was organized to reflect on the political relevance of the data.

For this project one additional value-pair was added to the 8 value-pairs that were formulated in the first project. This value pair represented the tension between entrepreneurial freedom and nature conservation, in other words: the space needed for nature and for farmers (and other entrepreneurs).

Some of the building blocks that had been taken from literature or estimated in the first project were empirically validated in an additional quantitative public survey. A citizen panel (CentERpanel, containing 2500 demographically representative Dutch citizens) was used to measure the dominant values in the set of value-pairs. This way, we were able to quantify the existing value-balances within

---

<table>
<thead>
<tr>
<th>Literature survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trend studies, policy- and technologic developments</td>
</tr>
</tbody>
</table>

Citizen poll (n= 2111) values in human-animal relationships and praxes

Application future discourses model human-animal praxes

Focus group 12 Praxes: current problems and discussions; Expected changes in these problems; Joint analysis of causes and determinants

Policy experts current problems and political issues; Expected changes in these problems; Joint analysis of causes and determinants

Directors of research schools

Report to Ministry, send to the parliament

Report to Ministry, send to the parliament

Invalitational workshop Members of the independent advisory committee on animals use

---

---

Four expert meeting at regime levels: 1 expert meeting with policy makers, 1 with the directors of research schools of Agricultural University Wageningen, 2 with the Board for Animal Issues (RDA: a stakeholder-independent advisory committee for the Ministry of Agriculture) and focus groups at the agora level with 19 different human-animal practices. Each consisted of 4-9 practice experts with insight and overview, selected from the RDA network, 1 specialized veterinarian appointed by the Royal Veterinarian Society of The Netherlands (KNMvD) and 1 policy expert of the Animal Protection Society (DB).
the value-pairs in 2011 (T=0). With respect to 12 animal practices, the position of these Dutch citizens was measured for the value-pair “animal as object vs. animal as subject” and correlated with age, sex, urban-rural background. After cleaning up the returns, 2111 were included in our analysis.

Figure 6.7: Left: empirically assessed distribution of positions in the public regarding 9 value-pairs (n=2111). Right: project 2 is a 19 time reproduction of the praxis in the agora, enabling us to describe the public’s attributions of value per praxis relative to non-praxis-related general position over 9 value-pairs.

Focus group meetings were held with experts of each of the praxes included in the research. In these 19 focus group meetings, empirical data were collected on the regime developments and expected issues in each of these praxes. Of all the developments and expected issues mentioned by the practice experts, we selected those which were indicated as driven by landscape and regime, i.e., demographics, policy and science changes. In this way, a distinction was made between expert estimations which are supported by the mechanism of the FD-model and those which are not. We regard this as an important tool to enhance the transparency of the characteristics of the discourses among praxis experts, hence inducing an explicit moment of reflection on the quality of the visions, i.e., are they mere gut feelings or do they stay consistent in triangulating with parallel changes. This might overcome the expert bias, which is a pitfall of opinion leaders-based futures studies. Subsequently, we assessed whether the driving forces (societal landscape, regimes policy and science) push towards an increase of the issue or towards solving the issue, making it less of a hot topic in the future.

As we were only able to measure T=0 for the balances between the value-pairs, we hypothesised along the rationale of the FD-model what changes are likely to occur in these measured balances given the changes in the societal landscape. This meant assessing what changes are likely to happen to the
value balances recorded in 2011. We used the citizen survey and literature-based correlations between values and demographic characteristics. For example, if a significant correlation exists between living in an urban area and valuing animals as subjects, the FD-model predicts that under the landscape influence of increasing urbanisation, the dominance of valuing animals as subjects at the agora level will increase in the future. In this way, we can make model-based, systematic, transparent and falsifiable hypotheses of the changes in the value balances towards the future, resulting in projected value-pairs for the future (T=2).9

In order to predict whether the developments at the different levels will result in future issues of societal debate, we first assigned the current value-pairs to each theme that was mentioned in the focus groups. Then, the augmentation (or amelioration) of the problem in that theme involved foreseeable changes in the landscape as well as the likely developments in policy and technology, which were set out against the future values relevant for those developments. Where the initiated policies and technologies and/or landscape changes counter the upcoming shifts in dominant values in society, those themes are identified as potential hot topics for future societal debate. This was only the case with four of the nine themes.

6.6 Discussion: the value of a future discourse model: modelling complexity.

This study for future debates took advantage of several recent models developed in disciplines like (history of) innovation and system change, technology assessment, applied ethics, sociology of conflict and discourse analysis. We took a model-based approach to identify future societal conflict or the upcoming type of future discourses in society. This resulted in a model including the interplay of eight value-pairs and three enabling and restricting forces (landscape, policy regime and science & technology regime).

Most models in futures studies simplify the future by defining the domain (economic, labour, technology) and acknowledge that the resulting exploration has to be understood under the ceteris paribus assumption (all other things being equal). However, developments in other disciplines like inter- and transdisciplinary research, complexity studies and innovation studies indicate that multilevel models of change are an option to incorporate more variables without losing meaningful causality and structure. After filling the model with empirical data, we described the reduction steps to answer the relevant questions posed by policy or politics regarding upcoming political controversies. In this last phase, after structuring the societal complexity at three levels and 8 value pairs, did specific, focused, analytical questions single out the path through the data towards the objectives: how will the changes at MLP and agora relate to praxis X? And given some thematic clusters of tensions, within these themes, which sub-dominant value will increase given trends in the societal landscape? Finally,

---

9 Quantitative analysis of the public survey with respect to these correlations goes beyond the scope of these illustrations on the DF-model and will be published as a separate study elsewhere (in preparation).
which of the validated developments at the regime level (i.e. in policy, science & technology) are contrary to these sub-dominant trends?

An additional value of the FD-model, compared to other models assuming the ceteris paribus postulate, is the incorporation of $8 + 3$ extra determinants of change, which brings the complexity of the future another step further under systematic analysis.

**Understanding the discourse patterns in the agora**

Debates will emerge from the agora. Therefore, the dynamics in the agora have to be understood to predict the conflict with the more slowly responding regimes at the institutional level. Inspired by Dagevos (2000, 2003) and the concept of ethical dilemmas, we showed that current societal issues can be formulated as tensions within a limited set of 8 pairs of contradictory values, energizing at a very basic level the rhetoric of convincing strategies from each side. Several scholars working on other social systems listed dominant and sub-dominant characteristics. For instance, Deval & Sessions (1985) and Cramer (1998) describe the dominant ‘worldview’ by mirroring the counter movement of ‘deep ecology’. When reframed as value-pairs, an indication of universalization (or external validation) of the chosen value-pairs emerges (table 6.2).

**Table 6.2:** Relating the presented value pair analysis to the deep ecology discourse with respect to the concepts in the framing by Deval & Sessions (1985) and Cramer (1998).

<table>
<thead>
<tr>
<th>Dominant worldview</th>
<th>Value pairs</th>
<th>Deep ecology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature as resource for humans</td>
<td>Trust in technology $&lt;$ &gt; Trust in nature</td>
<td>Harmony with nature</td>
</tr>
<tr>
<td>Trust in technology $&lt;$ As object $&lt;$ &gt; As subject</td>
<td>All nature has intrinsic worth</td>
<td></td>
</tr>
<tr>
<td>Economic growth for growing population</td>
<td>Engineering life $&lt;$ &gt; existentialism</td>
<td>Simple material needs</td>
</tr>
<tr>
<td>Risk avoidance $&lt;$ &gt; risk acceptance</td>
<td>Earth’s ‘supplies’ are limited</td>
<td></td>
</tr>
<tr>
<td>Belief in ample resource reserves</td>
<td>Engineering life $&lt;$ &gt; existentialism</td>
<td>Appreciate technology and non-dominating science</td>
</tr>
<tr>
<td>Advanced technological progress and solutions</td>
<td>Engineering life $&lt;$ &gt; existentialism</td>
<td>Earth’s ‘supplies’ are limited</td>
</tr>
<tr>
<td>Consumerism</td>
<td>Consumer norms $&lt;$ &gt; citizen norms</td>
<td>Living with just enough</td>
</tr>
<tr>
<td>Centralized /nation</td>
<td>Globalisation $&lt;$ &gt; regionalization</td>
<td>Bioregionalism (minority tradition)</td>
</tr>
<tr>
<td>community</td>
<td>Institutionalisation $&lt;$ &gt; Post-modern knowl.</td>
<td></td>
</tr>
</tbody>
</table>

The future-discourse approach (FD-model) results in a prediction of the topics that will be debated in society, without saying anything about the outcome of that debate. For example: whether the societal debate will eventually lead to the political decision (outcome) to prohibit religious slaughtering practices is of less importance in this project, unlike the prediction that a societal debate will be held on this subject, i.e., debating the (un)necessary suffering: combination of the value-pairs of risk avoidance vs. risk acceptance, individual vs. societal accountability, and animal as object vs. animal as subject. The specific outcome will be understandable in hindsight and will probably follow a coincidental path, depending on the local context, and will be finally catalysed by an *individual*, the
**policy entrepreneur** (Kingdon, 1995). However, the direction of the outcome will follow (sooner or later) the general societal sum of value-pairs at that moment, e.g., a ban on religious slaughtering in a highly urbanized society. Most often, this political decision is not necessarily a clear and radical choice, but rather an incremental step in an uneasy compromise somewhere in between the acknowledgment of the relevance of both poles. These value-pairs resemble ethical dilemmas, functionally speaking, which are intrinsically normative and unsolvable. Over time, the relative importance of the countering values might change in the agora. Values that dominate the discourses in the agora today might be dominated by their counterparts in the future. Even so, as the tension is based intrinsically on the construction of the dilemma, this tension will never cease. It is a constant, irrespective of which side dominates. The intension of debate, however, is driven by polarization or alignment behaviour exhibit by the key actors and the public.

At the macro level, societal debates are often framed as political debates between societal groups, standing up for their own legitimate interests, suggesting an analysis in which power and solutions by negotiation play an important role. Habermas Theory of Communicative acting (1981), general policy theory Dunn (1981) and Hisschemöller et al. (2001) specify that this only explains the contrasts in the clash of interests; more profound understanding is needed of the deeper driving values to understand the commitment to the defended interests, the values at stake. By making the value clash explicit and conscious, the interests move on to a second plan and start negotiating under the condition that their values are acknowledged and preserved. This provides discourse options for a way out, i.e., learning strategies among the relevant stakeholders. Take for instance the conflict between citizens on the one hand and industrial farmers and animal researchers on the other. This can be reframed as a value clash (dilemma): animal as object vs. animal as subject. The first appears dominant among farmers and the second among animal protectionists. In between positions are regarded by proponents of one side as schizophrenic or inconsistent. Political solutions might lead to the legal definition of an animal as an extended commodity (Germany) or limited legal person, as acknowledged in concepts like ‘intrinsic value’, i.e., possessing interests as an animal, separate from the owner’s interests or ‘instrumental value’. Those who take a stance in a dilemma do not accept a democratic majority voting as an argument to change their position, which indicates the nature of the never-ending debate regarding the valuation of animals. Although in one society the overall dominant distribution of citizens may be towards an animal as object (Spain, bull fighting), in another society it is towards the animal as subject (Netherlands, animal protection, Sea Sheppard). Both countries host subdominant but active groups arguing for the opposite position at the agora level. The value battle in the debate is the same dilemma, structurally speaking, and will never cease completely.

In the second project we were able to investigate the micro-dynamics at the level of the individual citizen. We collected their detailed valuations of human-animal praxes at T=0 (de Cock Buning et al., 2012). People appear to have no problem valuing animal-use differently in different praxes (see figure 6.8, the differences between cow farming and animals in circuses). More precisely, around ½ to ¾ of the citizens who indicated that they value animals in general equally as having an instrumental value and as having a subjective intrinsic value will move to more extreme positions depending the
type of the human-animal praxis. They resemble the floating voters in elections and from a dynamic perspective are the ‘dry wood’ that fires up societal debate, given a relevant trigger event. Politically speaking, the modus in the middle of the distribution should not be misinterpreted as a neutral and therefore stable base, but rather as a balance with all the weight on the pivot point. A small shift will move all, and will change the ongoing debate towards a radical new direction.

![Diagram](image)

**Figure 6.8:** When asked about their position on the axis of the value-pair animal as object vs. animal as subject in general, the distribution among 2111 informants shows an almost normal distribution (white bars). Asking about the praxis of cow farming (milk and beef), more than half of the number in “mostly animal as subject” moves to the object side, “both values equal” or “mostly animal as object” (light grey bars). In contrast, for the praxis “circus animals”, ⅔ who regard “mostly animal as object” and ⅔ of “both values equal” move to the subject side, “mostly animal as subject” or “always animal as subject” (dark grey bars). Dashed lines: below indicates the lowest percentage of informants who do not change position, above this are the persons who tend to adapt their valuation of the animal to the specific human-animal praxis (within these extremes in our survey).

At the level of the individual, figure 6.8 also shows that one and the same person might very well shift his/her value attribution when the human-animal relationship (the 12 praxes) differs: killing the unwelcome mice in their own house, hugging their pet and eating the pig. This is often labelled as inconsistent behaviour, although it is quite consistent in our dilemma framing. In many cases people behave in a superficial interpretation ‘as if’ they ‘dumped’ the instrumental or intrinsic value of the animal, e.g., they don’t hug mice and don’t eat their pets. However, behaviour towards the animal in a specific practice is the overt end result of a tipped balance. In other words, in the hugging of the pet, the counter value (instrumental, animal as object) is still there (e.g., I need the animal as a reassurance for myself), but not dominant. The dilemma is still there also. The dilemma or value pair is the constant as pair. The ascribed inconsistency incorrectly assumes a categorical yes/no valuation of a stand-alone value. However, some values come in pairs. It is basic: When a kid loves both of his divorced parents, it is by no means inconsistent that he likes to stay alternately with the father and the mother.

The strength of the model presented lies in the fact that, through the triangulation of influences on future society at different levels, a more integrated picture of the future can be created which takes
into account some of the complexity and interactions in society. The FD-model not only facilitates structured future explorations based on various disciplinary theories, it also provides a more realistic and more elaborate insight and understanding of the dynamics. Although this was not the focus of this study, the FD-model can also be used to identify issues for which societal interest is likely to diminish. Finally, this approach focuses on theory development and modelling that increase the explanation and insight into developments that eventually lead to changes in society. The predictions provided are rational estimations based on transparent hypothetical arguments. Hence, through justification and falsification of these arguments, the model and research method presented here can also contribute to the science of futures studies. On the other hand, we do realize that there are still some methodological points relating to the construction of the FD-model that need serious consideration when applying it. For example, the relevance of the growth in dominance of a value (in a value-pair) with respect to the relevant conservative value-pair still needs to be interpreted at the level of the regimes. Here, our ‘human condition’, the pitfall of the closed mind of the futures studies researcher, might still limit the number of options of conflict. We think that the construction of the FD-model at least made this pitfall explicit.

The FD-model presented in this study is an attempt to stimulate the discussion on systematic reflection on futures studies with the objective to analyse shifts in future-discourses and their impacts on societal conflict. It was developed in the context of a strategic exploration of policy-politics issues, i.e. two studies on the topics that will dominate the future societal debate on animal-human interactions. The ministry that commissioned the second project committed itself to repeating the citizen poll at T=2, evaluating the hypotheses made, optimizing the model and formulating new hypotheses for T=3. For this follow-up project a detailed protocol has already been submitted to the Ministry of Economics, Agriculture & innovation (EL&I).
Chapter 7

Future hot topics on animal – human interaction in the Netherlands

A systematic exploration of societal discourses

7.1 Introduction

Humans and animals have interacted all throughout history. This relationship knows many forms, depending of the type of animal and its function for humans. At one and the same time, humans see animals as a source of food, information or entertainment, build emotional relations with them, try to eliminate them as vermin and admire them as part of nature.

However, it is only recently that moral reflections on the human-animal relationships have started to develop. In the Netherlands, thinking about animals from an ethical point of view began in the second half of the 19th century, with the foundation of the organisation that would grow into the Society for the Prevention of Cruelty to Animals (Davids, 2001). The institutionalisation of animal protection organisations influenced the development of animal rights laws. In the Netherlands, animal rights developed gradually, starting with a legal prohibition to torture specific animals to include ever more species and the neglect and deprivation of their needs (Davids, 2001). Social debate on the animal-human interaction intensified after the Second World War, when the intensification, specialisation and mechanisation of animal husbandry led to up-scaling and changed the character of the traditional, small-scale family farm. At the same time, animal protection organisations experienced an enormous increase in membership and the growing concern for animal welfare was expressed in important publications such as Ruth Harrison’s ‘Animal Machines’ (1964) and Peter Singer’s ‘Animal Liberation’ (1975). In science, advanced brain research increased our insight into the capacity of animals to feel pain and suffer. Consideration for animal ethics arose not only in academia, but in society at large, as demonstrated by Kupper (2009) through the vast increase of publications in both

---

1 This chapter is based on the article: C. de Brauw, M. van Amstel, Tj. de Cock Buning, Future hot topics on animal – human interaction in the Netherlands: making use of a systematic model to anticipate social discourses Journal of Contemporary Law Review; submitted for publication 2013, under review.
the academic field of animal ethics and the public realm. The growing interest in animal welfare is also reflected in policy efforts. In the UK, Harrison’s publication led to the formulation of ‘five freedoms’ of husbandry animals by the Brambell commission, criteria that have formed the basis for reforms in animal protection legislation in many European countries. Within the Netherlands, an evaluation of animal welfare in husbandry by the Stock Farming Commission in 1975 (Verkaik, 1975) was followed by the acknowledgement that the intrinsic value of animals should form the basis for policies and legislation on animal protection. As a result, the ‘Health and Welfare Act for Animals’ was published in 1992, containing an overall framework for animal protection and wellbeing. Further intensification of the public debate on animals was stimulated by (1) the outbreak of a number of animal diseases that led to the mass culling of infected as well as non-infected animals, (2) the world’s first animal party taking a seat in the Dutch parliament, and (3) the announcement that a new animal law would be developed.

Over time, different animal-related issues have been the topic of societal debate on the local and the national level. Recent examples are factory farming of animals in multi-storey stables, minks kept for fur production, and ritual or religious slaughtering techniques. With the increasing attention paid to animal ethics, animal-related issues will undoubtedly keep coming up in societal debate and are likely to trigger opposition movements. In order to adapt policy efforts to relevant issues, the Dutch Ministry of Economic Affairs, Agriculture and Innovation (hereafter: the Ministry of EL&I) sponsored a research project to identify issues in the realm of animal-human interaction that are likely to become hot issues in the future.

This chapter presents the main results of this project, that consists mainly of an exploration of the future. Research on the future has become popular in recent decades and forms an interesting area of research on its own. The project presented here differs from many future studies in several ways. Whereas most studies of the future attempt to make a prognosis of what will occur, our focus was on what will be debated. Moreover, we did not make use of methods such as ‘visions’, explorations of current developments or ‘scenarios’ to predict future debates. Instead we experimented with a systematic method to study the future that acknowledges the complex interactions that take place in society (and thereby in the future). We investigated societal developments at three levels, applying the ‘future-discourse model’ that was developed in a previous project\(^2\) and discussed in the last chapter. These levels are: 1) the level of animal-related perceptions and values that exist within Dutch society, 2) the level of long-term, slow-moving changes in the societal landscape and 3) the level of developments in policy, technology and research in different domains of animal handling.

In order to make prognoses on future hot issues, we investigated (1) what perceptions of animals and the way they are treated were dominant in Dutch society in 2011 and what developments in that perception could be expected the coming decennia, and (2) what developments in animal-human interactions were likely to take place in the Netherlands in the fields of policy, research and technology.

---

7.2 Predicting future societal debate: the future discourse model

The future is a challenging research subject for the obvious reason that it is – as yet - unknown and therefore difficult to predict. However, not everything that is unknown is unpredictable: e.g. we can safely say that the sun will rise tomorrow. In the same way we can assume that there are developments in current society with effects that will persist into the future. The effects of developments that are already planned or being implemented are relatively ‘hard’ predictors for the future. Snellen (unpublished), reflecting on 20 years of future research for the Dutch government, remarked that future-oriented research has moved from predicting ‘what will happen’ towards predicting what type of topics that will dominate the societal and social-scientific debate and whether it is possible to predict these. He suggested using a ‘paradigm-switch’ approach to societal debate. Paradigm-switches can occur when the accumulation of anomalies result in the existing paradigm being untenable. We take up that notion for changes in discourse, assuming that some developments in margins (anomalies) place the dominant discourse under stress.

The future discourse model that was presented in the previous chapter provides a conceptual framework that makes a systematic and theory-based analysis possible of factors that can change the balance in future debates on a given praxis.

One of the factors that make future developments in society so hard to predict is that they are the outcome of interactions that are complex, nonlinear, dynamic and adaptive (Linstone, 2009). There are many factors that influence the balance in the public debate and these can also interact in a dynamic and complex way. Simplified, abstract and linear models are often used but do not always lead to satisfactory outcomes. This was the reason for us to create our model that reflected the complexity of society and conceptualizes the mechanisms in it at a higher level of integration. As was explained in the last chapter, our three-level model was based on ideas developed by Geels (2002). His model on system innovations takes a multi-level perspective (MLP) on transitions: the niche (micro-level), the regime (meso-level) and the landscape (macro-level). In our model, we include developments at the landscape and regime level. ‘Landscape’ refers to slow-moving changes in society, such as environmental and demographic developments that structurally influence society at large. ‘Regime’ refers to the dominant culture (way of thinking), structure (way of organising) and practice (way of doing) within a specific sector of society (e.g. academia, industry, government) (Kloet, 2011; Loorbach, 2007 – in Kloet). Our model follows the structure of the MLP to analyse (1) landscape forces that can make new debates possible at the level of the regime and influence the existing cultural value frames and (2) the institutionalized regimes and developments of micro-level niche initiatives (anomalies).

