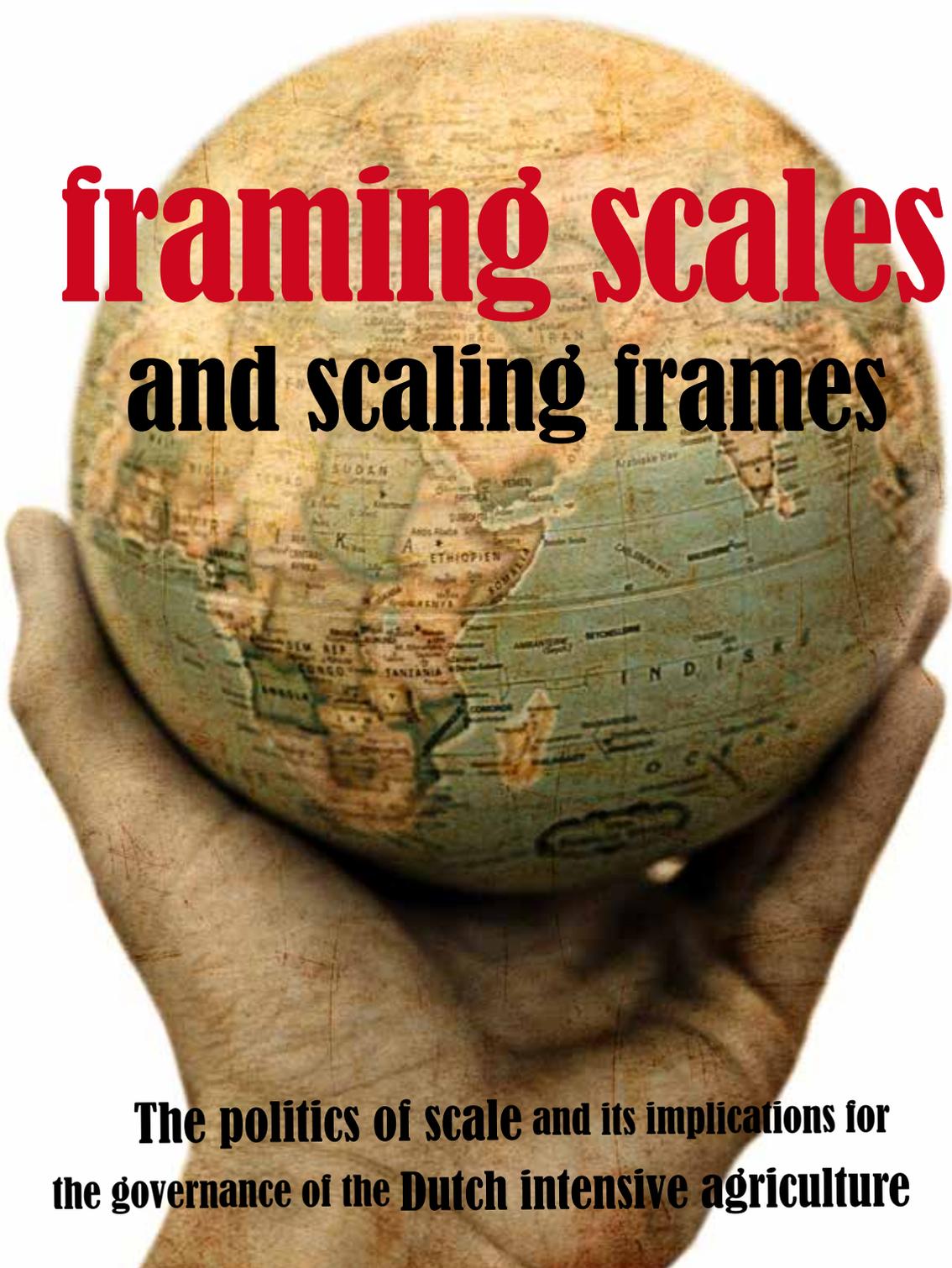


Maartje van Lieshout

A hand holding a globe with a map of Africa and the Indian Ocean. The globe is aged and shows various countries and regions. The hand is positioned at the bottom, supporting the globe from underneath. The map on the globe includes labels for Sudan, Ethiopia, Somalia, and the Indian Ocean (INDISK).

framing scales and scaling frames

**The politics of scale and its implications for
the governance of the Dutch intensive agriculture**

Framing scales and scaling frames

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Wageningen, November 2013

Maartje van Lieshout

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1

General introduction

M. van Lieshout

Setting the scene: ‘pig flat’, ‘mega-stable’, or ‘very innovative example for the rest of the world’?

In a small rural town in the south east of the Netherlands, a group of innovative farmers is developing a new mixed company (NMC), and the municipal alderman is trying to implement the national reconstruction act for rural areas. This NMC is to consist of a very large pig farm, a very large poultry farm, and a manure fermentation installation, and aims to become a closed system using outputs from one activity as input for another. The NMC is considered an innovative sustainable development in the agricultural sector that will contribute to food security for the growing world population. However, local citizens and even the national press have framed the NMC as a ‘pig flat’ or a ‘mega-stable’ and have expressed many different concerns about this development. People are afraid that animal diseases will spread to humans, and also of the risks of antibiotics resistance and fine dust. They are worried about the impact on their landscape and animal welfare. These worries and fears have ignited commotion and fierce protests by both citizens and NGOs...

1.1 Cause: scales and frames

This short story shows some of the different perspectives in this complex governance process. In this thesis, I study this governance process and the broader national debate about the future of the Dutch intensive agriculture sector. I focus on these different perspectives and their implications. More specifically, I focus on the use of scales and frames, scale frames, in interactions about complex problems.

Complex problems like climate change, global food security, and threats to biodiversity cut across traditional jurisdictions and scopes of organisations, and stretch across local to global scale-levels (Dietz, Ostrom, & Stern, 2003). For example, policies regarding CO₂ storage resolve issues nationally, or at even larger scale-levels, but lead to much insecurity about the consequences locally. Within the scope of this thesis, and as referred to above, the Dutch reconstruction policy¹ resolves land use issues on the regional and national scale-level, but creates extra nuisance on the local scale-level. In this thesis, I take these differences across scale-levels as a starting point. I study how different actors use these different scale arguments in their communication and ask the question: *What are the implications of scale framing for the governance of complex problems?*

It has become common in the fields of political sciences, public administration, and policy sciences to stress the complexity of societal problems (Hisschemöller & Hoppe, 1995; Koppenjan & Klijn, 2004; Van Bueren, Klijn, & Koppenjan, 2003). Complex problems are by definition multi-scale problems, since these are characterised by controversy, diffuse boundaries, uncertainty, ambiguity, dynamics, and multiple interdependent actors (Coleman, 2006; Hisschemöller & Hoppe, 1995; Koppenjan & Klijn, 2004). Moreover, the responsibility to tackle complex problems stretches across many organisations on different scales and levels (Head & Alford, 2008). In this thesis, I define scales broadly as the spatial, temporal, or administrative dimensions used to describe a phenomenon (adapted from Gibson, Ostrom, & Ahn, 2000, p. 218; see also 1.3). Apart from scales, levels can be distinguished. Levels are ‘the units of analysis that are located at the

¹ In the Netherlands, in order to restructure the rural areas to provide space for agriculture, nature, and water storage, the reconstruction act was formulated in 1999. This act divides the rural areas into three zones in which more or less intensive agriculture is allowed: in extensive areas (extensiveringsgebieden), the primary function is living or nature, and intensive farms have to leave; in intermediate areas (verwevingsgebieden), agriculture, housing, and nature are interwoven; and in agricultural development areas (ADAs) (landbouw ontwikkelings gebieden), intensive cattle breeding, settlement of new farms, and extending farms is possible. These development areas are designated by the provinces and established by the municipalities.

same position on a scale' (Gibson et al., 2000: 218), or in other words: the different locations on a scale.

Complex problems are not just out there. Actors highlight different aspects of a situation as a problem and situate this on different scales. This process is also referred as framing (Aarts & Van Woerkum, 2006; Dewulf et al., 2009; Entman, 1993; Lewicki, Gray, & Elliott, 2003). In this thesis, I focus on how actors use scale in their framings. I call this scale framing. Scale framing is not without consequences. It makes a difference in terms of actors, interests, and interdependencies whether problems are addressed at one scale-level or another (Dewulf, Mancero, Cárdenas, & Sucozhañay, 2011). This process of strategically using scales as political devices is also known as the politics of scale, or scalar politics (Delaney & Leitner, 1997; Jonas, 1994; MacKinnon, 2011; Swyngedouw, 2004).

Although the construction and politics of scale are intensively debated in the field of political geography (see for example MacKinnon, 2011, for an overview), the construction, use, and implications of framing scales for governance processes have not received much attention in public administration and policy sciences. Since these actions have many consequences for on-going governance processes, I study how framing issues on a certain scale and or level plays a role in these processes. I focus on the *process of framing scales in governance interactions*, and the implications thereof; this will improve the quality of the discussions and decision making about complex problems, and contribute to scale-sensitive governance.

In the remainder of this chapter, I discuss the core concepts underlying this thesis (1.2), followed by my research objectives and questions in 1.3. In 1.4, I present the methodology, and, in 1.5, I conclude with the outline of the thesis.

1.2 Conceptual framework

In the following, I discuss the literature on the main concepts: governance processes, scales and levels, frames and framing, scalar politics, and scale framing.

Governance processes

It is generally acknowledged that policy solutions for complex issues cannot be usefully developed in a top-down fashion (Dryzek, 1990; Healey, 1997; Pierre and Peters, 2000; Rhodes, 1997; Scharpf, 1978). In that sense, a shift from 'government' to 'governance' has been recognised (Pierre & Peters,

2000; Rhodes, 1997; Stoker, 1998; Van Kersbergen & Van Waarden, 2004). Government commonly refers to 'the formal institutions of the state and their monopoly of legitimate coercive power' (Stoker, 1998, p. 17), whereas governance signifies 'a change in the meaning of government, referring to an new process of governing; or a changed condition of ordered rule; or the new method by which society is governed' (Rhodes, 1996, pp. 652-653). In governance processes, public and private actors are involved, and governing mechanisms do not rest on 'recourse to the authority and sanctions of government' (Stoker, 1998, p. 17). In general, governance processes are less formal, procedures are determined in the process, and responsibilities are blurred (Stoker, 1998).

In the governance literature, broadly two perspectives can be distinguished: one normative and the other empirical. Normative perspectives on governance generally reflect the values of representative democracy and the values of governance. Van Kersbergen and Van Waarden (2004), for example, focus on shifts in governance and problems of governability, accountability, and legitimacy. In an empirical view on governance, the focus is on how governance functions/operates/works in practice (e.g. Hajer & Wagenaar, 2003; Termeer, 2009). In this thesis, I take an empirical perspective on governance, by studying how scale framing influences governance processes.

Within this empirical perspective, two governance approaches are of particular relevance for our interest in scale issues in governance processes: multi-level governance² (Böhme, Richardson, Dabinett, & Jensen, 2004; Hooghe & Marks, 2003; Marks & Hooghe, 2004; Pierre & Peters, 2000; see also Termeer, Dewulf, & Van Lieshout, 2010b), and adaptive governance (Folke, Hahn, Olssen, & Norberg, 2005; see also Termeer et al., 2010b). The first approach claims that 'governance is increasingly 'multi-level', where international, national and sub-national processes of governance are interlinked in a negotiated fashion' (Pierre & Peters, 2000, p. 72). This approach served as a starting point for our conceptualisation of the administrative scale (see chapter 3). The adaptive governance approach perceives the issue to be governed as a dynamic, complex adaptive system and takes the multi-scale and dynamic aspect of complex problems into account. It addresses both the complexity (uncertainty), polycentric, multi-level, and multi-scale aspects of governance of complex problems. I have used

² Referring to the perspective of multi-level governance to study the framing of scale may be confusing. From the above definitions, multi-level governance can be seen as a way to look at governance processes that take place on or across different levels on an administrative or a spatial scale.

the adaptive governance approach to address the complexity of our cases and to take scales other than the administrative also into account. I take the ideas of multi-level and adaptive governance as a starting point to contribute to a scale (frame)-sensitive governance approach that even more specifically addresses cross-scale and cross-level issues and how to deal with those (Padt, Opdam, Polman, & Termeer, 2014; Termeer & Dewulf, 2014).

Ideas about more participative, interactive, or deliberative ways of governing represent a last entry point to governance in this thesis. Across the world, public participation in governance processes is seen as an important way to improve the quality of government plans as well as to involve people in the policy process. As a result, citizens and stakeholders are regularly invited by policymakers to participate in policy development processes (Aarts, Van Woerkum, & Vermunt, 2007; Hajer, 2003; Hajer, van Tatenhove, & Laurent, 2004). Public participation in policy processes is also labelled interactive policymaking (Van Woerkum, 2000), interactive governance (Torfing, Peters, Pierre, & Sørensen, 2012), stakeholder planning, collaborative dialogues (Hajer, 2003), participative governance (Turnhout, Van Bommel, & Aarts, 2010), or collaborative governance (Emerson, Nabatchi, & Balogh, 2012; Purdy, 2012). The central idea I take from these governance approaches is that ‘policy making requires spaces where different institutions, agencies, groups, activists and individual citizens can come together to deliberate on pressing social issues’ (Hendriks, 2009, p. 173).

I take these starting points from multi-level, adaptive, and participative governance approaches together. In this thesis, I study governance of complex issues as a form of plural steering, which takes shape in different interactions, in different places, and on different scale-levels. On all these different occasions, interactions take place that steer the outcomes of the governance process.

Scales and levels

In several disciplines, the implications of scale issues are stressed (Buizer, Arts, & Kok, 2011; Padt et al., 2014; Termeer et al., 2010b). For example, in the context of natural resource management, many scholars study scale (e.g. Berkes, 2006; Folke, Chapin, & Kofinas, 2009; Folke, Pritchard, Berkes, Colding, & Svedin, 2007; Olsson, Folke, Galaz, Hahn, & Schultz, 2007; Papaik, Sturtevant, & Messier, 2008; Young, 2006); and, in spatial policy (Arts, Legendijk, & Houtum, 2009) and in the geography disciplines, scale is widely studied (e.g. Brenner, 2001; Jessop, Brenner, & Jones, 2008; Leitner, 2004; see MacKinnon, 2011, for an overview).

In the field of human geography, there has been an extensive debate about the conceptualisation of scale. Conceptualisations in this field vary from scale as level, scale as size, scale as nested hierarchy (e.g. Howitt, 2003), to scale as ‘the ‘vertical ordering’ of social systems and relations within a hierarchical scaffolding of intertwined territorial units stretching from the global/worldwide, the supranational/triadic and the national downwards to the regional, metropolitan, the urban, local and the body’ (Brenner, 2001, p. 547). Marston, Jones, and Woodward (2005) have even suggested the ‘eliminat[ion of] scale as a concept in human geography’, since ‘there is no agreement on what is meant by the term or how it should be operationalized’ and while ‘scholarly positions are divergent in the extreme’ (p. 416). However, I do think that scale is an interesting concept with which to analyse governance processes about complex issues, since, as explained in 1.1, complex problems are multi-scalar by nature and not much attention has been paid to this characteristic in the governance of complex problems so far. As Padt and Arts (2014) explain: ‘By analytically discerning multiple scales, researchers can be more precise in communicating the relationships between and among scales and levels. Scales and levels are then analytical tools that can be used to research the environment and the governance thereof’.

For the purpose of this thesis, to get a better understanding of scale framing in interaction, and the implications of scale framing for governance processes about complex problems, I need a conceptualisation of scale that allows for empirical investigation. In line with Gibson et al. (2000), I thus define scales as the spatial, temporal, or administrative dimensions used to describe a phenomenon (adapted from Gibson et al., 2000). Apart from scales, levels can be distinguished. Levels are ‘the units of analysis that are located at the same position on a scale’ (Gibson et al., 2000, p. 218), or in other words: the different locations on a scale. On the administrative scale, for example, I can distinguish the global, European, national, provincial, and municipal levels, and on the time scale I can distinguish between e.g. short-term and long-term processes (Cash et al., 2006).

Many scholars study scales from a positivist or realist paradigm, considering them as ‘real’, as fixed entities (Buizer et al., 2011). In this thesis, I do not perceive scales as fixed entities with an unequivocal meaning. Scales are not just out there. Rather, I study scales as social constructions (see also Delaney & Leitner, 1997; Marston, 2000). Sayre (2009) in this context discussed the difference between ontological and epistemological aspects of scale. The ontological aspect explains that ecological and social processes have a certain scale size and actually take place at a certain level. Ontologically viewed, scale is the objective characteristic of complex natural and social

interactions, often referred to as the operational scale (Sayre, 2009). In the epistemological view, the scale itself structures observations and, thus, the description of social and ecological phenomena (Sayre, 2009). This scale is also called the observational scale.

Within the debate about the conceptualisation of scale in geography, the construction of scale is also extensively debated (see e.g. Brenner, 2001; Jonas, 1994; Marston, 2004; Marston, 2000; Marston & Smith, 2001; and see MacKinnon, 2011, for an extensive theoretical debate on the social construction of scale and the politics of scale). However, there is general agreement in the geography literature that scale, in addition to an ontological category, is also socially constructed (e.g. Delaney & Leitner, 1997); but, as Marston (2000) explains: 'scale-making is not only a rhetorical practice; its consequences are inscribed in, and are the outcome of, both everyday life and macro-level social structures' (p. 221). In other words, scale is 'continually forged and remade through everyday habits, routines, practices, negotiations, experiments, conflicts and struggles' (Brenner, 2001, p. 605) with real, material, consequences. These conceptualisations of scale as constructions or epistemological moments of scale have received much less attention than the ontological moments or 'real' scales (Padt & Arts, 2014).

Frames and framing

I use theories about frames and framing (Aarts & Van Woerkum, 2006; Bateson, 1972; Dewulf, et al., 2009; Goffman, 1974; Lewicki et al., 2003; Schön & Rein, 1994) to study the construction and use of scale in governance interactions. Frames can be understood as strong and generic story lines that guide both analysis and action. Framing is about sense-making, interpreting, and giving meaning. 'To frame is to select some aspects of a perceived reality and make them more salient in a communicating context, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described' (Entman, 1993, p. 52). As Yanow (2000, p. 11) explains: 'That which is highlighted or included is often that which the framing group values'.

The concepts of frames and framing have regained the attention of researchers in a broad range of disciplines including psychology (Levin, Schneider, & Gaeth, 1998), sociology (Benford & Snow, 2000), communication (Aarts & Van Woerkum, 2006; De Vreese, 2005; Scheufele, 1999), public policy studies (Rein & Schön, 1996; Schön & Rein, 1994), and conflict and negotiation studies (Dewulf et al., 2009; Donohue, Rogan, & Kaufman, 2011; Gray, 2003; Lewicki et al., 2003). In contrast to a more cognitive approach that focuses on frames as knowledge structures or

cognitive representations (Bartlett, 1932; Minsky, 1975), I take an interactional approach, focusing on frames or *framings*³ as interactional alignments or co-constructions (Bateson, 1972; Dewulf et al., 2009; Dewulf, Craps, & Dercon, 2004; Goffman, 1974). In the interactional approach, framing is the dynamic enacting and shaping of meaning in on-going interactions, and frames are temporary communication structures (Dewulf et al., 2009).

I define interaction broadly as a set of texts, either written or verbal, produced between two or more people and linked together both temporally and rhetorically (Ford, 1999; Ford & Ford, 1995; Hardy, Lawrence, & Grant, 2005). Texts only exist as part of the same interaction if they are in some way responsive to each other, either directly or indirectly (a rhetorical connection), and are produced through chronologically sequenced discursive acts (a temporal connection). Interactions are important for understanding the role of language in governance processes. Consequential action is not so much the result of disconnected statements or isolated texts, as the result of on-going exchanges among actors that draw on broader discourses and produce frames that act as resources for action and for further interactions (Fairclough, 1992; Hardy et al., 2005). In this thesis, I distinguish between two levels of interaction: the face-to-face, or conversational interaction level, and the governance process interaction level. By the latter, I mean the interactions between different governance episodes (see chapter 5).

People construct frames when they interact by linking text to contexts (Chenail, 1995) and by considering possible reactions of the audience. They do not necessarily have the frames that they put forward in interaction available beforehand. Rather, in interaction, people adjust their frames to the situation at hand. Consequently, the framing of an issue, including the scale framing, is the result of interactions between different actors, and at the same time it is the input for these processes, resulting in more complexity (Lewicki et al., 2003).

With regard to governance processes about complex societal issues, frames allow policymakers to 'make a graceful normative leap from is to ought' (Rein & Schön, 1996, p. 88), whereby different frames point towards different action strategies. A governance process consists of a series of framings of the issues under debate, and the policy actor who is able to present the most convincing or acceptable framing steers the debate (Fischer & Forester, 1993; Ford, 1999). For example, in the agenda-setting phase of the governance process, framing is a crucial process steering the direction of change (or stability) (Baumgartner & Jones, 2009; Nisbet & Huges, 2006). The

³ The terms frames and framings are used interchangeably in this thesis.

specific framing of an issue that makes it to the top of the policy agenda will direct the kind of change that can take place.

Scalar politics

As scales are social constructions, they can be used strategically as political devices (Swyngedouw, 2004). Rangan and Kull (2009) explain how scale is constructed by expressing scalar narratives. A scalar narrative serves as a 'device for political persuasion in the public realm, and plays a much larger role than rationality in the politics of governance' (Rangan & Kull, 2009, p. 40). In this thesis, I do not analyse scalar narratives, but scale frames. Scale frames are smaller units of analysis than scalar narratives, but the essence of their politics is the same. Through these scalar narratives or scale frames, an interpretative scale is produced, enabling political actors to exercise power or oppose authority (Rangan & Kull, 2009). They typically make one scale politically more important than other scales, and thus favour one political reality above another because these scales are continually reproduced and institutionalised in practices (Engel-Di Mauro, 2009; Garmestani, Allen, & Gunnerson, 2009). Since particular stakeholders may have special interests in promoting one scale above another, the politics of scale come into play. This process, known as the politics of scale (Delaney & Leitner, 1997; Jonas, 1994), or scalar politics⁴ (MacKinnon, 2011), 'is highly contested, involving numerous negotiations and struggles between different actors as they attempt to reshape the spatiality of power and authority' (Leitner, 2004, pp. 238-239; Kurtz, 2003).

I recognise that there is a body of empirical work on the social construction of scale and the politics of scale in many different contexts (e.g. Harrison, 2006; Kurtz, 2003; Lebel, Garden, & Imamura, 2005; Leitner, 2004; McCann, 2003). Kurtz (2003), for example, studies the politics of environmental justice as politics of scale in order to explore how environmental justice activists respond to the scalar ambiguity inherent in the political concept of environmental justice; and McCann (2003) argues that urban politics is frequently characterised by political strategies that frame reality in terms of scale. He states that the simultaneous framing of space and time in the city has important, if sometimes unpredictable, implications for policy and politics. Although the construction and politics of scale are intensively debated, the practice of scalar politics remains abstract in these studies. There are no studies that show how actors in interaction, i.e. on the micro-conversational level, do scalar politics. And none of the empirical studies makes the implications of these scalar politics for governance processes

⁴ Politics of scale and scalar politics are used interchangeably in this thesis.

explicit; if discussed at all, the implications remain vague (see e.g. McCann, 2003, above).

Scale framing

To study the act and the implications of scalar politics, I have developed the concept of *interactional scale framing*. Through the process of framing, actors highlight different aspects of a situation as relevant, problematic, or urgent, and by doing so situate issues on different levels and scales. I use the term 'scale framing,'⁵ by which I mean the process of framing an issue using a certain scale and/or level. Scale framing is not without consequences. It makes a difference in terms of actors, interests, and interdependencies whether problems are addressed at one scale-level or another (Dewulf et al., 2011). Scale framing can be used as a means of legitimating inclusion and exclusion of actors and arguments in policy processes (Kurtz, 2003). As explained above, through processes of framing, actors operating and situating themselves at different scales strategically manipulate power and authority (Kurtz, 2003; Leitner, 2004). Actors can behave strategically by scaling the problem such that they situate themselves at the centre of power (Termeer & Kessener, 2007). Thus, actors strategically and instrumentally deploy scale frames with the purpose of effecting change (Delaney & Leitner, 1997). In this thesis, I study the process of interactional scale framing.

1.3 Research objectives and questions

Following from the above, the overall aim is to get a better understanding of scale framing in interaction, and the implications of scale framing for governance processes about complex problems.

The scientific relevance of this thesis stems from its contribution to the public administration, policy sciences, framing, and politics of scale theory by filling the knowledge gap around scale framing in interactions. I introduce, develop, and apply the concept of interactional scale framing.

The societal relevance of this thesis derives from insights into the meaning of scale framing in governance processes, which may help to improve the quality of the discussions and decision-making processes about complex problems.

Resulting from these objectives, the general research question is: *What are*

⁵ It may be more correct to use the phrase 'framing scales,' rather than 'scale framing,' since how scales are framed is the object of study, and not how frames are scaled. However, scale framing is preferred since it sounds right.

the implications of scale framing for the governance of complex problems? I study this in the context of the debate about Dutch intensive agriculture (see 1.4). In order to do so, I, firstly, wanted a better understanding of scale framing in current discussions about Dutch intensive agriculture. In Dutch agriculture, scale increase literally is a problem, since there is a fierce debate about allowing scale increase (*schaalvergroting*) in the form of mega-stables. This debate about mega-stables is mainly about how large a farm/stable could or should be. In this debate, many different scale frames are used. Thus, I started by mapping out how scale increase is framed in Dutch agricultural policy over time. I asked:

1. *How is scale increase framed in Dutch agricultural policy over time?*

Secondly, I was interested in the process of scale framing in interaction. In other words, I was interested in how actors do scalar politics in face-to-face interactions. Scalar politics or politics of scale can be studied from various different angles – for example, from the angle of the credibility or legitimacy of the actors involved in the interaction. In this thesis, I study the implications of scale framing in interaction for inclusion and exclusion (question 2), accountability (question 3), and power (question 4). I asked:

2. *What are the implications of scale framing in interaction for inclusion and exclusion of people and/or ideas in governance processes about the future of Dutch intensive agriculture?*

During the analysis of the scale frames in interactions, my attention was caught by the accountability management done with the help of scale frames, and I decided to focus the analysis on the role of scale framing for accountability management:

3. *What are the implications of scale framing in interaction for the management of accountability in governance processes about the future of Dutch intensive agriculture?*

The outcomes of this study – that actors *do* scalar politics on the conversational level, that they frequently use scale frames to reach different goals – raised the question of how scale framing relates to power:

4. *How does scale framing in interaction relate to power in governance processes about the future of Dutch intensive agriculture?*

Lastly, I wanted to reflect on the added value of my interactional scale framing perspective and make recommendations for more scale (frame)-sensitive governance. I asked:

5. *What are the implications of the insights derived from this study for the literature on governance, framing, and scalar politics?*
6. *What are the implications of these insights for future research?*
7. *What are the implications of these insights for the practice of organising governance processes?*

1.4 Methodology

In order to get a better understanding of the process and implications of scale framing in complex governance processes, I adopted an interpretive approach. In this section, I present this approach, the research design, and the methods for data collection and analysis.

An interpretive approach

An interpretive approach assumes that we live in a world that can be understood in multiple ways. In this world, there is no absolute truth. As Yanow (2007) explains, interpretive approaches to the analysis of policymaking processes provide an alternative to approaches that enact positivistic ontological and epistemological presuppositions, such as for example cost-benefit analyses, decision trees, attitudinal, and other survey research. Instead, interpretive researchers try to understand policymaking processes by the way in which people, or groups of people, give meaning to specific events (Van Bommel, 2008). The focus thus is on interpreting meanings constructed by different actors. Since I was interested in the role of scale framing (as a form of meaning construction) in governance interactions, I used an interpretive approach (Yanow, 2000; Yanow & Schwartz-Shea, 2006).

The philosophical basis of the interpretive approach is rooted in schools of thought like phenomenology, hermeneutics, symbolic interactionism, ethnomethodology, and pragmatism, among others (see also Van Bommel, 2008; Yanow & Schwartz-Shea, 2006). The point of departure in these schools is the fact that knowledge is generated and shaped by the researcher and the way to study human actors is through *verstehen* – understanding (Yanow, 2006); or, as Van Bommel (2008) explains, these schools start from the idea that perceptions are filtered and organised in a process of sense-making or

framing, but they differ in their approach to this framing process.

An interpretive approach is thus based on several ontological and epistemological presuppositions. Firstly, it presumes that we live in a social world characterised by the possibility of multiple interpretations (Yanow, 2000). In this world, there are no objective, true data (Yanow, 2000). Therefore, it is not possible for the researcher to stand outside the issue being studied. An interpretive approach also assumes that knowledge is acquired through interpretation, which necessarily is subjective: it reflects the 'lived life' of the analyst (Van Bommel, 2008; Yanow, 2007). Thus, in the process of meaning making, both the researched and the researcher interpret social reality, and as a result influence the generated knowledge (Yanow, 2007). This is also referred to as the double hermeneutic (Giddens, 1984; Jackson, 2006; see also Termeer, 1993). An interpretive approach has thus several implications for the role of the researcher and argues for reflexivity on her part. I return to this in the section on ensuring the quality of interpretive research.

Research design

'Complex problems require analytic tools that do not oversimplify social realities in order to force-fit them into restricted, and restrictive, models' (Yanow, 2007, p. 118).

In line with our interpretive approach and to do justice to the complexity of the problem that I wanted to study, I adopted a case study design. The case study is a design to study a social phenomenon through a thorough analysis of an individual case (Kumar, 2005). According to Tellis (1997), case studies allow for multi-perspective analyses, meaning that the researcher considers the voice and perspective not just of the actors, but also of the relevant groups of actors and the interaction between them. More specifically, 'case studies are analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods' (Thomas, 2011, p. 513). Because of this, case studies provide opportunities for the intensive analysis of many specific details often overlooked by other methods (Kumar, 2005). Furthermore, case studies are particularly useful when one is studying multidimensional phenomena that cross multiple scales and levels (De Vaus, 2001). They provide a systematic way of looking at events, collecting data, analysing information, and reporting results. This fits very well with the objectives and interpretive approach in this thesis.

I define a case as a carefully selected, demarcated whole that illustrates the issue under study (Van Bommel, 2008). Cases are thus not pre-established

units or categories, they are defined by the researcher by comparing data with theory (Van Bommel, 2008). Determining what to treat as a case is then an interplay between the research object and the researchers' ideas about it (Neuman, 2003). In line with this view, the case allows us to study analytically the issue in detail and/or to contribute to existing theory.

There are several different types of case study designs. Case studies can, for example, be descriptive, explanatory, theory testing or theory building, single case or multiple case. Multiple combinations and cross-classifications can be made between these different designs (De Vaus, 2001). Yin (2003) distinguishes between holistic and embedded case study designs. The same case study can have more than one unit of analysis (Yin, 2003). In this research, I study a single case: the debate about the future of Dutch intensive agriculture. In this case, I have analysed three embedded cases (see also below): a historical analysis, the decision-making process about the establishment of the NMC, and the societal dialogue on the future of intensive agriculture in the Netherlands.

One of the criticisms of case study research is that one cannot generalise on the basis of an individual case. However, according to Flyvbjerg (2006), case study research can very well be limited to a single case representing a carefully selected illustration of the phenomenon studied. As Yin (1994) explains, case studies are ideal for analytic generalisation, in which previously developed theory is used as a template against which to compare the empirical results of the case study. Thus, the case study uses the logic of analytic rather than enumerative generalisation (Van Bommel, 2008).

I see my cases and analysis as powerful examples of in-depth scale frame studies from which we can learn about the implications of scale framing in complex governance processes in other contexts (see Flyvbjerg, 2006). And, as I explain below, I am of the opinion that the traditional criterion of generalisability is not well suited to judge the quality of my interpretive study. I prefer to use the criterion of transferability (Erlandson, Harris, Skipper, & Allen, 1993) and leave the judgment on the transferability of the results to my readers.

Case selection

On the basis of the research objectives and research questions, I developed the following selection criteria:

- The case should be a complex problem and thus include scalar issues;
- Different levels of government should be involved;
- Access to actors, documents, and interactions should be possible.

As explained in 1.1, in order to study scale framing in complex governance interactions, I selected the debate about the future of the Dutch intensive animal husbandry sector in which many scale issues play a role. The debate is, amongst other things, about allowing scale increase (*schaalvergroting*) in the form of mega-stables. These discussions thus are about how large farms/stables could or should be. In this debate, the term scale itself is a topic of the discussion and thus of interest for our purposes. As indicated at the beginning of this chapter, the development of mega-stables has led to strong objections from local citizens as well as Dutch society in general.

Several reasons have been identified for the current resistance to mega-stables: for example, the occurrence of various animal diseases; issues about antibiotics use and increasing resistance to antibiotics; insecurity about the risks of dust particles and other emissions; and, recently, mega-stables' interference with the landscape (see also Frouws, 1998; Frouws & Van Tatenhove, 1993; Reisner & Taheripour, 2007; Van Der Ploeg et al., 2000). Proponents stress that large stables, with more animals and thus increased productivity, make investments in the newest technology feasible, resulting in fewer emissions, fully or partly closed systems, fewer animal movements, and better animal welfare (more space). Another supporting argument is food security: if we want to feed the growing world population, we need to produce much more food than we do now, and the Dutch intensive agriculture sector is good at this.

In the administrative context of this debate also, scale issues play a role. The European Common Agricultural Policy informs national policy. At national level, there are several memoranda and acts (e.g. Environmental Memorandum, Agenda Vital Rural Areas, Reconstruction Act, Spatial Planning Act). The implementation of these memoranda and acts is decentralised to the provinces and municipalities. One of the starting points of the Spatial Planning Act is equal responsibilities for the state, provinces, and municipalities regarding spatial planning. Each government is responsible at its own level of jurisdiction. In the case of mega-stables, this means that some provinces have prohibited the building of these stables, whereas others have not and have allowed municipalities to grant the permits.

To understand the current discussion about this topic, our first embedded case is a historical analysis of the contested term *scale increase* (an increase in both size and intensity) in Dutch agricultural policy.

The second embedded case is the decision-making process regarding the establishment of an NMC in a small municipality in the south of the Netherlands. *Mixed company* implies reversion to traditional farming systems that used to combine cattle breeding and arable farming, in contrast to the current specialisation of farms in either livestock or crops. This NMC will

accommodate 3,700 sows, 9,700 piglets, 19,700 hogs, 1,200,000 chicks, and 74,000 chickens. The farm will have its own manure fermentation installation, hatchery, and abattoir. The plans for the NMC caused fierce protests among citizens and a local action group, but also attracted attention from national action groups and as a result made the national press. On the other hand, the development of farming systems like the NMC is seen as very sustainable and innovative, as a solution for regional agricultural restructuring issues and an example for the rest of the world in the context of the predicted food security problems (see above).

The third embedded case is the societal dialogue on the future of intensive agriculture in the Netherlands. In 2011, as a result of fierce protests against mega-stables by different parts of Dutch society, the Dutch Minister of State decided to organise a societal dialogue about scale size and the future of intensive animal husbandry in the Netherlands. For example, the Party for the Animals (Partij voor de Dieren) asked many questions about mega-stables and animal welfare in parliament, several provinces forbade the building of mega-stables, and societal protests increased continuously.

Data collection

An interpretive approach argues for methods like conversational interviewing, participant observation, ethnography, and so forth that allow for understanding how actors frame issues and where these frames come from (Yanow, 2000). According to Yanow (2000), the data of interpretive policy analyses are the words, symbolic objects (e.g. policy documents), and acts of policy-relevant actors, along with the meanings that these have for them. What I collected were relevant policy documents, semi-structured interviews, observations, and recorded interactions.

For my first embedded case, the historical analysis, I collected the explanatory memoranda accompanying the yearly national budget of the Ministry of Agriculture, over the period 1950-2012. The memoranda are the results of an extensive negotiation process between the different parts of the ministry. These documents give an annual overview of the policy developments at the ministry at that time, are comparable, and are all digitally accessible. In all the embedded cases, I collected the relevant policy documents and other documents (such as brochures, newspaper articles, letters, reports, legislation, lists of names) as background information.

Interviews were a second source of data. I used interviews in the second embedded case. According to Erlandson et al. (1993), interviews are a valuable source of data. They allow the researcher and respondent to move back and forth in time, to discover what people think, and reveal the different frames

people bring to the fore about the topic. In general, interviews enable the researcher to discover aspects of the case that cannot be observed (Yin, 2009). Interviews can take various forms, from very open-ended to highly structured. I used conversational or semi-structured interviews. Semi-structured interviews do not follow a pre-fixed list of questions but allow for a conversation based on pre-determined themes (e.g. Silverman, 2001). I recorded my interviews to make sure that everything that was said was captured, and to enable me to make detailed verbatim transcripts necessary for my analyses. Before I started each interview, I asked permission to record it.

Observations and recordings of interactions between different actors in the embedded cases were the third source of data. I attended meetings between different actors in the second and third embedded cases. During these meetings, I recorded the discussions and made notes of what was happening, the atmosphere, who said what, and sensitive issues. These observations provided me with additional information, which helped me better understand the interactions. I asked permission to record the meetings beforehand. During the meetings my main role was information gatherer, rather than participant.

Data analysis

The interpretive approach provides a variety of methods to study meaning making, such as discourse analysis, narrative analysis, frame analysis, interaction analysis (see Yanow & Schwartz-Shea, 2006). In this thesis, I applied discourse, conversation, and frame analysis.

In general, I conducted the following analytical steps in the analyses of the different cases: I firstly made transcripts of all the data collected. Then, I repeatedly read and compared those transcripts. I coded the contents of the transcripts, using software for qualitative data analysis (Atlas-ti). Parts of the coded texts were subsequently categorised, analysed, and interpreted.

After reading and comparing the transcripts, I conducted a scale frame analysis. In this analysis, I read the transcripts looking for words, phrases, and so on that could possibly point towards scale-related issues; for example: words such as scale increase and related terms, scale, scale effect, large-scale, scale-up; words relating to time, referring to time scales; words relating to spatial or administrative areas; words relating to the size of the farm, and so on. Subsequently, I coded the sentences around these words as different scale frames in Atlas-ti. Next, I looked in detail at how the respondents built up their frames, and I made interpretations of the arguments they presented.

The analyses of the studies presented in chapters 4 and 5 contained

an additional analysis, in which I examined more closely the interaction sequences in which scale framing activities occurred. This analysis is based on the interactive approach to framing (Dewulf et al., 2009). Following this approach, I focused on how people negotiate the proper scale frame by the way they use language (Dewulf et al., 2004).

An interactive framing analysis draws on the fields of conversation analysis (Heritage, 1999) and discursive psychology (Edwards & Potter, 2005; Potter & Wetherell, 1987), which have language and interaction as central concerns in their detailed studies in both formal and informal settings. Language in these fields is conceptualised as action. The emphasis is on studying talk as a way of *doing* (Arminen, 2005). As Wilkinson (2006, p. 56) explains, people 'produce talk in order to *do* something: to corroborate, to challenge, to boast, to tease, to emphasise suffering (or to downplay it), and so on'. In addition, language is viewed as the medium for interaction (Potter, 2004).

Framing analysis from an interactional perspective is based on one of the basic ideas of conversation analysis. That is, what does an utterance do in relation to the preceding one(s) and what implications does an utterance pose for the next one(s). As Hutchby and Wooffitt (1998) put it, the next-turn proof procedure is the most basic tool in conversation analysis (see also Sacks, Schegloff, & Jefferson, 1974). '[T]he next turn provides evidence of the party's orientation to the prior turn, there and then' (Arminen 2005, p. 2). Thus, contributions to a conversation are caused by what has gone before (Wilkinson, 2006). '[W]e either *respond* to some else's prior action (e.g. by *answering* a question that they have posed), or we *initiate* a sequence of action of our own (e.g. by *asking* them a question)' (Wilkinson, 2006, p. 56). In our analysis of frames in interactions, each move in the discussion reveals whether the other party's framing is accepted or rejected as discussants respectively maintain or alter their own framing in their direct response (Drake & Donohue, 1996) or in the next event in the on-going interaction.

In line with this, I used discourse and conversation analytic methods (Edwards, 1997; Phillips & Hardy, 2002; Wood & Kroger, 2000) to study the selected interaction sequences. I analysed discursive strategies as for example the use of role discourse, self-repair, stake inoculation, if – then constructions, extreme case formulations, and footing (Drew, 2005; Edwards & Potter, 1993; Goffman, 1979; Pomerantz, 1986; Potter, 1996; Snejder, 2006; see chapter 4).

In addition to discursive strategies, I analysed the framing strategies that actors in interaction adopt to have their framing prevail. I followed Dewulf and Bouwen (2012), who have identified framing strategies that actors in interaction use to deal with frame differences (see chapter 4; Dewulf & Bouwen, 2012).

Ensuring the quality of interpretive research

Traditional criteria for judging the quality of research, such as validity, reliability, and objectivity, are not very suitable for interpretive studies (Yanow, 2006). However, for interpretive research, credibility and truth are fundamental issues. Without credibility and truth, scientific research becomes fiction (Van Bommel, 2008). In this thesis, I use the criteria as developed by Lincoln and Guba (see also Erlandson et al., 1993): credibility, transferability, dependability, and confirmability to account for the quality of my research.

Credibility relates to the truth value of the research. To build credibility in interpretive research, the researcher has to demonstrate that she has represented the multiple interpretations of the issue under research adequately (Lincoln & Guba, 1985). This can be realised by carrying out the research in such a way that the probability that the findings will be found credible is enhanced, and by having the findings approved by the constructors of the multiple realities being studied (Lincoln & Guba, 1985). In this study, I have built credibility through: 1) persistent observation by identifying and studying those elements and actors that are most relevant to the problem; 2) triangulation by using multiple different sources, methods, researchers, and theories; 3) peer review both internally in the supervising team and externally by presenting my work at conferences and through the blind peer review process of the journals in which the results are published; 4) refining questions and assumptions as more data became available by applying a cyclical, iterative research attitude going back and forth from questions, data, and theory; and, lastly, 5) providing the possibility to check preliminary findings and interpretations against archived raw data. I taped and transcribed all the interviews and interactions that I analysed and saved these for later applications or checks.

The second criterion, transferability, relates to the extent to which findings can be applied to other contexts and settings (Erlandson et al., 1993). Transferability in interpretive research depends on similarities between descriptions and what readers recognise in these descriptions. Yanow (2009), in this sense, discusses a third hermeneutic. In addition to the interpretative moments of the researched and the researcher, the third hermeneutic is the reader's or listener's hermeneutic, when the reader or listener interprets the researcher's words (Yanow, 2009). To enhance transferability, researchers need to collect sufficiently detailed descriptions of data in context and report them with sufficient detail and precision to allow the readers to make judgments about transferability (Erlandson et al., 1993). For me, this meant providing a transparent account of the research process: I am open and clear about the choices I made and the methods for data collection and analysis.

I show my analysis and interpretations, using the data in the texts. The judgment about the truth, usefulness, and generalisability of my research I consign to the reader (the third hermeneutic).

The third criterion, dependability, is about the traditional value of replication: the extent to which research can be replicated to yield the same results. It therefore relates to 'trackable variabilities' that can be ascribed to particular sources (error, reality shifts, better insights, and so forth) (Erlandson et al., 1993). I am of the opinion that the presence of the researcher already causes variability. Her presence influences the situation, making it different from what it used to be. To provide for a check on dependability, the researcher must make it possible for an external examination to be conducted on the process by which the study was performed. For me, this meant my being transparent about my choices and methods. As explained above, I taped and transcribed all the interviews and the interactions, and used these transcriptions as the basis for my analysis. This allowed me to preserve my data in a relatively raw form, although this already involved making choices (I did not transcribe all silences, laughs, and so on). I show my data as much as possible, using original quotes as illustrations. I realise that the researcher's interpretations are shaped by her own perceptions, ideas, experience, education, upbringing, and so on (Yanow, 2009) and have taken this into account. In this research project, I fulfilled different roles varying from observer, researcher, participant, to advisor. These different roles provided me many different insights into the cases. I have tried to be clear and open, with regard to my roles at specific junctures, and to the choices that I made and what informed them.

Lastly, confirmability relates to the traditional value of objectivity or to the extent to which findings are the product of the focus of inquiry and not of the biases of the researcher (Erlandson et al., 1993). However, from an interpretive point of view, this kind of objectivity cannot be claimed, since it does not exist (Erlandson et al., 1993). All I can do as an interpretive researcher is study the cases from a variety of perspectives and interpretations (Van Bommel, 2008). That is what I did. The significance of my interpretations cannot be measured against a non-existing objective reality and thus depends on the extent to which I present them in a convincing way. It is up to the reader to accept or reject my interpretations.

1.5 Outline of the thesis

This thesis consists of a compilation of four strongly related articles, three of which have been published, and the fourth is submitted for publication. In the following chapters, I present these articles. In chapter 2, I present a historical analysis to understand the continuous use and justification of the contested concept of scale increase in Dutch agricultural policy. In this chapter, I use the memoranda accompanying the yearly national budget for the Ministry of Agriculture to conduct a frame analysis on scale increase. In chapter 3, I study the NMC case to see which scale frames different actors use in interactions and with what implications. I use interviews with key actors and analyse municipal board meetings to show the different scale framings and resulting scale frame mismatches. Chapter 4 continues with the NMC case and questions how the different actors in this policy process used scale frames to manage accountability in interactions. In this chapter, I analyse face-to-face interactions between different actors in the case. In chapter 5, I present the analysis of the interplay between scale framing and power dynamics in the societal dialogue about the future of Dutch intensive agriculture. I develop a framework to study the interplay in both the face-to-face interactions and interactions at process level. In chapter 6, I present a conclusive oversight and address the research questions. Furthermore, I reflect on my research and discuss the findings in the light of scholarly literature. Finally, I present recommendations for further research and practice.

2

Framing scale increase in Dutch agricultural policy 1950 - 2012

M. van Lieshout, A. Dewulf, N. Aarts and C. Termeer

Abstract

In this paper, we study how agricultural policy, and particularly how scale increase, has been framed by the responsible ministers over the last six decades. We analyse the different interpretations attached to scale increase and other policy issues, in a longitudinal study of the memoranda accompanying the yearly national budget for the Ministry of Agriculture. Our analysis provides a nuanced explanation for the continuous use of the contested concept of scale increase. We show that the framing of Dutch agricultural policy has undergone considerable changes regarding issues and solutions, the role of international policy and issues from other policy domains. We find that the policy and the policy frames have become more diverse, interdependencies have increased and as a result policy has become more complex and self-referential. Part of our findings can be explained as the occurrence of a paradigm shift. However this does not explain the continuous presence of the logic of scale increase as the way forward for Dutch agriculture. We state that the self-referential agricultural policy system has aimed to continuously improve itself by means of scale increase, without discussing or critically reflecting on the functioning of the system itself. In this process language played a powerful role: changing the language helped to maintain the existing system or paradigm in which scale increase is continuously positively framed as the solution for Dutch agriculture.

