



Managing Flexibility and Expectations: Gendered Experiences of Spatial-temporal Relations in Swedish Family-based Dairy Farming

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Abstract. In recent decades, the Swedish agricultural sector has been reshaped by economic change and the restructuring of the labour market, but it is still dominated by family farms dependent on the labour and time of family members. To date, the concept of temporality and time has attracted limited attention within rural sociological research. Through interviews with couples on dairy farms, this study explored the potentialities in temporal analysis of family farm relations. It sought to open up ways of thinking and conceptualizing gendered and class-based time and division of work in farming. The results show an interconnection between the spatial-temporal organization, social relations, control, property and power of the labour process. The gendered division of labour on the farm, in the household and across different spheres produces a specific set of spatial-temporal relations that manifests itself in the differing experiences of everyday world, time, space and responsibilities between farming husbands and wives.

Introduction

In Sweden, family farming occupies a dominant position in agricultural production, and family labour still constitutes an essential resource on many farms (Andersson and Lundqvist, 2016). In recent decades, family farms have been reshaped by economic change and the agricultural sector has been restructured through growing commercialization, capitalization and technologization (Schwarzweiler and Davidson, 2000; Bock, 2006; Pini and Leach, 2011). Moreover, the need for finding new ways to develop production and profitability has contributed to diversification of the agricultural sector and reorganization of the family farm. Farmers have engaged in various adaptation strategies in order to reproduce the farm, resulting in renegotiation of the direction and organization of the family farm (Evans and Ilbery, 1993; Barlett et al., 1999; Kinsella et al., 2000; Brandth and Haugen, 2011). Today, a smaller proportion of family farms are able to provide work and income for the extended family (Blekesaune, 1996; Djurfeldt and Gooch, 2002; Bjørkhaug and Blekesaune, 2008; Andersson and Lidestav, 2014). Studies on the contribution of off-farm income through wage labour underline the flexibility of women's labour (Deseran

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and Simpkins, 1991; Bryden et al., 1993; Blekesaune, 1996; Kelly and Shortall, 2002). However, in the Swedish context little emphasis has been placed on understanding these shifts and their social implications. In international agrarian and rural studies too, few efforts have been made to transcend traditional concepts of labour and work in capturing and understanding these changes. For example, the concept of temporality and time in relation to agriculture has attracted only limited attention in previous rural sociological research (Busch, 1989; Lockie, 2006; Panelli, 2007; Gill, 2013).

The concept of temporality constitutes a powerful tool for capturing the everyday processes of family farming and for scrutinizing its gendered practices, value systems and division of labour that goes beyond the farm gate (Price and Evans, 2009). Over time, many of these processes have become materialized in the battle for property within the family enterprise (Friedmann, 1986) and embodied in the intersection between agrarian identities and spaces (Bryant, 2001; Saugeres, 2002; Little, 2003; Little and Leyshon, 2003; Brandth, 2006; Price, 2010a). Farm work constitutes a node in agrarian relations and is a central feature in the processes of socialization and inheritance (Price, 2010a), which over time can ensure, for instance, access to property (Flygare, 1999, 2001; Lidestav, 2010). In this context, the gendered division of labour is filled with meaning and implications and becomes central in the construction of subjectivities and the articulation of power (O'Hara, 1998; Shortall, 1999; Burton and Wilson, 2006; Price, 2010a). Therefore, the case of agriculture, and family farming in particular, offers important insights into flexibility in the labour process, both paid and unpaid, and the structuring of time in the public and domestic spheres. The integration of home and workplace also creates a need to study the intersection between gendered and class-based relations of time in the agricultural context. Situating the family farm within these conditions and relations opens the way for a more general theoretical and empirical contribution to the understanding of time, temporality, spatiality and the labour process, thereby contributing to efforts to theorize, for example, the processes of the knowledge economy (Thompson et al., 2001; Warhurst and Thompson, 2006) and the implications of new technologies on the labour process on dairy farms (e.g. Butler et al., 2012; Jacobs and Siegford, 2012; Holloway et al., 2014a; Hansen and Jervell, 2015).

From a narrative approach, the present study was based in men's and women's lived experiences of 'the family farming way of life' (Price and Evans, 2009). The aim was to investigate the temporalities of Swedish family farming, i.e. its spatial and social relations in the farm labour process, and thereby to contribute to the work of understanding gendered, classed and embodied subjectivities in agriculture and in the rural context (Little and Leyshon, 2003; Brandth and Haugen, 2005; Brandth, 2006; Bryant and Pini, 2011) with the help of a temporal perspective (Glucksmann, 1998, 2000). The intention was not to propose the temporal perspective as a new tool within rural studies or to substitute it for other perspectives, but rather to explore its potentialities in the social analysis of family-farm relations and to open up ways of thinking and conceptualizing gendered and classed time and division of work in agriculture. In its ambition to transcend the traditional concept of work, this study sought to provide fruitful insights into the lived realities and structuring of the agrarian labour process. In understanding inequalities as an integral part of production (Acker, 1990; Tomaskovic-Devey, 1993), the labour process provides conceptual space to examine the reproduction of gender and class-based inequalities in family farming through the everyday world. It also provides the tools to scrutinize and dis-

cuss the sorting of temporalities in terms of exploitation, power, consent and resistance within a wider theoretical framework. The Swedish context offers a specific set of spatio-temporal relations to this case study (Gunnerud Berg and Forsberg, 2003) and situates it within both the welfare state and a long political tradition of gender equality (Jordbruksdepartementet, 2004).