We proceeded from the premise that hot issues tend to be energised by an underlying value dilemma. In line with classical ethical theories, we frame the emotions that are related to hot issues as side effects of a specific class of moral conflicts, i.e. the moral dilemmas. Ethical dilemmas are conflicts in values that cannot be solved as both sides of the dilemma represent a ‘good’ option (or both a ‘bad’ option) while it is impossible to accredit both at the same time. Having to make choices in dilemmas
is generally regarded as stressful, as either choice seems to betray the other value (Watzlawick et al., 1967). For the future discourse model, we combined these dilemmas into 'value-pairs' consisting of a value and its counter-value. While in society at large, a certain side of a value-pair can be dominant at a certain moment in time, the other side will still be valued within some groups. Since our aim was to identify changing patterns in the societal debate, this concept enabled us to reframe the issues within debates as (a certain number of) value-pairs. These values as well as the issues through which they are disputed are referred to as the 'agora level'. Although the themes that are brought up in the debate may be manifold, the underlying set of basic dilemmas is more limited, e.g. liberal vs. social, global vs. regional, etc. In our perspective, many of the so-called trends in societal debate are actually new buzzwords for basic universal dilemmas that have and always will exist in society. These building blocks and their interrelation are illustrated in the model in figure 7.1.

![Figure 7.1: Multilevel future discourse model to systematically assess societal discourses](image)

The change in the landscape shapes the background at a given time in a given country and influences the debate in society at large (agora), as well as influences regime developments (technology and government). At the regime level, the governance regime and the technology regime (academia + industry) provide a stable stream of policy initiatives and technological discoveries. These regime developments can turn into debated issues if they incite responses from different groups in society. They can become hot issues when dominant values in society clash with institutionalized regimes or upcoming niche initiatives. We presume that these 'emotional' debates are rooted in moral values that can be classified as a limited set of value-pairs.

Figure 7.2 illustrates how the model is applied to predict future debates. We presume that changes in the landscape will affect the balance of dominant and subdominant values in society before they influence the regime level. Governance and technology will respond to changes in society more slowly than the values in society change. As a consequence of these different response times, a change in the landscape will first (T=2) lead to a change in the balance between dominant and subdominant values;
conceivably the subdominant value will grow in relation to the dominant value. If the government regime and the technology regime continue to state their policies in a T=0 fashion, these messages will become the controversial issues in the agora. As long as the landscape change continues (T=3), the agora will also keep changing and this may even result in a complete reversal in the dominance of the relevant value-pair. This process will stir up the public debate even further, until the regimes of government and technology re-synchronize with the agora (e.g. through different policies) (T = 3). Then, a new and relatively stable situation will be reached (T=3, which is a new T=0).

Figure 7.2: Predicting future debate with the future-discourse model. T=0: current situation (grey arrow shows the dominant value); T=2: changes in landscape leads to change in the balance in some of the value-pairs; T=3: a new balance in value-pairs forces changes at regime level. A new balance is reached at all levels. Explosions represent rising conflict. Dotted boxes: new issues and new policies/sciences/technologies.

The ‘issues’ – represented in the boxes in T=0, can have two origins. First, as was mentioned previously, value-pairs represent a dominant and a subdominant value in society. Each of these values will have a measure of support in that society. As such, any value related topic will always be considered an ‘issue’ by some parts of society. Secondly, it is possible that, even at T=0, the institutionalized regime is not in line with dominant values in the agora, but that this is not noticed - or not acted on - by a government until the issue is stirred up by some event (trigger). All issues need a trigger to become part of the public agenda. It is the unpredictability of the occurrence of such a trigger that makes it hard to predict the time span within which an issue can become ‘hot’.

Finally, although the use of value-pairs makes it possible to predict the type of controversies that will arise - since these have their roots in a specific value-pair and the clash of that value pair with existing or upcoming regimes - the model cannot predict the specific buzzwords (issues) the debates will focus on.

7.3 Methodology

Different methodologies were used to investigate the shifts at the different levels of our model. Relevant value-pairs were gathered from the literature, policy reports and the media, the relative dominance within the value-pairs was measured with a questionnaire submitted to Dutch citizens.
Chapter 7

The literature review and interviews provided the main sources for expected changes at the landscape level. Focus groups were used to gain insight into the developments at the regime level.

7.3.1 Questionnaire on animal perceptions and values among Dutch citizens

Data collection
In order to determine what animal-related values were dominant in Dutch society in 2011, a ‘value questionnaire’ was developed to find out how Dutch citizens thought about animals and animal-keeping in the Netherlands, and to measure the position they took in nine value-pairs that represented moral dilemmas. Eight of these value-pairs were developed in the context of a previous social trend analysis on animal testing (see chapter 6). The ninth – that concerned the tension between the amount of space required for nature as a habitat for animals and the space required for farms and businesses was added as it was specifically relevant for animal-human relations in general, if not for animal testing. Thus a total of nine value-pairs (see box 7.1). In the questionnaire, these value-pairs were presented as dilemmas on which participants were asked to take a position on a scale of 1 to 5.

Box 7.1: Animal-related value-pairs formulated to assess citizens’ basic value preferences

I believe/ I value:
1. animals are subjects \(\leftrightarrow\) animals are objects
2. risks should be accepted \(\leftrightarrow\) risks should be avoided
3. in technology \(\leftrightarrow\) in nature
4. in the socially engineered society \(\leftrightarrow\) in existential being
5. nature’s need should prevail \(\leftrightarrow\) Entrepreneurs’ needs should prevail
6. responsibility lies with individuals \(\leftrightarrow\) the government is responsible
7. in post-modern knowledge \(\leftrightarrow\) in knowledge from institutions
8. in the benefits of globalization \(\leftrightarrow\) regionalization is the way forward
9. citizen norms to guide my actions \(\leftrightarrow\) consumer norms to guide my actions

Next to this survey of the dominant values in Dutch society in 2011, the questionnaire contained several questions on the acceptability of a number of animal practices (licence to produce). Finally, participants were asked to list positive and negative aspects of human-animal relationships, the reasons for considering killing an animal as acceptable and the reasons for which they valued animals.

The questionnaire was tested among students and colleagues of the research team; this led to a few adaptations. A total of 2500 households received an online invitation to participate in the questionnaire during the week of 25 August 2011. 2160 households filled out the questionnaire. Participants were selected amongst members of the CentERPanel and represented Dutch citizens with respect to gender, age, income, education and place of residence (urban/rural).

---

3 CentERpanel is linked to a professional research institute at the University of Tilburg; it consists of 2500 households and represents Dutch national society to a large extent. The panel is motivated to participate in a poll every week. This Panel was also chosen because its members are known to stay in the program for a long time, allowing for a follow-up study with some of the participants in a couple of years.
Data analysis
Completely filled out questionnaires (n=2011) were processed in SPSS and presented as percentages of the total number of participants. Correlations were calculated between the value positions mentioned and the participants’ demographic variables (e.g. age, gender and place of residence). This was done in order to estimate the potential influences of landscape changes on the dominant values in society. If a correlation existed, for example, between urban inhabitants and the perception that space for nature should prevail over space for farmers (see value-pair 5, box 7.1), it would be possible to predict that increasing urbanisation will intensify the perceived need for space for nature. Only those results that were significant, considerable and obvious4 were include.

7.3.2 Literature study on landscape changes
For the assessment of relevant developments in animal-related issues at the landscape level, we used recent predictions on the developments in the societal landscape published by research institutes such as the Organisation for Applied Natural Sciences Research (Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek - TNO) and the Strategic Knowledge and Innovation Agenda of the Ministry of Economic Affairs, Agriculture and Innovation (Strategische Kennis en Innovatie Agenda - SKIA). The megatrends mentioned in these studies (‘mega’ referring to the impact these developments are likely to have on society and the scale at which they are expected to take place) were then assessed for their potential relevance for the societal perception of animal-human relationships that are central to this study. Landscape developments that were not considered to be relevant for animal husbandry or the perception on animal handling were not included here.

7.3.3 Focus groups on developments at the regime level
In order to collect information on potentially hot topics on animal practices in society, the regime level of the model, we formed 19 focus groups, each composed of experts on a specific practice of animal-human relations (see table 7.1 below).
We selected the focus group methodology because we wanted an exploratory setting to inventory in-depth information on the variety of issues that could arise in society (Dürenberger et al., 1999; Fiorino, 1990; Kupper et al., 2007). Focus groups can be characterized as group interviews with a small number of participants, in which they have the chance to reflect on each other (Dürenberger et al., 1999). This interaction was essential for this study, as it allowed us to distinguish between issues that were raised by one individual participant and those that were important for a broader range of experts. The interaction among participants distinguishes this methodology from other types of interviews (Barbour & Kitzinger, 1999). Besides these focus groups with practitioners from a specific animal practice, two focus groups were held in which we targeted policy developments and research initiatives concerning animal husbandry in the Netherlands. These functioned to triangulate the

4 P-value (chi-square quadratic form) corrected with Bonferroni (0.05/55): P < 0.0009 for large numbers.
policy and research activities, the concerns mentioned in the focus groups by practice experts and the literature search.

Table 7.1: Animal practices selected for expert focus groups

<table>
<thead>
<tr>
<th>Animal category</th>
<th>Animal practice</th>
<th>No. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Farm animals</td>
<td>1. Cattle for dairy</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2. Cattle and veal for meat</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>3. Fish (wild-caught and farmed)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>4. Horses and ponies</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5. Pigs</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>6. Poultry for eggs</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>7. Poultry for meat</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>8. Sheep</td>
<td>5</td>
</tr>
<tr>
<td>2. Pets</td>
<td>9. Pets in general</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>10. Aviary birds</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>11. Cats and dogs</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>12. Fish kept in aquaria or ponds</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>13. Rabbits and rodents</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>14. Backyard animals</td>
<td>8</td>
</tr>
<tr>
<td>3. Service animals</td>
<td>15. Circus animals/animals rentable for events</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>16. Working animals (guide dogs, police animals, etc.)</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>17. Zoo animals/animals in petting zoos</td>
<td>8</td>
</tr>
<tr>
<td>4. Wild animals</td>
<td>18. Wild animals in nature</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>19. Fish for angling purposes</td>
<td>7</td>
</tr>
</tbody>
</table>

Selection of animal practices and participants

The 19 animal practices for the focus groups were selected in a process involving several steps. First, animal-human relationships relevant for the Netherlands were divided into four categories: (1) farm animals, (2) pets (including backyard animals kept for non-commercial, recreational purposes), (3) service animals held for commercial purposes other than farm animals (such as zoo animals and guide dogs), and (4) ‘wild’ animals, also including angling and hunting practices. In the first two categories, we selected those practices that are most present in society. For farm animals, we used statistical data on the number of animals kept or the number of farms working with these animals, to find those animal practices that represent the majority in Dutch agriculture (Land- en tuinbouwcijfers, LEI & CBS, 2010). For pets, we selected those animals that are kept by a considerable percentage of households in the Netherlands (RDA, 2006). Within categories three and four, groups were defined by the practice (e.g. ‘working animals’, ‘zoo animals’, ‘animals in nature’) rather than the type of animal involved (horses, lions, dogs, etc.). This allowed for the inclusion of almost all human-animal interactive practices within

---

5 Based on data provide by the Board for Animal Affairs (RDA) in 2006. This Board provides the Dutch government with information and advice on animal-related issues.
these categories. For practical reasons, some comparable animal practices were combined in one focus group (e.g. aquaculture and wild fish; rodents and rabbits) (see table 7.1).

For each animal practice, we aimed to include four to six participants from a variety of backgrounds and organisations in the focus group, to gain as broad an insight into expected future developments as possible. Special efforts were also made to include a specialized veterinarian and a member of an animal protection organisation in each focus group. The selection of organisations and specific experts with a relevant expertise was done in close collaboration with the National Board for Animal Affairs.

All participants were asked to look beyond the current (political) interests of their organisation and to reflect on issues and challenges for their animal practice in the coming 20 years. A total of 132 animal practice experts participated in the focus groups (an average of seven experts per group).

The two separate group interviews that were set up to make an inventory of regime developments in policy and science/technology, included policy officials from the local and national government, as well as directors of the agricultural research schools from Wageningen University. International policy developments, especially at the EU level, were included in this study through questioning EU policy experts at the Dutch Ministry of EL&I. EU research programmes that were being carried out in Wageningen University were also investigated.

Focus group design

The focus group procedure followed the design that was developed for the project and tested among colleagues of the research team. During a two-hour session, participants were asked first to write down three current issues that they considered important topics for their animal practice (T=0 = 2011). Each issue was clarified by the expert who proposed it, discussed amongst the group and, when necessary, clustered with similar topics to form a list of all relevant issues for 2011. In order to gain insight into the relative importance of the issues that had been listed, participants were asked to mark the two issues they considered to be the most urgent. Next, participants marked three issues that they expected to increase in importance and three issues for which they expected attention to decline. Finally, they were asked to explain their reasons for their predictions. These explanations provided us with insight into the driving forces or mechanisms behind the issues the experts had named, for example, the development of technologies and policies or the expected influence of landscape changes. All of the focus groups concluded with a broader reflection on the issues that were dealt with during that session and whether participants thought that all developments in their animal practice had been adequately covered. Where necessary, topics were added to the overview made during the session.

The meetings with policy experts and directors of the research schools followed a more straightforward group interview approach, in which the participants were asked to list the topics to which research and policy development efforts would be devoted in the coming 5 years. Each of these developments was then related to (1) the animals it would affect and (2) the issue that the policy or technology/innovation/research was meant to address.

Animals for testing were not included in this project, as a separate study on developments in the animal-testing sector was performed in the year prior to this study.
Data analysis
The results of each focus group were processed into a table showing the issues, the expected shifts and the factors and mechanisms prompting these developments. These tables were sent to the participants for validation. All issues mentioned in the different focus groups were then combined into one list. Similar issues were grouped together in themes cross-cutting several practices. Similarities were not only based on the issues mentioned, but also on the mechanisms described as driving forces, i.e. landscape changes that were expected to raise the related issues and the forces from expected developments in policy and science/technology. As a result of this clustering process, issues related to a specific animal practice were abstracted into more general themes that affected a broader range of animal practices. The research team determined applicable value-pairs for each theme, based on the arguments used in the focus groups.

7.3.4 Identification of future hot topics
After gathering and analysing the data for the different building blocks of the analytical model, we compared the dominant citizen values with the developments at the regime and landscape level to deduce which themes would be likely to lead to societal conflicts. Of the themes that were introduced by the practice experts, we selected those driven by landscape, policy and science changes. This way, we distinguished between expert-guesses and future developments founded on ‘harder’ predictive developments. For each of these themes, we then assessed whether the driving forces would push towards magnifying the problem or reducing it and making it less of a hot topic.

In order to identify future conflicts in terms of underlying value tensions, we assessed what future changes were likely to occur in the balances of the value-pairs, compared to the balance we had measured in 2011 (indicated in figure 7.3 as situation 1).

Figure 7.3: Value-pairs of dominant and sub-dominant values and the potential shifts therein. Situation 1 represents the status at T=0 (2011). Drivers mainly from the landscape level can influence these value balances.
Significant correlations between values and demographic characteristics were then compared with landscape changes to assess which sides of a value-pair would be likely to be influenced by the landscape changes. Incorporating these possible changes in the value balances resulted in projected value balances for the future (2031).

Then, the foreseeable changes in landscape, as well as probable developments in policy and technology, were set out against the future values. Whenever the developments in policies and technologies and/or landscape changes went against the (future) dominant values in society, these were identified as future hot topics.

7.4 Animal perception in the Netherlands in 2011: results of the questionnaire

The results of the questionnaire give an impression of the perceptions and values related to animals in Dutch society. First of all, participants were given a list of 17 aspects of animal-human interaction and were asked to select five aspects that they regarded as the most positive and five aspects that they regarded as the most negative ones. We found that in 2011 Dutch citizens valued animals primarily for the relationship they had with them, repeatedly referring to the emotional and social bond between man and animal. The top three positive aspects that were selected - (1) ‘providers of warmth, love and companionship’, (2) ‘important for the development of children’ and (3) ‘support of the elderly and handicapped’ - all reflect this (see figure 7.4).

![Figure 7.4: Positive aspects of human-animal interaction](image-url)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>% of participants that said yes to the aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide love, warmth and company</td>
<td>69.6</td>
</tr>
<tr>
<td>Emotional development of children</td>
<td>58.7</td>
</tr>
<tr>
<td>Support for handicapped and elderly</td>
<td>56.8</td>
</tr>
<tr>
<td>Healthy and tasty meat, milk and eggs</td>
<td>45.1</td>
</tr>
<tr>
<td>Source of knowledge and inspiration</td>
<td>38.7</td>
</tr>
<tr>
<td>Industries of economic importance</td>
<td>37.1</td>
</tr>
<tr>
<td>Affordable meat, milk and eggs</td>
<td>27.2</td>
</tr>
<tr>
<td>Protection (watchdogs, police-dogs)</td>
<td>25.4</td>
</tr>
<tr>
<td>Farm animals make our landscape interesting</td>
<td>24.6</td>
</tr>
<tr>
<td>Keeping animals is part of our culture</td>
<td>24.5</td>
</tr>
<tr>
<td>Animals are fun and challenging</td>
<td>22.3</td>
</tr>
<tr>
<td>Provide food for growing worldpopulation</td>
<td>18.6</td>
</tr>
<tr>
<td>Animal testing</td>
<td>17.7</td>
</tr>
<tr>
<td>Wild animals in nature</td>
<td>14.3</td>
</tr>
<tr>
<td>Provide useful products</td>
<td>6.8</td>
</tr>
<tr>
<td>Provide fur (beautiful to wear)</td>
<td>1</td>
</tr>
<tr>
<td>Provide status and prestige</td>
<td>0.6</td>
</tr>
<tr>
<td>No positive aspects exist</td>
<td>2.2</td>
</tr>
</tbody>
</table>
Chapter 7

The more instrumental aspects of animal-human interactions – animals as providers of meat, eggs and milk – came fourth. More than 75% of the participants considered ‘animal abuse or neglect’ one of the most negative aspects of human-animal interaction, reflecting a similar – if opposite – position: the intolerance of non-empathetic behaviour towards animals (see figure 7.5).

**Figure 7.5: Negative aspects of human-animal interaction**

Participants were also asked to divide six points over 13 reasons to value animals. Of the overall points given to the different values, most (16.4%) were assigned to the usefulness of animals for people. The other three top aspects were related to the intrinsic value of animals and their part in the bigger context (nature/God’s creation). The emotional relationship, that figured in the top five positive aspects of the human-animal interaction discussed above, came fifth, with just under 10% of the points.

Next to the participants’ perspectives on animals in general, we wanted to discover their attitude towards a number of specific animal practices, including the practice of animal testing; in other words their ideas on the so-called ‘licence to use’. In this part of the questionnaire the participants were asked to rate the relative importance of human- and animal interests in different animal practices. On a five-point scale (going from 1: only human interests, to 5: only animal interests), participants were...
Future hot topics on animal – human interaction in the Netherlands

asked to indicate which interest should prevail in different situations and to what degree. The results are presented in figure 7.7 below, including the average outcome per animal practice.

Figure 7.6: Values attached to animals

<table>
<thead>
<tr>
<th></th>
<th>% of total points granted to the value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animals are useful to humans</td>
<td>16.4</td>
</tr>
<tr>
<td>Animals are part of nature</td>
<td>16.1</td>
</tr>
<tr>
<td>Animals are part of the creation/the whole</td>
<td>13.5</td>
</tr>
<tr>
<td>Are creatures with feelings</td>
<td>12.7</td>
</tr>
<tr>
<td>e care for them and want to take care of them</td>
<td>9.7</td>
</tr>
<tr>
<td>Animals are unique creatures</td>
<td>8.6</td>
</tr>
<tr>
<td>We have a relation with animals</td>
<td>7.6</td>
</tr>
<tr>
<td>They are biologically interesting</td>
<td>5.3</td>
</tr>
<tr>
<td>Their species-specific behavior</td>
<td>2.7</td>
</tr>
<tr>
<td>Animals and humans are equal</td>
<td>2.7</td>
</tr>
<tr>
<td>Animals have a will to live</td>
<td>2.2</td>
</tr>
<tr>
<td>Their appearance, wholeness, originality</td>
<td>1.9</td>
</tr>
<tr>
<td>Animals are more important than humans</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Figure 7.7: Licence to use: relative importance of human- and animal interests in different animal practices. Overall average score for the animal practice is presented between brackets (1 = only human, 5 = only animal).
While human and animal values balanced out in most situations (average $2.5 < X < 3.5$), a majority of the participants considered human interests to prevail over animal interests in the case of hazardous animals (disease bringing vermin of insects). On the other hand, animal interests outclassed the human interests where circus animals, animals in the wild and fur production (mink) were concerned. Zoo animals, animals used for sport purposes and even pets also scored slightly higher on the animal interest side ($X > 3.0$). These results can be interpreted as follows: in 2011, Dutch citizens value their own interests over the interests of animals in cases where animals are a threat. Animal interests are valued as equal to human interests if the animals are kept for food and working purposes. However, Dutch citizens are critical about the exploitation of animals for entertainment or luxury purposes and of animals that have no direct use for us, such as animals in the wild. Although the use of animals for testing purposes appears to be generally accepted, the scores differed from the others in that participants were relatively outspoken (scoring either 1 or 5, instead of 2, 3 or 4).

### 7.5 Three-level building blocks to examine the future

#### 7.5.1 Landscape developments: setting the stage

To increase our understanding of landscape developments, we assessed recent trend studies. Key publications that we used were ‘Megatrends’ issued by the Netherlands Organisation for Applied Scientific Research (TNO, 2010), which focuses on global changes, and the ‘Strategic Knowledge and Innovation Agenda of the Knowledge Chambers’ (Strategische Kennis- en Innovatieagenda van de Kenniskamers, SKIA) by the Dutch Ministry of Economic Affairs, Agriculture and Innovation (EL&I, 2010). The trends outlined in these studies were comparable to those described in other trend studies by for example the Netherlands Institute for Social Research (SCP, 2011) as well as publications of ‘trendwatchers’ (such as Bakas, 2005). This led to a list of relevant landscape developments for inclusion in this study (see Box 7.2).

