

# **Building a Narrative: The Role of Dualisms When Interpreting Food Systems**

## KIRSTEN VANDERPLANKEN, ELKE ROGGE, ILSE LOOTS, LIES MESSELY AND FRÉDÉRIC VANDERMOERE

[Paper first received, 8 January 2016; in final form, 27 May 2016]

Abstract. Against the background of increasingly complex and diverse agri-food systems, calls are made in rural sociology to no longer describe and distinguish food systems based on dualistic oppositions. The aim of this paper is to understand to what extent food system actors use different dualisms to build their ontological narratives. Based on a qualitative analysis, we analyse the narratives of key actors in the Flemish food system on food system challenges, and their relation with specific dualistic concepts and associated meanings, experiences and practices. Two distinct narratives emerge that are embedded in opposing dualisms, what leads us to believe that dualistic oppositions are still a part of the agrifood reality and are something to take into account when different actors have to collaborate.

## Introduction

In our global era, European agri-food systems are becoming increasingly complex. A myriad of actors, both public and private, are recurrently confronted with different food system challenges, that each in turn generate various impacts and responses. Despite these and other forms of variety, including those relating to agricultural practices and organizational structures, food systems are often depicted in dualistic terms, such as productivist versus post-productivist, or mainstream versus alternative. While research has shown that dualisms do not reflect the complexity of agri-food practices (e.g. Murdoch, 1997; Morgan et al., 2006; Sonnino and Marsden, 2006), objects of research construct and reproduce these dualisms when acting and reflecting upon the food system.

The aim of this study is to understand the ontological narratives of key actors in the Flemish food system, and how these intersect with various dualisms. Narra-

Kirsten Vanderplanken is PhD student at the Social Sciences Unit, Institute for Agricultural and Fisheries Research, Burgemeester van Gansberghelaan 115, box 2, B-9820 Merelbeke, Belgium; email: <kirsten.vanderplanken@ilvo.vlaanderen.be>. Elke Rogge is Scientific Director of the Rural Development Research Unit, Institute for Agricultural and Fisheries Research, Merelbeke, Belgium. Ilse Loots is Sociologist and Spokeswoman of the Research Group Environment and Society, Faculty of Social Sciences, University of Antwerp, Antwerpen, Belgium. Lies Messely is Senior Researcher at the Social Sciences Unit, Institute for Agricultural and Fisheries Research, Merelbeke, Belgium. Frédéric Vandermoere is Assistant Professor in the Department of Sociology, University of Antwerp, Antwerpen, Belgium. tives are accounts or stories of events that occur over time (Bruner, 1991). Yet they are more than a mere reflection of experiences: narratives offer opportunities for capturing actors' perceptions of that experience (Ingram et al., 2014). As such, narratives are a discursive mode of representation. Actors use ontological narratives to make sense of the world. Ontological narratives define the identity of actors and structure their behaviour. Reality is more than a sequence of events and understanding this provides a sense of social being. By embedding the ontological narrative in other narratives, a social identity is constituted (Somers, 1994). This is usually done unconsciously and implicitly, particularly when one's own narrative reflects the dominant world view (Somers, 1994; Freibauer et al., 2011). Using an actor point of view rather than an analytical one, the dualistic concepts under study are considered as metanarratives that comprise both the literal use of dualistic terms as well as underlying meanings, experiences and practices. Metanarratives are broader and more abstract narratives 'in which we are embedded as contemporary actors in history' (Somers, 1994, p. 619). Metanarratives build on concepts and explanatory schemes, and reflect the interaction between individual (i.e. ontological) narratives and institutional dynamics (Somers, 1994; Sheehan and Sweeney, 2009). Where the ontological and metanarratives intersect, world views are made explicit and shed light upon assumptions and discussions about food system challenges. The specific goal of this article is therefore to analyse how ontological narratives are embedded in dualistic metanarratives. This embeddedness can have relevant implications for the debate in rural sociology on overcoming dualisms in food practices, as actors act in accordance with their ontological narrative (Somers, 1994).

In what follows, we first review four dualistic metanarratives that appear repeatedly in literature on food and agricultural systems. Next, we discuss the collection of the interview data and the setting of the research. An examination of the intersection between the two types of narratives reveals two distinct and opposing storylines that are each embedded in specific metanarratives. Finally, we conclude by discussing possibilities for handling opposing narratives in a context where different actors have to work together.

#### Four Recurring Dualistic Metanarratives

The dualism of productivism and post-productivism revolves around the role of productivity. Productivist agri-food systems aim to boost productivity and efficiency through a focus on intensification, industrialization and specialization, while relying on technological inputs and state support (Wilson, 2001; Walford, 2003; Burch and Lawrence, 2005). Maximizing productivity became a primary policy aim in Western countries after World War II (Wilson, 2001; Bjørkhaug and Richards, 2004, 2008). Apart from meeting a national self-sufficiency objective, the productivist strategy also engendered negative outcomes such as decreasing food prices due to overproduction and the exploitation of natural resources (Bjørkhaug and Richards, 2004, 2008). In response to these and other issues associated with productivism (such as concerns about food quality) the concept of post-productivism emerged as a challenge to the productivist ethos from the 1980s on (Burch and Lawrence, 2005; Almstedt, 2013). Post-productivism downplays the pursuit of productivity relative to other goals, illustrated by values such as the adoption of environmental and health values alongside economic value (Mather et al., 2006). This shift in goals is linked to changes in agricultural practices as well as policy objectives and decision-making procedures (Almstedt, 2013). For example, the policy community opens up and evolves from a tight-knit agricultural group to one inclusive of a diversity of actors (Wilson, 2001; Mather et al., 2006). Although the empirical base and definition of post-productivism remain ambiguous, the concept is widely used and is thus relevant for our analysis (Evans et al., 2002).

The second dualism, mainstream versus alternative, is used to refer to different types of food system organization. Mainstream systems of food provisioning supply global markets across long-distance chains (Fonte, 2002; Ilbery and Maye, 2005). As a result, 'mainstream food' has become decoupled from producer and place, rendering it anonymous and placeless (O'Neill, 2014). Mainstream food systems tend to be dominated by large agri-food companies and corporate retailers who are competing with each other to define standards of efficiency and quality (Ilbery et al., 2004; Sonnino and Marsden, 2006). The spatial and structural features of mainstream food systems generally ensure high levels of production, but are also associated with negative environmental, health and social impacts, such as greenhouse gas emissions (Murdoch et al., 2000; Cleveland et al., 2011). Alternative systems of food provisioning aim to counter these unsustainable practices by creating new practices that offer an economic, social or spatial alternative (Watts et al., 2005; Roep and Wiskerke, 2010). Social and spatial distances are shortened by building new alliances between food system actors and with local communities (Jarosz, 2008; Roep and Wiskerke, 2010). Such connections increase the (social and spatial) embeddedness of the food system and help to adapt food provisioning to local values, norms, needs and desires (Roep and Wiskerke, 2010). Furthermore, building new linkages is a way of restructuring food provisioning systems that allows for the pursuit of environmental and social objectives, as well as economic objectives (Cleveland et al., 2014).