Temporality and the Labour Process

The social relations of family farming and agriculture are highly reproduced through work and the labour process. The structuring of these social relations, through the division of labour, is based on acknowledging and valuing certain skills, knowledge, technologies and types of work (Phillips and Taylor, 1980, p. 79; Bradley, 1986; Acker, 1990, p. 146; Glucksmann, 1990; Cockburn, 1991). Because farm work is synonymous with the work men do, women's unpaid housework (e.g. Oakley, 1972) and farm work (Hill, 1981; Sachs, 1983; Reimer, 1986) becomes less important and less likely to be recognized as work. These relations are reinforced by the spatial subordination of the reproductive sphere in relation to the productive sphere in family farming (Flygare, 1999, p. 219). With the decline in manufacturing jobs in the West, the service, finance and knowledge-intensive industries have contributed to a shift in the definitions of work, time and skills (Glucksmann, 2009). In agriculture, various forms of diversification have introduced and normalized new skill sets and knowledge (e.g. Pini, 2005; Brandth and Haugen, 2011; Grubbström et al., 2014). However, the gendered implications and effects on power relations of these shifts have been debated (e.g. Thompson et al., 2001; Andersson and Lidestav, 2014).

Based on the individual experiences of socio-economic relations on household level and an analytical ambition to transcend the dual dichotomies of paid/unpaid labour and public/private, feminist scholars have adapted a more expansive and inclusive definition of work (Glucksmann, 1998, 2000; McKie et al., 2002). Treating all labour undertaken as work, irrespective of where, how and by whom, allows a fuller analysis of the interconnections between paid on- and off-farm employment, unpaid domestic work and other types of care, grocery shopping and community work (Glucksmann, 1998). The adoption of a temporal perspective on the organization of family farming and the agrarian labour process facilitates exploration of the differing modes of interconnection between work activities and modalities of life. It also provides an insight into the reproduction of inequalities and the processes of exploitation.

Temporality is defined as 'an element of all social relationships, processes and structures, an integral aspect that is both constitutive of them and constituted by them' (Glucksmann, 2000, p. 108). Latour (1993, p. 75) emphasizes that 'temporality, in itself, has nothing temporal about it. It is a means of connecting entities and filing them away. If we change the classification principle, we get a different temporality on the same events.' Following Glucksmann (2000), the term temporality is used here to denote the distinctive structure of time. In the same way, Latour (1993, p. 76) states that 'it's the sorting that makes the time, not the time that makes the sorting' and points out how the structuring of time is situated in historical contexts and interconnected with other forces. This makes the number of different ways to structure time almost endless, with clock time as one specific form of temporality. In the social and political landscape, the family farm is located in the interconnection between a variety of temporalities and material and social relations. Time constitutes an inte-

gral dimension of power in social relations. In the structuring or disposition of time, different groups have unequal control and possibilities to manage time based on their subject positions. This unequal relation also produces a specific set of conflicts and clashes between different temporalities. The levels of control are interconnected in different ways with the exposure of bodies to external forces, i.e. psychosocial pressure, risks and hazards in agriculture (Andersson and Lundqvist, 2014).

Flexibility constitutes an integral aspect of different temporalities and is structured through the division of labour. Flexibility, as a form of structuring time and labour, is relational to other types of work. In a number of contexts, this relation is manifested in the perception of women's labour as more 'flexible' (Walby, 1989; Glucksmann and Nolan, 2007), resulting in a specific structuring of women's time and labour in relation to, for instance, care, household provisioning and domestic labour. The exchange of time, both within and outside the monetary dimension, takes place in a setting based on social relations and may therefore be unequal and contain elements of exploitation (Glucksmann, 1998).

Scott (1992, p. 25) points out that 'it is not individuals who have experience, but subjects who are constituted through experience' of an everyday world that is temporally and spatially situated (Heidegger, 1977). In this way, time and space are embodied (Adam, 2003) and the gendered socio-economic relations and division of labour produce a sexually specific embodiment of subjects (Grosz, 1995). Due to this, the experiences of farming couples differ with respect to temporality, the temporal and spatial structure of work/time, how flexibility is managed across different socio-economic modes, remuneration basis (paid or unpaid, market or non-market, formal or informal) and sphere (public and private). However, it is important to emphasize that time and space are co-constructed (D. Harvey, 1990) and therefore not separable (Crang, 2005). As emphasized by Lefebvre (1991), social relations are both constituted in space and of space. Therefore, temporality should be conceptualized together with spatiality (Massey, 2005, p. 89). In the case of agriculture, the premise that place matters (MacDonald et al., 2005; Pini and Leach, 2011) has a dual meaning, reflecting the spatial and natural conditions of farming (D. Harvey, 2006; Bernstein, 2010, p. 89–90). For example, the spatio-temporal situation of family farms, which are often inherited by the husband and located outside urban centres (far from public services), involves specific processes of subjectification and shapes patrilocal relations.

Based on the central themes of the theoretical framework presented above, five factors of the spatio-temporal organization of the labour process were developed based on the deductive as well as inductive coding of material collected in this study. As an example, matters of time management and expectations were emphasized by the interviewees. The analysis of the labour process was structured based on the five factors: *time management* concerns control of the disposal of time; *flexible times* describes the flexibility in different parts of the labour process; *division of labour* comprises the distribution of different work tasks; *structuring of time* concerns how different actors and aspects structure and control the temporalities of agriculture; and *different temporalities and expectations* include the consequences and effects of clashes between different temporalities.

