

The political ecology of alternative agriculture

Ontological difference and conflict
in the struggle over sustainability in Scania and on Zealand

Bachelor's thesis in Human Ecology

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Abstract

The aim in this thesis is to explore how power dynamics are involved as one way of knowing the environment is held to be more rational than the other. This is being put in the case of the development of alternative agriculture in Sweden and Denmark, where organic agriculture has managed to gain greater attention in recent years whilst biodynamic farming has been less successful. Furthermore, this thesis explores the project of political ontology; how the difference between organic and biodynamic farming can be understood as ontological and in what ways these differences are linked to unequal power relations. Qualitative interviews were conducted with five biodynamic farmers in Scania and on Zealand for this research.

The findings of this research suggest that the biodynamic farmers struggle with the dominant understanding of the world limited to a biophysical view on it. Meanwhile, organic farming has managed to negotiate with such ideas and made changes towards ecological modernization. The biodynamic farmer's understanding of the environment exceeds a biophysical understanding of it. The struggle of what should be included in a concept of sustainability could in such a way be understood as an ontological conflict. The ontological difference of organic and biodynamic farming implies different positions of power for them, since different associations are made with the respective understanding of the environment. Overall, the findings suggest that fundamental ontological difference plays a role in the power dynamics which the biodynamic and organic movement find themselves in.

Keywords: Biodynamic farming, alternative agriculture, political ontology, political ecology, human ecology, organic farming, sustainability

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1 Introduction

The initial idea for this thesis started with wine.

Before and during my studies I've been working in various restaurants in Malmö and Copenhagen. After getting familiar with the gastronomic influence from Copenhagen I took a strong liking to the world of the new Nordic cuisine. What caught my attention was its focus on benefitting from the local environment and on ethical production, but in particular its association with natural wines. Having an interest in wines from before, it was my experience that the world of wines (especially the self-appointed experts on wine) sometimes could feel conservative, a bit pretentious and excluding. By being introduced to natural wines and getting to meet with several of those wine farmers myself, I was served a very different picture of what wine can mean. I was met with a passion for the product, but above all a passion for the environment and the idea of an environment being reflected in a product. Since many of the wines were made with biodynamic methods, this was where I stumbled upon biodynamic agriculture for the first time.

I gradually came to understand that the opinions on biodynamic agriculture were quite varying. It could at times even be met with mockery, depending on if you talked to guests in a restaurant less aware of the production process of wine or when talking to people more engaged in the matter. It made me wonder why biodynamic farming was considered so odd by some people. And if biodynamic farming, much like organic farming, represents a sustainable alternative in agriculture, why isn't organic farming being met with the same reactions? And perhaps most importantly, if some alternatives are so quickly rejected, does this mean that we are missing out on some things in the debates on sustainability?

It has from my studies in Human Ecology and Political Ecology become more apparent that the debates on sustainability and the environment are widely faceted, as some knowledges on the topic are being given less attention than others. This occurs to that extent that some knowledges aren't being understood on their own terms, but instead often refunctionalized to fit a dominant understanding of sustainability (Escobar 1998:61). It is therefore my belief that the framework of political ecology could offer insights on whose understanding of the environment matters, and how power dynamics are involved as some knowledges of the environment are held to a larger credibility than others.

1.2 Aim and research questions

In this thesis I aim to propose a humble contribution to the works examining the power relations involved in whose knowledge or understanding of nature holds larger credibility (such as Escobar 1998, Escobar 2008, Martinez-Aliér 2004). In an effort to understand why organic agriculture receives more attention than biodynamic agriculture in Sweden and Denmark I've taken the liberty to explore the framework of political ontology. In other words, I aim to explore how the difference between organic and biodynamic farming can be understood as ontological and in what ways these differences are linked to unequal power relations.

I propose the following research questions:

What conflicts arise as the biodynamic movement tries to make a space for them within a dominant understanding of 'sustainability'? How can these conflicts be understood as ontological?

1.3 Scope and constraints

The setting for this thesis is limited to Scania in southern Sweden and Zealand in Denmark, which are the settings for the biodynamic farmers who participated in this research. Although the subject of agriculture, both biodynamic and organic, is treated, the mistake of understanding this thesis as an effort of investigating the capabilities of the two different practices shouldn't be made. The research is a qualitative approach and focuses on power relations in discourse, rather than using an approach of natural science.

The main focus in this thesis is on the narratives from biodynamic farmers through the lens of political ecology and political ontology. There has in such been put less focus on political economy, which otherwise is often used in relation with the framework of political ecology.

1.4 Earlier research

Whilst organic farming seems to be a much more recurrent subject of research, a focus on biodynamic still occur. On the theme of biodynamic farming, there is a variety of articles to be found. Most of them do however have a larger focus on the natural science. One example is the assessment of different farming types' ecological footprint, arguing that biodynamic farming, together with organic farming, present a viable alternative for reducing ecological

degradation in agriculture (Bavec et. al. 2011). Another example is the assessment of antioxidant activity in conventional, organic and biodynamic products, finding that biodynamic products had the highest antioxidant activity when comparing ripe products, whilst organic products had the highest when comparing the unripe ones (Maciel et. al. 2011). The human ecological- approach to biodynamic farming is less recurrent.

On the matter of ontology, I've found one article exploring the ontological approach in relation to alternative agriculture in Denmark, although it doesn't combine it with power dynamics involved. Rather, it investigates Latour's actor-network theory in the case of the organic movement in Denmark and how multiple ontologies on nature exist in spite of modernity (Kaltoft 2001). Other research in the category of political ontology and political ecology, although in different settings than for this thesis, will be tended to in the chapter introducing the theoretical framework for this thesis.

1.5 Disposition

The next chapter (2) offers a brief historical background of organic and biodynamic farming, as well as a brief account for how biodynamic and organic agriculture are organized in Sweden and Denmark today.

The theoretical framework for this thesis is presented in chapter 3. These include political ontology, political ecology and the concept of power/knowledge.

In chapter 4, I present the methodological approaches for this thesis, including both the collection of data and analysis of data.

The analysis – discussion in relation to the material - is found in chapter 5. This chapter is divided into four subsections. The first of these discusses the ontological difference of organic and biodynamic farming. The second discusses biodynamic and organic farming's relation to the concept of 'sustainability' and how they are confronted with dominant ideas. The third discusses how organic and biodynamic farming negotiate with dominant ideas. The fourth subsection discusses how associations with the different ontological assumptions on the environment propose different positions of power for the biodynamic and organic movements.

Final conclusions are presented in chapter 6.

2 Background

As will be more apparent in the analysis, where I focus on how biodynamic farming differs from other cultivation practices with help from the interviewees, it is difficult to find a clear definition of biodynamic farming. The practice is surrounded by multiple opinions, where each farmer has his or her own priorities on what constitutes a biodynamic farm. I will however make a brief history about biodynamic farming, from where it stems and how it is organized in Sweden and Denmark today, but I would like the reader to keep in mind that it does not offer a deeper insight to how an individual farmer sees biodynamic farming. I would also like to note that due to the setting of this thesis, the background offered is also limited to the European and Global North concepts of alternative farming.