Third, the dualism of production and consumption requires focusing on both ends of the food chain in research and policy. Production-oriented approaches to agri-food centre on the supply end of food chains and the exchange relations there. In line with Marxist arguments, power is located in the production sphere, where the resources and extracted surplus value are concentrated (Goodman, 2002; Goodman and DuPuis, 2002). As a result, food becomes a commodity that disguises power struggles between food chain actors. Consumers are considered to be passive actors because their practices can be derived from production (Goodman and DuPuis, 2002; Spaargaren and Van Vliet, 2000). For example, sustainable consumption is to be achieved through product innovations (Martens and Spaargaren, 2005). From a consumption-oriented perspective, however, consumer practices and meanings are more than something derived from production (Spaargaren and Van Vliet, 2000). Despite a variety of approaches used to study consumption, the themes of embeddedness and consumer politics recur in those studies. Consumer practices and meanings are and become embedded through social interactions (e.g. between producers and consumers). Further, valorizing specific consumer practices and meanings enhances the social and spatial embedding of a specific type of food provisioning (Goodman, 2002). When this valorization is part of a reflexive consumer practice a politics of food is created that can empower marginalized or excluded actors (Goodman and DuPuis, 2002).

The fourth and last dualism concentrates on the social and natural aspects inherent to food. This has led to two approaches: a science and technology approach and an eco-social approach. In the first approach, actors in food provisioning try to circumvent any eventual natural constraints by using science and technology (Murdoch and Miele, 1999; Murdoch et al., 2000). Two processes are vital here: the food industry appropriates natural and agricultural processes, and producers and products are substituted for others (Fonte, 2002). As a result, industrial actors become more powerful and are able to control food provisioning (Murdoch et al., 2000). Alternatively, eco-social approaches advocate a more symmetrical perspective including both natural and social aspects. These become intertwined in heterogeneous networks that are described by relational concepts such as social-ecological (e.g. Lutz and Schachinger, 2013). Because of their intertwining, the natural and the social become subject to the same processes and can be shaped in accordance with specific types of food systems (Murdoch, 1997).

### **Collecting Ontological Narratives**

The ontological narratives were collected in two series of semi-structured one to two hour interviews. Respondents were asked the open-ended, undirected question, 'What do you perceive to be challenges for the Flemish food systems and why?' The interview script contained a list of challenges that had been identified through a literature review. This list was complemented iteratively with challenges mentioned in the interviews. After the first three interviews, no new challenges emerged. This list was used as a kind of interview script to stimulate respondents. In total 16 in-depth interviews were conducted with 20 respondents (see Table 1). We selected respondents based on their function (or that of the organization they represent) within the Flemish food system (e.g. distribution). The strategy behind this kind of sampling was to purposefully select key respondents who would help us to gain insights into food system challenges and who represent a broad spectrum of perspectives based on their practices and experience (Patton, 2002; Creswell, 2003). All interviews were recorded; after transcription they were presented to the respondent for feedback.

The data were analysed in NVivo using an inductive approach. We began with open coding to reduce and organize the data. We extracted those parts of the data where respondents identified something as problematic or as challenging. Open coding was followed by axial coding. This allowed us to organize the challenges thematically into five categories (Table 2): issues relating to resilience and the environment, economic issues, institutional issues, spatial issues and social issues. The first category (resilience and environment) gathers all of the challenges regarding environmental changes and issues about how to respond to these. The category of economic issues includes matters relating to financial or market aspects of the production, distribution, trade and consumption of food. Third, the category of institutional issues comprises the challenges connected to formal institutions such as laws and policy, and references to the role of institutional actors (e.g. governments) in the food system. Informal institutions are not included here; they are part of the social issues. The fourth category contains spatial issues, which encompasses all challenges relating to the geographic embeddedness and spatial aspects of the food system. The final category of social issues contains all challenges pertaining to the behaviour, attitudes, knowledge, norms, perspectives, etc. of actors within the food system and their relations. Due to the complexity and multidimensionality of many of the issues cited by the respondents, several issues could be classified under more than one category. In addition, not all respondents identified all five of the above-mentioned challenges. We created a synthesis (Table 2) to illustrate that actors identify a range of challenges within the food system. Extensive description of these issues lies out-

Interview	Respondent	Function within the food system Quality label for fruit and vegetables		
1	1			
2	2	Food industry federation		
3	3	Policy actor regional level		
4	4	Farmers' distribution initiative		
5	5	Conscious consumer		
6	6	CSA farmer		
7	7	Consumer organization		
8	8–9	Monitoring agency		
9	10	NGO organic agriculture		
10	11	Produce auction		
11	12	Farmers' union		
12	13	Urban farming entrepreneur		
13	14	Policy actor at provincial level		
14	15	Retailer		
15	16–17	Local food project		
16	18–20	Policy actor at provincial level		

Table 1. Interviews.

 Table 2. Synthesis of the identified challenges.

Environment and resilience	Economic challenges	Institutional challenges	Spatial challenges	Social challenges
Transition	Export orientation	Labelling	Population density	Number of farm- ers
Climate change	Viability of busi- nesses	Food safety	Distribution	Awareness con- sumers
Food system	Innovation	Subsidies	Transport	Consumption behaviour
Food sovereignty	Market dynamics	Complexity of legislation	Globalization vs. localization	Education
Food security	Overproduction	Consistent, strong policy	Space	Image of food
Food waste	Food prices	European policy		Informal institu- tions
	Income security	Customized policy		Link producers– consumers
				Social support
				Research
				Cooperation
				Different visions/ perspectives

side the scope of this article. Instead, we use this categorization as a stepping stone for an exploratory study of the links between narratives and multiple dualisms.