**Box 7.2: Developments at the landscape level presented in key publications relevant for this study**

- Expanding global population, decreasing population in the Netherlands
- Ageing population in the Netherlands
- Increasing emancipation and feminization of society
- Rising welfare standards and individualization as main social structure
- Increased globalisation and urbanisation
- Growing scarcity of resources, land and fresh water
- Increasingly apparent environmental issues – climate change and loss of biodiversity
- Increased mobility, both of products and humans
- Newly emerging health hazards - increased spreading of germs
- Heightened focus on security and risk in a complex world
- Changing relationship citizen-government; decentralization as well as demands for more transparency and equal participation
- Growing reliance on network society for communication and as knowledge base
- Increasing development and use of (smart) technology
Only those trends were selected that dealt with substantial, measurable and empirically determined changes, i.e. demographic developments, social-cultural developments, spatial developments and developments in the physical environment. These megatrends show the future Dutch society as one with an increasingly ageing population, with an ever larger percentage of people living in urban areas (cities) and the position of women becoming more and more important. Globally, the network society and disappearing borders will further enhance globalization, international trade and transport, and increase the demands on governments and businesses for more transparency. Ever more wealth and consumption are likely to lead to scarcity of a number of resources and climate change will result in the migration of species (exotic animals) and germs, causing new diseases.

7.5.2 Regime developments: Issues in animal practices identified by experts

Our analysis of the issues that were raised by the experts as potential issues for the future were brought down to twelve themes. These themes transcended the issues mentioned in the different animal practices and could, according to us, be attributed to joint and similar regime and landscape developments. Considering the driving forces behind these themes and the likely developments therein, we expect the societal debates on eight of these themes to fade away or to remain at the same level. In the other four, developments at regime and landscape level are likely to intensify the debate. This section will discuss those four themes in which the public debate is likely to increase, as well as one theme that is already a hot topic and likely to remain so, considering the driving forces behind it.

1) The prevention of antibiotics resistance
This theme deals with the use of medication and other measures to prevent outbreaks of animal diseases. One of the problems in this field is that the growing use of medication increasingly results in resistance to such medication. This in turn can affect public health and animal safety. The growing scale of animal farms, longer transportation times and processes of climate change are expected to increase the need to combat infections, and spread the use of antibiotics, while policy and technology solutions such as approved and readily available vaccinations in case of outbreaks are achieved more slowly. Thus, this theme is expected to become increasingly important.

2) Animal welfare, sustainability and the World Trade Organisation
The second theme concerns the clash between the growing attention that is paid to corporate social responsibility (CSR) and animal welfare standards on the one hand and the increasing competition and trade in animal products on the global market on the other. At the landscape level, the global rise in welfare increases the demand for animal products. To fulfil this demand, up-scaling and intensification of animal husbandry would seem inevitable. At the policy level, the World Trade Organisation plays an important role, as the existing agreements do not permit discrimination between ‘like’ products or
countries. This brings with it that bans on products from foreign countries are not allowed. Equally,
as differing production processes are still considered to result in ‘like’ products, a distinction between
environmentally friendly products and conventional products is not allowed under the WTO rules.
Animal welfare standards and Corporate Social Responsibility (CSR) standards are considered to
be ‘processes or production methods’ and therefore do not result in ‘unlike’ products. Although
an exception to these rules can be made for environmental purposes, there are no known cases in
which an appeal based on this exception was accepted. Although participants of our focus groups
requested that a level playing field be created by the Dutch or European authorities (demanding the
same welfare standards for imported meat), these requests will probably require an adaptation of
the WTO rules. As long as such a level playing field has not been created, animal welfare standards
will increasingly come under pressure, while the public awareness of the way animals are treated is
growing at the same time.

3) Governance of animal species
The third theme deals with the expected shifts in global biodiversity. This theme is mainly stimulated
by landscape developments. The growing global population and the land required to feed and house
it, as well as the resulting pollution of the global environment and climate change, are leading to
the extinction of many species and the (accidental) introduction of others into – for them – foreign
habitats (also referred to as invasive alien species). Existing EU regulation such as the habitats and
birds directives and fisheries policies aim to protect rare species and habitats. At the same time,
however, policy developments at the national level seem to prioritise economic developments over
nature conservation and the protection of species. These developments are expected to increase the
risk of species becoming extinct. Technological developments to create a gene bank for rare species
and research on breeding techniques can sustain certain populations, but not all species are the
subject of such research projects.

4) Animal welfare during transport
Experts expressing concerns about animal welfare during transportation mostly refer to animals kept
for production purposes (livestock). However experts on hobby animals also mentioned transportation
to and from exhibitions as an issue in their practice. As a theme, ‘transportation welfare’ addresses
the problems that animals face when they are transported over long distances, for long hours and
under unregulated (and thus often less than ideal) conditions. Practitioners expect the (international)
transport of animals to intensify, due to increasing specialisation and differentiation in the livestock
chains, which implies moving animals between different stages of the production chain. Moreover, it
is to be expected that the international transport of animals will increase as a consequence of further
international cooperation. The experts in our focus groups expected public attention for this issue to
decrease in a number of years, due to new technology and investments in better trucks. However, as

---

7 See the official WTO website for further explanations of the WTO rules and the environment, as well as case
the introduction of stricter regulations on animal transport at the European level has not taken place and the international competition and declining economic climate have decreased the funds available for investments in innovations such as trucks that improve the welfare of livestock during transport, we question whether attention for this issue will decline. Instead, the market drivers at the regime and landscape levels make it more likely that welfare problems during transport will increasingly occur.

5) Animal diseases and zoonoses® - a special theme
Concern over the management of outbreaks of animal diseases was mentioned by experts in many animal practices. Current policies at the national and EU levels do not allow for preventive vaccination, resulting in mass culling of both infected and healthy animals in contaminated areas. As was mentioned above, landscape developments (increased globalisation and global welfare) will lead to further production and transportation of animals, both increasing the spread of infections. At the same time, climate change will make it possible for diseases currently restricted to warmer areas to spread to the Netherlands. Regime developments that we identified include the draft EU Animal Law that will open up legal possibilities for preventive vaccinations and national prevention, and cooperation policies between responsible ministries that should improve the management of new outbreaks. Similarly, investments made in the development of veterinary vaccines are also expected to contribute towards solving this problem. However, as the development of these vaccines requires time and the existing national non-vaccination policy is not expected to change soon, outbreaks of disease in the not so distant future are likely to be handled as they are now. As long as that is the case, large numbers of animals, both infected and healthy will be culled: events that are likely to stay hot topics each time they occur.

7.5.3 Dutch citizens’ position in animal-relevant value-pairs: fuel for hot topics
Whereas developments at the regime and landscape levels can give a sound indication of developments that can be expected in a certain sector, they will not become hot topics if they are in line with what society perceives as ‘right’. Societal conflict is most likely in case of developments that go against values that are dominant in society.

As was mentioned above, we measured the dominant values within the animal value-pairs by means of the questionnaire. Citizens were presented with a value (1) and its opposite (2) and were asked to choose on a five-point scale whether they only valued (1) – mainly valued (1) – valued both equally – mainly valued (2) or – only valued (2). Their answers were converted into a balance of dominant and non-dominant values for each of the value-pairs in 2011 (see figure 7.8). This figure shows that in most of the dilemmas, a majority of participants (between 37.4 and 52.5%) valued both sides equally, indicating that they saw both sides and were nuanced. Moreover, figure 7.8 illustrates that relatively few participants feel strongly about one of the two values, when they did feel oriented towards one or the other position they remained close to the middle position. As an exception to this rule, citizens

8 Zoonoses are animal diseases that can spread to humans.
indicated that they valued *engineering to improve life* strongly over *accept life as given*; in fact, this value-pair is the only one in which the middle position was not the largest category.

![Table showing relative weight of moral value-pairs in Dutch society in 2011. Dominant values are placed on the left, the non-dominant value on the right.](image)

**Figure 7.8:** Relative weight of moral value-pairs in Dutch society in 2011. Dominant values are placed on the left, the non-dominant value on the right.

Although most citizens valued both parts in a presented dilemma equally, some slight preferences can be found when looking at the distribution of the remaining percentages. It shows that Dutch society can be typified as one in which it is considered right to enhance life through engineering and in which technology is trusted more than nature, but that the need to protect nature over entrepreneurship is also felt, animals are considered as subjects (individual beings that deserve consideration), and risks are not considered something to avoid to all costs. Dutch society in 2011 is oriented towards globalisation, network knowledge is valued over institutional knowledge, the individual is considered more responsible than the government (or other institutions), and individuals are expected to behave as citizens (rather than as consumers).

While these insights can provide important information for current initiatives, the dominant values in 2011 cannot be used directly as predictors of future social issues, since the dominance of one or the other value in value-pairs is susceptible to change. Sub-dominant values in 2011 could become dominant in 2031. We recommend that the questionnaire be repeated every couple of years, to detect trends and shifts. As such trend data are not available now, we used a different approach to take
potential shifts in dominant values over time into account. We used the combination of working with value-pairs and the foreseeable changes at the landscape level to predict potential shifts in value orientations in the future. Other studies have illustrated that value orientations vary according to gender, age and place of residence (rural/urban). By establishing which value orientations corresponded with which demographic characteristics and then applying that information to the expected changes in demographics in Dutch society over the coming 20 years, we made an estimation of what shifts were likely in the relevant value-pairs.

To relate the value-pairs to expected landscape changes, we investigated whether a significant correlation existed between a preferred value and the following aspects: gender (M/F), age (50+ or 50-) and place of residence (born and raised in an urban or rural area). Influences of other megatrends on value orientation were not included as no representative data were available to make such correlations. Only a few differences turned out to be significant. We found that women are more likely to accept life as given than men, whereas the elderly (more than the younger members of society) espouse engineering of life rather than accepting life as given. Both the number of elderly people and the voice of women are likely to increase in society in the future. Thus, the value ‘life as given’ is likely to grow because of the increased voice of women, while ‘a belief in engineering’ is likely to go up because of the rising number of elderly people. Our estimate is that the overall balance will remain the same, meaning: Dutch society will continue to value the use of engineering to improve life over acceptance of life as given. Opposite shifts were found for the value-pairs individual versus institutional responsibility, trust in technology versus trust in nature, and trust in institutional knowledge versus trust in network knowledge. While the elderly tend slightly towards individual responsibility, trust in technology and institutional information, the majority of the women take a central position in the first two dilemmas and have a slight tendency to prefer network knowledge. Again, these differences are not expected to be so great that they will affect the balance of these value-pairs. It is likely that in the future, technology will still be trusted over nature for solutions, and a slight tendency towards individual responsibility and network knowledge will remain.

Moreover, we found that women (more than men) value animals as subjects instead of objects. Currently, their position is slightly dominant although most participants chose the middle position. While a majority will still remain in the middle, we expect the growing feminisation of society to result in animals being increasingly considered as subjects.

Male, elderly and urban participants valued globalisation over regionalisation, while female and younger participants as well as rural inhabitants are divided equally over both values. Again however, the majority remains in the middle position. The increasing age of the population and growing urbanisation can therefore be expected to increase the mild dominance of globalisation only slightly. As a final correlation, we found that male participants and rural inhabitants (more than their female or urban counterparts) valued space for businesses over space for nature. It is likely that the slight preference that exists to protect nature will increase during the next few decades due to urbanisation.

In conclusion, it can be stated that while shifts in society are likely to have some effect on the value
orientations that are dominant in society, our findings indicate that these developments are most likely to enhance the currently dominant values (as measured in the value-pairs relevant for this study). We did not find indications that the expected shifts in demographics will lead to any of the currently dominant values becoming less important (or vice versa).

### 7.6 Hot or not? Animal themes for societal conflict

As we noted before, not all of the themes that are likely to grow in importance will necessarily result in public disputes. In this final section, we address the themes presented in paragraph 7.5.2 and analyse whether they clash with the dominant values in society in order to estimate the potential for a societal conflict in each of these themes. As an illustration of the (use of the) model, the first theme is presented in figure 7.9.

![Figure 7.9: Illustration of the future discourse model by filling in the building blocks presented in figure 7.1 for the potentially hot issue of animal diseases, described in section 7.5.2](image)

This figure shows that the changes in the societal debate on the management of animal disease outbreaks are likely to continue in the Netherlands, as the developments at the landscape level will tend to increase the number of animal diseases occurring in the Netherlands, while developments at the regime level will not result in new ways to manage such outbreaks rapidly, leading to a frequent mass culling of animals when a disease outbreak occurs. This result seems contrary to the currently dominant value of *animal as a subject*. As society is increasingly critical of activities that treat *animals as objects*, mass culling is a likely topic for objection. At the same time, our *trust in technology* over nature and belief in *enhancing life* instead of accepting it as given, leads to the conclusion that some
form of management will be accepted. Vaccinations seem a good solution, as it acknowledges the individual animal. However, such vaccinations can take a long time to develop, which could be a problem especially when many new and unknown diseases start appearing.

Table 7.2: relevant developments in the different building block for the themes presented in section 7.5.2 compared.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Landscape</th>
<th>Regime - (P)olicy and (T)echnology developments</th>
<th>Clash with dominant values</th>
<th>Hot topic potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal diseases and zoonoses</td>
<td>Climate change; population density; increasing international transport</td>
<td>Non-vaccination policy remains (P); non-differentiation policy remains (P); slow vaccine development (T)</td>
<td>Animal as subject; trust in technology NB: health threats from animals scored very high as negative aspect of animal-human (H-A) interaction in questionnaire</td>
<td>Very likely. Each time an outbreak of a disease leads to mass culling</td>
</tr>
<tr>
<td>Prevention of resistance to antibiotics</td>
<td>Climate change; population density; (global) market competition</td>
<td>Non-vaccination policy remains (P); public-private covenants to reduce the use of antibiotics (P); more EU legislation (P); alternatives to antibiotics (T); improving detection and diagnosis (T)</td>
<td>Animal as subject; risk acceptance; trust in technology NB: health threats from animals scored very high as negative aspect of H-A interaction in questionnaire</td>
<td>Likely. When incidents show that use of antibiotics has negative effects on individual animals or when antibiotic use causes health issues for humans</td>
</tr>
<tr>
<td>Animal welfare, sustainability and the World Trade Organisation</td>
<td>Global scarcity; declining economic climate; (global) market competition; societal awareness</td>
<td>Incompatible policy WTO and sustainability (P); sustainable design of animal housing (T); robotisation (T); industrialisation (T)</td>
<td>Citizen norms; individual responsibility; globalisation</td>
<td>Most likely amongst farmers, who are stuck between forces. Can spread to national debate as farmers leave or start a discussion Debates on the slaughter of animals (exotic/surplus/unwanted) are likely each time it occurs</td>
</tr>
<tr>
<td>Governance of animal species (biodiversity)</td>
<td>Land use competition; urbanisation; climate change (more exotic animals)</td>
<td>Incompatibility of national nature policy and EU birds and habitat directives (P); improving methods to govern species (T)</td>
<td>Protect nature over entrepreneurship; animal as subject; globalisation</td>
<td></td>
</tr>
<tr>
<td>Animal welfare during transport</td>
<td>Increasing international transport; (global) market competition; societal awareness</td>
<td>Stagnation of EU legislation (P)</td>
<td>Animal as subject; Trust in technology; Trust in engineering;</td>
<td>Likely as increasing transport in financially uncertain times without stringent policies will result in suffering for individual animals, whilst technological and policy solutions should be possible</td>
</tr>
</tbody>
</table>

Table 7.2 contains the developments relevant for other themes that were presented in paragraph
7.5.2. Based on the dominant values in society, it is likely that all of them will become a topic of societal debate to some degree at some point in the future.

7.7 Discussion

The results of this study might be somewhat disappointing to readers. The ‘predictions’ do not show insights into a great unknown. Instead, most of the themes that are discussed are already familiar. This is largely a consequence of the method we selected, which was aimed at forecasting future societal controversies on developments that have already started, the consequences of which will extend into the future. The benefits of such an approach are that the predictions are not merely based on the view of experts, the extrapolation of current trends or the limited dimensions of a scenario-approach, but focus on the mechanisms that function as driving forces for societal debate and ‘grounding’ our predictions in the developments at landscape - and regime levels.

Another distinction between the prognosis presented here and most forecasts published these days is the objective of the study: while most studies aim to predict what will happen, this study aimed to predict what will be on the societal agenda. The essential difference between these approaches is that the latter explicitly implies the inclusion of public perceptions. From the simulation performed in the GM-case (presented in chapter 4), we learned that in case of uncertainty, people tend to base their opinions (and decisions) on basic value orientations. This notion was applied in this study. As perceptions on future developments cannot be known (they are not yet real), basic animal-related value dilemmas were used as a framework to make prognoses on the public’s positions on certain issues and likely shifts therein in the future. Measuring the dominant values in society does not detract from the fact that there will always be members of society with different and opposing value orientation. Interpreting values as dilemmas further frames these orientations as persistent and stable, making compromises difficult to arrive at.

Moreover, the fact that most participants stated in the questionnaire that they were undecided gives reason to believe that many people have not made choices in most of the dilemmas. Although a middle position can be interpreted as a moderate opinion, we would argue that it should not be underestimated that these people will deal with dilemma when they are confronted with them by choosing one or the other side. An issue that goes against values on which a moderate position is based can also result in controversy. This is exemplified in the ‘license to use’ of the practice of animal testing. Here a small reduction of the middle position implies a substantial shift to “mainly” human or animal positions, which can be observed as an ongoing, intense, societal and political debate on animal testing.

In this sense the model provides policy analysts with an extension to Kindon’s famous stream model. In an attempt to understand the non-rational and unpredictable nature of political agenda-setting, Kingdon (1995) distinguished three streams that must fuse to put a topic on the political agenda: the attention stream, the policy stream and the political stream. We think our model fits in with the
attention and policy streams, adding a deeper layer of value positions/dilemmas, which is ultimately the common denominator in public opposition, political party ideologies, and related policy decisions (grants for research and fair/consistent legislation and execution).

As with the other drivers in the model, the greatest benefit of working with values as drivers for the societal debate is that it provides an insight into why certain categories of issues are likely to become hot topics of national debate.

Our claim is not that no other themes or issues will become a hot topic in the future. All sorts of events can trigger an issue to become a hot topic: triggers can originate in well-known controversies or unpredictable events, such as a new scientific discovery. While some of them might represent new buzzwords for issues that fall within broader themes that are already foreseeable, others will represent genuinely new and unpredictable issues. However, we do feel that most of the upcoming issues will be within the 12 themes and that all of them will be energized by one or more of the value-pairs that we identified.

As this project is the first time the future discourse model was used empirically, some final remarks on this methodology seem appropriate. Working with focus groups was found to make a useful contribute to the data, allowing the insights of experts to be directly contested by other participants, this gave us an indication of whether the expert’s opinion was shared generally. At the same time, such a set-up requires a good balance of representation. In order to extrapolate the discussions from issues relevant to a specific practice to themes relevant for society at large, we found that it was necessary to include representatives of animal protection organisations in the focus groups. More attention will be paid to this aspect in subsequent projects. The focus groups organised in the context of this project were special in that participants who generally remain entrenched in their own viewpoints were challenged to look beyond their personal/organisational position and examine the drivers of the debate, instead of fighting over their respective positions. However, the developments predicted by the experts should be analysed to determine whether these predictions can be explained and grounded in driving mechanisms at the landscape and/or regime level. This is the new aspect that this model, and thus this study, contributes towards more academic analytical prognoses for the future.

Our appraisal of how value orientations will change over time were made on the basis of the correlation between value orientations and demographic characteristics. We recommend that it be validated every five years and that deviations from the changes that we expected be investigated, in order to check in how far the application of the model was valid. The model provides a conceptual and operational framework to make a systematic assessment of trends in the value orientations within Dutch society over time, as well as relate them to societies elsewhere.
Chapter 8

Epilogue

Let me start this final chapter by stating that my plea in this thesis is to consider citizen opposition as something positive. Democratic governments can benefit from all input from the citizens of the society that they govern. Whether this input is expressed through opposition or even anger, through voting or participating in information meetings, does not change the fact that they are all forms of expressing an opinion, a worry or a belief that is held by members of society. The transition from government to governance has resulted in the direct inclusion of more groups, institutions, organizations as well as citizens (groups) in different stages of policymaking. A government that genuinely aims to work with deliberative governance should be able to embrace citizen contributions as useful feedback to enhance the quality (effectiveness) as well as the legitimacy of its policies.

Of course, not all citizen contributions will necessarily lead to better policy, nor are all forms of expressing citizen opposition merely positive. Clashes between government and society over policies can have detrimental effects. Conflicts that turn violent, resulting in property damage, injuries or even deaths, are obvious examples. But other negative effects can also be mentioned. The citizens we interviewed in the regulation of the land-use case expressed that their experiences in the opposition process had led to a mistrust in governmental decision-making that extended beyond the conflict over the specific case and the authority involved. These citizens claimed to be highly suspicious of all decisions made by the specific authority as well as more critical towards decisions of governmental bodies in general. As for other effects that are often mentioned as negative aspects of citizen opposition, such as the long time needed to come to a final decision, with all related costs and uncertainty, my personal view is that they should not be considered negative so readily. According to the findings of this research, delaying a decision in order to understand the reasons why citizens disagree as well as allowing citizens to learn and participate in the decision-making process can keep these citizens from opposing the final decision and pay off in the long term.

Input from opposing citizens should be embraced not only for the benefit of more informed and (potentially) better policies, but also to improve the relationship between citizens and their government. Starting from a positive perspective on citizen opposition as a democratic virtue
(Verhoeven, 2009), the objective of this research was to gain deeper insights into the process of citizen opposition to policy decisions. On the basis of some empirical research, we aimed to explore the mechanisms through which conflicts between citizens and governments develop and to provide the government with some pointers on how to take citizen opposition seriously when it occurs as well as how to anticipate it in an early stage of the process.

The main question of this thesis is:

What characteristic mechanisms can be distinguished in citizen opposition and how can these insights help policymakers to foresee such responses and respond to them in a way that minimizes the negative effects of a conflict and enhances the process of policymaking through genuine deliberation?

In the course of this research, six sub-questions were formulated. Each chapter explored one of these questions. This final chapter focuses on the main question of this research. Section 8.1 discusses the mechanisms that we found for citizen opposition to local initiatives and thereby answer the first part of the main question as well as four sub-questions. The second part of the main question will be answered in section 8.2. That section will reflect on the model that was developed to foresee citizen opposition and thereby answer the remaining two sub-questions of the research. Section 8.3 provides recommendations for (the improvement of) deliberative governance. Some remarks on the results in a broader context are presented in section 8.4. This chapter ends with recommendations for further research (section 8.5).