2.1 A small history of biodynamic farming

Biodynamic farming has its roots with the anthroposophic movement in Germany (Vogt 2007:19). Anthroposophy is, in short, a world view, or philosophy, developed by Rudolf Steiner (1861-1925) which initially didn't involve agriculture specifically (Vogt 2007:19). In the beginning of the 20th century reactions to the increase in use of chemicals and industrial intensification in agriculture grew as it had led to a crisis of soil erosion and a decrease in food quality (Vogt 2007:9). As several movements developed on the matter of reforming agriculture towards a more sustainable practice, the matter also reached a concern of anthroposophic farmers (Vogt 2007:9, 19). Some of the foundational principles in anthroposophy are seeing the earth as part of the universe, meaning that influences from outside the earth needs to be taken into account, and the world consisting of physical as well as spiritual elements (Vogt 2007:19, Arman 1979:12). These principles are present in what came to be called biodynamic farming. The development of biodynamic farming within anthroposophy began with the agriculture lectures held by Rudolf Steiner, which was held privately for around 60 anthroposophic farmers in 1924 (Vogt 2007:19). The eight lectures provided guidelines, but no specific directives for cultivation according to anthroposophic principles (ibid.). One of the strongest points made by Steiner in these lectures was the notion of the farm as a living organism and individuality which should be able to perform and reproduce as a closed unit, without supplies from outside (Vogt 2007:20). Biodynamic farming was further developed by other farmers who for example tested and developed biodynamic preparations and developed composting techniques (Vogt 2007:19-21). Another example is the development of a sowing- and harvest almanac according to the moon and constellations, a product by Maria Tuhn (Arman & Bergström 1976:76-77). The standards for biodynamic farming through the organization Demeter were first introduced in 1928, after Steiner's death (Vogt 2007:22). What biodynamic

farming is today is in this sense more a product of development made by different farmers inspired by the lectures, than it is a product of the lectures themselves.

2.2 A small history of organic farming

What we know to be organic farming today is a combination of ideas on alternative farming rooted foremost in English- and German speaking countries at the end of the 19th century (Vogt 2007:9). As mentioned, that turn of the century saw several reactions to the intensified use of chemicals in agriculture, perhaps one of the most memorable voices being that of Rachel Carson with her book 'Silent Spring' (1962), written a few years before the movement for organic farming grew stronger (Vogt 2007:9). According to Vogt, prominent influences have been knowledge of biologically oriented agricultural science, the visions of several movements promoting their version of alternative agriculture (biodynamic agriculture included) and an interest in adopting farming concepts from the Far East, such as India, growing in Europe (Vogt 2007). Even though biodynamic farming was successful initially, both in terms of ecological benefits and growth, its foundational principles of cosmic influences and farm individuality hasn't been incorporated in today's modern, science-based concept of organic farming (Vogt 2007:20). In the 1970's the efforts for a shift in agriculture increased as environmental activists allied with anti-war activist due to them having the chemical companies as a common enemy (Lockeretz 2007:5). The leading matters in the advocacy of organic farming at this time involved the renunciation of chemicals in agriculture, sustainable practice such as the biological understanding of soil fertility, food quality and considerations of animal husbandry (Vogt 2007:9). During the 1990's organic farming received a great boost especially in the Nordic and German speaking countries, which had much to do with policies integrated in the various countries as well as the definition of organic farming being established in the EU (Michelsen 2002:101-102). For example, in 1994 the Swedish government set up a goal of 10 % of the national agriculture being organic by the year 2000 (Broberg 2010:823).

2.3 The organizations of biodynamic and organic farming in Sweden and Denmark today

Both Sweden and Denmark have leading institutions on organic farming. In Denmark the brand "Ø-mærket" is the national certification for organic farming established in 1988 controlled by the Danish state and enforced by the Danish veterinary and food administration (Fødevarestyrelsen 2018, Kaltoft 2001:148). In Sweden the national

regulatory institution for organic farming is run by a members association called KRAV, officially recognized by the Swedish government in 1993 (Broberg 2010:823).

There are also national associations and certification organs for biodynamic farming in Sweden and Denmark, although they don't have the same connections to their national governments. The Biodynamic Association in Sweden, founded in the year 1944, is situated in Järna, not very far from the capital (Biodynamiska föreningen 2014). In the area the association cooperates with four schools, where one of them is purely oriented in biodynamic agriculture. In Denmark the association for biodynamic farming was founded in 1936 according to the association's website (Foreningen for Biodynamisk Jordbrug 2018a). They are currently situated with offices in both Odense and Århus, but unlike the biodynamic association in Sweden they don't have an official education in biodynamic agriculture, although there are smaller courses to attend. They do however have representatives in some councils on organic agriculture and research. Both the Danish and Swedish associations also release a paper four times a year to association members.

The national associations are also connected to Demeter International, a certification body for biodynamic products. The certification of biodynamic products in Sweden and Denmark is performed by national Demeter associations.

It is difficult to find current figures on active biodynamic farmers. According to the websites of the Swedish Demeter association and Danish biodynamic association there are 17 biodynamic farms in Sweden and 42 biodynamic farms in Denmark, certified according to the Demeter standards (Foreningen for Biodynamisk Jordbrug 2018b, Svenska Demeterförbundet 2018a). It is however possible that there are more (or less) farms than that, which aren't certified.

Although the numbers for biodynamic farms aren't completely certain, it is clear the biodynamic movement is smaller than the one for organic farming when the numbers are put in relation to the numbers of organic farms in Sweden and Denmark. There were 3700 farms certified organic in Sweden according to KRAV's 2017 annual report and 3793 farms certified organic in Denmark according to statistics from the Danish ministry of environment and food (KRAV 2017, Landbrugsstyrelsen 2019).

3 Theoretical framework

During the course of conducting this thesis, frameworks have been changed and tweaked in relation to the responses I've received from the interviewees. As the farmers told stories about struggles involving the legitimacy and recognition of their practice from others, a large focus falls on theory regarding power relations involved in discourse and knowledge. Presented foremost in this chapter is the framework of political ontology, which offers suggestions on how to understand difference.

3.1 Political ontology

As the humanities, along with human ecology, have "enjoyed" an "ontological turn", I have taken the liberty to explore the framework of political ontology in this thesis. This implies an effort of trying to understand conflict or difference as ontological instead of cultural - i.e. in this thesis I aim to investigate the politics, or notions of power at play in the efforts of achieving a sustainable agriculture, with an ontological approach. The turn to ontology within the humanities has been set forth by several authors (see for example Descola 1996 and Escobar 1998), who claim that there is need for an approach which takes larger consideration to subjectivity and epistemologies involved when conducting research. I will however in this thesis concentrate more on the way the framework is presented by Mario Blaser and Anders Burman.

Both Mario Blaser and Anders Burman have engaged in and put the framework of political ontology to use in settings concerning indigenous knowledge in order to show how the history of colonialism is a present story (Blaser 2013, Blaser 2009, Burman 2016). This in regards to whose knowledge matters, forming what Burman calls a 'coloniality of reality' (Burman 2016:78). Although the notions of a colonial history won't be concerned in this thesis, I would like to argue that political ontology offers an analytical tool of approaching difference which still can be implemented in the setting of this thesis. The definition of ontology used here will in such follow the definitions used by Blaser and Burman; an ontology represents a set of ideas about "what exists" which in turn forms a certain "reality" or "truths" (Blaser 2013:547-8, Burman 2016:79). What Blaser calls the "project" of political ontology, is the recognition of some misunderstandings, or conflicts, as ontological;

"Ontological conflicts involve conflicting stories about "what is there" and how they constitute realities in power-charged fields". (Blaser 2013:548)

The recognition of ontological conflicts also mean the recognition of multiple existing ontologies, and therefore challenges the modern “multiculturalist” understanding; that there is one objective world “out there” with different cultural perspectives on it (Blaser 2009:11, Blaser 2013:548). Thus, the recognition of ontological conflicts means the recognition of multiple existing “realities” or “worlds”.

According to Blaser, the necessity of the ontological turn lies in the misuse of the concept of culture (2013:547-550). Culture is a concept which has been used with a Eurocentric perspective to explain “otherness”, by putting the “other” in a relative position to “us” Europeans (Blaser 2013:548). In such way, the use of the concept of culture has historically brought the idea that different cultural perceptions on nature are misunderstandings of our world. (Burman 2016:80).