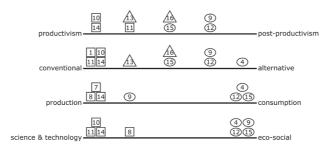
The setting for this research is Flanders (northern part of Belgium), a strongly urbanized region. It is one of the most densely populated areas in Europe with 478

inhabitants per km<sup>2</sup> (compared to the EU average of 166 inhabitants/km<sup>2</sup> in 2012) (Eurostat, 2014) and an average built-up percentage of 26% (compared to the EU average of 4.8%) (Poelmans and Van Rompaey, 2009). The ongoing urbanization of land poses multiple difficulties and obstacles for agriculture (Strategische Adviesraad voor Landbouw en Visserij, 2010). This has caused land to become scarce and thus more expensive. Prices for farmland have doubled in the period 1995-2009 (Bergen, 2011). Agricultural land encompasses nearly 45% of Flanders' territory, but it is very fragmented and interwoven with other land uses. Since land is scarce, land use is increasingly contested or required to be multifunctional (Antrop, 2004; Rogge et al., 2007). As a consequence, agriculture has to share limited open space with other land uses, such as nature, recreational space, environmental buffers, residential dwellings and settlements, etc. (Bomans et al., 2010). This intertwining of functions is characteristic of highly urbanized areas. Because urbanization is an increasingly global phenomenon, its consequences for the food system manifest themselves on a global scale as well (Brunori et al., 2013). Additionally, given that green planning and sustainable development plead for more resilient metropolitan spaces with a mixed land use (Leinfelder et al., 2008), insights into the narratives of Flemish food system actors on food system challenges can serve as a learning opportunity for other urbanizing regions as well.

#### Intersecting Narratives

The aim of the analysis is to study the intersection of the ontological narratives of key respondents and the four dualistic metanarratives. Specifically, this means that we study whether the respondents' narrative (per theme of challenges) is linked to the four dualistic concepts themselves or the meanings, experiences and practices underlying them. This thematic analysis results in five figures – one for every theme of challenges - where every respondent's ontological narrative is positioned relative to the dualistic metanarratives (Figures 1-5). The positioning of the actors is based on how much their ontological narrative is embedded within a specific metanarrative. For some respondents this was very easy because they clearly stayed within specific metanarratives (e.g. always embedded in the productivist metanarrative), but others sometimes used arguments from opposing metanarratives (e.g. embedded in both the productivist and post-productivist metanarratives). When respondents used more arguments from a specific metanarrative in proportion to its opposite narrative, their ontological narrative was positioned accordingly between the first metanarrative and the centre. When they used a relatively equal amount of arguments of both the opposing metanarratives, they were situated in the middle.

Although research in rural sociology has found that dualistic concepts do not reflect the diversity in practices, our analysis clearly shows that dualistic metanarratives still matter. Figures 1–5 reveal a clear divide between the respondents linked to the embeddedness of their ontological narrative in specific, opposing metanarratives. A first group of respondents we can distinguish embed their ontological narratives within the productivist, conventional, production, and science and technology metanarratives. We will refer to the metanarrative of this group as 'narrative A'. Respondents that belong to this group tend to be representatives of organizations that are active on both national and international markets. Their narratives also show professional distancing, as they are a representatives of large organizations and have experience in this representative role. Based on our respondent sample we find that



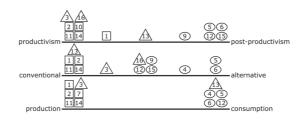
#### legend

numbers 1-16 refer to interviews 1-16 (see Table 1)

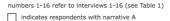
indicates respondents with narrative A

indicates respondents with narrative B

#### Figure 1. Environment and resilience.



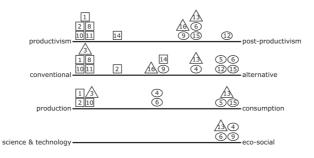




indicates respondents with narrative B

 $\wedge$  indicates respondents with narratives A and B

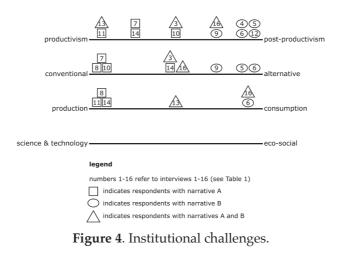




#### legend

numbers 1-16 refer to interviews 1-16 (see Table 1) indicates respondents with narrative A indicates respondents with narrative B indicates respondents with narratives A and B

Figure 3. Spatial challenges.



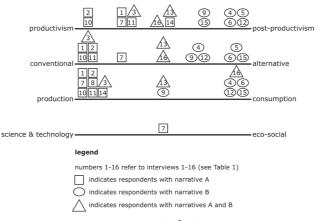


Figure 5. Social challenges.

narrative A can be considered currently as the more dominant narrative, as this is the narrative adhered to by powerful companies and organizations (e.g. retail, produce auction, food industry, etc.). Another group of respondents embed their ontological narratives within the post-productivist, alternative, consumption and eco-social metanarratives. The metanarrative of this group will be referred to as 'narrative B'. Respondents that fall within this group are mainly representative of local and smaller businesses and initiatives. Although they also have experience with representing their organization, the narrative of these respondents often has a more personal touch to it. Especially the narratives of the two entrepreneurs, the farmer and the coordinator of the LETS group are more personal. This can be explained by the fact that the organizations they represent are smaller (SMEs) and these respondents are the initiators and/or (sole) owners of the organizations they represent.

Hence, narrative A and narrative B represent a specific combination of the four dualistic metanarratives that relates to how the respondents' ontological narratives are embedded in the dualistic metanarratives. Because narratives A and B reflect the embeddedness of respondents' ontological narratives in opposing metanarratives, narratives A and B are opposing themselves. The respondents were often aware of this opposition and used this to distinguish themselves from the other group, thus further deepening the divide. This becomes especially clear when they talk in terms of 'we' and 'them', or criticize the other group for having caused certain problems or for not addressing these problems properly. Ingram et al. (2014) use the notion of alterity to refer to this process of the identification of a real or imagined 'other'. Although both groups are prone to stress this alterity in a negative way, this is especially so for respondents with narrative A. They do not only perceive this alterity to be a threat to their values, but also to their practices. These respondents claim that, for example, localizing food systems or reconnecting producers and consumers is not viable nor realistic, and could only be interesting for educating consumers.

'What I'm trying to say about those "alternativo-initiatives" is that they destroy our networks and boycott us. That is a problem. But we try to convince people to "no, do it like this"' (produce auction, manager).

Respondents with narrative B, on the other hand, do not talk about the threats the alterity poses to their own food system organization, but rather stress the environmental, social and economic downsides to society in general.