2.1 Introduction

At present the agricultural sector, and especially the building of ‘mega-stables,’ is a topic of much and heated discussion in the Netherlands. Several reasons have been identified for the current resistance to mega-stables: for example, the occurrence of various animal diseases; issues about antibiotic use and increasing resistance to antibiotics; insecurity about the risks of dust and other emissions; and recently the size of mega-stables in the landscape (see also Frouws, 1998; Frouws & Van Tatenhove, 1993; Reisner & Taheripour, 2007; Van Der Ploeg et al., 2000). Proponents highlight that large stables, with more animals and thus increased productivity, make investments in the newest technology feasible, resulting in less emissions, partly closed systems, less animal transports, and better animal welfare (more space). Another argument is food security: if we want to feed the growing world population we need to produce much more food than we do now.

As a result of all the protests and in accordance with the 2012 memorandum, the Dutch Minister of State of Agriculture (Henk Bleker) decided to organize a ‘societal dialogue’ about ‘the scale and future of the animal husbandry sector’ (Alders, 2011, p. 5) in the Netherlands. This dialogue should ‘result in a clear overview of all the opinions and arguments regarding scale increase in animal husbandry’ (Ministerie van Economische zaken Landbouw en Innovatie, 2011) and give an ‘insight into the question of whether there exists a societal legitimation for animal husbandry or what is necessary to obtain this’ (Alders, 2011, p. 11). The dialogue took place early in 2011.

The results of the dialogue were presented to the Dutch Cabinet in a letter from the Minister of State on 23 November 2011. In this letter, the Minister of State largely follows the reports of Hans Alders (2011) and Commissie Van Doorn (2011). Despite the fierce discussions, these two recent reports justify scale increase. In *From Mega to Better (Van mega naar beter)* (Alders, 2011) scale increase is literally mentioned as the means to continue farming in the most preferred scenario. In *All Meat Sustainable (Al het vlees duurzaam)* (2011) is stated that size is of subordinate importance as long as the production of meat is sustainable. The Minister of State in his letter concludes that the government ‘at the present moment does not see any reason to interfere with the scale-size of farms’. (Bleker, 2011, p. 7)

However, this discussion is not new. As far back as the 1930s, people in the Netherlands were afraid that farms were getting too big and too industrial: “from being an ‘agriculturist’, the farmer is becoming more and more a ‘manufacturer of naturalia’.” (Houwink, 1935 in: Van Dijk, Klep, & Merckx,

1999, p. 3, our translation). Notwithstanding these early negative sounds, even from farmers themselves (e.g. in the 1980s young farmers worried about ‘mammoth companies’ (see Depla & Schulte, 1983)), until recently the Dutch government has unproblematically stimulated scale increase (an increase in both size and intensity) in the agricultural sector. Scale increase, also referred to in terms of for example rationalisation, increasing production, expansion, or intensification, has thus been a topic of debate for many years.

To understand the current discussion and the continuous use and justification of the contested concept of scale increase as the way forward for Dutch agriculture, we need to know how the situation became what it is now. In other words, we need a historical analysis to understand the current discussion.

Several other researchers have studied the development of agricultural policy over different periods using various concepts and theories. For example Grant (1997) and Greer (2005) present extensive overviews of the development of agricultural policy in Europe (early 1960’s-late 1990’s/early 2000’s). Frouws (1998) distinguishes three discourses: the agri-ruralist, utilitarian, and hedonist discourse, to understand the ‘rural question’ (i.e. the development of the countryside) in Europe (1990’s). Termeer (1993) discusses the various reality definitions of different actors to explain the difficulties surrounding the Dutch manure policy (1970-1991). Termeer and Werkman (2011) use configuration theory to explain why it is so difficult to change the closed agricultural policy networks (2007-2009). Other authors use the concept paradigm shift or change to explain large changes in (agricultural) policy over the last decades (e.g. Coleman, Skogstad, & Atkinson, 1996; Daugbjerg & Swinbank, 2011; Van Der Ploeg, et al., 2000). Related, some scholars have recently sought to explain why language and categorisations of food scares have changed over the last decades, while the risks of these scares have remained the same. One answer is found in the institutional shifts in the area of food (e.g. Loeber, 2011; Loeber, Hajer, & Levidow, 2011; Paul, 2011). Another answer can be found in the powerful role of language in the construction and sense-making of these risks (Feindt & Kleinschmit, 2011; Loeber, 2011; Loeber, et al., 2011; Paul, 2011; Roslyng, 2011). However these various studies do not focus on the contested concept of scale increase, and cannot explain why this controversial term is maintained and justified as solution for all kinds of problems the agricultural policy seeks to solve. Although the social, economic and political context have changed considerably, and the agricultural policy accordingly, scale increase continues to appear in policy documents as a solution.

In this paper, we explicitly focus on the role of language in agricultural policy to understand continuity and change in Dutch agricultural policy, and to explain the continuous use and justification of scale increase in policy over time. We review the explanatory memoranda accompanying the yearly national budget of the Ministry of Agriculture over the period 1950-2012. We use framing theory to analyse the memoranda. Through the process of framing, actors highlight different aspects of a situation or an issue as relevant, problematic or urgent. In the same process, actors also leave out issues that they do not want to emphasise, as is the case in strategic documents like memoranda. As such a framing analysis will provide a more subtle insight in the continuity and change in the constructed meaning of Dutch agricultural policy and the use of the concept of scale increase therein.

We address the following research questions: How is agricultural policy framed in the Dutch agriculture ministers’ memoranda throughout the years 1950-2012? How is scale increase in Dutch agricultural policy framed in the memoranda over time? How can the continuous presence of the contested term scale increase in the overall changing agricultural policy be explained? What can we learn from this study with regard to long-term frame change?

In the following, we elaborate on framing theory and long-term frame change. Next we present the methods used, and the results of the analysis of the memoranda 1950-2012. We end with a concluding discussion.

2.2 Theoretical Framework

In order to provide a subtle insight in the continuity and change of Dutch agricultural policy we use framing theory, theories about continuity and change in policy and long term frame change⁶.

Framing theory

We follow authors like Stone (2012), Fischer and Forester (1993), and Hajer and Wagenaar (2003) in their idea that public policy is largely made up of language and that language is not a neutral expression of interests and meanings (Hajer, 2001). Language does not just mirror reality but constructs its meaning (Fischer & Forester, 1993). From this point of view, problems, causes and solutions are not given but ‘created in the minds of citizens

⁶ Since this thesis consists of a collection of chapters written in the form of articles reproduced verbatim (except for words such as ‘paper’ and ‘article’ which refer to the work being discussed and which have been changed into ‘chapter’), the reader will note some overlap in the conceptual/theoretical parts of the different chapters.

by other citizens, leaders, organisations, and government agencies, as an essential part of political manoeuvring (...)’ (Stone, 2012, p. 156). As Fischer and Forester (1993, p. 2) make clear: ‘Policy analysis and planning are practical processes of argumentation’. Policymaking is reasoning by metaphor and analogy; it is trying to get others to see the situation as one thing rather than another (Stone, 2012).

In line with these starting points about the role of language in public policy we use theories about frames and framing (Aarts & Van Woerkum, 2006; Bateson, 1972; Dewulf et al., 2009; Goffman, 1974; Lewicki et al., 2003; Schön & Rein, 1994) to show how agricultural policy has been framed throughout the years by the responsible ministers, and the role of scale increase in these policies. Frames can be understood as strong and generic story lines that guide both analysis and action. ‘To frame is to select some aspects of a perceived reality and make them more salient in a communicating context, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described’ (Entman, 1993, p. 52). As Yanow (2000, p. 11) explains: ‘That which is highlighted or included is often that which the framing group values’.

The concepts of frames and framing have regained the attention of researchers in a broad range of disciplines including psychology (Levin et al., 1998), sociology (Benford & Snow, 2000), and communication (Scheufele, 1999). In contrast to a more cognitive approach that focuses on frames as knowledge structures or cognitive representations (Bartlett, 1932; Minsky, 1975), we take an interactional approach, focusing on frames or *framings* as interactional alignments or co-constructions (Bateson, 1972; Dewulf, et al., 2009; Dewulf et al., 2004; Goffman, 1974). In the interactive approach, framing is the dynamic enacting and shaping of meaning in on-going interactions, and frames are temporary communication structures (Dewulf, et al., 2009). People construct frames when they interact by linking text to contexts (Chenail, 1995) and considering possible reactions of the audience.

The framing of an issue is the result of processes of interaction and negotiations between different actors, and at the same time it is the input for these processes.

Frames allow policymakers to ‘make a graceful normative leap from is to ought’ (Rein & Schön, 1996, p. 88), whereby different frames point towards different action strategies. A policy process consists of a series of framings of the issues under debate, and the policy actor who is able to present the most convincing or acceptable framing steers the debate (Fischer & Forester, 1993; Ford, 1999). For example in the agenda-setting phase of the policy process, framing is a crucial process steering the direction of policy change (or

stability) (Baumgartner & Jones, 2009; Nisbet & Huges, 2006). Agenda-setting is the on-going competition between issue proponents for the attention of media professionals, the public, and policy elites (Dearing & Rogers, 1996) and the framing of issues, stressing one perspective and ignoring others, is a powerful force in this process (Dearing & Rogers, 1996; Kosicki, 1993; Van der Stoep & Aarts, 2010). The specific framing of an issue that makes it to the top of the policy agenda will direct the kind of policy change that can take place.

Long-term frame change

In our view frames are not static entities, but can be revised or transformed under certain circumstances (Lewicki et al., 2003). Reframing occurs when actors change their frames; that is, when they develop a new way of interpreting or understanding the issues, or when they develop a ‘new’ language to communicate about the issue. In order to reframe one’s understanding of an issue, some degree of perspective taking is required (Schön & Rein, 1994). Perspective taking involves standing back, observing, and reflecting on the fact that there is more than one way to view the issues (Lewicki et al., 2003; Schön & Rein, 1994).

In this paper we are interested in long-term (i.e. several years of decades) policy frame change. Although there are studies about reframing (e.g. Feyerherm, 1995; Kaufman & Smith, 1999; Schön & Rein, 1994; Wagner, 2007) in for example negotiation processes, not much research on long-term (policy) frame change has been conducted. One exception is Feyerherm (1995) who found that frame(work)s can change over time given the repeated presence and interaction with participants who hold alternative frameworks. Another exception, although not using the framing terminology is Termeer (1993), who concludes frames can be stabilised, redefined, and changed. She discerns confrontation (with another actor or frame) as important trigger for reframing.

In line with our approach to framing, the extensive literature on paradigm shifts in (agricultural) policy, provides us with helpful insights regarding long-term policy frame change (e.g. Coleman et al., 1996; Daugbjerg & Swinbank, 2011; Hall, 1993; Van Der Ploeg et al., 2000). As Hall (1993) explains, policymakers work within a policy paradigm: an interpretive ‘framework of ideas and standards that specifies not only the goals of policy and the kind of instruments that can be used to attain them, but also the very nature of the problems they are meant to be addressing. Like a *Gestalt*, this framework is embedded in the very terminology through which policymakers communicate about their work (...)’. (Hall, 1993, p. 279, italics in the original) As such policy paradigms resemble policy discourse (cf. Hajer, 1995) or metaframes (cf.

Schön & Rein, 1994). Drawing on theory of social learning (Argyris & Schön, 1996), Hall (1993) explains change in policy paradigms is likely to involve the accumulation of anomalies with the prevailing paradigm, experimentation with new forms of policy, and policy failures that cause a shift in the locus of authority over policy. This kind of change cannot be realised inside the state itself, but is effected by means of electoral competition and a broader societal debate (Hall, 1993). According to Hall (1993) such a paradigm shift is marked by radical changes. However Coleman et al. (1996), and Daugbjerg and Swinbank (2011) show there is also a more gradual, incremental trajectory to paradigm change, characterised by adjustment and planned policy change informed by alternative policy paradigms. In this view change is negotiated between state actors and group representatives (Coleman et al., 1996).

In the literature on agricultural policy paradigms three succeeding paradigms are distinguished which have determined agricultural policies since WWII: the state-assisted or modernisation paradigm (Coleman et al., 1996; Van Der Ploeg et al., 2000), the market-liberal paradigm (Coleman et al., 1996), and the rural development or multifunctional agricultural paradigm (Daugbjerg & Swinbank, 2011; Van Der Ploeg et al., 2000). The state-assisted paradigm rests on two fundamental principles: 'first, the agricultural sector contributes to national policy goals and therefore merits special attention; and, second, the price mechanism is a suboptimal means of achieving an efficient and productive agricultural sector' (Stone, 2012, p. 275). As a reaction to problems related to the state-assisted paradigm as overproduction, high government costs, and international trade tensions the market liberal paradigm emerged (Coleman et al., 1996). In this paradigm, agriculture should be understood as an economic sector like all others, in which competitive markets are the source of producers' incomes, and only those producers who can earn an income from the sale of commodities in these free markets should remain active in agriculture (Stone, 2012, p. 275). Lastly, the multifunctional agriculture or rural development paradigm evolved as a reaction against the negative environmental impacts of both former paradigms (Daugbjerg & Swinbank, 2011). In this paradigm the agricultural sector is seen as a provider of public goods in addition to, and in many ways more important than, its role as a producer of food (Daugbjerg & Swinbank, 2011).

Thus confrontation with (actors who hold) alternative frameworks or paradigms in a situation where the current paradigm does no longer suffice, seems to be the overarching driver for long term policy frame change. With the help of these ideas on long term policy frame change we will study the changing policy framings in Dutch agricultural policy. In order to explain the

continuous use of the contested concept of scale increase we will use a more fine grained frame analysis, which will enable us to show in detail how the policy and the concept of scale increase is framed over time and learns us more about long-term frame change and stability.

2.3 Materials and methods

To analyse the policy frames, we conducted a longitudinal analysis of the explanatory memoranda accompanying the yearly national budget of the Ministry of Agriculture, over the period 1950-2012. The memoranda are the results of an extensive negotiation process between the different parts of the ministry. These documents give an annual overview of the policy developments at the ministry at that time, are comparable and are all digitally accessible. For the Dutch agricultural history, taking the aftermath of WW II and the recent developments into account the period 1950-2012 is a meaningful period. We take 1950 as a starting point, since at that time government and policy were functioning normally again after WW II. We used five-yearly intervals in order to be able to discover frame changes over time. We complemented this analysis with a secondary analysis of earlier studies relating to the topic and historical overviews (e.g. Bieleman, 2008, 2010; Jansma & Schroot, 1987; Termeer, 1993; Van Dijk et al., 1999), and the analysis of the two abovementioned recent advisory reports: *All Meat Sustainable* (Commissie Van Doorn, 2011) and *From Mega to Better* (Alders, 2011).

We started our analysis by reading each whole memorandum, but, because the studied memoranda were very different in their appearance regarding their length, layout and comprehensiveness, we limited our main analysis to the introductory chapters in order to make the memoranda somehow comparable. In these introductions the main topics and goals of the memoranda are summarised. A first step was undertaking a content analysis. In this step the first author repeatedly read and compared the texts, looking for statements about general policy developments, the scale-size of farms, the related problems, and how the solutions and aims were phrased. This resulted in a selection of the relevant segments of text in the general introductory chapters of the memoranda. When the introduction did not make clear what the policy entailed, we further analysed and coded other parts of the memoranda that gave more explanation about relevant topics than was provided in the introduction.

The selected segments of text were coded, using software for qualitative data analysis (Atlas-ti). We coded the introductory paragraphs for policy

context (i.e. the underlying arguments) (125 quotations), role of government (11 quotations), scale increase (i.e. statements about the scale-size and development of farms including in terms other than scale increase) (33 quotations), international policy developments (57 quotations), and other policy domains, such as planning, environment, nature, recreation (49 quotations), see Table 2.1.

The selected segments got as many codes as presented by the phrasing of the issue in that segment. Thus for example the phrase: 'If labour and capital in Dutch agriculture want to get a reasonable reward, then in the first place a large quantity of quality produce is required'. was coded with the codes policy context and scale increase. The selected and coded segments were subsequently categorised, analysed, and interpreted, resulting in the agricultural policy frames as presented in the result section below.

In a second analysis, we used the words in the frames that we found in the first analysis as search terms.⁷ In this analysis, we coded the general introductions using the literal terms and synonyms for *growth* and *expansion* related to production (12), *increasing production/productivity* (10), *structure* relating to farm development (change of structure, structure policy, structural adjustments, farm-size structure) (20), *income position/reasonable living* of farmers (14), *management* relating to farm development (12), *quality* of the agricultural produce (52), influence of *consumers/citizens/society* (69), *sustainability* (57), *vitality/liveability* (23), *innovation/innovative* (24) (see also Table 2.3).

2.4 Results

In this section we present our results. We illustrate the policy frames with quotes from the memoranda and refer to the used codes between brackets.

1950: increasing production, stimulating exports

In 1950, Dutch agriculture is still recovering from the Second World War (Bieleman, 2010). Agricultural policy falls under the responsibility of the Ministry of Agriculture, Fisheries and Food Supply. The minister frames the policy for the agricultural sector in general in terms of growth, increasing production and stimulating exports (policy context, scale increase):

⁷ growth and expansion: groei|uitbreiding, structure: structuur*|struktuur* in relatie tot bedrijfsontwikkeling, income position/reasonable living: inkomen*|bestaan*|levens*, management: bedrijfsvoering|management|ondernemerschap, quality: kwaliteit*, sustainability: duurzaam*|duurza*, vitality/liveability: vitaliteit*|vita*|leefbaar*, innovation/innovative: innovat*|innover*, consumers citizens society: burger*|consument*|maatschapp*|society

Table 2.1 | Interpretative codes per memorandum

	Policy context	International	Other policy domains	Role of government	Scale increase	Quotation Totals
1950	3	2	0	1	6	12
1955	3	5	0	0	0	8
1960	5	1	1	0	2	9
1965	6	2	0	1	6	15
1970	7	5	0	0	3	15
1975	1	5	4	0	5	15
1980	5	5	4	0	6	20
1985	11	4	8	0	0	23
1990	14	6	8	0	3	31
1995	11	5	7	0	0	23
2000	17	5	7	5	1	35
2005	11	4	6	3	0	24
2010	23	6	3	1	1	34
2012 ^a	8	2	1	0	0	11
Totals	125	57	49	11	33	275

^a Since the 2012 memorandum accompanies the budget of the Ministry of Economic Affairs, Agriculture and Innovation, we analysed the parts dealing with agricultural policy.

If labour and capital in Dutch agriculture want to get a reasonable reward, then in the first place a large quantity of quality produce is required.

Export opportunities are also determined by the cost price of the product, and this latter is for its part once again strongly influenced by the size of the stock. It is thus plain that as large as possible an increase as is in conformity with feed production and feed importation should be striven for.

The arguments behind these aims are framed in terms of population growth, a reasonable reward for labour and capital and the importance of the agricultural sector for the Dutch economy (policy context).

On the international level, the first agreements for a common agricultural policy in the Benelux economic union are also framed in terms of guaranteeing social security for the farmers and farmworkers and increasing the productivity of the agricultural sector as much as possible (international).

Thus in the 1950 memorandum we see that the minister aims at stimulating growth in production and exports. The term scale increase is not used yet, but the foundations are already in the memorandum.

1955: continuing the preceding years

By 1955, the tone of the introductory memorandum has changed quite a bit. In contrast to 1950, as a result of landmark events in 1953 and 1954, such as international tensions due to the Korean war, a clear drop in prices on foreign markets and increasing surpluses, the domestic market is mentioned as the most important trading area for Dutch agriculture (policy context).

In order to guarantee a continued fair wage for the Dutch farmers the aim of the Dutch government is to promote exports, support attempts towards quality improvement and decrease costs, and to pursue a trade policy that offers the best prospects for Dutch agricultural products. Regarding foreign politics, the aim is to clear the trade barriers and to coordinate agricultural and food supply politics in the broadest sense (international). In 1955, surpluses are mentioned for the first time. Nevertheless, the minister is planning to continue the policy of the preceding years and refers explicitly to 1954 (policy context):

the creation of such economic conditions that the agricultural sector is enabled to deliver the largest contribution to national prosperity. (memorandum accompanying the 1954 national budget)

So, in 1955 also, the minister wants to stimulate the agricultural sector to increase production as far as his limited possibilities allow.

1960: advancing high productivity and a reasonable standard of living

By 1960, the name of the ministry has changed to: Ministry of Agriculture and Fisheries. Also in the 1960 memorandum several difficulties and developments are mentioned that complicate the situation for the agricultural sector: the unfavourable financial position of the treasury, the development of

agriculture and quality agricultural products in the surrounding countries that amongst other things leads to a decrease in the agricultural population (policy context, international). A new problem in this memorandum is the relatively deprived position of the agricultural areas in comparison to the cities (other policy domain):

The further development of the countryside needs then again to be strenuously pursued to prevent a relative deprivation compared to the cities. While the urban conglomerates develop at an ever faster pace, many parts of the countryside, through a certain attenuation, lag ever further behind.

This is the first time that another policy domain influences agricultural policy. In general, the policy for 1960 aims at ‘the advancement of an as high as possible productivity’ and ‘the advancement of a reasonable standard of living in the agricultural sector’. From 1958, the agriculture ministers had been aiming at farm size increase and the related elimination of smaller farms (Jansma & Schroot, 1987). In the 1960 memorandum, in order to end/prevent the deprived position of the agricultural areas, ‘measures as part of scale increase’ are explicitly mentioned, amongst others (scale increase). Despite the difficult situation, the Dutch government is of the opinion that it is the responsibility of the farmers

to continuously improve and rationalise their enterprise, since without an increase in economic productivity, farmers will not be able to meet the constantly increasing competition. (...) This steady improvement of his farm is a duty, which in the main rests on the shoulders of the farmer himself.

Hence, in 1960, scale increase is framed as one of the solutions for the further development of the countryside as compared to the cities, and this is the responsibility of farmers themselves.

1965: changing the structures

The memorandum for 1965 starts with an enumeration of several factors that are leading to radical changes in the agricultural sector: for example, rapid technological development, rapid economic growth outside the agricultural sector and accompanying growing prosperity, and the resultant consumption habits (policy context). Furthermore, societal changes like improving working conditions (reduction of working hours and five-day workweeks), but also

increasing self-service and the greater possibility of conserving food products at home (refrigerators) are mentioned (policy context). Lastly, developments in the European Economic Community, the implementation of a common market and Common Agricultural Policy (CAP in 1962) result in a totally different market situation for many agricultural sectors (international).

The policy for 1965 is framed in terms of ‘change of structure’, ‘structure policy,’ ‘structural adjustments of farms’ and ‘improvement of the farm-size structure’. (scale increase) The government is of the opinion that Dutch agriculture needs a ‘comprehensive structure policy’. (role of government) The proposed policy measures will form an essential support to the individual efforts of farmers to restructure their farms (policy context). The minister refers back to the memorandum of 1964 to repeat that

the often less favourable farm-size structure of a relatively large number of farms in the Netherlands involves production taking place in units that are too small. This limits the opportunities to replace human labour with cheaper mechanical labour and also to rationalise management and to qualitatively improve the created product.

As part of the outcomes of a 1960 report of a governmental research commission (Bieleman, 2010), a Development and Reorganisation Fund for Agriculture had been established in 1964. The most important measure of this fund concerned

a financial arrangement for entrepreneurs, who given their age, the lack of a successor, or because they do not see a future for their farm in the long run, on a voluntary basis want to terminate their enterprise. (...) The resulting vacant lands can be used to enlarge the area of other, already existing farms.

Furthermore, the minister sees land consolidation as an important measure, in addition to the fund, to improve the internal farm production situation and to generally adapt and renovate rural areas (policy context, scale increase). Thus, in the 1965 memorandum, we see the development of policy explicitly aimed at scale increase.

1970: continuation of restructuring

The memorandum for 1970 is in many respects a continuation of the years before. The policy is framed in terms of ‘improving the income position of those who work in the sector’ and ‘a maximum contribution of the agricultural sector to the national budget’ (policy context). The memorandum, for the first time, mentions a negative aspect of scale increase, namely, that scale increase in the livestock sector leads to new veterinary issues. However an advice will be formulated how to deal with these issues.

The minister refers back to the 1968 memorandum for the explanation of the foundations for his policy. According to this 1968 memorandum, farmers have to deal with several issues, such as the decrease in labour because of the development of the industry as well as the rapid mechanisation of agriculture (policy context). The decrease in labour has led neither to a substantial reduction in the number of farms, nor to the growth of these farms (policy context, scale increase). According to the 1968 memorandum, these issues require a continuation of the structural adjustments

both in the agricultural operational management and in the relations between farmers on the one hand and market and industrial processing on the other hand. (policy context, scale increase)

In the 1970 memorandum, the minister argues that the increase in the range of products and the scale increase as a result of the dismantling of barriers in the European Economic Community (EEC) – in 1968, customs within the EEC were abolished – will require more large-scale investments. Such investments will generally be within the reach only of large enterprises or co-operatives. Experience shows that enterprises with the highest growth rates owe these to a high investment rate (scale increase). So, the proposed restructuring policy is mainly aimed at scale increase. From now on, the CAP also deals with the reform of agricultural structure in the member states (international).

1975: farm development

Compared to the 1970 memorandum, the 1975 memorandum introduces several changes. For example, attention is paid to other policy areas: agricultural policy is interrelated to more general land-use planning issues (structural improvement, nature conservation, landscape and recreation), and to environmental issues (other policy domains). In addition, the terms ‘intensive agriculture’ and ‘ecological agriculture’ are used for the first time.

The policy for the agricultural sector for 1975 is still framed in the context of problems because of economic and social aspects linked to rapid technological and societal developments and low farmer incomes (policy context). In addition, issues relating to the interaction between the different links in the production chain (e.g. very low milk prices because of a further shift in sales towards retail) and issues regarding land-use planning (e.g. land consolidation, fitting farm buildings in and maintenance of landscape) are emphasised (policy context, other policy domains).

The policy for 1975 is, although not very explicitly, mainly framed in terms of research, studies and analysis of farm development:

The announced study about the structure vision for the agricultural sector (...) is also of importance for farm-development policy. (scale increase)

Several passages in the memorandum imply that this farm development hints at scale increase. For example, in relation to the results of the past years, it is mentioned that

(...) the average farm size increased significantly; in the period 1960-1973 it even doubled. Still there are many enterprises with a relatively small farm size (...) almost half of the total are smaller than 90 sbe [standaard bedrijfs eenheid, standard company unit⁸], whereas with a modern, efficient farm size one man can realise a production of 100 to 110 sbe. (scale increase)

Furthermore, scale increase is used as an argument for realising reasonable farmer incomes:

the problems of the future position of groups of farms in the middle that currently still yield a reasonable income, but whose existing enterprise structure offers insufficient guarantees for continuation in the long run. (scale increase)

With regard to the reform of the agricultural structure, reference is made to the European Orientation and Guarantee Fund, which will provide a contribution for the improvement of the Dutch agricultural structure (international, scale

⁸ Till the end of the 1980's the sbe existed as norm for determining company dimensions. It was an indicator for the net added value, and with that for the need for labour (www.lei.wur.nl/NL/statistieken/BSS+en+NGE/SO+en+NSO-typing/ accessed 6-8-2012). This quote relates to animal husbandry, and thus indicates farmers are able to keep larger amounts of animals, not necessarily on larger areas.

increase). From 1975 on, the CAP also influences environmental measures (international, other policy domains).

1980: concerns about employment

In the 1980 memorandum, the minister frames his policy as three tasks: 1) food and raw material production in the Netherlands and elsewhere, 2) the maintenance of a strong agricultural sector (because of food supply, employment and balance of payments), 3) striking an appropriate balance in the use of green space (policy context, other policy domains). New aspects in this memorandum are attention paid to animal welfare and to interdepartmental agreements (policy context).

The minister shows particular concern with regard to employment in the agricultural sector. He refers to a yearly overview document of the LEI (*Landbouw Economisch Instituut*, Agricultural Economical Institute) in which it is calculated that current production could be maintained at the same level if labour declined by 40% (scale increase). The minister proposes to broaden agricultural activities. Production that requires a large labour input, or that aims at producing goods that have not yet reached, or are not yet threatened by, market saturation, are favoured in this. The minister thinks of product renewal, further quality differentiation, and a change from quantity to quality (policy context).

The memorandum is not very clear about the policy to maintain a strong agricultural sector. The minister's concern as expressed above shows that he is of the opinion that the sector should organise production differently. In the remainder of the memorandum, the minister states that there has been a continuous increase in large agricultural enterprises, a continuous 'increase in the productive capacity which goes hand in hand with a decrease in agricultural enterprises' and he talks about a 'farm-development policy' that aims at 'entrepreneurship, labour, land and capital, as well as the composition, amount and quality of the produced goods' (scale increase). Although not very clearly, this policy seems to aim at scale increase, but also shows awareness of the drawbacks.

With respect to the CAP, the Dutch minister is of the opinion that the EC should have more influence on the agricultural policies in the member states regarding surpluses, the use of pesticides and fertilisers in food production and regarding animal welfare aspects, health, and the use of medicines (international).

1985: international influences and improving management

The introduction to the 1985 memorandum is framed by several EC developments (policy context, international).

International influences and frameworks to a large extent mark the agricultural sector in our country. (...) Curbing the surpluses and controlling the growth of expenses are central in the EC.

The minister will dedicate himself to ensuring that the EC will resolve the difficulties in a communal way: by intervening in production in sectors where structural surpluses exist or threaten to develop, by streamlining market and price policy, and by adjusting the structure policy (policy context, international). With regard to the latter, the policy is framed in terms of

Enterprise improvement that provides the enterprise with income opportunities on a level comparable with those in the area.

This improvement, in contrast to earlier policies, should not be reached via expansion of production, but via improvements in management (labour and production conditions, cost aspects) (policy context). Hence, scale increase as a measure to restructure farms has disappeared from the memorandum, and the consequences of specialisation and increase have to be resolved on the European level (policy context, international). The national efforts are also framed in this direction:

By and large, it is best for the agricultural sector to maintain or establish healthy, viable enterprises. It should be possible to combine modern management and sound entrepreneurship.

Thus, for the first time, the solution is not framed in terms of scale increase, but in terms of management. However, this policy frame does not say what modern management looks like and whether or not this entails scale increase.

Environmental issues are more overtly determining the national policy as is quality of the agricultural produce (policy context, other policy domains). Interestingly, it was not till the 1980 memorandum that the 'detrimental effects of slurry and surplus slurry' were acknowledged. Although the slurry problem had already been recognised in several reports in the 1970s, it was not till the *Interimwet* (Interim Act) of 1984 that the minister took a serious initiative to tackle this problem (Frouws & Van Tatenhove, 1993; Van Dijk, et al., 1999 p. 31-37). Even within this act however, farms were allowed to expand by at least

10%, depending on the location (idem, p. 37). In this memorandum however, the minister dedicates himself to developing an integrated environmental policy so that the use and development of natural resources remains possible (other policy domains). Within this scope, the minister has, together with the Minister of VROM (Housing, Spatial Planning and Environment), developed a new Fertiliser Act (*Meststoffenwet*) and Soil Protection Act (*Wet op de bodembescherming*).

1990: quality and sustainability

For the first time since 1960, the name of the ministry changes again. Now, agricultural policy falls under the Ministry of Agriculture, Nature Conservation and Fisheries. This transformation has proven to be more than mere a change of name (Frouws & Van Tatenhove, 1993). As a result of the growing public and political pressure, the ministry has 'gradually broadened its narrow productivist perspective' (Frouws & Van Tatenhove, 1993 p. 224). In the 1990 memorandum, the minister pays attention to several policy plans from other domains that influence the memorandum (e.g. National Environmental Policy Plan, Nature Policy Plan) and to policy that results from developments in the EC and consequent to the latest GATT negotiations (less support and protection, and instead a more market-oriented agricultural trade system) (policy context, other policy domains, international).

What is remarkable in this memorandum is that the policy is framed in terms of 'quality' (of both agricultural products and especially the environment) and, for the first time, 'sustainability'.

The national execution of the EC structural policy aims at the creation of preconditions for structural improvements and the introduction of sustainable farm systems. It enables investments in quality improvement in addition to the more traditional investments in enterprise/farm improvement (policy context, scale increase).

The memorandum does not say anything about what these improvements should look like. Just like in 1985, farms should be restructured via (sustainable) management (policy context, scale increase):

Profitability in the pig and poultry sectors is strongly influenced by the possibilities of producing efficiently by increasing costs. Enterprise development is often necessary.

Thus farm development (increase) is framed as a measure to produce efficiently by increasing costs.

1995: vitality and liveability

The framing of the 1995 policy is in terms of the 'vitality' and 'liveability' of the rural areas (policy context, other policy domains).

A vital and varied rural area is essential for a densely populated country such as the Netherlands. The quality of society is also determined by this.

According to the 1995 memorandum, the agricultural sector is indispensable for varied and liveable rural areas, since about two-thirds of the rural area is worked by farmers (policy context). This expresses a different role for the agricultural sector in Dutch society: managers of the landscape and liveability in the countryside. However, it is also repeated that the sector still delivers an extremely important contribution to the Dutch economy (policy context).

The future of the Dutch agricultural sector lies, according to this minister, 'mainly in producing with more added value and high quality (...) environmentally friendly and animal-friendly production in order to maintain and strengthen the market position'. The agricultural sector should try to develop new market segments: traditional production methods, regional products, but also income from services outside the agricultural sector (policy context). The minister does not mention anything about the preferred size, scale or structure of the farms.

2000: renewed acquaintance between city and countryside

In the memorandum for the year 2000, an important role is reserved for consumers, citizens and society. According to the minister, society is currently pressing for a different way of food production (policy context):

More attention for the environment, more respect for animal welfare and sufficient attention for the demands consumers make regarding food safety (...)

Furthermore, in the memorandum a 'renewed acquaintance between city and countryside' is emphasised (see also Van Dijk et al., 1999, p. 11). The increased involvement of the city with the countryside demands different ways of agricultural production, and in addition the agricultural sector should provide for other functions: the conservation and strengthening of nature, tourism, recreation and healthcare in the Dutch countryside (policy context, other policy domains).

Since now city and countryside have an eye for each other again, the 'green space' is not solely the domain of the farmers anymore. It is more than ever a public domain.

For the first time, the minister openly admits that the relation between the ministry and the agricultural sector has changed as a result of different interests (policy context, role government). With regard to intensive agriculture, the minister is of the opinion that

the sector can only obtain a lasting 'license to produce' if the way of producing is adjusted to the changing societal demands.

In addition to policy decentralisation or regionalisation (Frouws & Van Tatenhove, 1993), more and more issues are part of international/ EC decision making; for example, besides price and trade agreements, obligations regarding the environment are also now part of the CAP (international). Especially regarding the environment (nitrates), the EC forces the Dutch government to take stricter measures. The minister proposes a new manure policy in which the number of livestock on a farm will no longer be determined by the production rights obtained in the past, but rather by the degree to which an enterprise has arranged for the sustainable disposal or sale of manure (policy context). Furthermore, a temporary law is proposed to set a new ceiling on the maximum number of pigs that may be held on a farm (policy context).

Thus, although not framed in terms of scale 'consolidation' or 'decrease,' this new manure policy attempts to realise this. However, the converse of this policy is that a trade in land and production rights develops and results in larger farms coupled to these rights (Baltussen et al., 2010).

2005: combining all demands

In 2003, the name of the ministry changed to: Agriculture, Nature and Food Quality, reflecting the trends in the memoranda of 1995 and 2000. The core of the policy programme is framed as

the realisation of sustainable agriculture, vital nature, a familiar countryside, and a high quality food supply, combined into a whole coherent with the wishes of citizens in the area in relation to living, working and spare time. (policy context, other policy domains)

The minister explains that, as part of the Reconstruction Act, financing is available to concentrate the intensive agriculture in so-called agricultural development areas (policy context). This act divides the rural areas into three zones in which more intensive or less intensive agriculture is allowed. Only in 'agricultural development areas,' it is possible to engage in intensive cattle breeding, settlement of new farms and extension of farms. In other areas, intensive farms have to move out or cannot expand. The memorandum does not say much more about the development of farms, except that the policy aims at extensive dairy farms.

The minister refers to the results of the concluding meeting of the national debate about intensive agriculture, to be held later in 2005, for the policy activities regarding intensive agriculture (policy context). With regard to the other functions of the countryside, the minister has developed an integral economic, ecologic, social-cultural vision in the Agenda Vital Countryside (*Agenda Vitaal Platteland*) (other policy domains).

2010: a sustainable, innovative agrocluster, agrosector, agrocomplex

The minister in the 2010 memorandum has a rather different way than her predecessors of looking at the agricultural sector and related topics. For example, she frames agriculture as 'no longer part of the problem, but part of the solution to the economic crisis we find ourselves faced with'. (policy context) And, in relation to the city, the countryside is framed as the: 'front yard of the city, the place for townspeople to go for recreation and relaxation'. (policy context, other policy domains) Furthermore, the minister no longer talks about farms or enterprises, but discusses the 'agrocluster,' 'agrosector' and the 'agrocomplex'. (policy context, scale increase). Although she does not further explain these terms, the use of these terms signals a shift from the individual farm as focus point for policy to sets of interconnected entities; a shift from the farm level to a more integral food system level. The general agricultural policy for 2010 is framed in terms of 'sustainable,' 'preservation' and 'innovative'. The minister wants to work on

a sustainable and innovative agricultural sector, maintenance of biodiversity and the characteristic features of our Dutch countryside, and the preconditions for qualitatively good and healthy food. (policy context)

In the 2010 memorandum, development is no longer framed in terms of growth and expansion, or in terms of management, but in terms of 'investments in healthy and sustainable food'. (policy context) With regard to the animal husbandry sector, the minister states that this sector

receives much attention from society and is involved in many societal discussions around issues such as animal welfare, scale increase, environment, fitting in with the landscape and the world food question. (policy context)

Sustainability and preservation are the minister's answers to this. This means an animal husbandry sector with a production system that – while remaining competitive – respects humans, animals, the environment and surroundings, including the effects of the Dutch sector elsewhere in the world (policy context). Thus, for the first time since the 1980 memorandum, the term scale increase is back, but now as part of the problem, not the solution.

The Dutch minister is of the opinion that the CAP transition process is not completed yet. Further steps regarding market orientation and more steering on societal objectives (e.g. environment, animal welfare, biodiversity) are needed (international).

2012: towards a futureproof agriculture, scale increase as means for farm continuity

In the 2012 memorandum⁹ the policy is formulated in four 'actionlines'. Only the fourth actionline deals with agriculture: 'work towards a futureproof agricultural production and energysupply'. The policy is framed in terms of sustainable, innovative and international. Sustainable by producing high-quality food with as little as possible raw produce. Innovative by developing new products that contribute to health, sustainability, flavour and ease. And international by improving the 'international toposition'. The agricultural sector is designated as one of the 'topsectors': unique international competing sectors. The agricultural sector not only 'makes a crucial contribution to our economy, but also is at the inception of the solutions for the societal problems of our age' (e.g. food security). The memorandum does not mention scale increase, but highlights the development of 'integral sustainable stable systems', and states that the government will facilitate the discussion about mega-stables.

In *From Mega to Better* (Alders, 2011), the outcomes of the societal dialogue about the future of intensive agriculture are reported. Alders (2011) observes that most of the participants in the dialogue still place the animal husbandry sector in the rural areas, but question whether the developments in the sector

⁹ Since October 2010 the agricultural policy falls under the responsibility of the ministry of Economic Affairs, Agriculture and Innovation. As a result the 2012 memorandum is rather different. We decided to present the 2012 analysis together with the analysis of the reports *From Mega to Better* and *All Meat Sustainable*.

still fit the environment. Furthermore, he concludes that complying with the rules and law is not sufficient for societal acceptance: ‘Something has to change. Continuing business as usual is no longer an option’ (Alders, 2011, p. 5). The majority of participants in the different parts of the dialogue prefer the scenario of a future-proof (*toekomstbestendige*) animal husbandry. This scenario aims to address citizens’ desire for sustainability, and implies that the consumer is willing to pay for, or otherwise subsidise, the costs of sustainably produced food. In this scenario, scale increase literally means farm continuity.

Around the same time as the report on the societal dialogue appeared, Commissie Van Doorn presented its report *All Meat Sustainable* (2011). In this report, Commissie Van Doorn gives advice about the future of the intensive livestock sector in the Province of North Brabant. Together with this advice, a declaration of intent was presented, signed by all important stakeholders in the sector.

According to *All Meat Sustainable* (Commissie Van Doorn, 2011), societal acceptance of meat is under high pressure. The Commission frames the realisation of a societally acceptable animal husbandry sector as a ‘turn,’ or more strongly formulated, a ‘breakthrough’ (Commissie Van Doorn, 2011, p. 1). The commission is of the opinion that we (the Netherlands and the world) cannot do without intensive agriculture if we want to feed the world’s population. From that point of view, according to the Commission, the most important ambition is: ‘to connect intensive methods with sustainability’ (Commissie Van Doorn, 2011, p. 2). The Commission states that the interpretation of a careful animal husbandry sector involves more than merely determining the number of animals. Furthermore, it states that by only pressing for a sharp reduction in livestock, one deprives the primary producers of all future prospects. Thus, in short, the conclusion of this report is that as long as the meat is produced sustainably the size of the company is of subordinate importance.

Summarising

A summary of these results can be found in Table 2.2.

To verify the frames that we found in the above, we used the words of these frames as literal search terms in the introductory chapters of the memoranda (see Methods section). The results of this second analysis are presented in Table 2.3. This table shows that agricultural policy is framed in different terms. It presents how often the words typical for the different frames were mentioned in the different memoranda. This reflects the fact that

Table 2.2 | Summary of the policy frames and the role of scale increase

	<i>Agricultural policy is framed in terms of</i>	<i>The role of scale increase in the policy</i>
1950	Growth, increasing production, and stimulating exports.	The term scale increase is not used yet, but the foundations are already in the memorandum.
1955	Promoting exports, supporting quality improvement, decreasing costs, pursuing a trade policy, and delivering the largest possible contribution to national prosperity.	In 1955 also, the minister wants to stimulate the agricultural sector to grow as far as his limited possibilities allow.
1960	Advancement of productivity that is as high as possible and of a reasonable living in the agricultural sector.	Scale increase is framed as one of the solutions for the further development of the countryside as compared to the cities.
1965	‘Change of structure,’ ‘structure policy,’ ‘structural adjustments of farms’ and ‘improvement of the farm-size structure’. Dutch agriculture needs a ‘comprehensive structure policy.’	In the 1965 memorandum, we see the development of policy explicitly aiming at scale increase.
1970	‘Improving the income position/living conditions of those who work in the sector’ and ‘a maximum contribution of the agricultural sector to the national budget.’	The proposed restructuring policy is mainly aimed at scale increase. The memorandum also mentions a negative aspect of scale increase, namely, that scale increase in the livestock sector leads to new veterinary problems.
1975	Research, studies and analysis of farm development.	The concept of farm development hints at scale increase.
1980	Concern with regard to employment in the agricultural sector.	Although not explicitly, the policy seems to implicitly aim at scale increase.
1985	International, mainly EC developments, improvements in management.	Scale increase as a measure to re-structure farms has disappeared from the memorandum. For the first time, restructuring is framed in terms of management.

Table 2.2 | Summary of the policy frames and the role of scale increase

	<i>Agricultural policy is framed in terms of</i>	<i>The role of scale increase in the policy</i>
1990	'Quality' and 'sustainability'	Farm development (increase) is framed as a measure to produce efficiently despite increasing costs.
1995	'Vitality' and 'liveability'	The minister does not mention anything about the preferred size, scale or structure of farms.
2000	'Renewed acquaintance between city and countryside'	Although not framed in terms of scale 'consolidation' or 'decrease,' this policy attempts to realise this.
2005	'Combining all demands'	The Reconstruction Act will stimulate the dynamics within intensive agriculture. The memorandum does not say much more about the development of farms, except that the policy aims at extensive dairy farms.
2010	'Sustainable,' 'preservation' and 'innovative'	Development is no longer framed in terms of growth and expansion, or in terms of management, but in terms of 'investments in healthy and sustainable food'. For the first time since 1980, the term scale increase is back, but now as part of the problem, not the solution.
2012	'Futureproof', 'sustainable,' 'innovative,' and 'international'	Scale increase literally means farm continuity. As long as the meat is produced sustainably the size of the company is of subordinate importance.

Table 2.3 | Typical terms for the found frames coded per memorandum ^a

	<i>Growth, expansion related to production</i>	<i>Increasing production/pro-ductivity</i>	<i>Structure related to farm development</i>	<i>Income position/reason-able living of farmers</i>	<i>Management related to farm development</i>	<i>Quality of the agricultural produce</i>	<i>Influence of consumers citizens society</i>	<i>Sustainability</i>	<i>Vitality/liveability</i>	<i>Innovation/innovative</i>	<i>Totals</i>	<i>Quotation Totals^{aa}</i>
1950	4	3	1	0	0	2	0	0	0	0	10	23
1955	0	0	1	1	0	2	2	0	0	0	6	13
1960	0	2	2	1	1	0	0	0	0	0	6	16
1965	1	3	6	2	0	2	0	1	0	0	15	29
1970	0	0	2	2	1	0	0	1	0	0	6	20
1975	0	0	0	1	0	0	0	0	0	0	1	14
1980	1	0	0	1	0	7	5	1	0	0	15	33
1985	2	2	1	1	3	7	1	1	0	1	19	36
1990	0	0	7	0	2	10	6	4	0	1	30	53
1995	1	0	0	2	1	4	4	2	6	0	20	38
2000	3	0	0	2	1	3	23	2	3	1	38	63
2005	0	0	0	0	2	6	12	11	7	3	41	62
2010	0	0	0	1	1	9	16	34	7	18	86	112
TOTALS	12	10	20	14	12	52	69	57	23	24	293	512

^a We decided not to include the 2012 analysis, since the memorandum was rather different and we included two other reports.

^{aa} This column presents the totals of the coded quotations to make it possible to correct the increase in frequency of the typical terms for the increase in number of quotations.

different issues, expressed in different words, were important in different memoranda. The issues framed in terms of growth, expansion, increasing production/productivity were mainly important in the first years. The issues of income position and quality were important throughout almost all the memoranda. And sustainability, innovation and vitality are only recent issues. Overall, Table 2.3 shows that throughout the years more issues become part of the memoranda. This indicates the arguments and frames become more diverse, the interdependencies between different policy domains increase, the ministry has different priorities and consequently the policy and policy frames become more complex (see also page 59).

2.5 Discussion and Conclusion

In this section, we answer our research questions and discuss the lessons that can be learned with regard to long term policy frame change.

How is agricultural policy framed throughout the years 1950-2012?

Our analysis shows that the agricultural policy in the various memoranda is written down as an agricultural story, but over the years many other elements slip in. With regard to the contents, we see a development of policy frames in the early memoranda aiming purely and unproblematically at increasing agricultural production: growth of production, increase in exports, farm development and scale increase. After 1980, the arguments and frames become more diverse, especially when NGOs, citizens (other than farmers) and consumers get a larger voice in policy (see also Greer, 2005).

We notice an extension of policy aimed purely at the agricultural sector, to agricultural policy complemented with issues from other policy areas (nature, environment, water, land-use planning, etc.), to agricultural policy embedded within economic policy. This shows that other policy domains have become more and more important in addition to agricultural policy in Dutch society. At the beginning of this development, policy is framed in terms of using natural resources in such a way that agriculture benefits from these resources (1975, 1980, 1985). In 1995, a change is made towards an agricultural sector that conserves and manages the landscape. In 2010, the rural areas are framed as being the ‘front yard’ of the cities.