Case Study and Method

The majority of the Swedish landscape is covered with productive forest, leaving a

small proportion of farmland (SKS, 2013). Along with its two northern neighbours, Sweden is among Europe's least densely populated countries. Dairy farming is conducted all over the country and has a long and significant history, especially in the mechanization of Swedish farming in the beginning of the twentieth century (Olsson, 1994). The long tradition of milk production has led to Sweden having the highest average yield per cow in Europe. Today, milk constitutes the largest income-producing agricultural activity and much of farming in the Swedish countryside is dependent on milk production, e.g. in northern regions 84% of full-time farmers are involved in dairy farming (Nilsson and Barnheim, 2000, p. 330–331). The northern context of Swedish dairy farming also exaggerates the impact of agroecological processes in terms of e.g. environment, soil and animals. In general, Swedish agriculture has undergone great changes in the past decade, with the number of farms having decreased by nearly one-third since the early 1990s (SCB, 2011a, p. 12), but continues to be important for local society (Morell, 2011; SCB, 2011b, p. 94). On a global scale, the number of dairy producers is decreasing, while herd size continues to increase (Doupbrate et al., 2013). In Sweden, the number of dairy farm businesses has decreased by roughly 6–8% per year in recent years, and by 2011 there were 5,341 dairy farms left in Sweden (Svensk Mjök, 2012a).

Due to this, the choice of dairy farming as a case places this study within a specific set of social, material, temporal and spatial relations based on historical processes, environments and traditions. Dairy farming is also labour intensive and milk is unique as an agricultural commodity, because it is produced daily all year round (Doupbrate et al., 2013). On the farm, dairy production is often combined with other farm activities, such as cereal and forage production and on-farm feed processing.

Understanding the rural community is of great importance in the process of understanding social divisions (Little, 1994). The farms in this case study are situated within a restricted area of the county of Västra Götaland, at similar distances from large cities. The county contains 20% of all farm businesses in Sweden (SCB, 2011a, pp. 398, 400, 402) and is the largest milk producer, supplying one-sixth of total milk production in Sweden (Svensk Mjök, 2012b). The county is located in the plains region of south-western Sweden and has 1.5 million inhabitants. A mixed and emergent sampling strategy, incorporating purposive and snowball approaches, was used to collect data for the present study. The farms were sampled from register data based on maximal variation within the geographical area. The primary criteria applied in the case study were: 1. couples involved in dairy farming and 2. both partners participating in farm work. To provide a diverse population, the strategically sampled farms were distributed on the scale of secondary sampling criteria, which were farm size, sex of the operations manager, form of land tenure (mainly self-owned or leased) and labour (only family or hired). A total of 16 face-to-face interviews were conducted with eight heterosexual farming couples in their homes. The interviewees were aged between 36 and 65 years and were all parents, three of them with young children. The partners were interviewed separately. The interviews, which were semi-structured and lasted about an hour, were conducted in Swedish, digitally recorded and transcribed verbatim. The quotes in the text below are the author's translation. The aim of the interviews was to enable development of a personal narrative (Kohler Riessman, 2003), so that the interviewees could reflect on their experiences of everyday life and family farming (Glucksmann, 2000). An interview guide was constructed based on themes in the theoretical framework and explored the experiences of the participants' everyday world, their background,

their view on the future and their farm. The material was later coded deductively based on these themes. During the course of the research, sub-coding was conducted inductively, based on communalities and conflicts, and transformed into categorical themes based on patterns and communalities.

The farm provided the main income for the household, but was the sole source of income for only three of the eight farms. One of the women and four of the men were involved as board members of different agricultural business organizations, mainly the dairy association. About half the women interviewed had experience of paid care work and two combined their farm activities with off-farm labour. Many of the women related their situation to the temporal and spatial organization, restrictions and changes in the local labour market (cf. Leach, 2000). The annual turnover of the farms ranged between 2 and 10 million Swedish kronor (SEK) and the area of arable land ranged from 80 to 600 hectares. The majority of the farms had turnover of around 3.5 million SEK, about 150 hectares of arable land and about 70–80 productive cows. Half the farms surveyed were organic and half conventional. On half of the farms, a son was a joint owner and in the process of taking over.

Results

Time Management

A central perception of the farming profession among the interviewees was that it allowed them to organize their working day. The farmers often associated this factor with freedom and independence. They appreciated the greater control over their work, being able to determine when and how they undertook different tasks. The temporalities of farming were contrasted favourably by a number of participants with their experiences of the labour process in offices and in industry. Woman 1 felt ‘trapped’ in the office and Man 8 reflected on his latest off-farm employment:

M8: ‘I think it was during the years in industry that I felt so damn tied up. I have never really got tired of agriculture. [In hard times], I just compare it to standing by the assembly line and then it feels better.’

Interviewer: ‘By tied up, do you mean the routine aspect of the work or standing by the assembly line?’

M8: ‘Yes, both of those things, but I’m also not the kind of person who other people decide over. I couldn’t take it.’

Even though a number of factors and actors, such as deliveries, milk collection, calving, diseases, network labour, etc., shape the temporal and spatial organization of the labour process and social relations, the interviewees emphasized the freedom of farming, even in an often packed working day. In the general analysis, this could be distinguished as a central part of the collective narrative of agriculture. Woman 7 asked the rhetorical question: ‘If we have a calving at three in the night, am I doing that in my leisure time?’ This could be interpreted as the interviewees experiencing greater flexibility in disposal of labour time, and should mainly be seen as their satisfaction with time management. However, the flexibility and autonomy in farming concerning how work is organized comes at the expense of longer working hours (cf. Brannen, 2005). On many occasions, farmers work under great time pressure to keep up with the rhythms of agroecological processes (cf. Holloway, 2001; Bernstein, 2010; Riley, 2011).