The Eurocentric history of “othering” cultures, and the history of Social Darwinism,¹ was later criticized in anthropology. Since the view of culture as “traditional”, “closed” made it impossible to explain how western dominance had influenced these cultures, the critique resulted in the view that we are all, in one way, modern (Blaser 2013:548-549).

The view of an all-encompassing modernity does however still allow the West to define identities of others (Escobar 2008:3). The strategy of “sameing” cultures in order to avoid “othering” has also resulted in the concept of culture becoming “thin” and thus inadequate for dealing with difference (Blaser 2013:549-50).

The ambition with political ontology is in this response, to find ways in understanding difference on their own terms, a way of dealing with and taking seriously, real differences on “what is there”. Here, the “political” is crucial in order to recognize notions of power and hegemony in order to avoid the reproduction of descriptions of different understandings on the world as misunderstandings (Burman 2017, Burman 2016:80, Blaser 2013:550).

The turn away of the assumption that there is one objective nature “out there”, has been questioned by some authors (see for example Alf Hornborg 2015). The concern includes for instance that the recognition of multiple “realities” would obstruct the use of and benefits that ecology and biology, as seen within natural sciences, has for research within political ecology and political economy. However, as Burman argues, the turn to a political ontology does not need to imply a turning away from political economy or the turn to a fundamental view on ontology (Burman 2016:80). What should be emphasized, is how the ontological turn also is a reaction to how the own ontological status has been taken for granted in former research (Blaser 2013:550). This considering, I do not immediately oppose future research which benefits from the knowledge produced within the natural sciences with the

¹ Social Darwinism is the view on societal development according to evolutionary principles. That society, much like nature, goes through a process of natural selection or ‘survival of the fittest’ (Ritzer 2009:36).

turn to ontology I carry out in this thesis. I would however argue that there is a need to be aware of our own ontology when making such studies, especially the ontological limitations.

In this thesis, I will use the framework of political ontology in an investigative way. It will in a way be an exercise in trying to understand how the stories from biodynamic farmers can be seen as ontologically different when they are comparing themselves to other practices that are considered sustainable. Besides approaching biodynamic farming with ontology and taking in consideration the discussion just presented, the idea is also to understand how they are confronted with dominant ideas, how they negotiate with them and how they try to sustain their own existence (Blaser 2009:11).

3.2 Political ecology

The framework of political ecology is not limited to one single concept or one single body of theory, but is rather consistent of several, which come together into one field (Robbins 2012:9). As the field was conceptualized in the 1970's during discussions on the relation between political economy and environmental degradation, in connection to a growing environmental movement, much of the early research in political ecology has focused on power relations between the global north and south, where the incorporation of a global market in local communities has large implications for both local environments as well as the people in these communities, and causes a new rationality to form which hollows local knowledge and understanding of the environment (Walker 2005:74). As the field has developed into more branches, several political ecologists have started examining the politics of power and knowledge at a local scale (Walker 2005:75).

Common to the field is however the assumption, and conviction, that we cannot disconnect "nature" from society, and in order to fully understand issues concerning environment, we need to look beyond ecology. As Paul Robbins argues:

"[P]olitical ecology [is] a field that seeks to unravel the political forces at work in environmental access, management, and transformation [... and] the way that politics is inevitably ecological and that ecology is inherently political" (2012:3).

Although the field has been criticized by some for missing out on the "ecology" (Walker 2005), the "political" in political ecology is playing an important role as to explain the use of natural resources. Debates on environmental issues are taking place in local communities as well as international political platforms, which calls for the need for an exploration of the power relations involved in these interactions, and the power dynamics

between different environmental interests and knowledges (Gezon & Paulson 2005:1).

Political ecology in this sense also addresses the limitation to ecological explanations, i.e. explanations which are given through a natural science perspective by for example calculating environmental impact and the quantification of such in monetary form. These explanations fail in general to address other values such as loss of cultural patrimony, loss of biodiversity, impaired livelihood or other human rights violations which take place in such conflicts (Martinez-Alier 2004:28). Besides giving a broader picture to the complexity of environmental issues, Martinez-Alier argues that, what is relevant to political ecology is the notions of power at play when one language which simplifies the complexity of environmental issues triumphs over other languages (2004:28-9).

In this thesis, I won't address an environmental issue grounded in empirical data, which in this case might have been suggested to be on the ecological impact of different cultivation models. The focus is here on different views on sustainability and the power dynamics involved in discourses on our biophysical environment, more specifically; on how the environment is mediated and expressed by one particular movement engaging in farming and how they through their practice are claiming a space in a discourse on sustainability. In this sense, the focus lies more on the power dynamics of discourse than it does on measured ecological consequences of a certain cultivation method. In response to any critique on the ecology in political ecology, I would like to emphasize that those who within the field of political ecology don't engage directly with ecology are in a broader sense invoking 'concerns of ecology', but doing so through questions of power, representation and the rights of people living and working in the environment (Walker 2005:78). This, of course, also involves a broadening of the concept (ecology), as perhaps seen by natural scientists.

In a summarizing conclusion to this, I would like to emphasize that there are power relations at play in who gets to decide what is being included and what is discarded in not only environmental issues but also in the perception of environment itself. In regards to my aim and research questions, I will in this thesis pay a greater attention to what Escobar and Paulson (2005) refer to as an alternative political ecology, focusing more in particular on the power relations involved in discourses, more specifically how discourses on the environment are being reduced to dominant views on it. It is with these tools given that I hope to bring a further understanding to how the discourse on what sustainable farming is is limited due to power dynamics.

3.3 Power/knowledge

The concept of power/knowledge is one which has been used in political ecology to understand how dominant ideas on nature are mediated in discourse. It is a concept associated with the works of Michel Foucault, but in this thesis I will also take inspiration from works by Stanley Jeyaraja Tambiah (1990). From the material collected in interviews, I noticed how words such as “rationality” were used in a way to legitimize certain parts of practices and I found that the concept of power/knowledge could help identify dominant ideas and understand how negotiations occur with these ideas. I find it above all useful in conjunction with political ontology. Relevant to both political ecology and political ontology is that not all knowledges enjoy equal power, and that this inequality has implications for both environments and people in them (Gezon & Paulson 2005:11).

For understanding how dominant ideas interfere within a discourse on sustainability, I will in this thesis use Michel Foucault’s understanding of truth. Foucault argues, that truth is a type of idea which holds logic, is taken for granted, isn’t being disputed/challenged by the person herself and is therefore an effect of power (Robbins 2012:70). By being taken for granted, seeming logic or rational, it enforces social order (Robbins 2012:70). In this sense, politics becomes implicit to what is considered true, or as Michel Foucault puts it:

“Ideas are not powerful because they are true, they are true because of power” (cited in Robbins 2012:124).

These truths, Foucault suggests, are being upheld through discourse and by institutions (Robbins 2012:70). In this sense, politics and domination are always involved in knowledge, as well as the institutions in which knowledge is produced, which brings me to also take a bit of help from Tambiah’s history on modern science (1990). In his book, with help from other writers of the Frankfurt School, Tambiah describes how modern science, as defined as hard science, or positive science, in Western civilization “is held to be the quintessential form of rationality” (1990:140). He also highlights that the historic development of Western science in Europe involved a separation by science off of religion, which also includes its rejection of forms of “magic” (ibid.). The rationale of science has in such ways resulted in a science/magic dichotomy, where science becomes a powerful truth above things considered falling into a category of “magic”. This theme will be more thoroughly investigated in the analysis of this thesis and will be a critical tool in understanding the power dynamics of knowledges within a global north setting.