Furthermore, an increasing influence of different administrative and spatial scales (e.g. provinces, other countries, EU, world market) can be observed. Throughout the memoranda, attention is paid to international

affairs, but the issues under the influence of international policy and agreements increase considerably throughout the years, as also issues delegated to the provinces. With regard to the spatial scale, we notice an increasing influence of the cities on land use in rural areas.

We conclude that, as a result, the policy and the policy frames become more and more diverse and consequently more complex, because of the involvement of more stakeholders, more interdependencies between these stakeholders, but also between agricultural and other policy domains, the involvement of more and more administrative scales (as a result of decentralisation or regionalisation and international/EC decision making), conflicting and more consumer demands (quantity and quality, safe, animal friendly, etc.) and more competition.

How is scale increase in Dutch agricultural policy framed in the memoranda over time?

We have shown that scale increase has been debated in different terms over the years: increase production, expand exports, farm size increase, restructure farms, farm development, sustainable farm management, new veterinary problems, and as the cause of several environmental problems.

In the early memoranda (1950-1980), scale increase is framed as a solution for the various problems with which the agricultural sector has to deal. In 1985 and 1995, scale increase is not mentioned, and farm restructuring is framed in terms of management. In 2000 and 2005, scale increase is not literally mentioned as a problem or part of the problem, but the policy does aim at consolidation or decrease, or scale increase is only allowed in specific areas. However, the unintended side effect of this policy was a trade in production rights, resulting in more animals per farm. In 2010, scale increase is framed as part of the problem. Furthermore the minister in the 2010 memorandum uses the terms ‘agrocluster,’ ‘agrosector’ and ‘agrocomplex’ as opposed to ‘farm’. The use of these terms signals a shift from the individual farm as focus point for policy to sets of interconnected entities; a shift from the farm level to a more national food system level. In the 2012 memorandum, instead of making a statement about mega-stables or scale increase, the minister only wants to facilitate discussion about this topic. And lastly, in *From Mega to Better* (Alders, 2011), scale increase is both part of the problem and part of the solution: critics on scale increase has been the reason to start the dialogue, but scale increase is also framed as the means towards farm continuity in the most preferred scenario.

Scale increase is legitimised with different arguments, in the different memoranda, referring to different problems: for example, scale increase as a

measure to end/prevent the deprived position of the rural areas as compared to the cities in 1960; in 1965 scale increase is necessary because the relatively unfavourable size structure of Dutch farms involves production taking place in units that are too small; or in 1970 scale increase requires large-scale investments, which are generally only within the reach of large enterprises and thus require scale increase. Scale increase is legitimised as a means of farm continuity in the preferred the scenario of a future-proof animal husbandry (Alders, 2011). And, lastly, Commissie van Doorn (2011) uses sustainability as an argument to approve scale increase.

Thus, although many different problems are presented in the memoranda as arguments for the policy, to date scale increase also remains the solution: even when scale increase is framed as the problem, it is framed as the solution as well.

How can we explain the continuous presence of scale increase in agricultural policy?

In line with Coleman et al. (1996) we see the Dutch agricultural policy has gradually changed. We analyse a shift from the state-assisted or modernisation paradigm in the early memoranda (1950-1970) towards the multifunctional agriculture or rural development paradigm (1975-2012). The elements of the market liberal paradigm are not clearly present in the Dutch memoranda. Between 1975-1995 we can distinguish elements of both the modernisation and the multifunctional agriculture paradigm. Thus with regard to long-term frame change, we can see a shift in the umbrella paradigm or metaframe, that explains, and at the same time is explained by, the slipping in of other elements and issues from other policy areas, the use of more diverse arguments, and the increasing influence of different administrative scales (see Coleman et al., 1996; Daugbjerg & Swinbank, 2011; Termeer, 1993; Termeer & Werkman, 2011).

With this paradigm shift we can also explain the framing of scale increase throughout the policy documents over the years. In the early memoranda, under the modernisation paradigm, scale increase, framed in terms of growth, increasing production, and stimulating export, was necessary in order to feed the Dutch population and to contribute to national prosperity. Between 1975 and 1995, in the transition period, scale increase plays a less important role in the memoranda: it is less clear what is meant by the used framings, or the framings regarding scale increase have disappeared from the agenda. From 1995 onwards, under the multifunctional paradigm, the minister does not mention scale increase, aims at consolidation or decrease, or frames scale increase as part of the problem.

However the paradigm shift does not explain the return of the logic of

scale increase as the way forward in two recent reports. Maybe this can be explained by the present emerging of a new paradigm? Or by the idea that the modernisation and multifunctional paradigms exist alongside each other? Looking at our frame analysis we can question if the modernisation paradigm has ever totally disappeared (cf. Daugbjerg & Swinbank, 2011). When we take a closer look at the strategies used in the memoranda to deal with scale increase, we can distinguish between: unmistakably positive framing in the early memoranda; framing the negative consequences of scale increase as solvable (1970); masking the term scale increase by using terms like restructuring, farm development, management (1975-1990, 2005); ignoring scale increase (1995); framing scale increase as a problem (2000, 2010); and framing scale increase as both problem and solution (2012). Thus different framing strategies enabled the continuous presence of scale increase as underlying logic in the memoranda.

A possibly illuminating explanation with regard to the continuous presence of scale increase in the documents, is an explanation of the agricultural policy system as self-referential system (Luhmann, 1984, 1990; Morgan, 2006; Urry, 2004; Wagemans, 2002). Self-referential social systems (e.g. law, politics, science, etc.) 'constitute their own boundaries, re-create the conditions for their internal operations, and develop according to their own operational logic rather than obeying an external logic' (Jessop, 2001, p. 86). To deal with complexity, the system divides reality into what it considers important or relevant and what it does not. This means that systems both include and exclude, they construct visibilities at the same time as they mask or ignore alternative conceptions of reality (Termeer & Werkman, 2011; Van Herzele & Aarts, 2012; Wagemans, 2002). It also means that systems are very difficult to change (Aarts & Van Woerkum, 2013; Wagemans, 2002). As Morgan explains changes do not result from external influences, but are rather 'produced by variations within the overall system that modify the basic mode of organisation' (Morgan, 2006, pp. 244-245).

The self-referential agricultural policy system has aimed to continuously improve itself by means of scale increase, without discussing or critically reflecting on the functioning of the system itself. In this process language played a powerful role: changing the language helped to maintain the existing system or paradigm in which scale increase is continuously positively framed as the solution for Dutch agriculture. The policy framings are enriched over time by changing the language, incorporating harmful elements, rendering these harmless (see also Aarts & Van Woerkum, 2013; Dewulf & Bouwen, 2012; Te Molder & Potter, 2005). In other words the changing language immunised the system against other solutions than scale increase. At the

same time actors with different framings were excluded by the system (Termeer & Werkman, 2011).

As stated above, the interdependencies in the chain, between sector and government, and between policy domains, are enormous. These interdependences have resulted in path-dependence which makes the existing system, even if there is awareness of its self-referentiality, very difficult to change (Garud & Karnoe, 2001; Pierson, 2000; Rip, 1995). So in addition to debating the conditions for a sustainable agricultural sector, we suggest that more thought should be given to 1) the adaptation of the current complex agricultural system; as Einstein perceptively said: 'We can't solve problems by using the same kind of thinking we used when we created them'. In this regard an opening might be to recognise that a diversity in paradigms exist (cf. Frouws, 1998) to come to a less path dependent (Urry, 2004), and a more resilient agricultural system. And 2) the powerful role of language in the continuation and change of policy.

Furthermore we think that in this complex and increasingly internationally determined, but locally executed, policy field it would be interesting to study the implications of the use of scales and scale arguments. From our results, it appears that different scales (administrative, spatial) have become involved in the agricultural policy system. Similarly, we observed that other policy domains have also experienced an expansion of scales. However, despite the growing influences of scales other than, for example, the national administrative scale, the solution to the problems in the agricultural sector is still sought on the national level.

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3

Do scale frames matter?

Scale frame mismatches in the decision-making process of a 'mega farm' in a small Dutch village

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Abstract

Scale issues are an increasingly important feature of complex sustainability issues, but they are mostly taken for granted in policy processes. However, the scale at which a problem is defined as well as the scale at which it should be solved are potentially contentious issues. The framing of a problem as a local, regional, or global problem is not without consequences and influences processes of inclusion and exclusion. Little is known about the ways actors frame scales and the effect of different scale frames on decision-making processes. This paper addresses the questions which different scale frames actors use and what the implications of scale frames are for policy processes. It does so by analysing the scale frames deployed by different actors about the establishment of a so-called new mixed company or mega farm and the related decision-making process in a Dutch municipality. We find that actors deploy different and conflicting scale frames, leading to scale frame mismatches. We conclude that scale frame mismatches play an important role in the stagnation of the decision-making process.

3.1 Introduction

Complex policy processes increasingly play out in multi-level and multi-scale contexts; this means that actors and processes operating on different scales and levels are involved. Amongst others, administrative, spatial, and time scales can be distinguished, whose levels and boundaries do not neatly correspond with each other. This makes it difficult to pinpoint who is responsible for what, who directs the process, and how problems and solutions are defined and valued (e.g. Lovell, Mandondo, & Moriarty, 2002; Lebel, 2005).

Scales can be defined as ‘the spatial, temporal, quantitative, or analytical dimensions used to measure and study any phenomenon’ (Gibson et al., 2000, p. 218). Apart from scales, levels can be distinguished. Levels are ‘the units of analysis that are located at the same position on a scale’ (Gibson et al., 2000, p. 218), or in other words: the different locations on a scale. On the administrative scale, for example, we can distinguish the global, European, national, provincial, and municipal levels, and on the time scale we can distinguish between e.g. short-term and long-term processes (Cash et al., 2006). Scales, however, are not just out there as fixed entities with an unequivocal meaning. Through the process of framing, actors highlight different aspects of a situation as relevant, problematic, or urgent, and by doing so situate issues on different levels and scales. Framing refers to the interpretation process through which people construct and express how they make sense of the world around them (Gray, 2003). Resilience to flooding, for example, could be framed as a national issue of dike infrastructure, or as a local issue of flood-proof housing. We use the term ‘scale framing,’ by which we mean the process of framing an issue using a certain scale and/or level. Scale framing is not without consequences. It makes a difference in terms of actors, interests, and interdependencies whether problems are addressed at one scale level or another (Dewulf et al., 2011). Scale framing can be used as a means of legitimating inclusion and exclusion of actors and arguments in policy processes (Kurtz, 2003). Actors can behave strategically by scaling the problem such that they situate themselves at the center of power (Termeer & Kessener, 2007). Obviously these processes are highly contested, as actors attempt to reshape power and responsibilities (Kurtz, 2003).

Although different authors address scale issues in the context of natural resource management (e.g. Adger, Brown, & Tompkins, 2005; Berkes, 2006; Biggs et al., 2007; Borgström, Elmqvist, Angelstam, & Alfsen-Norodom, 2006; Folke, Pritchard, Berkes, Colding, & Svedin, 2007; Lovell, Mandondo, & Moriarty, 2002; Olsson, Folke, Galaz, Hahn, & Schultz, 2007; Papaik,

Sturtevant, & Messier, 2008; Young, 2006), only few study scales as social constructions (e.g. Delaney & Leitner, 1997; Lebel, 2005). In some disciplines, for example political and human geography, the construction of scales has been studied, but only few address the use of scale frames in policy processes (e.g. Dewulf et al., 2011; Harrison, 2006; Kurtz, 2003).

In this paper, we study scales as social constructions, focusing on the role of scale frames in a complex decision-making process about sustainability issues. We address two related research questions:

1. Which scale frames do actors use and how do these differ from each other?
2. What are the implications of scale frames for policy processes, with regard to inclusion and exclusion of actors and arguments?

We address these questions through an in-depth case study of the decision-making process about the establishment of a so-called mega farm in a designated agricultural development area (ADA) near a small Dutch village. The fact that different actors refer to the same farm as a new mixed company (NMC), a mega farm, a pig flat, or an agricultural production park indicates that the development is contentious and gives rise to divergent frames. All these different names have different connotations and frame the farm in different ways. In this paper, we show how different actors construct and use different scale frames about the farm, and we discuss their implications.

In the following, we build the theoretical framework we need for the analysis, explicate the methods used, present the results, and discuss their implications.

3.2 Theoretical Framework

Since we are interested in scale frames and their implications for policymaking, we develop a theoretical framework starting from the concepts of policymaking, frames and framing, scales and scale framing. We use theories from different scientific disciplines, including policy science, public administration, communication science, organisational psychology, and human and political geography.

Policymaking

We follow authors like Stone (2012), Fischer and Forester (1993), and Hajer and Wagenaar (2003) in their idea that public policy is largely made up of language. As Fischer and Forester (1993, p. 2) make clear: 'Policy analysis and

planning are practical processes of argumentation'. Deborah Stone explains that the essence of policymaking is the struggle over ideas: 'Policymaking is a constant struggle over the criteria for classification, the boundaries of categories and the definition of ideas that guide the way people behave' (2012, p. 11). Policymaking is reasoning by metaphor and analogy; it is trying to get others to see the situation as one thing rather than another (Stone, 2012). Or in other words, 'policymaking is mostly a matter of persuasion' (Goodin, Rein, & Moran, 2006, p. 5).

From this point of view, problems, causes, and solutions are not given, but 'created in the minds of citizens by other citizens, leaders, organisations, and government agencies, as an essential part of political manoeuvring. Symbols, stories, metaphors and labels are all weapons in the armamentarium' (Stone, 2012, p. 156). The fact that problems, causes, and solutions are created by individuals and groups in society leads to a multiplicity of perspectives on the problem, its causes, and possible solutions. According to Rein and Schön (1996), this multiplicity in the policy realm is something to worry about. They suggest a frame-reflective approach to deal with it.

In line with this, we view the decision-making process under study as part of a larger policy process (see Appendix 3.1); as a series of on-going discursive negotiations (see also Aarts & Van Woerkum, 2002). This means that we discuss the impact of scale frames on on-going negotiations, not on succeeding stages in a policy process.

Frames and framing

We use theories about frames and framing (Bateson 1972, Goffman 1974, Schön and Rein 1994, Lewicki et al., 2003, Aarts and van Woerkum, 2006, Dewulf et al., 2009) to obtain a better understanding of how actors use scale frames to make sense of contentious issues. Frame analysis starts from the idea that people make sense of situations for themselves and for others by means of certain perspectives or frames that they deploy in interaction (Dewulf et al., 2009; Harrison, 2006; Kurtz, 2003; Van Lieshout & Aarts, 2008; Weick, 1995). As Entman (1993, p. 52) puts it: 'to frame is to select some aspects of a perceived reality and make them more salient in a communicating context, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described'. Consequently, the framing of an issue, including scale framing, is the result of processes of interaction and negotiations between different actors, and at the same time it is the input for these processes. A policy process consists of a series of framings of the issues under debate.

Scales

The concept of scale is applied in different scientific disciplines that attribute different meanings to it. Different scale dimensions can be distinguished; for example: spatial, temporal, or administrative scales. Furthermore, the concepts of scale, level, hierarchy, etc. are used as synonyms in certain disciplines whereas they are strictly separated in others. Gibson et al. (2000) and Buizer et al. (2011) present an overview of how scales are conceptualised in various disciplines.

We draw on the literature about politics of scale in human and political geography in order to discuss the use of scales as sense-making devices. This approach defines scale as a social construct, 'suggesting that scale is not pre-given but a way of framing conceptions of political-spatiality' (Kurtz 2003, p. 894, see also Brenner, 2001; Delaney & Leitner, 1997; Harrison, 2006; Marston, 2000). A problem may (temporarily) be formulated in such a way that certain scales become dominant while others are attributed less significance. 'Central to the politics of scale is the manipulation of power and authority by actors and institutions operating and situating themselves at different [spatial] scales. This process is highly contested, involving numerous negotiations and struggles between different actors as they attempt to reshape [the spatiality of] power and authority' (Leitner, 2004, pp. 238-239, author's brackets, see also Dewulf et al., 2009). To put it differently, the setting of a scale depends on the actors involved and the goals they pursue, and vice versa. It is a causal circular process in which social (institutional) structures influence problem definitions and problem definitions influence social structures (Dewulf et al., 2011; Termeer & Kessener, 2007).

Scale frames

In this paper, we focus on the scale frames that different actors construct in order to understand the role of these frames in the sense-making of an issue in policy processes. Scale frames can be considered as a specific type of issue frame (framing the topic of concern) that actors use in communicative contexts, in addition to other frames, such as identity frames (framing one's own identity), characterisation frames (characterising other stakeholders), or power frames (framing the power relations of the actors involved) (Gray, 2003).

Kurtz (2003, p. 894) makes a distinction between scale frames and counter-scale frames. 'Scale frames are the discursive practices that construct meaningful (and actionable) linkages between the scale at which a social problem is experienced and the scale(s) at which it could be politically addressed or resolved.' She uses the term counter-scale frame to 'refer to an

action frame intended to undermine the resonance and persuasiveness of a given scale frame' (Kurtz, 2003, p. 907).

3.3 Methods

Methodological approach

We use an interpretive approach (Yanow, 2000; Yanow & Schwartz-Shea, 2006) to study the scale frames of the different actors. Interpretive methods are based on the presupposition that we live in a social world characterised by the possibility of multiple interpretations (Yanow, 2000). Interpretive researchers try to understand the way in which people, or groups of people, give meaning to specific events (Van Bommel, 2008).

We see our case and analysis as a powerful example of an in-depth scale frame study from which we can learn about the implications of scale framing in complex policy processes in other contexts (see Flyvbjerg, 2006).

Data collection

We analysed our case by means of:

- Seventeen semi-structured interviews. Semi-structured interviews do not follow a pre-fixed list of questions but allow for a conversation based on pre-determined themes (e.g. Silverman, 2001). We interviewed representatives of all the involved parties (politicians, civil servants, farmers, citizens, action group).
- Studying four important moments in the municipal decision-making process, i.e. council meetings about the Agricultural Development Area (ADA) and/or the New Mixed Company (NMC), in which the different stakeholders interacted.
- Studying policy documents, newspaper articles, and reports.

Data analysis

The conversations and council meetings were audio-taped and typed out verbatim. The transcripts of the interviews and council meetings were repeatedly read and compared. The contents of the transcripts were coded, using software for qualitative data analysis (Atlas-ti). Parts of the coded texts were subsequently categorised, analysed, and interpreted using the theories and concepts discussed in the previous section.

The first step in our analysis was to read the transcripts looking for words, phrases, etc. that could possibly point towards scale-related issues; for example: words such as scale, scale effect, large-scale, scale-up; words related to time,

referring to time scales; words relating to spatial or administrative areas; words relating to the size of the farm, etc. Subsequently, we coded the quotations around these words as different scale frames in Atlas-ti. Scale frames were deployed throughout the different interviews and formed 27% of the coded quotations (17 conversation transcripts, in which 1,529 quotations were coded, of which 408 with scale-related codes; the council meetings were only coded for scale frames). Next we looked in detail at how the respondents built up their frames, and we made interpretations of the arguments they presented.

To ensure a systematic analysis, we made a theoretical division of spatial, administrative, agricultural, and time scales (see Table 3.1). This is a theoretical division since these scales are not completely separable: sometimes they coincide, sometimes they overlap, sometimes they conflict. In other words: these scales map the world in different ways, but they do relate to each other.

To illustrate the different scale frames used by the different actors, we analyse the stories of three key actors in the case: the alderman, the founder of the local action group, and the chicken farmer in the NMC consortium (Appendices 3.2, 3.3, 3.4). These key actors can be seen as representing the main groups in the process, and their quoted citations were chosen on the basis of their illustrativeness: these quotes were the best examples to illustrate our results. To illustrate the implications of scale frames with regard to inclusion and exclusion, we analyse four council meetings (Appendix 3.5) and reconstruct the decision-making process (Appendix 3.1).

3.4 Results

In the following, we present the scale frames of three key actors and subsequently the analysis of the scale frames in the decision-making process.

The alderman

See also Appendix 3.2 and Table 3.2. The alderman repeats several times during our conversation that it is essential 'to find a balance', that is by concentrating intensive animal husbandry in ADAs, providing opportunities for other rural functions in other areas of the municipality. The dominant frame deployed by the alderman emphasises the importance of 'sustainability on a higher level' as an argument for the developments in the agricultural sector. Concerning the area vision for the ADA, building on his sustainability argument, the alderman explains that he is of the opinion that it is a good

Table 3.1 | A theoretical division of scales

Scale	Levels	Utterances
Spatial	<ul style="list-style-type: none"> • Neighborhood • Village • Municipal • Regional • National • Global 	<ul style="list-style-type: none"> • about (local, regional) developments • about spatial issues e.g. landscape, the location of developments • referring to certain villages, towns, cities, etc. • referring to NIMBY (not in my back yard)
Administrative	<ul style="list-style-type: none"> • Municipal • Provincial • National • EU • Global 	<ul style="list-style-type: none"> • about administrative matters • referring to one of the administrative levels or concrete places in an administrative context • mentioning government, minister, provincial delegate, alderman, etc. • discussing policy in general, the reconstruction act or another specific policy • asking questions about who/which level is responsible
Agricultural	<ul style="list-style-type: none"> • Crop • Field • Farm • Regional food system • Global food system 	<ul style="list-style-type: none"> • (scale) size of farms • agriculture • food production
Time	<ul style="list-style-type: none"> • Past • Present • Future 	<ul style="list-style-type: none"> • about time • about pace • about the timeframe

vision document, because it provides 'future-proof sizes'. These scale frames focus on the agricultural sector as a whole and on intensive agriculture in general, rather than on the ADA and the NMC in the municipality, and on the opportunities offered by the concentration of intensive agriculture. The alderman uses mainly spatial and agricultural scales to phrase his arguments about the establishment of the NMC and the development of the ADA (Table 3.2).

The alderman stresses the advantages of developments like the ADA and the NMC on mostly regional and higher scale levels, stating that we have

Table 3.2 | The scales and level used by the alderman

<i>What is being framed^a</i>	<i>How is this framed</i>	<i>Scale</i>	<i>Level</i>	<i>Quote</i>
NMC	As causing environmental inconvenience only in its close surroundings	Spatial	Neighborhood	<i>Look, in the end because we'll concentrate we'll realise an environmental gain. [...] Only on the Dutch scale, on the European scale, on the provincial scale, on the municipal scale that's right, but somewhere something [NMC] is being developed that in those surroundings leads to an increase.</i>
NMC	As inevitably resulting in local disadvantages in order to solve issues at other locations	Spatial	Neighborhood/ Regional	<i>The moment you live next to the ADA, [...] then in your environment, something [NMC] will come that will increase certain things. [...], and in another area you will have a decrease.</i>
NMC	As beneficial/advantageous for the community, the surrounding area	Spatial	Municipal	<i>The first advantages are clearly advantages for the community. People from the municipality move to the ADA, so somewhere else in the municipality a farm is cleared. [...] Thus for the people, the surrounding area, for nature, for ecology, the environment will improve.</i>
NMC	As creating more sustainability by solving bottlenecks somewhere else	Spatial	Regional	<i>The strength of the concept [NMC] I think is that you solve bottlenecks somewhere else, in nature areas. And [...] I find this something with a great degree of sustainability.</i>
ADA	As a development in the municipality that will solve regional sustainability questions	Spatial	Municipal/ Regional	<i>I think it's important that we dared to choose to think more broadly beyond our own municipality. Otherwise such developments won't succeed. And if we want to solve sustainability questions then you'll have to dare to look further than your own church steeple.</i>
ADA	As a development to transform the rural areas, to balance the different functions in the rural areas	Spatial	Regional	<i>...but it's important, you've got to do this [develop the ADA], but in other places you've to clear out things. Then you'll have the balance again. The fact that you want to concentrate more, everything in larger areas [...], ADAs, and also simply developing the instruments to transform the remainder of the rural area. Thus cleaning up old farm buildings, glasshouses, strengthening nature, openness, those things. That's, well, finding the balance.</i>
ADA	As an industrial area for intensive cattle breeding	Agricultural	Regional food system	<i>An ADA is an industrial area for intensive cattle breeding.</i>
ADA	As providing space for future-proof farms	Agricultural/ Time	Regional food system/ Future	<i>The criteria: 6 ha, 65% covered with buildings, those are future-proof sizes.</i>

^a In this table, all the scale frames with regard to the ADA and the NMC deployed by the alderman in the interview are included. The selected quotations are in italics. We translated the quotes as literally as possible. Additions and changes are indicated by square brackets.

Table 3.3 | The scales and levels used by the founder of the action group

<i>What is being framed^a</i>	<i>How is this framed</i>	<i>Scale</i>	<i>Level</i>	<i>Quote</i>
NMC	As a degradation for the region, a win-win situation nationally	Spatial	Regional/National	<i>For the region it [NMC] is still a degradation. You can read that in the [consultancy name] environmental advice. On the national scale there is a win-win situation.</i>
NMC	As a development that is too large for the landscape in a country as small as the Netherlands	Spatial	National	<i>We're a very small country in which open space is claimed for very many things, [...] and since we're such a small country there simply is no space for developments like this [NMC].</i>
ADA	As one of the accumulating developments that will transform the village into a neighborhood in an industrial park	Spatial	Village	<i>...but as a result of all those developments [the village] is basically placed in an industrial park, a neighborhood in an industrial park.</i>
ADA	As one of many in itself possibly good developments	Spatial	Municipal/Village	<i>And there again the thought: we have to concentrate the greenhouses, since that means that you have to affect the landscape at fewer places. Only that doesn't seem to count for [this village].</i>
NMC	As desired by all administrative levels	Administrative	Municipal/Provincial/National	<i>Looking at the decision making, we're not only talking about the municipality, but [...] on central, provincial, and municipal level the administrators are all Christian Democrats who already in 2003 have declared they'll do anything to develop the NMC. The minister was even willing to adapt the law.</i>
NMC	As causing trouble	Agricultural	Farm	<i>Particularly the chicken farm will emit a gigantic lot of particulate matter.</i>
NMC	As disastrous for small family farms	Agricultural	Farm	<i>Talking about the NMC, that's disastrous for small family farms.</i>
NMC	As questionable if pork production is desirable		Regional/Global food system	<i>It's questionable whether so much pork is desirable, since in principle there's an overproduction in the world and for sure the Netherlands, since 80 to 90% of the pork is exported [...] we state that more attention should be paid to regional production. [Western Europe].</i>
NMC	As too small to compete with farms in other countries	Agricultural	Global food system	<i>In the end The Netherlands cannot win with this company on the world market.</i>
NMC	As having questionable sustainability from a nutrition point of view	Agricultural	Global food system	<i>If you watch what happens in South America, where gigantic soy plantations are put down and a large part of it is transported to feed the pigs here [...] all that pork is very unproductive. You should rather produce much more soy and vegetables and those kinds of things, then you need a smaller agricultural area for more nutrition.</i>
NMC	As should be developing knowledge for the Third World and a concept that will be exported to China	Agricultural	Global food system	<i>Use the company [...] to develop knowledge meaningful for the Third World, but in the Third World these gigantic companies would never be placed. What happens, these companies, the concept is exported to China and in China they will make the money.</i>
NMC	As competing with small farmers in Ghana	Agricultural	Global food system	<i>In Ghana, chicken farmers don't have a chance anymore. Why? What we consider as waste over here, the chicken wings and the like, is dumped in Africa for very low prices.</i>

^a In this table, all the scale frames with regard to the ADA and the NMC deployed by the founder of the action group in the interview are included. The selected quotations are in italics. We translated the quotes as literally as possible. Additions and changes are indicated by square brackets.

Table 3.4 | The scales and levels used by the entrepreneur

<i>What is being framed^a</i>	<i>How is this framed</i>	<i>Scale</i>	<i>Level</i>	<i>Quote</i>
NMC	As a company nobody in the village will notice	Spatial	Village	<i>Nobody in [the village] will even notice.</i>
NMC	As a development with which the municipality can show off	Spatial/ Administrative	Municipal	<i>I believe [the municipality], if the NMC is established and is managed successfully, they can well show off as an area where innovations found their breeding ground, [...] I believe [the municipality] should be proud of that!</i>
NMC	As solving problems at other places	Spatial	Regional	<i>So I solve many problems in four other places.</i>
NMC	As a company that will be developed if not here then somewhere else	Spatial	National	<i>And there is a big chance we'll do it here in the Netherlands.</i>
NMC	As determined by the size of the smallest feasible abattoir	Agricultural	Farm	<i>The size is solely determined because we'll build the smallest abattoir that can cost-effectively slaughter chickens.</i>
NMC	As a beautiful, innovative company	Agricultural	Farm	<i>Moreover I wanted to practice transparency and situate the company on a spot where everybody can see it. [...] Well I want to make there a beautiful, innovative company, which you can show and you don't have to be ashamed of.</i>
NMC	As being better than the old small farms	Agricultural	Farm	<i>The requirements for building a new company are so strict that a company with 1.2 million animals causes less environmental damage than currently one with 120,000. Thus yes I'm convinced it'll be better.</i>
NMC	As an example for the rest of the world	Agricultural	Global food system	<i>I think this is an example... that the importance goes beyond my personal interest and also beyond the interest of intensive animal production. We want to create an appealing project there, which can serve as a model for the world. This isn't only about us. Moreover we are convinced the concept we've developed really is an important example for the world. Many people don't see the larger importance of the development we're putting into action. We're indeed very early, which is a good thing, since otherwise this development might well come to a dead end and that would be a great loss for the Dutch sector, and worldwide as well, I believe.</i>
NMC	As causing 5% less loss of raw materials	Agricultural	Global food system	<i>Which means we lose 5% less raw materials in the chain, which isn't so important for the Netherlands, but looking at the world that's of very great importance.</i>
NMC	As the future of intensive agriculture	Time	Future	<i>Does your vision [...] mean that this [the NMC] is the way to go for sustainable intensive agriculture? I think it's unavoidable [...]</i>
NMC	As a possibility for future intensive animal production that Dutch society is about to decide upon	Time	Future	<i>An alternative is that the Netherlands decides intensive breeding can't take place here any longer.</i>

^a In this table, all the scale frames with regard to the ADA and the NMC deployed by the farmer in the interview are included. The selected quotations are in italics. We translated the quotes as literally as possible. Additions and changes are indicated by square brackets.

to look at the higher levels in order to solve sustainability questions. In this way, he downplays the local level and the actors on that level. The other local developments (e.g. the sand-depletion installation, expansion of the fruit and vegetable auction, expansion of the greenhouses, which is the main argument of the action group) are no part of the alderman's story.

The founder of the action group

See Appendix 3.3 and Table 3.3. The founder of the local action group states that this group does not have a problem with the ADA, but with the NMC. He starts his argumentation by placing the establishment of the NMC in a broader local perspective, explaining that the village is surrounded by different developments, which by themselves are not such a threat, but altogether it is felt that the village is being enclosed by these developments. In his enumeration, he continually repeats the argument about the positive effect the individual developments may have on a higher administrative or spatial scale level, but its negative effects on the local level. In other words, he stresses the other developments on the local level to construct the argument that the accumulation of negative effects of the developments is unacceptable: 'local accumulation scale frame'. He uses the accumulation of the negative effects of the developments together to neutralise the argument that the initiatives by themselves are positive developments. In addition to the local level, he stresses the global level (to contest the advantages on the national level by mentioning disadvantages for the rainforest in Brazil and far larger farms in Ukraine) to construct his arguments against the ADA and the NMC. This we refer to as 'unsustainability on the global level scale frame'.

Using spatial, administrative, and agricultural scales and levels, the founder of the local action group portrays the NMC as a bad development on multiple scale levels. (For a visual illustration see www.youtube.com/watch?v=MyahOyDxM44.)

One of the entrepreneurs

See Appendix 3.4 and Table 3.4. One of the entrepreneurs argues that concepts like the NMC are an inevitable part of the future of intensive agriculture. The entrepreneur frames the development of the NMC on a spatial scale, at the regional rather than the local level. There is a chance that the entrepreneur will establish the NMC in the Netherlands, but there are also other possibilities. The entrepreneur is of the opinion that Dutch society is about to decide about the future of intensive agriculture and the future of food production (time scale frame). He makes it seem as if he does not really care whether and where the NMC will be established in the Netherlands, as long

as the concept of the NMC is established somewhere. If not here, then he will go somewhere else, for example to India where he is already involved in a project. Stating it this way, the entrepreneur gives the creation of the NMC an importance that goes beyond the ADA, municipality, or province: he puts the development on the national level of the spatial scale.

In line with this reasoning, the entrepreneur frames the NMC as 'a very sustainable concept for future intensive agriculture, an example for the rest of the world' that exceeds personal, local, or national interests. By taking his argumentation one step further, reasoning that the importance of the project is so great that the specific location is not the point of discussion – 'if not here, then somewhere else' – he keeps out of harm's way. In other words, he depersonalises the issue and at the same time excludes the citizens, the local action group, and even the local administration from the issue.

The entrepreneur is of the opinion that the NMC will improve the situation on higher spatial levels and will only cause slightly more trouble on the local level. So the entrepreneur does not ignore the effects on the local level, he rather downplays them. (The other developments around the village, which worry the founder of the action group, are no part of the story of the entrepreneur.)

For the entrepreneur, the discussion is about the NMC, not about the ADA. In contrast to the founder of the local action group, the entrepreneur uses several scales and levels to show how good the development of the NMC is.

The decision-making process

The analysis of the different council meetings (see Appendix 3.5) shows that the different speakers use different scales and levels to frame the NMC and ADA. In all the meetings, the arguments made by the citizens and representatives of different groups and organisations are hardly addressed in the political debate. The citizens discuss the NMC, whereas the political debate is about the area vision for the ADA: a scale frame mismatch between the agricultural and spatial scale. We see that different parties comment on the mixing-up of the discussion about the NMC and the development of the ADA, but nothing is done about this. The fact that the political debate was not about the concerns of the citizens with regard to the NMC, but only about the criteria in the area vision, led to citizens having the feeling that they were not being listened to, resulting in commotion and discontent. As a consequence, the action group was founded, and media attention was attracted to make the concerns public. Both the action group and media attention led to several

delays and obstructions of the decision-making process.

Although it seems that the different actors are discussing the same topic in the meetings, they use different arguments built on different scale frames, which they don't explicate. The analysis shows that scale frame differences and mismatches occur: different actors, although discussing the same topic but using different scale frames, talk at cross purposes. As a consequence, we see the different actors repeating their arguments in each subsequent meeting, resulting in tenacity and even conspiracy.

The scale frames deployed in the meetings are comparable to the scale frames deployed by the key actors in the interviews. In the meetings, the 'regional balance scale frame,' the 'future-proof scale frame,' the 'sustainability on a higher level scale frame,' the 'local accumulation scale frame,' and the 'global unsustainability scale frame' as deployed above are repeatedly brought to the fore. Particularly the 'sustainability on a higher level scale frame' can be recognised throughout the different administrative levels, when the reconstruction or intensive cattle breeding is discussed (see Appendix 3.1). Using certain scale frames enables actors to include some and exclude others from the decision-making process. For example, the alderman, and administrators in general, by framing the issue on a regional or higher level, downplay the actors on the local level and indirectly exclude them for the decision-making process. The repeated use of certain typical scale frames also shows who is engaging with whom and which actors share the same opinion. Furthermore, it shows that actors are not open to the scale frames of others.

3.5 Discussion and conclusions

In this section, we compare the different scale frames used by the different actors, followed by a discussion about the implications of scale frames for policy processes and ideas about future research.

The different scale frames compared

Our study shows that the three key actors use different scales in their framings of the issue. The alderman uses mainly spatial and agricultural scale frames in his reasoning. He uses his dominant 'sustainability on a higher level scale frame' to justify the negative effects and disadvantages of the development of an NMC at the local level. The founder of the action group also uses multiple scales (spatial, administrative, and agricultural) and levels, but he uses these to highlight the downsides of the NMC. He uses different scale frames to construct different arguments against the NMC. His dominant scale frame can

be characterised as 'accumulation of local developments'. The entrepreneur presents different scale frames relating to space, agriculture, and time to frame the development of the NMC as 'an example of sustainable intensive agriculture for the rest of the world'. Putting it this way, the entrepreneur places the issue in a national or global perspective, emphasising that the interests are far larger than his personal interests. For the entrepreneur, it is about the concept of an NMC and the future of intensive animal husbandry. The entrepreneur considers the NMC as a solution for future intensive animal husbandry because it solves problems relating to animal welfare and environmental issues. In contrast to the founder of the local action group, he uses multiple scales to show how good the NMC is.

In the council meetings, the dominant scale frames as deployed by the three key actors were continuously brought to the fore and repeated by the other actors in the same configuration. By repeating, strengthening, and adding to each other's claims, frames become frozen, with the result that they become absolutely true for the people of the group that uses them and therefore are put forward in no matter what context (Ford 1999, Gray 2003, Aarts and van Woerkum 2006).

We conclude that different actors use different kinds of scales to construct their specific scale frames, in which they highlight different levels. So, in addition to for example identity frames or characterisation frames (Gray, 2003), scale frames are used to make sense in complex policy processes, emphasising both the problem at stake and the direction in which the solution should be sought. Furthermore, our study shows that actors use and mix multiple scales and levels, and not only the spatial scale as studied in human and political geography (Brenner, 2001; Delaney & Leitner, 1997; Harrison, 2006; Kurtz, 2003; Marston, 2000). They frame their arguments as convincingly as possible and from different points of view, implying that they have thoroughly considered their standpoint. Following Kurtz, the frames of the alderman (and politicians and policymakers on higher levels) and the entrepreneur(s), on the one hand, and the frames of the action group and citizens, on the other hand, relate to each other as scale frames and counter-scale frames. If we take the analysis a step further however, these scale frames and counter-scale frames consist of different scale dimensions (e.g. spatial, agricultural, administrative, and time scales) that highlight different aspects of the issue and are positioned on different levels. The use of differently mixed scales and levels enables more arguments, provides a structure for arguments, but also tends to obscure the interests at stake. Actors try to legitimate their positions by juggling scale frames but do not take on board the scale frames and arguments of others with opposing opinions. The analysis of the council meetings shows that certain

configurations of actors use and stick to the same (frozen) scale frames. The use of these various different scale frames can be explained as actors speaking different languages, expressed in different frames, resulting in incompatible stories that fit diverging interests (Pearce & Littlejohn, 1997). As a result of the use of different scale frames without explication, scale frame mismatches occur.

Scale frame mismatches

We conclude that, in addition to scale mismatches (see for example Borgström et al., 2006; Cumming, Cumming, & Redman, 2006; Termeer, Dewulf, & Van Lieshout, 2010), we can speak of scale frame mismatches. We identify three types of scale frame mismatches: (1) framing the issue using different scale frames, (2) framing the issue using different scales, and (3) framing the issue at different levels of the same scale. Since we only selected scale frames for the analysis, i.e. where issues are framed using a certain scale and/or level, all of these involve more than merely issue framing mismatches. However, not all the differences between the scale frames are mismatches; we refer to scale frame mismatches when the scale frames deployed by different actors point in varying directions, making decision taking problematic.

1. Framing the issue using conflicting scale frames

For example, in the context of this local decision-making process, both the founder of the action group and the farmer frame the issue using the global food system level on the agricultural scale. However, they do so in conflicting ways. The founder of the action group implies that the NMC's sustainability is questionable: *If you watch what happens in South America, where gigantic soy plantations are cut down and a large part of it is transported to feed the pigs here [...] You should rather produce much more soy and vegetables and those kinds of things, then you need a smaller agricultural area for more nutrition.* The farmer, however, frames the NMC as *an example for the world*. Therefore the scale frame of the founder points in the direction of developing small-scale regional food production instead of NMCs, whereas the farmer is of the opinion that concepts like the NMC provide solutions for sustainable food production worldwide.

2. Framing the issue on different scales

For example, the alderman and the farmer frame the NMC as solving bottlenecks/problems somewhere else. The alderman states: *The strength of the concept [NMC] I think is that you solve bottlenecks somewhere else, in nature areas*, and the farmer comparably says: *So I solve many problems in*

four other places, both using a spatial scale, regional level. According to the founder of the action group, instead of solving problems, the NMC is *disastrous for family farms*, thereby using an agricultural scale, farm level.

3. Framing the issue at different levels of the same scale

For example, the alderman frames the NMC on the spatial scale, neighborhood level, as causing environmental inconvenience only in its immediate surroundings: *Look, in the end because we'll concentrate we'll realise an environmental gain. [...] Only on the Dutch scale, on the European scale, on the provincial scale, on the municipal scale that's right, but somewhere something [NMC] is being developed that in that surrounding leads to an increase.* The founder of the action group, however, frames the NMC as a win-win situation on the national level, but a degradation for the region, emphasising the regional and national level: *for the region it [NMC] is still a degradation. You can read that in the [consultancy name] environmental advice. On the national scale there is a win-win situation.*

Implications of scale frame mismatches for complex policy processes

Our analysis shows how actors use scale frames to legitimise the exclusion of certain actors and/or ideas from the conversation and to invalidate certain arguments in the discussion. Framing the issue on a particular scale and level makes it possible, consciously or unconsciously, to include and exclude arguments and other actors without literally saying so. The alderman for example excludes the local citizens by framing the issue not on the local, but on regional and national scale levels. And the use of the local level by the founder of the action group allows him to include other local developments in his argument as well.

Looking at the evolving policy process, we can observe relations between the identified scale frames and different process stages. An example of the use of a particular scale frame that has implications for the process is the framing, by the alderman (and the council more generally), of the NMC as a positive and sustainable agricultural development. Since the alderman was already positive before the official debate about the development of the ADA started, this agricultural scale frame has influenced the municipal decision-making process from design to decision. On the other side, citizens only discussed the NMC whereas the formal debate was about the area vision (including the ADA). Throughout the process, this made it easy for the alderman to consider the arguments as irrelevant and consequently exclude these arguments, while at the same time he did not have to debate the NMC. By defining the worries of the citizens with regard to animal welfare and health as part of a national

debate, the alderman shifted responsibility for this debate to the national level and at the same time excluded these arguments from the local discussion.

Another type of implication follows from the scale frame mismatches that we have identified. As a result of scale frame mismatches, communication problems occur; but the strategic use of scale frames also provides opportunities for change. We can make a distinction between scale frame differences and scale frame mismatches. Scale frame differences are not problematic per se; on the contrary, they may allow for enrichment of the debate and change. Scale frame mismatches, on the other hand, imply difficulties and conflict. In the following, we discuss the implications of scale frame differences and mismatches, based on negotiation and communication theory, since this seems an important issue for further research.

In the negotiation literature, a distinction is made between distributive negotiating and integrative negotiating (e.g. Pruitt and Carnevale 1993, Aarts and van Woerkum 2002). Distributive negotiating is about 'one cake that has to be divided,' and integrative negotiating is about 'the baking process,' about jointly baking a larger cake (Pruitt & Carnevale, 1993). In the former, actors keep motives, interests, and feelings to themselves, and knowledge is translated into arguments that are used as weapons in the struggle to achieve the maximum result. Scale frame mismatches fit this negotiation style. The latter is about openness, joint fact finding, and social reflection (e.g. Aarts & Van Woerkum, 2002; Pruitt & Carnevale, 1993). Scale frame differences fit with this style.

In the decision-making process that we have studied (see Appendix 3.1), scale frame mismatches play a role in the stagnation of the communication between the actors in the process and consequently play a role in the stagnation of the policy process as a whole. We can look at this particular decision-making process as a distributive negotiation process. When actors involved in multi-stakeholder problems do not make their interests explicit, and instead emphasise different scales and different levels to undercut the arguments of the other parties, the meaning of the issues and the delimitation of the problem domain remain contested. In other words, the question: what are we co-constructing together? is neither asked nor answered. No joint fact finding, social reflection, or reframing takes place. Instead, through processes of positive feedback within their own groups, the scale frames are continuously repeated and strengthened (see also Termeer, Breeman, Van Lieshout, & Pot, 2010a), resulting in an unstable distributive process (Pruitt & Carnevale, 1993), frozen frames (Gray, 2003), fixations of the process (Termeer & Kessener, 2007), and the problem becoming intractable (Gray, 2004; Morgan, 2006). This complicates the discussion and decreases the space for negotiation. It

resembles the stagnating effects on policy processes of so-called dialogues of the deaf (Van Eeten, 1999).

In our case, the area vision was approved in February 2008, but, as of August 2010, the initiators of the NMC do not yet have permission to start building. The opponents continue to obstruct the process, using their 'accumulation on the local level scale frame,' by requesting more and more studies to prove the accumulated effects and to question the assumed sustainability. Furthermore, using the 'accumulation on the local level scale frame' and the 'unsustainability on the global level scale frame,' the opponents have been able to involve national campaigning groups and to create a media hype. By obstructing the process on the local level, the alderman is made responsible, and the province and central government are no longer involved, but the process is difficult to continue and complete without the support of higher administrative levels and their resources.

To conclude, we argue that, in addition to research about dealing with scale mismatches, further research about scale frame mismatches and the implications thereof is needed. Looking at policy processes as negotiations, we need more insights into the role of scale frames, scale frame differences, and scale frame mismatches in interaction. Being reflexive about scale frames, so as to enable joint fact finding and reframing, might prove to be an important ingredient for scale-sensitive governance.

Appendix 3.1

Case description

In the Netherlands, in order to restructure the rural areas to provide space for agriculture, nature, and water storage, the reconstruction act was formulated in 1999. One of the motives for this reconstruction was the 1997 the outbreak of the classic swine fever. Another motive was the number of functions the Dutch rural areas fulfill, resulting in competing claims and tensions. This is especially the case in the sandy areas in the south east of the Netherlands. In these areas, the intensive agricultural sector is large and nature is vulnerable. Environmental problems are more intense in these areas than in other parts of the Netherlands.

The reconstruction act is a national act decentralised to the provinces, which is executed and implemented by municipalities. This act divides the rural areas into three zones in which more or less intensive agriculture is allowed:

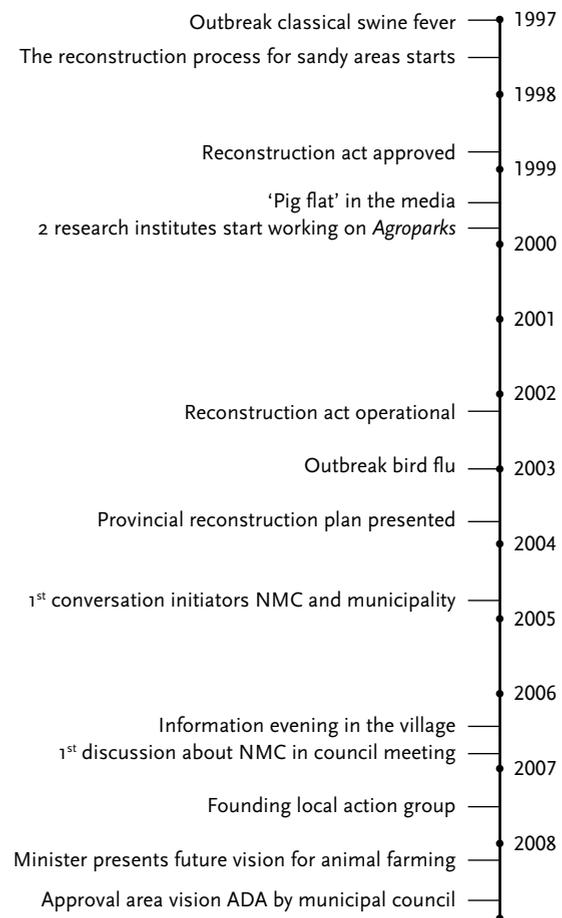
- in extensive areas (*extensiveringsgebieden*), the primary function is living or nature, and intensive farms have to leave,
- in intermediate areas (*verwevingsgebieden*), agriculture, housing, and nature are interwoven, and
- in agricultural development areas (ADAs) (*landbouw ontwikkelingsgebieden*), intensive cattle breeding, settlement of new farms, and extending farms is possible. These development areas are designated by the provinces and established by the municipalities.