8.1 What characteristic mechanisms of (local) citizen opposition can be distinguished?

We started the research on citizen opposition by analysing the literature on so-called Nimby opposition, a common form of citizen opposition in the Netherlands. The analysis of the literature led us to draft two models, a ‘quadrant model’ of different opposition positions and a ‘local response model’, in which the development of different responses is addressed as a process. Although these models include both positive (accepting) as well as negative (rejecting) responses from citizens to local developments, this final chapter will focus on opposition. The literature study also provided us with some ideas on essential mechanisms of - and influential factors for citizen opposition. In the case studies we conducted subsequently, several of these mechanisms were confirmed.

Sub-questions formulated in the course of this part of the research are:

1) What characteristic mechanisms can be distinguished in citizen opposition and how can these insights help policymakers to foresee such responses and respond to them in a way that minimizes the negative effects of a conflict and enhances the process of policymaking through genuine deliberation?

2) What position do rural communities in the Netherlands take with regard to the potential cultivation of GM crops, how do these responses differ
8.1.1 Citizen opposition as a process

First of all, it is important to recognize, both for understanding citizen opposition and for formulating ways to deal with it, that active expressions of citizen opposition represent the final stage of a longer process. Although the idea of citizen opposition as a process of stages has been recognized for example by Hajer (2003a), Futrell (2003) and Verhoeven (2009), we did not find studies in which a systematic model was developed, based on the idea of citizen responses as a process. The perception of citizen opposition as a process can contribute to understanding both what opposition responses are, how they develop and what factors are relevant at different stages. A process approach also allows for more specific ways to address citizen responses in each stage. The local response model, which was formulated in chapter two illustrates this process perspective. The model will be used in the rest of this section to help explain the different mechanisms that were obtained from the different case studies.

![Diagram](image)

**Figure 8.1**: stages of the opposition response distinguished in this thesis and the different factors influencing such responses.

We distinguished four different stages in the process. A trigger (stage 2) causes citizens to reflect on their general and often implicit opinion (stage 1) resulting in a concrete and more explicit opinion on the specific situation at hand (stage 3). This reflected position then forms the basis for further
development towards active opposition responses in the form of visible behaviour (stage 4). These stages correspond with the classification that Hajer (2003a) and Verhoeven (2009) use of ‘offline’, ‘standby’ and ‘online’ citizens.

We then focused on the factors and influences (drivers) that cause citizens to move from one stage to the next (from offline to standby and from standby to online). Although citizen opposition becomes most visible when it is expressed through action (such as demonstrations, written petitions, or court cases), the perspective of a process shows that this end result has required citizens to go through two transitions: first, the transition from unaware and uninterested citizens to aware and interested ones, and secondly, the transition from aware and interested citizens to active ones. In the following subsections, we will recapitulate the different elements of figure 1 that were studied in the course of our projects.

8.1.2 Stage 2 – It starts with a trigger

Although a trigger is not the first part of figure 1, nor the first stage identified in the process, the importance of a trigger will be addressed first. From the Nimby examples studied in the literature study, we learned that the first transition in the citizen response process is brought about by concrete plans to situate a facility in the vicinity; this functions as an incentive for citizens to reconsider their opinions on that facility and its proximity. At the same time, a trigger-event can cause citizens that have no specific idea on a development to first consider a development or facility. In our theoretical model, we used the general term reflection trigger to refer to events that push citizens to actively (re)consider their position on a specific case.

The importance of a reflection trigger was found in all of the research projects performed in the course of this thesis. The effect of a trigger is first and foremost that it stimulates citizens to question the situation at hand and to take the space and time to actively consider how they perceive a development or planned policy. This reconsideration seems to involve not only the change in relevant facts and circumstances, but also the underlying values that fuel the evaluation of the new or changed facts and circumstances. We have framed these reconsiderations as a dilemma between what is relevant and important at the general (‘us’) level and what is relevant and important in a specific situation (‘me’). ‘Relevant’ refers to the factual arguments, ‘important’ refers to the significance of these facts in terms of value-orientations. The role of values in opposition responses will be further discussed below (section 8.1.3). For the role of the trigger, however, this distinction between facts and values is relevant because it implies that a trigger does more than just inform about a factual development: it causes reflection to take place on personal values.

Many things can function as a reflection trigger. In traditional Nimby situations, the vicinity of a planned development functions as a trigger. But an (external) institution or person (politician) can also trigger reflection on a standing or new policy by publically questioning that policy. Moreover, an event that shows the detrimental effects of an existing policy can trigger reflection. Our case study on GM crop cultivation showed that proximity, however, does not necessarily suffice as a trigger: in only one
of the four communities did the (planned) fields of GM crops lead to opposition activities by a group of citizens. Moreover, in that community, the debate was not triggered by the fields itself, but through the subsequent actions of one citizen and a politician of the Green Party. The local ‘organic food store’ functioned as a platform where like-minded citizens could meet and collect their perception on the development and the will to act against it. The actions organised through that platform, functioned as a trigger for other inhabitants of the community. In the regulation on land-use decision-making project (case study 2, chapter 5), citizens were triggered to react to the plans for a local nature reserve by the meetings organised by the initiator and the local government to inform them of the plans. This is an example of how an element of the decision-making process aimed at including citizens can, in fact, trigger opposition to that decision.

Both examples seem to illustrate that a platform for citizens to meet might play a role in the process of opposition. In the GM-case, the platform was created by the organic food store. In the regulation of land-use decision-making case, the fact that many citizens were gathered at the information meetings made these into a platform for citizens to find each other. We found indications that collective opposition activities benefit from a platform where likeminded citizens can find each other in two projects. For a better understanding of platforms as a driver for citizens opposition and the stage in which they play a role, more case research on such platforms is recommended.

What functions as a trigger to some, need not necessarily have the same effect for everyone. Some citizens might not get triggered by certain developments at all, simply because they are not interested in the subject. Moreover, different events can function as triggers for different people. Considering opposition as a process helps to clarify how the interaction between triggered citizens and the government can in turn provide a reflection trigger for other citizens, causing a snowball effect, not only with regard to the level of indignation evoked but also of the number of people joining the debate. Again, community A in the GM case study is an example. Initially, only one citizen seemed to be triggered by the news that local cultivation of GM crops would take place. Along the way, through the mobilization of a politician, other citizens were triggered. These citizens then united in the organic-food store, which then functioned as a trigger to even more people. Also, the fact that only the inhabitants of community A were triggered by the trials with GM crops in the community, whilst the population of the other communities were not, does not mean that citizens of these other communities might not at some point in time become triggered to oppose this activity, for example if a farmer starts to grow GM crops on a regular basis or on substantive amounts of land.

We conclude that, although the findings of our study underline the importance of a reflection trigger, it is hard to predict whether such a trigger event will, in fact, take place. In order to foresee topics prone to citizen opposition, different factors will have to be employed. One of these factors, the value-orientations or worldviews of citizens, will be addressed in paragraph 8.1.5.

8.1.3 From stage 1 to stage 3 – dealing with dilemmas

As shown in figure 1, the reflection evoked by a trigger involves a re-evaluation both of content-
related facts and of applicable values. The fact that a general development or facility becomes a concrete plan adds a dimension to the arguments relevant for the formulation of a position. This extra dimension changes the scope of the issue at stake and thus forces a re-evaluation of one’s position. This shifted scope can also cause dilemmas. Different facts and values can become relevant in different circumstances, causing a dilemma between what is right in the general context and what is right in a specific situation.

Although our empirical research on local opposition movements did not focus explicitly on the role of values, the importance of this factor came up in both our research on the GM case and the regulation of decision-making case (see especially chapters 4 and 5).

Our findings from the GM decision-making simulation presented in chapter 4, showed that citizens make very little use of the information provided to them. Instead, the participating citizens were found to base their position on GM crops on their basic values or worldviews. Unlike what is usually claimed in decision-making processes, namely that emotions and values hinder rational decision-making and should therefore be ignored, the case studies in this research suggested that values or worldviews cannot be ignored because they play an important – and even crucial – role in the individual’s decision making process on an issue. When citizens are asked to put the essence of their opposition to a plan or development into words, they more often than not referred to the threat the development forms for their basic perceptions of what is right or wrong. In the GM case as well as in the case on land-use regulation, citizens expressed very strong worldviews, rejecting ‘new’ nature, a fear of technological innovations, as well as procedural values such as equality and transparency.

In our analysis of these arguments, no distinction was made between emotions, beliefs, values and worldviews. Nor did we distinguish between convictions that, from an academic perspective, can be considered true or untrue (e.g. the argument that GM pollen will cross over hundreds of kilometres was falsified scientifically) - whereas what citizens believe can be factually wrong, guiding values cannot be wrong in our perspective. Moreover, even factually incorrect convictions can be an expression of a value under threat. Values are always in competition with other values. Dealing with values is a question of prioritization instead of distinguishing good values from bad values.

We found that the motivation for citizens to oppose something more often than not originates in a value or worldview that is threatened by the development. When values are (believed to be) jeopardized, citizens start speaking up (see chapters 4 and 5). Values seem to guide not only what we find important, but also seem a good indicator or what we are (or will) opposed to. Moreover, we found that the importance of values as a basis for a position becomes even more apparent when knowledge on a development is not certain. As we saw in the simulation performed in the GM case, the lack of clear-cut information causes value-based arguments to dominate over evidence-based information.

A specific situation can cause a conflict with several values at the same time. The individual citizens interviewed in the regulation of land-use case each mentioned different values as the motivation for their personal part in the opposition activities, even when they belonged to the same opposition
group. Sometimes, the correlation between a value based viewpoint and opposition to an issue seemed indirect. In-depth probing was necessary to find out why these citizens opposed that specific development.

What can be said about the role of information, given the importance of values in accepting or opposing decisions?

Although the findings of the simulation held in the GM case alone gave us reasons to doubt that more or better information will lead to more widespread acceptance of a decision, further insight was gained on different ways in which activated (stage 3) and non-activated (stage 1) citizens use information. We found activated citizens to be more likely to use the information provided to reinforce the position they had taken towards the issue, while inactivated (unaware and uninformed) citizens used the information to learn about important elements of the debate on the subject. In the case of GM crops, participating citizens that had no previous knowledge on the subject, were found to discuss safety distances between GM and non-GM farmers, possible effects on health and the environment and potential advantages of the technology. Although the arguments they used in the discussions did not reflect the arguments provided in the information, the information did seem to provide topics or elements essential for the decision-making on the subject. The simulations thus functioned as a means to stimulate problem-structuring (Hisschemöller & Hoppe, 2001) or second-order learning (Fischer, 1990).

Citizens who were already aware or activated on the subject were found to select those arguments from the information that bolstered their position. Here, again, values played an important role: in several cases, information that countered their value-based perception was explicitly set aside as ‘untrue’. One example is the way in which citizens dealt with the information on seeding-out distances. Dutch academic empirical tests in 2006 and 2007 showed that outcrossing of GM maize pollen at distances of 25 meters stay below the 0.9% threshold of EU labelling. At distances of 250 meters, the admixture (even) complies with the 0.1% threshold required by organic farming organisations (van der Wiel & Lotz, 2006). This information was part of the information portfolio presented to the participants. Citizens who seemed critical of the GM technology referred to respect for nature as a prevailing value and criticised the academic results (“this cannot be true if Sahara sand reaches The Netherlands”).

Active citizens in community A (GM case) as well as citizens interviewed in the project on regulation of land-use decision-making reported that limited information or information haze did play an important role in the process of active (re-)consideration of the issue following the trigger event. In that stage they actively searched for information on the subject. The information they found provided further fuel for their awareness or suspicion of the projects that the local government was planning in the nearby nature reserve.

Summing up the findings in our empirical research on information, it seems that triggered/aware citizens reflect on their position in a specific situation by setting out their dominant values against the
available information. If the facts, that are presented, fail to inform, or if they oppose their dominant values, the information is more likely to be ignored or set aside, and values prevail in formulating a position. Therefore, we suggest that - if true deliberative governance is the aim - it is of importance to investigate and take account of the values and worldviews that can come under pressure by a development. Without the inclusion of the values underlying citizen perceptions, decision-making will be reduced to discretionary governance.

But there is more.
We have also seen that value orientations are dynamic and can lead to conflict. Whereas some people value nature over technology, for example, others value technology over nature. This basic difference in perspective can give rise to conflicts, not only between people with different dominant values, but also within one person, when different situations cause different values to be dominant. Acknowledging this dynamic aspect of value-orientations helps to explain why one person can have different opinions on one issue. In order to stress the perspective that all values are valid and encourage the acknowledgement of dynamic positions, we framed opposing values as a dilemma rather than as a conflict.

Interesting about the value dilemma perceptive is that it helps to show how individual citizens are likely to have to deal with these dilemmas. Only few citizens are thought to uphold only one side of a value dilemma. Most are likely to value both sides of a value dilemma to some degree. Different circumstances can cause different sides of the value dilemma to prevail, leading to different and even conflicting positions in different situations. Instead of accusing citizens with such dual or shifting positions of inconsistency, uncovering these dilemmas can provide possibilities for finding a shared position or solution to a problem.

This perspective on citizen opposition implies that deliberative governance should take into account not only the values that are relevant and dominant at the time, but also potential shifts in these values (over time, or according to the context). We suggest using value-pairs as a means to keep track of both dominant as well as subdominant values and to find situation-specific fair compromises. This suggestion is further discussed in section 8.1.5.

8.1.4 Moving on: the role of participation and social cohesion

In addition to the investigation of the role of information, and our findings on the role of values, we investigated the role the decision-making procedure (citizen-participation) and social cohesion play in citizen opposition.

From the literature as well as the initial case study on GM crop cultivation, we concluded that the process that the government uses to come to decision-making forms one of the most essential (non-content-related) factors that influence citizens to oppose a decision. In the regulation of land-use decision-making case, we tried to gain more insight into the role the decision-making procedure plays in activating citizens.
We found that interaction between citizens and governments seems to be a factor of ongoing importance throughout the process. It has already been mentioned that – next to a platform for aroused citizens to meet and get organized – the way in which a plan is introduced or communicated to citizens can form a powerful trigger to raise awareness and arouse citizens. In addition to this, an authoritative response by the government, or more precisely the absence of (re)deliberation of negative perceptions or opposition by citizens, seems to be a second important factor in the development of a negative position into active opposition. The governance process itself thus can function as a trigger as well as an enhancing or reducing factor in the stages following the trigger. Our findings show that essentially this double function of the decision-making procedure can be problematic. In the cases we analysed in chapter 5, the involvement of citizens was organised in such a way that citizens felt that they were being informed and asked for their agreement at the same time: they concluded that the decision had already been taken and that the authorities were merely estimating the level and content of possible disagreement. Thus, the main effect of the information meetings that were held was that the citizens - who had been activated to participate, but were denied a dialogue and a role in the final decision - were pushed towards active opposition. We cannot ignore that there seems to be a mismatch between the decision-making process the government goes through and the awareness process through which citizens respond to that decision. From the perspective of citizens, the beginning of their decision-making process on the acceptability of a project corresponds with a stage in which relatively concrete decisions on the project have already been made by the initiator/government. In other words, a time gap seems to exist between the decision-makers and the community members who feel affected/involved by the decision. This gap subsequently causes several other gaps to emerge. Possible gaps include a knowledge-gap between citizens who are only just beginning to develop an opinion and collect relevant information and the decision-makers who have spent a lot of time on the matter already. Also a deliberation-gap looms, as citizens want to discuss basic assumptions behind the project, such as the general need and necessity of the project, while the stage of development of the project does not allow for a discussion of such aspects. In chapter 5 we analysed how the Dutch law's on governmental decision-making contributes to the mismatch between citizens and initiators/government. In Dutch legal terms, citizen involvement in governmental decision making only starts with the presentation of a draft decision. We realise that this is not the first study to stress the importance of citizen involvement in earlier stages of the process (see for instance in the Netherlands the recommendations of the Commissie Elverding “Sneller en Beter”), but our findings on the importance of a trigger lead us to conclude that an earlier inclusion by itself will not necessarily enhance the deliberative aspect of the decision-making, as untriggered citizens lack the sense of urgency that motivate them to participate. Citizen involvement prior to a trigger event is thus unlikely to be effective. Moreover, even if untriggered citizens were to be included, our findings give reason to believe that, since they have not gone through a process of active re-consideration of their position (both in terms of facts and values), their input might differ substantially from their position once they have become triggered and have re-evaluated their position.
An additional finding on the decision-making procedures, that might play a role as incentive for citizens to oppose a development, is the character of the initiating party. In the GM crop cultivation case, participating citizens stated that according to them the national government was the party responsible for making decisions on the issue. Acting against decisions of the local government or individual farmers who want to apply the technology was not perceived as an option by most. In the regulation of land-use decision-making case, citizens were fuelled in their anger on the decisions made for a local nature reserve, because it was made by ‘some national government official’ who they considered to have no knowledge of the local situation.

We were not able to demonstrate that a higher degree of social cohesion (between individuals belonging to one community) was correlated with a shared perception on a topic (such as a GM-free community). We did find some indications that social cohesion is important in the final stage of the opposition response: whether a negative position transforms into action and what type of action taken. In both case studies on local opposition, we found some evidence that social cohesion prevented individual citizens from opposing a project carried out by a local inhabitant, and influenced the means through which citizens express their discontent. In the GM-case, the fact that the owner of a nearby farm, a person that they had known for years, would decide to cultivate GM-crops was considered very different from the a situation in which a non-local company would decide to grow such crops on community grounds. Direct familiarity with the initiator seems to reduce the incentive to act against him or her. Furthermore, citizens interviewed in the regulation of land-use case reported that they experienced massive pressure from the community to stop their opposition activities. These citizens were constantly aware of the way others in their surroundings perceived their activities. Social cohesion might thus not only prevent, but also reduce opposition activities. These findings were not compared with the pressure citizen-groups in urban areas experience to their opposition activities. Given that opposing citizens are generally considered a nuisance, more research is needed to investigate the role of social cohesion.

8.1.5 And back to the beginning (Stage 0) – Value-pairs to foresee societal debate

From the insight that values are essential in the development of opposition movements, we concluded that societal conflict is more likely to develop when a policy (initiative) infringes on the moral perception of potentially affected citizens. Foreseeing issues of potential societal opposition in individual policy decisions seems practically impossible, as it would imply questioning citizens about their moral considerations for each policy that is developed. It becomes even harder to ask citizens on their moral considerations for policies or technologies that are yet to be developed. We therefore suggest assessing citizens’ moral perspectives at a more basic level of known recurrent values-pairs in discourses underlying a range of issues prone to public debate. Although a simplification of reality, the benefit of such an approach is that the range of possible arguments and opinions that citizens can develop against a future policy is brought down to a limited number of pairs of basic values. In the cases presented in this research, such pairs of basic values were formulated with regard to
animal issues. These indications of what is of (moral) importance can be set out against developments in society (science, technology, demographics, policies) in order to provide policymakers with an indication of whether a development might infringe on (dominant social) values and subsequently might result in societal controversies.

Consistent with the idea of value dilemmas, dominant values were paired up with a counterpart to form value-pairs. This visualises not only what is currently considered important, but also what is considered less important (and might be important in other settings or a different time). The added value of working with such pairs is twofold:

1) We assume that most citizens are not attached to one side of a value-pair but, in line with the flexible perceptions in Nimby responses, value both sides of a value-pair (though not necessarily equally). The results of citizen positions in the value-pairs that were measured through the questionnaire in the case study on animal issues (case study 4, chapter 7) are in line with this assumption. Most citizens stated that they valued both sides of a value-pair, with only a slight preference for one or the other side. An expected consequence of such an almost equal distribution of importance between values, is that the technically non-dominant value can become decisive in a specific situation. Insights into both the dominant, and the subdominant values can help understand the range of potential responses of citizens.

2) We assume that over time, the value perception of citizens can change. What are dominant values now might become subdominant in the future and vice versa. In line with political scientists and policy analyses in which the trend in the perception of what is good politics (left-right; national-international; top-down-interactive) are described as pendulous, we consider shifts in value perceptions to be pendulous as well. Here, the use of value-pairs provides the boundaries between which perceptions can develop. Taking an example of a formulated value-pair from the case studies of this thesis, we can thus anticipate that, at some point in time in the future, citizens will move away from the dominant perception that animals should be valued as subjects, and that valuing animals as objects will become the dominant value. By explicitly acknowledging both sides of a value-pair, shifts can be more easily noticed.

Although we think that working with value-pairs can be beneficial for both understanding and anticipating societal debates, our findings are preliminary. Our understanding of the role of value-pairs in foreseeing citizen perceptions on future policies, as well as the way in which dominant values become less dominant, is still based on assumptions more than empirical results. In future research, we recommend that attention be paid to the uses of these value-pairs. Special attention is recommended on developing systematic ways in which relevant value-pairs for different policy terrains or subjects can be formulated. As a start, we formulated such pairs for the terrain of animal governance.
8.2 Reflections on the future discourse model as a method to foresee citizen opposition

The second part of the main question of this research involved developing a method to foresee citizen responses. This section will reflect on the future discourse model that was developed and on the implications of our findings for future research.

Sub-questions formulated in the course of this part of the research are:

5) On the question of animal testing: what theory-based research model can be proposed to foresee potential public controversies and provide an instrument to deal with these responses in a constructive way?

6) Making use of the model, what issues on the interaction between humans and animals can be predicted to become topics of future public controversies?

The essence of the future discourse model that was developed in chapters 6 and 7 to foresee citizen opposition or societal controversy consists in the incorporation of values. Although the model suggested is still in the stages of early development and could benefit from further empirical application, the limited empirical experience gained with foreseeing future issues of citizen concern, suggests that working with value-pairs could prove to be a useful instrument. It can help to gain insights into moral perceptions that prevail in society.

The benefits of a limited set of pairs of basic values as an indicator for the dominant social values is that it lifts the insights into citizen perceptions above the level of unique opinions on individual issues, policies or developments. Such issue specific opinions are often polled in citizen-perspective research, but have relatively little meaning for other cases. In order to foresee future issues, some form of abstraction therefore seems necessary. At the same time, the selected values must represent the diversity of values relevant for different situations. We see the value-pairs that we introduced in chapter 6 - that emerged during the laboratory animal experimentations case - as a starting point for formulating additional (or separate sets of) relevant value-pairs in other terrains. In the project on the animal issues governance, we added an additional value-pair, namely that of respect for nature versus the right to economical entrepreneurship. This value-pair seemed relevant when discussing for example the space that needs to be available for wild animals and the effect farmed animals can have on nature, but not for debates on laboratory animals.

