Making meat moral: A comparison of rearing and killing practices in Swedish cattle farming

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Abstract
To eat or not eat meat? That has become a central sustainability question. This article zooms in on the moral sustainability of cattle farming and does so from an on-farm perspective: through an ethnographic study of two Swedish cattle farms, we explore how rearing animals for food is made moral. The farms represent two distinct styles of farming, and discursive and non-discursive methods are used to analyse differences in narratives and practices. We combine insights from the farming styles literature with affective and multispecies approaches to theorise farming moralities as situated, embedded and relational beliefs that pertain to practices of work. Our study demonstrates how scale and endogeneity are key factors shaping farming morality by generating different on-farm notions of animal agency and interspecies relationships. We discuss the implications of this conclusion for a potential shift in meat practices.

KEYWORDS
farming morality, human–animal relationships, multispecies ethnography, practices
THE MORALITY OF MEAT: INTRODUCTION

Fancy a steak? Global meat consumption is increasing and expected to double by 2050 (Food and Agriculture Organization of the United Nations [FAO], 2006, 2018) but is under fire on several fronts. Meat has become representative for the unsustainability of the western way of life. In particular, it is cows1 that are considered (part of) the problem: The scope of contemporary cattle farming is a main driver behind the crossing of several planetary boundaries (Bowles et al., 2019; Clark & Tilman, 2017; IPES-Food, 2022; Weis, 2013) and high levels of beef consumption is a source of diet-related illnesses (Willett et al., 2019). There is scientific consensus that it is imperative to shift to plant-based diets in which meat is a minor ingredient (de Boer et al., 2014; Röös et al., 2015). Next to planetary and human health concerns, moral discomfort with animal farming is also growing. The number of animal rights groups and animal protection laws are increasing, and consumer calls for ‘humane’ farming practices are sounding louder (Gutjahr, 2013; Kjærnes et al., 2022; Miele, 2016).

When meat is up for debate, the positions of farmers are often not much more than caricatures. Literature and popular media tend to downplay the ambiguity and diversity of the moral intuitions and practices with which farmers raise, keep and slaughter their animals (Bryant & van der Weele, 2021; Driessen, 2012; Wilkie, 2010). This is problematic as a public moral shift has the potential to drive a transformation of farming practices, and without the recognition of farming heterogeneity, proposals and policies for transformation risk missing their target. The purpose of this article is to complement the extensive literature on the morality of meat-eating from the perspective of consumers (e.g. Arcari, 2018a, 2020; Barnett et al., 2005; Fanzo, 2015; Pilgrim, 2013; Pluhar, 2010) with a study of the moral diversity and ambiguity that underpin cattle farming. We conceptualise morals as situated, embedded principles of right and wrong that emerge through everyday interactions among farmers, slaughter(wo)men, farmed animals and farm materialities (Herman, 2016; Lynn, 1998). We ask how raising animals for food is (made) morally possible? We investigate this question through an ethnographic study of two Swedish beef cattle farms and slaughterhouses.

In rural sociology, farming diversity is often conceptualised in terms of farming styles (van der Ploeg, 2022). We build on this literature and integrate insights from the ‘affective turn’ and the ‘animal turn’ to achieve three objectives: (1) theorise raising and slaughtering animals as a moral practice; (2) compare farm and slaughterhouse practices that are distinct in terms of organisation; and (3) discuss the implications of our results for explaining the interrelation between farming practices and morals that enable the raising and killing of animals for food. Throughout data collection and analysis, we used audio–visuals (photography, movie-and image-making and soundscape recording) to enable a multisensory exploration of the multispecies relationships of two Swedish farmyards.

DIVERSITY AND AMBIGUITY OF FARMING: THEORISATION

To capture the diversity of farmers’ material and cognitive practices, scholars have frequently relied on typologies (e.g. Battershill & Gilg, 1996). The rural sociology underpinning these typologies has tended to focus on the structures of farming: financial, power related and cultural. An important effort trying to overcome one-sided structural explanations and recognise the
complexity of farming is the farming styles research spearheaded by van der Ploeg (for an overview see van der Ploeg & Ventura, 2014). The farming styles concept differentiates farmers in terms of how they adapt aspirations and capacities to available socio-ecological opportunities. Farmers are conceptualised as relatively autonomous decision-makers who, through reasoning, construct understandings and meanings about farm life and act accordingly. We would like to highlight two aspects of farming styles that so far have not been theorised much: the role of affective sensibilities and animals in shaping (the diversity of) farming.

Affect and morals

Farming styles are a notion that refers to a series of concrete, everyday farm activities. These activities, or practices, are patterned interactions among humans, animals, living and non-living nature and technical artefacts (van der Ploeg, 2013). It follows that styles do not exist independently of doing, which brings to focus the importance of work: the practical, embodied and situated knowledge needed to farm (Mellegård & Boonstra, 2020; Scott, 1998; van der Ploeg, 2013). What remains undertheorised, however, is that affect and morals guide and flow from this work (Fukuda, 2016; Meijboom & Stafleu, 2016; but see Bassi et al., 2019 for an exception). Following the ‘affective turn’, needs and responsibilities materialise in and through everyday on-farm doings and multispecies interactions (Herman, 2016; Shapiro, 2020).