During recent decades, new developments in milking technology and livestock housing have reshaped production on dairy farms (Holloway, 2007; Holloway et al., 2014a, 2014b). Today, there are two main systems for housing (tie-up barns and cubicle sheds) and two milking systems (manual and automatic). The combination of these two types of systems in use can differ between farms. On the farms surveyed in this study, cubicle shed systems with a milking parlour (manual) or automatic milking were most common. These two systems impose different temporalities. The manual milking system enforces a more routine and clock-based organization of the labour process, with two daily milkings (morning and late afternoon). In the automatic system, milking is carried out throughout the day with the help of computers and milking robots. However, Man 2 reflected on how the automatic systems have affected the spatio-temporal relation of farming:

‘The downside is that you’re never finished. It goes on around the clock and the milking is never done, so to say. Before, you knew that the work was done at six o’clock in the evening and you were able to go off somewhere and not have to milk until next morning. [Today], if it stops or if the alarm goes off, we have to get back and fix it.’

A number of other interviewees who use a similar system described similar dilemmas – additional aspects that extend or blur the spatio-temporal boundaries of the working day. Nearly all participants experienced a lack of distinction in time and space between work and non-work and between farm and household (cf. Tietze and Musson, 2002), making it difficult to describe a typical working day. Some of the participants felt that this ceaseless form of work is psychosocially challenging and that their social engagements and activities have suffered due to the lack of spatio-temporal boundaries in the farm labour process. Man 8 noted that:

‘The disadvantage, as a human being, might be that you live a hundred per cent with your thoughts on this damn farming business. I also worked at home [at the farm] with my father and there has not been a day since 1970 when I have not had my mind in farming and thought about what I should do. In that way, I have never cleared my head.’

The wives who did not have a farming background and therefore had a shorter process of socialization into the temporalities of farming also expressed this clash between temporalities. Woman 7 described the spatio-temporal relations of dairy farming thus:

‘It was definitely difficult in the beginning, before you realized how you should “think”, if you like. [My husband] has this background, he grew up on a dairy farm and both his grandfather and father did too. He was more into this way of thinking, which I wasn’t.’

The spatial interconnection between home and farm through the property situates the choices and decisions of business and family life. The participants reported that events in one sphere have consequences across spheres and socio-economic modes. Woman 7 contrasted her situation with her earlier experiences of the labour market:

‘It is work, leisure and it is all connected. If our farm does not do well and we cannot make it, maybe we have to sell. Someone who works in a regular job can be sacked, but still keep their home and look for a new job.’

A number of the women noted that farming is not only a lifestyle but also a choice,

with longer temporal and spatial connections. Based on their earlier experience, they pointed out that in farming it is not possible just to change jobs. The spheres of provision and production are thereby interconnected through the farm unit – the property (cf. Niskanen, 1998, p. 77). This also represents a larger problem in a historical landscape constituted by smaller production units. The flexibility and the autonomy over how work is organized does not seem to result in farmers spending less time working (cf. Brannen, 2005). The development of new milking technologies has altered the relations of the labour process, rationalizing work in time and space by introducing a different spatial and temporal organization of labour on the farm. It has thereby extended or blurred the spatio-temporal boundaries of the working day.

Although new technologies and the appropriation of the agrarian labour process gave rise to ‘new possibilities for the “annihilation” of space and time’ (Lockie, 2006, p. 35), the interview material showed how these technologies drive rationalization of actions in time and space, contributing to a shift in spatio-temporal relations and imposing new temporalities. With increasing farm size and the introduction of new technologies, the temporalities and spatio-temporal relations of dairy farming tend to take increasingly industrial forms (cf. Guthman, 2004). New technologies, such as automatic milking systems, are developed and introduced to save time in a context where time is money. This is mainly achieved by controlling time; controlling the seasonality and variations of dairy farming. Through rationalization of the labour process and enforced flexibility to adapt to the arable patterns of production, service and consumption, the control of time in the production process should be regarded as an integral part of industrial capitalism (cf. Adam, 2000). The new technologies bring new tasks and skillsets that are allocated to a specific kind of people, shaping the social relations and temporalities of the family farm (cf. Braverman, 1974; Cockburn, 1991). These new technologies are also a way for external actors to penetrate the control of the farm labour process and, through these systems, to impose a form of impersonal control that is perceived by the participants as a smaller burden than managerial presence.

Flexible Times

The interviewees noted that the farm labour process is partly dependent on flexibility in time-space and know-how to handle variations based on unpredictable events, such as sickness and injuries. To ensure this flexibility, according to the interviewees, the labour process has to be organized in particular ways, based on physical, social and knowledge conditions. The farm ‘should not stand and fall with one man.’ Some grown-up children of the farm couple who work off-farm have helped out on the farm from an early age and continue to do so if they have the time. Another active tactic practised by the farmers is to circulate work tasks, mainly to their adult children, to ensure a wider spread of the knowledge and skills needed for daily farm operations. A couple of the male interviewees described how their sons or daughters had to step in during their absence owing to sickness or injuries. This flexibility is mainly in relation to the temporality of the husband on the farm. This results in the wife, children and employee(s) being constituted as flexible labour, which shapes the temporalities of these groups. In order to cope with the high workload, some interviewees claimed that a certain amount of flexibility is required in organizing the labour process to free up time for activities and commitments outside the farm, such as recreational, social and committee engagements.