'The globalization of the food system hasn't been a good evaluation and also the free market isn't the right path for food... This is contrary to our [i.e. the Flemish] export mission and the idea of Flanders as a logistic hub for the world. So I think that regarding food, a free market is not a good choice and does not lead to food security in the world. On the contrary. And it also doesn't provide the farmer with a good income either, only the multinationals' (NGO, director).

A third group can be distinguished: respondents from the policy sector. These respondents do not have a 'new' narrative, but instead borrow elements from narratives A and B to constitute their own. Moreover, they do not make a choice between specific concepts, meanings, experiences and practices, but switch between them depending on the challenge being discussed. In the following sections, each narrative is discussed in more detail.

#### Narrative A

Overall, narrative A intersects with the productivist, conventional, production, and science and technology metanarratives across the five categories of challenges. The extent to which the overarching narrative A and individual ontological narratives are embedded in these metanarratives can vary depending on the specific challenge that is being discussed. For example, the respondents only referred to a science and technology approach in the context of sustainability challenges. With regard to the other challenges, the conventional respondents did not mention this nor did they make another reference to the relationship with nature.

With regard to the environment and resilience, respondents with narrative A focus on conservative strategies that avoid profound systemic changes. The respondents can be divided into two groups: those that think that the environment and resilience are important challenges and those who do not. The first group argues to address such issues within the present organizational frame and infrastructure. They believe that large-scale, industrialized and intensive processes of food production and processing contribute to food security, food safety and sustainability in general. Issues that arise can be solved through further scientific and technological interventions whose aim is to improve efficiency. Such interventions usually aim to improve economic standards instead of conserving the environment or creating resilience. For this group, economic efficiency is equated to sustainability. Besides efficiency, environmental and resilience issues are attributed to consumer behaviour and awareness. Despite the conviction of consumer responsibility, consumers are not included as active actors and involved in finding a solution. Instead, this group believes that consumers should be nudged or educated so they will change their behaviour.

'You bring everything together and tell the buyer, the retailer, that he can find everything in that one place and that he only has to drive one truck from the auction to the store where otherwise you'd have to take 50 or 60 trucks. So can it be more efficient? No. Is it sustainable? Yes' (produce auction, manager).

The group that does not consider environmental and resilience issues to be important argue that 'sustainability is not the core business of our agency' (monitoring agency, manager) or that they already 'meet the legal standards [set by Flandria]' (quality label, manager). Their role within the Flemish food system therefore does not require them to think about these issues proactively.

The focus on productivist values is extended to economic challenges. One example is the critique of the agricultural treadmill farmers, and by extension also food processors, are stuck in. The respondents indicate surplus production, market dynamics, consumer (de)valuation of food products and skewed power relations as causes for the increasing income insecurity that food producers are facing. The respondents hope to solve those economic problems through professionalization, scaling up, intensification and specialization. Although the indicated challenge seems to align more with post-productivism, the solutions suggested by the respondents reflect a productivist, production-centred thinking tailored to a conventional food system organization.

'Someone who is big has a cogeneration system for his energy supply and has screens that illuminate his crops so he can harvest his tomatoes sooner; these things make a big difference. The cost is considerably lower' (quality label, manager).

Related to this, the consumer is also blamed with regard to problematically low food prices. The respondents point out two causal processes that contradict each other: the consumer demands cheap food that is available to everyone, and the demand to make food more expensive to ensure fair prices for the producers. Again, the respondents do not see an active role for the consumer as consumers are seen as always buying the cheapest food available. Instead, a solution is found in market dynamics or developing partnerships between producers, processors and/or other food actors.

'So paying more for food to provide the farmer a better income? That will not happen. Instead they [consumers] will say: farmer, organize yourself better so you can earn a living' (farmers' union, CEO).

Regarding institutional challenges, a recurring theme is government involvement.

The respondents recognize the need to develop a strong, consistent policy to enforce rules and norms. Also a level playing field is something that should be provided by the government, as a clear set of rules, equally applied to all, eliminates unfair competition. Third, some respondents feel the government should play a more active role in transitioning the food system. Suggestions that are made include monitoring practices to guarantee fair business relations or to prevent monopolies, or the creation of new legal business forms that enhance sustainable development.

'When specific legislation imposes those things, then real change will happen. I believe there is a major role for the government here. Everyone can cooperate... but to create a real change, regulation is needed' (consumer organization, researcher).

Despite this call for government involvement, the respondents feel that this should not go beyond the creation of a framework in which the market has free reign. According to the respondents, too much government interference could be inefficient and impede innovation. Another theme is decision-making processes. Here, the respondents only specify roles for traditional chain actors. For instance, consumers are not included in policymaking. One possible reason for this is that the respondents believe that consumers are not enough aware, they do not understand why agriculture needs subsidies, or they have aspirations that are difficult to realize.

'But some products, like a pizza for instance, are made from up to 40 different ingredients... That is not so easy. Consumers may feel the need to know whether this comes from Africa or Asia. That is all easily said and done when the product is made out of one ingredient' (monitoring agency, manager).

The spatial challenges within narrative A mainly relate to globalization. Despite Flanders' export orientation and ambitions, the globalized market is perceived as a threat by the respondents as it implies competition with cheaper, foreign products. Moreover, these products originate in another legislative context and are thus subject to other quality and production norms. This is believed to create an imbalanced playing field and can potentially endanger public health. Yet the main issue according to the respondents is the tendency of consumers to buy the cheapest food. This is especially problematized in the case of the Flemish market, because the Flemish consumers have no *terroir* logic when buying food. Again, despite the role attributed to create a culture of *terroir*. Although some issues are linked to globalization, this is not a bad thing in itself. A reliance on local production and consumption is certainly not a solution according to the respondents.

'If we only did local production and used local networks, we would first lose diversity in our products. It is terrible what we would lose on that front. Second, in terms of efficiency this would also not be good... In one location you cannot be efficient for everything. You are only efficient for some things, which means that your very well-made products ought to be exported. Everyone does that' (food industry, director).

The returning critiques on consumer behaviour in other challenges make this the most pressing social challenge within narrative A. Consumers are perceived as being unaware of and contributing to problems such as farmers' income insecurity,

food waste and low food prices.

'Regarding food waste, consumers have a very large responsibility. They should be punished for wasting food, but that is almost impossible' (food industry, director).

Another social challenge that is frequently quoted by the respondents is that of skewed power relations within the food system. Most of the power is perceived to be concentrated at the two ends of the food chain: with the input producers and the distributors. Joining a cooperative could be a solution because a bigger network can be a good mediator between a small producer and a large distributor. Another suggested solution is building relations or increasing cooperation within the food chain (again, the consumer is not included). This can be complicated, however, because of the complexity and fragmentation within the food system and the limits set to cooperation.