The municipality in our case has taken the first step in the establishment and development of an ADA by approving an area vision for the ADA. This vision document provides the framework of sizes, standards, rules, and regulations with which the farms in the ADA have to comply. For example, the percentage of the area that may be built upon, the standard for the odor that may be emitted, the heights of the buildings, etc., are described in this document. The approval of the area vision (on 12 February 2008) led to much commotion and fierce protests among citizens, fuelled by a local action group (see also Appendix 3.5). At the meeting where the municipal council voted on the approval of the area vision, both local and national newspapers, radio and television broadcasters were present.

In the ADA, a new mixed company (NMC) – also referred to as mega farm - wants to settle. Mixed company refers to older farming systems that combined cattle breeding and arable farming. The NMC will accommodate 3,700 sows, 9,700 pigs, 19,700 hogs, 1,200,000 chicks, and 74,000 chickens

The farm will have its own manure fermentation installation, hatchery, and abattoir. The pig farm and chicken farm will be located in separate buildings of not more than one story high. The initiators are planning to apply the latest technology, innovations, and far-reaching co-operation (for example providing their energy to mushroom growers in the area or households nearby) to be able to turn the farm into a closed system, using short chains, and thereby establish a sustainable new company. The citizens of the village where the ADA will be situated and a local action group are afraid for an increase in traffic, stench, particulate matter, and zoonotic infections.

Figure 3.1 | Reconstruction of the decision-making process (national and provincial events on top of timeline, municipal events below)



Appendix 3.2

Narrative of the alderman

We translated the quotes as literally as possible. Additions and changes are indicated by square brackets.

The responsible alderman was born and raised in the village close to the ADA, but not the one where the protest is concentrated. He has an agricultural background and this is his first term as an alderman with the Christian Democrats party, which is traditionally a party backed by many farmers. The alderman is enthusiastic about the NMC initiative and states

In the beginning, I associated myself too much with the NMC, I didn't do that well. That's why during the process I continuously had the label of proponent.

The alderman characterises the future of agriculture in the area as 'proceeding towards more intensive breeding' because of 'the pressure on land in the Netherlands and as a result of the rising costs of property'.

According to the alderman 'the complexity of formal regulations and the risks for entrepreneurs' will lead to a certain scale-size of the farms. In his opinion, the development of agriculture of certain scale-sizes needs to be accommodated, and it is this accommodation that provides opportunities to transform the remaining of the rural areas: By 'cleaning up old farm buildings, glasshouses, etc., values such as nature and openness' in those areas are strengthened. In addition to this development, the alderman also sees future opportunities for smaller farms combined with recreation and care functions.

The alderman repeats several times during our conversation that it is essential 'to find a balance,' that is, by concentrating intensive agriculture in ADAs, providing opportunities for other rural functions in other areas of the municipality (spatial scale frame, municipal level). The dominant frame deployed by the alderman emphasises the importance of sustainability and the need to look at higher levels (than the farm or village) to solve sustainability questions. This scale frame focuses on the agricultural sector as a whole and on intensive agriculture in general, rather than on the ADA and the NMC in the municipality, and on the opportunities offered by the concentration of intensive agriculture. For example:

By bringing different functions together [in development areas] you can create a high amount of sustainability. Output is input. And

all of this in such a setting that we will get real quality, both in the buildings and around the buildings.

and

The strength of the concept I think is that you solve bottlenecks somewhere else, in nature areas. And I, I say this now with a somewhat technical background, I find this something with a large degree of sustainability, the use of the newest techniques, less transport.

We could classify this ‘sustainability on a higher level scale frame’ as an agricultural or spatial scale frame, regional food system, or regional level. The alderman deploys this scale frame as an argument for the developments in the agricultural sector, which he presents as facts: this is the way the future of agriculture is going to be. In the first quote, the alderman explains his perspective on sustainability. In the second quote, he expands his perspective. The alderman needs this sustainability perspective in his further reasoning about why the developments regarding the ADA and the NMC in his municipality are good.

Concerning the area vision, building on his sustainability argument, the alderman explains that he is of the opinion that it is a good vision document, because it provides ‘future-proof sizes’ (time scale frame, future level). Furthermore he thinks that

it is important that we have dared to choose to think more broadly than our own municipality, otherwise such developments won't succeed. And if we want to solve sustainability questions then you will have to dare to look further than your own church steeple. For if everyone wants to do good around his own church steeple, you don't realise anything at all. While sometimes you will have a plus somewhere to be able to solve a very large minus elsewhere, or the other way around...

These phrases show how the alderman constructs the scale frame of sustainability on a higher level on the spatial scale and how he constructs the municipal level (or higher) as the right level for sustainability. The alderman is convinced that if we want to solve sustainability questions we have to look beyond our immediate surroundings. Furthermore he constructs the village level as around the church steeple. (In Dutch the reference to the church

steeple does not necessarily have a religious connotation. In this quote it rather refers to the capacity to look beyond one's own locality and interests.) The alderman needs this administrative scale frame (the importance of looking at the larger scale for sustainability reasons), in order to justify what is happening on the local level:

Yes, there are disadvantages the moment you live next to the ADA, whether you live in [Village A], [Village B], [Village C], or [Village D], then in your environment, something will come that will increase certain things. In that area that will happen, and in another area you will have a decrease.

Appendix 3.3

Narrative of the founder of the action group

We translated the quotes as literally as possible. Additions and changes are indicated by square brackets.

The founder of the action group lives in the same village as the alderman, so in one of the neighbouring villages, but not the one where the protest is concentrated. He is a member of the socialist party and has been politically active in the municipality in the past. He explains his position as founder of an action group in a village other than the one in which he lives as follows:

I used to be on the municipal council, so I knew those developments. I protest not only in [this village], but also in [another village] and, if I have to, also in Amsterdam, that doesn't really matter when it is about an interest. That's how I came to [this village], since no initiatives had been started here in a long time.

He emphasises that when citizens joined the group it was no longer a political organisation, but an independent action group.

The founder states that the action group does not have a problem with the ADA, but with the NMC. He starts his argumentation by placing the establishment of the NMC in a broader local perspective, by explaining that the village is surrounded by different developments, which by themselves are not such a threat, but altogether it is felt that the village is being enclosed by these developments. The first development he mentions is the NMC. He refers to the reconstruction act, which 'is in itself a good plan,' to be able to concentrate on the inconvenience of intensive cattle breeding. 'But at this location it will cause more inconvenience than was already the case.' And if this were the only development, it would be alright, looking at the locations where farms are cleared and the situation will improve. But on the other side of the village, a sand-processing installation is planned, with the same argument: they can make several smaller installations at different locations, but then more villages will suffer from the inconvenience. 'So that's exactly the same reasoning as with the NMC.' Another development is an industrial zone, instead of the various small industrial areas that are now spread over the region. Also, a large auction complex is planning to spread out towards the border of the village, and a glasshouse area is about to be expanded.

And there again the thought: we have to concentrate the greenhouses, since that means that you will affect the landscape at fewer places. Only that doesn't seem to count for [this village]. [...] but as a result of all those developments [the village] is basically placed in an industrial park, a neighbourhood in an industrial park.

The founder of the action group presents all the separate developments as facts to work towards his main argument in the last quote: that it is unacceptable that the village will end up as a 'neighbourhood in an industrial park'. In his enumeration, he continually repeats the argument about the positive effect that the individual developments might have on a higher spatial scale level, but the negative effects of it on the village level, and he emphasises that this does not seem to count in the decision-making process. The founder of the action group states that before decisions about different initiatives to concentrate developments are taken, one should look at the location for these concentrations, so that the possible accumulated effect will be taken into account ('accumulation spatial scale frame').

The founder continues by explaining the arguments that the action group has against the NMC. For each argument (e.g. odour, increased transportation, increase of fine dust, the consequences for public health because of dust and MRSA), he explains what is wrong with the argumentation of the municipality and entrepreneurs. He raises doubt about every proof or investigation of the proponents, by questioning the independence of the study and the reliability of the results. He does this by referring to other studies and scientists who prove the opposite or state that the effects of the techniques are not known yet. For example:

Particularly the chicken farm will emit a gigantic lot of particulate matter. Constantly it is said in the discussion that clear air systems would filter enough out of the air, so the emission could be limited. They say we can filter 80% to 90% out. Already 6 September 2007, during a meeting in [the village] by [Mister G.] from Wageningen, he is also a professor over there I believe. He has indicated that those things do not exist at all, which can do that.

And

That particulate matter is harmful for human health isn't only said here by us, but 50 doctors here in the region have brought that out. [...] In the meantime, the RIVM has conducted research and in

that study all items that we have emphasised have been confirmed factually. [The RIVM is the government institution for public health and the environment.]

By showing these different uncertainties and their proof, the founder of the action group implicitly formulates another criterion for the establishment of the NMC, namely, that more security is needed, especially with regard to health issues.

After asking about possible advantages of the NMC, the founder states:

For the region it is still a degradation. You can read that in the [consultancy name] environmental advice. On the national scale there is a win-win situation. (spatial scale frame, regional versus national level)

But after this recognition of the advantages, he starts to break down the different arguments. Subsequently, he questions the sustainability of the NMC by linking it to negative developments at the global level ('unsustainability spatial scale frame').

If you watch what happens in South America, gigantic soy plantations are established and a large part of it is transported to feed the pigs, which we subsequently eat. Whereas from a nutrition point of view, all that pork is very unproductive. You should rather produce much more soy and vegetables and those kinds of things, then you need a smaller agricultural area for more nutrition, for more calories, or minerals, or how you would name it. So if we talk about the 3 Ps you have to look at those things. [The 3 Ps are three pillars of sustainability: people, planet, and prosperity.]

With this explanation, the founder of the local action group shows that the NMC is a bad development on multiple agricultural scale levels. Another related argument raised by the founder is the landscape. He argues that the Netherlands is a small country with many claims on the available space and that this makes the country too small for such developments (spatial scale frame, national level). This contrasts with the argument of the alderman who states that developing an NMC will provide space for other functions in other places. Lastly, the founder argues that the NMC does not have a future since on a global agricultural scale level it will not be able to compete with farms in other countries (this is in contrast to the recognition of the win-win situation on the national level presented above).

In the end, the Netherlands can't win with this company on the world market. To mention one example: in the Ukraine they want to establish a farm, or probably it is already there, with 100,000 pigs. That's three times what they are planning here.

Appendix 3.4

Narrative of the entrepreneur

We translated the quotes as literally as possible. Additions and changes are indicated by square brackets.

The chicken farmer who is part of the consortium of entrepreneurs in the NMC lives in another municipality in another province than where the ADA is located. His firm consists of several poultry farms at different locations that he manages together with two brothers. A couple of years ago, when they were looking at the future of their company, they came across the NMC initiative. They found that their ideas and their attitude fitted exactly with those of the other entrepreneurs and that being part of the NMC would take them and their company one step further in respect of their sustainability aims. In their own plans, the brothers were working towards short chain systems; meaning that they would produce chickens from egg to meat within their company and without transportation. Being part of the NMC would allow them to come a step nearer to a closed system, because it would enable them to reuse the manure as well (by fermenting it into gas and energy).

According to this entrepreneur, concepts like the NMC are the future of intensive agriculture, and a development in the direction of NMCs is inevitable:

I think it's unavoidable. And there is a big chance we'll do it here in the Netherlands. An alternative is that the Netherlands decides that intensive production can't take place here any longer. There are examples of that from the past. In Singapore they've done that. Then you'll get a totally different society. I think we should think about that very carefully if we want that. In fact in the national debate about intensive animal production, we have come to the conclusion that that is not the way to go, we'll have to do with intensive production.

This quote shows that the entrepreneur frames the development of the NMC on a spatial scale and on a national, rather than a local or regional, level. The quote shows that there is a chance that the entrepreneurs will establish the NMC in the Netherlands, but that there are also other possibilities. It also shows a time scale frame: the entrepreneur refers to the past and is of the opinion that Dutch society is about to decide about the future of intensive agriculture, and the future of food production. Either she accepts the

development of NMCs or she decides intensive animal production in NMCs is unacceptable. By putting it this way, the entrepreneur states that it is not up to them as entrepreneurs to decide. He makes it seem as if he does not really care whether and where the NMC will be established in the Netherlands; if not here, then he will go somewhere else. Stating it this way, the entrepreneur gives the creation of the NMC an importance that goes beyond the ADA, municipality, or province: he puts the development on the national level of the administrative scale.

In line with this reasoning, the entrepreneur frames the NMC as a very sustainable concept for future intensive agriculture, an example for the rest of the world that exceeds personal, local, or national interests. He deploys two connected dominant agricultural scale frames. Firstly, he uses a sustainability frame that is comparable to the frame deployed by the alderman.

Looking at poultry farming, which happens to be the sector in which I have grown up, for which we have developed a concept without animal transport, a total reduction of transport, in the course of which you're on the road as little as possible, in the course of which you thus totally aren't on the road with animals. And that you've the most efficient use of expensive raw materials and in the course of which you also reuse all your remains [...]. That's, according to me, the most sustainable way of production. We cooperate with other companies, for example pig- and energy-production companies. I think it's an example... that the importance goes beyond my personal interest and also beyond the interest of intensive animal production.

However, whereas the alderman focused his sustainability argument on agriculture in general, emphasising the advantages of concentration of intensive agriculture, the sustainability frame of the entrepreneur focuses on the innovativeness of the NMC, which makes it a sustainable company or concept.

The last part of the quote shows the second dominant scale frame: the entrepreneur sees the NMC as an example of sustainable intensive animal production of interest to the whole world. The entrepreneur is of the opinion that co-operation in the rest of the world can learn from the experience of the NMC. By constructing the argument that 'the importance goes beyond my personal interest and also beyond the interest of intensive animal production', the entrepreneur indirectly refers to the opponents who say that

the entrepreneurs pursue only personal economic incentives and to the short-sightedness/unawareness of many people who do not see this importance:

Many people don't see the larger importance of the development we're putting into action.

This is also shown in other parts of the interview where he states:

We want to create an appealing project there, which can serve as a model for the world. This isn't only about us

and where he talks about 'the larger plan'. These statements also show that for the entrepreneur the concept is just as important as the concrete firm, and therefore it does not matter where the company will be established as long as it is established. Following from this, the preferred location of the NMC (for now) just happens to be in this ADA. This ADA is an interesting location for several reasons (e.g. access to highways, visibility from the highway, opportunities for expansion, innovative agricultural environment), but could have been somewhere else. For example, the entrepreneur currently is also working on a project in India. The entrepreneur has a comparable reasoning for the size of the NMC: 'the size is solely determined because we'll build the smallest abattoir that can cost-effectively slaughter chickens'. And 'the size of the company purely has to do with the concept: no animal transport'. (No animal transport means producing from egg to meat and consequently a minimal number of chickens for cost-effective slaughtering.)

Regarding the effects of the NMC on the spatial scale, village level, the entrepreneur is convinced that 'nobody in [the village] will even notice' that the farm is there. The direct neighbours will have some more inconvenience, because there will be more traffic and 'a little odour every now and then, but not more than presently, since there are already large firms at present'. So the entrepreneur makes a distinction between the neighbours who will have some more inconvenience, and the village 3 kilometres away, which will hardly notice the NMC. To underpin this statement, the entrepreneur constructs the argument that the NMC will be at a greater distance from the village, from the people, from nature than their four farms are now. At their current location, there live '74 families within a radius of 500 meters. And if we build the NMC, then we will have 14 families in a radius of 1,000 meters, and in a radius of 500 meters only 4'. So in fact he is of the opinion that the citizens in the village should not be worried, as he explains:

my neighbours never complain. Those are the people who would be so terribly burdened. Who in fact should have died a long time ago, but it's full of small children and they're all healthy.

Thus the entrepreneur is of the opinion that they will improve the situation on a larger spatial level (regional) and will only cause slightly more inconvenience on the neighbourhood level. (The other developments around the village, which worry the founder of the action group, form no part of the story of the entrepreneur.)

The entrepreneur is aware of the worries of the citizens in the village. He repeatedly states that he feels really sorry, but they do not have reason to be worried, and it makes him sad how these people are frightened by the media and the action group.

It's a disaster for those people in the village, I think. Mainly that certain actors so enormously cleverly know how to play the game by driving that community apart, because somewhere a chicken farm will be established 3 kilometres outside the village centre.

No, the local people, that's something else, those people are sincerely frightened. Those people are simply scared. I find it very terrible that they're scared. It's in fact not acceptable at all. Those people, well, they have images in their minds, and those images came there and I say they're planted there. That has much to do with communication and media.

The fact that he repeats this argument several times shows that the entrepreneur feels really sorry for the citizens. It also shows that he is convinced that the NMC will not cause much inconvenience, except very locally, and that he is frustrated with the fact that it is very difficult to communicate the positive message.

Appendix 3.5

Analysis of municipal council meetings

In the following, the analyses of four important moments in the municipal decision-making process are summarised.

During the *municipal council meeting of 14 November, 2006*, the NMC initiative is discussed for the first time. In this first meeting the different speakers use different scales and levels to discuss the NMC. The deployed scale frames are comparable to the scale frames deployed by the key actors in the interviews. Two citizens frame the NMC as unsustainable both on the global level, referring to the cutting of the rainforest for soy in Brazil, and their living environment on the local level. We can analyse these frames as spatial scale frames. They frame the NMC as a 'pork factory, an industry, which will destroy their environment'. This we refer to as an agricultural scale frame. The council addresses one of the scale frames of the citizens (the NMC as industry; an agricultural scale frame). The alderman only acknowledges that the NMC will have a large spatial impact in a certain area (spatial scale frame). So although it seems that the different actors are discussing the same topic, they use different arguments presented in different scale frames, and they do not explicate these. We see the Socialists address the blending of the discussion about the NMC and the development of the ADA. The alderman does not respond to this. Since the purpose of this meeting is only to debate the NMC, there is no conclusion about the issue.

The criteria for the area vision for the ADA were up for discussion on the agenda of the *municipal council meeting of 4 September, 2007*. The area vision is seen as a first step in the execution of the reconstruction plan. Since intensive agriculture is traditionally an important economic sector in the municipality, the municipal board wants to lay down conditions for the ADA, 'providing for innovative growth of the sector in a sustainable way and offering continuity'. Looking at this meeting, we see that the action group emphasises the accumulation of developments surrounding their village (a spatial scale frame). The council on the other hand is only discussing the ADA (agricultural scale frames), and the alderman explains that he will balance the different functions of the countryside (a spatial scale frame). With regard to the farms in the ADA, the action group highlights the negative aspects of large-scale farms on different scales and levels, the council wants to set all kinds of maxima (agricultural scale frames), and the alderman will limit emissions but at the same time allow for growth, using spatial and

administrative scale frames. Here we see scale frame mismatches: different actors, although discussing the same topic but using different scale frames, talk at cross purposes. Also in this meeting different actors deploy different scale frames, which are related to the scale frames as deployed in the interviews: e.g. the 'sustainability on a higher level scale frame', the 'local accumulation scale frame', the 'unsustainability on the global level scale frame'.

After the discussion about the criteria, the vision document itself is under discussion during a fact-finding *council meeting of 11 December, 2007*. In this council meeting, the arguments articulated by the citizens and representatives are hardly addressed in the political debate. The citizens are discussing the NMC, whereas the political debate is about the area vision for the ADA: a scale frame mismatch between the agricultural and the spatial scale. Furthermore, the different parties acknowledge that the discussion about the NMC interferes with the ('objective') decision-making process on the area vision, but no suggestions are made to separate the two debates. The alderman hardly reacts in this debate, since it is only a fact-finding discussion. And since the alderman does not react and the purpose of the meeting is only to exchange views, there is no need to come to a shared conclusion and the item is left open-ended. In the meeting, the different actors deploy scale frames that are similar to the scale frames that they deployed in earlier meetings. The repeated use of certain typical scale frames shows who is engaging with whom and which actors share the same opinion.

During the *municipal council meeting of 12 February, 2008*, the municipal council approves the area vision as presented by the board by 11 votes to 10, under loud protests from local, regional, and national activists. The representatives of the different interest groups, just like in the meeting of 11 December, mainly articulate their worries about the NMC using agricultural scale frames. In this meeting also, the arguments expressed by the citizens and representatives are hardly addressed in the political debate. The citizens discuss the NMC, whereas the debate is about the area vision for the ADA. Again we see the mismatch between the agricultural and spatial scale. The different parties mainly discuss the maximum sizes defined in the area vision and suggest amendments. The alderman, speaking on behalf of the board, advises the rejection of almost all suggestions and amendments. He rejects all the arguments to fix maximum sizes (agricultural scale frames) with his 'future-proof time scale frame' and shifts the responsibility to the national level (administrative scale frame), stating that market processes are not

local government duties. And the area vision is approved without hardly any amendments. In this meeting also, the different actors deploy scale frames that are similar to the scale frames deployed by the key actors in our interviews.

4

Doing scalar politics

Interactive scale framing for managing
accountability in complex policy processes

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Abstract

Complex policy issues increasingly play out in multi-level and multi-scale contexts. This allows for scale framing: framing an issue at a particular scale and level. In this paper, we study scale framing as an interactional phenomenon in various policy settings, with a focus on its role in managing accountability. Using an interpretive approach, based on discourse and conversation analysis, we analyse three different policy interactions. We show how actors do scalar politics in face to face interactions, by using scale frames to manage accountability. We tentatively revealed three scale framing patterns. We conclude that a discursive approach to accountability is an important addition to more procedural approaches in complex policy processes.

4.1 Introduction

In a small rural town in the south east of the Netherlands, a municipal alderman is trying to implement a national reconstruction act for rural areas. This act aims to cluster agricultural activities so as to preserve open landscape and nature elsewhere. On the municipal level, this means, amongst other things, that municipalities have to create agricultural development areas (ADAs): areas in the countryside where intensive cattle breeding, new farm settlements, and farm expansion are allowed. The municipality in our case has taken the first step in establishing and developing an ADA by approving an area vision for this ADA. This vision document stipulates the sizes, standards, rules, and regulations with which the farms in the ADA have to comply. The approval of the area vision by the municipal council ignited commotion and fierce protests by citizens and NGOs. Most of the protests were against plans to establish a new mixed company (NMC) in the ADA. This NMC was to consist of a large pig farm (sows, pigs, hogs), a large poultry farm (chicks, chickens, hatchery, and abattoir), and a manure fermentation installation, and it aimed to become a closed system using outputs from one activity as input for another. The NMC is considered an innovative sustainable development in the agricultural sector that will contribute to food security for the growing world population.

This case forms the background to research about the meaning of scale framing for accountability management in complex policy interactions. The development of this ADA in the municipality can be seen as a complex policy process. An important characteristic of complex policy processes is their multi-scalar nature. This means that actors and processes operating on multiple scales and levels are involved. For example, the municipality in our case has to deal with the national government and the province to implement the national act, but also with the regional farmers, local citizens, and a local action group.

Several authors have paid attention to consequences of shifts to governance (e.g. Bob Jessop, 1997). Some authors have particularly emphasised accountability problems as a result of multi-scalar governance systems (for example Bovens, Schillemans, & 'T Hart, 2008; Hajer & Wagenaar, 2003; Koliba, Mills, & Zia, 2011; Rhodes, 1997; Van Kersbergen & Van Waarden, 2004). Koliba et al. (2011, p. 211) explain: 'Because it can no longer be assumed that the state possesses the same kind of authority that traditionally has been ascribed to public organisations, governing these interorganisational networks creates new accountability challenges. These challenges arise when states are displaced as central actors, when market

forces are considered, and when cooperation and collaboration is recognised as an integral administrative activity'. Because in complex policy processes, such as the development of the ADA, many actors and organisations are involved, operating on different scales and levels, it is difficult to identify who is accountable for what, who should direct the process, and how problems and solutions should be defined and valued (e.g. Hajer & Wagenaar, 2003; Lebel, 2005; Lovell, et al., 2002). Hajer and Wagenaar (2003) talk about an institutional void, since there are no rules concerning responsibility, authority, and the expected accountability. Accountability is thus not predefined, but dynamic and constructed in innumerable interactions.

In this paper, we study scales as social constructions (e.g. Delaney & Leitner, 1997; Marston, 2000). We define scales broadly as the spatial, temporal, or administrative dimensions used to describe a phenomenon (adapted from Gibson et al., 2000)¹⁰.

Scales, however, are not just out there as fixed entities with an unequivocal meaning. Through the process of framing, actors highlight different aspects of a situation as relevant, problematic, or urgent, and by doing so situate issues on different levels and scales. We analyse scales as discursive devices deployed by different actors and groups as they seek to gain particular forms of recognition and advantage (Delaney & Leitner, 1997; MacKinnon, 2011). By scale framing we mean the process of framing a phenomenon on a certain scale (see also Van Lieshout, Dewulf, Aarts, & Termeer, 2011).

Scale framing is not without consequences. It makes a difference in terms of actors, interests, and interdependencies whether problems are addressed at one scale or another (Dewulf et al., 2011). In our case: is it a local problem or a regional/national solution? In this way, scale framings can be used as

¹⁰ We are aware of the debates about the conceptualisation of scale in the human geography. Conceptualisations in this field vary from scale as level, scale as size, scale as nested hierarchy (e.g. Howitt, 2003), to scale as 'the 'vertical ordering' of social systems and relations within a hierarchical scaffolding of intertwined territorial units stretching from the global/worldwide, the supranational/triadic and the national downwards to the regional, metropolitan, the urban, local and the body'. (Brenner, 2001, p. 547) Marston et al. (2005, p. 416) have even suggested to 'eliminate scale as a concept in human geography', since 'there is no agreement on what is meant by the term or how it should be operationalised' and while 'scholarly positions are divergent in the extreme' (idem). However we do think scale is an interesting concept to analyse complex policy issues. For the purpose of this paper, to show how actors do scalar politics on the micro conversational level and the implications for accountability management, we need a very concrete conceptualisation of scale. Therefore we use the definition from Gibson et al. (2000), which we adapted to the scales we found in an earlier analysis of the same case (see Van Lieshout, et al., 2011). Using this broad conceptualisation we come close to Jessop et al.'s (2008) attempt to develop an approach 'that can grasp the inherently polymorphic, multidimensional character of sociospatial relations' (p. 389), by looking at scale as a structuring principle that impacts the other fields, however without using the other important geographic concepts (territory, place and networks).

a means of legitimating inclusion and exclusion in policy processes (Kurtz, 2003). Actors can behave strategically by scaling the problem such that they are situating themselves at the centre of power (Termeer & Kessener, 2007) or vice versa: as if they have nothing to do with it. Obviously these processes, known as the politics of scale (cf. Delaney & Leitner, 1997; Jonas, 1994), or scalar politics (MacKinnon, 2011), are fiercely disputed, as actors endeavour to restructure power and responsibilities (Kurtz, 2003; Leitner, 2004). Although the construction and politics of scale are intensively debated in the field of political geography, this topic and its implications for policy processes have not received much attention in public administration and policy sciences. Furthermore, the act of the politics of scale remains abstract in these studies.

In this paper, our primary interest is to show how actors do scalar politics at the conversational level, and to make the implications of scale framing for accountability management explicit. We address the following research question and sub questions: What is the meaning of scale frames for the management of accountability in complex policy processes? How can we conceptualise policy making, scalar politics and accountability to develop a discursive approach to accountability? Which methodological consequences follow from this conceptualisation? In the remainder of this paper, we discuss our conceptual framework, the methods used for the empirical study, our results, and conclusions.

4.2 Conceptual framework

In the following, we elaborate on the main concepts underlying this study: policy making, framing, scalar politics, and accountability.

Policy making and interactional framing

We follow authors like Stone (2012), Fischer and Forester (1993), and Hajer and Wagenaar (2003) in their idea that public policy is made of language. Deborah Stone explicates that the essence of policy making is the struggle over ideas: 'Policy making is a constant struggle over the criteria for classification, the boundaries of categories and the definition of ideas that guide the way people behave' (2012, p. 11). This implies that language is not the neutral expression of interests and meanings (Hajer, 2001); language does not just mirror reality but constructs its meaning (Fischer & Forester, 1993).

From this point of view, problems, causes, and solutions are not given but 'created in the minds of citizens by other citizens, leaders, organisations, and

government agencies, as an essential part of political manoeuvring. Symbols, stories, metaphors and labels are all weapons in the armamentarium' (Stone, 2012, p. 156).

Language is also the medium for interaction (Potter, 2004). By performing specific linguistic actions, actors generally manage their encounters in interactions: actors initiate, develop, and conclude the business they have together (Heritage, 2004). Actors manage their interests and construct facts and accountability in interactions (Edwards & Potter, 1993).

The fact that individuals and groups in society create problems, causes, and solutions leads to a multiplicity of perspectives on the problem, its causes, and possible solutions. According to Rein and Schön (1996), this multiplicity in the policy realm is something we should worry about. They suggest a frame-reflective approach to deal with this multiplicity.

Framing has to do with making sense, interpreting, giving meaning to what is happening in the ongoing world (Weick, 1995). 'To frame is to select some aspects of a perceived reality and make them more salient in a communicating context, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described' (Entman, 1993, p. 52). As Yanow (2000) explains: 'That which is highlighted or included is often that which the framing group values'. Consequently, the framing of a problem, including the scale framing, is the result of processes of interaction and negotiations between different actors, and at the same time it is the input for these processes.

In contrast to a more cognitive approach that focuses on frames as knowledge structures or cognitive representations (Bartlett, 1932; Minsky, 1975), we take an interactional approach, focusing on frames or *framings* as interactional alignments or co-constructions (Bateson, 1972; Dewulf, et al., 2009; Dewulf, et al., 2004; Goffman, 1974). In the interactive approach, framing is the dynamic enacting and shaping of meaning in ongoing interactions, and frames are temporary communication structures (Dewulf et al., 2009). People construct frames when they interact by linking text to contexts (Chenail, 1995) and considering possible reactions of the audience. They do not have the frames that they put forward in interaction available beforehand. Consequently, the framing of an issue, including the scale framing, is the result of processes of interaction between different actors.

Scalar politics

Through the process of framing, actors operating and situating themselves at different spatial scales strategically manipulate power and authority (Leitner,

2004). This process, known as the politics of scale (Delaney & Leitner, 1997; Jonas, 1994), or scalar politics (MacKinnon, 2011), 'is highly contested, involving numerous negotiations and struggles between different actors as they attempt to reshape the spatiality of power and authority' (Kurtz, 2003; Leitner, 2004, pp. 238-239). Actors strategically and instrumentally deploy scale frames with the purpose of effecting change (Delaney & Leitner, 1997).

We recognise that there is a substantial theoretical debate over the concept of scale in geography (Brenner, 2001; Jonas, 1994; Marston, 2004; Marston, 2000; Marston & Smith, 2001; see MacKinnon, 2011 for an extensive theoretical debate on the social construction of scale and the politics of scale that goes beyond the scope of this paper). There is, however, general agreement in the literature that scale, in addition to an ontological category, also is socially constructed (e.g. Delaney & Leitner, 1997); but, as Marston (2000, p. 221) explains: '(...) scale-making is not only a rhetorical practice; its consequences are inscribed in, and are the outcome of, both everyday life and macro-level social structures'. In other words, scale is 'continually forged and remade through everyday habits, routines, practices, negotiations, experiments, conflicts and struggles' (Brenner, 2001, p. 605) with real, material, consequences. We follow MacKinnon (2011), who argues to replace the politics of scale with the concept of scalar politics. Since often 'it is not scale *per se* that is the prime object of contestation between social actors, but rather specific processes and institutionalised practices that are themselves differentially scaled'. (MacKinnon, 2011, p. 22-23, italics in original)

We also recognise that there is a body of empirical work on the social construction of scale and the politics of scale in many different contexts (e.g. Allen & Cochrane, 2007; Deckla, 2003; Harrison, 2006; Herod, 1997; Kaiser & Nikiforova, 2008; Kurtz, 2003; Lebel, Garden, & Imamura, 2005; Leitner, 2004; McCann, 2003; Miller, 1997). Kurtz (2003), for example, studies the politics of environmental justice as a politics of scale in order to explore how environmental justice activists respond to the scalar ambiguity inherent in the political concept of environmental justice. And McCann (2003) argues that urban politics is frequently characterised by political strategies that frame reality in terms of scale. He states that the simultaneous framing of space and time in the city has important, if sometimes unpredictable, implications for policy and politics.

Although the construction and politics of scale are intensively debated, the act of scalar politics remains abstract in these studies. There are no studies that show how actors in interaction, i.e. on the micro-conversational level, do scalar politics. And none of the empirical studies makes the implications of these scalar politics for policy processes explicit; if discussed at all, the

implications remain vague (see e.g. McCann, 2003 above). In this research, we study interactions in different contexts to determine the precise role of scale frames in accountability management.

Accountability

Accountability may be generally defined as ‘the obligation to give an account of one’s actions to someone else, often balanced by a responsibility of that other to seek an account’ (Scott, 2006, p. 175). In the literature, different forms of accountability are distinguished – for example, democratic accountability, legal accountability, bureaucratic accountability, professional accountability, and collaborative accountability (Bovens 2006; Bovens, et al., 2008; Koliba, et al., 2011). Accountability in governance systems is generally about values such as openness and transparency in decisions, rules, and procedures (Howell-Moroney & Hall, 2011).

In this paper, we study the managing of accountability in policy interactions from a discursive perspective. People in interaction can emphasise different dimensions of accountability in their interactions: to whom one is accountable, the performance that has to be accounted for (Van Woerkum and Aarts, 2012), or accountability for events versus the accountability of the speaker who is producing the report (Edwards & Potter, 1993).

Edwards and Potter (1993, pp. 134-135) have distinguished several discursive devices to manage accountability in interaction. These are: 1) the use of role discourse, particular role descriptions point at actions as being the ‘right thing,’ proper, and correct (rather than, say, trivial, unworthy, avoidable, or capricious) for a person in that role; 2) the use of empiricist discourse in which data are depicted as ‘doing confirming’ and ‘concluding’ independently of the actions of a human agent; 3) the use of the rhetoric of argumentation, in which events are constructed in almost syllogistic form: if and only if p then q ; not p therefore not q ; 4) the use of extreme case formulations: by using the extreme points of dimensions, the case is made clear-cut and non-negotiable; 5) the use of ‘footing’: ‘footing highlights the basis upon which an account is offered: does it come from direct experience and involvement, or is it a report based upon the testimony of a reliable witness, or is it a disinterested passing on of possibly contentious information?’ (Edwards and Potter 1993, pp. 134-135). Arguments from authority or appeals to authority are related to footing: Source A says that p is true. Source A is authoritative. Therefore, p is true.

4.3 Methods

We used interpretive methods to study the role of scale frames in different policy interactions (Yanow, 2000; Yanow & Schwartz-Shea, 2006). Interpretive methods are based on the supposition that we live in a social world characterised by the possibility of multiple interpretations (Yanow, 2000; Yanow & Schwartz-Shea, 2006). The focus lies in interpreting meanings constructed by different actors. Interpretive researchers try to understand how people, or groups of people, give meaning to specific events (Van Bommel, 2008).

Data

For the analysis in this paper, we used 1) the recordings of a ‘catch up’ meeting between the alderman, responsible civil servant, and two leaders of the local action group contesting the NMC; 2) the recordings of a discussion between different members of a municipal board and a researcher presenting the results of an evaluation of the policy process; and 3) the recordings of the municipal council meeting in which the area vision document was approved (see Table 4.1). These recordings are all part of the same policy process; however, they represent different stages and different interaction settings involving similar but also different actors. We use these empirics to illustrate the fruitfulness of our analytical approach. This case enables us to show how actors in complex policy processes do scalar politics. According to Flyvbjerg (2006), case study research can very well be limited to a single case which represents a carefully selected illustration of the phenomenon studied. Furthermore, the sampling we use is not primarily at the level of the case, but below: we sampled interactions through selecting fragments in the three recordings where scale framing was at stake. The fragments we selected to present in the paper are the clearest examples of scale framing interactions out of the three recordings. The recordings were audio-taped and transcribed verbatim.

Analysis

Our analysis is based on a discursive approach to framing. We focus on how people define the meaning of an issue or how they negotiate the proper frame by the way they use language (Dewulf et al., 2004). In this approach, each move in the discussion reveals whether the other party’s framing is accepted or rejected as discussants respectively maintain or alter their own framing in their response (Drake & Donohue, 1996).

Table 4.1 | Selected data and context

	<i>Data</i>	<i>Context</i>	<i>Date</i>
Fragment 1 'monitoring fine particles'	Catch-up meeting	To remain on speaking terms with the action group, the responsible aldermen and leaders of the group meet every six weeks. In those meetings the current state of affairs of the development of the ADA and other local projects are discussed.	26-03-09
Paragraphs ^a 107, 113, 129			
Fragment 2 'NMC in ADA'	Discussion between the municipal board and a researcher	The approval of the area vision by the municipal council ignited commotion and fierce protests by citizens fuelled by a local action group. The municipality was stunned by the commotion and decided to evaluate the process and to learn from the experience for future processes. The authors became involved to study the process.	07-05-09
Paragraphs 46, 48, 50, 58, 60, 62, 64			
Fragment 3 'future oriented and future proof'	Municipal council meeting	In this council meeting, the municipality approved the area vision for the ADA by 11 votes to 10. This vision document stipulates the sizes, standards, rules, and regulations with which the farms in the ADA have to comply.	12-02-08
Paragraphs 151, 205, 290, 292, 295, 465			

^a Paragraphs refer to the paragraph numbers in *Atlas-ti*. In *Atlas-ti* a new paragraph number is displayed for every piece of text followed by a hard return. (Thus blank lines also have a paragraph number, since these are in fact hard returns.)

In our first analytical step, we repeatedly read and compared the transcripts to understand what was happening in the different interactions. The content of the transcripts was coded, commented on, and interpreted using software for qualitative data analysis (*Atlas-ti*). To systematically analyse the transcripts, we used a provisory theoretical division (based on an earlier study, see Van Lieshout et al., 2011) of spatial, administrative, and time scales (Table 4.2). This is a theoretical division for the purpose of the analysis since the scales are not completely separable: sometimes they coincide, sometimes they overlap, and sometimes they conflict. In other words, these scales do relate to

Table 4.2 | Indicators for the selection of scale framing fragments

<i>Scale</i>	<i>Utterances</i>
Spatial	<ul style="list-style-type: none"> • about local, regional, national, and global developments • about spatial issues, e.g. landscape, farm size, the location of developments
Administrative	<ul style="list-style-type: none"> • about international, national, provincial, municipal administrative matters • that refer to one of the administrative levels or concrete places in an administrative context • that mention government, minister, provincial delegate, alderman, etc. • that discuss policy in general, the reconstruction act, or another specific policy • that question who/which level is responsible
Time	<ul style="list-style-type: none"> • about time • about pace • about the timeframe

one another although they map the world in different ways.

As a result of this first step, we could identify fragments in the transcripts in which scale framing activities occurred.

In a second step, we examined more closely the selected fragments in which scale framing activities occurred. We made descriptions of what was happening in the fragments. We used discourse and conversation analysis methods (Edwards, 1997; Phillips & Hardy, 2002; Wood & Kroger, 2000) to study the selected interaction sequences. We looked at scale frames in utterances in relation to the preceding one(s) and the implications of these scale frames for the next utterance(s) (Arminen, 2005; Sacks, Schegloff, & Jefferson, 1974). During the analysis of these scale frame interactions our attention was caught by the accountability management done with the help of scale frames, and we decided to focus our analysis on the role of scale framing for accountability management.

Edwards and Potter suggest that it is helpful to approach an understanding of factual discourse with two fundamental questions in mind. 'These are basically the question of *construction* (how is the account constructed to seem factual and external to the author) and *function* (what is this particular account designed to accomplish)' (Edwards & Potter, 1993, p. 133; Phillips & Hardy, 2002). The function of an account is determined by the

subsequent utterance. As Arminen (2005, p. 2) explains: ‘the next turn provides evidence of the party’s orientation to the prior turn, there and then’.

4.4 Results

We illustrate our findings with the help of three examples from the different interaction settings we studied¹¹.

‘Monitoring fine particles’

In Fragment 1, the responsible alderman (AL) and a municipal civil servant (CS) inform two leaders (L1 and L2) of the local action group about the possibility of placing an experimental measurement station next to trees along the highway adjacent to the ADA. This experimental station will measure the absorption of fine particles by trees. The emission of fine particles is one of the worries that the action group and many citizens have about the NMC. For this reason, the alderman expected that the action group would be enthusiastic about the experiment. The leaders of the action group, however, frame the experiment as a first step towards establishing the NMC. Since the experiment presupposes the presence of fine particles, the action group frames the experiment as proof that the NMC will be established. The alderman explains that the experiment will be situated next to the highway and that, even without the NMC, traffic will generate fine particles. The alderman continues his argumentation in Fragment 1, paragraph 107:

FRAGMENT 1 | PARAGRAPH 107 | AL

1 Well up till now (1), look sometimes, well governing is also anticipating. Look maybe soon
 2 it is, in a few years, it ((the NMC)) will be there and then we'll say what a pity we didn't do
 3 it ((the experiment)). And if the New Mixed Company doesn't come, then we'll have the
 4 advantage anyway. So I eh do want to go ahead since I, we have together, observed that
 5 there are worries amongst the citizens and I find this a possibility too. And if I get the
 6 chance now then I'll have the benefits anyhow and the profits can only increase. And based
 7 on the knowledge I presently possess I still say, now if no strange things occur, then the
 8 board will decide ((to proceed with the licensing procedures)).

¹¹ We translated the discussion as literally as possible. Changes made by the authors for anonymity or clarifying reasons are between double brackets: (...). An underscore (trees) means that part is emphasised. (.) Means a short pause and (1) means a 1 second pause. [is the symbol for people talking simultaneously. Small circles (°...°) indicate that part was spoken more softly than the rest of the quote (see Wood and Kroger 2000, p. 193). We used the Atlas-ti paragraph numbering to refer to the different paragraphs in the fragments and added line numbering to make our analysis easier to follow.

In this paragraph, AL starts to defend himself against L1’s assertion that the experimental design is proof that the NMC will be established. AL in line 1 states that ‘governing is anticipating’. This is a time scale frame. The use of this scale frame can be seen as the use of role discourse: ways of characterising actions as being the right thing, proper, and correct for a person in that role (Edwards & Potter, 1993, pp. 133-134). The alderman’s use of role discourse provides him with an account for the choice about the experiment he is making now with an eye to developments in the future. In lines 2-3, AL argues that, if they do not take the chance to place the experimental design near the ADA, they will regret it if the NMC is established in a few years (a time scale frame). AL uses what we call projection into the future to account for his choice to place the experimental design now. AL, in line 4, repeats that he wants to go ahead of the possible establishment of the NMC, referring to the worries of the citizens which ‘I, we have together’ (both municipality and action group) have observed. In this way, the alderman portrays himself as taking his responsibility with regard to the worries of the citizens (an administrative scale frame, role discourse) and looking ahead (a time scale frame). AL employs a self-repair ‘I, we have together’. Self-repair is used to adjust the construction to express what one means to express or to accomplish the action the speaker means to perform (Drew, 2005, p. 95). In this situation, AL uses the self-repair to involve L1 and L2 and make them accountable too. Referring to the worries of citizens has been called ‘stake inoculation’ (Potter, 1996, p. 125). Doing this, AL rebuts a potential claim that it is in his own interest to place the experimental design in the ADA. This is an example of the management of accountability within the interaction, where the other examples in this fragment are managing accountability for decisions outside this interaction. Taking the worries of the citizens into account also refers to another level of accountability, i.e. the democratic accountability as referred to in section 2.3. In lines 5-6, AL presents a time scale frame (get the chance now and have benefits now and in the future). He formulates this time scale frame using an ‘if-then’ construction. ‘If-then’ constructions are rhetorical constructions designed and produced to perform accountability-implicative work; ‘they work to index both the speaker’s rational accountability as observer and judge of this particular kind of state of affairs and wider accountability issues for actions and upshot of actions’ (Tileag, 2010, p. 230). ‘If-then’ formulations offer predictable and recognisable patterns that reduce the need to provide an explanation (Sneijder, 2006, p. 93). AL concludes with an ‘if-then’ rhetorical construction, using a time scale frame, to account for his plan since as far as he knows the board will decide to proceed.

FRAGMENT 1 | PARAGRAPH 113^a | L1

- 1 Yeah, yeah, no okay, but there are more aspects to this than solely the fact that fine particles
 2 are caught. When you say, one of my objections against the NMC is for example (1) that the
 3 open landscape will be affected, but if an NMC comes or trees, which hide the open
 4 landscape from the view, in both cases the open landscape is affected. I can imagine that fine
 5 particles, at least, that would be my conclusion, that fine particles and the prevention of fine
 6 particles is more important. ((2 sentences omitted))
- a *Paragraphs 109 and 111 are omitted. In 109, L1 questions the timeframe in which the experiment would be done. AL confirms in 111 that, because of the planting of the trees, this would be in two weeks.*

In paragraph 113, L1 ignores (excludes) the arguments of AL in paragraph 107 by shifting to another topic and reframing his argument. In lines 3-4, he introduces a spatial scale frame: the trees in the experimental design will hide the open landscape from sight, which is also one of the action group's arguments against the NMC. L1 claims in lines 4-6 that he is aware that reducing fine particles is more important. This is a rhetorical construction to undermine the implication that he would prioritise open landscape above fine particles.

FRAGMENT 1 | PARAGRAPH 129^a | AL

- 1 And I agree with L1 when he says well you have to make a choice: either the landscape or
 2 such an experiment. Look the experiment isn't that large that a very large forest will
 3 develop. You'll get a cluster of trees somewhere next to the highway. When you drive along
 4 the highway then we already see some clusters here and there. So I think, on the one hand I
 5 consider the decline, but that's then also just my assessment, the decline of the quality of the
 6 landscape won't become worse. ((4 sentences omitted))
- a *Paragraphs 115-127 omitted: discussion about other locations for the experiment.*

In his reaction, AL (paragraph 129) uses several devices to account for the decision to plant trees for the experimental design. AL first agrees with L1 that one has to make choices, to continue with a reframing in lines 2-3 of the experimental design as 'a cluster of trees' instead of 'a very large forest' (a spatial scale frame). AL uses 'a very large forest,' a spatial scale frame, as an extreme case formulation (Pomerantz, 1986; Potter, 1996). Extreme case formulations are rhetorical constructions used when actors anticipate or expect others to undermine their claims (Pomerantz, 1986). AL, in advance, declares the framing 'a very large forest,' which L1 could have used, as not applicable. By referring to other 'clusters' (line 4), the experimental 'cluster of trees' is posted as being nothing special. AL refers to the current situation in which you can see clusters here and there when you drive along the highway (a spatial scale frame). So one extra cluster will not make a large difference.