The organization of the farm labour process and the temporalities of the farm are highly seasonal, which creates large variations in spatio-temporal relations depending on agroecologies, networks/communities and environmental management. The temporal and spatial rhythms of ecological processes require large spatio-temporal variations in the labour process, resulting in an increased need for labour in certain periods of the year, particularly during harvesting. Some farms are able to handle these variations based on their ordinary labour, while others are dependent on social networks or communities for additional labour. The support of other family members, mainly parents, and collective organization of harvesting on different farms are two of the main ways to handle these variations and the need for additional labour. Woman 7 described the role of her parents during harvest:

‘When the barn work is finished in the morning, then it’s time to harvest the silage. You maybe take a short break for dinner. We often have the luxury that my parents come and help us out with that part, so that I don’t have to stop to prepare the dinner... which would have taken me at least an hour. They [the parents] tend to come here and act a little bit as household assistants.’

These arrangements involve negations of temporalities that are both constitutive of, and constituted by, social relations on the farm and the rural community. In this process, many of the interviewees highlighted the importance of neighbours and exchanges, both in spatial relation to the farm and the area of cultivated land. Collective organization of harvesting underlines the rootedness of social networks in place and work. Differences in temporalities and in control over the disposal of time are an important area of variation between the two groups of farms that are dependent on additional labour and support. Other types of spatio-temporal variations are primarily related to animal welfare, the health of the actors in the labour process, and construction work. The participants described how the weather influences their organization of labour and constitutes a temporality that shapes the spatial-temporal relations of the farm labour process, as well as in the household. Man 2 said:

‘It’s just this weather dependency of when to harvest. You have to pay attention to the weather all the time and you can’t decide anything without [taking it into account]. If you are to have some holiday time, then those days can’t come in the way [of the harvest]. It has to be in the period when we know that it’s safe to decide on something. The summer period is a hectic time. When we can hold a birthday party, or anything else, is based on when we are able to harvest grass the next time.’

The examples that other interviewees gave mainly related to their lack of ability to plan ahead, both professionally and socially, e.g. trips and social events, and rapidly changing conditions, e.g. completing the harvest before rain. In structuring time based on these conditions, many of the older farmers believed that it is now more difficult to predict the weather due to more rapid environmental shifts. One of them, Man 4, stated:

‘I feel that the climate is getting harder and harder [to predict], definitely. There’s more sudden changes in the weather and heavy rain, that’s my experience anyway and I think that others share it.’

Dependence on nature and the climate order time-space and produce a specific tem-

porality that is interconnected with temporalities across different spheres and socio-economic modes through the prioritization of a variety of tasks. The more rapid variation in climate also imposes a gradual shift in the temporality that occupies more time and decreases spatial and temporal flexibility, while demanding a different form of flexibility. The rhythms of agroecological processes and the dependence on the weather clearly visualize the temporal separation of culture from nature through the creation of clock-time. The clock could be seen as one way in which capital penetrates and structures family farming (cf. Friedmann, 1981; Marsden et al., 1986; Marsden, 1991), especially with economic incentives connected to contract farming. However, the informal exchange of labour, equipment and services means that clock-time cannot be regarded as the dominant medium of exchange in family farming. As with domestic labour, this underlines the situated position of the farm labour process in the interconnectedness across different socio-economic modes: off-farm wage labour, hired farm labour, family farm labour, domestic labour and informal exchange.

Division of Labour

The interviews revealed temporal and spatial differences between the work and nature of tasks undertaken by husband and wife. The technical and spatial division was often interconnected, with the wife being responsible for domestic and care work within the household, but also outside the domestic sphere in the form of, for instance, regular consumption work and in relation to childcare. In addition to care of animals and desk work, Woman 4 pointed out that ‘there is a lot of service work: there should always be food on the table, coffee made and a cake baked’ – expectations that structure the temporalities and the spatio-temporal relations of the farm. The experience of these expectations in terms of their main responsibility in the household was shared by many of the women. Family responsibility forces women to expand the multiplicity of temporalities in which they work, e.g. through consumption, care, domestic work, farm work and off-farm work (cf. Maher, 2009). This greater flexibility also intensifies the pressure of work (cf. Green, 2001). However, many of the interviewees, both husbands and wives, stressed the interdependencies of work undertaken on different socio-economic bases: the household and the farm. One of the husbands, Man 6, described this connection and its importance in recruiting extra help during the intense periods of summer:

‘It is clear that if they have to bring sandwiches when they come here, it’s not much fun. They want the social: to eat together and drink coffee. It means a lot.’

In general, labour undertaken on the farm, in the barn and out in the fields mainly constitutes the node around which other types of labour are organized and time is allocated. The husbands’ labour occurs less across different temporalities and socio-economic bases and their activities are primarily situated out in the field and involve the use of machinery (cf. Kallioniemi and Kymäläinen, 2012). Men more often perform the milking, while women are responsible for the care of calves and non-productive cows. Although the gendered division of labour in direct relation to dairy production is more flexible, the number of tasks and how the work is structured have a gendered character. Similar patterns are evident in the labour undertaken by sons and daughters of the family, where the daughters to larger extent undertake

domestic labour while the sons follow the work patterns of the husbands, as well as being joint owners of the farm.