'Retailers have a lot of power. They use that very well, because they realize that there is a lot of surplus production. Sometimes we have to move heaven and earth to say no to them, because they ask too much. When you are talking to them, you can feel that you are not their equal. That you, as a salesperson, almost have to go down on your knees for them' (quality label, manager).

In conclusion, narrative A underpins a conventional food system organization that is dominated by large-scale businesses, oriented towards specialization and export and led by economic standards. According to the respondents, the challenges they identify are attributed to problems relating to efficiency, power balances or consumer behaviour. The focus remains on the production side of the food system: only actors from within the chain are involved in developing and implementing solutions to these challenges. Consumers remain passive actors because interaction with them is limited to the market sphere. Furthermore, solutions to challenges are approached with scientific and technological interventions, which are usually applied to increase the (economic) efficiency.

#### Narrative B

In general, narrative B is embedded within the post-productivist, alternative, consumption and eco-social metanarratives. Respondents with narrative B mostly promote an alternative food system organization based on localization and an emphasis on quality. Further, they build on reciprocal relationships between consumers, producers and other actors within the food system and believe that these will stimulate the local and social embeddedness of the food system. This attention to reciprocity is extended to the relationship with nature, which implies that the respondents try to find solutions to challenges that depart from a symmetric approach to nature and society.

According to the respondents with narrative B, the core challenge regarding the environment and resilience is the rebalancing of the food system. This is mainly based on a critique of the productivist paradigm. According to the respondents, a conventional food system organization can have negative environmental impacts. Solving these by improving efficiency or implementing new technologies are 'endof-pipe solutions and do not look at the food system as a whole' (NGO, director). A proactive approach based on a long-term perspective, reciprocity and embeddedness is argued to be better suited to resolve challenges related to the environment and resilience.

'I think the primary agricultural system, from my position, is sick in terms of impact on the environment... The focus has been placed too strongly on industrialization... which ipso facto has a bigger, more problematic impact on the environment' (urban agriculture, entrepreneur).

Similar to narrative A, narrative B also indicates income insecurity as a major economic challenge. This financial challenge is attributed to another cause, however: the respondents believe that skewed power relations cause income insecurity of farmers and producers. To counter this imbalance, the focus is shifted from producers to consumers. Respondents with narrative B do not consider consumers as passive actors. Instead, the respondents want to involve consumers because they believe this will inform them about underlying processes of food production, will stimulate them to pay a fairer price for quality food, and can inspire a better appreciation of food (producers). Another benefit is that when there is a direct link between producers and consumers, producers can set the prices themselves and receive the money immediately.

'When you know that you are not merely buying a product, but you are making sure that the person who worked for it can live off his work. I think that is incredible' (community supported agriculture, farmer).

Although the respondents state that reconnecting producers and consumers can solve some issues, they recognize that it can also cause new problems to arise. One of these is the development of an economically viable business. When developing and maintaining a local food system, both producers and consumers are required to make significant commitments of time and money. This kind of commitment might not suit every producer and consumer. For this reason, local food networks that depend on volunteers sometimes find it difficult to become economically viable or maintain that viability. Also the prioritizing of social or ecological goals over economic profit contributes to this issue.

'Consumers are often only looking for an easy way to buy food and do not feel the need to get to know the farmer, organize activities and do something with the team. Some people do not feel this need' (farmers' distribution initiative, manager).

According to the respondents, one solution can be to take a more flexible, pragmatic approach to consumer involvement and to let go of dogmatic beliefs. In this way, the consumers who are willing to invest time and those who are not can both consume local, quality food.

The need for a flexible approach is also mentioned with regard to institutional issues. The respondents advocate an adapted policy that takes business size and local needs into account. According to them, current policy is often aimed at large-scale businesses or is too complex for small producers to manage. Further, policy can and should play an important role in stimulating, facilitating, sensitizing and enforcing in order to make the food system more sustainable.

'When you produce organically, you have to be monitored to prove you are not polluting. On the other hand, when you use polluting, conventional methods, you don't have to pay and you are not monitored... You get a higher price for organic produce, OK, but if producers would have to pay for the damage they cause to the environment and society, organic food would be 100 times cheaper' (community supported agriculture, farmer).

The respondents with narrative B criticize the lack of long-term thinking in policy and the strong financial state support (e.g. subsidies). According to them, turning both of these around will provide a new perspective on food systems and their impact on the environment.

The main spatial challenges within narrative B are logistics and scale. Regarding logistics, the respondents indicate difficulties in balancing logistical efficiency and environmental impacts in terms of time and money. Investments in logistics and transport costs are expensive in comparison to shorter transport distances, which can make it hard to create an economically efficient logistical system with minimum environmental impacts.

'It is our mission to develop sustainable projects that have a significant ecological and social impact, obviously, but that still allow us to make money with a viable business model. That viability can be realized in the long or short term, that doesn't really matter to me. The intention is to finance things and have these investments returned' (urban agriculture, entrepreneur).

Determining the scale on which to operate is not easy according to the respondents. Localizing the food system is a way to limit environmental impacts and to increase consumer involvement, but what local exactly means is hard to determine. As a result, this varies between the respondents from city to provincial and regional levels and even to Western Europe. The respondents recognize that a minimum scale is required to establish a viable business. However, this requires caution and monitoring in order to prevent alternative food systems from becoming absorbed into mainstream systems if this is not their aim.

Finally, equivalent to narrative A, the consumer is the focus of the social issues that were identified in narrative B. Similarly, the respondents believe that consumers are unaware of and contribute to problems such as farmers' income insecurity, food waste and low food prices. However, within narrative B the respondents stress the need to actively involve consumers in order to solve these issues. To the respondents, this implies shortening the food chain and engaging in more direct exchange with a limited number of intermediary actors. As a result, producers can get a fairer price and get to know consumers, who in turn learn about food products and the underlying processes. Another social challenge that has to do with consumers is the need to broaden the interested group of consumers.

'For example for CSA... they get a very narrow audience of people that are already motivated to do that. People who want to put on their boots and sink their shovel into the ground... You only reach the conscious, motivated consumer, but not your average consumer... With projects like these, we hope to include the normal consumer in the story of consuming sustainably' (local food project, entrepreneur).