'NMC in ADA'

Fragment 2: 'Procedures' is part of the discussion in which the alderman (AL) discusses one of the researcher's (R) conclusions regarding the path the municipality followed during the decision-making process about the ADA. The researcher's conclusion was that the municipality took the stand that the NMC should be established in the ADA, whereas there might be other locations that possibly would have led to less resistance and citizen protests. In addition to AL and R, one of the other board members (BM) is cited.

FRAGMENT 2 | PARAGRAPH 46 | AL

- 1 Coming to your ((R)) second: 'NMC in an ADA since that is what they're intended for'.
 2 Well that issue also is hard to discuss, since I have for example spoken to the provincial
 3 delegate: 'Is this ((the NMC)) possible in ((an industrial development area))'. 'Is this
 4 possible for example outside the ADA, opposite the ADA?' We-ell then I first should have
 5 gone to see the provincial aldermen, then the minister of Agriculture and then the Minister
 6 of Housing, Spatial Planning, and Environment and that was again open for debate in the
 7 Council of State. So yes, in theory it was a discussion for me, however in practice it wasn't.

In paragraph 46, AL accounts for and defends the choice to establish the NMC in the ADA. In lines 2-4, AL explains that he discussed different locations with the provincial delegate. He continues (lines 4-7) to explain which governmental bodies he would need to contact to consider those other locations (administrative scale frame): he would have to get approval from the provincial administration, two ministers, and the Council of State. The enumeration, an extreme case formulation, emphasises how much trouble it would take to deviate from the procedures. By stating it this way, AL portrays himself as taking his responsibility (role discourse). He did look for alternatives but was not in a position to make the decision to realise the NMC at another location. He is dependent on higher governmental levels, since the municipality is not entitled to make this decision, and meeting all the other government bodies would be time consuming and thus not feasible. The fact that AL would have to see four different governmental actors implies that it is not clearly defined who is accountable in this case. AL uses upscaling along the administrative scale to shift responsibility to other governmental organisations and to create accountability for his own assessments.

FRAGMENT 2 | PARAGRAPHS 48 | 50

- 1 R Yes then it will take another 10 years, right.
 2 AL Yes
 3 R Or well [And those entrepreneurs they would like

4 AL [Look and then again you run into the procedures. Look and we also got the
5 pressure of the Province, yes those ADAs really have to get off to a good start. And
6 then it seems a discussion, but it wasn't. Since also the Rural Areas Agency, that
7 indicated, well in fact it [the NMC] should be established in industrial parks. Yes nice,
8 but where does this get me? Nowhere at all!

In line 1, R confirms what AL has said, she sympathises with AL, and indicates that she knows how these things work by attaching a time scale frame ('another 10 years') to the administrative scale frame. This frame makes the scenario (of getting approval from all the different administrators) sketched by AL in paragraph 46 very unattractive and unrealistic. This is a way of 'scale coupling' that functions to strengthen the initial administrative scale frame of AL (paragraph 46 lines 4-7). R (line 3) continues with an utterance about the entrepreneurs, but at the same time AL (line 4) confirms R's time scale frame by making a reference to 'the procedures,' suggesting that the procedures take a lot of time. In this way, this time scale frame serves as an account for the choice he made (or the procedures, so to speak, 'forced' him to make).

In line 5, AL continues with another argument to account for the path he took, namely, that the municipality felt pressured by the province to hurry with the development of the ADA. This implies that there was no time to discuss whether the NMC should be situated in the ADA or somewhere else, since the ADA had to be established (a time scale frame). It also reveals that AL feels responsible for carrying out the provincial policy (an administrative scale frame). This is a form of role discourse, implying that this was the proper thing for him to do (Edwards & Potter, 1993), which serves as an account for the decision he took. Here also, the coupling of a time scale frame ('those ADAs really have to get off to a good start') and an administrative scale frame (pressure from the province) functions to strengthen the initial time scale frame. AL (in lines 6-8) repeats that, even though the Rural Areas Agency indicated that the NMC should be established in an industrial park (a spatial scale frame), he was not able to situate the NMC somewhere else ('it seemed a discussion, but it wasn't'). Thus, AL in this paragraph constructs a concurrence of different arguments, consisting of different scale frames, to account for the decisions he made.

FRAGMENT 2 | PARAGRAPHS 58 | 60 | 62 | 64^a

1 BM But what is it right? Since when you try to grasp what an NMC actually is: a company
2 with tens of thousands animals, where day in, day out transportation goes to and fro:
3 carrying away animals, bringing animals. So that isn't agriculture in a traditional way.
4 So it's also wrong to say: well it fits the landscape nicely. It also doesn't directly

5 involve industry, since you have exactly done this to create safety zones around it. So
6 that diseases and the like aren't accessible just like that. So you have to deal with a
7 phenomenon, which as such asks for an autonomous solution. You can't just present
8 this as agriculture, since the character of the NMC also seems industrial, but
9 nevertheless it does remain an agricultural-like thing.

10 AL But we also did make that consideration right, to see if we could typify it as a chain
11 company, an industrial chain company that would for example enable establishment
12 opposite and outside the ADA. But we pulled back a bit from that idea, since that
13 would mean that we as a municipality would, all of a sudden, lead the (.) the debate.

14 Yeah what's [the national debate

15 BM [the national debate

16 AL And on the other hand for me it was also a consideration. If I look 10-15 years ahead,
17 the NMC will be next to an industrial complex, namely ((name of the industrial park)).
18 Just outside, but next to it. So currently this is the case, but in 10 years' time I think this
19 is a more logical location. °but well that's what I think°

a Paragraphs 52, 54, and 56 are omitted: In 52, R enumerates the different framings of the NMC that she found in her evaluation. In 54, B1 confirms R. In 56, R concludes that because of the procedures for ADAs it is the most convenient way to establish the NMC in the ADA. She makes an implicit accusation that the municipality opted for the easiest way out with all the consequences thereof.

BM in lines 1-5 questions what the NMC is and concludes that it can be framed neither as agriculture nor as industry (a spatial scale frame) and thus it requires an autonomous solution. This shows a definition dilemma and the implicit question: what can you do in such situations? In this way, BM prepares for an accountability argument.

In lines 10-12, AL continues his account by explaining that the municipality did consider framing the NMC as an industrial company that could be situated opposite the ADA (a spatial scale frame); but, as AL explains, they pulled back from that idea because that would have meant that the municipality was leading the national debate (an administrative scale frame). This implies that AL (the municipality) shifts the accountability for discussing what the NMC is and where it can be located to the national level. BM (line 15) agrees with AL. We refer to this as upscaling, used to shift accountability to higher administrative levels.

AL continues with an admission (lines 16-17), a new argument: in 10-15 years the NMC will be next to an industrial complex, so in 10 years' time he thinks this will be a more logical location (a time scale frame). This is another example of a projection into the future ('time will tell I was right') to account for decisions presently made (see Fragment 1, paragraph 107). This time scale frame provides him with a new argument and solves the definition dilemma.

'Future oriented and future proof'

The selected fragment is from the municipal council meeting in which the area vision for the ADA was approved. The area vision stipulates the sizes, standards, rules, and regulations with which the farms in the ADA have to comply. The selection is a compilation of quotes referring to the maximum plot size and the maximum building sizes of farms as suggested by B in Fragment 3, paragraph 151. Later, B's party officially formulated this as amendment 1¹². In the area vision, the plot size is set at 6 ha. The area vision does not limit the maximum building-block size per plot, but has set the limit at a building percentage of 15% for the ADA as a whole. This corresponds to about 30 ha in total. In the fragment, the alderman (AL), the leader of the coalition party (B), and the leader of the alderman's party (J) are quoted.

FRAGMENT 3 | PARAGRAPH 151 | B

1 For the plot size and within that the building-block size we want to follow the most recent
2 data from the ((regional farmers' organisation)). Apart from that we come across
3 similar sizes in research as well. A modern, future-oriented farm can function perfectly on
4 a plot size of 6 ha, well over 1/3 of which can be built on ((2.5 ha)), chairman even large
5 farms fit within such sizes.

In lines 3-4, B frames a modern, future-oriented farm as a plot of 6 ha, well over 1/3 of which can be built on. She emphasises that even large farms fit within these sizes (spatial frame). B refers to two external sources (footing/argument from authority (Edwards & Potter, 1993; Erving Goffman, 1979)) – the regional farmers' organisation and research – to account for her framing of a modern, future-oriented farm and more generally to account for her party's amendment 1: to set the maximum size of a plot at 6 ha and built area per plot at 2.5 ha. In lines 4-5, B explicitly addresses the chair to emphasise that large farms also fit within these maxima. This is a rhetorical construction with the effect that a discussion about allowing large farms in the ADA becomes more difficult.

FRAGMENT 3 | PARAGRAPH 205 | J

1 As they ((the criteria)) are in the area vision at this moment we don't resist, but we do want
2 to indicate that by using the criteria as mentioned before ((by B in 151 and further by her

12 This means that many paragraphs and parts of paragraphs have been omitted as these did not refer to these maximum sizes and/or amendment 1. The selected texts do, however, exist as part of the same conversation because they are responsive to one another, either directly or indirectly (a rhetorical connection), and are produced through chronically sequenced discursive acts (a temporal connection) ((Hardy, Lawrence, & Grant, 2005)

3 party in their amendments)), also no real need exists for these criteria. It is or it isn't fitting;
4 that's the main criterion. Then size is of minor importance. A small farm of one and a half
5 ha, that really doesn't look good, we shouldn't want that. A beautiful farm, of a larger size,
6 that can fit well in the surroundings, on the other hand, should be able to meet the criteria.
7 That's why our preference is not to be too restrictive with the size-measures yet beforehand.
8 (4) We do have to take care that we're not stipulating criteria that won't keep us going in the
9 longer term and have be revised or amended shortly after the stipulation of the area vision.
10 What we stipulate today should be robust, clear and particularly future-proof criteria.

In lines 1-3, J emphasises that the criteria formulated earlier by B are unneeded. According to J, the criteria should not be about the size of a farm (a spatial scale frame), but (lines 3-4) rather about whether a farm fits in the landscape or not. In other words, is the farm beautiful enough to fit in the area? (a spatial scale frame). Thus J introduces a new, competing criterion instead of the criterion large/small. J suggests to judge farms in the ADA on the criterion: fitting in the surrounding landscape. He uses an extreme case formulation, 'really doesn't look good,' to accomplish accountability for his (opposite) stance. This formulation makes his position 'clear-cut and non-negotiable' (Edwards & Potter, 1993, p. 135). J further accounts for this viewpoint with a time scale frame, arguing that the criteria should not be too limiting beforehand (line 7) and that no criteria should be fixed that might appear limiting in the long term (lines 8-10). In other words, the criteria have to be 'future proof' (line 10). So, in contrast to B who uses 'future oriented,' which she defines in terms of concrete sizes using a spatial scale frame, J constructs fitting/not fitting as a more future-proof criterion than large/small. In other words, for J the criterion large/small is not future proof. In addition, J (lines 8-10) warns those parties who do want to limit the maximum sizes that the criteria decided upon today should not have to be readjusted shortly afterwards. This is a rhetorical construction, a sort of threat, to which he can later refer and for which he can hold others accountable if the council decides to limit the maximum sizes.

FRAGMENT 3 | PARAGRAPHS 290 | 292 | 295

1 AL Amendment 1, which concerns the maximum building size per building plot ((of) 6
2 ha to determine on 2.5 ha. We want to ask you if that amendment, we want to
3 dissuade you from that, especially since we think that's too little future oriented.
4 B Then you thus contradict the LLTB ((regional farmers' organisation)) in your
5 deliberations.
6 AL No I don't contradict the LLTB in that. When you have a look at the email from the
7 LLTB, in which that 2.5 ha, it also says that eh, that eh, eh eh (2) That email says you

8 need say 6 ha future oriented. And in the first instance there would be buildings on
 9 2.5 ha. Furthermore in that email is also mentioned that on the remaining area on
 10 which one doesn't want to have buildings, that one keeps space there for future
 11 expansions. When you know that on a building plot, the first part maybe is only built
 12 upon 20 - 30%, and then the last part already to a large extent will be built upon, we
 13 say 2.5 ha is absolutely not future oriented and that's why we dissuade you from that
 14 and that's in line with the email of the LLTB. And also in line with all reports we
 15 have seen recently.

In lines 2-3, the alderman replies to amendment 1. He discourages this amendment, since the board ('we') is of the opinion that this is 'too little future oriented'. AL makes a connection between farm size (a spatial scale frame) and future oriented (a time scale frame). He needs this future perspective to rebut the arguments to set the maximum building size to 2.5 ha and to account for his suggestion to stick to 15% development in the ADA as a whole (30 ha in total), as mentioned in the area vision. This is comparable to the use of time scale frames as projections into the future in Fragments 1 and 2.

In line 4, B claims that AL contradicts the farmers organisation. By doing this, B indirectly forces AL to make explicit what 'future oriented' means.

In line 6, AL explains (lines 6-12) how he read the email from the farmers' organisation: farms need 6 ha of which 2.5 ha will be built upon in the first instance and in the future (presumably) larger buildings will be needed (this is another, more careful, projection into the future to account for the criteria that AL/the board want to set). If this is correct, 2.5 ha is not future oriented. In lines 10-13, AL uses the rhetoric of argumentation: 'When you know... and that... then we say...'. This conclusion is presented in an 'almost syllogistic form' and as 'warranted by the impersonal operation of logic rather than the motivated inferences of humans' (Edwards & Potter, 1993, p. 135). In line 12, AL talks about 20-30% to show that 2.5 ha is not future oriented, but 2.5 is 42% of 6 ha. Thus AL minimises or downgrades 2.5 ha to 20-30% to account for his stance that 2.5 ha is not future oriented. AL further accounts for his/the board's point of view by referring to both the farmers' organisation's email (line 14) and 'all reports' (line 14) (footing/argument from authority (Edwards & Potter, 1993; Goffman, 1979)).

FRAGMENT 3 | PARAGRAPH 465 | B

1 But we're not talking about mega farms in our vision on the ADA. We want to allow and
 2 provide space for the placement of regular farms. With the first amendment about the plot
 3 building of 2.5 ha, on a plot of 6 ha, farm buildings on a plot, we factually concur with the

4 data coming from the sector. Then the alderman and I can hold different views on that point,
 5 but the facts in the reports simply say so and then we are with those 2.5 ha even, you hear it
 6 from the SP ((Socialist Party)), even on the spacious side, since fairly very large farms fit
 7 on 2.5 ha.

In Fragment 3, paragraph 465, B accounts for her party's stand and amendment to set the maximum building size at 2.5 ha. She uses a spatial scale frame, distinguishing between mega farms and regular farms. In line 4, B reverts to the earlier truncated discussion with AL (Fragment 3, paragraphs 290-295). B emphasises that she is basing her views on 'facts from the sector,' 'facts in the reports,' and 'the SP'. She uses footing (Edwards & Potter, 1993; Erving Goffman, 1979) three times to account for her party's suggestion/ amendment to set the maximum building on a plot at 2.5 ha (spatial scale frame).

4.5 Conclusions

In this last concluding section we answer our research question, relate our outcomes to larger policy processes, and reflect on the use of a discursive approach to analyse accountability.

In this study, we aimed to show how actors in complex policy interactions *do* scalar politics. Our analysis shows that actors involved in policy interactions use multiple scale frames in their discussions to define and redefine their own and others' scale frames towards specific ends. Scale frames provide possibilities to dismiss and exclude other arguments.

With regard to the role of scale frames for accountability management in complex policy processes, our analysis shows that actors in interaction use scale frames as autonomous devices and in combination with specific discursive devices to construct accountability. In interaction, complex processes of constructing and managing accountability for both statements made on the spot and statements/decisions made on other occasions are occurring, and scale frames are important devices to construct accountability.

Throughout our transcripts, we touched on three scale framing patterns that could be identified in different contexts: projections into the future, upscaling and downscaling, and scale coupling. We have identified projections into the future, where different actors project the issue into the future to account for choices and decisions that are difficult to legitimise on the basis of current conditions. In this way, scale frames provide arguments to account for disputable choices and assessments.

Further, our analysis shows actors downscale the issue to a lower and less problematic level. Opposite of downscaling is upscaling the issue to a higher and more problematic or more influential level. As a consequence of upscaling and downscaling ideas and actors on other levels are excluded. Furthermore, upscaling and downscaling are used to magnify or diminish the issue under discussion. Here our research shows a different use of upscaling than for example actors upscaling an issue to pursue their agenda at larger scales (e.g. Harrison, 2006).

Lastly, actors in interaction use scale frames to couple different scales. This coupling is used when the single scale frames are not convincing enough. Scale coupling functions to strengthen an initially unconvincing scale frame. These patterns, especially scale coupling, are examples that show how frame bridging, amplification, extension, and reframing work (Benford & Snow, 2000). The background conditions for these specific scale framing strategies are an interesting topic for further research.

Our research shows that the different actors use different scale frames to discursively manage accountability in governance interactions. We showed how actors *do* scalar politics on the conversational level; they frequently use scale frames in interaction when presenting their point of view on the problem and solution, to make issues more or less important, to discuss others points of view, and to include and exclude arguments and actors. This demonstrates the importance of frames and scale frames, and more general the importance of language, as tool in policy interactions (cf. Hajer & Laws, 2008; Healey & Hillier, 1996) to produce and manage change and action on a more macro level (Baker, 2009; Ford, 1999; Shaw, 2002). The actor who is able to frame the terms of the debate, steers the debate towards certain outcomes and policy implications.

However, in some cases scale plays a larger role than in others and as a consequence these cases are more interesting to study from a scale framing perspective. We selected our cases because scale issues played a role. As a result, we were almost sure that scale frames would be present in the discussions. Furthermore, we selected interaction sequences on the basis of the scale frames that we identified in a first stage of the analysis. Thus, in these sequences, many scale frames were answered by other scale frames, although in randomly selected sequences scale frames presumably will be answered by other frames as well. In complex policy processes, many frames are used, frames that do not refer to scales, but also many frames that do refer to scales. In other words, people do not use scale frames only, but many of the frames they use, are scale frames. This is all the more reason to look closely into scale frames and their impact on complex policy processes

because, as we have shown, they can lead to important results.

Finally, we reflect on the use of a discursive approach to analyse accountability. We believe that this is an important addition to the more procedural approaches to accountability (focusing on openness and transparency in decisions, rules, and procedures) in complex policy processes, especially in today's information society. However, it is most likely that these scale frames and related scale frame patterns remain implicit for the participants. Creating a certain sensitivity to scale frames and the mismatches between them can improve the quality of interactions (see e.g. Van Lieshout et al., 2011). The consequences both of a particular scale frame in terms of inclusion and exclusion of issues and actors, and of possible mismatches between different scale frames, can be made explicit. In this way, discussions of the kind of 'it isn't! it is!' can be brought to the level of a dialogue in which implicit assumptions, starting points, and backgrounds become the subject of the conversation and can be dealt with in a constructive way (Pearce & Littlejohn, 1997).

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5

The power to frame the scale?

Analysing scalar politics over, in and of a
deliberative governance process

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Abstract

In this paper, we study the role of scalar politics in governance processes. More specifically, we analyse the interplay between scale framing and power dynamics in a deliberative governance process about the future of Dutch intensive agriculture. In response to fierce societal resistance, the then Dutch Minister of State for Agriculture decided to organise a societal dialogue about the scale and future of the animal husbandry sector in the Netherlands. We analyse this deliberative process on both the interactional (i.e. within the different policy episodes) and the governance process level. We distinguish between the power dynamics: in the interaction, of the interaction and over the interaction. We use discourse and conversation analysis to study the interplay between scale framing and the power dynamics at stake. At first sight, the ‘power-over’ in this process appeared very strong and dominated the ‘power-in’ and the ‘power-of’, but in the end the power-of appeared even stronger. Furthermore, we show that scale frames are powerful discursive devices in the different episodes (power-in), but the analysis of the process as a whole shows a different picture.

5.1 Introduction

Although the construction and politics of scale are intensively debated in the field of political geography (see e.g. MacKinnon, 2011 for an overview), the construction, use and implications of scale framing for governance processes have not received much attention in public administration and policy sciences. Scale framing is a powerful mechanism in shaping the meaning of policy issues, with possibly far-reaching consequences for governance processes in terms of responsibilities and inclusion or exclusion of actors and ideas (Kurtz, 2003; Leitner, 2004). In this paper, we study scalar politics. More specifically, we analyse the interplay between scale framing and different power dynamics in a deliberative governance process about the future of Dutch intensive agriculture, and its influence on policy outcomes.

We define scales broadly as the agricultural/spatial, temporal or administrative dimensions used to describe a phenomenon, and levels are the different locations on a scale (adapted from Gibson et al., 2000; see also Table 5.1)¹³. Through the process of framing, actors highlight different aspects of a situation as relevant, problematic or urgent (Gray, 2003; Entman, 1995), and by doing so situate issues on different levels and scales (Dewulf & Bouwen, 2008; Van Lieshout et al., 2011). Actors that are able to frame the issue on a particular scale influence the governance process in terms of inclusion and exclusion of issues, actors, solutions and outcomes (Kurtz, 2003; Leitner, 1997, 2004; Van Lieshout, Dewulf, Aarts, & Termeer, 2012). But how do some actors ensure that their scale frames prevail, whereas other scale frames disappear? A variety of different frameworks and conceptualisations of power exist (e.g. Bachrach & Baratz, 1970; Clegg, 1989; Lukes, 1974, 2005). As we focus on what is happening in interaction, we conceptualise power as an interactional phenomenon that forms an integral element of human relations (Bachrach & Baratz, 1970; Elias, 1970). Power is then not conceptualised as a capability or characteristic of an individual, but rather as a dynamic, continuously established in interaction by the reactions of other actors (Elias, 1970; Thornborrow, 2002). As Fairclough (2001, p. 36) explains: ‘power ... is never definitively held by any one person, or social grouping, because power can be won and exercised in struggles in which it also can be lost’. In this paper, we use the term *power dynamics* to grasp the relational and dynamic aspects of power.

¹³ We are aware of the debates about the conceptualization of scale in human geography. For the purpose of this paper, we need a very concrete conceptualization of scale. Therefore, we use Gibson et al.’s (2000) definition, which we adapted to the scales found in an earlier analysis of the same case (see Maartje Van Lieshout, et al., 2011).

We study the interplay between scale framing and power dynamics in the so-called societal dialogue on the future of intensive agriculture in the Netherlands. In response to fierce societal resistance and under pressure from the Economic Affairs, Agriculture and Innovation (EAI) Select Committee, the then Dutch Minister of State for Agriculture decided to organise a ‘societal dialogue’ about ‘the scale and future of the animal husbandry sector’ (Alders, 2011, p. 5) in the Netherlands.

This discussion is implicitly and explicitly about scale, since the increasing number of large animal-housing units – so-called mega-stables – and their (possible) negative effects form the direct cause for the dialogue. On the one hand, the societal debate is about whether it is desirable to keep many animals close together in large housing units; on the other hand, it is about the consequences of situating such animal housing close to residential areas (which is often the case because of the high population density in the Netherlands). Dutch citizens worry about the occurrence of various animal diseases and the spread of these to humans, animal welfare, antibiotic use and the development of resistant bacteria, the risks of dust and other emissions, environmental problems and, recently, the size of mega-stables in the landscape.

The dialogue took place in spring 2011 and consisted of orienting talks, a representative opinion study, citizen panels, a stakeholder dialogue and an internet discussion (www.dialogmegastallen.nl, accessed 10 January 2012; Alders, 2011; Ministerie van Economische zaken Landbouw en Innovatie, 2011). The results of these discussions were collated in a report for the responsible Minister of State. In response, the latter wrote a letter to the Dutch Lower House in which he addressed the concrete policy measures that he would take as a result of the dialogue (Bleker, 2011) (see below).

In the next section, we develop a framework to analyse the interplay between scale framing and power dynamics in governance processes. At the end of this section, we fine-tune our research question. Subsequently, we discuss the methods used. Then we proceed to analyse the different episodes of the governance process in relation to the societal dialogue regarding Dutch intensive agriculture. Finally we conclude with a reflection on the different mechanisms of power and scale framing in this deliberative governance process.

5.2 Framework to Analyse the Interplay between Scale Framing and Power Dynamics in Governance Processes

Policymaking in Deliberative Governance Processes

Following Stone (2012), we do not see policymaking as a rational process. Policies ‘are not simply external, generalised or constraining forces, nor are they confined to texts. Rather, they are productive, performative and continually contested’ (Shore & Wright, 2011, p. 1). In this paper, we take a processual approach to policymaking (see also Shore & Wright, 2011). The assumption behind process thinking is that social reality is not a steady state, but rather a dynamic process (Pettigrew, 1997). Pettigrew (1997, p. 338) defines a process as ‘a sequence of individual and collective events, actions, and activities unfolding over time in context’.

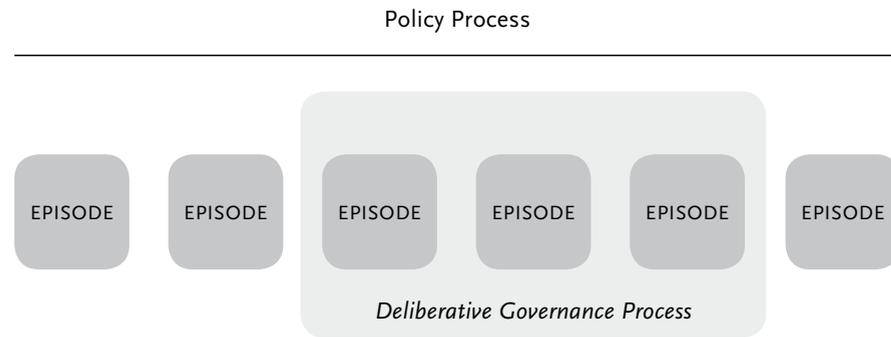
Central in a processual approach is thus the sequence of events, in the case of policymaking also referred to as policymaking episodes (Barzelay & Gallego, 2006), or decision-making rounds (Teisman, 2000). In this paper, we use the term *episode*. As Teisman (2000) explains, in different episodes the interaction between different actors results in one or more definitions of problems and solutions. An episode begins and ends with the adoption of a certain combination of a problem definition and a (virtual) solution by one or more actors (Teisman, 2000).

In addition to the different episodes, the role of *context* is crucial to understand the process (Pettigrew, 1997). As Pettigrew (1997, pp. 338-339) explains: ‘Actions drive processes but processes cannot be explained just by reference to individual or collective agency. Actions are embedded in contexts which limit their information, insight and influence. But the dual quality of agents and contexts must always be recognised’. Contexts are both shaping and shaped. Actors are producers and products (Giddens, 1979). This swapping between agents and contexts is cumulative and occurs over time (Pettigrew, 1997).

Thus, in our view, policymaking is an on-going, dynamic, interactional, adaptive process, consisting of a sequence of episodes unfolding over time in context. The governance process that we are studying consists of several episodes and is part of a larger on-going process (see Figure 5.1).

We study part of the policy process about the future of intensive agriculture in the Netherlands as an example of a deliberative governance process. The central idea behind deliberative governance is that ‘policy making requires spaces where different institutions, agencies, groups, activists and individual citizens can come together to deliberate on pressing social issues’ (Hendriks, 2009, p. 173).

Figure 5.1 | Deliberative governance process as part of a larger policy process



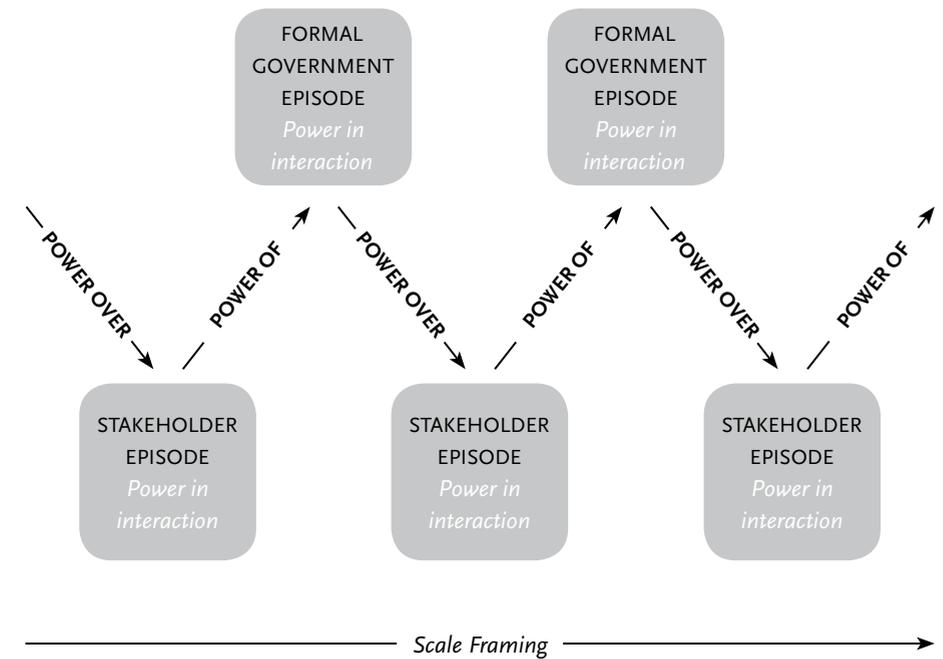
Scale Framing

In governance processes, actors in interaction strategically deploy scale frames with the purpose of effecting change (Delaney & Leitner, 1997). Through the process of framing, actors highlight different aspects of a situation as relevant, problematic or urgent (Gray, 2003; Entman, 1995), and by doing so situate issues on different levels and scales (Dewulf & Bouwen, 2008; Scholten, 2012; Van Lieshout et al., 2011). In this way, scale frames can lead to intended or unintended inclusion and exclusion of actors, ideas and possible solutions in policy processes (Kurtz, 2003). Previous research has shown that actors in (governance) interactions continuously use different scale frames to accomplish various goals (Van Lieshout et al., 2011; Van Lieshout, et al., 2012). These activities, known as the politics of scale (cf. Delaney & Leitner, 1997; Jonas, 1994), or scalar politics (MacKinnon, 2011), are fiercely disputed, as actors endeavour to restructure power and responsibilities (Kurtz, 2003; Leitner, 2004). In order to study scalar politics in governance processes, we conceptualise this as the interplay between scale frames, as just explained, and power dynamics, to which we now turn.

Power Dynamics

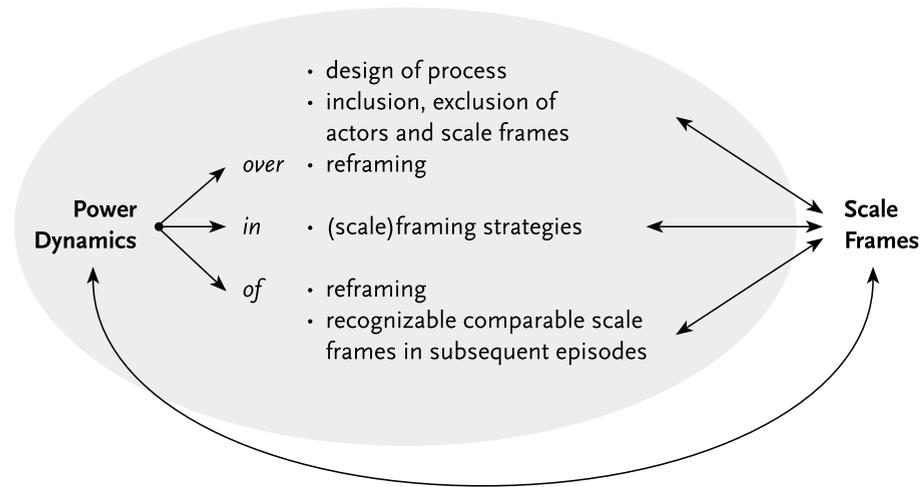
In order to analyse the power dynamics on both the interactional level (within the different episodes) and the process level, we draw on Torfing, Peters, Pierre, and Sørensen (2012, p. 49). They suggest analysing not only 'power-in' interactive governance but also 'power-of' interactive governance and 'power-over' interactive governance. For our purposes, we adapt these perspectives on power in interactional terms in a way that allows us to capture power dynamics in and between policy episodes. In Figure 5.2, we schematically present the three different perspectives.

Figure 5.2 | The interplay between power dynamics and scale frames in (deliberative) governance processes



By analysing *power-over*, we focus on the organiser's power to design the governance process. This perspective helps us to analyse how the design of the process (i.e. the context of the episodes) influences the interactions and the outcomes, and which scale frames are taken to the next episode (see also Arminen, 2005; Fairclough, 2001; Thornborrow, 2002); and conversely we analyse how the constructed scale frames influence the design of the process in terms of inclusion and exclusion of actors and ideas. Governments/organisers have the power to open up and close down governance processes (Torfing et al., 2012). This power of the organiser over the process follows from its authority, i.e. its socially acknowledged right to judge, decide, take action and so forth (Hardy & Phillips, 1998; Purdy, 2012), and its formal and acknowledged role as organising actor (Fairclough, 2001; Thornborrow, 2002). The organiser has the power to include various actors and ideas (including particular scale frames) and exclude others (Huxham & Vangen, 2005; Purdy, 2012; Torfing, et al., 2012). Furthermore, the organiser can set the agenda, steer towards particular outcomes (including the reframing of certain scale frames), control the information provided, and decide on note taking, conclusions and documentation (Huxham & Vangen, 2005; Purdy, 2012).

Figure 5.3 | Framework for assessing the interplay between power dynamics and scale frames in deliberative governance processes



By analysing *power-in*, we focus on the power dynamics within the different governance episodes, i.e. in conversations between the different actors. The power-in deliberative governance episodes can be influenced by the specific characteristics and/or competences of the actors. For example, their expertise and status (Purdy, 2012), their role (Fairclough, 2001; Thornborrow, 2002), their ability to participate and their discursive capacities (Huxham & Vangen, 2005; Purdy, 2012; Torfing, et al., 2012) can provide actors with power in interaction. For our purpose, we focus on the interplay of power-in dynamics and the process of (scale) framing in interaction. Dewulf and Bouwen (2012) have identified interactional framing strategies that actors use to deal with frame differences, for example frame incorporation and frame polarisation (Dewulf & Bouwen, 2012, p. 179). With regard to scale frames, Van Lieshout et al. (2012) have identified four specific strategies: projections into the future, downscaling, upscaling and scale coupling.

By analysing *power-of*, we focus on participants' power to influence the process. As Torfing et al. (2012) explain, power-of studies focus on the way interaction in deliberative governance settings influences the formulation and implementation of policy. This perspective provides insights into how deliberative the process was in terms of taking the participants' viewpoints to the next episodes. In analysing power-of, we reflect on how participants' scale framing influences deliberation and how deliberation influences the scale frames taken to the next episode. Power-of dynamics become evident when, for example, participants are able to influence the continuation of the process,

and control or verify the (intermediate) outcomes. A concrete example of power-of is the use of *exit power*. We assess power-of by analysing the extent to which the scale frames of the participants in an episode can be recognised in the conclusions and subsequent episodes, and the extent to which the participants have the opportunity and are able to reframe their own and others' scale frames. Reframing can be considered a power-of dynamic when participants are able to successfully challenge the issue frame determined by the organisers.

Following from the above, we can fine-tune our research question: What is the interplay between the scale framing and the power dynamics at different stages in the governance process about the future of Dutch intensive agriculture? We can specify three sub-questions: What are the implications of the process design for prevailing scale frames and vice versa (power-over)? What is the role of (scale) framing strategies on prevailing scale frames in the different episodes (power-in)? Are actors able to re-scale-frame the issue, and are these reframed scale frames taken into account in the subsequent episodes (power-of)?

5.3 Methods

Data

We analysed the formal episodes in the governance process of the societal dialogue (see Figure 5.2), starting with the debate in which the Minister of State promised to organise the dialogue. We further analysed the societal dialogue itself (citizen panels, stakeholder dialogue) and the concluding report. In addition, we analysed the letters of the responsible Minister of State as outcomes of the related episodes. The policy process is still continuing, but this selection of episodes forms a logical whole for the purpose of this paper. Citizens were recruited in five regionally organised citizen panels and a youth panel. The panels consisted of six to eight people and an independent external supervisor/coach. The panels were asked to answer three questions: How should the Dutch animal husbandry sector look in the future? What does that mean for: 1) the entrepreneurs in the sector and the Dutch economy, 2) the welfare and health of the animals, 3) human health, 4) the environment and 5) the landscape? And which government policy is required?

An internet dialogue was also part of the governance process. We took this episode into account in our analysis; however, since the results were comparable to the panels, and for space reasons, we decided not to include these results here.

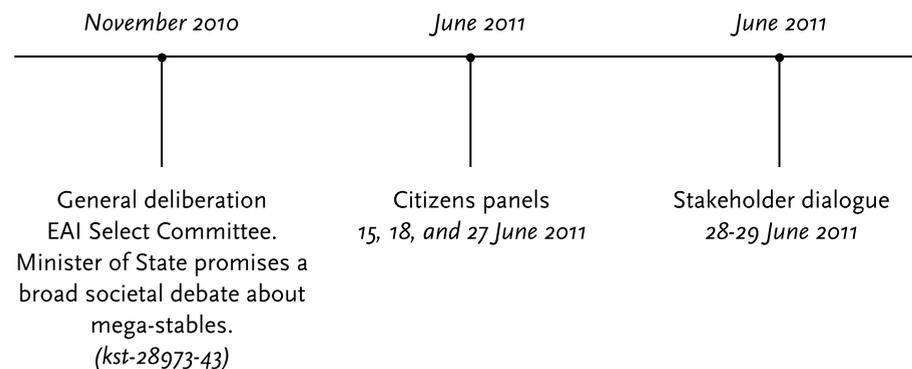
The stakeholder dialogue consisted of a two-day meeting chaired by Hans Alders (a former politician who has chaired various advisory committees for the Dutch parliament) with representatives of the primary sector, the chain, societal organisations, governments, science and knowledge.

The letters and report are publicly available. As part of the societal dialogue, six citizen panels were recruited. The first author attended the sessions of one of the six citizen panels and recorded the discussions: the panel for the Noord-Brabant Limburg region¹⁴. The recordings of the last session of this citizen panel were typed out verbatim. The data from the stakeholder dialogue consist of extensive notes and recordings of the discussions. The parts of the discussions involving scale framing were typed out verbatim.

Analysis

In our first analytical step, we reconstructed the policy process around the societal dialogue by creating a timeline of important episodes and the accompanying policy documents/transcripts (Figure 5.4).

Figure 5.4 | Timeline of analysed episodes in the societal dialogue on the future of intensive agriculture in the Netherlands



In the following step, we analysed the power-over, power-of and power-in the different episodes. We used scale frame analysis (Van Lieshout, et al., 2011; Van Lieshout, et al., 2012) to identify fragments in the transcripts in which scale framing activities occurred. Our analysis is based on the interactive approach to framing (Dewulf, et al., 2009). We focused on how people

¹⁴ Since all working visits were organized for the same day, the first author was able to attend only one panel. As we wanted to make a detailed analysis of the whole process, we decided to focus on this panel.

negotiate the proper scale frame by the way they use language (Dewulf, et al., 2004). In this approach, each move in the discussion reveals whether the other party's framing is accepted or rejected as discussants respectively maintain or alter their own framing in their direct response (Drake & Donohue, 1996) or next event in the on-going interaction.

We repeatedly read and compared the texts to understand what was happening in and between the different episodes. The content of the transcripts was coded, commented on and interpreted using software for qualitative data analysis (Atlas-ti). To systematically analyse the transcripts, we used a conceptual division (based on an earlier study, see Maartje Van Lieshout, et al., 2011) of agricultural, administrative and time scales (see Table 5.1). The result of this step was a selection of parts of the transcripts in which scale framing activities occurred.

In the third step, using discourse and conversation analysis methods (Edwards, 1997; Phillips & Hardy, 2002; Wood & Kroger, 2000), we examined more closely these selected fragments. In this step, we analysed the framing strategies that actors used to have their scale framing prevail (see e.g. Dewulf & Bouwen, 2012; Maartje Van Lieshout, et al., 2012).

5.4 Results

In this section, we analyse the selected episodes (see Figure 5.4).

General Deliberation of the EAI Select Committee 11 November, 2010

The topic for deliberation in the Select Committee meeting of 11 November 2010 was sustainable animal husbandry. The setting was a formal, chaired sitting, divided into two predetermined timeslots, with allotted speaking time and interruptions for the spokespersons of the political parties, followed by the reaction and replies of the Minister of State.

A division can be observed between two groups of political parties during the meeting. The first group framed their questions in terms of societal acceptance of the current developments in the animal husbandry sector, i.e. the development of more and more mega-stables and the various possible consequences thereof. The other parties framed their questions in terms of a level playing field versus stricter national rules in addition to international (EU) regulations. These different (scale) framings of the issue resulted from the powerful ability of spokespersons to lead the debate towards mega-stables and national rules, because the setting allowed them to ask the relevant questions (power-in). As Sacks (1995, p. 55 in Thornborrow, 2002,

Table 5.1 | Indicators for the selection of scale framing fragments

Scale	Levels	Examples of scale frames (from earlier studies)
Agricultural	Crop Field Farm National food system Global food system	<ul style="list-style-type: none"> Talking about the NMC [new mixed company], that's disastrous for small family farms. It's questionable whether so much pork is desirable, since in principle there's an overproduction in the world and for sure the Netherlands, since 80 to 90% of the pork is exported [...] we state that more attention should be paid to regional production [Western Europe]. If you watch what happens in South America, where gigantic soy plantations are established and a large part of it is transported to feed the pigs here [...]
Administrative	Municipal Provincial National EU Global	<ul style="list-style-type: none"> Looking at the decision making, we're not only talking about the municipality, but [...] on central, provincial, and municipal level the administrators are all Christian Democrats who already in 2003 have declared they'll do anything to develop the NMC. The minister was even willing to adapt the law. We-ell then I first should have gone to see the provincial aldermen, then the Minister of Agriculture and then the Minister of Housing, Spatial Planning and Environment, and that was again open for debate in the Council of State. Look and then again you run into the procedures. Look and we also got the pressure of the Province, yes those agricultural development areas really have to get off to a good start. And then it seems a discussion, but it wasn't.
Time	Past Present Future	<ul style="list-style-type: none"> An alternative is that the Netherlands decides intensive breeding can't take place here any longer. Yes then it will take another 10 years, right. So currently this is the case, but in 10 years' time I think this is a more logical location.

pp. 60-61) explains: 'as long as one is in the position of doing the questions, then in part one has control of the conversation'.

In the following, we focus on the mega-stable frames, since these lead to the promise of the Minister of State to organise the societal dialogue. The spokespersons of the first group of parties frame the developments in the animal husbandry sector as:

perfecting of the animal husbandry industry towards mega-stables, an increase in the concentration of animals, whereby [...] Dutch family farms are wiped out on the world market. (Party for the Animals)¹⁵

The starting point for the policy is and seems to continue to be: the Netherlands with their agriculture have to compete on the world market. The large question for the Green Party is whether societal acceptance and support of citizens can go along with a one-sided focus on the competitive position of the Dutch agricultural sector. (Green Party)

If power-in is looked at from a (scale)-framing perspective, these quotes point at competition on the world market; this is an example of upscaling to the global level, which would ruin local family farms and exclude small Dutch farmers. This way of framing can also be seen as an example of frame polarisation (polarising the difference by reaffirming one's own framing or an upgraded version of one's own framing (Dewulf & Bouwen, 2012).

These and comparable frames in the debate finally resulted in a prioritisation of the mega-stable issue on the agenda of the Minister of State. This shows that the members of the Select Committee have power-of this part of the process, since they are able to place their scale frame of the undesired, socially unacceptable mega-stables on the agenda. Their scale framing is taken into account and leads to the promise to organise a 'broad discussion on the topic'.

The Minister of State, in his response, frames the issue literally as:

The issue concerns the factory-like way of keeping large numbers of animals on one farm or location. We have to acknowledge a discussion about this topic exists here and there in society.

¹⁵ We translated the quotes as literally as possible. Changes made by the authors for anonymity or clarifying reasons are between square brackets: [...]. [is the symbol used for people talking simultaneously.

The Minister of State frames the issue in a factual, distanced way as an issue ‘here and there in society’. By doing so, he downscales the issue, making it smaller, and downplays the fact that a fierce debate is going on in both the media and daily conversations (power-in).

Continuing, the Minister of State addresses the spokespersons’ frames:

Looking at the issue rationally, it is possible to keep animals correctly on a very large scale within all the existing rules for the environment. Some even say: in those large entities, with even more modern technology, is even better for controlling emissions and the environment. In the second place, animal health, in the same massive animal husbandry, can be established and protected in a correct, respectable and sometimes in a highly veterinary way.

What the Minister of State does in this response in terms of scale framing is incorporate almost all elements of the spokespersons’ frames in his own argumentation (Dewulf & Bouwen, 2012). He uses the same arguments as the spokespersons, but phrases these in a neutral, distanced way, leaving the adjectives out. In addition, he refutes these by reframing them in ‘rational’ and positive terms.

Furthermore, he upscales the issue by using very positive frames about the value of the Dutch agricultural sector on a global scale level with regard to competition, food production and biodiversity. For example:

Let us take pride in our agricultural and animal husbandry sectors that are developing in an incredible way. [...] These are sectors which can compete on the world market. I think that’s a value in itself. You shouldn’t be ashamed you have a sector in the Netherlands which can amply compete on the world market. Quite the contrary, you should be proud of that!

In addition, the spokespersons should look across the borders:

If we just look across the borders, then I think that the Dutch contribution to the prevention of unnecessary damage to biodiversity because of food production in the world could well be much larger than our local contribution.

Framing the issue this way implies that the spokespersons should look at the larger scales and not focus too much on the ‘millimetre around our own company’. So, in his statements about both ‘taking pride’ and ‘looking across our borders,’ the Minister upscales the issue to the global level to account for the contested large-scale animal husbandry on the national and lower levels. However, several times he also repeats his scale frame of the issue as societally unaccepted mega-stables in the Netherlands.

You can think of all rational reasons on the basis of which you say that large-scale, massive animal husbandry at one location complies with all criteria; but nonetheless in society the question exists as to whether large-scale, massive animal husbandry can continue unbridled, and whether we want that. You can say everything can be reasoned rationally, but that’s not enough, because every activity in our country ought to count on a basic public support. Thus, I believe we shouldn’t avoid a broad discussion about this.

In this way, he legitimises the discussion and the opposition: although we disagree, I have to take the other (‘not rational’) viewpoints into account – nevertheless emphasising that, rationally reasoned, the problem does not exist.

To conclude, in this deliberation, the different spokespersons emphasise mainly the negative effects in a global scale frame, whereas the Minister of State looks at the global level and the long term, to frame the positive effects of the developments in the sector. However, in the end, the Ministers of State does decide to organise a broad societal debate to discuss the current national worries (a national scale frame). Thus, the spokespersons have power-of: their input is taken to the following episodes, since the Minister concludes that ‘everything can be reasoned rationally’, but nevertheless allows a broad discussion for the sake of public support.