4 Methodological approach

4.1 Qualitative interviews

Due to the character of the research questions for this thesis, there was need for a method which allows the respondents to explain the complexities and possible conflicts of their experiences. The use of interviews for this thesis has been a tactical choice to open up the conversation, avoid being limited to certain categories and an effort to move beyond a standardized answer. These are according to Valentine some of the benefits of conducting interviews over for example the usage of a questionnaire (2013:110-111). The aim was to conduct interviews more similar to a conversation, but guided with the help from an aide-mémoire – in this case a list of topics drawn based on my original research questions which I could turn to during the interview if needed. Such interviews, where the interviewer puts a larger focus on following up on points made by the interviewee than questions set up beforehand, are what Bryman describes as an unstructured interview style (2016:468). Some points made in a former interview were however sometimes followed up in an interview with a new informant in order to see if some opinions or experiences were recurrent. Some of the interviews could in such be defined as semi-structured, considering a couple of questions were outlined beforehand (Bryman 2016:468). Emphasis was however put on the open structure. One interview was conducted over the phone because one interviewee had a limited amount of time to spend. The time limit led me to make compromises on the open structure for this interview and instead apply a semi-structured interview, with some questions written up beforehand. The qualitative character did however still remain, as space was made to follow up on certain points made by the interviewee (Bryman 2016:468).

In total, four interviews were conducted with five farmers (the half of one interview was conducted with two farmers present). Three of the interviews took place in the fall of 2015 and the fourth in the fall of 2018. With exception for the interview conducted over telephone, the interviews were held at the farms and/or homes of the interviewees. The setting of an interview can either produce or prevent a relaxed environment and in such influence the conversation (Valentine 2013:118). I therefore made the choice to let the farmers speak on their own 'territory', hoping that this might be a space where they feel comfortable to speak freely about their practice. This setting also offered the interviewees to point to material they had available or show me around their farm in order to further explain their arguments. The duration of the interviews varied from 1.5 hours to 3 hours, with exception for the telephone interview which lasted half an hour. As taking notes

during the interview can distract the conversation (Bryman 2016:479), all interviews were recorded after consent and hereafter transcribed.

4.2 Sampling

The qualitative approach in this thesis has influenced the sampling process. Valentine argues that the aim when performing qualitative interviews is not to achieve a representative sample of informants, but instead try to achieve an illustrative one (2013:112). The geographical location of the interviewees has however constituted a factor of representation, considering the geographical scope for this thesis. It is however most important to find people who are willing to share their knowledge and experiences (Cloke et al. 2004:156).

The aim for this thesis was thus to find biodynamic farmers in the regions of Zealand and Scania who have a considerable amount of experience in the practice. Four different farms in Denmark were contacted by email, using the list of farms on the Danish biodynamic association's webpage. Two of the contacted responded and were willing to meet for an interview, which ultimately resulted in three informants as two were working at the same farm. Realizing that biodynamic farming is practiced by quite few in Scania, I had to choose a different tactic in how to find informants for this location. One informant was encountered on a fair where the Swedish biodynamic association was present. The other informant based in Scania was contacted via email after receiving the contact information from a friend. It is therefore fair to say that the time limit for this thesis and unforeseen difficulties have had an effect on the sampling process.

To clarify; five interviewees have contributed to this thesis, whereof three are situated on Zealand (Denmark) and two in Scania (Sweden), three of the interviewees are men and two are women. Although the quantity of interviews was limited, the unstructured conversations conducted allowed for the collection of in-depth qualitative data.

4.3 Method for analysis

Alvesson & Sköldbberg (2018:13) proposes hermeneutics as an important form of reflection, recognizing how research should be seen as an interpretive activity. Hermeneutics emphasizes the plurality of interpretation in the analysis of data, the belief that a circular mode of interpretation, going between understanding and pre-understanding will bring inspiration and reveal knowledge concealed when seeing research as a linear casual

connection (Alvesson & Sköldbberg 2018:113-121). In accordance to the method suggested, I've revisited the data in order to find patterns on recurring subjects. This has led me to adapt my theoretical framework, not being bound to certain pre-understanding, but letting the data affect this theoretical pre-understanding.

The transcripts were printed and coded manually with marking pens. The initial coding consisted of two categories – one where the farmers explain their practice and how they define biodynamic farming and the other where the interviewees mention conflicts regarding this definition and conflicts arising in relation to other views. A process of revisiting data, going from the primary material to theory and back to the primary material again, was applied. The second category was in such a way later divided into three subcategories.

The subcategories are a mixture of issues proposed by the interviewees and my interpretation of other statements made by the interviewees belonging to that same category. What the researcher should be aware of when carrying out an analysis is to what extent codes or categories of the material are a result of interpretation by the researcher and to what extent the codes are a result of relationships the interviewees have used more consciously (Crang 2013:231). There are of course grey areas between these and it is therefore difficult to establish an exact position (ibid.). What I'd like to acknowledge though, is that the analysis is largely influenced by my own interpretation of the data which means that it might look different through someone else's point of view.

4.4 Reflexivity

The constructivist approach in this thesis may spur critique based on a positivistic view on scientific objectivity, seeing that research using qualitative interviews is nearly impossible to replicate and considering the subjectivity involved in the use of such a method (Valentine 2013:111, Cloke et al. 2004:126). Taking a post-structuralist perspective on this topic, there is however reason to argue against an assumed objectivity at all existing in research (Valentine 2013:112). Elspeth Graham argues that “[...] any piece of geographical research is based on philosophical assumptions or choices” (2013:8). She further argues that the assumption of a research question being relevant or an answer to it being applicable is based on an assumed knowledge – you need to know something in order to determine whether an answer or question is relevant or not (Graham 2013:9). It means that your pre-understanding of the world is constantly at play when conducting research. This implies that a quantitative approach, such as a questionnaire, shouldn't be considered objective due to the subjective influence involved when a researcher poses fixed questions.

The more interactive interview allows the respondent to influence the conversation to a greater extent in difference to when responding to a questionnaire, but the interaction will be affected by possible social or political difference between the researcher and respondent (Cloke et al. 2004:129). The subjectivity, or positionality, involved when performing interviews therefore needs to be addressed.

To exhibit reflexivity is according to Bryman to recognize the influence and subjectivity of the researcher and therefore to be self-reflective (2016:34-35). Applying this to my own research, I find it important to state for the reader that even though I don't personally subscribe to the world view of biodynamic farmers, I do sympathize with them to some extent and am biased in the sense of my personal values on prejudice. This entails that I have personal opinions on the prejudice which biodynamic farmers describes existing on them. Even though I make efforts in making sure that this doesn't have large implications on my results, it is quite noticeable that my subjectivity has affected my topic, research question and method in the first place. The characteristics of the researcher, such as age, gender and language are also factors that can lead to a certain influence during the interaction in an interview (Cloke et al. 2004:158). Possible factors which might have had an influence under the interviews for this thesis might be my age being lower than the interviewees', my gender identity as a woman and/or my identity as a student of higher education. Language barriers might also have had an influence during interviews. The interviews conducted in Denmark were held in Danish and although I do speak and understand the language, I wouldn't consider myself fluent.

4.5 Ethical considerations

The ethics revolving research have been focus for more debate in recent years than it has before (Bryman 2016:121). Main issues regarding ethics in social research involve the potential harm of participants, however the participation is consensual, whether there is an invasion of privacy or deception involved (Bryman 2016:125).