As a solution, one respondent proposes to be less dogmatic about consumer involvement. In the end, participating is what matters and what already causes a change in consumer behaviour. In sum, narrative B promotes an alternative food system organization based on localization and local and social embeddedness. The main threats to the environment, society and economy are perceived to come from the conventional system. To reduce these perceived negative externalities, the respondents advocate a trade based on a symmetrical approach to nature and society. In practice this means that environmental and social impacts are to be balanced with economic gains. Further, the food community is broadened and consumers are actively involved, both to enhance embeddedness and to get fairer prices.

#### Narrative of the Policy Respondents

The narrative of the policy respondents does not fit either narrative A nor B. Instead, these respondents borrow arguments and solutions from both narratives to constitute their own. As a result, their narrative constantly finds compromises between two recognizably distinct narratives, which is probably the reason why respondents both within narratives A and B indicate the need to develop a stronger policy and a clearer framework that stimulates innovation and enhances the transition towards a more sustainable food system.

'This is a common reproof of the government, especially the Flemish government. They give subsidies to develop GMOs and they give subsidies to organic agriculture, while both are at odds with each other. Policy has to make a choice. Or maybe this is better: not choosing is also a choice... Sometimes decisions have to be made and they will make them. But what is the result? After a few years everything could be revoked' (policy actor, advisor).

This concludes the exploration of the narrative of the policy respondents. Having done the tour, we now proceed to present our conclusions and discussion.

#### **Conclusion and Discussion**

In this article we discussed the embeddedness of the ontological narratives of key actors in the Flemish food system on food system challenges in four dualistic metanarratives: productivism versus post-productivism, mainstream versus alternative, production versus consumption, and science and technology versus eco-social. Based on qualitative analysis, we found two overarching narratives (narrative A and B) that are embedded in opposing metanarratives. Narrative A supports productivist values such as intensification, industrialization and specialization (Wilson, 2001; Bjørkhaug and Richards, 2004). A conventional food system organization with large-scale, export-oriented business (Ilbery et al., 2004) is promoted in order to attain maximum productivity. The strong focus on productivity is also reflected in the embeddedness of narrative A in the production metanarrative, as respondents turn to food chain actors for solving food system challenges (Goodman and DuPuis, 2002). These challenges are mainly attributed to flaws in the (economic) efficiency of food processes, and can be addressed with scientific and technological interventions (Murdoch and Miele, 1999). In contrast, respondents in narrative B downplay the importance of maximizing productivity and adopt instead social and ecological values alongside economic viability (Mather et al., 2006; Jarosz, 2008). Food system

challenges are addressed by stimulating the local and social embeddedness of food systems and through integrative mechanisms that include previously marginalized actors (Goodman, 2002; Roep and Wiskerke, 2010). The narrative of the policy respondents does not fall entirely within either of these two narratives, but instead borrows from both.

Our findings clearly show that, regarding food system challenges in Flanders, dualistic oppositions still prevail in actors' ontological narratives. The respondents identify an alterity, which they perceive to be a threat to their (shared) set of values and practices (Ingram et al., 2014). Respondents with narrative A saw a threat for their organization of the food system; respondents with narrative B indicated a threat for society as a whole. Within these two narratives the identified alterity works as a cohesive force, uniting actors to resist a collectively identified threat (Ingram et al., 2014). Yet it is this unity that is both cause and effect of the persistence of the polarization between the narratives. Furthermore, since actors behave in accordance with their narratives, the dualisms can be translated to their practices as well. Hence, despite evidence of hybrid manifestations in actual practices, our data illustrate that this hybridity is lacking or at the least less prevalent in the narratives of our respondents.

Further research is required to fully understand the link between ontological narratives and dualistic metanarratives and how this translates to practices and networks, but we can make some recommendations for dealing with the existence of dualistic narratives in a context where different actors have to work together. Dualistic polarizations hamper cooperation between actors that are embedded in opposing metanarratives and can even paralyse decision-making. In addition, this also impacts individual performance when actors dismiss potential solutions that do not fit well within their narrative. In this regard, creating a new narrative that embraces contradictions without slighting any actors, can stabilize assumptions for decision-making (Hampton, 2009). The narrative of the policy respondents uses elements from both narratives A and B, and could thus potentially be a bridging narrative. However, we find this narrative to be empty as it combines these narratives because of a lack of choice and not with the aim to bridge the gap. As a result, the narrative of the policy respondents tends to confirm existing polarization. This leads to inconsistencies and hampers decision-making and collaboration as much as the opposition between the other two groups.

Several routes can be taken towards the establishment of a bridging narrative. A first one is linked to the notion of alterity. Although the majority of our respondents identified the alterity as a threat or even as an enemy, one respondent pleaded for a different approach. He argued for a less moralizing and a less dogmatic approach to alterity.

'People are thinking very dogmatic, which prevents real results from happening: they say it should be 100% like this, for example organic, or they won't accept it. Thinking like that is not good enough... You have to make certain compromises' (urban agriculture, entrepreneur).

Indeed, there is a difference between identifying alterity as a threat or as an opponent with whom you need to reach a compromise. By avoiding polarization and drawing lines between 'us' and 'them', this approach leaves more room for collaboration. A similar option is using consensus topics. An example from our case is using the consensus between respondents to change consumer behaviour as a lever for cooperation, participation and change. Consensus topics are general enough that each actor can stay within her or his narrative, and at the same time have the capacity to stimulate exchange between different narratives (Brunori et al., 2013). However, the possibility of different interpretations also implies the possibility of different pathways of action (Brunori et al., 2013). Allowing for too much interpretative flexibility can lead to inconsistent policy or a perpetuation of the polarization that one hopes to overcome. In our case, for example, narratives A and B are polarized with regard to both problem framing and problem-solving, which means that there are different interpretations on at least two levels. Combined with the wide variety of actors that are involved in the food system and the complex nature of food system challenges, the likelihood increases that simply defining a common goal is not going to be enough to move beyond the existing polarizations (Loorbach, 2007). This is further complicated by the continuous reaffirmation of the polarization by the respondents, who use the contradictory narratives to distinguish themselves. A third possibility is acknowledging the reality of opposing and conflicting narratives and using this as a catalyst for change. By confronting the narratives, the relevance of both perspectives can be assessed and questions can be raised that stimulate further debate. Furthermore, this could also encourage cooperation and participation within the food system (Aylett, 2010; Silver et al., 2010). In addition, confronting the narratives can be used to counterbalance skewed power relations. By allowing conflicting perspectives, excluded or marginalized groups are given a voice and engage in social learning. At the same time, more powerful actors are held accountable for their ideas and actions and are required to comply with regulations and agreements (Aylett, 2010; Silver et al., 2010).