Structuring of Time

Social relations shape the temporal and spatial organization of the farm labour process. The central subject of influence, according to all interviewees, is the animals and their well-being. Dairy farming is strongly adapted to the temporal and spatial rhythms of ecological processes and dairy cows. Working with animals imposes temporalities with large variations and was referred to by interviewees as one of the significant factors shaping the temporalities of family-based dairy farming. The interconnectedness of emotional, social and economic relations in the temporal and spatial organization manifests itself in great care for the animals, emphasized by the emotional and economic costs of e.g. mastitis (cf. Holloway, 2001; Yarwood and Evans, 2006; Riley, 2011).

In dairy farming, the production of fresh produce imposes a temporal imperative for speed and coordination. The interconnection across the process of production, distribution, exchange and consumption structures the temporalities of dairy farming and is evident on a daily basis through the milk lorry visits. Woman 8 described how she has to help out with the milking in the morning, before taking care of her other tasks, since 'we have such an early pick up of the [milk] tank that we have to make sure that everything gets done in time'. In many cases, milk collection is temporally and spatially interconnected with the location of the individual farm. Technological innovation, industrial restructuring and economic change, such as the introduction of milking robots, private labelling and price fluctuations, have shifted the mode of interconnection across the process of production to consumption. This was particularly apparent in the interviewees' reflections over how the fluctuations and changes in the national and global market affect them, primarily through the producer price of milk, and decrease spatial and temporal distances.

The high labour intensity of dairy farming means that the majority of farms in the case study were dependent on additional labour input, either hired or family labour. The interviewees with hired labour described the step from being just family-labour based to hiring additional labour as major, from an economic, organizational and social perspective. The majority of the interviewees indicated that this shift was a major temporal and spatial upheaval that enforced a temporal and spatial imperative of coordination and trust. Through social practices, such as coffee breaks and meals in the farm kitchen, the rhetoric of family belonging and quasi-family relationship helps incorporate the hired labour into the temporalities of the family farm and the farm labour process. In relation to hired labour, Woman 5 mentioned that she will 'always have them at the table, as we always have done. But it is just fun and social.' Some interviewees noted that being brought up on a farm made it easier to adapt to the temporal and spatial organization of work.

Kinship constitutes the organizational basis for the farm labour process and is materialized in the farm property in terms of feelings and of values. The control over the labour process is therefore articulated differently depending on the combination of family or hired labour (cf. Bernstein, 2010). With its basis in family labour, control of hired labour is exercised through relationships and their integration in the family structure (cf. Newby, 1972). This means that the social relations and organization of the farm labour process are often articulated in terms of family relations;

characterized by trust, obligation and affection, through social practices and 'being part of the family'. The socialization and fostering of younger employees described by the interviewees resonates with findings by Newby (1977) in the British context and supports the claim by Burawoy (1979, p. 30) that the labour process 'must be understood in terms of the specific combinations of force and consent'. Braverman (1974) points out the importance of understanding the processes of control in order to comprehend the structuring of the labour process. The results of the present study demonstrated the male control of the farm labour process. Kinship, the spatial interrelation between the farm and the household and the 'organized flow of activities through time' (Ploeg and Long, 1994, p. 15) could be regarded as the material basis of organization, or management style in the words of Burawoy (1979), that makes both farm men and women participate in their own exploitation or self-exploitation (cf. Chayanov, 1986). The present study showed how the farm labour process in many ways resembles the exploitative processes of women in unpaid domestic work and paid care labour (e.g. Rose, 1983; Armstrong and Armstrong, 2005; Clough and Halley, 2007), but where the emotional responsibility for the family is combined with e.g. animal welfare and the generational place (the farm). In the context studied here, resistance is mainly practised in relation to external factors and actors, e.g. through attempts to reduce economic risks and to increase control of the labour process. The class-based relations of farming are emphasized in the differentiation between farms in relation to their dependence on external support and hired labour. The relationship between the farm family and hired help dismantles the traditional and dichotomizes definitions and representations of the home and the farm, as well as temporal and spatial relations in the concept of class struggle (McDowell, 2006).

The wives interviewed, who had the main responsibility for domestic work and care labour, mainly controlled the timing and chores in the domestic sphere. Since the distinction between the public and private sphere is vague, to say the least, they undertook domestic work and off-farm errands at times to suit themselves and their other types of labour. Woman 7 said that:

'We can take a Wednesday off and run some errands. I've also worked at a healthcare clinic – then I worked eight to five everyday, Monday to Friday. There was no chance of getting an appointment at the hairdresser on a Saturday and it was not possible to do bank errands on weekends.'

Since farm life can be difficult at times, Woman 7 underlined that it is important to focus on the positive sides of family farming and its different modalities of life. However, women's management of time was also subject to external constraints and the work was partly dominated by clock-time allocated to specific chores, e.g. preparation of meals and driving children to and from school and other activities. Although not strictly governed by clock-time in their work, these women juggle and move between different temporalities (cf. Thompson, 1996). The domestic and care work is carried out to meet the clock-time regulations of the school and the farm labour process and, in the case of three women, the timing of off-farm employment and board activities. Woman 1 described this:

'In the afternoon, there are a lot of activities with the children: picking them up and giving them a lift. I have always done all of this. I have left [the farm work] to do this.'

In a similar way, clock-time is imposed on the farm labour process by the clock-

based arrangement of veterinary services, the milk lorry, the authorities and timings of off-farm employment and board activities. Similarly to the organization of domestic work, the temporality of dairy farming often does not constitute a linear flow but is composed of cycles: undertaking tasks and chores with specific regularities. Women's work can also be seen as possessing a more cyclical character, while the interconnection between men's work and the public sphere associates it to a more linear and progressive articulation of time. The perception of both household and farm time is structured by sequences of tasks, rather than quantities of hours (cf. Gershuny et al., 1994), and thereby emphasizes the 'labour-price advantage' of the family farm (Koning, 1994, p. 172).