The participants in interviews for this thesis were informed of the topics of this thesis before agreeing to an interview and again before initiating the interview. The interviews were taped after the consent from the participants. All participants were also offered anonymity. The choice to apply a conversational style to the interviews has also been influenced by the ethical consideration to open up the possibility for the informant to have a larger impact on the research process. This effort does however not directly imply that the possibility of influence has been perceived by the interviewee. The position to dictate the topic and the perspective still remain with the researcher.

5 Analysis

5.1 Differences between organic and biodynamic agriculture

This chapter will focus on how differences between organic and biodynamic agriculture are motivated by the interviewed farmers. Whilst there are many similarities between organic agriculture and biodynamic agriculture, there are certain parts that separate them.

5.1.1 The cosmic element and spirituality (the non-material)

The consideration of the cosmic element and spirituality, or the non-physical, was described as an essential principle in biodynamic farming. The understanding of the cosmic element within biodynamic farming stems from its connection to anthroposophy, started by Rudolf Steiner. As one farmer mention, she sees biodynamic agriculture as a way of “doing” anthroposophy, that it is a “farming-way” of doing anthroposophy. The use of anthroposophy in farming can in such be seen as a way to put ideas to practice. When the interviewee’s further explained the meaning of the cosmic element, they referred to Steiner on several occasions:

“If I understand it quite square, Steiner says that we are a spiritual being, but we have materialized here on earth and we are to try the physical. [...] But there is always something spiritual about the physical.”

Another farmer states:

“Steiner has spoken out on, that if we are to cultivate a proper product which us people are in need for, we need to see things holistically. And a part of the holism is the cosmic element. Because there is a cosmic rhythm that has an influence on people, on our earth and on our plants. It plays an essential role. And it has also been shown to be true, that it is that way.”

The cosmic element is being described as a fundamental principle in the biodynamic practice. The notion of the cosmic element representing an ontological difference could be suggested in the sense of how the cosmic element is being referred to as something that “exists” and emphasized by the interviewee’s as something that is true. Simultaneously, what is being described as a difference from organic farming and other farming practices is the awareness that the existence of the influence from the moon and stars on our plants isn’t a truth that others go by:

“[The] largest difference is, as I see now, is that other farmers don’t use a spiritual side. They are only looking to the physical. But in the future, they will hopefully discover that there are more than just things that are physical.”

Another farmer states:

“The biodynamic means that you don’t only look onto the physical world and chemistry and all of that. You also look to cosmos as we call it, the whole universe, the planets, constellations. The sun, the moon and stars, all of it. Because they have an impact [...] But most people don’t know it. And don’t wish to know it either.”

The inclusion of the cosmic element is a fundamental idea in biodynamic agriculture and is present when performing the practical cultivation. I would like to offer two examples of parts in the biodynamic practice, mentioned by the interviewees to be aspects which separate them from organic farming, and how the understanding of a world where cosmic/spiritual influences needs to be taken into account is present.

5.1.2 Biodynamic preparations

Biodynamic agriculture entails the rejection of pesticides and fertilizers much like in organic agriculture. There are however biodynamic preparations which is to be used in biodynamic agriculture. The preparations were being used by some of the interviewees and were described to be consistent of old medicinal herbs, which one farmer used in order to motivate the legitimacy of the preparations:

“Milfoil is a fantastic old medicinal herb and has been used for hundreds of years to strengthen the whole organism. So it wasn’t a coincidence that Steiner chose those plants to grow and ferment in a certain way and then add small amounts in the compost.”

The different preparations are used for different purposes, but the ingredients of the preparations and the use of cow horns are chosen by their ability to enhance the powers influencing the plant (Arman 1971:20, Arman 1979:48). Medicinal herbs, such as milfoil, nettle, valerian and chamomile, are used as additives to the compost after preparation of the herbs (Arman 1971:28-29). There are also two preparations which are to be used in the field, numbered preparation 500 and 501. Preparation 500 is made from cow manure which is packed in cow horns and preparation 501 is made from silicon which is extracted from quartz (Arman 1971:21-22).

5.1.3 The cow and its horns

The cows were mentioned by the interviewees to have an important role in biodynamics. On the one hand they mean that it is important to have ruminants that can support the

farm with manure and that the fodder for them is produced on the farm, as part of the holistic view they propose. On the other hand they mean that cows have a certain ability to utilize the influences from cosmos and with that enrich the plants. Keeping the horns on the cow plays a crucial role in this ability.

“Based on that the cow is a ruminant that intakes a lot of fodder and produces a lot of manure, Rudolf Steiner talks about how the cow enriches the manure and in turn enriches the soil. So that we can get better products. And this is where the horns have a central role. When we look at a horn we can see that there are large veins that go up and turn back again. And that’s a bit strange. But Steiner tells that when the cow digests its food, powers radiate out from it. And the horns bring it back and concentrate those powers inside which are reflected back in the manure. [...] So the manure that comes from a cow is worth more if the cow has horns, than if it doesn’t have horns. “

To keep horns on the cows is therefore one of the regulations in the Demeter standards for biodynamic farming (Demeter International 2018:21). This is, at least in Sweden and Denmark, not applied within organic farming.

5.1.4 The cosmic element as ontological difference

Following the definition of ontology proposed by Blaser and Burman as set of ideas about “what exists” which forms a certain “reality” or “truth” (Blaser 2013:547-8, Burman 2016:79) one could propose that the existence of the cosmic element with farmers in the biodynamic agricultural practice represents an ontological difference from the ideas carried within organic farming. This becomes apparent in how the cosmic influences are taken in regard in the biodynamic worldview and practices, together with the biodynamic farmers’ claim that only the physical is considered in organic farming.

The proposed project of political ontology set forth by Blaser does however not only consider conflicting stories about “what exists”, but also how these realities are affected by power dynamics (2013:548-549). A further understanding of how the biodynamic farmers are confronted and deal with dominant worldviews is thus needed.

5.2 Claiming a space within “sustainability”

The emergence of biodynamic farming was one of several alternative farming practices developing in the beginning of the 20th century as a reaction to the increase in usage of chemicals in agriculture and the increasing problem of soil erosion (Vogt 2007:9-10). The ecological benefits of biodynamic agriculture were expressed by the interviewees and seemed to constitute a great motivation for them to perform the practice. As expressed by one farmer:

“A big problem today, also in Denmark, [...] is the decrease in humus, there is less and less organic substance. And the only thing giving a surplus of organic substance is the biodynamic method. [...] So in the long run, you could say that the only thing that is good enough is the biodynamic”.

Another farmer explains his commence within the biodynamic movement with the biodynamic agriculture being an opposite to, what in his view is a destructive conventional farming practice he had experienced as a child. In this sense he motivates the factor of sustainability being incorporated in biodynamic agriculture:

“ And so I heard about biodynamics. And it made me so happy. Because there was a method that actually went against all of that destructive [practice]. [...] Even though there were a lot of things around me that got destroyed, I’ve held on to my inner principle and later found out that there actually is an alternative way. Or a good way to cultivate the land and look out for our people, look out for our animals and look out for our climate.”

Another way to understand the claim of being a sustainable farming practice is the incorporation of the standards for organic farming within the standards for biodynamic farming. The regulations of biodynamic farming in Sweden and in Denmark, standardized by the countries’ national Demeter associations, state that in order for a farm to be certified biodynamic it also needs to fulfill the requirements for organic agriculture, where the national Demeter associations in Sweden and Denmark refer to the state laws on regulation of organic farming (Svenska Demeterförbundet 2018b:4, Foreningen for Biodynamisk Jordbrug 2018c). Seeing that the organic certification in each country is the acclaimed sustainable alternative farming practice, the incorporation of the standards for organic farming can be seen as a claim to be “as good as” organic farming.