Establishing bridging narratives, however, is not easily done and requires complementary insights besides narratives. Sutton (1999) for example points out that narratives serve the interests of certain groups, and help to transfer ownership of processes to members of the group that sustains a specific narrative. Furthermore, Sutton (1999) claims that every narrative needs a counter-narrative in which the decisions and actions made by its representatives are called into question. The concept of the narrative network, can then help to understand (power) dynamics between different groups and the democratic, innovative and inclusive potential of networks (Lejano et al., 2013; Ingram et al., 2014). Although examples can be found in literature of networks that succeed to be flexible and inclusive regarding narratives (Ingram et al., 2014), we find that in Flanders the persistence and internalization of the dualistic metanarratives in actors' ontological narratives leaves little room for this inclusiveness. In this light it is important to study possible routes for bridging narratives from a network perspective. Effective networks have the potential to bridge polarizations, to integrate different perspectives and to forge collective aims (Lejano et al., 2013). Studying the potential links between narratives and networks could provide fruitful insights.

Besides understanding the link between narratives and networks, an investigation of the evolution of different narratives over time could also provide fruitful insights. For example, will repeated confrontation and contact lead to a homogenization of contradicting narratives or will it deepen the divide? In addition, the question which narrative will emerge as dominant over time is relevant. Currently narrative A seems to be more dominant, as we have found that this is the narrative of more dominant actors in the Flemish food system (e.g. retail and food industry). However, there are indications that this could be changing. Powerful actors are feeling threatened by alternative narratives such as narrative B and respond to this in different ways. Some actors try to negate this threat by adapting their own narrative to include elements from the opposing one. Others only adapt their public narrative as a marketing strategy but do not change their own ontological narratives accordingly. To understand and follow this evolution, longitudinal research might be promising to document changes in narratives over time.

Finally, analysing the intersection of ontological narratives and dualistic narratives can also be relevant in other contexts besides that of food system challenges or transitioning the food system. Especially in the context of creating and maintaining alliances or networks, research has shown that getting actors with different expertise and backgrounds to cooperate can be difficult due to their unique perspectives (Cross et al., 2002). Being able to assess the position of relevant actors based on how their ontological narrative is embedded within specific metanarratives can be very interesting then. This is not only true for actors in the field, but can also be relevant to policymakers wanting to stimulate or facilitate certain networks. The assessment can then be used as a tool to anticipate and moderate frictions between stakeholders. At least knowing every actor's position might help to find common ground or stimulate discussion in a context where cooperation is required.

#### References

- ALMSTEDT, Å. (2013) Post-productivism in rural areas: a contested concept, in: L. LUNDMARK and C. SAND-STRÖM (eds) Natural Resources and Regional Development Theory. Umeå: Institutionen för geografi och ekonomisk historia, pp. 8–22.
- ANTROP, M. (2004) Landscape change and the urbanization process in Europe, Landscape and Urban Planning, 67, pp. 9–26.
- AYLETT, A. (2010) Conflict, collaboration and climate change: participatory democracy and urban environmental struggles in Durban, South Africa, *International Journal of Urban and Regional Research*, 34(3), pp. 478–495.
- BERGEN, D. (2011) Grond te koop? Elementen voor de vergelijking van prijzen van landbouwgronden en onteigeningsvergoedingen in Vlaanderen en Nederland. Brussel: Departement Landbouw en Visserij.
- BJØRKHAUG, H. and RICHARDS, C.A. (2004) Sustaining Agricultural in Australia and Norway : A Multifunctional Approach. Presented at 'Globalisation, Risks and Resistance: XI World Congress of Rural Sociology', Trondheim, 25–30 July.
- BJØRKHAUG, H. and RICHARDS, C.A. (2008) Multifunctional agriculture in policy and practice? A comparative analysis of Norway and Australia, *Journal of Rural Studies*, 24(1), pp. 98–111.
- BOMANS, K., STEENBERGHEN, T., DEWAELHEYNS, V., LEINFELDER, H. and GULINCK, H. (2010) Underrated transformations in the open space: the case of an urbanized and multifunctional area, *Landscape and Urban Planning*, 94(3–4), pp. 196–205.
- BRUNER, J. (1991) The narrative construction of reality, Critical Inquiry, 18(1), pp. 1-21
- BRUNORI, G., MALANDRIN, V. and ROSSI, A. (2013) Trade-off or convergence? The role of food security in the evolution of food discourse in Italy, *Journal of Rural Studies*, 29, pp. 19–29.
- BURCH, D. and LAWRENCE, G. (2005) Supermarket own brands, supply chains and the transformation of the agri-food system, *International Journal of Sociology of Agriculture and Food*, 13(1), pp. 1–28.
- CLEVELAND, D.A., RADKA, C.N., MÜLLER, N.M., WATSON, T.D., REKSTEIN, N.J., WRIGHT, H.V.M. and HOLLINGS-HEAD, S.E. (2011) Effect of localizing fruit and vegetable consumption on greenhouse gas emissions and nutrition, Santa Barbara County, *Environmental Science and Technology*, 45(10), pp. 4555–4562.
- CLEVELAND, D.A., MÜLLER, N.M., TRANOVICH, A.C., MAZAROLI, D.N. and HINSON, K. (2014) Local food hubs for alternative food systems: a case study from Santa Barbara County, California, *Journal of Rural Studies*, 35, pp. 26–36.
- CRESWELL, J.W. (2003) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* Thousand Oaks, CA: Sage Publications.
- CROSS, R., BORGATTI, S.P. and PARKER, A. (2002) Making invisible work visible: using social network analysis to support strategic collaboration, *California Management Review*, 44(2), pp. 25–46.
- EUROSTAT (2014) *Population Density by NUTS 3 Region*. Published online <a href="http://appsso.eurostat.ec.europa">http://appsso.eurostat.ec.europa</a> .eu/nui/show.do?dataset=demo\_r\_d3dens&lang=en>, accessed 10 Sept. 2014.