Different work and non-work activities by household members may result in clashes between differing temporalities, as identified by Kaufman-Scarborough (2006). Shifting work between different modes of provision may require new articulations of temporalities between these. The shift of temporalities in one sphere alters the relations between spheres. After becoming a parent, Woman 2 felt that she had to stop working full-time, mainly because of the irregular working hours of paid care labour. However, she underlined that she 'might have continued working a higher level of part-time if one had worked office hours'. The structuring of husbands' work as dominant could thereby be understood as interconnected with the gendered labour market and distribution of domestic labour. For many of the women, both with and without a farming background, moving in together involved a double life transition, both in work and in personal life. In many cases, those with no farming background had a greater transition in terms of temporal and spatial dimensions, while many of the husbands already lived on the farm and all were socialized into the temporalities of farming. Man 7 described this in relation to his wife with a non-agricultural background:

'You are never able to attend a celebration, a birthday party or something else without the risk of suddenly having to leave for a calving. Since I have grown up with this and have always lived with it, I'm used to it happening. But I think that [my wife] found it quite difficult when she moved here.'

In these cases, the difference in socio-temporal expectancies of men and women was greater (cf. Daly, 2002). The spatial and temporal relations of the women were shaped by the fact that most of them had moved to the area and thereby lost their local social networks. The patrilocality of family farming thereby shapes the gendered relations and the power relations of agriculture. One of the recently relocated wives mentioned difficulty in finding her way around by car, something that affected both her professional and social life. A number of women described how, in the beginning, it was difficult to have a social life and find new friends, and how they were largely dependent on the social network of their husbands.

Different Temporalities and Expectations

Shaping the internal relations of the family farm, the gendered labour market appears to have both push-and-pull effects on the women in the study. In many cases, it offers women a possibility of employment in the public sector, while the gendered conditions of the same sector also 'push' women onto the farm. In the latter situation, the dependence on the husband increases, expanding the unequal power relations of the household. The temporal and spatial organization of domestic labour

and care work resulted in a number of the wives interviewed here choosing to leave wage labour outside the farm or start working part-time after maternity leave. The spatial and temporal distance to work and to childcare was the main reason, plus friction between different temporalities (cf. Thompson, 1996; Maher, 2009). Woman 7 described the situation after her maternity leave:

‘Commuting [to work] with two young children: milk, his medicine and everything. Then I had to choose: either to leave the kids at daycare down in [the village] for 12–13 hours a day, or try to be at home. The choice was fairly easy – I stayed at home.’

The lack of childcare for people working outside regular office hours and in more remote areas exacerbated the contradictory effects of temporal shifts. Most of the wives were involved, at present or previously, in off-farm work with paid care labour. This interconnection of different temporalities caused friction in the organization of domestic labour and care work. However, a number of husbands claimed that the irregular working hours of paid care labour in fact helped decrease the number of conflicts. According to Man 2:

‘[My wife] also has a job, in health care, which doesn’t take place seven to four, Monday to Friday. It is evenings and weekends, just like here [on the farm]. She can’t say anything if I work weekends and evenings, since she does that too. It is mutual. I think this might be the explanation why it has worked as well as it has.’

That husband felt that the similar structure of the different temporalities and the disposal of time provided a shared temporal understanding and position in the domestic negotiation of time. The wives without a farm background said that on moving to the farm, the temporal differences were the largest transition. Many of these wives were used to the organization of labour being structured by clock-time, clearly marking the start, end and duration of the working day. Woman 7 said:

‘Animals are animals – anything can happen. That’s how it is and I’m not native here either so I had to learn that this is not just a job, it is a whole lifestyle. It weaves in the work of course, but it goes round the clock, how should I put it, I’m at work as soon as I’m awake.’

These differences in expectations reveal a difference in temporal and spatial experiences inside and outside agriculture. The differences in temporalities were reported to cause frictions and conflicts in households (cf. Price and Evans, 2006), and one husband claimed that such clashes resulted in the end of his first marriage. The shift in temporalities also manifested itself in relation to the public sphere, according to the participants, mainly in connection with their children’s activities. The temporalities of dairy farming often clashed with some of the more dominating temporalities in the community and public sphere, affecting the parents’ ability to attend school performances and various after-school activities. Some of the participants, often with smaller children, felt that this temporal shift influenced their children’s experience of parenthood, in comparison with that of other children. The mixture of temporalities has consequences across different spheres, as Woman 5 noted:

‘We rarely get away as a family. Very rarely, and it’s never easy. There’s always pressure to get the milking over quickly so you can get away. Then you almost fall asleep, since you are exhausted.’

The second milking period of the day often takes place at the same time as other people end their working day and pick up their children from school. This results in the interviewees feeling 'sandwiched' between the demands of the farm and their responsibilities as parents (cf. Hochschild, 1997; Gershuny, 2000; Coyle, 2005). However, many of the parents in the study cited the temporal and spatial advantages with the temporalities of farming, particularly being at home most of the time. In relation to the women in particular, their presence, 'being there', could be seen as central in their spatial-temporal understanding of motherhood (cf. Maher, 2009).