5.2.1 The claim of being more than organic

The incorporation of the standards for organic farming is however not only motivated by interviewees as being “as good as” organic farming, but rather a claim of being “even better” and that the standards for biodynamic farming are more strict than the ones for organic farming. A popular description of biodynamics with the interviewee’s was “organic plus”, when trying to give a simple explanation of what biodynamic farming is.

“Biodynamic farming is organics, organic farming plus, you might say. [...] A biodynamic farmer is also an organic farmer. It’s kind of like... When you have to drive in 100 kilometers per hour. And if you’re driving in 120, you also drive in 100. Do you know what I mean?”

How the interviewees motivate being “even better” than organic farming and what the “plus” means besides the ecological benefits mentioned takes us back to the consideration of the cosmic element. The biodynamic farmers mean that the biodynamic product can do something more than a conventional or even an organic crop can. The goal in biodynamic agriculture is to produce a crop whose sole purpose isn’t to just fill your stomach, but to satisfy you fully with nutrients that your body can recognize and that can satisfy both your physical and spiritual needs. As one farmer expresses:

“The biodynamic can be called holistic [...], that is, it takes in regard many aspects. They all play a part in an interaction to grow a nutritious, ripe product which nourishes us humans in a satisfying way. So that we become full from relatively little and become full in a way that we can recognize the products we take. That is, we shouldn’t use too much energy on it, so that we have the excess energy, if I put it simply, okay, so that we also have the excess energy to deepen* ourselves in other things. And it is also said that biodynamic food gives an element to us humans, that we have some substances in us which have the possibility to develop. And we can do that on a spiritual level and on a social level.”

The biodynamic farmers mean that they achieve this type of quality by working with the influences from the cosmos, taking in regard the moon, planets and stars by for example using the biodynamic preparations. They mean that although the production of crops becomes smaller, the quality is better and that is what is important, not only for our environment but also for humans on a social and spiritual plane.

5.2.2 Struggles with dominant ideas on nature

Some of the interviewees mentioned that their focus on the quality of the product was often criticized by others. This was mentioned by the interviewees to be based on

arguments surrounding the efficiency of production. The critique, or argument, that “we need to feed a growing world population” was one which they felt was being held over their heads and hard to come back from. One farmer for example argued that the issue is distribution and not that not enough food is being produced, but still felt that the argument on quantity and efficiency was quite common. Another mentioned how he felt that the focus on quality wasn’t being supported enough, also meaning that organic farming is confronted with this argument:

“I don’t feel that it is being supported enough, since biodynamic and organic products are very good. They’re much better. But they are, among other things, better because they don’t contain so much water. And if you have a potato that contains a lot of water, it will of course weigh more. If it contains a lot less water you are left with more dry substance and therefore don’t get as many kilograms. I mean, if you have a conventional farm, maybe you’ll get 50 tons of potatoes per hectare. You can’t reach that with a biodynamic, organic farm, you might get around 30, 35 kilograms per hectare. It’s a big difference. Okay, and then you get a little bit more [money] for organic products. But maybe not enough. So, that’s why I think that the different governments should focus more on the quality on... What is being done for animal welfare, what is being done with the product, what you do for nature in that way... [...] But they don’t. It’s not being taken in regard.”

The biodynamic farmers’ expressions of feeling undermined and not prioritized could be suggested to be the biodynamic farmers struggling with a dominant idea on nature. Martinez-Alier argues that some ideas and languages on environment triumph over others due to power relations (2004:28-9). In this case, the critique of biodynamic and organic farming based on its efficiency could be suggested to carry powerful ideas on the environment. According to Worster, dominant ecological thought today has been formed by the values of the global economic order, shaped by technology and influenced by a western scientific view on the environment (1994:291-3). He further argues that the theoretical models of ecologists in western science today “have transformed nature into a reflection of the modern corporate, industrial system” (Worster 1994:292). The critique on biodynamic and organic farming not being efficient enough could therefore be suggested of being supported by a dominant idea on nature, which is based on a materialistic view limiting the environment to its productive ability. It could in such be suggested that the biodynamic farmers’ experience of struggle to be heard or taken seriously in meeting with the critique is due to power relations involved when one way of knowing our environment is held to be more rational than the other.

The critique based on efficiency is one which both biodynamic and organic farmers are met with according to the interviewees. This struggle hence offers little insight into how organic

agriculture has managed to claim a larger space of representing a sustainable alternative than biodynamic agriculture.

5.2.3 Ontological difference in the understanding of 'sustainability'

One way of understanding their different positions is to consider how the biodynamic farmers understanding of the quality of their product exceeds a biophysical view of 'sustainability'. Their claim to be "more" than organic did involve the argument of biodynamic farming's better ability to sustain humus levels. Practitioners of biodynamic agriculture should therefore not be seen to be estranged to a biophysical way of knowing the environment. Their claim of being "more than" organic farming does however also involve the need to consider spiritual and cosmic influences in order to uphold a sustainable farm that can produce good quality products.

The idea of "sustainability" proposed by the biodynamic farmers could in such be seen to exceed a biophysical view. Escobar and Paulson argue that terms such as 'biodiversity', where I would suggest the term 'sustainability' not falling far from it, being immediately associated with biophysical referents "is a discursive invention of recent origin" (2005:257). They further argue that a biophysical understanding of biodiversity has been powered by dominant institutions such as large NGO's alongside with Global North states, which eventually has undermined other ways of knowing biodiversity (2005:259-62). If one is to assume that the term 'sustainability' falls into such a category suggested by Escobar and Paulson, the biodynamic farmers' way of knowing and understanding sustainability might not enjoy equal power as a knowledge of 'sustainability' limited to a biophysical view.

5.3 Negotiations with dominant ideas

5.3.1 *The changes in organic production standards*

As mentioned, organic farming is being met with the same critique regarding efficiency as biodynamic farming. One of the interviewees started off as an organic farmer before finding her way to the biodynamic movement, but later chose to go on solely organics in the 90's. Starting out as a young farmer, convinced from the start of an agricultural practice without using pesticides, she struggled with prejudice and judgment from others:

“We have almost been lynched [snigger]. We have been that, very offended, rude people who have... mocked us. When I was 22 and was a dairy farmer, I was in the erfa-group² with the farmers. And we were going to do some insemination or something like that... Well, I wasn't allowed to go in their car, I had to drive myself. It was like that! Like, 'she's so weird'. 'She's questioning what we believe in'. It was... very, very tricky. But I was so convinced that soy shouldn't go to ruminants in the Nordics...”

The judgment she faced as a young organic farmer seems to be based on the critique she expressed on the rationale of the conventional agriculture, challenging the dominant rationale of viewing the environment according to values of global economic order, promoting the efficiency and quantity of production (Worster 1994:291-3).

Today she finds that there is more acceptance for organic farming than there was before, with some people being quite impressed with what they do, although there still is an older group who remains skeptical. The opinion on the growing popularity and acceptance of organic farming today is one which the biodynamic farmers agree on. Shared is also the opinion on the changes they've seen in organic farming over the years. When the biodynamic farmers were asked why they think organic agriculture has managed to grow more popular, where biodynamic agriculture hasn't seen the same type of rise in attention, the changes in organic agriculture were a regular theme.

The now-organic farmer said that changes in organic agriculture were made due to the difficulty in conversion from conventional farming to organics, but by imitating the conventional system through the certification standards for organics they were able to develop much faster. She felt that the standards for biodynamic agriculture today are similar to the original standards for organic agriculture and didn't quite like the way the regulations for organics had been watered down. However, she remains hopeful that by

² A group for professionals in the same branch with the purpose to exchange experience.

lowering the threshold for entering organics, possibilities are opened up for farmers to later themselves be convinced to make further changes.