- EVANS, N., MORRIS, C. and WINTER, M. (2002) Conceptualizing agriculture: a critique of post-productivism as the new orthodoxy, *Progress in Human Geography*, 26(3), pp. 313–332.
- FONTE, M. (2002) Food systems, consumption models and risk perception in late modernity, *International Journal of Sociology of Agriculture and Food*, 10(1), pp. 13–21.
- FREIBAUER, A., MATHIJS, E., BRUNORI, G., DAMIANOVA, Z., FAROULT, E., GIRONAGOMIS, J., O'BRIEN, L. and TREYER, S. (2011) Sustainable Food Consumption and Production in a Resource-constrained World, 3rd SCAR Foresight Excercise. Brussels: European Commission, Standing Committee on Agricultural Research.
- GOODMAN, D. (2002) Rethinking food production-consumption: integrative perspectives, Sociologia Ruralis, 42(4), pp. 271–277.
- GOODMAN, D. and DUPUIS, E.M. (2002) Knowing food and growing food: Beyond the production-consumption debate in the sociology of agriculture, *Sociologia Ruralis*, 42(1), pp. 5–22.
- HAMPTON, G. (2009) Narrative policy analysis and the integration of public involvement in decision making, *Policy Sciences*, 42(3), pp. 227–242.
- ILBERY, B. and MAYE, D. (2005) Food supply chains and sustainability: evidence from specialist food producers in the Scottish/English borders, *Land Use Policy*, 22(4), pp. 331–344.
- ILBERY, B., MAYE, D., KNEAFSEY, M., JENKINS, T. and WALKELEY, C. (2004) Forecasting food supply chain developments in lagging rural regions: evidence from the UK, *Journal of Rural Studies*, 20(3), pp. 331–344.
- INGRAM, M., INGRAM, H. and LEJANO, R. (2014) What's the story? Creating and sustaining environmental networks, *Environmental Politics*, 23(6), pp. 984–1002
- JAROSZ, L. (2008) The city in the country: growing alternative food networks in Metropolitan areas, *Journal* of *Rural Studies*, 24(3), pp. 231–244.
- LEINFELDER, H., PISMAN, A. and ALLAERT, G. (2008) Naar een methodiek voor de systematische benadering van bestaande en potentiële ruimtelijke verweving, *Ruimte en planning*, 28(4), pp. 29–41.
- LEJANO, R., INGRAM, M. and INGRAM, H. (2013) The Power of Narrative in Environmental Networks. Cambridge, MA: MIT Press.
- LOORBACH, D.A. (2007) Transition Management: New Mode of Governance for Sustainable Development. PhD Dissertation, Erasmus University Rotterdam.
- LUTZ, J. and SCHACHINGER, J. (2013) Do local food networks foster socio-ecological transitions towards food sovereignty? Learning from real place experiences, *Sustainability*, 5(11), pp. 4778–4796.
- MARTENS, S. and SPAARGAREN, G. (2005) The politics of sustainable consumption: the case of the Netherlands, Sustainability: Science, Practice and Policy, 1(1), pp. 29–42.
- MATHER, A.S., HILL, G. and NIJNIK, M. (2006) Post-productivism and rural land use: cul de sac or challenge for theorization?, *Journal of Rural Studies*, 22(4), pp. 441–455.
- MORGAN, K., MARSDEN, T. and MURDOCH, J. (2006) Worlds of Food: Place, Power, and Provenance in the Food Chain. Oxford: Oxford University Press.
- MURDOCH, J. (1997) Inhuman/nonhuman/human: actor-network theory and the prospects for a nondualistic and symmetrical perspective on nature and society, *Environment and Planning D: Society and Space*, 15(6), pp. 731–756.
- MURDOCH, J. and MIELE, M. (1999) 'Back to nature': changing 'worlds of production' in the food sector, Sociologia Ruralis, 39(4), pp. 465–483
- MURDOCH, J., MARSDEN, T. and BANK, J. (2000) Quality, nature, and embeddedness: some theoretical considerations in the context of the food sector, *Economic Geography*, 76(2), pp. 107–125.
- O'NEILL, K.J. (2014) Situating the 'alternative' within the 'conventional': local food experiences from the East Riding of Yorkshire, UK, *Journal of Rural Studies*, 35, pp. 112–122.
- PATTON, M.Q. (2002) Qualitative Research and Evaluation Methods, 3rd edn. Thousand Oaks, CA: Sage Publications.
- POELMANS, L. and VAN ROMPAEY, A. (2009) Detecting and modelling spatial patterns of urban sprawl in highly fragmented areas: a case study in the Flanders-Brussels region, *Landscape and Urban Planning*, 93, pp. 10–19
- ROEP, D. and WISKERKE, J.S.C. (2010) On governance, embedding and marketing: reflections on the construction of alternative sustainable food networks, *Journal of Agricultural and Environmental Ethics*, 25(2), pp. 205–221.
- ROGGE, E., NEVENS, F. and GULINCK, H. (2007) Perception of rural landscapes in Flanders: looking beyond aesthetics, Landscape and Urban Planning, 82(4), pp. 159–174.
- SHEEHAN, H. and SWEENEY, S. (2009) The Wire and the world: narrative and metanarrative, Jump Cut, 51, published online <a href="http://www.ejumpcut.org/currentissue/index.html">http://www.ejumpcut.org/currentissue/index.html</a>>.
- SILVER, H., SCOTT, A. and KAZEPOV, Y. (2010) Participation in urban contention and deliberation, International Journal of Urban and Regional Research, 34(3), pp. 453–477.
- SOMERS, M.R. (1994) The narrative constitution of identity: a relational and network approach, *Theory and Society*, 23(5), pp. 605–649.
- SONNINO, R. and MARSDEN, T. (2006) Beyond the divide: rethinking relationships between alternative and

conventional food networks in Europe, Journal of Economic Geography, 6(2), pp. 181–199.

- SPAARGAREN, G. and VLIET, B. VAN (2000) Lifestyles, consumption and the environment: the ecological modernization of domestic consumption, *Environmental Politics*, 9(1), pp. 50–76.
- STRATEGISCHE ADVIESRAAD VOOR LANDBOUW EN VISSERIJ (2010) Advies over de beleidsnota Landbouw, Visserij en Plattelandsbeleid 2009–2014. Brussel: Strategische Adviesraad voor Landbouw en Visserij.
- SUTTON, R. (1999) The Policy Process: An Overview, Working Paper 18. London: Overseas Development Institute.
- WALFORD, N. (2003) Productivism is allegedly dead, long live productivism: evidence of continued productivist attitudes and decision-making in South-East England, *Journal of Rural Studies*, 19(4), pp. 491–502.
- WATTS, D.C.H., ILBERY, B. and MAYE, D. (2005) Making reconnections in agro-food geography: alternative systems of food provision, *Progress in Human Geography*, 29(1), pp. 22–40.
- WILSON, G.A. (2001) From productivism to post-productivism... and back again? Exploring the (un) changed natural and mental landscapes of European agriculture, *Transactions of the Institute of British Geographers*, 26(1), pp. 77–102.