Women's working patterns have always been more diverse than men's, both in terms of time and tasks. Women are often engaged in multitasking, especially across different temporalities (e.g. in relation to care, household provisioning, domestic and farm labour) and spheres (public, farm and domestic). Because the types of tasks that women usually perform are not recognized as work, their labour could be perceived as more exploited. However, it was primarily the clashes between different temporalities and expectations connected to them that seemed to affect the interviewees' experience of the quality of time (cf. Wajcman, 2008). Much of women's work in the domestic and public sphere does not conform to standard working time. The male wage labour norm constitutes the basis for the definition of 'standard', conceptually articulating the spatial and temporal division of men's and women's labour. However, as M. Harvey (1999, p. 25) emphasizes, there is 'nothing normal about "normal" working time'. In the case of dairy farming, the clashes with 'normal working time' mainly create challenges in the labour undertaken in different spheres by women, but also in terms of social interaction outside the temporalities of farming. The more general conflict of different temporalities primarily materializes with regard to their children and their expectations. The results show that differences in the structure and experience of temporality are one aspect in the division between public and private (cf. Glucksmann, 1998). The difference in the spatio-temporal experiences of men and women was articulated in terms of confrontations between different temporalities of work in different spheres, paid and non-paid, in a way that visualized the gendered relations of time in agriculture. The interviews also revealed the gendering of flexibility in relation to full-time engagement in farming. Women had to juggle multiple tasks and temporalities across a variety of spheres to a greater extent, structuring their work in relation to the temporalities of others. The flexibility in dairy farming not only comprises working time, but also non-work time, which cannot be planned on a fixed and regular basis (cf. Beynon, 2002).

Conclusions

Controlling the disposition of time is an important factor in farming couples' choice and perception of their occupation. It differentiates the temporalities of farming from wage labour in terms of the modalities of life. Although allowing limited control due to increased external pressures in the form of economic processes and technologies, farming couples' control and management of time are interconnected and structured by the different temporalities of men and women, and their experience of these. This study showed how the gendered division of labour constitutes a basis for articulation of power through the disposition of time. This results in the structuring of men's and women's everyday worlds being both constitutive of, and constituted by, spatial and temporal relations. The consequence is that men and women in family farming are exposed to different environments, expectations and psychosocial and

economic pressures as a result of the spatio-temporal relations (cf. Price and Evans, 2006; Andersson and Lundqvist, 2014). To some extent, this also reflects the social relations of the family farm in general, in its specific location and in the restructuring agricultural sector.

The understanding of temporalities as situated and historically specific in their spatial and socio-economic relations underlines the need to consider agrarian and rural contexts. In understanding gendered, classed and embodied subjectivities, the body (in matter, form, environment and spatio-temporal location) needs to be rethought through new tools and perspectives (Grosz, 1995, p. 84) to better comprehend how these affect individuals and their internal emotional geographies (McDowell, 1999; Riley, 2011). However, it is important to emphasize the dependence on social theory of the temporal perspective, since it cannot itself explain the distribution or principles of ordering. In this study, the temporal perspective proved to be a fruitful tool within the study of the rural as well as family farming. It offered some vital insights into the relations between family and farm and between paid and non-paid labour, transcending its dual and dichotomized relation, and into concepts of lifestyle (Bennett, 2005; Heather et al., 2005; Price and Evans, 2009), and expanding the understanding of the agrarian labour process within the capitalist system. More attention must be paid to the relationship between family farming and agriculture from a temporal and spatial approach in order to improve understanding of the gendered, classed and embodied subjectivities and processes in these contexts and to 'tackle the reality of the farming way of life, rather than continually validate its cultural practices' (Price, 2010a, p. 93). This study contributed directly to research on agrarian sociology and family businesses. By offering an alternative approach and case study, it also contributed more generally to research on work sciences and sociology – primarily in relation to the issues of shifts in work organization and the introduction of new technologies in the labour process. By linking these two parts, the study made a significant contribution to understanding the new technologies of dairy farming (cf. Butler et al., 2012; Jacobs and Siegford, 2012; Holloway et al., 2014a; Hansen and Jervell, 2015), which in relation to their advances and spread in Western agriculture have received limited attention.

The study showed how the centralization of employment and childcare to population centres, together with the shifting economic conditions causing e.g. farm expansion, has contributed to greater involvement of women in agriculture and increased responsibilities for care, domestic work and consumption labour due to the remote geographical location and classed position of the farm. Reinforced by patriarchal relations, the material relations embodied in the farm in terms of family home and husband's business structure the temporalities of each family member and impose specific types of flexibilities. The material in this study underlined how the male dominance shapes the structuring of the labour process – reproducing the male domination over women's labour. Confirming previous research (Price, 2010b; Price and Evans, 2009; Andersson and Lundqvist, 2014), the study also revealed the embodiment of flexibility with its physical consequences and the multiple responsibilities that entail limited experiences and knowledge of specific tasks and work on the farm. There were no signs of renegotiation of the sexual division of domestic labour or farm labour between couples (cf. Blekesaune, 1996; Brandth, 2002; Kelly and Shortall, 2002; Heather et al., 2005; Price and Evans, 2009; Price, 2010a). Placed within the spatio-temporal materiality of the family farm, the responsibility for the family forced women to expand the multiplicity of temporalities in which they work

and the greater flexibility intensified pressure in work (cf. Teather, 1994; Heather et al., 2005; Price and Evans, 2005, 2009). Based on the gendered division of labour, the articulation of power through the sorting of time materializes the different experiences of temporalities between men and women. Thus on the types of family farms studied here, the different temporalities of dairy farming reproduce the sorting of time, sexual division of labour and social relations of the family, the agricultural sector and society, and ensure men's dominance, power and access to property.

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