The outcomes of this episode were presented in a letter from the Minister of State to the Lower House of 11 February, 2011. In this letter, the Minister explains how he will organise the dialogue about mega-stables. He starts his letter by repeating his factual, distanced framing:

The large-scale keeping of animals is possible, with due regard for all existing rules for the environment, animal welfare and animal health. Still, in society the question exists as to whether the expansion of the number of large-scale farms can continue this way. For me, the essence is that the animal husbandry sector needs and maintains a societal legitimation to produce.

The scale framing of the issue as a societal question, i.e. of relevance for whole of Dutch society, an administrative scale frame on the national level, implicates that Dutch society should somehow be included in the process. The Minister of State intends to do this by organising the dialogue in different ways: through exploratory talks with representatives of provinces, the animal husbandry sector and societal organisations; through conversations with small groups of citizens and entrepreneurs; through a representative study; and through an open internet discussion. The Minister of State explains:

I like the concepts we use to be clear. In that way, I hope to contribute to a constructive conversation about what the 'human measure' of scale increase in the livestock sector can be. I dedicate myself to good information provision to all participants in the dialogue.

Thus, the dialogue should be about the 'human measure' of scale increase, thus not about the 'animal measure', 'scale decrease' or 'scale maintenance'. Framing the topic of the dialogue this way implicates the possibility of developments in the agricultural sector other than scale increase being excluded (power-over).

The analysis of this letter shows the Minister of State uses several framing strategies to avoid giving the impression that there may be a problem with the intensive livestock sector, but at the same time to acknowledge the discussion in society. As a result, the Minister of State is able to respond to the debate in society without blaming anyone or taking responsibility to limit the development of mega-stables or livestock.

This analysis shows that the spokespersons have power-of since the Minister will organise the societal dialogue. However, with regard to prevailing scale frames, the spokespersons' scale frames neither return nor are addressed. The Minister reframes the issue as 'the needed societal legitimation' and the topic of the dialogue as 'the human measure of scale increase', thus not as mega-stables only.

Citizen Panel Noord-Brabant Limburg, June 2011

The different citizen panels first attended a general information meeting in which they learned about the different perspectives of various stakeholders. Subsequently, the panel Noord-Brabant Limburg visited a very large pig farm¹⁶ and a poultry farm¹⁷ and discussed the issues with local and regional

¹⁶ In 2009: 4,500 sows and 20,000 pigs/hogs.

¹⁷ In 2011 approximately: 120,000 chicks.

governors. These farms and governors were selected/invited by the organising team. The third meeting was organised to discuss the outcomes. This meeting was facilitated by the external panel supervisor, who also attended the other meetings. He followed three questions and four future scenarios as provided by the Ministry. From the three-hour discussion, the supervisor distilled a 10-page report. In the account, the supervisor wrote on the outcomes of this panel; almost all issues, arguments and dilemmas as raised during the discussion were reported. This account was included in the concluding report, *From mega to better*, as an appendix. The organising team further reduced the outcomes of this panel to less than a page in the main text of the report. Consequently, the details have largely disappeared.

Regarding power-over, the procedure shows a powerful role for the organising team and the supervisor in selecting the information, the farms to be visited, agenda setting, structuring the discussion, as well as concluding and selecting the reported results. At the same time, it shows limited power-of the participants in influencing the process in terms of the outcomes (scale frames) taken to the next episode, since the organiser and supervisor had such a large role in concluding and reporting, and thus in selecting.

The main issues discussed by the panellists were: the scenarios as provided by the organisation, whether animals should be seen as products, what would happen if scale increase was limited in the Netherlands, the risks of large stables, mega-stable versus mega-company¹⁸, and the role of government. In the discussion, the common arguments pro and against large stables were presented; for example, the unknown risks regarding both human and animal health, animal wellbeing, the economic perspectives and so forth (see also above, and Alders, 2011; Van Lieshout, et al., 2011; Van Lieshout, Dewulf, Aarts, & Termeer, 2013a).

In relation to scale frames, mainly different agricultural scale frames were put forward, emphasising different levels, to make an argument. Throughout the discussion, it was persistently argued that 'because of the free European market, a focus on the domestic market will not succeed'. In the example below, the opponents (e.g. A) of mega-stables presented their arguments on the local or regional level, whereas proponents (e.g. B, C) discussed the issue on a European or global level (comparable with the scale framing strategies of the Minister of State):

A: It'll be clear that the latter [the scenario of small-scale farms serving regional niche markets] has my preference [...] just let go

¹⁸ Mega-stables consist of one very large building; mega-companies consist of several smaller animal housing units not necessarily at the same location.

of the European market, just make sure you provide the internal market well, with an excellent quality product and you aren't purely aimed at production.

B: Well and if that then means Albert Heijn [a large Dutch supermarket] buys its meat in Germany or wherever, but anyhow not in the Netherlands, since that's cheaper [then you're also on the wrong track again he

A: [well then, that's what I'm saying, yes of course it has economic consequences.

C: [...] Without subsidies and the like, that market can't survive. Since you retain a free European market thus people will just buy their meat abroad.

B: Because I don't believe in the Netherlands on its own, thus I find European, it could even be world, but let's keep it European.

Opponent A also referred to soy production in Brazil (global level), but although this is a common argument in the wider mega-stable debate, this scale frame is not powerful in this panel, since it is not picked up in the discussion.

Another difference between opponents and proponents involves a time scale frame: focusing on the present, maintaining what we have (opponents, D), versus emphasising where we will go in the future (proponents, E):

D: But I do think, then we return to that which is achieved, we actually should [maintain] what we have now, those amounts etc., those I would really like to maintain. [...] I think we have enough. The stables are big enough.

E: [...] I have seen now that the pig farmer actually is working quite sensibly and also actually does want [to work sensibly] and I now simply see it as a business, just like any other business. And the Netherlands competes in all sectors, and the small businesses have to disappear since they can no longer meet the requirements which we as citizens and government demand. And I think that the animal husbandry sector isn't any different. We have started that trend and I think we just have to continue.

The participants also discussed mega-stables and mega-companies (farm level) and concluded that this difference is important with regard to the health risks both for humans and for animals, the look and how it fits the landscape. According to both proponents and opponents, although the latter remained a bit sceptical, the development of mega-companies rather than mega-stables offers prospects for developments in the agricultural sector.

The panellists mainly framed national government as the responsible actor (administrative scale frame). In general, contrary to the Dutch decentralisation reality, they saw a large role for national government. They agreed that national government should take care of human health. Some panellists were of the opinion that central government should also take the lead in the arrangement of the rural areas, since otherwise regional differences could occur and because central government was the only actor that could take all the different aspects into account. However, this did not lead to much debate and scale framing activities.

Thus, although the participants used mainly agricultural scale frames, the analysis shows differences between the proponents and opponents in the levels emphasised to make their argument. From the perspective of scalar politics, this means that it makes a difference which scale level is used to discuss an issue and whether the issue is framed as a problem or not. However, since the purpose of the panel was to report on arguments pro and contra, rather than to reach a consensus about the future direction of Dutch intensive agriculture, the atmosphere of the discussion was more about sharing perspectives than concluding.

The panel supervisor's account presents a selection of arguments from the discussion. For example, the discussion about the development of mega-companies, as referred to above, is not mentioned. The account focuses mainly on the national level of the agricultural scale. For example, the framing that the intensive agricultural sector is very important for the Dutch economy and has to compete on the European (or global) market, which was discussed extensively, is only indirectly mentioned and presented in a detached way with arguments that others find important:

The prevention of scale increase in the Netherlands probably means a rise in the cost price. Consequently, meat will become more expensive. With that, the scenario of meat being only accessible for the 'rich' comes on the screen. If they get the chance, other countries will take the advantage. They will flood the Dutch market with cheaper meat. The question is whether, abroad, issues such as animal wellbeing, public health and environment are guaranteed.

Thus, a situation can occur where the problems regarding the previously mentioned themes are exported.

Retail expects a safe product at a keen price from its suppliers. If the Dutch livestock farmers don't succeed in realising this, purchasers will move abroad. Many livestock farmers have reacted to this with scale increase.

People were saying abandon large-scale livestock farming and focus with our own sustainable production system on the internal market. In that case, the intensive livestock sector will probably give way to smaller farms. The European market will be left at that.

In this account, the importance of the intensive agricultural sector for the North-Limburg region is mentioned, whereas this was not discussed in the panel. Thus, in terms of power-over, the supervisor, within his assignment, has a powerful position. By focusing on the national level of the agricultural scale, the arguments of proponents and opponents are joined together, and thus the use of different scale levels by proponents and opponents disappears (scale frame joining). By selecting only part of the scale frames, a way of frame disconnection (disconnecting the challenging element from the ongoing conversation as irrelevant, unimportant or the like (Dewulf & Bouwen, 2012) and reframing the arguments in general terms on the national level, the supervisor again limited the power-of the participants.

In the main text of the report *From mega to better*, the supervisor's account is further reduced and narrowed down. The report presents a general, nationally oriented perspective on scale increase, not a particular scale frame on this or a related issue. With respect to the outcomes of this panel and the general outcomes of the panels, the statement in the general outcomes that 'all panels report that the size of a farm as such is not seen as an important subject for debate' is interesting, because more than half of the panellists in the observed panel preferred the future scenario of a caring livestock sector, emphasising small-scale, environment-oriented farms, serving niche markets.

Thus, in the citizen panel episode, the supervisors had a powerful role in selecting, reframing and summarising the arguments presented by the various panellists. The Noord-Brabant Limburg panel supervisor's selection and representation of scale frames was the basis for the selection presented in the final report. However, looking at the general outcomes of the panels in the final report, one can ask what the contribution of this panel, including the supervisor's account, was (no power-of). The analysis of this episode shows

that it makes a difference which scale level is taken to discuss the issue and whether the issue is framed as a problem or not. With regard to strategies, downscaling, frame joining and frame disconnection were used to present a narrow, nationally oriented account of a very broad and long discussion. At the end of this episode, we can conclude that power-over dominates the other power dynamics in the sense that how the panels are organised, and the way the reporting is done, determine which scale frames are taken to the next episodes.

Stakeholder Dialogue, June 2011

In the first round of the stakeholder dialogue, the different stakeholders got the chance to present their viewpoints on the issue. The common arguments as discussed above were presented by the different stakeholders. Next, the chair introduced the discussion, referring to two reports on the topic published several years earlier. He concluded that the redesign of the sector as recommended in these reports had not yet taken place. The chair had power-over the meetings by determining the topic for the different rounds, by bringing the discussion back to that topic whenever necessary and by summarising. This procedure left space for the stakeholders to have power-in and power-of the discussion. However, as we will show, the chair influenced the discussion considerably, amongst other things by introducing certain scale frames.

With regard to power-in, emphasis was placed on the northwest European scale level, as the level on the spatial, agricultural and administrative scale that should be taken as the basis for discussions on the future of Dutch intensive agriculture. This upscaling of the issue is introduced by the chair, referring to the government's future vision for livestock breeding (power-over):

There is no escape from the dynamics of the free market in which it has to happen, and it also isn't that we in the Netherlands now will produce for the Netherlands, is it? – we have chosen our position in the larger whole. The larger whole does not by definition mean the whole world, but a concentration on the northwest European area, not only as market, but also as supply area, and actually in that area we together should look at what is happening.

The business-related stakeholders, in particular, continuously used this scale frame.

The thing is, the key lies on the shop shelf. Not only the Dutch shop shelf for that matter, but European. Because I think that, with all respect, we talk about the Dutch situation. But the Netherlands are not an island. ... So I think when a sustainability stroke is made, when it's about welfare and environment, you should in fact look at that northwest European market, since, at least I can't imagine that, the welfare and environmental objectives of the organisations stop at the Dutch borders. (Representative pig farmers)

You should be very well aware of the existence of that border, let me just very simply say the border between Limburg and the Ruhr Area, is quite different than what's often said, that country borders are so important and the like. The areas in the northwest just fluently melt into one another. (Commodity Board for Poultry and Eggs)

In contrast to other episodes in this analysis, in the stakeholder dialogue, this northwest European level is referred to as the 'region', showing that these stakeholders have a different, upscaled perspective than actors in other episodes on how the issue of the intensive cattle sector should be approached. This implicates that more should be coordinated on the European administrative scale level. As a consequence of this dominant scale frame, the more locally oriented stakeholders, such as the citizen initiatives and municipal health authority, who frame issues and solutions mainly on the local and national level, have less power-in the discussion. Furthermore, solutions on the national or lower levels are disqualified as irrelevant – for example by upscaling the argument, stating that the 'Netherlands are not an island' (see quote above) or that 'if we want to think about solving the issue on a stamp, I will pull out'.

Secondly, the stakeholders showed an awareness of the fact that much depends on the scale level that is taken as the starting point to look at the issue.

Several problems can be solved by spreading the production rather than moving it. Thus it depends, I think, at which scale level you look and which problem you tackle. (Research Centre)

In addition, there was an extensive discussion relating to the level that should be taken to 'close the cycle':

A: I wanted to add that we have to agree on the level we want to close the cycle, since it is closed on the global level: soy in relation to the rest. So you should look at the level you want to close it. Is that the regional level, or country level, or European or whatever? Since otherwise we're still not advancing. (Research Centre)

[...]

B: ultimately we think that just closing the cycle on a level as low as possible [...] (Foundation Nature and Environment)

[...]

C: But if we think, we should close the cycles on the plot level. Then I find that the population increases in China and the food production increases in South America, aside from the Dutch livestock industry and the consequences. [...] but when talking about the world food problem I think you should look just a little further than the plot level. (Agriculture and Horticulture Organisation Dairy Cattle)
Chairman: Again the memorandum of Wageningen University and Research Centre that says regarding Planet¹⁹, you see thus the livestock industry contributing to the provision of sustainable energy. The environmental emissions in the form of greenhouse gasses, ammonia, dust and odour are minimised to a great extent; [...] a broad application of new technology provides for a nearly closed production cycle. Also the feed and manure cycles are largely closed on farm, at national or northwest European level. So in this letter that element is indeed covered.

This discussion shows that the stakeholders are aware that looking at different levels has different implications. The discussion also shows that upscaling the issue to a higher level makes it easier to argue that cycles are closed; but the discussion is not concluded: in the end, Alders quotes from a report representing the government's vision and terminates the discussion on this topic (power-over).

Thus, regarding power-in, the analysis of the stakeholder dialogue shows findings comparable to those of the citizen panels. The stakeholders used several scale framing strategies (we showed mainly upscaling), but, in the end, it was the chair that introduced topics using a particular scale frame, and he also concluded and terminated particular scale frames (power-over). The stakeholders had limited power-of, in the sense that there were no particular recognisably different scale framings or reframings visible in the next episode

¹⁹ In the context of the triple P of sustainability: people, planet, profit.

or the report. However, the complete account of this episode in the report, and the possibility of discussing the earlier version of the report during a return day, show the stakeholders had more power-of than the citizens.

The results of the stakeholder dialogue are represented in the report *From mega to better* as a journalistic report, written by an independent journalist, who presents a detailed account of the two-day debate. This 14-page account is integrally taken up in the report. This procedure shows the power-over of the journalist (i.e. of the organiser) over what is concluded and reported. At the same time, this shows the power of the stakeholders since the account presents their discussion and scale frames accurately, and they had the chance to comment on the earlier version. However, the extensive and relevant debate among the stakeholders about which scale level should be used to look at the various issues of the problem is not mentioned. Furthermore, the account does not give a feeling for how much issues/frames were emphasised. For example, the repeatedly recurring scale frames about the northwest European scale level were mentioned in the account, but not the fact that these were important because they were mentioned so often, and in the end functioned as given.

On 23 November 2011, the Minister of State wrote a letter to parliament interpreting the conclusions of the societal dialogue and presenting his vision on the future of the animal husbandry sector. The Minister of State started this letter by explaining that:

The many reactions show that both in society and in the business community itself many worries exist about the developments in the animal husbandry sector. On the local level, problems occur that, according to [dialogue chairman] should be solved with priority. The most important message [dialogue chairman] presents is that the problem is not so much the mega-stable and the scale size, but rather the effects of the farms on the quality of the surroundings, the societal embedding of the animal husbandry sector, and the question of how much expansion space the sector has.

In this quote, the Minister downscales the issue from a national, societal problem to a local problem. Framing the problem as ‘the effects of farms on the surroundings’ rather than the size of the farms (upscaling from the farm level to a regional level or rescaling from an agricultural to a geographical scale) means that he does not have to set limitations on farm sizes. Indirectly, mega-stables and scale size are part of the problem, but phrasing it this way implies that he can develop policy on preventing effects on the surroundings,

without having to take measures to restrict farm size or numbers of animals. The Minister of State frames family farms as the farms fitting his vision:

Agricultural family farms provide employment, public support, social services, and are important for the liveability of the villages. [...] This is not to say there is no room for other forms of farm business, but, for the licence to produce, a good relationship with the environment is essential.

In his letter, the Minister of State uses the negatively connoted scale frame mega-stable only once in the beginning. Instead, he uses the scale frame *family farm*, which in the Netherlands has positive associations with small-scale farms from the old days. Furthermore, he mentions several positive characteristics of family farms. The Minister does not make explicit what a family farm is, and how large this can be. In fact, modern Dutch family farms can very well be mega-stables. Thus, by using the scale frame of the family farm, without explicating what this is, the Minister allows for the development of many farms in the Netherlands, without having to say anything about mega-stables, since family farms are not associated with mega-stables. With regard to the possibilities for development and growth of these farms, the Minister states:

Considering the economic importance for the rural areas, the cabinet is of opinion that an organic and gradual growth and development of these farms [family farms] should be possible. Against this background, the cabinet does not deem an unbridled growth of the size of farms desirable.

By framing the growth of family farms with moderate adjectives, while juxtaposing this to undesirable, unbridled growth, the Minister adopts an ambiguous position and leaves almost all options open – even more so given that the heavily regulated Dutch spatial planning process makes unbridled growth almost impossible anyhow. However, framing expansion this way gives the impression that the Minister will prevent the development of mega-farms. Since this framing at the same time does not restrict the development of farms, this position could satisfy both supporters and opponents.

However, the Minister will make legal provisions to intervene whenever necessary for spatial, human health, socio-economic or ethical reasons. Furthermore, he will request the provinces and municipalities to postpone new applications for stables larger than 300 NGE or more than one storey

high (administrative scale frames). Thus, he is taking a first step by requesting postponement, but this request only applies to *new* applications for which the *zoning plan needs to be changed*. This does not happen often.

The Minister of State continues by framing the transition towards future-proof and societally accepted animal husbandry as an opportunity for the sector 'to contribute to the global preservation of the animal husbandry sector and to international food security'. Framing the local or national transition this way places it in the future and makes it important on the global level (upscaling). In other words, it prompts thinking at the larger scale levels.

In sum, this letter shows that the Minister of State has framed the urgent problems of the animal husbandry sector on the local level. Furthermore, he frames the issue as the effects of farms on the surroundings and their embedding in the surroundings, rather than as the size of the farms. He discusses family farms, which evoke positive associations in the Dutch context, instead of mega-stables. Thus, he presents a very powerful frame that enables him not to set limits on farm size.

5.5 Conclusion and Discussion

We started this paper by stating that scale framing is a powerful mechanism in shaping the meaning of policy issues, with far-reaching consequences for governance processes in terms of responsibilities and inclusion or exclusion of actors and ideas. We analysed the interplay between scale framing and different power dynamics to find out why some scale frames prevail, whereas others disappear. In this section, we answer our research questions and provide explanations for our most notable findings.

What is the Interplay between Scale Framing and Power Dynamics?

This paper shows that our analytical framework on scale framing and power dynamics provides a nuanced perspective on the subtle but firm power play in this governance process around Dutch intensive agriculture.

At first sight, the power-over in this process appeared very strong and dominated the power-in and the power-of. The power-over the process by the organiser/Minister of State determined the process by deciding on the procedures, the agenda, concluding and reporting from the different episodes. This also determined what happened to the variety of scale frames: which scale frames were included, taken to the next episodes and taken up in the conclusions, and thus which problems and actors were included and which were not (see also Swyngedouw, 2005, and Table 5.2). For example,

as a result of working with panel supervisors, writing accounts following specific questions and topics from the organisers, the discussion about the development of mega-companies in the citizen panel that we analysed has disappeared from the debate. This can be explained by what Fulbright (1966) has defined as the 'arrogance of power'. As Fulbright (1966, p. 3) explains: 'Power confuses itself with virtue and tends also to take itself for omnipotence'.

Table 5.2 shows what happened to the variety of scale frames in the citizen panel. The table is based on the selection of scale frames as presented in this paper. It shows that, from the different scale frames pro and contra mega-stables, only pro scale frames on two levels are mentioned in the report *From mega to better*.

If the different interactions are examined more closely, analysis of power-in shows a much more nuanced perspective on the variety of scale frames than would be identified if only the outcomes of the different episodes were taken into account. The different actors in the various episodes used different (scale) framing strategies to adjust or rebut other actors' (scale) frames in line with their own interests (power-in).

Analysis also shows the differences in the power-of of different participants. The members of parliament who acted as spokespersons in the Select Committee had power-of: their reframings of the problems in the intensive agricultural sector were taken into account, and as a result the Minister of State organised the societal dialogue. Also, the continuation of the process shows the spokespersons' power-of: in response to a motion proposed by some spokespersons, the Minister of State was pushed to make restrictions on farms sizes, which he announced in a letter to parliament of 5 June 2012. The stakeholders in the dialogue also had some power-of as their scale frames were represented rather completely in the journalistic report and they had the opportunity to discuss the earlier version. The members of the citizen panel did not have much power-of: their contribution – the different scale framings and reframings put forward in the discussions – were not documented in the report and disappeared in the panels' general conclusions.

However, as the continuation of the process (e.g. the motion) shows, it remains a power play with different equilibriums in which different actors at different junctures are in the position to have a prevailing scale frame. Relatedly, it differs which selection of the on-going process is made to study the power dynamics. We can explain this dynamic between the power-over and power-of by the difference between the more classical government episodes and the more deliberative governance episodes. In the former,

Table 5.2 | The variety of scale frames pro and con in the citizen panel, supervisor’s account and report

	Citizen panel		Supervisor’s account of the citizen panel		Report ‘From mega to better’ Section about this citizen panel	
	Pro	Contra	Pro	Contra	Pro	Contra
Global		We can also grow soybeans in the Netherlands. But we get them from Brazil, where the forests are burnt down, just because over there the price is much more attractive.				
EU	<ul style="list-style-type: none"> Without subsidies and the like that market can’t survive. Since you retain a free European market. Because I don’t believe in the Netherlands on its own, thus I find European [...] 					
National		Just let go of the European market, just make sure you provide the internal market well, with an excellent quality product and you aren’t purely aimed at production.	Preventing scale increase will mean a rise in the cost price. Retail expects a safe product for a keen price from its suppliers. If the Dutch farmers don’t succeed in realizing this, purchasers will move abroad.	Abandon large-scale livestock farming and focus on our own internal production.	Preventing scale increase will mean a rise in the cost price. It’s questionable whether animal welfare [...] are guaranteed abroad and thus whether problems aren’t exported.	
Regional		It’ll be clear that small-scale farms serving regional niche markets have my preference [...]	The importance of the intensive agricultural sector for the North-Limburg region is mentioned in the account.			
Farm	The development of mega-companies rather than mega-stables offers prospects for developments in the agricultural sector.		Extra demands, combined with producing cheaply, force scale increase.		Extra demands, combined with producing cheaply, force scale increase.	
Present		We should maintain what we have now, those amounts, we have enough. The stables are big enough.				
Future	We have started that trend and I think we just have to continue.					

the Minister of State has to account for his plans and decisions in answer to the members of parliament, whereas, in the latter, public and private actors are involved, and governing mechanisms do not rest on ‘recourse to the authority and sanctions of government’ (Stoker, 1998, p. 17). In the governance episodes, the process is less formal, procedures are determined in the process and responsibilities are blurred: the ‘institutional void’ (Hajer, 2003). Consequently, (deliberative) governance processes are less transparent than conventional processes and therefore, paradoxically, may allow for a more powerful central government rather than more shared power (see also Stoker, 1998; Swyngedouw, 2005; Turnhout, Van Bommel, & Aarts, 2010; Eeten, 2001; Vink, Dewulf, & Termeer, 2012). Thus, although there are many good arguments in favour of organising policy processes in the form of a deliberative dialogue, the process design in this case strengthened central government’s power-over, rather than the other actors’ power-of – namely, by providing information, selecting farms, determining the topics, listing instead of concluding, providing only limited possibilities for participants to control documented outcomes.

Thus our analysis shows that scale frames are powerful discursive devices *in* the different episodes (power-in), but the analysis of the process as a whole shows a different picture. This shows that both proponents and opponents in the different episodes construct various scale frames, emphasising different scales and levels, but most of these scale frames are not taken into account. In the process, the differences in scale frames are largely neglected, and the fundamental issues that these scale frames raise (e.g. global food security, cutting down the rainforest) are not discussed (see Table 5.2). This shows that it is also of importance for the analysis which scale level is used: the interaction or the process (cf. Easterling & Polsky, 2008; Turnhout & Boonman-Berson, 2011). However, the fact that certain scale frames are filtered from the process does not necessarily mean that they are unimportant; on the contrary, this can equally mean they are very important but do not fit the ideas of some decisive actors.

Finally, we studied a ‘heated’ governance process and concluded that in this process scale frames other than those fitting the solutions of the Minister of State did not play a large role. Regarding future research it might be interesting to see whether, in less heated policy processes, scale frames, rather than power dynamics, do determine how the policy process evolves.

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6

**Conclusion:
the implications of framing
scales and scaling frames**

M. van Lieshout

Introduction

With this thesis, I aimed to get a better understanding of scale framing in interaction, and the implications of scale framing for the nature and course of governance processes about complex problems. I introduced and developed the concept of *interactional scale framing* and applied this to the debate about Dutch intensive agriculture. I studied three embedded cases to answer my research questions. The general research question was: *What are the implications of scale framing for the governance of complex problems?*

In this last chapter, I answer my research questions (6.1), discuss the added value of my scale framing perspective to the literature (6.2), and discuss the limitations of my research and the avenues for future research (6.3). In 6.4, I conclude with the implications of this study for governance practices.

6.1 Conclusions

In this section, I answer the general research question: What are the implications of scale framing for the governance of complex problems? The different embedded cases studied in chapters 2-5 have provided us with several insights. I continue by answering my sub-questions and end with a general conclusion.

Framing scale increase in Dutch agricultural policy over time

In chapter 2, I showed that the agricultural policy in the various memoranda is written down as an agricultural story, but over the years many other elements slipped in. Despite these changes in policy and policy frames, scale increase has played a central role in agricultural policy.

With regard to the contents, I saw a development of policy frames in the early memoranda aiming purely and unproblematically at increasing agricultural production: growth in production, increase in exports, farm development, and scale increase. After 1980, the policy and the policy frames became more and more diverse and consequently more complex, since more stakeholders are now involved and more interdependencies exist between these stakeholders. Also, the increase in interdependencies between agricultural and other policy domains, and the involvement of more and more administrative scales, contributed to the diversity and complexity of agricultural policy and policy frames.

I showed that scale increase played a central role in agricultural policy throughout the memoranda, but that this has been debated in different terms over the years. Furthermore, scale increase is legitimised with different arguments in the different memoranda, referring to different problems at different times. Different framing strategies enabled the continuous presence of scale increase as the underlying logic in the memoranda. I explained this continuous presence of scale increase in the documents by viewing the agricultural policy system as self-referential (Luhmann, 1984, 1990; Morgan, 2006; Urry, 2004; Wagemans, 2002). The self-referential agricultural policy system aimed to continuously improve itself by means of scale increase, without any discussion or critical reflection on the functioning of the system itself. In this process, language played a powerful role: changing the language helped to maintain the existing system or paradigm in which scale increase is continuously positively framed as the solution for Dutch agriculture. I concluded that a focus on the use of language in combination with scale; in other words, a focus on scale framing provides an interesting starting point to study interactions in governance processes about intensive agriculture.

The implications of scale framing for inclusion and exclusion

In the new mixed company (NMC) case in chapter 3, I showed that actors use different scales in their framings of the NMC and the agricultural development area (ADA). Actors construct various scale frames, in which they highlight different levels.

The analysis showed how actors use scale frames to legitimise the exclusion of certain actors and/or ideas from the conversation and to invalidate certain arguments in the discussion. Framing the issue on a particular scale and level makes it possible to include and exclude arguments and other actors, consciously or unconsciously, but tacitly. An example of the use of a particular scale frame in the NMC case that had implications for the governance process was the framing of citizens' concerns with regard to animal welfare and health as part of a national debate. As a consequence, the alderman shifted responsibility for this debate to the national level and at the same time excluded these arguments from the local discussion.

The NMC case shows that actors try to legitimate their positions by juggling scale frames, but do not take on board the scale frames and arguments of others with opposing opinions. The use of these various different scale frames can be explained as actors speaking different languages, expressed in different frames, resulting in incompatible stories that fit diverging interests (Pearce & Littlejohn, 1997). As a result of the use of different scale frames without explication, scale frame mismatches occur. I conclude that, in addition to scale mismatches (see e.g. Borgström et al., 2006; Cumming et al., 2006; Termeer et al., 2010b), we can speak of *scale frame mismatches* (see also Table 6.1 and Van Lieshout et al., 2011).

The implications of scale framing for accountability management

In chapter 4, again involving the NMC case, I showed that the different actors use different scale frames to discursively manage accountability in governance interactions. Actors on the conversational level *do* scalar politics: they frequently use scale frames in interaction when presenting their point of view on the problem and solution, to make issues more or less important, and to include and exclude arguments and actors. In other words, scale frames are used strategically as political devices.

In interaction, complex processes occur in relation to constructing and managing accountability for both statements made on the spot and statements/decisions made on other occasions. I identified three scale framing strategies that actors use to manage accountability: *projections into the future*, *upscaling and downscaling*, and *scale coupling*. In projections into the future, different actors project the issue into the future to account for

choices and decisions that are difficult to legitimise on the basis of current conditions. Further, I revealed that actors upscale and downscale issues to respectively higher and more problematic, or more influential levels, or lower and less problematic levels. As a consequence of upscaling and downscaling, ideas and actors on other levels are excluded. Furthermore, upscaling and downscaling are used to magnify or diminish the issue under discussion. Lastly, actors in interaction use scale frames to couple different scales. Scale coupling functions to strengthen an initially unconvincing scale frame.

The interplay between scale framing and power

In the societal dialogue case, chapter 5, I showed the interplay between scale framing and different power dynamics. I conceptualised power in terms of three power dynamics: 'power-over' the interaction, 'power-in' the interaction, and 'power-of' the interaction. Power-over refers to the power of the organiser over the governance process, power-in refers to the power of actors in face-to-face interactions, and power-of refers to the power of the stakeholders over the process.

In this case, power-over tended to dominate power-in and power-of. The power-over the process by the organiser/the Minister of State determined the process by deciding on the procedures, the agenda, concluding, and reporting from the different episodes. This also determined what happened to the variety of scale frames: which scale frames were included, taken to the next episodes, and taken up in the conclusions, and thus which problems and actors were included and which were not.

The analysis showed the differences in the different participants' power-of. In this process, particularly the members of parliament acting as spokespersons in the Select Committee showed power-of.

On closer examination of the different face-to-face interactions, the analysis of the power-in showed a much more nuanced perspective than would be concluded if the outcomes of the episodes alone were taken into account. Scale frames are powerful discursive devices *in* the different episodes, but the analysis of the process as a whole shows a different picture. This shows that both proponents and opponents in the different episodes construct various scale frames, but most of these scale frames are not taken into account in the final report. Thus, it is also of importance for the analysis which scale-level is taken: the interaction or the process (cf Easterling & Polsky, 2008; Turnhout & Boonman-Berson, 2011).

The analysis of the interplay between scale framing and different power dynamics showed that it remains a power play with different equilibriums in which different actors at different junctures are in the position to have a

prevailing scale frame. The dynamic between the power-over and power-of I explained by the co-existence of classical ‘government’ episodes and more deliberative ‘governance’ episodes.

General conclusions

Overall, I conclude that scale framing has many implications for the on-going governance process. Furthermore, scale frames are powerful discursive devices to influence the governance process, to achieve power-over the process, and to account for disputable decisions and statements. These scale frames can complicate the governance process, but also provide possibilities for different approaches to the issue. More specifically, my research showed that:

1. A detailed focus on language, more specifically on scale framing in interactions, provides unique and relevant insights into governance processes.
2. Actors construct different scale frames in governance interactions, in which they highlight different scales and levels.
 - Scale framing allows for defining and redefining one’s own and others’ scale frames towards specific ends. Framing the issue on a particular scale and level makes it possible, consciously or unconsciously, to include and exclude arguments and other actors without literally saying so. Furthermore, scale frames are used to legitimise the exclusion of actors and/or ideas from the conversation and to invalidate arguments in the discussion;
 - The dominant scale frames in the debate steer the debate towards certain outcomes and policy solutions;
 - Scale frames serve as powerful discursive devices used to shift accountability and to account for disputable choices and assessments;
 - Scale framing allows for inflating or reducing the problem.
3. Actors in interactions continuously jump from one scale frame to another, leading to scale frame mismatches, resulting in comparing apples to oranges and obscuring the discussion. These processes influence the quality of the discussions.
4. Governance processes are power plays with different equilibriums in which different actors at different junctures are in the position to have their scale frame prevail.

6.2 Contributions to theory

In this section, I reflect on the contribution of the interactional scale framing approach to successively: the governance literature, the framing literature, and the scalar politics literature.

Scale framing and governance

In chapter 1, I started by outlining the shift from government to governance. Since it is generally realised that policy solutions for complex issues cannot be usefully developed in a top-down fashion, a shift towards participatory or deliberative governance processes has become evident (Dryzek, 1990; Pierre & Peters, 2000; Rhodes, 1997; Scharpf, 1978). I highlighted three approaches to governance of relevance for my research interests: multi-level, adaptive, and participative or deliberative governance. On the basis of these governance perspectives, recently some scholars have started to explore ideas about what scale-sensitive governance should entail. In this section, I elaborate on these ideas from my interactional scale framing perspective.

Termeer and Steen (2011) define scale-sensitive governance as a way of governing that seeks to address scale issues in the best possible way depending on the specific context. According to Termeer, Dewulf et al. (2010), scale-sensitive governance should be based on a multiplicity of theories, amongst which monocentric, multi-level, and adaptive governance. These theories have different responses to scale issues, and governance is unlikely to be successful if only one of these approaches is used (Dewulf, Termeer, Werkman, Breeman, & Poppe, 2009; Termeer, Dewulf et al., 2010). However, most of these ideas on scale-sensitive governance are still in an exploratory and theoretical phase; hardly any empirical research has been undertaken to study scale-sensitive governance and its attributes (see Padt & Arts, 2014, for examples; Steen & Termeer, 2011).

Padt, Opdam, Polman, and Termeer (2014) take Termeer and Dewulf (2014) and some empirical cases as their starting point to develop a perspective on scale-sensitive governance of the environment. They conclude that governance over scale issues is ‘doomed to fail if, in a specific governance setting, cross-scale and cross-level interactions, logics of scale, politics of scale, and governance capabilities are neglected’ (Padt et al., 2014). Both Padt et al. (2014) and Termeer and Dewulf (2014) acknowledge the importance of different scalar perspectives and constructions; however, because of the theoretical, prescriptive nature of their work, they do not address the detailed insights on the different scalar perspectives (or frames) that follow from an interactional scale frame analysis.

I elaborate on the ideas of Padt et al. (2014), Steen and Termeer (2011), and Termeer and Dewulf (2014) from an interactional scale framing perspective. Steen and Termeer (2011) distinguish three pillars for scale-sensitive governance: departing from scale as a dogmatic concept, connecting scalar thinking with societal developments, and recognising/acknowledging other scalar logics. Termeer and Dewulf (2014) build on this and elaborate on the different elements to develop the governance capability of scale sensitivity (see also Termeer, Dewulf, Breeman, & Stiller, 2013). They distinguish between scale-sensitive observing, acting, and enabling. In doing so, they distinguish between the problem scale and the governance scale. The problem scale captures the different levels at which a problem plays out, and the governance scale entails the different levels at which formal and informal governance arrangements operate (Termeer & Dewulf, 2014). Accordingly, scale-sensitive *observing* includes identifying and analysing 1) cross-level issues on the

Table 6.1 | Examples of scale frame mismatches

Framing the issue using conflicting scale frames	Dutch intensive agriculture as an example for the rest of the world, as a solution for the food-security problem (agricultural scale global level)	Soy/feed production for the Dutch intensive agricultural sector destroys the rainforest Dutch mega-farms are too small to compete with farms in other countries (agricultural scale global level)
Framing the issue on different scales	The NMC solves bottlenecks/problems somewhere else (spatial scale)	The NMC is disastrous for family farms (agricultural scale)
Framing the issue at different levels of the same scale	Clustering intensive livestock provides space for nature, living and recreation and prevents epidemics of animal diseases (regional level)	EU market requires efficient intensive production (EU level)

problem scale, 2) interdependencies between levels on the governance scale, and 3) fit or mismatch between the governance scale and the problem scale(s) (Termeer & Dewulf, 2014).

From my point of view, an interactional scale frame analysis is a way of

scale-sensitive observing (and acting and enabling). An interactional scale frame analysis results in an overview of the wide variety of scale frames that different actors use to address the problem. Thus, an interactional scale frame analysis can highlight the perceived cross-level issues on both the governance scale (which is the administrative scale in this thesis) and the problem scale (mainly the agricultural scale in this thesis). Furthermore, a scale frame analysis provides detailed insights into the fits and mismatches between the different scale frames as expressed by different actors. In chapter 3, I made a distinction between scale frame differences and mismatches and identified three types of mismatches; awareness of these mismatches facilitates scale-sensitive observing (see also below and Van Lieshout et al., 2011).

The overall goal of scale-sensitive *acting*, according to Termeer and Dewulf (2014), is to reduce mismatches by creating a better fit between the governance scale and the relevant problem scales. From an interactional scale framing perspective, scale-sensitive acting would entail (developing) scale frame awareness amongst actors in a governance process, so that they can discuss the underlying starting points and preferred solutions, identify the differences and mismatches, and work towards shared *re-scale-framings* of both the problem and the solution.

Finally, *enabling* scale sensitivity for Termeer and Dewulf (2014) is about the features of the governance institutions that enable or empower scale-sensitive observing and acting. From an interactional scale framing perspective, enabling means creating space and time for open communication and reflection to identify the scale frame mismatches and differences and to come to shared re-scale-framings. Therefore, the governance capability of scale (frame) sensitivity should be linked with the capability of reflexivity (Termeer et al., 2013). More interactive, participative, or deliberative governance processes allow for open communication and reflection.

The interactional scale framing perspective thus provides additional ideas about how scale sensitivity can be realised in governance processes. In general, this thesis argues for more sensitivity to the role of language, more specifically for *scale frame* sensitivity in the scale-sensitive governance of complex problems. This will allow for better decision making.

Scale framing and framing

In chapter 1, I introduced my conceptualisation of framing and explained that I employ an interactional approach, focusing on frames or framings as interactional alignments or co-constructions (Bateson, 1972; Dewulf et al., 2009; Dewulf et al., 2004; Goffman, 1974). In this approach, framing is the

dynamic enacting and shaping of meaning in on-going interactions, and frames are temporary communication structures (Dewulf et al., 2009). In this thesis, I introduced, developed, and applied the concept of *interactional scale framing*. In this section, I highlight the contributions from this perspective to framing theory. I firstly pay attention to the added value of scale frames, and then I discuss the contributions of my interactional perspective.

With regard to the added value of scale frames, this study has shown that scale frames are used – in addition to, for example, identity frames or characterisation frames (Gray, 2003) – to make sense in governance processes about complex issues, emphasising both the problem at stake and the direction in which the solution should be sought. Scale frames can be seen as particular problem frames, but the specific focus on scales and levels uncovers different aspects of the issue that are relevant for different actors, and thus provides different insights, and new angles for solutions.

I have shown that actors use and mix multiple scales and levels, and not only the spatial scale as studied in human and political geography (Brenner, 2001; Delaney & Leitner, 1997; Harrison, 2006; Kurtz, 2003; Marston, 2000). In the cases, I distinguished between the spatial, agricultural, administrative, and time scales. Although some scholars may accuse me of ‘overstretching’ the concept of scale (e.g. Brenner, 2001; Lebel, Garden, & Imamura, 2005; Leitner, 2004), analysing these different scales provided me new and different insights. In so doing, I answered the call of Bulkeley (2005, p. 897) who suggested ‘that debates over the politics of scale need to cut loose from territorial moorings too easily tied to naive delimitations of scale as discrete units and entities. This requires an approach which does not take for granted, nor close off, the boundaries of the city, region, nation, global, local, individual, household and so on’.

The use of differently mixed scales and levels enables more arguments, provides a structure for arguments, but also tends to obscure the interests at stake. As a consequence of these many possibilities for framing the issue using different scales and levels, mismatches happen that result in communication problems. Scale frame mismatches – in addition to frame mismatches or scale mismatches – show the miscommunications very specifically. I distinguished three types of mismatches: (1) framing the issue using different scale frames, (2) framing the issue using different scales, and (3) framing the issue at different levels of the same scale (see Table 6.1).

I indicated that the strategic use of scale frames also provides opportunities for change (see Van Lieshout et al., 2011).

I distinguished between scale frame differences and scale frame mismatches. Scale frame differences are not problematic per se; on the contrary, they may

Table 6.2 | Different scale frames of proponents and opponents in the debate about the future of Dutch agriculture

<i>Scale-level</i>	<i>Proponents</i>	<i>Opponents</i>
Global	Dutch intensive agriculture as an example for the rest of the world, as a solution for the food-security problem	Soy/feed production for the Dutch intensive agricultural sector destroys the rainforest Dutch mega-farms are too small to compete with farms in other countries
EU	EU market requires efficient intensive production	EU subsidies thwart small scale production
National	A strong (intensive) agricultural sector is needed for Dutch economy	Mega-farms are too large for the landscape in a country as small as the Netherlands There is no need for mega-stable if I produce for our own country/region
Regional	Clustering intensive livestock provides space for nature, living, and recreation and prevents epidemics of animal diseases	Regarding emissions and nuisance, mega-farms are a degradation for the region, but a win-win situation nationally
Local	Entrepreneurs need to be able to invest in innovative, future-proof large scale activities near our village	Mega-farms do not fit in the landscape, pollute, cause an increase in heavy traffic, etc.
Farm	Family farms need to be able to grow	Family farms allow for good and animal-friendly farm management. Mega-farms are disastrous for small family farms

allow for enrichment of the debate and change. Scale frame mismatches, on the other hand, imply difficulties and conflict. Scale frame mismatches play a role in the stagnation of the communication between the actors in the process and consequently play a role in the stagnation of governance processes as a whole (see also Gray, 2003, 2004; Morgan, 2006; Pruitt & Carnevale, 1993; Termeer et al., 2010b).

In addition to the concept of scale framing, the combination of a face-to-face and governance process level interactional perspective is new and contributes to more insights into interactional framing (cf. Druckman &

Druckman, 2011, p. 256). I have shown that (scale) framing happens not only in face-to-face interactions on the conversational level, but also in interactions on the governance process level (Van Lieshout, Dewulf, Aarts, & Termeer, 2013b). My study made clear that it makes a difference which interaction level is taken for the analysis. Analysing face-to-face interactions reveals the variety of scale frames and provides nuanced insights into the several (scale) framing activities that occur. In my study, this resulted in insights into the several strategies that actors use to account for their statements (Van Lieshout et al., 2012; see also below). The analysis on the governance process level showed that other factors and processes (power dynamics, personal goals) also play a role and determine what happens to the variety of scale frames (which ones are taken into account and which ones are neglected), and the outcomes of the process (Van Lieshout et al., 2013b).

The fact that an actor uses different scale frames of an issue within the same face-to-face interaction (Van Lieshout et al., 2011) shows that it is rather the particular interaction – and the goals an actor wants to reach in that interaction – that elicit the frames that are uttered, than factors like public attention, time pressure, intervention of a mediator, or the location of the talks, as suggested by Druckman and Druckman (2011).

This thesis shows that scale framings on the governance process level and on the conversational level influence each other. For example, particular scale frames on the governance process level determine how the governance process is designed, particularly who is invited. The actors that are invited bring different scale frames to the fore that might influence the scale frames on the governance process level; this could mean that other actors are invited who bring new scale frames to the debate, and so forth (Van Lieshout et al., 2013b). However, the combination of different interactional levels of analysis especially made clear that it makes a difference which part of the governance process, i.e. which episodes, are selected to conduct the analysis.

Scale framing and scalar politics

In chapter 1, I explained that, since scales are social constructions, they can be used strategically as political devices (Swyngedouw, 2004), enabling political actors to exercise power or oppose authority (Rangan & Kull, 2009). These processes are known as the politics of scale (Delaney & Leitner, 1997; Jonas, 1994) or scalar politics (MacKinnon, 2011). I argued that, although the construction and politics of scale are intensively debated in the literature, the act of doing scalar politics remains abstract in these contributions. To study the act and the implications of scalar politics, I developed and applied the concept of interactional scale framing, as discussed earlier in this chapter. In

this section, I elaborate on the added value of this scale framing approach to the politics of scale literature.

I have shown that actors use and mix multiple scales and levels, and not only the spatial scale as studied in human and political geography (Brenner, 2001; Delaney & Leitner, 1997; Harrison, 2006; Kurtz, 2003; Marston, 2000). In addition, I have shown that actors in governance interactions use multiple scale frames in their discussions to define and redefine their own and others' scale frames towards specific ends. More specifically, both proponents and opponents use different scales and levels to frame the issue, even within the same interaction. It is not, for example, that proponents mainly upscale the issue to show the importance and opponents mainly downscale the issue to show the direct effects on the local level, or the other way around (cf. Harrison, 2006). Rather, this study shows that actors frame the issue both *pro and contra* on the different scales and levels (see Table 6.2; chapter 3), resulting in discussions that implicitly compare aspects of the issue at stake that are not comparable.

Both on the governance process and the conversational level, scale frames play a powerful role (see also above). The scale on which an issue is framed has implications for the possible, or logical, solutions, and thus for the continuing governance process (cf. Harrison, 2006; Kurtz, 2003; Mansfield & Haas, 2006). My analysis of conversational level interactions showed how actors *do* scalar politics; they frequently use scale frames in interaction when presenting their point of view on the problem and solution, to make issues more or less important, to discuss other points of view, to include and exclude arguments and actors, to shift accountability, and to account for their statements and decisions (Van Lieshout et al., 2012).

In the politics of scale literature, mainly *rescaling* is discussed as the strategy through which scalar politics are performed (e.g. Bulkeley, 2005; Kaiser & Nikiforova, 2008; Mansfield, 2005). An exception is Harrison (2006), who distinguishes 'pushing down' (Harrison, 2006, p. 518) the scale at which the problem is perceived, thereby minimising the problem, and 'pushing up' (Harrison, 2006, p. 521) the framing of the problem in order to justify calls for regulatory action at a higher jurisdictional scale. In this thesis, I have identified several additional (scale) framing strategies that actors use in interactions to do scalar politics.