Measuring citizen positions in value-pairs repeatedly over time, instead of measuring a position towards separate values, is that it not only shows movement between dominant and subdominant values, but also provides a direction for the movement. A declining value of one side of the pair implies that the value on the other side of that pair is becoming more important at the same time. In order to foresee topics that could become issues of citizen opposition, or at least of societal debate, we consider it useful to measure the positions of citizens on a basic set of value-pairs over time. The measurement of such value-pair positions could for example be incorporated in the continuous...
research on citizen perspectives performed by the Netherlands Institute for Social Research. We are not suggesting that insights in citizen positions in these basic value-pairs can replace the effort any administration will need to make to understand the values that are relevant for individual policy decisions. Some knowledge on the general moral position of inhabitants can however provide guidance in the changes that take place in society at a moral level. These insights can be useful in the planning of (long-term) policy.

For the identification of future issues of citizens concern or opposition, the future discourse model suggests a triangulation of developments at three different levels. In addition to the moral level, which is represented by positions in value-pairs, we included the level of policies and technologies (regime) and the slow moving level of social demographics (landscape). The added values of this approach is that it acknowledges that societal issues arise from the combination of different developments that come together. Developments in the landscape can create new problems. Such problems can become the subject of citizen opposition, if the available ways to deal with these problems - the available policies and technologies - contrast with the dominant values in society. At the same time, however, dominant values can shift (under the influence of landscape changes), causing existing policies or technologies to become the subject of citizen concern. Focusing on all these developments at the same time, as well as the interactions between them, acknowledges the complexity of society and the nonlinear, dynamic and adaptive ways of future developments. In this way, the suggested model is meant to stimulate future research beyond predictions based on linear models.

8.3 Recommendations to improve deliberative governance

The final part of the main question of this thesis focuses on improvements for governance. As a positive perspective on citizen opposition was deliberately chosen in this thesis, recommendations should be formulated that minimizes the negative effects of a conflict and enhances the process of policymaking through genuine deliberation. This section will address the general recommendations that we distilled from the different results of the different case-studies.

Social science scholars, especially in the field of policy analysis, political science and opposition studies, seem to agree on the added value that deliberative governance can have over traditional directional means of governance to come to effective and legitimate solutions for complex problems (e.g. Hajer 2003b, p.176, who uses the terminology effective and legitimate in this context).

From the results of the case-studies, eight recommendations can be made to improve governance through genuine deliberation. To me, genuine deliberative governance implies two things. First of all, it must include the genuine concerns of citizens; in other words, it must take into account those aspects/values that represent the actual concerns of those having an interest in the process, which should at least be those affected by the decision. Secondly, a very obvious requirement that we found to be less obvious than expected, these concerns should be deliberated – meaning a two-way, interactive exchange of perspectives. Deliberation should not only concern the suggested solutions,
but also the (re)definition of the problem and aspects that should be taken into account when solving that problem.

A. Information is unlikely to limit citizen opposition

*Information has a different effect for citizens in different stages of formation of a response position. We recommend governments to be aware of these differences in their communication with citizens. The availability of reliable information seems most important for citizens who are aware and interested and in the process of position reflection (stage 3).*

We found indications that information has little effect for citizens who are not aware, nor interested (stage 0) in a plan or development. Citizens in this stage are likely to ignore information provided on a subject. Those citizens that had already made up their minds (end of stage 3 – stage 4) chose to neglect the arguments that were contrary to their arrived position. This is contrary to the idea that opposing citizens should be provided with (more) information in order to increase understanding and thereby acceptance of the plan or development. Citizens are most open to information in the stage 3. It is in this relatively short stage of position reflection that citizens search for information. See section 8.1.3.

We recommend to focus information provision on citizens in this stage and to adapt information to the way citizens go about looking for information. Instead of general information campaigns, that are likely to reach many citizens in stages 1 and 4, information might better correspond with citizens in stage 3 when it is easily found and provides an overview of the aspects involved in the decision. Our findings additionally suggest that hazy information can overwhelm citizens, leaving them to refrain from basing their decision on the information. Even when citizens are asked to read information carefully in a research simulation setting, most participants are probably still in ‘information haze’ and did not pick up on the arguments presented in that information or incorporate these in their discussion. Instead, we found citizens in phase 3 to base their decisions on their value perceptions. We therefore recommend to acknowledge the values and different perspectives that can be held on the issue at stake, in the information.

B. Information can function as a trigger

*In addition to informing citizens on (the benefits and disadvantages of different alternatives to) a plan or development, we found that information can also function as a trigger. We recommend governments to use this function of information to stimulate position reflection on a specific project or plan.*

Whereas the simulation on GM did not provide evidence that citizens use information to come to a specific position, we did find that citizens use information to learn about the plan or project, as well as of element of that plan on which an opinion must be formed. This way, information functioned as a trigger and pushed citizens into the stage of active reflection on a plan. The importance of a trigger has
been elaborated on in section 8.1.2. In order to improve deliberative governance, especially on topics with which citizens have had little experience, such as a new technology for example, we recommend authorities to pay attention to the triggering potential of information.

C. Dilemma-framing can reduce conflict

Effective and legitimate governance may benefit from moving away from a rationality–emotionality debate and towards acknowledging that different positions in a dilemma can result in a different point of view on the same issues.

The basic conclusion from our case studies is that citizens are likely to become involved and concerned with governmental decision making when their moral convictions are threatened and they have the feeling that their concerns are being overlooked or not taken seriously (see section 8.1.3). We concluded that the dilemma framing we used in the projects of this thesis fit with the importance of these different and potentially opposing moral convictions. Such a framing refrains from a rationality–emotionality debate and moves towards acknowledging that different positions in a dilemma can result in a different point of view on the same issue. When different positions are no longer right or wrong, but different ways to deal with a dilemma, opposing parties may adopt a different approach to each other, as well as to the issue at stake. The focus groups that were held in the final case study (animal issues), can be considered a fruitful attempt to make such a transition. In these sessions, experts and practitioners that usually only engage in conflict and negotiation were stimulated to refrain from arguing their individual perspectives on the issue and instead move towards a more abstract formulation of topics that are the subject of conflict as well as topics that could become an issue of societal debate in the future. Instead of arguing, for example, the economic need for international animal transportation - versus the animal welfare implications of animal transportation, participants agreed that animal transportation is an upcoming issue of concern. Moreover, participants were able to list aspects that are relevant in this discussion (economic competition, global markets, visibility, welfare) with respect for different positions on these aspects.

A plea for this kind of shift in the perspective of the debate seems to find support in a recent report on societal discontent by the Dutch Council for Societal Development (RMO 2013). The authors suggest shifting the debate to a dialogue on the diversity of concerns and perspectives on the future (RMO, 2013). The method we developed in the projects, especially the value-pairs, can contribute to an effective design to frame a discussion on the diversity of concerns and perspectives in a way that acknowledges plurality of values while at the same time it does not stigmatize (half of) the values belonging to the sub-dominant side of the dilemma. This enriches the right-wrong attitude, to a jointly recognized dilemma of relevant values. A dilemma-framing furthermore encourages governments to consider citizen opposition as serious feedback to policies and plans.
D. Search for the hidden values

Because gut feelings and threatened moral convictions seem to be a driving force in the development of opposition responses, we recommend that policymakers make a real effort to understand the driving values and resulting convictions held by citizens that are affected by the decision and to address these genuinely.

Considering the role we found values to play in opposition responses of citizens, we recommend decision-makers to pay genuine attention to the values underlying the positions citizens take in a debate. Even if the arguments citizens present to oppose a development are factually inaccurate, we strongly recommend administrations or project developers to refrain from the rhetoric straw man strategy to reject the concerns. Instead, we recommend engaging in deliberation with these citizens to make the underlying values explicit and relate these, when possible, to a value-pair.

This recommendation finds support in several recent Dutch reports and studies. The recommendations of the Dutch Council for Societal Development recommendation (RMO, 2013) on ways to address societal discontent, corresponds with this recommendation. The report urges governments to aim at understanding the underlying motivations and perspectives of societal discontent and to use these as the beginning of a debate, rather than the end. On the basis of his empirical analysis of a case of local citizen opposition in The Netherlands, Verhoeven (2009) also encourages policymakers to invest in understanding the underlying reasons citizens have for opposing a policy plan and to be more open to emotional and moral considerations in the debates over these decisions. The recommendation to take citizens seriously finds support in the recent research of the WRR (2012).

Governance should thus include an opening for value-related deliberation and arguments. That way, it can offer an opportunity to address the issue at stake at the proper level of concern and in light of relevant worldviews. Implementing such a method, however, will require training policy-makers, administrations, in short all those who will be involved in the debate with citizens over their concerns, in recognising, analysing, addressing and acknowledging values.

E. Acknowledge the dynamic of citizen positions

In order to genuinely understand citizen opposition, governments are recommended to acknowledge the dynamic position citizens can have towards an issue and to pay attention to the transition that takes place in the positions expressed by citizens. In order to take such dynamic positions into account, we recommend to investigate citizen positions not through one time consultation, but through repeated consultation over time.

In addition to acknowledging that values play an important role in position formulation, we also found that citizen-positions are dynamic (see section 8.1.3). Different contexts can lead to adjusted positions on one and the same issue. Citizens can also change position over time. In order to genuinely understand citizen opposition, these dynamic positions should be acknowledged. Thereby, it is also acknowledged
that the opinion of society on a development cannot be expressed as the sum of those who agree and those who disagree. Citizens are not fixed in a position. Therefore, governments should not treat citizens as if they should remain fixed to a position. This implies that citizen positions should be investigated not only through one time consultation, but through repeated consultation over time. Moreover, based on our findings, we recommend governments to pay attention to the transition that takes place in the positions expressed by citizens. Trends in the context (policy, innovations en demographic landscape changes) provide insights in important factors of that debate and can thereby help foreseeing future debates. Value-pairs could be used as a means to monitor such moral perspectives regularly. It cannot only show how citizens value all sorts of developments now, but also future developments and to what directions these valuations might change. Long term policies that are driven by values different from the dominant set of citizen values will trigger public debate at all domains where these values play a role.

F. Make room for manoeuvre

Acknowledging that positions are dynamic has the added benefit that it provides room for manoeuvre and a strategy out of conflict. Governments are recommended to make room for position-movement and provide the conditions under which these can take place.

We consider that conflict consists of a situation of clashing and opposing positions. Solving such a conflict implies that one of the parties, or both parties, will have to move their position towards the other. If positions would not be dynamic, such movement, or manoeuvre, would not be possible. Acknowledging that positions are dynamic thus provides possibilities for movement. The main question for solving such conflict then becomes: under what conditions are citizens (and/or governments) likely to adapt their position? Governments that intend to solve existing clashes thus have to provide room for position-movement. Moreover, the conditions under which manoeuvre can take place, have to be facilitated.

G. Add a reflection-phase to make room for position re-evaluation

In order to allow for genuine re-evaluation, we recommend that a reflection-phase be added to the decision-making procedure. Such a reflection-period should be included between the moment that citizens become aware of a situation (after a trigger) and the moment in which citizens are included for deliberation.

In chapter 5, recommendations were made as to how the new Dutch regulation on spatial planning could be turned into an opportunity to enhance participatory decision-making, and thereby deliberative governance. From the interviews held for that part of the thesis, we concluded that the lack of opportunity to reflect on a proposed plan caused citizens to doubt the plan itself and the reasons for the government to support or suggest it. Deliberation with citizens who are sceptical is likely to be more difficult than a debate with citizens who are aware and interested, but not distrustful.
of the role they will be able to play in the plan.

Considering this background, we support the initiative in the draft text of the new suggested spatial planning law. This draft will increase the type of decisions to which an exploration procedure applies, a procedure borrowed from the so called Tracéwet. This exploration procedure allows for earlier inclusion of citizens, who can give their opinion on the problem, the possible solutions and the interests that should be taken into account. Furthermore, the administration is required to justify how citizen input is put to use. However, the new exploration procedure is still only applicable to a limited number of decisions, and citizens cannot request that an authority apply this procedure to a specific problem. As such, this procedure does not result in a real shift in power and does not meet the requirement that is in our eyes essential, that is to create procedural room within the decision-making process in which citizens can re-evaluate their position before they genuinely contribute to the deliberation.

As to this last aspect, we recommend adding a phase to the decision-making procedure, a phase that could be referred to as a reflection-phase. This phase should be added early in the process, when there is still room and flexibility to adapt a policy plan or decision. It should however not be included too early, as citizens will only be able to consider their position towards a specific development after they have been triggered. A reflection phase should thus be included after a trigger and re-evaluation of the position. The aim of such a reflection-phase is threefold: 1) citizens will be able to provide better input once they have been able to reflect on a situation and 2) citizens are provided with a chance to catch-up on the procedure through which governments and initiators have already gone, allowing for more equal deliberation. 3) More equal deliberation might generate better mutual trust. In chapter 5 we suggested to make a clear distinction between information-meetings and consultation/deliberation-meetings. Considering that information-meetings often seem to function as a trigger, we suggest that the time in between these two meetings could be considered a reflection-phase.

**H. See the learning potential of actively creating a reflection trigger**

*Considering the importance of a trigger for citizen reflection and thereby the possibility for genuine deliberation, we recommend governments to search for means to create a reflection trigger before one occurs. Requesting active deliberation on subjects before they become issues of societal concern, seem to be one way of creating such a trigger.*

Although this thesis stresses the importance of triggers for citizen opposition responses, we realize at the same time that it is difficult to foresee concrete triggers. In the case study on animal governance, we did find that the setting in which that research was performed was conductive to an open deliberation in a way that acknowledged the dilemmas in that field. The way in which participating experts were asked to discuss potential issues of future societal debate challenged them to go beyond expressing their normal positions towards addressing the key aspects of the debate as well as the drivers (changes in landscape, policies and technology) for that debate. This turned out to be a way in which the dilemmas could be debated and insights shared in a non-conflict setting. Disagreement
between the parties was acknowledged, and there was no intention to solve these disagreements, just a wish to understand the different perspectives. Acknowledging and explicitly discussing the dilemmas that experts and practitioners foresee for the future may contribute to foreseeing both the topics in which potential issues might be triggered, as well as the different perspectives that can exist on such issues, which can lead to clashes or opposition. As a consequence, participating parties seemed to be more aware of the issues at stake at the end of the debate. In most debates, some issues were addressed that part of the participants had not realized (yet) or forgotten. Through discussing the issues, these debates functioned as a type of reflection trigger in the sense that participants were stimulated to think actively of potentially hot issues and the reasons/values underlying them.

The added value of actively creating a reflection trigger before a natural trigger occurs, is that natural triggers often occur in a stage where some of the parties involved have already spent time, energy and potentially money on a specific policy or plan, and are thus not as flexible to genuinely incorporate perceptions of others. Discussing a potential, but still fictional situation, will also allow for a focus on the content-related perceptions, and less on for example the decision-making procedure, which will provide better insights on the potential conflicts over the content of a specific policy or plan itself.

8.4 From local opposition to national protest – reflection on the results and external validation of this research

The first two cases that were analysed in this thesis, consisted of local issues to which local citizens responded. We therefore cannot conclude that the mechanisms that were identified in the first part of the research, and included in the local response model (see chapter 2) will also apply to opposition activities at other levels, such as the national level. In order to get an indication of the potential that the developed models and distinguished mechanisms of local citizen opposition have for application on other levels of citizen opposition, this section will start by comparing our findings with findings in the field of protest movements.

Research on protest movements has mostly been done within the realm of social psychology and focuses on uncovering the motives for citizens to participate in protests. According to Beyerlein and Hipp (2006), one of the most significant theoretical contributions to the understanding of social movement activism was made by Klandermans and Oegema (first in 1987), who described a social movement as a sequential process. In this process they distinguished two stages. In the first stage, citizens who are part of the ‘mobilization potential’ of a society have to commit to the goals and means of the movement. Then, in the second stage, the commitment has to be transformed into actual participation (Beyerlein & Hipp, 2006).

People with mobilization potential have a positive attitude towards the means and goals of a social movement (Klandermans & Oegema, 1987). Recruiting those parts of society that have this mobilization potential, then motivating these people to participate and finally reducing the barriers that may keep
them from actually taking part in protest movement activities are mentioned as essential elements for participation (Klandermans & Oegema, 1987).

Klandermans and Van Stekelenburg (many different publications, including Van Stekelenburg’s PhD thesis in 2006, and a recent publication in 2013 by Van Stekelenburg & Klandermans, 2013) performed literature studies, interview and survey's on the characteristics and reasons for (potential) participants is social movements to participate in Dutch demonstrations. They identified motives such as grievance, efficacy, identity, emotions and social embeddedness. Moreover, they developed a model containing four of these explanatory motivations. They concluded that a threat to the interests and/or the values of a group creates anger, which then increases the chance that they are willing to participate in protest. That willingness can then be used either to express their anger or protect their interests or values.

These stages, as well as the idea that motivation is to some extent explained by a threat to people’s interests or values, resemble the transitions and factors that were distinguished in the local response model, namely the trigger that brings about a transition from unaware and uninterested citizens (stage 1) to aware and interested ones (stage 3), and the transition from citizens who are aware of the situation to ones who decide to act against the proposed plan (stage 4: aware, interested and active). However, our model does not necessarily lead to participation in a protest movement. Citizens can also decide to refrain from action, even if they strongly disagree with a plan or development. Additionally, our model includes citizens who become active in all sorts of opposition activities, not just protest movements.

Klandermans and Oegema’s (1987) and later van Stekelenburg’s (2006) research on social movements focuses on the motivation for citizens to join an existing movement or participate in activities that have already been planned. This perspective implies some form of mobilizing activity such as campaigning and recruitment to be carried out by some other entity or actor. The case studies of our research had a slightly different perspective, namely that of (local) citizens and was focused on the likelihood that and the process by which these citizens move from ‘off line’ to active opposition to local developments.

The citizens of Klandermans study would have to know about a scheduled protest event and have to come to a decision on whether or not to participate in that event. The citizens we focused on had to decide whether their discontent with a decision was strong enough for them to act. Our research did not differentiate between opposition activities that citizens organised themselves, or participation in activities that were already planned by others.

Differences also exist in the start of the process, in that knowing about a policy plan or knowing about a scheduled opposition action might not require the same amount of agitation or triggering. Like Klandermans and Oegema (1987), we found that citizens need to go through two essential transitions before they actively oppose policy decisions. These parallels could imply that the local response model could also apply to larger-scale opposition. The stages and transitions that we distinguished in our local response model may even provide a better framework for analysing forms of citizen protest in absence of an actor initiates the actions, for example the Occupy movement.

At the same time, the focus of social movement scholars could be used to further develop the final
stage of our local response model (stage 4). Such a version of the model could include a differentiation between citizens who decide to initiate opposition actions and citizens who decide to participate in activities organized by others. Protest marches, more than petitions and court cases, can escalate into aggression. It is especially these escalations that are perceived as a negative aspect of protest by society. Both of the topics in our research - GM as well as animal welfare - are issues that can lead to aggressive acts. However, actions of that sort seem not to be performed by local citizens, but by organized action groups. Our study did not include cases in which citizen action did, in fact, escalate. However, our local response model can also be applied to forms of citizen action that are likely to escalate. A recent study on four European cases of escalating mass citizen behaviour, done by the University of Groningen, showed that the strongest predictor of societal anxiety is the formation of a group identity, based on the one hand on structural distinctions between members of that group and 'others', and on the other on shared moral emotions. Again, this study showed that values under pressure are an important predictor for opposition (Postmes et al., 2013). Whereas Postmes et al. stress the importance of shared moral emotions within a group of opponents, our findings showed that the moral component and/or emotions do not necessarily have to be shared. Within one group of citizens opposing a decision, the underlying interests and motivations represented a wide range of values. Even so, these citizens were united in their incentive to act against a policy-plan/decision that threatened the various underlying values.

The case study on mass protest behaviour by Postmes et al. (2013), described above, mentioned the social composition of a community or neighbourhood as a factor that can increase the likelihood of citizen opposition, especially in areas where social networks are tight. This theory needs to be nuanced, as the initial insights we gained on social cohesion during our case studies showed that these networks can function as a reducer of the incentive to come into action, and can also affect the type of action performed. Even so, the underlying force of social cohesion could be the same: where social networks are tight, the interests and perspectives of others in that network seem to be a more relevant factor in the decision-making about opposition.

8.5 Recommendations for further research

A substantive part of the research effort in the case studies presented here was devoted to the development of several theoretical models. Although our own case studies showed the analytical and conceptual benefits of these models, so far only a limited number of (empirical) studies have been done in which they have been applied. Further research in which these models are used is thus recommended to validate them against other contexts. While the local response model was based on theoretical insights from international studies, we have so far only applied it to Dutch cases. Application of the model in non-Dutch cases is encouraged as a contribution to the generalization of the model. As was already mentioned in the previous section, additional research is also recommended in which the ‘local-response model’ is applied to non-local campaigns, i.e. protest movements against national
policy decisions or issues.

Further research to develop the ‘future discourse model’ is also recommended. One of the aspects of the model that requires further development is the formulation of relevant value-pairs for different policy terrains and subjects.

As to the mechanisms behind citizen opposition we found that triggers are important to activate citizens about a subject. In order to stimulate genuine deliberation on a subject, citizens need to be triggered on the subject. For policymakers who want to enhance deliberative decision-making, it could be of interest to gain further insights in ways and means that can work as a **reflective trigger** for potentially interested or affected citizens. In the regulation of land-use planning case, citizens referred to an information meeting as a trigger-event. Further research is recommended on means through which potentially interested citizens can be reached and activated for a subject. In that context, it could be of importance to investigate conditions under which the triggers works constructively or destructively on deliberative governance.

In the GM-case, as well as in the case on the regulation of land-use decision-making, active citizens mentioned that they would not have been able to unite if it had not been for a place or event functioning as a platform. In the GM-case, citizens referred to the local organic food store as a place where likeminded citizens could meet. In the regulatory case on land-use planning, citizens mentioned that the information meeting functioned as a platform: those citizens who were critical of the plan noticed each other and met up after the meeting. Further studies in this area could focus on this aspect to see whether a platform is indeed necessary to unite citizens and to stimulate the transition from aware(stand-by, stage 3) citizens to active citizens (stage 4).