Broberg confirms this change within the Swedish organic food movement towards ideas of ecological modernization (2010: 823). In his article, he proposes that the movement to introduce organic milk, which grew strong in both Sweden and Denmark in the late 1980's, constituted a large factor in the adaptation to a larger market, but further argues that the institutionalization of organics in Sweden, more precisely KRAV, made way for alliances between alternative agriculture and conventional actors and became a forum for the different actors to negotiate and compromise (Broberg 2010:824, 832).

Seeing that the standardization and institutionalization of the organic movement had an impact on their growth, the standardization and institutionalization of biodynamic farming through Demeter could be seen as an effort, or strategy, from the biodynamic movement to achieve similar results as organic agriculture has. One might then wonder if the Demeter standards in Sweden and Denmark will see the same type of development as the standards for organic farming has and eventually open up for larger possibilities for "efficient" agriculture. This would entail making compromises towards conventional agriculture and gaining more acceptances by doing so. I would however like to suggest that an ontological difference, more specifically the regards taken to the cosmic element in biodynamic agriculture which doesn't constitute a factor in organic agriculture, makes up for a different kind of compromise for biodynamic farmers than for organic farmers. It thus might be more difficult for biodynamic farmers to make changes in regulations with the purpose of making the production more effective. I would like to further develop this idea by considering how the biodynamic farmers stressed the possibilities of organic agriculture to perform such changes and how they mean that this constitutes a difference between organic and biodynamic agriculture:

"I mean, the organic farmer can do things much more industrial, one can well industrialize, you might say, they're industry-people. But it's also that way of thinking, that everything is physical. And then you think in a different way."

Another farmer expresses himself in a similar way and argues that organic farming fits a materialistic worldview, whilst they in biodynamics have a transcending to the spiritual.

In order to explore a hypothetical development, one could look into how certain standards/regulations are motivated by the biodynamic farmers and how they see it differing from the organic. The organic farmer mentioned in her interview, that one change that had been made in the Swedish organic standards (KRAV) was the number of hens allowed in one stall. Considering that the minimum required space for animals at a farm is different in conventional, organic and biodynamic farming, an example of a potential change in the minimum required space for cows could be considered.

In organic farming, it is by the Swedish certification association KRAV regulated that cows require a minimum of 4.5 square meters per cow in their outside area (KRAV 2018). The organic farmer interviewed for this thesis, who is based in Sweden, had herself made the choice to give her cows a space of 6 square meters per cow and motivated a larger space for them by emphasizing animal welfare and her conviction that one shouldn't have more cows on a farm than a farm can provide for, that is the ability to produce enough fodder for the livestock you have.

The biodynamic farmers expressed a similar motivation for the requirement of space for cows, emphasizing the ability to be as self sufficient as possible on fodder and the consideration of animal welfare. The way that the biodynamic farmers further motivated animal welfare is however different from organics. Whilst there is no specific regulation specifying a required minimum space for cows in square meters in the Demeter standards, it is still required that they follow the national regulations for organic farming. What is however expressed in the standards is that "sufficient area [is] to be provided and the herd managed to allow the expression of social behavior" (Demeter International 2018:21). It is also stated in the standards that dehorning of cows isn't permitted (ibid.). The interviewees argue that there is more space required for cows in biodynamic farming than it is in organic farming based on the principle of keeping horns on the cow. Their regulation on allowing cows to express their social behavior is in such based on giving cows the minimum space they need in order to form their hierarchy peacefully and by doing so they are able to keep the horns on the cows without injuries occurring. Seeing that keeping the horns is important in order to make use of the influences from the cosmic element and that this is essential to biodynamic agriculture, a compromise on the space for cows would also involve a compromise where the consideration for the cosmic element might be affected. This is not a factor that needs to be taken in regard in organic agriculture.

As Blaser argues, ontological difference is difference based on assumptions about "what exists", where the framework of political ontology focuses on the negotiations involved, as well as conflicts which can occur as ontologies strive to sustain their own existence (2013, 2009). The biodynamic farmers seem to claim that the negotiations/compromises between organics and dominant ideas, more specifically how organics in Sweden and Denmark have managed to grow and find acceptance, is because they assume a similar world, one which only regards the physical. I would like to avoid claiming that a potential change in decreasing the minimum space requirements for cows in order to raise the quantity of production would be easier for organics. I would, however, like to suggest that such a change would entail a different type of compromise for biodynamics based on the difference in how they know/understand their world.

5.3.2 *The standardization of biodynamic farming*

I would like to further follow up on the just mentioned argument by Blaser, that negotiation and conflicts occur as ontologies try to sustain their own existence (2009:11). If seeing standardization as an effort by the biodynamic movement to sustain their own existence and an effort in trying to make a space for themselves within a dominant understanding of 'sustainability', it might be interesting to see to how this standardization is perceived by the interviewees. The regulations of Demeter were not fully enjoyed by everyone. One farmer felt that although the certification was practical for a consumer who doesn't have contact with the production, she didn't feel that the certification offered a guaranty for the quality of the product. Mostly, she felt that the measuring of different parts through a protocol doesn't correspond well with the anthroposophic ideas behind biodynamic farming:

"I don't like the certification so much because it hinders personal development. And since anthroposophy is directly associated with personal development you shouldn't certify things like that. [...] if you work with protocols, like certification uses, protocols aren't something living. It is something dead used for measuring. And you would never just measure one thing if you want to measure personal development. [...] It's not interesting what you know now, what's interesting is what you knew before and what you've learned now. That's also the case with a farm. Because there are different goals and development for a very young farm than for a farm that is 50 years old, that has been biodynamic for generations. You expect different qualities then. Every farm is an identity, you can't compare them. You can't say that one farm is better than the other, they're different."

She further proposed that a better way of certification within biodynamics would be to look to the development of the farmer, what he means to the farm and what the farm means to him and see more to the process instead of separate parts. Due to the farm she had being quite young, she and her partner had for example decided to temporarily stop using the biodynamic preparations since they didn't have enough time or resources to do it all. This also meant that they currently weren't certified biodynamic. The choice of temporarily stop using the biodynamic did however not imply her feeling less like a biodynamic farmer.

Another of the biodynamic farmers also chose to skip some parts which are required for biodynamic farming according to the Demeter standards. He argued that in theory you could do biodynamic farming without knowing much about the influences from cosmos and that as long as you comply with the regulations it would go well. But, he further argued, if you want to be a real biodynamic farmer you should also know about those things.

The opinion on the importance of the biodynamic preparations also differs between the farmers, but if a farmer wishes to be certified biodynamic it is a requirement. One farmer

said they used to use the biodynamic preparations, but that they have made the decision to temporarily stop due to lack of time. Another, who's had many years as a biodynamic farmer but now, considers herself to be solely organic, felt that the preparations didn't give enough effect when put in relation to the time and effort needed for the production and usage of the preparations and therefore decided not to proceed using them.

The farmer who no longer considers herself biodynamic felt that for example the preparation with valerian sometimes could have good effect when there was frost during the spring, but does as mentioned no longer use them. She did however still grow the herbs on the farm and said that if there now is any type of radiating power from those herbs, she'll simply settle for having them growing on the farm.

The certification of biodynamic farming can be seen as an effort to sustain their existence, considering the possibilities of justifying a higher price and the (relative) safety it brings consumers. It does however seem to have created a conflict, where some biodynamic farmers feel that the assessment of certification doesn't correlate with how they identify themselves as biodynamic farmers. Also, they seem to feel that such measurements aren't proper tools to assess the ontological assumption of a cosmic element and the developmental process involved in biodynamic farming.