In chapter 2, I showed that different strategies (e.g. unmistakably positive framing, masking, ignoring) enabled the continuous presence of scale increase as the underlying logic in the memoranda of the Ministry of Agriculture. In chapter 4, I revealed strategies such as: projections into the future (project the issue into the future to account for choices and decisions

that are currently difficult to legitimise), upscaling (to higher and more problematic or more influential levels, to magnify the issue) and downscaling (to lower and less problematic levels, to diminish the issue), and scale coupling (to strengthen an initially unconvincing scale frame) (Van Lieshout et al., 2012). Thus, the different *scale framing strategies* that I identified show that actors *use* the scalar element in their framings for more specific actions than merely rescaling. Furthermore, the scalar element allows for different strategies to accomplish different goals than other framing strategies allow for (see e.g. Dewulf & Bouwen, 2012).

In addition, I showed that actors in governance interactions anticipate the implications of scale framing with the help of scale framing strategies. For example in chapter 4, AL uses upscaling along the administrative scale to shift responsibility to other governmental organisations and to create accountability for his own assessments about where to locate the NMC. Locating the NMC in the ADA in his municipality would mean that AL is responsible, but, by upscaling the issue along the administrative scale, he anticipates, and tries to forestall, being held accountable by his conversation partners.

Furthermore, the study shows that the complex interplay between scale framing and power dynamics determines which scale frames are taken into account and which actors can or cannot anticipate scale framing. The actor with the power to frame the scale steers the debate towards certain outcomes (chapter 5). However, in the end, the interplay determines who that actor is. Thus, the added value of an interactional scale frame analysis is insight into the actions done with scale frames on different interactional levels. In other words, such analysis shows the act of doing scalar politics, including its consequences (e.g. the capricious course of the discussion). In combination with an analysis of power dynamics, an interactional scale frame analysis provides insights into the power struggles and prevailing scale frames on both the conversational and the governance process level.

6.3 Limitations and avenues for future research

In this section, I discuss the limitations of my research and couple these to interesting angles for future research.

Limitations and avenues relating to governance

I acknowledge that in some cases scale plays a larger role than in others, and as a consequence these cases are more interesting to study from a scale

framing perspective. In governance processes about complex issues, many frames are used – frames that do not refer to scales, but also many frames that do refer to scales. In other words, people do not use scale frames only, but many of the frames they use are scale frames. I selected my cases because scale issues played a role. As a result, I was almost sure that scale frames would be present in the discussions. Furthermore, I selected interaction sequences on the basis of the scale frames that I had identified in a first stage of the analysis. Thus, in these sequences, many scale frames were answered by other scale frames, although, in randomly selected sequences, scale frames presumably will be answered by other frames as well. This is all the more reason to look closely into scale frames and their impact on governance processes because, as I have shown, they can lead to important results. Recently, some studies have shown that scale framing also happens in other cases, not selected for the purpose of scale frame analysis (see for example Candel, Breeman, Stiller, & Termeer, 2013; Van Hulst, Siesling, Van Lieshout, & Dewulf, in press). In these cases also, scale framing has considerable implications.

Recognising that governance processes are increasingly organised in a deliberative or interactive way, thus involving more stakeholders with diverging perspectives, I argue that more insights into scale frames, scale frame differences, and scale frame mismatches in interactions are needed. In addition to research about dealing with scale mismatches, further research about dealing with scale frame mismatches is needed. What are the implications of scale frame mismatches for the governance of complex problems? And how should these implications and mismatches be dealt with?

In this thesis, I studied a very heated governance process, including fierce debates, and many scale framing activities. I concluded that, in this process, scale frames other than those fitting the solutions of the Minister of State did not play a large role (chapter 5). Regarding future research, it might be interesting to see whether, in less heated governance processes, scale frames, rather than power dynamics, determine how the policy process evolves. What are the implications of scale framing for the governance of tamed problems?

Furthermore, it is important to realise that I studied the case of the future of Dutch intensive agriculture, a well-developed western country case. Scale framing in governance processes in other regions of the world may provide different insights. It is widely known that conversational interaction patterns in high-context, collectivistic cultures are different from conversational interaction patterns in low-context, individualistic cultures (e.g. Hall, 1976; Servaes, 1989). From that perspective, interactional scale framing in a high-context – for example Asian – case may be different, have different

implications, and a different interplay with power dynamics than I found in this thesis. What are the implications of scale framing for the governance of complex problems in high-context cultures?

Limitations and avenues relating to framing

In relation to framing, I showed that scale frames are powerful devices in interactions (chapters 3, 4, and 5), but I did not study the relation between scale frames and other frames, so I cannot draw conclusions about the strength of scale frames compared to other frames.

It can be stated, however, that, in my cases, some of the scale frames can be classified as sticky frames, meaning that they are hard to change, and less likely to shift once they are adopted (Carnevale, 2011) – for example the ‘scale increase frame’, the ‘we should be proud of the economically important Dutch sector frame’, ‘the mega-stable frame’, and ‘the cutting down the rainforest frame’ keep appearing or ‘sticking’ (Chapters 3-5). Carnevale (2011) presents several characteristics that determine the stickiness of frames. For example, sticky frames tend to imbue or implicate negative emotions, have many parties or powerful constituents that concur with the frame, and tend to be team based or shared by a we-group. These characteristics also apply for the sticky scale frames in my cases.

In chapters 2 and 5, I showed that scale increase is a rather sticky frame in Dutch agricultural governance, but I did not explain this in terms of stickiness, but rather in terms of different framing strategies, self-referentiality, and power dynamics (Van Lieshout et al., 2013a; Van Lieshout et al., 2013b). This means that I found explanations both inside and outside the framing activities to explain why these frames stick and do not change. This is another interesting angle for future research: How do (scale) frames stick and how do they change? What factors determine reframing and frame change: framing activities and framing strategies in face-to-face interactions or rather other factors and processes on the governance process level? And what is the role of new media in frame change? (cf. Carnevale, 2011; Druckman & Druckman, 2011).

Limitations and avenues relating to scalar politics

To conclude, in relation to scalar politics, as I already stated, some authors may argue that I overstretch the concept of scale (cf. Brenner, 2001; Lebel, et al., 2005; Leitner, 2004). However, I agree with Kaiser and Nikiforova (2008, p. 543) that ‘approaching scale as performative avoids the unnecessary and unproductive debates about whether analyses of scale should focus on the social construction of ‘singular’ scales (e.g. the state, the global, the local) or

on ‘plural’ interscalar relations’ (cf. Brenner, 2001; Marston, 2000; Marston & Smith, 2001). I also agree, and this thesis shows, that ‘the politics of scale is about more than spatial scale’ (McCann, 2003, p. 160). I have shown that actors use different scales and levels in the different framings of the issues in the debate. However, I did not pay attention to the relations between different scales/levels in scale frames, but McCann, for example, points at the articulation of both spatial and temporal terms in framings: ‘discussions of ‘our neighbourhood’ and ‘our city’ are interwoven with appeals to time of residence in a neighbourhood and longstanding cultural connections to a city’ (McCann, 2003, p. 160). Accordingly, interesting research questions are: What are the relations between different scales in different scale frames? And how are these relations used? For what actions and with what implications?

Another, last, interesting angle for future research follows from the scale framing strategies as addressed in chapter 4 and the framing strategies to deal with frame differences as identified by Dewulf and Bouwen (2012). I observed that the scalar element allows for different strategies than other frames, but I did not pay attention to dealing with scale frame differences. How do actors in conversational interactions deal with scale frame differences? In chapter 4, I studied scale framing in relation to accountability construction. I revealed the presented scale framing strategies, but this was not the focus of the analysis. Thus, I have not paid attention to, for example, the conditions accommodating the different scale frames, or to other possible actions than constructing accountability. These observations lead to questions such as: Under which conditions do actors use upscaling, downscaling, scale coupling, and projections into the future? Are scale framing strategies also used to accomplish goals other than accountability construction in interactions? Can any patterns be recognised in the use of scale framing strategies?

6.4 Implications for practice: towards scale frame-sensitive governance?

In this section, I highlight some insights from this research for governance practitioners. Following from the section on scale framing and governance, I mention four focus areas. Although my focus on scale frames presents a selective lens on governance processes, I argue that giving more attention to the politics of scale – or more specific to scale frames, scale frame differences, and scale frame mismatches – offers prospects for tackling complex issues, since scale frames and the mismatches between them reveal different

problems and thus other possibilities for solutions. However, it is most likely that the scale frames and related differences and mismatches will remain implicit for the participants in governance processes.

Thus, firstly, sensitivity to scale framing activities in governance processes is an important ingredient for scale-sensitive governance (scale frame-sensitive observing, cf. Termeer & Dewulf, 2014). The presence of different scale frames, and the differences or mismatches between these, can be analysed. In addition, the consequences of particular scale frames in terms of inclusion and exclusion of issues and actors can be analysed.

Secondly, it is important to have or to develop an awareness of scale frame fits, differences, and mismatches amongst actors in a governance process to allow for scale frame-sensitive acting (cf. Termeer & Dewulf, 2014). Consciousness of the fits, differences, and mismatches amongst actors provides opportunities for better conversations and discussions, and opportunities to work towards shared *re-scale-framings*.

An awareness of, and sensitivity to, scale frame differences indicates opportunities for change. As Hospes and Kentin (2014) explain ‘scale frames can be treated as mini-theories of change on how to politically solve a problem’. Instead of the identification of the scale of the problem or of the ideal governance scale to solve it, the challenge is to explore and reflect on the different scale frames and to appreciate other scale frames (Hospes & Kentin, 2014). Awareness of scale frame differences allows for shared re-scale-framings of both the problem and solution.

In the case of scale frame mismatches, a facilitator may try to make explicit the different scale frames – and the underlying interests and assumptions. In this way, discussions of the kind ‘it isn’t! it is!’ can be brought to the level of a dialogue in which implicit assumptions, starting points, and backgrounds become the subject of the conversation and can be dealt with in a constructive way (Pearce & Littlejohn, 1997).

Thirdly, enabling scale frame sensitivity means creating space and time for open communication and reflection, to be able to identify the scale frame mismatches and differences and to come to shared re-scale-framings. More interactive, participative, or deliberative governance processes allow for this, but, as shown in chapter 5, much depends on how such processes are organised (Van Lieshout et al., 2013b). However, as the aim of the organising party is to come to scale-sensitive solutions, it is expected that the process will be designed in a way that provides enough time and space to identify, analyse, and reflect on the various scale frames, differences, mismatches, and fits.

To conclude, I want to draw attention to the different power dynamics in governance processes and how these allow for scale framing. In line with this, I state that it is not enough to organise a deliberative or participate governance process, if the process design does not allow all the participants to have equal influence (Idrissou Aboubacary, 2012; Van Lieshout et al., 2013b).

References

- Aarts, N., & Van Woerkum, C. (2002). Dealing with uncertainty in solving complex problems. In: C. Leeuwis & R. Pyburn (eds.), *Wheelbarrows full of frogs : social learning in rural resource management* (pp. 421-435). Assen, the Netherlands: Koninklijke Van Gorcum.
- Aarts, N., & Van Woerkum, C. (2006). Frame construction in interaction. In: *Engagement. Proceedings of the 12th MOPAN International Conference, Pontypridd, University of Glamorgan, 22-24 June 2005*.
- Aarts, N., & Van Woerkum, C. (2013). CSR and the need to connect: a theoretical reflection with implications for practice. Manuscript submitted for publication.
- Aarts, N., Van Woerkum, C., & Vermunt, B. (2007). Policy and planning in the Dutch countryside: The role of regional innovation networks. In: *Journal of Environmental Planning and Management* 50 (6): 727-744. doi: 10.1080/09640560701608473
- Adger, W. N., Brown, K., & Tompkins, E. L. (2005). The political economy of cross-scale networks in resource co-management. In: *Ecology and Society* 10 (2). Retrieved from www.ecologyandsociety.org/vol10/iss12/art19
- Alders, H. (2011). *Van mega naar beter. Rapportage van de maatschappelijke dialoog over schaalgrootte en toekomst van de veehouderij* [From mega to better. Reporting of the societal dialogue about scale size and the future of animal husbandry]. Den Haag, the Netherlands: Ministerie van Economische zaken, Landbouw en Innovatie.
- Allen, J., & Cochrane, A. (2007). Beyond the territorial fix: regional assemblages, politics and power. *Regional studies* 41(9): 1161-1175. doi: 10.1080/00343400701543348
- Argyris, C., & Schön, D. A. (1996). *Organizational learning II: Theory, method, and practice*. Reading, MA: Addison-Wesley.
- Arminen, I. (2005). *Institutional interaction. Studies of talk at work*. Burlington, VT: Ashgate Publishing Limited.
- Arts, B., Lagendijk, A., & Van Houtum, H. (2009). *The disoriented state: Shifts in governmentality, territoriality and governance*. Dordrecht, the Netherlands: Springer.
- Bachrach, P., & Baratz, M. S. (1970). *Power and poverty: Theory and practice*. New York: Oxford University Press.
- Baker, A. C. (2009). *Catalytic conversations: Organizational communication and innovation*. Armonk, NY: M. E. Sharpe.
- Baltussen, W. H. M., De Bont, C. J. A. M., Van den Ham, A., Van Horne, P. L. M., Hoste, R., & Luesink, H. H. (2010). *Gevolgen van het afschaffen van dierrechten* [Consequences of abolishing animal rights]. Den Haag: LEI Wageningen UR.
- Bartlett, F. C. (1932). *Remembering: A study in experimental and social psychology*. Cambridge, England: Cambridge University Press.
- Barzelay, M., & Gallego, R. (2006). From 'new institutionalism' to 'institutional processualism': Advancing knowledge about public management policy change. In:

- Governance* 19 (4): 531-557. doi: 10.1111/j.1468-0491.2006.00339.x
- Bateson, G. (1972). *Steps to an ecology of mind*. New York, NY: Ballantine Books.
- Baumgartner, F. R., & Jones, B. D. (2009). *Agendas and instability in American politics*. Chicago, IL: University of Chicago Press.
- Benford, R. D., & Snow, D. A. (2000). Framing processes and social movements: An overview and assessment. In: *Annual Review of Sociology* 26: 611-639.
- Berkes, F. (2006). From community-based resource management to complex systems: The scale issue and marine commons. In: *Ecology and Society* 11 (1): 45. Retrieved from www.ecologyandsociety.org/vol11/iss41/art45/
- Bieleman, J. (2008). *Boeren in Nederland: Geschiedenis van de landbouw 1500-2000 [Farmers in the Netherlands: A history of agriculture 1500-2000]*. Amsterdam, the Netherlands: Boom.
- Bieleman, J. (2010). *Five centuries of farming: A short history of Dutch agriculture 1500-2000*. Wageningen, the Netherlands: Wageningen Academic Publishers.
- Biggs, R., Raudsepp-Hearne, C., Atkinson-Palombo, C., Bohensky, E., Boyd, E., Cundill, G., Zurek, M. (2007). Linking futures across scales: A dialog on multiscale scenarios. *Ecology and Society* 12 (1): 17. Retrieved from www.ecologyandsociety.org/vol12/iss11/art17/
- Bleker, H. (2011). *Visie veehouderij [The future of intensive agriculture]*. The Hague, the Netherlands: Ministry of Economic Affairs Agriculture and Innovation.
- Böhme, K., Richardson, T., Dabinett, G., & Jensen, O. B. (2004). Values in a vacuum? Towards an integrated multi-level analysis of the governance of European space. In: *European Planning Studies* 12 (8): 1175-1188.
- Borgström, S. T., Elmqvist, T., Angelstam, P., & Alfsen-Norodom, C. (2006). Scale mismatches in management of urban landscapes. In: *Ecology and Society* 11 (2): 16. Retrieved from www.ecologyandsociety.org/vol11/iss12/art16/
- Bovens, M. (2006). Analysing and assessing public accountability: A conceptual model. In: *European governance papers (EUROGOV) C-06-01*.
- Bovens, M., Schillemans, T., & 'T Hart, P. (2008). Does public accountability work? An assessment tool. In: *Public administration* 86 (1): 225-242. doi: 10.1111/j.1467-9299.2008.00716.x
- Brenner, N. (2001). The limits to scale? Methodological reflections on scalar structuration. In: *Progress in Human Geography* 25 (4): 591-614.
- Buizer, M., Arts, B., & Kok, K. (2011). Governance, scale, and the environment: The importance of recognizing knowledge claims in transdisciplinary arenas. In: *Ecology and Society* 16 (1): 21. Retrieved from www.ecologyandsociety.org/vol16/iss1/art21/
- Bulkeley, H. (2005). Reconfiguring environmental governance: Towards a politics of scales and networks. In: *Political Geography* 24 (8): 875-902. doi: 10.1016/j.polgeo.2005.07.002
- Candel, J. J. L., Breeman, G., Stiller, S. J., & Termeer, C. J. A. M. (2013). Disentangling the consensus frame of food security: The case of the EU Common Agricultural Policy

reform debate. Manuscript submitted for publication.

- Carnevale, P. J. (2011). Dynamics of frame change: The remarkable lightness of frames, and sticky frames. In: W. A. Donohue, R. G. Rogan, & S. Kaufman (eds.), *Framing matters: Perspectives on negotiation research and practice in communication* (pp. 268-275). New York, NY: Peter Lang.
- Cash, D. W., Adger, W., Berkes, F., Garden, P., Lebel, L., Olsson, P., & Young, O. (2006). Scale and cross-scale dynamics: Governance and information in a multilevel world. *Ecology and Society* 11 (2). Retrieved from www.ecologyandsociety.org/vol11/iss12/art18
- Chenail, R. J. (1995). Recursive frame analysis. In: *The Qualitative Report* 2 (2). Retrieved from www.nova.edu/ssss/QR/QR2-2/rfa.html
- Clegg, S. R. (1989). *Frameworks of power*. London, England: Sage.
- Coleman, P. T. (2006). Intractable conflict. In: M. Deutch, P. T. Coleman, & E. C. Marcus (eds.), *The handbook of conflict resolution. Theory and practice* (2nd ed.), (pp. 533-559). San Francisco, CA: Jossey-Bass.
- Coleman, W. D., Skogstad, G. D., & Atkinson, M. M. (1996). Paradigm shifts and policy networks: Cumulative change in agriculture. In: *Journal of Public Policy* 16 (03): 273-301. doi: 10.1017/S0143814X00007777
- Commissie Van Doorn. (2011). *Al het vlees duurzaam. De doorbraak naar een gezonde, veilige en gewaardeerde veehouderij in 2020 [All meat sustainable. The breakthrough towards a healthy, safe and appreciated animal husbandry sector]*. Den Bosch, the Netherlands: Commissie van Doorn.
- Cumming, G. S., Cumming, D. H. M., & Redman, C. L. (2006). Scale mismatches in social-ecological systems: Causes, consequences, and solutions. In: *Ecology and Society*, 11 (1): 14. Retrieved from www.ecologyandsociety.org/vol11/iss11/art14
- Daugbjerg, C., & Swinbank, A. (2011). Explaining the 'health check' of the common agricultural policy: Budgetary politics, globalisation and paradigm change revisited. In: *Policy Studies* 32 (2): 127-141. doi: 10.1080/01442872.2010.541768
- Dearing, J. W., & Rogers, E. M. (1996). *Agenda-setting*. Thousand Oaks, CA: Sage.
- Deckla, N. (2003). Insurgent urbanism in a railway quarter: Scalar citizenship at King's Cross, London. In: *ACME: an international journal for critical geographies* 2 (1): 33-56.
- Delaney, D., & Leitner, H. (1997). The political construction of scale. In: *Political Geography* 16 (2): 93-97.
- Depla, S., & Schulte, E. (1983). *Mammoetbedrijven in de intensieve veehouderij: Op weg naar nieuwe ijstijden? [Mammoth companies in the intensive agricultural sector: Towards a new ice age?]* Wageningen, the Netherlands: IMGO-Landbouw.
- De Vaus, D. A. (2001). *Research design in social research*. London, England: Sage.
- De Vreese, C. H. (2005). News framing: Theory and typology. In: *Information Design Journal + Document Design* 13 (1): 51-62.
- Dewulf, A., & Bouwen, R. (2008). *Frames, scales and actors. A case study of collaborative water governance in Southern Ecuador*. Paper presented at the European Group of Public

- Administration Conference, Rotterdam.
- Dewulf, A., & Bouwen, R. (2012). Issue framing in conversations for change. In: *The Journal of Applied Behavioral Science* 48 (2): 168-193. doi: 10.1177/0021886312438858
- Dewulf, A., Craps, M., & Dercon, G. (2004). How issues get framed and reframed when different communities meet: A multi-level analysis of a collaborative soil conservation initiative in the Ecuadorian Andes. In: *Journal of Community & Applied Social Psychology*, 14 (3): 177-192.
- Dewulf, A., Gray, B., Putnam, L., Lewicki, R., Aarts, N., Bouwen, R., & van Woerkum, C. (2009). Disentangling approaches to framing in conflict and negotiation research: A meta-paradigmatic perspective. In: *Human Relations* 62 (2): 155-193. doi: 10.1177/0018726708100356
- Dewulf, A., Mancero, M., Cárdenas, G., & Sucozhañay, D. (2011). The fragmentation and connection of frames in collaborative water governance. A case study of river catchment management in Southern Ecuador. In: *International Review of Administrative Sciences* 77 (1): 50-75.
- Dewulf, A. R. P. J., Termeer, C. J. A. M., Werkman, R. A., Breeman, G. E., & Poppe, K. J. (2009). Transition management for sustainability: Towards a multiple theory approach. In: K. J. Poppe, C. Termeer, & M. Slingerland (eds.), *Transitions towards sustainable agriculture and food chains in peri-urban areas* (pp. 25-50). Wageningen, the Netherlands: Wageningen Academic Publishers.
- Dietz, T., Ostrom, E., & Stern, P. C. (2003). The struggle to govern the commons. In: *Science* 302 (5652): 1907-1912.
- Donohue, W. A., Rogan, R. G., & Kaufman, S. (2011). *Framing matters: Perspectives on negotiation research and practice in communication*. New York, NY: Peter Lang.
- Drake, L. E., & Donohue, W. A. (1996). Communicative framing theory in conflict resolution. In: *Communication Research* 23 (3): 297-322.
- Drew, P. (2005). Conversation analysis. In: K. L. Fitch & R. E. Sanders (eds.), *Handbook of language and social interaction* (pp. 72-102). Mahwah, NJ: Lawrence Erlbaum Associates.
- Druckman, D., & Druckman, J. N. (2011). The many faces of framing in negotiation. In: W. A. Donohue, R. G. Rogan, & S. Kaufman (eds.), *Framing matters: Perspectives on negotiation research and practice in communication* (pp. 255-267). New York, NY: Peter Lang.
- Dryzek, J. S. (1990). *Discursive democracy: Politics, policy, and political science*. Cambridge, England: Cambridge University Press.
- Easterling, W. E., & Polsky, C. (2008). Crossing the divide: Linking global and local scales in human-environment systems. In: E. Sheppard & R. B. McMaster (eds.), *Scale and geographic inquiry: Nature, society and method* (pp. 66-85). Hoboken, NJ: Blackwell Publishing.
- Edwards, D. (1997). *Discourse and cognition*. London, England: Sage.
- Edwards, D., & Potter, J. (1993). *Discursive psychology*. London, England: Sage.

- Edwards, D., & Potter, J. (2005). Discursive psychology, mental states and descriptions. In: H. te Molder & J. Potter (eds.), *Conversation and cognition* (pp. 241-259). Cambridge, England: Cambridge University Press.
- Elias, N. (1970). *Was ist Soziologie? [What is Sociology?]*. Munich, Germany: Juventa.
- Emerson, K., Nabatchi, T., & Balogh, S. (2012). An integrative framework for collaborative governance. In: *Journal of Public Administration Research and Theory* 22 (1): 1-29. doi: 10.1093/jopart/muro11
- Engel-Di Mauro, S. (2009). Seeing the local in the global: Political ecologies, world-systems, and the question of scale. In: *Geoforum* 40 (1): 116-125. doi: http://dx.doi.org/10.1016/j.geoforum.2008.09.004
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. In: *Journal of Communication* 43 (4): 51-58. doi:10.1111/j.1460-2466.1993.tb01304.x
- Erlanson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry. A guide to methods*. London, England: Sage.
- Fairclough, N. (1992). *Discourse and social change*. Cambridge, England: Polity Press.
- Fairclough, N. (2001). *Language and power* (2nd ed.). Harlow, England: Pearson education limited.
- Feindt, P. H., & Kleinschmit, D. (2011). The BSE crisis in German newspapers: Reframing responsibility. In: *Science as Culture* 20 (2): 183-208. doi: 10.1080/09505431.2011.563569
- Feyerherm, A. E. (1995). Changing and converging mind-sets of participants during collaborative, environmental rule making: Two negotiated regulation case studies. In: L. E. Preston (ed.), *Research in Corporate Social Performance and Policy* (pp. 231-257). Bingley, England: Emerald.
- Fischer, F., & Forester, J. (eds.). (1993). *The argumentative turn in policy analysis and planning*. Durham, England: Duke University Press.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. In: *Qualitative Inquiry* 12 (2): 219-245. doi: 10.1177/1077800405284363
- Folke, C., Chapin, I. I. F. S., & Kofinas, G. P. (2009). *Principles of ecosystem stewardship: Resilience-based natural resource management in a changing world*. New York, NY: Springer-Verlag.
- Folke, C., Hahn, T., Olssen, P., & Norberg, P. (2005). Adaptive governance of social-ecological systems. In: *Annual Review of Environmental Resources* 30: 441-473.
- Folke, C., Pritchard, L., Berkes, F., Colding, J., & Svedin, U. (2007). The problem of fit between ecosystems and institutions: Ten years later. In: *Ecology and Society* 12 (1): 30. Retrieved from www.ecologyandsociety.org/vol12/iss31/art30/
- Ford, J. D. (1999). Organizational change as shifting conversations. In: *Journal of Organizational Change Management* 12 (6): 480-500.
- Ford, J. D., & Ford, L. W. (1995). The role of conversations in producing intentional change in organizations. In: *The Academy of Management Review* 20 (3): 541-570.
- Frouws, J. (1998). The contested redefinition of the countryside. An analysis of rural

- discourses in the Netherlands. In: *Sociologia Ruralis* 38 (1): 54-68. doi: 10.1111/1467-9523.00063
- Frouws, J., & Tatenhove, J. V. (1993). Agriculture, environment and the state: The development of agro-environmental policy-making in the Netherlands. In: *Sociologia Ruralis* 33 (2): 220-239. doi: 10.1111/j.1467-9523.1993.tb00962.x
- Fulbright, J. W. (1966). *The arrogance of power*. New York, NY: Random House.
- Garmestani, A. S., C. R. Allen, and L. Gunderson. (2009). Panarchy: Discontinuities reveal similarities in the dynamic system structure of ecological and social systems. In: *Ecology and Society* 14 (1): 15. Retrieved from www.ecologyandsociety.org/vol14/iss11/art15/
- Garud, R., & Karnoe, P. (2001). *Path dependence and creation*. Mahwah, NJ: Lawrence Erlbaum.
- Gibson, C. C., Ostrom, E., & Ahn, T. K. (2000). The concept of scale and the human dimensions of global change: A survey. In: *Ecological Economics* 32 (2): 217-239.
- Giddens, A. (1979). *Central problems in social theory: action, structure and contradiction in social analysis*. London, England: Macmillan.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Cambridge, England: Polity Press.
- Goffman, E. (1974). *Frame analysis: An essay on the organisation of experience*. New York, NY: Harper and Row.
- Goffman, E. (1979). Footing. In: *Semiotica* 25 (1-2): 1-30. doi: 10.1515/semi.1979.25.1-2.1
- Goodin, R. E., Rein, M., & Moran, M. (2006). The Public and its policies. In: M. Moran, M. Rein & R. E. Goodin (eds.), *The Oxford handbook of public policy* (pp. 3-35). Oxford, England: Oxford University Press.
- Gray, B. (2003). Framing of environmental disputes. In: R. J. Lewicki, B. Gray, & M. Elliott (eds.), *Making sense of intractable environmental conflicts: Concepts and cases* (pp. 11-34). Washington, DC: Island Press.
- Gray, B. (2004). Strong opposition: Frame-based resistance to collaboration. In: *Journal of Community and Applied Psychology* 3: 166-176.
- Greer, A. (2005). *Agricultural policy in Europe*. Manchester, England: Manchester University Press.
- Hajer, M. (2001). Infrastructuur als discursieve politiek: de 'transeuropese netwerken' nader beschouwd [Infrastructure as discursive politics: looking at the 'transeuropean networks' more closely]. In: T. Abma & R. in 't Veld (eds.), *Handboek beleidswetenschap: Perspectieven, thema's, praktijkvoorbeelden* [Handbook policy science: Perspectives, themes, examples from practice] (pp. 382-391). Amsterdam, the Netherlands: Boom.
- Hajer, M. (2003). Policy without polity? Policy analysis and the institutional void. In: *Policy Sciences* 36 (2): 175-195. doi: 10.1023/a:1024834510939
- Hajer, M. A. (1995). *The politics of environmental discourse: Ecological modernization and the policy process*. Oxford, England: Clarendon.

- Hajer, M., & Laws, D. (2008). Ordering through discourse. In: M. Moran, M. Rein & R. E. Goodin (eds.), *The Oxford handbook of public policy* (pp. 251-268). Oxford, England: Oxford University Press.
- Hajer, M., & Wagenaar, H. (eds.). (2003). *Deliberative policy analysis: Understanding governance in the network society*. Cambridge, England: Cambridge University Press.
- Hajer, M. A., Van Tatenhove, J. P. M., & Laurent, C. (2004). *Nieuwe vormen van governance: Een essay over nieuwe vormen van bestuur met een empirische uitwerking naar de domeinen van voedselveiligheid en gebiedsgericht beleid* [New modes of governance: An essay about new modes of governance with an empirical elaboration to the foodsafety and area specific policy domains] RIVM rapport 5000013004/2004. Retrieved from www.rivm.nl
- Hall, P. A. (1993). Policy paradigms, social learning, and the state: The case of economic policymaking in Britain. In: *Comparative Politics* 25 (3): 275-296.
- Hall, E. T. (1976). *Beyond culture*. New York, NY: Doubleday.
- Hardy, C., Lawrence, T. B., & Grant, D. (2005). Discourse and collaboration: The role of conversations and collective identity. In: *The Academy of Management Review* 30 (1): 58-77.
- Hardy, C., & Phillips, N. (1998). Strategies of engagement: Lessons from the critical examination of collaboration and conflict in an interorganizational domain. In: *Organization Science* 9 (2): 217-230. doi: 10.1287/orsc.9.2.217
- Harrison, J. L. (2006). 'Accidents' and invisibilities: Scaled discourse and the naturalization of regulatory neglect in California's pesticide drift conflict. In: *Political Geography* 25 (5): 506-529.
- Head, B., & Alford, J. (2008). *Wicked problems: The implications for public management*. Paper presented at the Panel on Public Management in Practice. International Research Society for Public Management., Brisbane. Retrieved from www.irspm2008.bus.qut.edu.au/papers/documents/pdf2/Head%20-%20Wicked%20Problems%20HeadAlford%20Final%20250308.pdf
- Healy, P. (1997). *Collaborative planning: Shaping places in fragmented societies*. Hampshire, England: MacMillan.
- Healey, P., & Hillier, J. (1996). Communicative micropolitics: A story of claims and discourses. In: *International planning studies* 1 (2): 165-184. doi: 10.1080/13563479608721650
- Hendriks, C. M. (2009). Deliberative governance in the context of power. In: *Policy and Society* 28 (3): 173-184.
- Heritage, J. (1999). Conversation analysis at century's end: Practices of talk-in-interaction, their distributions, and their outcomes. In: *Research on Language & Social Interaction* 32 (1-2): 69-76. doi: 10.1080/08351813.1999.9683609
- Heritage, J. (2004). Conversation analysis and institutional talk. Analyzing data. In: D. Silverman (ed.), *Qualitative research: Theory, method and practice* (pp. 222-245). London: Sage.

- Herod, A. (1997). Labor's spatial praxis and the geography of contract bargaining in the US east coast longshore industry, 1953-1989. In: *Political Geography* 16 (2): 145-169.
- Hisschemöller, M., & Hoppe, R. (1995). Coping with intractable controversies: The case for problem structuring in policy design and analysis. In: *Knowledge, Technology, and Policy* 8 (4): 40-60.
- Hooghe, L., & Marks, G. (2003). Unraveling the central state, but how? Types of multi-level governance. In: *The American Political Science Review* 97 (2): 233-243.
- Hospes, O., & Kentin, A. (2014). Tensions between global-scale and national-scale governance: The strategic use of scale frames to promote sustainable palm oil production in Indonesia. In: Padt, F. J. G., Opdam, P. F. M., Polman, N. B. P., & Termeer, C. J. A. M. (eds.), *Scale-sensitive governance of the environment*. Oxford, England: John Wiley & Sons.
- Howell-Moroney, M. E., & Hall, J. L. (2011). Waste in the sewer: The collapse of accountability and transparency in public finance in Jefferson County, Alabama. In: *Public Administration Review* 71 (2): 232-242. doi: 10.1111/j.1540-6210.2011.02334.x
- Howitt, R. (2003). Scale. In: J. Agnew, K. Mitchell, & G. Toal (eds.), *A companion to political geography* (pp. 138-157). Oxford, England: Blackwell Publishing.
- Hutchby, I., & Wooffitt, R. (1998). *Conversation analysis: Principles, practices and applications*. Oxford, England: Polity Press.
- Huxham, C., & Vangen, S. (2005). *Managing to collaborate. The theory and practice of collaborative advantage*. London, England: Routledge.
- Idrissou Aboubacary, L. (2012). *Dynamics of conflict in participatory forest management in Benin: A framing perspective*. PhD thesis. Wageningen University, Wageningen, the Netherlands. Retrieved from <http://edepot.wur.nl/199662>.
- Jackson, P. T. (2006). Making sense of making sense: Configurational analysis and the double hermeneutic. In: D. Yanow & P. Schwartz-Shea (eds.), *Interpretation and method: Empirical research methods and the interpretive turn* (pp. 5-26). Armonk, NY: M.E. Scharpe.
- Jansma, K., & Schroor, M. (eds.). (1987). *Tweehonderd jaar geschiedenis van de Nederlandse landbouw [Two hundred years history of Dutch agriculture]*. Leeuwarden, the Netherlands: Inter-Combi van Seyen.
- Jessop, B. (1997). Capitalism and its future: Remarks on regulation, government and governance. In: *Review of international political economy* 4 (3): 561-581. doi: 10.1080/096922997347751
- Jessop, B. (2001). State theory, regulation, and autopoiesis: Debates and controversies. In: *Capital & Class* 35 (1): 83-92.
- Jessop, B., Brenner, N., & Jones, M. (2008). Theorizing sociospatial relations. In: *Environment and Planning D: Society and Space* 26 (3): 389-401.
- Jonas, A. E. G. (1994). The scale politics of spatiality. In: *Environment and Planning D: Society and Space* 12: 257-264.

- Kaiser, R., & Nikiforova, E. (2008). The performativity of scale: The social construction of scale effects in Narva, Estonia. In: *Environment and Planning D: Society and Space* 26 (3): 537-562.
- Kaufman, S., & Smith, J. (1999). Framing and reframing in land use change conflicts. In: *Journal of Architectural and Planning Research* 16 (2): 164-180.
- Koliba, C. J., Mills, R. M., & Zia, A. (2011). Accountability in governance networks: An assessment of public, private, and nonprofit emergency management practices following hurricane Katrina. In: *Public administration review* 71 (2): 210-220. doi: 10.1111/j.1540-6210.2011.02332.x
- Koppenjan, J., & Klijn, E. H. (2004). *Managing uncertainties in networks: A network approach to problem solving and decision making*. London, England: Routledge.
- Kosicki, G. M. (1993). Problems and Opportunities in Agenda-Setting Research. In: *Journal of Communication* 43 (2): 100-127. doi: 10.1111/j.1460-2466.1993.tb01265.x
- Kumar, R. (2005). *Research methodology: A step-by-step guide for beginners*. London, England: Sage.
- Kurtz, H. E. (2003). Scale frames and counter-scale frames: Constructing the problem of environmental injustice. In: *Political Geography* 22 (8): 887-916.
- Lebel, L., Garden, P., & Imamura, M. (2005). The politics of scale, position, and place in the governance of water resources in the Mekong region. In: *Ecology and Society* 10 (2): Retrieved from www.ecologyandsociety.org/vol10/iss12/art18/
- Leitner, H. (1997). Reconfiguring the spatiality of power: The construction of a supranational migration framework for the European Union. In: *Political Geography* 16 (2): 123-143.
- Leitner, H. (2004). The politics of scale and networks of spatial connectivity: Transnational interurban networks and the rescaling of political governance in Europe. In: E. Sheppard & R. B. McMaster (eds.), *Scale and geographic inquiry* (pp. 236-255). Malden, MA: Blackwell Publishing Ltd.
- Levin, I. P., Schneider, S. L., & Gaeth, G. J. (1998). All frames are not created equal: A typology and critical analysis of framing effects. In: *Organizational Behavior and Human Decision Processes* 76 (2): 149-188.
- Lewicki, R. J., Gray, B., & Elliott, M. (eds.). (2003). *Making sense of intractable environmental conflicts: Frames and cases*. Washington, DC: Island Press.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Loeber, A. (2011). The food chain reformed: Novel food risk arrangements and the metamorphosis of a metaphor. In: *Science as Culture* 20 (2): 231-253. doi: 10.1080/09505431.2011.563571
- Loeber, A., Hajer, M., & Levidow, L. (2011). Agro-food crises: Institutional and discursive changes in the food scares era. In: *Science as Culture* 20 (2): 147-155. doi: 10.1080/09505431.2011.563567
- Lovell, C., Mandondo, A., & Moriarty, P. (2002). The question of scale in integrated natural

- resource management. In: *Conservation Ecology* 5 (2): 25. Retrieved from www.consecol.org/vol25/iss22/art25/.
- Luhmann, N. (1984). *Soziale systeme: Grundriss einer allgemeinen Theorie* [Social systems: Sketch of a general theory]. Frankfurt am Main, Germany: Suhrkamp Verlag.
- Luhmann, N. (1990). *Essays on self-reference*. New York, NY: Columbia University Press.
- Lukes, S. (2005). *Power: A radical view* (2nd expanded ed.). Basingstoke, England: Palgrave Macmillan.
- MacKinnon, D. (2011). Reconstructing scale: Towards a new scalar politics. In: *Progress in Human Geography* 35 (1): 21-36.
- Mansfield, B. (2005). Beyond rescaling: Reintegrating the 'national' as a dimension of scalar relations. In: *Progress in Human Geography* 29 (4): 458-473.
- Mansfield, B., & Haas, J. (2006). Scale framing of scientific uncertainty in controversy over the endangered Steller sea lion. In: *Environmental Politics* 15 (1): 78-94. doi: 10.1080/09644010500418795
- Marks, G., & Hooghe, L. (2004). Contrasting visions of multi-level governance. In: I. Bache and M. Flinders (eds.), *Multi-level governance* (pp. 15-30). Oxford, England: Oxford University Press.
- Marston, S. A. (2000). The social construction of scale. In: *Progress in Human Geography* 24 (2): 219-242. doi: 10.1191/030913200674086272
- Marston, S. (2004). A long way from home: Domesticating the social production of scale. In: E. Sheppard & R. B. McMaster (eds.), *Scale and geographic inquiry: Nature, society, and method* (pp. 170-191). Malden, MA: Blackwell.
- Marston, S. A., Jones, J. P. III, & Woodward, K. (2005). Human geography without scale. In: *Transactions of the Institute of British Geographers* 30 (4): 416-432.
- Marston, S. A., & Smith, N. (2001). States, scales and households: Limits to scale thinking? A response to Brenner. In: *Progress in Human Geography* 25 (4): 615-619. doi: 10.1191/030913201682688968
- McCann, E. J. (2003). Framing space and time in the city: Urban policy and the politics of spatial and temporal scale. In: *Journal of Urban Affairs* 25 (2): 159-178. doi: 10.1111/1467-9906.t01-1-00004
- Minsky, M. (1975). A framework for representing knowledge. In: P. Winston (ed.), *The psychology of computer vision*. Columbus, OH: McGraw-Hill. Retrieved from <http://courses.media.mit.edu/2004spring/mas2966/Minsky%201974%201920Framework%201920for%201920knowledge.pdf>.
- Morgan, G. (2006). *Images of organization* (Updated edition). Thousand Oaks, CA: Sage.
- Neuman, W. L. (2003). *Social research methods. Qualitative and quantitative approaches*. Boston, MA: Allyn and Bacon.
- Nisbet, M., & Huger, M. (2006). Attention cycles and frames in the plant biotechnology debate. In: *Harvard International Journal of Press/Politics* 11 (2): 3-40.
- Olsson, P., Folke, C., Galaz, V., Hahn, T., & Schultz, L. (2007). Enhancing the fit through

- adaptive co-management: Creating and maintaining bridging functions for matching scales in the Kristianstads Vattenrike Biosphere Reserve Sweden. In: *Ecology and Society* 12 (1): 28. Retrieved from www.ecologyandsociety.org/vol12/iss21/art28/
- Padt, F. J. G., & Arts, B. (2014). Concepts of scale. In: F. J. G. Padt, P. F. M. Opdam, N. B. P. Polman, & C. J. A. M. Termeer (eds.), *Scale-sensitive governance of the environment*. Oxford, England: John Wiley & Sons.
- Padt, F. J. G., Opdam, P. F. M., Polman, N. B. P., & Termeer, C. J. A. M. (eds.). (2014). *Scale-sensitive governance of the environment*. Oxford, England: John Wiley & Sons.
- Papaik, M. J., Sturtevant, B., & Messier, C. (2008). Crossing scales and disciplines to achieve forest sustainability. In: *Ecology and Society* 13 (1): 30. Retrieved from www.ecologyandsociety.org/vol13/iss31/art30/
- Paul, K. T. (2011). Dutch food safety policy: From 'politics in the stable' to stable politics. *Science as Culture* 20 (2): 209-229. doi: 10.1080/09505431.2011.563573
- Pearce, W. B., & Littlejohn, S. W. (1997). *Moral conflict: When social worlds collide*. Thousand Oaks, CA: Sage.
- Pettigrew, A. M. (1997). What is a processual analysis? Reflections on conducting processual research on management and organizations. In: *Scandinavian Journal of Management* 13 (4): 337-348. doi: [http://dx.doi.org/10.1016/S0956-5221\(97\)00020-1](http://dx.doi.org/10.1016/S0956-5221(97)00020-1)
- Phillips, N., & Hardy, C. (2002). *Discourse analysis. Investigating processes of social construction*. Thousand Oaks, CA: Sage.
- Pierre, J., & Peters, B. G. (2000). *Governance, politics, and the state*. Basingstoke, England: Macmillan.
- Pierson, P. (2000). Increasing returns, path dependence, and the study of politics. In: *The American Political Science Review* 94 (2): 251-267.
- Pomerantz, A. (1986). Extreme case formulations: A way of legitimizing claims. In: *Human Studies* 9 (2): 219-229.
- Potter, J. (1996). *Representing reality: Discourse, rhetoric and social construction*. London, England: Sage.
- Potter, J. (2004). Discourse analysis as a way of analysing naturally occurring talk. In: D. Silverman (ed.), *Qualitative research: Theory, method and practice* (pp. 201-221). London, England: Sage.
- Potter, J., & Wetherell, M. (1987). *Discourse and social psychology: Beyond attitudes and behaviour*. London, England: Sage.
- Pruitt, D. G., & Carnevale, P. J. (1993). *Negotiation in social conflict*. Buckingham, England: Open University Press.
- Purdy, J. M. (2012). A framework for assessing power in collaborative governance processes. In: *Public Administration Review* 72 (3): 409-417. doi: 10.1111/j.1540-6210.2011.02525.x
- Rangan, H., & Kull, C. A. (2009). What makes ecology 'political'? Rethinking 'scale' in political ecology. In: *Progress in Human Geography* 33 (1): 28-45. doi:

- 10.1177/0309132508090215
- Rein, M., & Schön, D. (1996). Frame-critical policy analysis and frame-reflective policy practice. In: *Knowledge and Policy* 9 (1): 85-104. doi: 10.1007/bfo2832235
- Reisner, A. E., & Taheripour, F. (2007). Reaction of the local public to large-scale swine facilities. In: *Journal of Animal Science* 85(6): 1587-1595. doi: 10.2527/jas.2006-618
- Rhodes, R. A. W. (1996). The new governance: Governing without government. In: *Political Studies* 44 (4): 652-667. doi: 10.1111/j.1467-9248.1996.tb01747.x
- Rhodes, R. A. W. (1997). *Understanding governance: Policy networks, governance, reflexivity and accountability*. Maidenhead, England: Open University Press.
- Rip, A. (1995). Introduction of new technology: Making use of recent insights from sociology and economics of technology. In: *Technology Analysis & Strategic Management* 7 (4): 417-432. doi: 10.1080/09537329508524223
- Roslyng, M. M. (2011). Challenging the hegemonic food discourse: The British media debate on risk and salmonella in eggs. In: *Science as Culture* 20 (2): 157-182. doi: 10.1080/09505431.2011.563574
- Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. In: *Language* 50 (4): 696-735.
- Sayre, N. F. (2009). Scale. In: N. Castree, D. Demeritt, D. Liverman, & B. Rhoads (eds.), *A companion to environmental geography* (pp. 95-108). Malden, MA: Wiley-Blackwell.
- Scharpf, F. W. (1978). Interorganizational policy studies: Issues, concepts and perspectives. In K. Hanf & W. F. Scharpf (eds.), *Interorganizational policy making: Limits to coordination and central control* (pp. 345-370). London, England: Sage.
- Scheufele, D. A. (1999). Framing as a theory of media effects. In: *Journal of Communication* 49 (1): 103-122.
- Scholten, P. W. A. (2012). Agenda dynamics and the multi-level governance of intractable policy controversies: The case of migrant integration policies in the Netherlands. In: *Policy Science* 46: 217-236. doi: 10.1007/s11077-012-9170-x
- Schön, D. A., & Rein, M. (1994). *Frame reflection: Toward the resolution of intractable policy controversies*. New York, NY: Basic Books.
- Scott, C. (2006). Spontaneous accountability. In: M. W. Dowdle (ed.), *Public accountability: Designs, dilemmas and experiences* (pp. 174-194). Cambridge, England: Cambridge University Press.
- Servaes, J. (1989). Cultural identity and modes of communication. In: J. A. Anderson (ed.), *Communication yearbook* (pp.383-416). Newbury Park, CA: Sage.
- Shaw, P. (2002). *Changing conversations in organizations: A complexity approach to change*. New York, NY: Routledge.
- Shore, C., & Wright, S. (2011). Conceptualising policy: technologies of governance and the politics of visibility. In: C. Shore, S. Wright & D. Però (eds.), *Policy worlds: Anthropology and the analysis of contemporary power* (pp. 1-25). New York, NY: Berghahn Books.
- Silverman, D. (2001). *Interpreting qualitative data: Methods for analysing talk, text and*