In this thesis, we deliberately chose to focus on citizens. As a consequence, no attention has been spent on the perspectives of other parties and the role they play in the opposition procedures. Governmental authorities and policymakers can be mentioned as most important other actors that have not been the focus of in this research.\(^1\) The implications of the case-studies for policy and the recommendations made in this chapter to improve deliberative governance, were thus primarily formulated from the perspective of citizens. In further research, it would be recommended to focus on the role of government/policymakers in citizen-opposition reactions to policies. Moreover, it is recommended to investigate whether the implementation of the recommendations made in this thesis are feasible for policymakers. There are different circumstances possible that limit the possibility policymakers have in policy-decision making procedures. Policy decisions that are made at the European level for example, limit the potential policymakers or governments have to adapt a decision. Monetary considerations can also limit the potential policymakers have to enhance interaction with citizens in decision-making procedures. Further research is recommended on limitations and barriers for governments to adapt policy decision-making to a genuine deliberative process. Additionally, it would be interesting to

---

\(^1\) Governments were however involved in most of the projects included in this thesis, as the commissioners of the projects. In the project on future issues on animal governance, civil servants of the ministry of economic affairs, agriculture and innovation were involved in a focus-group and feedback session on policies on animal-human interaction. As such, although our focus was not on the role of governmental authorities, some reflection on the results of our research did take place.
investigate the circumstances under which genuine deliberative decision-making is beneficial for policymakers.

In addition to the role of policymakers, the role of initiators of a plan or development could be included. Although these recommendations were focussed on policymakers, citizens can also oppose decisions made by an individual or a private actor. Farmers in the GM case were an example of such actors. Research is recommended on the role of such private initiators and whether the way citizens perceive decisions of a government differs from the ways in which they perceive decisions from a private actor. In the GM-case we concluded that social cohesion decreases the chance that citizens will perform citizen opposition activities. It thus seems likely that a local initiator would face less opposition than a non-local initiator. Moreover, it would be interesting to see whether citizens have different expectations regarding private actors than regarding governments and whether or not those expectations affects citizens reaction to private initiatives.
References

A


B


References


D


E


F


G


H


J


References


L


O

P


References


Snellen, I. T. M. (unpublished). Toekomststudie vanuit een hedendaags en methodisch perspectief’ (future studies from a contemporary and methodological perspective), presentation held at the WRR symposium ‘25 jaar later’ (twenty five years later) on 17 september 2004.


Van Dam, R., During, R., & Salverda, I. (2008). Burgers en Landschap deel 2 - Trends en theorieën over betrokkenheid van burgers - Quick scan ten behoeve van de Agenda Landschap, Wageningen (NL): Alterra Wageningen UR.


the focus from the planners’ perspective to fairness and community commitment. *Journal of Environmental Planning and Management* 52(2): p. 217-236.


Z


Summary

This thesis addresses the subject of citizen-opposition to decisions of a governmental authority. Citizens can oppose all sorts of decisions made by their (democratically elected) government bodies. Land-use planning is one of the policy-territains in which virtually every decision seems to lead to citizen opposition, but examples on other subjects are also abundant. Citizens can use different means to express their discontent, such as demonstrations, petitions or legal procedures and can target national policies or local initiatives. This thesis aims to deepen the understanding of how these citizens’ protests come into being and how these processes develop.

The way in which citizen responses to (policy) decisions are perceived, depends on the role they are considered to have in (policy) decision-making. This role and the relationship between citizens and their government are not straightforward. Inclusive forms of policymaking (governance) are becoming more and more popular. Important reasons for this popularity are that the problems policymakers have to deal with are becoming increasingly complex and scientific knowledge can no longer provide certainty. Against this background, it has been argued that deliberative forms of policymaking – in which policy is considered a ‘learning strategy’ - are the only feasible strategy. Citizen involvement is considered necessary, not only for the legitimacy of the policy, but also to structure the problem and the interests involved. Whereas their participation is thus increasingly encouraged in (interactive) policymaking, the influence that citizens seek through active opposition is criticized. Opposition to local initiatives, commonly referred to ‘Not-In-My-BackYard’ (Nimby) protests, are generally perceived as a negative phenomenon. Angry citizens are perceived as ‘bad’ citizens, who place their own interest above that of others or society at large. In this thesis, we studied whether citizen opposition responses contain elements that can enhance deliberative governance.

In the course of four projects, performed at the Athena Institute, we focussed on different aspects of citizen opposition to governmental decision making or policies. This thesis presents the findings of these projects. It takes a constructive perspective on citizen opposition, viewing it as a phenomenon that can provide a positive contribution to policymaking.

The objective of this thesis is twofold:

1) To gain deeper a understanding of citizen opposition responses and the mechanisms that drive them and

2) To propose a theoretical model that can help foresee issues that are likely to become the object of citizen opposition and respond in ways that reinforce the positive aspects of the phenomenon.
The main question of this thesis is:

*What characteristic mechanisms can be distinguished in citizen opposition and how can these insights help policymakers to foresee such responses and respond to them in a way that minimizes the negative effects of a conflict and enhances the process of policymaking through genuine deliberation?*

The first chapter, the introduction, gives a theoretical background on the process of policymaking and the developments that have taken place in Dutch society that influence the role citizens have in the policy-making process. It also contains the demarcations of the thesis and clarifies some of the assumptions and perspectives chosen. As one of these perspectives, we look at citizen opposition responses as a *process* that develops over time and under the influence of different driving factors. We follow Hajer (2003a) and Verhoeven (2009) who framed citizen opposition as a process of different *stages*, and we wonder how citizens move from one stage to another.

The thesis is divided into three parts. The first part (chapters 2 and 3) focuses on theoretical aspects of citizen opposition and the development of models to analyse different forms that it can take. The second part (chapters 4 and 5) contains a detailed discussion of the structure of citizen opposition and presents the results of empirical studies on the role of (non)-content related factors. The third part of the thesis (chapters 6 and 7) is dedicated to methods for foreseeing societal conflict. Chapter 6 presents (the development of) a model to predict future issues of citizen opposition or societal debate as a means to improve constructive deliberation. Chapter 7 shows the results of one of the first experiments performed with the model.

In order to gain insights into the variety of citizen opposition responses and the mechanism that fuel such responses, a literature study was done on one of the most well known forms of citizen opposition to local initiatives, the Not in My BackYard (hereafter: Nimby) response. Chapter 2 presents the results of this literature study and answers the question: *What types of responses can be identified in the Nimby-literature and what factors and mechanisms are found to be influential for such responses?* Nimby literature was chosen because it reflects a type of citizen opposition that is common, well documented and incorporates most vividly the uneasy societal perspective that exists on citizen opposition. The aim of the literature study was to understand what we are really talking about when speaking of citizen opposition and to develop a theoretical model that would allow for systematic research on not only Nimby responses, but on citizen opposition in general.

First, we deduced from the literature that it contains no clear consensus on what type of opposition the acronym Nimby stands for. Authors seem to disagree on several aspects of the phenomenon, making it difficult to do structured research on this form of citizen opposition. To encourage a more constructive approach to Nimby and a more academic use of the concept, we suggested a working definition of Nimby. In addition, we formulated a quadrant model, in which different citizen responses
(accept – oppose) are set out against the distance to proposed developments (nearby – far away). This model illustrates the dynamic character of the Nimby position: the combination of acceptance of a development when it takes place far away and rejection of the same development when it is planned nearby. We also designed a local response model, in which different citizen-reactions to a development are presented as a process of four stages: (1) a general attitude or feeling (= implicit position) towards a facility or development; (2) a trigger event; (3) reflection on the position towards the specific facility in the community; (4) the expression of a positive or negative position by overt (opposition) behaviour. The central perspective adopted in the local response model is that of a dilemma; the re-evaluation, made in stage 3, is caused by a dilemma between different interests at different levels. In the realm of ethics, a dilemma is described as a conflict between two legitimate ‘goods’. In this case, the dilemma exists between the general public good (democratic decisions, betterment of society or the environment) versus one’s own good (privacy, acquired privileges, quality of life and the right to protect one’s own interests). In other words, Nimby refers to a dilemma between an individual (‘me’) and a collective (‘we’) perspective on advantages and disadvantages in the broadest sense. The final part of chapter 2 addresses factors that influence the ‘me’ and ‘us’ perspective of the dilemma and thereby enhance or reduce opposition.

We applied these models in the first empirical study, that focused on the (possible) reaction of the inhabitants of Dutch rural communities to commercial cultivation of genetically modified crops (GM crops) in their vicinity. **Chapter 3** presents the findings of this case study, for which we formulated a second sub-question: What position do rural communities in the Netherlands take with regard to the potential cultivation of GM crops, how do these responses differ from the national debate and can factors be identified that help explain these differences? This case study was commissioned by the Ministry of Agriculture, Nature, and Food Quality and the Ministry of Housing, Spatial Planning and the Environment jointly. In view of the fact that the debate on genetic modification (GM) is known to be persistent and polarized, the ministries felt a need for more insight into the position of non-farming inhabitants of rural communities (‘the neighbours’) in this debate. When the European Union allowed the commercial cultivation of several GM crops, it was expected that Dutch farmers would apply the technology. This gave relevance to the debate on the (dis)advantages of the technology as seen by those directly confronted with this cultivation: the inhabitants of rural communities.

15 focus-groups were held to debate on this technology with citizens of four rural communities. Communities were selected in which test-field with GM crops had been situated. Citizens were invited by way of an open invitation and were uninformed about the technology they would discuss prior to the focus group. With the exception of one community, two sessions were held with each group of citizens. The first session consisted of an open discussion on any relevant and important developments in the community as seen by the participants. The second session was completely dedicated to GM crop cultivation. The arguments used by citizens in both of these meetings were compared with known ‘me’ and ‘we’ arguments from the national debate on the technology.
GM was found to be of no special importance in most communities. The topic of GM was mentioned spontaneously in only one community. In all other groups, GM was not mentioned and – when introduced - given very little priority compared to other issues. Although test-fields had been located in all of the communities, most citizens were unaware and unfamiliar with the technology. When pushed to discuss the idea, all groups put forward positive and negative arguments and most of these arguments resembled the arguments in the general ‘we’ discussion. None of the communities took a Nimby position towards GM crops. Groups who did oppose the cultivation of GM crops in their community seemed to disagree with the technology in general, not its local application as is the case with a ‘Not in any backyard’ (Niaby) position. Interestingly, we found that some citizens used an argumentation resembling a ‘reverse Nimby’: acceptance of the application nearby, but no specific interest, or a negative perception of the technology in general. These citizens stated that they would rather have the application of the technology take place within their community than somewhere else, as they could then have some influence on the way it was done.

Although participants were explicitly asked to discuss the local cultivation of GM crops, many of the arguments in all of the discussions revolved around the introduction of GM products in the food chain, i.e., GM foods and the consequences for human health. In fact, the objection to the cultivation of GM crops often seemed to be based on a dislike of GM foods.

As for relevant factors that explain the differences in the national and local debates, we found support for the idea that social cohesion in rural communities seems to diminish the chance of active local protest against GM cultivation of crops. Social cohesion makes it more difficult to express opposition behaviour: standing up against the development implies confronting members of the community. Another factor that diminishes the incentive to start local opposition seems to be procedural: inhabitants see little point in opposing cultivation in their own community, when this has no effect on farmers in neighbouring communities. Local opposition therefore comes down to a symbolic act: voicing an opinion more than blocking the development.

From the literature analysis performed in chapter 2, two factors were identified as important for citizen opposition responses: information on the projected policy, plan or project and the decision-making process through which a decision is made. These two factors were studied in chapters 4 and 5. Chapter 4 addresses sub-question 3, which is: How do citizens use information in their decision to accept or oppose the local cultivation of GM crops, and which factors can be identified that explain the decision-making?

The role of information was investigated in the GM-project. Traditionally, information and knowledge are considered to increase the acceptance of a policy or development. Rational decision-making theories are based on the idea that information increases the understanding of a decision and thereby its acceptance. We combined Rogers’ (2003) model on innovation decision making with the concepts of ‘uncertain risk’ (van Asselt & Vos, 2008) and ‘information haze’ (Futrell, 2003) and hypothesised that decision-making processes in situations where available information is contradictory or incomplete will
Summary
differ from rational decision-making. The case of GM-crops provides a good example of an innovation that is associated with unknown risks and contradictory information. The data for this project were collected in a simulation that was carried out in the second round of focus groups of the GM-project. Participants were provided with information on GM-crop cultivation and were each asked to highlight the arguments that they considered relevant. Subsequently, participants had to decide unanimously on the question whether their community should become a GM-free zone.

Both the arguments highlighted in the texts and the arguments used in the debates were analysed. We concluded that citizens make little use of the information they have been provided with in formulating arguments for the group discussion. In all groups ‘text arguments’ were outnumbered by arguments from ‘other sources’. Moreover, we noted that participants in all groups followed their emotional commitments, feelings, values and worldviews, instead of the information provided. We concluded that in a situation characterised by a multitude of contradictory arguments, uncertainties and the absence of a specific trustworthy source, citizens use their values as a compass to determine their perspective (and make a decision) on a new technology. Decision-making processes do not start with a blank sheet but are influenced by every individual’s inherent value orientations. Early in a discussion, participants were already expressing emotional commitments reflecting these values. When they were asked to reflect on the simulation, values were also referred to as an explanation for the decision. These values were not only a dominant factor in the decision-making, they were also found to be resistant to arguments contradicting the specific worldview. Moreover, participating citizens agreed that they could not convince each other at the level of value-positions, leading many groups to decide by a majority of vote (instead of the unanimity we had asked for).

Chapter 5 zooms in on citizen participation in the policy-making process. Many studies included in the literature review of chapter 2 mentioned this factor as important for the development of citizen opposition. Chapter five presents the results of a case study on the Dutch rules for citizen participation in land-use decision-making. The sub-question formulated for that case-study was: how do the (legal) possibilities for participation in policy decision-making and the way these are actually put into practice affect the response of citizens to the decisions that are reached and what recommendations can be made to improve policy-decision making in the proposed new law on spatial planning?

The Dutch regulation on land-use decision-making was analysed and compared with criteria for ‘successful’ citizen participation that we distilled from social science literature. By supplementing the basic insights on the importance of citizen participation presented in the literature study in chapter 2 (Nimby literature) with specific social science studies on citizen participation, we came to three criteria for ‘successful’ citizen participation. First of all, authorities should take the procedure seriously: all participants should be clear on the objective of the participation and the role that citizens will have in it. Secondly, the authorities should take the actual input seriously: the involvement of citizens should start in an early stage and continue throughout the process. And finally, authorities should be serious about the role citizens play in decision making: a decision making procedure should be open to all
who feel the need to participate (inclusive) and some form of transition of power to citizens needs to take place.

A legal perspective was then taken, to analyse the rights and duties that citizens in the Netherlands currently have in governmental decision-making on land-use planning. From this analysis we concluded that – although several reforms have taken place to improve the decision-making procedure - inclusive, timely and influential citizen participation is currently not guaranteed. Most importantly, the current regulation of citizen participation excludes people who might reasonably want to be involved and it lacks some form of transition of power to participating citizens. It is up to the authorities to decide who is allowed to be involved in the procedure and what citizens may give an opinion on.

Focus groups with experienced citizens supplemented these insights with information on the way these laws were applied in their case. These group-interviews revealed that information meetings (during which the authorities presented a plan or project) often work as a trigger for opposition and at the same time as an encouragement for attending citizens to form an opinion on the subject at hand. Again, we found that citizens base that ‘opinion’ on their individual value-frame or worldview. The interviews also showed us that the concept of ‘transition of power’ need not be taken literally. Citizens are not necessarily striving for the actual power to decide. The power transfer that they want is far more the ability to influence the way a decision is reached and the ability to contribute to that process in terms of requesting certain aspects or consequences to be investigated or taken into account.

Based on these findings and the analysis of the draft spatial planning act, we welcome the main change that is suggested in that law, i.e. expanding the application of an exploratory procedure to cover a wider range of decisions. The advantage of such an extended preparation phase is the inclusion of a wider range of interests, including values, at an early stage of participation. Moreover, based on the idea that citizens have to be activated to participate in the process, we see the preparation phase as an important tool for early active engagement of citizens and as a stimulus for them to form an opinion. Activating citizens, without giving the impression that the decision has already been taken, requires a balance between raising a clearly defined issue and remaining flexible about possible approaches and solutions to that issue. In order to maximize the effect of an exploration phase, we recommend that it be developed further, for example by prescribing strictly separated information - and consultation meetings. That way, citizens can take the time to re-evaluate their position and form an idea on a plan, before they are asked for their opinion. Finally, in order to stimulate power transfer, we recommend to that an obligation for administrative bodies be added to the spatial planning act, to report to the citizens (one and all) how the input of citizens is handled and how it is weighed.

The third part of the thesis (chapters 6 and 7) presents the theoretical and explorative effort that was made to develop a systematic method to anticipate issues that are likely to become the subject of societal controversy or citizen opposition. In the course of two case-studies, both focusing on the relationship between animals and humans, we developed a method to foresee issues of future societal discourse. The development of this model is presented in chapter 6. Chapter 7 describes the
first empirical attempts to anticipate societal discourses in the field of animal governance. For this part of the research, the following sub-questions were formulated:

Sub-question 5: On the question of animal testing: what theory-based research model can be proposed to foresee potential public controversies and provide an instrument to deal with these responses in a constructive way?

Sub-question 6: Making use of the model, what issues on the interaction between humans and animals can be predicted to become topics of future public controversies?

The model that was developed and applied in these final projects was based on the following assumptions: 1) although the future is uncertain, some developments in current society will have long term effects and thus contain predictive power and 2) citizen perceptions are energised by (clashing) values and worldviews, that can change over time. In order to foresee future issues of societal debate, insights are not only needed on the developments that are likely to take place in a specific policy domain or practice, but also on the way society perceives those developments. The model we developed was aimed to move beyond expert opinions or scenarios. Following Kingdon’s (1995) stream-model, we assume that the future consists of a combination of developments at different levels in society. We used Geels’ (2002) multi-level perspective to distil three levels of development: the landscape, regime and agora level. ‘Landscape’ refers to slow-moving changes in society, such as environmental and demographic developments that influence society at large structurally. ‘Regime’ refers to the dominant culture (way of thinking), structure (way of organising) and practice (way of doing) within a specific sector of society (e.g. academia, industry, government). In the agora level, we aimed to include the values and worldviews that are dominant in society. We framed these values as dilemmas, that can be classified into ‘value-pairs’ that consist of a value and counter-value. Working with these pairs of countervailing values helps to keep in mind that a currently dominant value can determine how society feels about an issue and can give an insight into what developments society is likely to oppose. Moreover, as values are likely to shift over time, working with value-pairs provides a way to monitor the direction these shifts will take. Relevant value-pairs were formulated with the aid of futurologists, trend-watchers, sociologists and other societal experts, who identified dominant trends in society. Together with the developments at regime- and landscape level, these value-pairs form the building blocks of the ‘future discourse model’.

In the final project, we were able to test the future discourse model empirically and formulate likely issues of future discourses on animal governance. In the Netherlands, animal issues are frequently subject of social controversy, both in political debates and amongst citizens. Examples include the outbreaks of animal diseases, mass culling, religious slaughtering and starving ‘wild’ animals in nature parks. In a project commissioned in 2011 by the Dutch Ministry of Economic Affairs, we investigated the shifting perceptions to contribute to the drafting of more adequate policies and legislation. A survey was conducted amongst a representative group of Dutch citizens to measure the acceptability of different animal practices and value-orientations, making use of case-appropriate value-pairs. In
addition, systematic predictions were made of future hot topics of societal debate on animal issues. We found that, anno 2011, Dutch citizens value animals mostly for relational aspects. Future societal debates are most likely to develop where animal-human interactions conflict with the value of animals as subjects, e.g. the governance of mass diseases, biodiversity and animal transportation and in conflicts between animal welfare standards and WTO regulations. We recommend that – more than is presently the case - dominant values in society be taken into account when formulating policies and regulations.

This thesis ends with some conclusions on the main question, some reflections on the meaning of the findings for governance as well as recommendations for further research in chapter 8. We conclude that two elements re-occurred in most of the case-studies. These are the importance of a trigger as the start for the (re-)evaluation of a position and the role that values and worldviews play in coming to a position. The combined results of the projects presented in this thesis led to a number of recommendations for deliberative governance.

First of all, our research indicates that information has a different effect for citizens in different stages of formation of a response position. The availability of reliable information seems most important for citizens who are aware and interested and in the process of position reflection (stage 3). We recommend governments to be aware of these differences in their communication with citizens and to adapt information to the way citizens go about looking for information. Instead of general information campaigns, that are likely to reach many citizens in stages 1 and 4, information might better correspond with citizens in stage 3 when it is easily found and provides an overview of the aspects involved in the decision.

In addition to informing citizens on (the benefits and disadvantages of different alternatives to) a plan or development, we found that information can also function as a trigger. This role of information is vital if citizens are to be able to make an informed contribution to the discussion on a development or plan. In order to improve deliberative governance, especially on topics with which citizens have had little experience, such as a new technology for example, we recommend governments to make use of this function of information to stimulate position reflection on a specific project or plan.

Secondly, considering our findings on the importance of values as driving forces in the development of opposition responses, we recommend that policymakers make a real effort to understand the driving values and the resulting convictions held by citizens that are affected by the decision and to address these fairly. Even if the arguments that citizens present to oppose a development are factually inaccurate, we strongly recommend that policymakers refrain from using this as a reason to reject the concerns. Instead, we recommend policymakers to confer with these citizens to make the underlying values explicit and relate them, whenever possible, to a value-pair. Governance should thus include an opening for value-related deliberation and arguments. Implementing this method will require training policy-makers, administrations, in short all those who will be involved in the debate with citizens over their concerns, in recognising, analysing, addressing and acknowledging values. In accordance with
the dilemma framing we used, we also suggest that effective and legitimate governance may benefit by moving away from a rationality–emotionality debate and towards acknowledging that different positions in a (value) dilemma can result in a different point of view on the same issue. When these different positions are no longer regarded as right or wrong, but as different ways to deal with a dilemma, opposing parties may have a new approach to each other, as well as to the issue at stake.

Besides establishing that values play an important role in position formulation, we also found that citizen-positions are dynamic. A trigger can give rise to reflection and re-evaluation of a position. Different contexts can also lead to adjusted positions on one and the same issue. Therefore, as a third recommendation, we suggest that governments should not treat citizens as if they are (and will remain) fixed in one way of thinking. This implies that citizens’ positions should be investigated not only through one time consultation, but through repeated consultation over time. Moreover, we recommended governments to pay attention to the transitions that take place in citizens positions, when the context of the debate on an issue changes. The factors that play a role in these transitions provide insights into the factors that will dominate that debate and can thereby help foreseeing future conflicts.