5.4 Science and magic – the perceptions of biodynamic farming

In this last chapter, I would like to turn to how the farmers feel they're being perceived by others. As mentioned in the former chapter, the organic farmer was met with judgment by other farmers when she was younger. On that basis, she felt that it was difficult to be taken seriously, although she found certain spaces where the option of organics wasn't met with skepticism. Since then, the perception of organic farming, and organic farmers specifically, has taken a shift from organic farmers being perceived as hippies with braids promoting small-scale production and self-sufficiency to "modern market-minded agricultural experts", more associated with ecological modernization and the neo-liberal undertones that comes with it (Broberg 2010:823).

The biodynamic farmers still face judgment from others at times. But I would like to argue that the responses they receive from others hold a different character than the responses organic farmers used to be met with. One farmer talked about how he sometimes had experienced insolent reactions from other people:

"One should assume that you have developed something, not that you are crazy. It's a bit rude sometimes. That they think it's so strange just because they don't understand it. Because they don't know it. And then it's just [makes a swish-sound and moves his hand], wrong and away. And [they say] 'that's too far out.. is this religious farming or what should I call it...?'. You could say that it's a bit rude to some extent, I think."

The biodynamic farmers being met with expressions which seem to characterize biodynamic farming as 'religious' brings to mind Tambiah's history of modern science. According to Tambiah, the historic development of the concept of science in Western countries has resulted in a science/magic dichotomy, where 'science' represents truth and rationality (1990:140). The perception of biodynamic agriculture falling into a category of 'religion', or 'magic' could in such way be suggested to imply a perception of the practice not belonging to a category of 'science' nor being true or rational.

The associations of biodynamics as 'magic' seem to be made in relation to the ontological assumption of a cosmic element. One farmer mentioned the difficulties in explaining biodynamic farming to other people:

"It's hard to explain more specifically what it is.. [...] For example, when you include the cosmic element or if you include the preparations, [they react] 'yes, but what the hell is this', right? 'Such hocus pocus he's involved in'. And, if you don't have access to that, or a certain understanding of it, you won't get any further."

What's interesting is also one farmer bringing up science as a factor for the misunderstanding of biodynamics by others, further illustrating the experience of the science/magic divide. This farmer had recently made the decision to be open about their practice being biodynamic on their website. She meant that the subject of biodynamics and anthroposophy can spark judgment:

“I usually don't say that we're doing biodynamic farming. But now we have at least taken the decision to publicly say that we are biodynamic on our website and in our farm shop. [...] I've heard from others that it's a bit sensitive in Sweden with biodynamics and anthroposophy. Biodynamics, that's not a word that many people here know, but I've understood that more know of anthroposophy and that it has a negative connotation.”

When asked why she thinks that is, she argued that people in Sweden (which is where she's active) are very scientific. When asked to further explain what she meant by it, she explained that she felt that people often use their knowledge based on natural sciences.

“[Natural sciences,] it's all things you can measure, that you can see and count. And when you use biodynamics in farming, there are a lot of things that can't be measured in centimeters or numbers. It works in a different way. [...] That's why, if you use your background in natural science to understand biodynamics, you're not going to come up with something. Because you're using the wrong instrument. And that's what a lot of farmers do, they use natural scientific instruments. [...] It is really like that, that if you only see the world in a physical way, you have a very limited world. It's very small. Because the world that lies behind it is so much bigger, with many more possibilities. And you have a lot of power to influence your plants and your animals in a spiritual way as a farmer”.

This more specifically illustrates how biodynamic farmers experience a science/magic dichotomy. From the quotations one could argue that biodynamic farming, based on their ontological assumption of a cosmic element, is being put into a category of 'magic' which is put in opposition to a category of 'science'. As science is held to be a rational and true understanding of the world, representing a powerful truth above things 'magical' it would imply that biodynamic farming as put in category of 'magic' is understood as less true and less rational.

Seeing that reactions spur in relation to the ontological assumption of a cosmic element, one could also understand the power relation through the lens of political ontology. Especially in regards to how the biodynamic farmers express their feeling of being misunderstood based on the ontological assumption of a cosmic element. As the assumption of the existence of one modern world still holds large dominance, other ways of understanding and knowing their world, “worlding”, are being held to a less credibility to

that extent that they've been turned into anomalies (Blaser 2013:554-5). The reactions towards biodynamic farming from others could in such be suggested to be understood as an ontological conflict, affected by power relations in what reality matters.

As mentioned, the associations with organic farming and organic farmers have shifted. Some of the interviewees argued that people find it easier to understand organic farming. The now organic farmer eventually chose to leave biodynamic agriculture because, among other things, she didn't fully agree with the view on the importance of the biodynamic preparations. But she also mentioned the difficulties in establishing yourself as biodynamic when compared to organics:

“... So, that's why we left biodynamics around the middle of the 90's. We were also KRAV³ and it was hard to establish biodynamics as organics grew. KRAV was much simpler. There was no... I mean, KRAV was only natural science. And you could explain that to the common man.”

In this sense, the ontological accessibility, and the keeping with a scientific understanding of the world within organic farming might be part of an explanation on how organic farming has managed to establish a larger space as a sustainable alternative to agriculture. This overshadows the efforts by the biodynamic movement to be represented as such a sustainable alternative as well.

³ KRAV – the Swedish certification body for organic farming

6 Conclusions

The aim for this thesis has been to understand how organic farming has managed to grow as a representation for sustainable agricultural practice where biodynamic farming hasn't been as successful.

Whilst this is, in my opinion, an interesting question that I wish I could answer, I'm also under the opinion that no simple answer should be proposed. The findings of this thesis may however offer some insights on how power relations are involved as one sustainable alternative receives greater attention than the other.

The biodynamic farmers try to make a space for themselves through being recognized as a sustainable alternative. Since influences from cosmos and spirituality are being taken in regard in biodynamic farming, they struggle with a dominant understanding of sustainability limited to a physical understanding of the concept. I would like to suggest that the struggle of what should be included in a concept of sustainability could be understood as an ontological conflict since it involves conflicting stories about "what is there".

Based on the analysis, I would further like to suggest that the ways of knowing their world differ in organic and biodynamic farming and that these ways of knowing the world don't enjoy equal power. Both the organic and biodynamic movements are struggling with the dominant view on nature as an industrial system which prioritizes the environment's ability for efficient production. Still, the organizations for organic farming have managed to negotiate with such ideas and made changes towards ecological modernization. These changes are seen as a factor as to how they've managed to grow in recent years.

Meanwhile, the biodynamic movement still struggles with the dominant understanding of the world limited to a biophysical view on it. Based on the arguments made by the interviewees, I would like to suggest that due to organic farming carrying an understanding of the world more similar to a dominant understanding, it might make it easier for the organic movement to negotiate, make compromises and be accepted as a sustainable alternative to agriculture. If biodynamic farmers were to make similar changes as organics, it would constitute a different kind of compromise for them due to their ontological assumption of the cosmic element. This means that the premises for negotiations with a dominant understanding of nature, and sustainability, are different.

Simultaneously, the changes in organic farming have also led to organic farmers being seen as more rational. Their physical understanding of the world, or rather their understanding of the world not exceeding a physical understanding, has put organic farming in a category of 'science', whilst biodynamic farming is, in their relation to their ontological assumption of a cosmic element, being put into a category of 'magic'. As science is held to be a rational

and true understanding of the world, representing a powerful truth above things 'magical' it would imply that biodynamic farming as put in category of 'magic' is understood as less true and less rational. The ontological difference of organic and biodynamic farming does in such a way imply different positions of power for them.

These conclusions propose an understanding of the politicized environment which the biodynamic and organic movement find themselves in and the role that fundamental ontological difference play in these dynamics.

7 References

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