- interaction*. London, England: Sage.
- Sneijder, P. W. J. (2006). *Food for talk: Discursive identities, food choice and eating practices*. PhD thesis, Wageningen University. Retrieved from <http://edepot.wur.nl/38184>
- Steen, T. P. S., & Termeer, C. J. A. M. (2011). Pijlers voor schaalsensitief bestuur [Pillars of scale-sensitive governance]. In: *Bestuurskunde*(4): 56-61.
- Stoker, G. (1998). Governance as theory: Five propositions. In: *International Social Science Journal*, 50(155): 17-28. doi: 10.1111/1468-2451.00106
- Stone, D. (2012). *Policy paradox: The art of political decision making* (3rd ed.). New York, NY: Norton.
- Swyngedouw, E. (2004). Scaled geographies: Nature, place, and the politics of scale. In: E. Sheppard & R. B. McMaster (eds.), *Scale and geographic inquiry: Nature, society, and method* (pp. 129-153). Malden, MA: Blackwell.
- Swyngedouw, E. (2005). Governance innovation and the citizen: The Janus face of governance-beyond-the-state. In: *Urban Studies* 42 (11): 1991-2006. doi: 10.1080/00420980500279869
- Teisman, G. R. (2000). Models for research into decision-making processes: On phases, streams and decision-making rounds. *Public Administration* 78 (4): 937-956. doi: 10.1111/1467-9299.00238
- Tellis, W. (1997). Introduction to case study. In: *The Qualitative Report* 3 (2). Retrieved from www.nova.edu/ssss/QR/QR3-2/tellis1.html
- Te Molder, H., & Potter, J. (2005). *Conversation and cognition*. Cambridge, England: Cambridge University Press.
- Termeer, C. J. A. M. (1993). *Dynamiek en inertie rondom mestbeleid: een studie naar veranderingsprocessen in het varkenshouderijnetwerk [Dynamics and inertia in manure policy: A study on the processes of change in the pig-farming network]*. PhD thesis, Erasmus University, Rotterdam, the Netherlands.
- Termeer, C. J. A. M. (2009). Barriers to new modes of horizontal governance - A sense-making perspective. In: *Public Management Review* 11 (3): 299-316.
- Termeer, C. J. A. M., Breeman, G. E., van Lieshout, M., & Pot, W. D. (2010a). Why more knowledge could thwart democracy: Configurations and fixations in the Dutch megastables debate. In: R. J. In 't Veld (ed.), *Knowledge democracy - Consequences for science, politics and media* (pp. 99-111). Heidelberg, Germany: Springer.
- Termeer, C. J. A. M., & Dewulf, A. (2014). Scale-sensitivity as a governance capability: Observing, acting and enabling. Padt, F. J. G., Opdam, P. F. M., Polman, N. B. P., & Termeer, C. J. A. M. (eds.), *Scale-sensitive governance of the environment*. Oxford, England: John Wiley & Sons.
- Termeer, C. J. A. M., Dewulf, A., Breeman, G., & Stiller, S. J. (2013). Governance capabilities for dealing wisely with wicked problems. In: *Administration & Society*. Advance online publication. doi: 10.1177/0095399712469195
- Termeer, C. J. A. M., Dewulf, A., & Van Lieshout, M. (2010b). Disentangling scale

- approaches in governance research: Comparing monocentric, multilevel, and adaptive governance. In: *Ecology and Society* 15 (4): 29. Retrieved from www.ecologyandsociety.org/vol15/iss24/art29/
- Termeer, C. J. A. M., & Kessener B. (2007). Revitalizing stagnated policy processes: Using the configuration approach for research and interventions. In: *The Journal of Applied Behavioral Science* 43 (2): 256-272.
- Termeer, C. J. A. M., & Steen, T. P. S. (2011). Inleiding themanummer schaalsensitief bestuur [Introduction special issues scale-sensitive governance]. In: *Bestuurskunde* 4: 2-5.
- Termeer, C. J. A. M., & Werkman, R. A. (2011). Changing closed agricultural policy communities. In: *Critical Policy Studies* 5 (3): 283-298. doi: 10.1080/19460171.2011.606301
- Thomas, G. (2011). A typology for the case study in social science following a review of definition, discourse, and structure. In: *Qualitative Inquiry* 17 (6): 511-521. doi:10.1177/1077800411409884
- Thornborrow, J. (2002). *Power talk. Language and interaction in institutional discourse*. Harlow, England: Pearson education.
- Tileag , C. (2010). Cautious morality: Public accountability, moral order and accounting for a conflict of interest. In: *Discourse studies* 12 (2): 223-239. doi: 10.1177/1461445609356501
- Torring, J., Peters, B. G., Pierre, J., & Sørensen, E. (2012). *Interactive Governance. Advancing the paradigm*. Oxford, England: Oxford University Press.
- Turnhout, E., & Boonman-Berson, S. (2011). Databases, scaling practices, and the globalization of biodiversity. In: *Ecology and Society* 16 (1): 35. Retrieved from www.ecologyandsociety.org/vol16/iss31/art35
- Turnhout, E., Van Bommel, S., & Aarts, N. (2010). How participation creates citizens: Participatory governance as performative practice. In: *Ecology and Society* 15 (4): 26. Retrieved from www.ecologyandsociety.org/vol15/iss24/art26
- Urry, J. (2004). The 'system' of automobility. In: *Theory, Culture & Society* 21 (4-5): 25-39. doi: 10.1177/0263276404046059
- Van Hulst, M., Siesling, M., Van Lieshout, M., & Dewulf, A. (in press). The conflict, the people and the neighbourhood: How news articles frame social disorder. In: *Media, Culture and Society*.
- Van Bommel, S. (2008). *Understanding experts and expertise in different governance contexts. The case of nature conservation in the Drentsche Aa area in the Netherlands*. PhD thesis, Wageningen University, Wageningen, the Netherlands.
- Van Bueren, E. M., Klijn, E.H., & Koppenjan, J. F. M. (2003). Dealing with wicked problems in networks: Analyzing an environmental debate from a network perspective. In: *Journal of Public Administration Research and Theory* 13 (2): 193-212. doi: 10.1093/jopart/mug017
- Van Der Ploeg, J. D., Renting, H., Brunori, G., Knickel, K., Mannion, J., Marsden, T.,

- Ventura, F. (2000). Rural development: From practices and policies towards theory. In: *Sociologia Ruralis* 40 (4): 391-408. doi: 10.1111/1467-9523.00156
- Van der Stoep, H., & Aarts, N. (2010). New markets in Heuveland: Coalitionbuilding and agenda setting. In: I. Horlings (ed.), *Vital coalitions, vital regions. Partnerships for sustainable regional development*. Wageningen, the Netherlands: Wageningen Academic Publishers.
- Van Dijk, G., Klep, L. F. M., & Merx, A. J. (1999). *De corrosie van een ijzeren driehoek: Over de omslag rond de landbouw [The corrosion of an iron triangle: About the turning point of agriculture]*. Assen, the Netherlands: Van Gorcum.
- Van Eeten, M. (1999). *Dialogues of the deaf: Defining new agendas for environmental deadlocks*. Delft, the Netherlands: Eburon.
- Van Eeten, M. (2001). The challenge ahead for deliberative democracy: In reply to Weale. In: *Science and Public Policy* 28 (6): 423-426.
- Van Herzele, A., & Aarts, N. (2012). 'My forest, my kingdom'. Self-referentiality as a strategy in the case of small forest owners coping with government regulations. In: *Policy Sciences* 45: 1-19. doi: 10.1007/s11077-012-9157-7
- Van Kersbergen, K., & Van Waarden, F. (2004). 'Governance' as a bridge between disciplines: Cross-disciplinary inspiration regarding shifts in governance and problems of governability, accountability and legitimacy. In: *European Journal of Political Research* 43 (2): 143-171.
- Van Lieshout, M., & Aarts, N. (2008). 'Outside is where it's at!' Youth and immigrants' perspectives on public spaces. In: *Space and Culture* 11 (4): 497-513.
- Van Lieshout, M., Dewulf, A., Aarts, N. & Termeer, C. (2011). Do scale frames matter? Scale frame mismatches in the decision making process of a 'mega farm' in a small Dutch village. In: *Ecology and Society* 16 (1). Retrieved from www.ecologyandsociety.org/vol16/iss11/art38/
- Van Lieshout, M., Dewulf, A., Aarts, N., & Termeer, C. (2013a). Framing scale increase in Dutch agricultural policy 1950-2012. In: *NJAS Wageningen Journal of Life Sciences* 64-65. doi: 10.1016/j.njas.2013.02.001
- Van Lieshout, M., Dewulf, A., Aarts, N., & Termeer, C. (2012). Doing scalar politics: Interactive scale framing for managing accountability in complex policy processes. In: *Critical Policy Studies* 6 (2): 163-181. doi: 10.1080/19460171.2012.689736
- Van Lieshout, M., Dewulf, A., Aarts, N., & Termeer, C. (2013b). *The power to frame the scale? Analysing scalar politics over, in and of a deliberative governance process*. Manuscript submitted for publication.
- Van Woerkum, C. (2000). *Communicatie en interactieve beleidsvorming [Communication and interactive policymaking]*. Alphen aan den Rijn, the Netherlands: Samsom.
- Van Woerkum & N. Aarts (2012). Accountability: To broaden the scope. In: *Journal of Organisational Transformation and Social Change* 9: 271-283.
- Vink, M. J., Dewulf, A. R. P. J., & Termeer, C. J. A. M. (2012). *An alternative understanding*

of climate adaptation governance: Powering and puzzling through frame interactions over unsolvable problems. Paper presented at the Symposium The Governance of Adaptation, Amsterdam.

- Wagemans, M. (2002). Institutional conditions for transformations. A plea for policy making from the perspective of constructivism. In: C. Leeuwis & R. Pyburn (eds.), *Wheelbarrows full of frogs. Social learning in rural resource management* (pp. 245-258). Assen, the Netherlands: Koninklijke Van Gorcum.
- Wagner, T. (2007). Refraining garbage: Solid waste policy formulation in Nova Scotia. In: *Canadian Public Policy /Analyse de Politiques* 33 (4): 459-475.
- Weick, K. E. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage.
- Wilkinson, S. (2006). Analysing interaction in focus groups. In: P. Drew, G. Raymond, & D. Weinberg (eds.), *Talk in interaction in social research methods* (pp. 50-62). London, England: Sage.
- Wood, L. A., & Kroger, R. O. (2000). *Doing discourse analysis: Methods for studying action in talk and text*. Thousand Oaks, CA: Sage.
- Yanow, D. (2000). *Conducting interpretive policy analysis*. Thousand Oaks, CA: Sage.
- Yanow, D. (2006). Thinking interpretively: Philosophical presuppositions and the human sciences. In: D. Yanow & P. Schwartz-Shea (eds.), *Interpretation and method: Empirical research methods and the interpretive turn* (pp. 5-26). Armonk, NY: M.E. Scharpe.
- Yanow, D. (2007). Interpretation in policy analysis: On methods and practice. In: *Critical Policy Studies* 1 (1): 110-122. doi: 10.1080/19460171.2007.9518511
- Yanow, D. (2009). Dear author, dear reader: The third hermeneutic in writing and reviewing ethnography. In: E. Schatz (ed.), *Political ethnography: What immersion contributes to the study of power* (pp. 275-302). Chicago, IL: University of Chicago Press.
- Yanow, D., & Schwartz-Shea, P. (eds.). (2006). *Interpretation and method: Empirical research methods and the interpretive turn*. Armonk, NY: M.E. Scharpe.
- Yin, R. K. (1994). *Case study research: Design and methods*. London, England: Sage.
- Yin, R. K. (2003). *Case study research: Design and methods*. London, England: Sage.
- Yin, R. K. (2009). *Case study research: Design and methods*. London, England: Sage.
- Young, O. (2006). Vertical interplay among scale-dependent environmental and resource regimes. In: *Ecology and Society* 11 (1): 27. Retrieved from www.ecologyandsociety.org/vol11/iss21/art27

Summary

With this thesis, I aim to get a better understanding of scale framing in interaction, and the implications of scale framing for the nature and course of governance processes about complex problems. In chapter 1, I introduce the starting points: the conceptual framework, the research aim, the research questions, the case, and the methodology. I begin from the idea that complex problems are not just out there, but that actors highlight different aspects of a situation as a problem. This process is also referred to as framing. The differences in frames, expressed by different actors, contribute to the complexity of the problem.

In this thesis, I focus on how actors use scale in their framings. I call this scale framing. I define scales broadly as the spatial, temporal, or administrative dimensions used to describe a phenomenon. Apart from scales, levels can be distinguished. Levels are the different locations on a scale.

Scale framing is not without consequences. It makes a difference in terms of actors, interests, and interdependencies whether problems are addressed at one scale-level or another. This process of strategically using scales as political devices is also known as the politics of scale, or scalar politics. I introduce, develop, and apply the concept of *interactional scale framing* to the debate about Dutch intensive agriculture. The general research question is:

What are the implications of scale framing for the governance of complex problems?

To answer this question, I adopt an interpretive approach. In an interpretive approach, researchers try to understand how people, or groups of people, give meaning to specific events. The focus is thus on interpreting meanings constructed by different actors. In line with an interpretive approach and to do justice to the complexity of the problem that I wanted to study, I used a case study design, consisting of three embedded cases in the debate about the future of the Dutch intensive animal husbandry sector. The thesis consists of a compilation of four articles, three of which have been published and the fourth has been submitted for publication.

In chapter 2, I study how agricultural policy, and particularly scale increase, has been framed by the responsible ministers over the last six decades. I analyse the different interpretations attached to scale increase and other policy issues in a longitudinal study of the memoranda accompanying the yearly national budget for the Ministry of Agriculture. The analysis provides a

nuanced explanation for the continuous use of the contested concept of scale increase. The study shows that the framing of Dutch agricultural policy has undergone considerable changes regarding issues and solutions, the role of international policy, and issues from other policy domains. I conclude that the policy and the policy frames have become more diverse, interdependencies have increased, and as a result policy has become more complex and self-referential. Part of the findings can be explained as the occurrence of a paradigm shift. However, this does not explain the continuous presence of the logic of scale increase as the way forward for Dutch agriculture. Another explanation may emanate from the fact that agricultural policy is a self-referential system. The self-referential agricultural policy system has aimed to continuously improve itself by means of scale increase, without discussion or critical reflection on the functioning of the system itself. In this process, language plays a powerful role: changing the language helps to maintain the existing system or paradigm in which scale increase is continuously positively framed as the solution for Dutch agriculture.

The framing of a problem as local, regional, or global is not without consequences and influences processes of inclusion and exclusion. However, little is known about the ways actors frame scales and the effect of different scale frames on decision-making processes. In chapter 3, I address the questions of which different scale frames actors use and what the implications of scale framing are for governance processes. I analyse the scale frames deployed by different actors about the establishment of a so-called new mixed company or mega farm and the related decision-making process in a Dutch municipality. I conclude that actors deploy different and conflicting scale frames, leading to scale frame mismatches. Three types of scale frame mismatches are identified: (1) framing the issue using different scale frames, (2) framing the issue using different scales, and (3) framing the issue at different levels of the same scale. Furthermore, a distinction is made between scale frame differences and scale frame mismatches. Scale frame differences are not problematic per se; on the contrary, they may allow for enrichment of the debate and change. Scale frame mismatches, on the other hand, imply difficulties and conflict. I conclude that scale frame mismatches play an important role in the stagnation of the decision-making process.

In chapter 4, I study scale framing as an interactional phenomenon in various governance settings, with a focus on its role in managing accountability. This study shows how actors do scalar politics in face-to-face interactions, by using scale frames to manage accountability. I tentatively reveal three scale framing strategies: projections into the future (project the issue into the future to account for choices and decisions that are currently

difficult to legitimise), upscaling (to higher and more problematic or more influential levels, to magnify the issue) and downscaling (to lower and less problematic levels, to diminish the issue), and scale coupling (to strengthen an initially unconvincing scale frame). I conclude that a discursive approach to accountability is an important addition to more procedural approaches in complex governance processes.

In the last empirical chapter (5), the role of scalar politics in governance processes is questioned. More specifically, I study the interplay between scale framing and power dynamics. I analyse the 'societal dialogue on the future of Dutch intensive agriculture' both on the interactional (i.e. face-to-face in the different policy episodes) and on the governance process level. A distinction is made between power dynamics 'in the interaction', 'of the interaction', and 'over the interaction'. Power-over refers to the power of the organiser over the governance process, power-in refers to the power of actors in the face-to-face interactions, and power-of refers to the power of the stakeholders over the process. In the societal dialogue, power-over tended to dominate power-in and power-of. The power-over the process by the organiser/the Minister of State determined the process because he decided on the procedures, the agenda, conclusions, and reporting from the different episodes. This also determined what happened to the variety of scale frames. Closer analysis of the different face-to-face interactions revealed that the power-in showed a much more nuanced perspective. Scale frames are thus powerful discursive devices *in* the different episodes, but the analysis of the process as a whole shows a different picture. I conclude that it remains a power play with different equilibriums in which different actors at different junctures are in the position to have a prevailing scale frame.

In the concluding chapter, I answer the research questions, discuss the added value of a scale framing perspective to the literature, and debate the limitations of this research and avenues for future research. The chapter concludes with the implications of this thesis for the practice of governance. Overall, I conclude that scale framing has many implications for the on-going governance process. Furthermore, scale frames are powerful discursive devices to influence the governance process, to achieve power-over the process, and to account for disputable decisions and statements. These scale frames can complicate the governance process, but also provide possibilities for different approaches to the issue.

More specifically, my research shows that:

1. A detailed focus on language, more specifically on scale framing in interactions, provides unique and relevant insights into governance processes.

2. Actors construct different scale frames in governance interactions, in which they highlight different scales and levels.
 - Scale framing allows for defining and redefining one's own and others' scale frames towards specific ends. Framing the issue on a particular scale and level makes it possible, consciously or unconsciously, to include and exclude arguments and other actors without literally saying so. Furthermore, scale frames are used to legitimise the exclusion of actors and/or ideas from the conversation and to invalidate arguments in the discussion;
 - The dominant scale frames in the debate steer the debate towards certain outcomes and policy solutions;
 - Scale frames serve as powerful discursive devices used to shift accountability and to account for disputable choices and assessments;
 - Scale framing allows for inflating or reducing the problem.
3. Actors in interactions continuously jump from one scale frame to another, leading to scale frame mismatches, resulting in comparing apples to oranges and obscuring the discussion. These processes influence the quality of the discussions.
4. Governance processes are power plays with different equilibriums in which different actors at different junctures are in the position to have their scale frame prevail.

I relate the research to the literature on scale-sensitive governance, as recently explored by some colleagues. Scale-sensitive governance can be conceptualised as scale-sensitive observing, acting, and enabling. From my point of view, an interactional scale frame analysis is a way of scale-sensitive observing (and acting and enabling). I argue that an interactional scale frame analysis results in the wide variety of scale frames that different actors use to address the problem and thus reveals the fits and mismatches between these different scale frames. From an interactional scale framing perspective, scale-sensitive acting would entail (developing) scale frame awareness amongst actors in a governance process, so they can discuss the underlying starting points and preferred solutions, identify the differences and mismatches, and work towards shared *re-scale-framings* of both the problem and the solution.

With regard to the added value of scale frames to the framing literature, this thesis shows that scale frames are used, in addition to for example identity frames or characterisation frames, to make sense in governance processes about complex issues, emphasising both the problem at stake and the direction in which the solution should be sought. Scale frames can be seen as particular problem frames, but the specific focus on scales and levels

uncovers different aspects of the issue that are relevant for different actors, and thus provides different insights, and new angles for solutions. The use of differently mixed scales and levels enables more arguments, provides a structure for arguments, but also tends to obscure the interests at stake. Scale frame mismatches, in addition to frame mismatches or scale mismatches, show the miscommunications very specifically.

In addition to the concept of scale framing, the combination of a micro-level and a macro-level interactional perspective is new and contributes to more insights into interactional framing. The study demonstrates that it makes a difference which interaction level is taken for the analysis. Analysing face-to-face interactions reveals the variety of scale frames and provides nuanced insights into the several (scale) framing activities that occur. In this study, this has resulted in insight into the several strategies that actors use to account for their statements. The analysis on the governance process level showed that other factors and processes (power dynamics, personal goals) also play a role and determine what happens to the variety of scale frames (which ones are taken into account and which ones are neglected) and the outcomes of the process.

In relation to the politics of scale literature, the research shows that actors use and mix multiple scales and levels, and not only the spatial scale as studied in human and political geography. In addition, the study shows that actors in governance interactions use multiple scale frames in their discussions to define and redefine their own and others' scale frames towards specific ends. More specifically, both proponents and opponents use different scales and levels to frame the issue, even within the same interaction. The analysis of conversational level interactions showed how actors *do* scalar politics; they frequently use scale frames in interaction when presenting their point of view on the problem and solution, to make issues more or less important, to discuss other points of view, to include and exclude arguments and actors, and to account for their statements and decisions. In addition to the generally discussed strategy of rescaling, I reveal strategies like: projections into the future, upscaling, downscaling, and scale coupling.

Samenvatting

In dit proefschrift onderzoek ik het gebruik van schaalargumenten, zogenaamde schaal frames (kaders), in verschillende beleidsinteracties over de toekomst van de Nederlandse intensieve veehouderij. Het doel van mijn onderzoek is het schaal framen (kaderen) in interacties beter te begrijpen en de implicaties van schaal framen voor de aanpak van complexe problemen in kaart te brengen. In hoofdstuk 1 introduceer ik de uitgangspunten, het conceptueel raamwerk, het doel van het onderzoek, de onderzoeksvragen, de casus, en de methodologie. Een van de uitgangspunten is het idee dat complexe problemen niet zomaar bestaan, maar dat verschillende actoren andere aspecten van een situatie benadrukken en als problematisch zien. Dit proces wordt ook wel framing genoemd. De verschillen in de frames, zoals die geuit worden door de verschillende actoren, dragen bij aan de complexiteit van het probleem.

In dit proefschrift, focus ik op hoe actoren schalen en schaalniveaus in hun frames gebruiken. Ik noem dit schaal framen. Ik definieer schaal als de ruimtelijke, temporele, of bestuurlijke dimensies die worden gebruikt om een fenomeen te beschrijven. Naast schalen kunnen niveaus worden onderscheiden. Niveaus zijn de verschillende locaties op een schaal.

Schaal framen heeft consequenties. Of problemen op het ene schaalniveau worden geplaatst of op een ander, heeft implicaties voor actoren, belangen, en afhankelijkheden. Dit proces van het strategisch gebruik van schalen om invloed uit te oefenen ofwel het machtsspel met schaalargumenten staat in de literatuur bekend als 'politics of scale'.

In dit proefschrift introduceer en ontwikkel ik het concept *interactioneel schaal framen* en pas dit toe op het debat over de Nederlandse intensieve landbouw. De hoofdonderzoeksvraag luidt:

Wat zijn de implicaties van schaal framen voor de aanpak en het besturen van complexe problemen?

Om deze vraag te beantwoorden, gebruik ik een interpretatieve benadering. In een interpretatieve benadering probeert de onderzoeker te begrijpen hoe mensen of groepen mensen betekenis geven aan bepaalde gebeurtenissen. De nadruk ligt dus op het interpreteren van de betekenissen die verschillende actoren hebben geconstrueerd. Als onderzoeksontwerp heb ik een case study gebruikt. Dit ontwerp sluit aan bij een interpretatieve benadering en maakt het mogelijk om het probleem in al zijn complexiteit te onderzoeken. De case study bestaat uit drie ingebedde casussen in het debat over de toekomst

van de Nederlandse intensieve veehouderij. Op basis van deze ingebedde casussen heb ik vier artikelen geschreven, waarvan er drie gepubliceerd zijn en de vierde ingediend is bij een internationaal wetenschappelijk tijdschrift.

In hoofdstuk 2 bestudeer ik hoe het agrarisch beleid, in het bijzonder schaalvergroting, de laatste zes decennia is geframed door de verantwoordelijke ministers. Ik analyseer de verschillende interpretaties van schaalvergroting en andere beleidskwesties in een longitudinale studie van de memoranda behorend bij de jaarlijkse begroting van het ministerie van landbouw. De analyse geeft een genuanceerde uitleg voor het continue gebruik van het betwiste begrip schaalvergroting. De studie laat zien dat het Nederlandse landbouwbeleid door de jaren verschillend wordt geframed. De analyse laat aanzienlijke veranderingen zien in de frames als het gaat over problemen en oplossingen, de rol van internationaal beleid en kwesties uit andere beleidsvelden. De conclusie van dit hoofdstuk is dat het beleid en de beleidsframes diverser zijn geworden en dat afhankelijkheden zijn toegenomen. Dit heeft geresulteerd in complexer en zelf-referentiëler (meer op zichzelf dan op de buiten wereld gericht) beleid. Een deel van de resultaten kan worden uitgelegd als het optreden van een paradigma verschuiving. Het continue gebruik van (argumenten voor) schaalvergroting als oplossing voor allerlei moeilijkheden in de landbouwsector wordt hier echter niet door verklaard. Een andere verklaring vloeit voort uit het idee van het agrarisch beleid als zelf-referentieel systeem. Het zelf-referentiële agrarische systeem heeft getracht zichzelf continu te verbeteren door schaalvergroting, zonder enige discussie of kritische reflectie op het functioneren van het systeem zelf. In dit proces speelt taal een belangrijke rol: door het veranderen van de taal was het mogelijk om het bestaande systeem of paradigma, waarin schaalvergroting continu positief wordt geframed als de oplossing voor de Nederlandse landbouw, in stand te houden.

Het framen van een probleem als lokaal, regionaal, nationaal of mondiaal is niet zonder consequenties. Het beïnvloedt onder andere processen van in- en uitsluiting. Er is echter maar weinig bekend over hoe actoren schalen gebruiken in hun frames en het effect van verschillende schaal frames op besluitvormingsprocessen. In hoofdstuk 3 onderzoek ik de verschillende schaal frames die actoren gebruiken en de implicaties van het schaal framen voor besluitvormingsprocessen. Ik analyseer de schaal frames die worden gebruikt door de verschillende actoren in de casus over de besluitvorming rondom het oprichten/ontwikkelen van een zogenaamd nieuw gemengd bedrijf. Ik concludeer dat actoren verschillende en conflicterende schaal frames hanteren, en dat dit leidt tot botsende schaal frames. Ik heb drie verschillende typen botsingen geïdentificeerd: (1) het onderwerp framen met

behulp van verschillende schaal frames, (2) het onderwerp framen met behulp van verschillende schalen, en (3) het onderwerp framen op verschillende niveaus van dezelfde schaal. Daarnaast maak ik een onderscheid tussen schaal frame verschillen en schaal frame botsingen. Schaal frame verschillen hoeven niet se problematisch te zijn; in tegendeel, deze kunnen het debat juist verrijken en maken verandering mogelijk. Schaal frame botsingen, daarentegen, veroorzaken moeilijkheden en conflicten. Ik concludeer dat schaal frame botsingen een belangrijke rol spelen in de stagnatie van besluitvormingsprocessen.

In hoofdstuk 4, bestudeer ik schaal framen als een interactioneel fenomeen in uiteenlopende situaties. Mijn focus ligt op de rol van schaal framen bij het managen van aansprakelijkheid. Dit onderzoek laat zien hoe actoren in persoonlijke interacties het machtsspel met schaalargumenten spelen, door schaal frames te gebruiken om aansprakelijkheid te managen. Ik onderscheid drie schaal frame strategieën: projecties in de toekomst (het projecteren van het onderwerp in de toekomst om keuzes en beslissingen te verantwoorden die op dit moment moeilijk zijn te legitimeren), op- en neerschalen (naar hogere en meer problematische of invloedrijkere niveaus of om de kwestie uit te vergroten; naar lagere en minder problematische niveaus of om de kwestie te bagatelliseren), en schaal koppeling (om een in eerste instantie niet overtuigend schaal frame te versterken). Daarnaast concludeer ik dat een discursieve benadering van aansprakelijkheid in complexe beleidsprocessen een belangrijke toevoeging vormt op de meer procedurele benaderingen.

In het laatste empirische hoofdstuk (5), wordt de rol van het machtsspel met schaal argumenten (politics of scale) in besluitvormings- en beleidsprocessen onderzocht. In dit hoofdstuk bestudeer ik de wisselwerking tussen schaal frames en machtsdynamieken. Ik analyseer de 'maatschappelijke dialoog over de toekomst van de Nederlandse intensieve landbouw' zowel op interactie niveau (persoonlijke interacties in verschillende beleidsepisodes) als op het niveau van het beleidsproces. Ik onderscheid de machtsdynamieken 'in interacties', 'van interacties', en 'over interacties'. Macht-over verwijst naar de macht van de organisator over het proces, macht-in verwijst naar de macht van actoren in persoonlijke interacties, en macht-van verwijst naar de macht/invloed van de deelnemers over/op het proces. In de maatschappelijke dialoog, leek de macht-over, de macht-in en de macht-van te domineren. De macht van de organisator/de staatssecretaris over het proces bepaalde het proces omdat hij besliste over de procedures, de agenda, de conclusies en verslaglegging van de verschillende episodes. Dit bepaalde ook wat er gebeurde met de variëteit aan schaal frames. De gedetailleerde

analyse van de persoonlijke interacties, de macht-in, liet echter een veel genuanceerder perspectief zien van wat er in interactie met schaal frames gebeurt en wordt gedaan dan de analyse van de macht-over. Schaal frames zijn dus machtige discursieve middelen *in* de verschillende episodes, maar de analyse van het proces als geheel geeft een ander beeld. Ik concludeer dat er sprake is van een machtsspel met verschillende evenwichten, waarbij verschillende actoren onder verschillende omstandigheden een positie kunnen hebben waarin hun schaal frame prevaleert.

In het concluderende hoofdstuk beantwoord ik de onderzoeksvragen, bediscussieer ik de toegevoegde waarde van een schaal frame perspectief voor de wetenschappelijke literatuur, en bespreek ik de beperkingen van dit onderzoek en de mogelijkheden voor toekomstig onderzoek. Het hoofdstuk wordt afgesloten met de praktische implicaties van dit proefschrift voor bestuurders.

Alles overziend, trek ik de conclusie dat schaal frames veel implicaties heeft voor beleids- en besluitvormingsprocessen. Daarnaast zijn schaal frames machtige middelen om beleidsprocessen te beïnvloeden, om macht-over het proces te bewerkstelligen, en om betwistbare beslissingen en uitspraken te verantwoorden. Schaal frames kunnen het proces compliceren, maar bieden ook mogelijkheden voor andere benaderingen van het onderwerp. De belangrijkste uitkomsten van het onderzoek zijn:

- Een gedetailleerde focus op taal, op schaal frames in interacties in het bijzonder, biedt unieke en relevante inzichten die van belang zijn voor complexe beleids- en besluitvormingsprocessen.
- Actoren in interacties construeren verschillende schaal frames, waarin ze verschillende schalen en niveaus benadrukken.
- Schaal frames maakt het mogelijk om het eigen schaal frame en dat van iemand anders te definiëren en te herdefiniëren teneinde verschillende doelen te bereiken.
- Het framen van een kwestie op een bepaald schaal niveau maakt het mogelijk om argumenten en andere actoren in te sluiten en uit te sluiten;
- De dominante schaal frames sturen het debat in de richting van bepaalde uitkomsten en beleidsoplossingen;
- Schaal frames dienen als krachtige discursieve middelen om verantwoording af te schuiven en om betwistbare keuzes en beslissingen te verantwoorden;
- Schaal frames maakt het mogelijk om het probleem op te blazen of juist te bagatelliseren.
- Actoren in interacties springen continu van het ene schaal frame naar het andere. Dit leidt tot schaal frame botsingen en resulteert in het vergelijken

van appels met peren wat de discussie verder bemoeilijkt. Deze processen beïnvloeden de kwaliteit van de discussies.

Beleids- en besluitvormingsprocessen zijn machtsspellen met verschillende evenwichten waarbij verschillende actoren onder verschillende omstandigheden een positie kunnen hebben waarin hun schaal frame prevaleert.

Met betrekking tot de bijdrage van een interactioneel schaal frame perspectief voor de wetenschappelijke literatuur, relateer ik mijn onderzoek aan de literatuur over schaal-sensitief bestuur, zoals recent verkend is door enkele collegae. Schaal-sensitief bestuur kan worden geconceptualiseerd als schaal-sensitief observeren, schaal-sensitief handelen, en schaal-sensitiviteit mogelijk maken. Naar mijn mening is een interactionele schaal frame analyse een manier om schaal-sensitief te observeren (en schaal-sensitief te handelen en schaal-sensitiviteit mogelijk te maken). Een interactionele schaal frame analyse resulteert in de variëteit aan schaal frames die verschillende actoren gebruiken om een probleem te verwoorden. Een schaal frame analyse legt dus de overeenkomsten en botsingen tussen de verschillende schaal frames bloot. Vanuit een interactioneel schaal frame perspectief, betekent schaal-sensitief handelen: (het ontwikkelen van) sensitiviteit voor/bewustzijn van schaal frames bij actoren in een beleids- of besluitvormingsproces. Vanuit dit bewustzijn kunnen actoren de onderliggende uitgangspunten en geprefereerde oplossingen bediscussiëren, de verschillen en botsingen identificeren, en toewerken naar gedeelde '*re-scale-frames*' van zowel het probleem als de oplossing.

Met betrekking tot de toegevoegde waarde van schaal frames voor de framing literatuur, laat dit proefschrift zien dat schaal frames worden gebruikt, naast bijvoorbeeld identiteitsframes of karakteriseringsframes, om betekenis te geven aan complexe problemen. In deze schaal frames worden zowel het probleem als de mogelijke oplossingsrichting benadrukt. Schaal frames kunnen worden gezien als bepaalde probleem frames, maar de specifieke focus op schalen en niveaus onthult andere aspecten van de kwestie die relevant zijn voor verschillende actoren. Schaal frames bieden dus andere inzichten en nieuwe oplossingsrichtingen. Het gebruik van verschillende gemixte schalen en niveaus maakt meer argumenten mogelijk, biedt een structuur voor de argumenten, maar kan ook leiden tot het verdoezelen van de belangen waar het om gaat. Schaal frame botsingen, als toevoeging op frame botsingen of schaal botsingen, laten heel specifiek de miscommunicatie zien.

Naast het concept schaal framen, is de combinatie van een micro-niveau en een macro-niveau interactioneel perspectief nieuw. Dit levert nieuwe inzichten in framen in interacties. Het onderzoek laat zien dat het uitmaakt op welk interactieniveau de analyse zich richt. Het analyseren van persoonlijke interacties onthult de variëteit aan schaal frames en biedt genuanceerde inzichten in de verschillende (schaal) frame activiteiten. In mijn onderzoek heeft dit geresulteerd in inzichten in de strategieën die actoren gebruiken om hun uitspraken te verantwoorden. De analyse op het beleidsproces niveau laat zien dat andere factoren en processen (machtsdynamieken, persoonlijke doelen) ook een rol spelen en bepalen wat er gebeurt met de verscheidenheid aan schaal frames (met welke rekening wordt gehouden en welke worden genegeerd) en de uitkomsten van het proces.

In relatie tot de ‘politics of scale’ literatuur, laat dit onderzoek zien dat actoren meerdere schalen en niveaus gebruiken en mixen, en niet alleen de ruimtelijke schaal zoals bestudeerd wordt in humane en politieke geografie. Daarnaast laat het onderzoek zien dat actoren in beleidsinteracties meerdere schaal frames in hun discussies naar voren brengen om hun eigen schaal frames en die van anderen te definiëren en herdefiniëren om bepaalde doelen te bereiken. Meer specifiek, zowel voor- als tegenstanders gebruiken verschillende schalen en niveaus om een kwestie te framen, zelfs binnen dezelfde interactie. De analyse van interacties op het persoonlijke niveau laat zien hoe actoren het machtsspel met schaalargumenten spelen: hoe zij dit *doen*. Actoren gebruiken schaal frames veelvuldig in interacties om hun mening over het probleem en de oplossing te presenteren, om kwesties belangrijker of minder belangrijk te maken, om andere meningen te bediscussiëren, om argumenten en actoren in te sluiten en uit te sluiten, en om hun uitspraken en beslissingen te verantwoorden. Naast de algemeen bekende ‘omschalings-’ (rescaling) strategie, onthult dit onderzoek strategieën zoals: projecties in de toekomst, opschalen, neerschalen, en schalkoppelen.

Publications

Refereed journal publications

- Van Lieshout, M., Dewulf, A., Aarts, N. & Termeer, C. (2013). The power to frame the scale. Analysing power in deliberative governance interactions. Manuscript submitted for publication. In: *Journal of Environmental Policy and Planning*.
- Van Hulst, M., Siesling, M., Van Lieshout, M., & Dewulf, A. (in press). The conflict, the people and the neighbourhood: How news articles frame social disorder, accepted. In: *Media, Culture and Society*.
- Van Lieshout, M., Dewulf, A., Aarts, N. & Termeer, C. (2013). Framing scale increase in Dutch agricultural policy 1950-2012. In: *NJAS-Wageningen journal of life sciences*.
- Breeman, G. Termeer, C. & Van Lieshout, M. (2013). Decision making on mega stables: understanding and preventing citizens’ distrust. In: *NJAS-Wageningen journal of life sciences*.
- Van Lieshout, M., Dewulf, A., Aarts, N., & Termeer, C. (2012). Doing scalar politics: interactive scale framing for managing accountability in complex policy processes. In: *Critical Policy Studies* 6 (2): 163-181.
- Van Lieshout, M., Dewulf, A.R.P.J., Aarts, M.N.C., & Termeer, C.J.A.M. (2011). Do scale frames matter? Scale frame mismatches in the decision making process of a ‘mega farm’ in a small Dutch village. In: *Ecology and Society* 16 (1): 38.
- Termeer, C.J.A.M., Dewulf, A.R.P.J., & Van Lieshout, M. (2010). Disentangling scale approaches in governance research: comparing monocentric, multilevel, and adaptive governance. In: *Ecology and Society* 15 (4): 29.
- Lampila, P., Van Lieshout, M., Gremmen, H.G.J., & Lahteenmaki, L. (2009). Consumer attitudes towards enhanced flavonoid content in fruit. In: *Food Research International* 42 (1): 122-129.
- Van Lieshout, M., & Aarts, M.N.C. (2008). Outside is where it’s at! Youth and immigrants’ perspectives on public spaces. In: *Space and Culture* 11 (4): 497-513.
- Van Woerkum, C.M.J., & Van Lieshout, M. (2007). Reputation management in agro-food industries: Safety first. In: *British Food Journal* 109 (5): 355-366.

Book chapters and reports

- Van Lieshout, M., Termeer, C.J.A.M., & Dewulf, A.R.P.J. (2011). Colliding scale frames in the decision making about intensive agriculture. In: Eijsackers, H., Scholten, M.C.T. (eds.), *Livestock farming with care. Summaries of essays* (p. 37). Wageningen, the Netherlands: Wageningen UR.
- Aarts, N., Van Lieshout, M., Van Woerkum, C. (2011). Competing claims in public space: The construction of frames in different relational contexts. In Rogan, R.G., Donohue, W.A., & Kaufman, S. (eds.). In: *Framing Matters. Perspectives on Negotiation Research and Practice in Communication* (pp. 234-254). New York, NY: Peter Lang.

- Termeer, C.J.A.M., Breeman, G.E., & Van Lieshout, M. (2011). Careful trusting in intensive farming. In: Eijsackers, H., Scholten, M.C.T. (eds.), *Livestock farming with care* (p. 11). *Summaries of essays*, Wageningen UR.
- Van Lieshout, M., Termeer, C.J.A.M., & Dewulf, A.R.P.J. (2010). Schaken met schalen. In: Eijsackers, H., Scholten, M. (eds.), *Over zorgvuldige veehouderij. Veel instrumenten, één concert* (pp. 238-249). Wageningen, the Netherlands: Wageningen UR.
- Termeer, C.J.A.M., Breeman, G.E., Van Lieshout, M., & Pot, W.D. (2010). Why more knowledge could thwart democracy: Configurations and fixations in the Dutch mega-stables debate In: Veld, R.J. in 't (ed.), *Knowledge Democracy. Consequences for Science, Politics, and Media* (pp. 99-111). New York, NY: Springer.
- Termeer, C.J.A.M., Breeman, G.E., & Van Lieshout, M. (2010). Zorgvuldig vertrouwen! In: Eijsackers, H., Scholten, M. (eds.), *Over zorgvuldige veehouderij. Veel instrumenten, één concert* (pp. 14-25). Wageningen, the Netherlands: Wageningen UR.
- Termeer, C.J.A.M., Van Lieshout, M., Breeman, G.E., & Pot, W.D. (2009). *Politieke besluitvorming over het Landbouwonwikkelingsgebied Witveldweg in de Gemeente Horst aan de Maas*. Wageningen, the Netherlands: Wageningen Universiteit, Leerstoelgroep Bestuurskunde.
- Van Lieshout, M., & Aarts, M.N.C. (2006). Competing claims in public space: The construction of frames in interaction. In: Gould, N. (ed.), *Engagement. MOPAN 2005. Multi-Organizational Partnerships, Alliances and Networks* (pp. 195-207). Exeter, England: Short Run Press.
- Van Lieshout, M., & Aarts, N. (2006). Buiten gebeurt het! Over het belang van publieke ruimtes voor jongeren en immigranten in Nederland. In: *Vrijtijdstudies* 24 (3 & 4): 35-47.
- Van Lieshout, M., Aarts, N., & Van Woerkum, C. (2006). *De straat is van ons allemaal. Een studie naar conflicten in de publieke ruimte en de rol van de overheid*. Wageningen, the Netherlands: Wageningen Universiteit, Communicatiemanagement.
- Van Lieshout, M., & Aarts, N. (2006). 'De straat is van ons allemaal' Hoe governance gestalte krijgt in conflicten over publieke ruimtes. In: Van der Burg, S., Van der Ham, R., Grin, J. (eds.), *Beleid in Transitie* (pp. 103-111). Wageningen, the Netherlands: Wageningen Universiteit, Leerstoelgroep Milieubeleid.
- Van Lieshout, M., & Aarts, M.N.C. (2005). Framing public space: Perspectives of non-institutionalized groups of people in society. In: Gössling, T., Jansen, R.J.G., & Oerlemans, L.A.G., (eds.), *Coalitions and Collisions* (pp. 3-13). Nijmegen, the Netherlands: Wolf.
- Van Lieshout, M., & Aarts, M.N.C. (2005). *Buiten gebeurt het! Perspectieven van jongeren en immigranten op openbare ruimtes in Nederland*. Wageningen, the Netherlands: Wageningen Universiteit, Communicatiemanagement.
- Van Lieshout, M., & Van Woerkum, C.M.J. (2004). *In relatie tot reputatie. Reputatiemanagement en voedselveiligheid*. Wageningen, the Netherlands: Wageningen UR, Communication Science.

Presentations at international Conferences

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|---------------|---|
| June 2004 | MOPAN conference, Tilburg (the Netherlands) |
| June 2005 | MOPAN conference, Cardiff (United Kingdom) |
| April 2009 | European Consortium for Political Research (ECPR) Joint sessions of workshops, Lisbon (Portugal) |
| June 2010 | Interpretive Policy Analysis (IPA) conference, Grenoble (France) |
| November 2010 | Scaling and Governance Conference, Wageningen (the Netherlands) |
| June 2011 | Interpretive Policy Analysis (IPA) conference, Cardiff (United Kingdom) |
| July 2012 | Interpretive Policy Analysis (IPA) conference, Tilburg (the Netherlands) |
| July 2012 | Multi-Organizational Partnerships, Alliances, and Networks (MOPAN) conference, Wageningen (the Netherlands) |
| March 2013 | Symposium on Scale in Environmental Governance, Berlin (Germany) |
| July 2013 | Interpretive Policy Analysis (IPA) conference, Vienna (Austria) |

About the author

Maartje van Lieshout was born in Alkmaar, the Netherlands on March 9th, 1977. She holds an MSc in Forestry and Nature Conservation with a minor in Communication Science from Wageningen University, the Netherlands. In addition she graduated as a Bachelor of Education at the Marnix Academie in Utrecht. In 2002 she started working as a Project employee 'Land van Wijk en Wouden' at the Province of South Holland, the Netherlands. From 2003 till 2006 she worked as a scientific researcher on different projects at the Communication Science group of Wageningen University. She continued her work as a scientific researcher from 2006-2008 in the European FLAVO project, within the Centre for Methodical Ethics and Technology Assessment, Wageningen University. In 2008 Maartje started to work as a PhD-candidate at Public Administration and Policy Group of Wageningen University. From January 2013 she worked as lecturer in the same group. Currently she is lecturer at the Institute of Public Administration at Leiden University.



Completed training and supervision plan

Maartje van Lieshout
Wageningen School of Social Sciences (WASS)

<i>Name of the learning activity</i>	<i>Dept./Institute</i>	<i>Year</i>	<i>ECTS*</i>
A. Project related competences			
Classics in Public Administration	NIG	2008	3
Sioo summerschool op het gebied van organisatie-, bestuurs- en veranderkunde	Sioo	2008	1.5
Theories and Tools of Narrative Inquiry	Wass	2008	1.4
Scaling and Governance	WGS	2009	1.5
Doing Interpretative Analysis	Wass	2010	3
Masterclass Public Administration	NIG	2011	5
B. General research related competences			
Introduction course	WASS	2008	1.5
Framing scales and scaling frames	Mansholt/WASS Multidisciplinary Seminar	2009	1
Framing scales and scaling frames	ECPR, Lissabon	2009	1
Jumping accross scales and levels	IPA, Grenoble	2010	1
Scale framing in interaction	Scaling and Govern- ance, Wageningen	2010	1
Panel organisation: Interactional framing in policy controversies	IPA, Cardiff	2011	2
Interactive scale framing for managing accountability in complex policy processes	IPA, Cardiff	2011	1
The power to frame the scale. Analysing power in deliberative governance interactions	MOPAN, Wagenin- gen	2012	1
The power to frame the scale. Analysing power in deliberative governance interactions	IPA, Tilburg	2012	1

Name of the learning activity	Dept./Institute	Year	ECTS*
Framing Scales, the implications of scale framing for governance processes	Symposium on Scale in Environmental Governance, Berlin-Brandenburg Academy of Sciences and Humanities	2013	1
Powering and puzzling over scales. Studying scalar politics in a deliberative governance process about the future of the Dutch intensive livestock sector.	IPA, Vienna	2013	1
C. Career related competences/personal development			
Information Literacy for PhDs including introduction to EndNote	WUR Library	2008	0.6
Project- and Time Management	WGS	2010	1.5
Career assessment	WGS	2010	0.3
Scientific writing	WGS	2011	1.8
Afstudeervak organiseren en begeleiden	OWI	2011	1
Developing, and assisting in Governance, Trust and Policy Change (PAP-30806)	PAP	2010 2011	1
Expert/supervisor Academic Consultancy Training	PAP	2010 2012	1
Guestlecture Analysis of a Problem Domain (YSS-10906)	PAP	2009, - 2012	
Guestlecture Advanced Communication Science (COM-33806)	COM	2012	
Supervision MSc thesis	ASG/COM	2011	1
Supervision MSc thesis	PAP	2011 - 2012	1
Total			37.1

* One credit according to ECTS is on average equivalent to 28 hours of study load.

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