Acknowledging that positions are dynamic has the added benefit that it provides a strategy out of conflict. Solving a conflict implies that one or both parties move their position towards the other (manoeuvre). Governments that aim at solving existing clashes are well advised to keep room for position-movement. Moreover, conditions will have to be provided under which manoeuvre can take place. Deliberative settings that provide the possibility to debate and reflect on positions can help to make the essential elements of the positions explicit. Insights into these essential elements also give insights into the space remaining for manoeuvre.

The further recommendation concerns the role that a trigger has in the process through which citizens develop a position on a specific issue. The fact that a trigger leads citizens to re-evaluation and that this re-evaluation is important for their understanding of the dilemma at stake, leads me to recommend that a period of time be reserved in the decision-making procedure for that specific purpose. This reflection-phase should – in our view - be added between the moment that citizens become aware of a situation (after a trigger) and the moment in which they are included in deliberation on that issue.

The final recommendation for deliberative governance focuses on the active creation of a trigger. Although this thesis stresses the importance of triggers for citizen opposition responses, we realize at the same time that it is difficult to foresee concrete triggers. However, in the case study on animal issues policies, we did find that the setting in which that research was performed was conducive to an open deliberation in a way that acknowledged the dilemmas in that field. An additional benefit of the open debate on potential issues for the future was that the participating parties seemed to be more aware of the issues at stake at the end of the debate. In most debates, issues were brought up by some participants that others had not (yet) realized or forgotten. Through discussing the issues, these debates functioned as a type of trigger in the sense that participants were stimulated to think actively
about potentially hot issues and the reasons/values underlying them. Increasing the awareness at an early stage, not only by informing but by requesting active deliberation, could potentially be a means to create the effect of a trigger, before one occurs.

This thesis ends with some suggestions for further research. These suggestions include further empirical testing of the models that we developed and in depth research on important factors and mechanism such as the role of triggers and platforms. With regard to triggers, we suggest research on actions or events that can work as such and ways in which citizens can be deliberately triggered over a subject. Looking beyond the scope of this thesis, we suggest that follow-up research could specifically focus on the role of policymakers and project developers/initiators, to find out whether the recommendations made in this thesis are feasible and the circumstances under which genuine deliberative decision-making are beneficial for these parties.
Samenvatting

Dit proefschrift gaat over verzet van burgers tegen overheidsbeslissingen. Burgers verzetten zich tegen alle mogelijke besluiten van hun (democratisch gekozen) bestuurders. Ruimtelijke ordening is een van de terreinen waarop vrijwel elke beslissing tot verzet leidt, maar er zijn ook oneindig veel voorbeelden te noemen op andere terreinen van overheidsbeleid. Burgers geven op allerlei manieren uiting aan hun onvrede, zoals bijvoorbeeld door demonstraties, petities of juridische procedures. Hun bezwaren kunnen zich richten tegen beslissingen op nationaal of lokaal niveau. Dit proefschrift beoogt dieper inzicht te geven in de manier waarop burgerverzet ontstaat en over de mechanismen waarlangs dat verzet zich ontwikkelt.

De manier waarop tegen de reacties van burgers op beslissingen van het bestuur wordt aangekeken, hangt samen met de rol die bij de besluitvorming over openbaar beleid aan hen wordt toebedacht. Deze rol is binnen de verhouding tussen burgers en hun overheid niet zonder complicaties. Governance, of vormen van bestuur waarbij de burgers meer bij besluitvorming worden betrokken, kennen een groeiende populariteit. De reden daarvoor is dat de problemen waar beleidsmakers mee te maken krijgen steeds complexer worden, terwijl de wetenschap geen zekerheid meer kan bieden. Tegen die achtergrond wordt wel aangevoerd dat deliberatieve vormen van governance (besluitvorming door overleg) - waarbij het beleid wordt gezien als een ‘leerstrategie’ - de enige haalbare strategie is. De betrokkenheid van burgers is dan nodig, niet alleen voor de legitimiteit van het beleid, maar ook om het probleem zelf en de daarbij betrokken belangen in kaart te brengen. Hoewel hun bijdrage in (interactieve) beleidsvorming dus in toenemende mate wordt aangemoedigd, keurt men af dat burgers het beleid proberen te beïnvloeden door zich daartegen actief te verzetten. Verzet tegen lokale initiatieven, meestal aangeduid ‘Not-In-My-BackYard’ (Nimby) protesten, wordt over het algemeen gezien als iets negatiefs. Boze burgers worden beschouwd als ‘slechte’ burgers, die hun eigen belang plaatsen boven dat van anderen of van de samenleving als geheel. In dit proefschrift hebben we onderzocht of burgerverzet elementen bevat die bevorderend zijn voor deliberatieve vormen van governance.

In vier projecten, uitgevoerd binnen het Athena Instituut, hebben we ons gericht op verschillende aspecten van burgerverzet tegen besluit- of beleidsvorming door de overheid. In dit proefschrift zijn de resultaten van deze projecten weergegeven. Het proefschrift waardeert burgerverzet als iets constructiefs met een mogelijke positieve invloed op de kwaliteit van beleidsvorming.
Het doel van dit proefschrift is tweeledig:

1) Het verkrijgen van een dieper inzicht in de uitingen van burgerverzet en in de mechanismen achter die processen en

2) Het ontwikkelen van een theoretisch model dat behulpzaam kan zijn bij het voorspellen van kwesties die waarschijnlijk tot burgerverzet zullen leiden en bij het vinden van een manier om daarop te reageren met het accent op de positieve kanten van dat verzet.

De hoofdvraag van dit proefschrift is:

Welke karakteristieke mechanismen treden op bij burgerverzet en hoe kunnen beleidsmakers inzicht daarin gebruiken om op dergelijk verzet te voorzien en er zo mee om te gaan dat de negatieve effecten van conflicten zo klein mogelijk blijven en oprechte deliberatieve vormen van governance worden bevorderd?

Het eerste hoofdstuk, de inleiding, geeft een theoretische achtergrond van beleidsvorming in het algemeen en van de ontwikkelingen die zich in de Nederlandse samenleving hebben voorgedaan op het gebied van burgerinspraak. Het geeft ook de grenzen van het onderzoek aan en onderbouwt een aantal van de gekozen aannames en uitgangspunten. Een van die uitgangspunten is dat we het burgerverzet zien als een zich in de tijd en onder invloed van een aantal factoren ontwikkelend proces. We sluiten ons aan bij Hajer (2003a) en Verhoeven (2009) die burgerverzet beschrijven als een proces van verschillende fasen en we onderzoeken hoe burgers zich van de ene naar de volgende fase bewegen.

Het proefschrift is verder onderscheiden in drie delen. Het eerste deel (hoofdstuk 2 en 3) concentreert zich op de theoretische aspecten van burgerverzet en op de ontwikkeling van modellen waarmee verschillende vormen ervan kunnen worden geanalyseerd. Het tweede deel (hoofdstuk 4 en 5) bevat een gedetailleerde bespreking van de structuur van burgerverzet en geeft de resultaten weer van empirische studies naar de rol van (niet-) inhoudelijke factoren. Het derde deel (hoofdstukken 6 en 7) is gewijd aan methodes voor het voorspellen van maatschappelijke conflicten. In hoofdstuk 6 komt (de ontwikkeling van) een model aan de orde dat voorspelt op welke onderwerpen zich in de toekomst burgerverzet of maatschappelijk debat zou kunnen voordoen en heeft als doel constructief overleg te bevorderen. Hoofdstuk 7 geeft de resultaten weer van één van de eerste experimenten die op basis van het model zijn uitgevoerd.

Om inzicht te krijgen in de vele vormen van burgerverzet en in de mechanismen die dergelijke acties aandrijven, is een literatuurstudie gedaan naar één van de meest bekende vormen van burgerverzet bij lokale initiatieven: de ‘Nimby’-reactie. In Hoofdstuk 2 staan de resultaten van deze literatuurstudie. Dit hoofdstuk beantwoordt de vraag: Wat voor reacties zijn te vinden in de Nimby-literatuur en door welke factoren en mechanismen worden die reacties beïnvloed? We hebben gekozen voor de
Nimby literatuur omdat die een algemeen voorkomende vorm van burgerverzet beschrijft, dat goed gedocumenteerd is en de levendigste beschrijving geeft van de ongemakkelijke manier waarop in het maatschappelijk verkeer naar burgerverzet wordt gekeken. Het doel van de literatuurstudie was om te begrijpen waarover we het hebben als we over burgerverzet spreken en om ons in staat te stellen een theoretisch model te ontwikkelen waarmee we niet alleen Nimby-reacties, maar ook andere vormen van burgerverzet, systematisch kunnen onderzoeken.

In de eerste plaats volgt uit het literatuuronderzoek dat er geen duidelijke consensus bestaat over welk type burgerverzet nu precies met de term Nimby wordt aangeduid. Schrijvers lijken het oneens te zijn over meerdere aspecten van het fenomeen en dat maakt het lastig om gestructureerd onderzoek naar deze vorm van burgerverzet te doen. Voor een constructievere benadering van Nimby en een meer academisch gebruik van het begrip hebben we een werkdefinitie van Nimby opgesteld. Daarnaast formuleerden we een ‘kwadrant model’, waarin de verschillende reacties (‘accepteren’ – ‘verzetten’) zijn afgezet tegen de afstand tussen de burger en de geplande ontwikkelingen (‘in de buurt’ – ‘ver weg’). Dit model illustreert het dynamische karakter van de Nimby positie: de combinatie van aanvaarding van een ontwikkeling als deze ver weg plaatsvindt en afwijzing van dezelfde ontwikkeling als die in de buurt is gepland. We ontwierpen ook een ‘lokaal reactie model’. Daarin zijn verschillende reacties van burgers uitgezet als een proces in vier fasen: (1) een algemene attitude of houding ten opzichte van een techniek of ontwikkeling (= impliciete positie); (2) een trigger moment of gebeurtenis; (3) reflectie op de eigen positie ten opzicht van de specifieke ontwikkeling binnen de eigen gemeenschap; (4) het uitdragen van de positieve of negatieve positie in openlijke daden van verzet of instemming.

Het kernpunt van dit ‘lokaal reactie model’ gaat over een dilemma; de reflectie van fase 3 is het gevolg van een dilemma tussen de verschillende belangen op verschillende niveaus. In de ethiek wordt een dilemma beschreven als een conflict tussen twee legitieme ‘goeden’. In dit geval heeft het dilemma betrekking op de keuze tussen het algemene publieke goed (bijv. democratische beslissingen, verbetering van de samenleving of het milieu) en het eigen goed (bijv. privacy, verworven privileges, kwaliteit van leven en het recht om de eigen belangen te beschermen). Met andere woorden: Nimby verwijst naar een dilemma tussen een persoonlijk (‘ik’) - en een collectief (‘wij’) perspectief op de voor- en nadelen in de ruimste zin van het woord. Het laatste deel van hoofdstuk 2 bespreekt de factoren die van invloed zijn op het ‘ik’ en ‘wij’ perspectief in dat dilemma die verzet aanwakkeren ofwel verzachten.

We pasten deze modellen toe in het eerste empirisch onderzoek over (mogelijke) reacties van inwoners van Nederlandse rurale gemeenschappen op de commerciële teelt van genetisch gemodificeerde gewassen (GM-gewassen) in hun buurt. In Hoofdstuk 3 staan de resultaten van deze case study. Daarvoor hebben we een tweede subvraag geformuleerd: *Hoe stellen rurale gemeenschappen in Nederland zich op bij een eventuele teelt van GM-gewassen, in hoeverre verschilt die positie ten opzichte van het nationale debat en zijn er redenen te vinden waarom deze verschillen kunnen worden verklaard?* Deze case study was opgedragen door het Ministerie van Landbouw, Natuur en
Voedselkwaliteit en het Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieu gezamenlijk. Omdat de strijd over genetische modificatie (GM) naar bekend persistent en gepolariseerd is, hadden beide ministeries behoefte aan meer inzicht in het standpunt van niet-agrarische bewoners van rurale gemeenschappen (‘de buren van de boeren’) in dit debat. Toen de Europese Unie de commerciële teelt van verschillende GM gewassen toestond werd verwacht dat Nederlandse boeren de nieuwe technologie zouden gaan toepassen. Daarom werd het debat over de voor en nadelen van deze techniek, zoals gevoeld door de bevolking die direct met deze teelt geconfronteerd zou worden - de bewoners van rurale gemeenschappen - actueel.

15 focusgroepen zijn gehouden met burgers uit vier landelijke gemeenschappen om te debatteren over de technologie. Er zijn gemeenten geselecteerd waarin al in een eerder stadium testen met genetisch gemodificeerde gewassen waren uitgevoerd. Burgers werden door middel van een open uitnodiging gevraagd deel te nemen. Zij ontvingen vooraf geen informatie over de technologie die ze in de focusgroep zouden bespreken. Met uitzondering van één gemeente, werden voor elke groep burgers twee sessies gehouden. De eerste sessie bestond uit een open discussie over alle, in de ogen van de deelnemers, relevante en belangrijke ontwikkelingen in de gemeenschap. De tweede sessie werd volledig gewijd aan de teelt van GM gewassen. De argumenten van burgers in beide vergaderingen werden vergeleken met de bekende ‘ik’ en ‘wij’ argumenten uit de nationale discussie over GM technologie.

In de meeste gemeenschappen vond men GM niet van bijzonder belang. In maar één gemeenschap werd de GM kwestie spontaan genoemd. In alle andere groepen kwam GM niet aan de orde en – toen het toch ter sprake werd gebracht – kreeg het maar heel weinig aandacht in vergelijking met andere onderwerpen. Hoewel er in alle gemeenten proefvelden lagen waren de meeste burgers zich niet bewust van het bestaan van, en niet bekend met de technologie. Toen het onderwerp onder enige druk toch besproken werd kwamen alle groepen met voor en tegenargumenten en de meeste daarvan kwamen overeen met de argumentatie in de algemene ‘wij’ discussie. Geen van de gemeenschappen nam een Nimby positie in ten opzichte van GM. Groepen die zich wel tegen de teelt van GM gewassen in hun gemeenschap verklaarden leken bezwaar te hebben tegen de technologie in het algemeen en niet zoeer tegen de toepassing ter plaatse, zoals het geval is met een ‘Not In Any Backyard’ (Niaby) positie. Interessant vonden we dat sommige burgers een argumentatie gebruikten die lijkt op een ‘omgekeerde Nimby’: aanvaarding van GM gewassen in de buurt, maar geen specifiek belang bij - of zelfs een negatieve houding ten opzichte van de technologie in het algemeen. Deze burgers verklaarden dat zij de technologie liever binnen hun gemeenschap zagen toegepast dan ergens anders, omdat ze dan enige invloed zouden kunnen uitoefenen op de manier waarop dat zou worden gedaan.

Hoewel de deelnemers expliciet werd gevraagd om de lokale teelt van GM gewassen te bespreken, ging veel van de argumenten in alle discussies over de introductie van GM producten in de voedselketen, dat wil zeggen GM voedsel en de gevolgen daarvan voor de menselijke gezondheid. In feite leek het bezwaar tegen de teelt van GM gewassen vaak te berusten op een afkeer van GM voedingsmiddelen. We vonden steun voor de opvatting dat sociale cohesie in buitengebieden de kans op actief lokaal

Uit de literatuurstudie van hoofdstuk 2 kwamen twee factoren naar voren die van belang lijken voor het ontwikkelen van burgerverzet: de informatie over het voorgenomen beleid, plan of project en het besluitvormingsproces. Deze twee factoren zijn onderzocht in de hoofdstukken 4 en 5. **Hoofdstuk 4** behandelt *subvraag 3, te weten: Hoe gaan burgers om met informatie bij hun beslissing om ofwel te aanvaarden dat er ter plaatse GM gewassen worden geteeld dan wel om zich daartegen te verzetten en welke factoren zijn voor die besluitvorming bepalend?*

De rol van informatie in verzetsreacties van burgers is in het GM project onderzocht. Van oudsher wordt aangenomen dat informatie en kennis bijdragen aan de aanvaarding van een beleid of ontwikkeling. Theorieën over rationele besluitvorming gaan uit van het idee dat door meer informatie het begrip voor een besluit toeneemt en dat daarmee de aanvaarding ervan gemakkelijker wordt gemaakt. We combineerden Rogers’ (2003) ‘model on innovation decision making’ met de concepten ‘uncertain risk’ (van Asselt & Vos, 2008) en ‘information haze’ (Futrell, 2003) en veronderstelden dat besluitvormingsprocessen in situaties waar de beschikbare informatie tegenstrijdig of onvolledig is (information haze) anders zullen verlopen dan volgens de lijnen van rationele besluitvorming. De kwestie van GM-gewassen geeft een goed voorbeeld van een nieuwe technologie waaraan het oodum kleeft van onbekende risico’s en tegenstrijdige informatie. De gegevens voor dit onderzoek werden verzameld bij een simulatie in de tweede ronde van de focusgroepen van het GM-project. Aan de deelnemers werd informatie over GM teelt verstrekt en aan een ieder werd gevraagd aan te geven welke argumenten zij het meest relevant vonden. Vervolgens moesten de deelnemers unaniem beslissen of hun gemeente een GM-vrije zone zou worden.

We analyseerden zowel de argumenten die in de tekst als het meest relevant waren aangemerkt, als de in de debatten aangevoerde argumenten. We concludeerden dat burgers bij hun argumentatie in de groepsdiscussie weinig gebruik maakten van de aan hen verstrekte informatie. In alle groepen delfden de argumenten uit de tekst het onderspit tegen argumenten uit ‘andere bronnen’. We constateerden bovendien dat de deelnemers zich in alle groepen lieten leiden door hun persoonlijke opvattingen over normen en waarden en hun wereldbeeld, en niet door (argumenten in) de aan hen ter beschikking gestelde informatie. We concludeerden dat burgers bij tegenstrijdige argumenten, bij onzekerheden en bij het ontbreken van een duidelijke betrouwbare bron, hun waarden als kompas gebruiken bij het bepalen van hun standpunt (en beslissing) over een nieuwe technologie. Besluitvormingsprocessen starten niet op een onbeschreven blad, maar worden beïnvloed door ieders eigen individuele
waarden patroon. Al in een vroeg stadium van de discussie spraken de deelnemers zich uit over hun emotionele opvattingen die een weerspiegeling zijn van hun individuele normen en waarden. Toen aan hen werd gevraagd zich te bezinnen over de simulatie verwezen zij naar hun waardenpatroon als motivering voor hun beslissing. Dat waardenpatroon vormde niet alleen een dominante factor in de besluitvorming maar bleek ook bestand tegen argumenten die het wereldbeeld tegenspraken. De deelnemende burgers waren het er tenslotte over eens dat ze elkaar toch niet konden overtuigen op het terrein van waardepatronen, met het gevolg dat veel groepen hun beslissing met meerderheid van stemmen namen (in plaats van de unanimously die we hen als spelregel was opgelegd).

**Hoofdstuk 5** gaat dieper in op de participatie van burgers bij het maken van beleid. In tal van de onderzoeken, genoemd in het literatuuroverzicht bij hoofdstuk 2, wordt participatie beschouwd als een belangrijke factor bij het ontstaan van burgerverzet. Hoofdstuk vijf beschrijft de resultaten van een casestudy over de Nederlandse regelering van burgerparticipatie bij de besluitvorming over ruimtelijke ordening. De deelvraag van deze casestudie luidde: *Hoe beïnvloeden de (juridische) mogelijkheden voor burgers om te participeren in de besluitvorming én de wijze waarop deze participatie in praktijk wordt gebracht de manier waarop beslissingen door die burgers worden ontvangen en welke aanbevelingen kunnen worden gegeven om in het nieuwe wetsvoorstel over ruimtelijke ordening de besluitvorming over beleid te verbeteren?*

We hebben de Nederlandse regelgeving over besluitvorming op het gebied van ruimtelijke ordening geanalyseerd en vergeleken met ‘succesvolle’ burgerparticipatie, beschreven in sociaal-wetenschappelijke literatuur. De basis-inzichten over het belang van burgerparticipatie, die besproken zijn in de literatuurstudie in hoofdstuk 2 (Nimby literatuur), vulden we aan met specifieke sociaal-wetenschappelijke studies over hetzelfde onderwerp. Op basis daarvan formuleerden we drie criteria waaraan ‘succesvolle’ burgerparticipatie zou moeten voldoen. Allereerst moeten de instanties de procedure serieus nemen: voor alle deelnemers moet duidelijk zijn wat het doel van de participatie is en welke rol burgers daarbij kunnen vervullen. Ten tweede moet de overheid de inbreng van burgers serieus nemen: de betrokkenheid van burgers moet in een vroeg stadium aanvangen en gedurende het gehele proces doorlopen. En tenslotte moeten de autoriteiten de rol die burgers in de besluitvorming spelen serieus nemen: een besluitvormingsprocedure moet open staan voor iedereen die behoefte voelt daaraan deel te nemen en er moet enige vorm van machtsoverdracht aan de burgers zijn.

Vervolgens is vanuit een juridisch oogpunt onderzocht wat nu in Nederland de rechten en plichten van burgers zijn bij de totstandkoming van overheidsbesluiten op het gebied van ruimtelijke ordening. Daaruit hebben we de conclusie getrokken dat er op dit ogenblik nog geen garantie bestaat dat burgers werkelijk bij de besluitvorming worden betrokken, te weten in een voldoende vroeg stadium en met de mogelijkheid werkelijk invloed uit te oefenen, ook al zijn er recent verschillende hervorming van het beslissingsproces doorgevoerd. Belangrijker is dat de huidige regelingen mensen van participatie uitsluiten die met reden behoefte hebben om bij de kwestie te worden betrokken en dat iedere vorm van machtsoverdracht aan de deelnemende burgers ontbreekt. Het is de overheid die uitmaakt wie
mogen participeren bij de besluitvorming en ook over welke onderwerpen zij dan een mening mogen geven.

Focusgroepen met burgers die ervaring op dit gebied hadden opgedaan zorgden voor aanvullende informatie over de manier waarop de wet in hun geval werd toegepast. Uit deze focusgroepen bleek dat voorlichtingsbijeenkomsten (waarin ambtenaren een plan of project presenteren) vaak als een trigger werden voor verzet en tegelijkertijd als een aanmoediging voor de aanwezige burgers om zich een oordeel over het onderwerp te vormen. Opnieuw bleek dat voor dat oordeel individuele waardepatronen of wereldbeelden belangrijk zijn. De interviews lieten ons ook inzien dat ‘machtsoverdracht’ niet letterlijk behoeft te worden genomen. Burgers zijn niet per se uit op werkelijke beslissingsmacht. Wat ze wel willen is de bevoegdheid om invloed uit te oefenen op de wijze waarop het besluit tot stand komt en de mogelijkheid daaraan bij te dragen door bijvoorbeeld te mogen verlangen dat bepaalde aspecten of te verwachten gevolgen gevolgen nader worden onderzocht of in aanmerking worden genomen.

Op grond van deze uitkomsten en onze analyse van de ‘toetsversie Omgevingswet’ onderschrijven we de belangrijkste wijziging die in dat ontwerp wordt voorgesteld, te weten het uitvoeren van een verkennende fase voor een breder scala van besluiten. Het voordeel van een dergelijke verlengde voorbereiding is dat meer belangen, zoals onderliggende waardepatronen, al in een vroeg stadium aan de orde kunnen komen. Tegen de achtergrond dat burgers vaak gemotiveerd moeten worden om aan het proces deel te nemen, zien we de verkenningsfase bovendien als een belangrijk instrument om burgers vroeg actief te betrekken en als een trigger voor hun oordeelsvorming. Het activeren van burgers zonder de indruk te wekken dat de beslissing al is genomen vereist een evenwicht tussen het duidelijk markeren van het onderwerp van de besluitvorming enerzijds en voldoende flexibiliteit om dat onderwerp op verschillende manieren te benaderen en op te lossen anderzijds. Om het effect van een verkennende fase zo groot mogelijk te maken raden we aan om het nog verder uit te werken, bijvoorbeeld door bijeenkomsten voor het geven van informatie en bijeenkomsten voor overleg met burgers strikt te scheiden. Op die manier kunnen burgers de tijd nemen om te reflecteren op hun positie en hun ideeën over een plan te vormen, voordat ze hun oordeel worden gevraagd. Ter bevordering van enige machtsoverdracht raden we ten slotte aan dat de Omgevingswet een bepaling zou moeten bevatten die aan het overheidsorgaan de verplichting oplegt (eens en voor altijd) aan de burgers aan te geven op welke wijze hun inbreng wordt behandeld en meegewogen.

Het derde deel van dit proefschrift (hoofdstukken 6 en 7) beschrijft hoe met toepassing van theoretisch en exploratief onderzoek een systematisch model is ontwikkeld waarmee het mogelijk is kwesties die in de toekomst waarschijnlijk tot maatschappelijke controverse of burgerverzet zullen leiden te voorzien. In een tweetal casestudies, beide over de verhouding tussen dier en mens, hebben we dit model ontwikkeld, waarmee te voorspellen is over welke kwesties in de toekomst maatschappelijke onrust zal ontstaan. De ontwikkeling van dit model is weergegeven in hoofdstuk 6. **Hoofdstuk 7** beschrijft de eerste proefondervindelijke pogingen om onderwerpen van maatschappelijke onrust te voorzien op het gebied van beleid met betrekking tot de verhouding tussen mensen en
dieren. Voor dit deel van het onderzoek zijn de volgende deelvragen geformuleerd: Deelvraag 5: ten aanzien van dierproeven: wat voor theoretisch onderzoek model kan worden opgesteld om potentiële publieke strijdpunten te voorspellen en om het mogelijk te maken daarmee op een constructieve manier om te gaan?

Deelvraag 6: Met gebruikmaking van het model: is te voorspellen welke onderwerpen op het terrein van de verhouding tussen mens en dier in de toekomst aanleiding zullen geven tot maatschappelijke controverses?

Om toekomstige maatschappelijke controverses te kunnen voorspellen is niet allen inzicht nodig in de ontwikkelingen die zich waarschijnlijk op een specifiek beleidsdomein of praktijk zullen voordoen, maar ook in de manier waarop de samenleving die ontwikkelingen zal opvatten. Het model dat werd ontwikkeld en in deze laatste projecten ook is toegepast, is gefundeerd op de volgende aannames: 1) ook al is de toekomst onzeker, bepaalde ontwikkelingen in de huidige maatschappij hebben gevolgen voor de lange termijn en daarmee een zekere voorspellende kracht en 2) opvattingen van burger krijgen vorm door (botsende) waarden en wereldbeelden die in de loop der tijd kunnen wijzigen. Het model dat we bouwden was bedoeld om verder te gaan dan voorspellingen op basis van visies van deskundigen of scenario’s waarin bestaande situaties rechtlijnig worden doorgetrokken. In navolging van het ‘stomen model’ van Kingdon (1995) namen we aan dat de toekomst wordt bepaald door een combinatie van gelijktijdige ontwikkelingen op verschillende niveaus in de samenleving. We hebben gebruik gemaakt van Geels’ (2002) ‘multi-level perspective’ om drie niveaus van ontwikkeling vast te stellen: het landschap, het regime en de agora. ‘Landschap’ verwijst naar langzaam bewegende veranderingen in de maatschappij, zoals milieu- en demografische ontwikkelingen die de samenleving als geheel structureel beïnvloeden. ‘Regime’ heeft betrekking op de dominante cultuur (manier van denken), structuur (manier van organiseren) en praktijk (manier van doen) binnen een bepaalde sector van de samenleving (bv. academische wereld, industrie, overheid). Op het niveau van de ‘agora’ hebben we de in de samenleving overheersende waarden en wereldbeelden een plaats gegeven. We hebben deze waarden beschouwd als dilemma’s, in te delen in ‘waarden-paren’, elk bestaande uit een waarde en een tegenwaarde. Het werken met deze paren van tegenovergestelde waarden maakt het gemakkelijker om in gedachte te houden dat een waarde die nu bepalend is voor de vraag hoe er in de samenleving over een bepaalde kwestie wordt gedacht en het kan inzicht geven in de ontwikkelingen waarmee de samenleving waarschijnlijk moeite zal krijgen. Omdat waarden de neiging hebben in de loop van de tijd op te schuiven, biedt het werken met waarden-paren bovendien de mogelijkheid om de richting van die veranderingen te volgen. Relevante waarden-paren werden geformuleerd met behulp van futurologen, trendwatchers, sociologen en andere maatschappelijke experts, die de heersende trends in de samenleving hebben vastgesteld. Samen met de ontwikkelingen op de niveaus van regime en landschap, vormen de waarden-paren de bouwstenen voor het ‘toekomstige maatschappelijke controversen model’.

In het laatste project konden we het model empirisch toetsen en onderwerpen aanwijzen op het gebied van dierenbeleid waarover in de toekomst waarschijnlijk maatschappelijk debat zou ontstaan.
In Nederland zijn dieren vaak onderwerp van maatschappelijke controverse, zowel in de politiek als onder burgers. Voorbeelden hiervan zijn de uitbraken van dierziekten, massale ruimingen, religieuze slachten en het verhongeren van ‘wilde’ dieren in natuurparken. In een project dat in 2011 in opdracht van het Ministerie van Economische Zaken is opgezet, hebben we onderzoek gedaan naar wijzigende maatschappelijke opvattingen om bij te kunnen dragen aan meer adequaat beleid en wetgeving op dit gebied. Er is een enquête gehouden onder een representatieve groep Nederlanders om, met gebruikmaking van op de zaak toegesneden waarden-paren, te meten in hoeverre dier-praktijken acceptabel werden geacht. We vonden dat Nederlandse burgers, anno 2011, dieren vooral waarderen om relationele redenen. In de toekomst gaan maatschappelijke debatten waarschijnlijk over kwesties waar dier-mens interacties in strijd zijn met de waarde van het dier als individu (subject), zoals het beleid ten aanzien van massale dierziektes, biodiversiteit en dierentransport en bij conflicten tussen dierenwelzijn en de WTO-regels. Onze aanbeveling is dat - meer dan nu het geval is – bij het vaststellen van beleid en regelgeving rekening wordt gehouden met de in de samenleving bestaande waarden.

Dit proefschrift eindigt in hoofdstuk 8 met een aantal conclusies over de hoofdvraag, met enkele opmerkingen over de betekenis van de uitkomsten voor beleidsvorming en met aanbevelingen voor verder onderzoek. We concludeerden dat twee elementen voorkwamen in het merendeel van de casestudies, te weten 1) het belang van een trigger als aanzet voor (her)bezinning op de positie en 2) de rol die waarden en wereldbeelden spelen bij het vormen van een oordeel. De uitkomsten van de in dit proefschrift beschreven projecten leiden tezamen tot een aantal aanbevelingen voor deliberatieve vormen van governance.

In de eerste plaats blijkt uit ons onderzoek dat informatie een ander effect heeft voor burgers in verschillende stadia van de vorming van een reactie positie. De beschikbaarheid van betrouwbare informatie lijkt het meest van belang te zijn voor burgers die bewust zijn van - en geïnteresseerd zijn in een ontwikkeling of plan en verkeren in het proces van positie reflectie (fase 3). Wij adviseren overheden zich bij de communicatie met burgers bewust te zijn van deze verschillen en om hun informatie aan te passen aan de manier waarop burgers zoeken naar informatie. In plaats van algemene voorlichtingscampagnes, die veel burgers in fasen 1 en 4 bereiken, verwachten we dat informatie beter afgestemd is op burgers in fase 3 wanneer het gemakkelijk te vinden is en een overzicht geeft van alle bij de beslissing betrokken aspecten.

Informatie kan, naast het informeren van burgers over (de voordelen en nadelen van de verschillende alternatieven voor) een plan of ontwikkeling, ook functioneren als een reflectie trigger. Deze rol van informatie is van essentieel belang om de burger in staat te stellen om een weloverwogen bijdrage te leveren aan de discussie over een ontwikkeling of plan. Ter verbetering van deliberatieve vormen van governance, met name over onderwerpen waarmee burgers weinig ervaring hebben, zoals bijvoorbeeld een nieuwe technologie, adviseren wij overheden om gebruik te maken van deze functie van informatie.

In de tweede plaats leidt onze conclusie dat waarden een drijvende kracht zijn bij de vorming van verzet tot de aanbeveling dat beleidsmakers zich moeten inzetten om de waarden die bij een
beslissing betrokken zijn en de daaraan ontleende opvattingen te begrijpen en te adresseren. Zelfs als de door de burger aangevoerde argumenten tegen een ontwikkeling feitelijk onjuist zijn, adviseren we beleidsmakers dat niet als reden te gebruiken om aan de zorgen van de burgers voorbij te gaan. In plaats daarvan adviseren wij beleidsmakers om overleg met deze burgers te voeren om de onderliggende waarden te achterhalen en om die, waar mogelijk, een plaats te geven in waardenparen. Besluitvormingsprocedures zouden dus ruimte moeten bevatten voor de inbreng van waarden en argumenten die voor burgers relevant zijn. Dit vereist training in het herkennen, analyseren, aanpakken en erkennen van waarden van beleidsmakers en overheden, oftewel: allen die te maken krijgen met gesprekken met burgers over hun zorgen. Ons voorstel om zorgen van burgers over ontwikkelingen te beschouwen als dilemma's past in de gedachte dat effectief en legitiem bestuur er voordeel bij kan hebben om niet te blijven hangen in discussies op basis van rationele argumenten maar om te onderkennen dat uiteenlopende waarden posities kunnen leiden tot verschillende standpunten over dezelfde kwestie. Als verschillende posities niet langer als ‘goed’ of ‘fout’ worden beschouwd, maar als verschillende manieren om een tegen een dilemma aan te kijken, is er ruimte voor partijen om elkaar én het geschilpunt in kwestie op een nieuwe manier tegemoet te treden.

We hebben vastgesteld dat waarden een belangrijke rol spelen bij het bepalen van een positie, maar ook dat zulke posities kunnen verschuiven. Een trigger kan aanleiding geven om de eigen positie te heroverwegen. Ook uiteenlopende externe omstandigheden kunnen leiden tot een andere positie ten opzichte van hetzelfde onderwerp. Daarom bevelen we overheden aan burgers niet te behandelen alsof ze vast (moeten blijven) zitten aan één positie ten opzichte van een plan of ontwikkeling. Erkennen dat de positie van burgers flexibel en veranderlijk is betekent ook dat overheden de positie van burgers niet in één enkele raadpleging moeten onderzoeken, maar die raadpleging van tijd tot tijd moeten herhalen. Daarnaast bevelen wij aan overheids een eind bedacht te zijn dat veranderingen in de context van een debat aanleiding kunnen zijn voor veranderde perspectieven op de kwestie. Kennis van de omstandigheden die aanleiding kunnen zijn voor dergelijke heroverwegingen van een positie kan bijdragen aan de voorspelling van thema's voor toekomstige maatschappelijke controversen. Dat posities flexibel zijn en kunnen veranderen heeft als bijkomend voordeel dat het mogelijk een strategie uit een conflict biedt. Een conflict impliceert dat partijen met hun posities tegenover elkaar staan. Om tot een oplossing van dat conflict te komen moet één of beide partijen bewegen of verschuiven in de richting van de ander (manoeuvre). Overheden die conflicten willen oplossen doen er goed aan om ruimte te maken voor een dergelijke beweging. Bovendien moeten voorwaarden worden geschapen die manoeuvre mogelijk maken. Het faciliteren van overleg en van bezinning op ingenomen standpunten kan helpen de essentie van die posities bloot te leggen. Inzicht in de kern van de ingenomen posities levert ook inzicht op over de ruimte die voor verschuiving bestaat.

Een verdere aanbeveling betreft de rol van de trigger bij het proces van standpuntbepaling bij burgers. Omdat een trigger aanzet tot reflectie en omdat die reflectie belangrijk is voor het begrip van - en het oordeel over de aanhangige kwestie, raden we aan dat een ‘reflectie fase wordt toegevoegd aan de besluitvormingsprocedure. Volgens ons zou die reflectie fase moeten worden toegevoegd tussen het
Samenvatting

moment dat burgers zich van een situatie bewust worden (na een trigger) en het moment waarop ze worden betrokken bij het overleg over die situatie.

De laatste aanbeveling voor deliberatieve vormen van governance gaat over het doelbewust creëren van een trigger. Dit proefschrift benadrukt het belang van triggers bij burgerverzet, maar we realiseren ons dat het moeilijk is om concrete triggers te voorzien. In de casestudy over beleid van dieraangelegenheden, bleek dat de manier waarop het onderzoek in die casestudy werd uitgevoerd bepalend was voor open overleg tussen deelnemers. In de focusgroepen van het onderzoek slaagden partijen die normaal in conflict met elkaar verkeren erin gezamenlijk bestaande en toekomstige dilemma’s van hun dierpraktijk te beschrijven. Een bijkomend voordeel van het open debat over mogelijke kwesties in de toekomst was dat deelnemende partijen zich aan het einde van het debat meer bewust leken te zijn van die kwesties. In de meeste debatten brachten deelnemers thema’s ter sprake die anderen (nog) niet hadden gezien of weer waren vergeten. Door het bespreken van knelpunten fungeerden deze debatten als een soort trigger in de zin dat de deelnemers werden gestimuleerd om actief over potentiële kwesties en de achterliggende motieven en waarden na te denken. Het in een vroeg stadium bevorderen van meer besef, niet alleen door voorlichting, maar juist door actief overleg te initiëren, zou wel eens een manier kunnen zijn om het effect van een trigger op te roepen, voordat die zich uit zichzelf voordoet.

Dit proefschrift eindigt met enkele suggesties voor verder onderzoek. Deze suggesties zien onder meer op (verdere) empirische toetsing van de modellen die we in dit onderzoek hebben ontwikkeld en op verdiepends onderzoek naar de belangrijke factoren en mechanismen, zoals de rol van de triggers en van platforms. Wat de triggers betreft raden wij aan onderzoek te doen naar acties of gebeurtenissen die als trigger kunnen werken en naar manieren waarop overheiden burgers actief bij een onderwerp kunnen betrekken. Buiten de reikwijdte van dit proefschrift stellen wij voor dat follow-up onderzoek zich specifiek richt op de rol van beleidsmakers en projectontwikkelaars/initiatiefnemers, om uit te vinden of de aanbevelingen die in dit proefschrift zijn gedaan haalbaar zijn en onder welke omstandigheden oprechte deliberatieve besluitvorming ook voordelen voor deze partijen oplevert.
Dankwoord

Mijn dank gaat allereerst uit naar prof. dr. Tjard de Cock Buning en dr. Mariette van Amstel, de bedenkers en begeleiders van mijn promotietraject in alle opzichten van het woord. Tjard, jij hebt mij geleerd mijn nieuwsgierigheid te zien als onderzoeksinstrument en niet bang te zijn voor complexiteit. Ik heb erg genoten van onze samenwerking, zowel in de projecten - tijdens de focusgroepen, in de lange autoreizen heen en terug naar dorpen in de uithoeken van Nederland - mijn ook in de discussies over het interpreteren van de data en het ontdekken van de rode lijn van mijn verhaal. Dank voor je steun, je geduld en je vertrouwen. Mariëtte: vanaf het begin van mijn onderzoekscarrière, die begon met mijn scriptie milieuwetenschappen, ben je mijn begeleidster en medeonderzoekster. Ik ben er dankbaar voor dat ik ook dit deel van mijn opleiding tot onderzoeker met jou samen mocht doen. Dank voor alle gezellige gesprekken, dank voor het zijn van een luisterend oor en dank voor feedback op de meest gekke tijden. Ik ben benieuwd waar we elkaar in toekomst weer tegen zullen komen. Ik dank mijn leescommissie voor de tijd en aandacht die ze aan mijn proefschrift hebben willen schenken. Prof. dr. Gremmen, prof. dr. Osseweijer en prof. dr. van der Zande, hartelijk dank voor de feedback op het manuscript. Prof. dr. Bunders, Joske, dank ik in het bijzonder voor het realiseren van dit niet traditionele promotietraject. Ik bewonder jouw denken in mogelijkheden. Dankbaar ben ik voor je motivering en relativerende kracht op essentiële momenten de afgelopen jaren. Dank ook aan alle anderen die (delen van) dit manuscript hebben meegelezen en voorzien van commentaar, waaronder de anonieme reviewers van de verschillende tijdschriften waarin delen van dit proefschrift zijn gepubliceerd en Hans Mabelis, die de inleiding en uitleiding van het proefschrift van feedback voorzag. Sarah Cummings, Dominique Jans en Alison Fisher: bedankt voor het redigeren van de Engelse teksten.

Daarnaast dank ik alle personen die hebben bijgedragen aan de projecten die het hart van dit proefschrift vormen, waaronder de opdrachtgevers van het ministerie van VROM (thans I&M) en LNV/EL&I (thans EZ) en ZonMW, de leden van de begeleidingscommissies, de stagiaires en junioren die meegewerkt hebben aan verschillende projecten en literatuuronderzoek – Edward Kniesmeijer, Mandy Palm, Sand Bruls, Marlous Arentshorst, Ingeborg Wu, Megha Vir Piari, Sam Schrevel - en de experts en burgers voor hun inbreng tijdens de focusgroepen of de enquête. Specifiek wil ik Prof. dr. Hans Hopster en dr. Vincent Pompe danken voor de prettige samenwerking in het ‘denken over dieren’-project.
Heel belangrijk voor mijn tijd op de VU waren de collega’s. Ik ben dan ook heel trots dat ik bijgestaan wordt door drie paranimfen. Anna en Lia, jullie zijn de reden dat ik bij de VU ben teruggekomen en gebleven. Wat is het fijn als je werkpkleen een plek is waar je je vrienden ziet; maar ik heb vooral heel goede herinneringen aan alles wat we buiten de VU hebben gedaan. Daar gaan we wat mij betreft nog jaren mee door! Geweldig dat jullie naast me staan op de grote dag. Tjerk-Jan, Je bent misschien geen echte faun, maar wel mijn steun en toeverlaat voor alle werk- en niet werkgerelateerde sores. Ik hoop dat we nog jaren door blijven kletsen.

Mijn tijd bij het Athena was daarnaast lang niet zo kleurrijk en leerzaam geweest zonder: Frank, dank je voor je ‘mentorschap’ mijn eerste jaar op de VU; Barbara, dank voor je inspiratie en warmte – als ik ooit verder ga in de wetenschap hoop ik te worden zoals jij; Sam, dank voor het introduceren van de schijfdagen, je verhalen en je ‘BOM’ aan energie; Tine, mijn kamergenoot, ik mis u! Yadira, partner in crime in de combinatie van een promotie en een beroepsopleiding. Gesprekken met jou stelden me gerust; Marianne, dierenvriend, dank voor de feestjes en idealen; Marije, jij en je pink hebben m’n hart gestolen – je bent nog niet van me af! Dirk en Thijs, de onmisbare mannen in het Athena-kippenhok. En natuurlijk: Marlous en Jackie. Dank jullie voor jullie onvermoeibare hulp bij het vinden van weggeraakte sleutels, artikelen en inlogcodes en vooral voor jullie vrolijkheid.

Maar ook buiten de VU zijn er mensen die ik wil bedanken voor hun rol in mijn promotietraject. Dat zijn allereerst mijn collega’s bij Vos & Vennoten Advocaten. Anna Jonkhoff, patroon en kamergenoot: dank dat ik je eerste werknemer mag zijn. Dank voor alle ruimte die je me hebt gegeven om advocaat te worden naast het promoveren en soms beter dan ikzelf aan te voelen dat die combi misschien toch wat zwaar was. Dank ook aan Ruud en de andere ‘Vosjes’, Jan-Eelco, Martijn, Tahir, Doeko, René, Mirjam, Diane, Thijs, Mannie, Gerda en Vivian, voor het zijn van mijn ‘andere’ werk en een welkome afleiding.


Dankwoord

Tenslotte wil ik mijn dankbaarheid uitspreken voor de les die ik persoonlijk heb geleerd heb van dit traject en dat is te vertrouwen op mijn (onder)buikgevoel. Ook als dat gevoel rationeel niet te verklaren is. Het is het eerlijkste kompas dat je hebt en het laat zich het niet tot zwijgen brengen.