Building on a long sociological tradition (Sumner, 1940 [1906]; de Tocqueville, 2012 [1835]), we conceptualise morals as habitual and intuitive modes of thinking, feeling and doing that are key to understanding the motivation behind human behaviour. This understanding matches with insights that organisational and economic decisions of farmers are anchored in moral intuitions that stem from feelings, sentiments and affections (Dam & Nizet, 2015; Driessen, 2012; Gezelius, 2014; Holloway, 2002, 2007; Rieple & Snijders, 2018; Scott, 1977; van der Ploeg, 2013; Wilkie, 2010). For instance, in their study of Canadian cattle farmers, Bassi et al. (2019) found that negative affective states – such as discomfort – can be a catalyst to search for alternative animal care practices, beyond industry codes of conduct.

Slaughter brings the complex intertwined of affect, morals and rational (economic) decision-making to the fore: despite the prerequisite that farmed animals exist to be killed for food, slaughter is an event that needs to be dealt with. Morgan and Cole (2011) argued that, to morally allow for the slaughter of animals, animals must be repositioned discursively from subjects to objects. This reposition reconciles the transition of animals from sentient beings to be cared for to commodities to be consumed (see also Arcari, 2020). The organisation of farming and slaughter into distinct, geographically separated practices helps farmers ‘manage their hearts’ (Hochschild, 1983). Farmers stay on the life side of farming, and someone else must, literally, do the dirty work (Birke et al., 2007). Similarly, inside the slaughterhouse, spatial and semiotic constructions co-create a pragmatic separation between slaughter(wo)men and animals so that the work is thought of in terms of food processing rather than animal killing (Pachirat, 2011). The act of taking lives is further de-emotionalised through a male macho-culture that premiers commitment and professional pride (Cudworth, 2017; McLoughlin, 2019; Wilkie, 2010). These socio-material orderings of farming and slaughter offer specific conditions for what is considered moral (Blanchette, 2018; Buller, 2016; Higgin et al., 2011).
Cows and other animals

Rural sociologists have traditionally studied animals and farm materialities as either passive labour objects or commodities. Central in the now established ‘animal turn’ is a growing recognition of the active role of animals – cooperating with humans, equipment, technology and materials – in shaping everyday farm practices (Bear & Holloway, 2019; Buller, 2014; Darnhofer, 2020; Darnhofer et al., 2016; Jones, 2006; Murdoch, 2001; Wilkie, 2015). Animal personalities can be known and allowed to influence the way things are done on the farm (Holloway, 2002, 2007; Wilkie, 2010) while the materiality of the farm matters for what human–animal relationships are possible or impossible (Buller, 2013; Pachirat, 2011; Porcher, 2011; Tallberg & Jordan, 2022). Indeed, to farm is to work with living nature, and farming is inherently hybrid, governed neither by the dynamics of nature nor of the will of farmers alone: it is a ‘co-production’ (van der Ploeg, 2013, p. 48). Importantly, however, these co-productions are not equal collaborations: There is a species hierarchy at play and farmers have the upper hand. After all, animal farming is humans doing things to animals.

Following Darnhofer (2020) and Tovey (2003) among others, we recognise the analytical need to capture the co-producing role of animals in shaping everyday farm life. Drawing on Carter and Charles’ (2011) relational conception of agency, we understand agency as constituted by and contingent on social positioning. Positionings create a certain set of interdependencies, capacities, constraints and interests. Animals occupy a subordinate position within our societies but, through their social interactions with us, they are nonetheless agents. Our ambition is to go beyond recognizing animals as part of practices on unequal terms and explore how the terms of co-production are constituted (see also Arcari, 2018b). That is, how farmed animals are shaped by practices and allowed to shape practices. In our analysis, we refer to the animals’ agency as animality to put emphasis on animals as social agents whose beings and actions are interpreted and related to.

In sum, to study cattle farming and slaughter practices, and the moralities that are both cause and consequence of these practices, we integrate insights from the affective turn and the animal turn with the concept of farming styles. We theorise cattle farming practices as both shaping and shaped by farmers’ morals, farmed animals and farm materiality (including landscape, infrastructure, technology and labour divisions). In what follows we use morals, farm materiality and animality as constituting dimensions of different farming practices to analyse and qualify the diversity and moral ambiguity of cattle rearing and slaughter.

RESEARCHING AND PRESENTING FARM LIFE: METHODOLOGY

Ideal-typical farms

The purpose of typological approaches to farming is to assist comprehension through simplification (e.g. Vanclay et al., 2006; Whatmore, 1994; Whatmore et al., 1987). Many typologies include ideal-types: Categorical descriptions of farming practices that serve as borderline cases to confront and compare real-type cases (Gunther & Diamond, 2003; Weber, 2017 [1904]). However, typological descriptions that fail to clearly articulate distinctions and tensions between theoretical ideal-types and real-type cases fail to recognise the empirical complexity, and invite
oversimplified statements such as ‘intensive bad, extensive good’ (Wilkie, 2010, p. 8). Instead, ideal-types must be considered theoretical end points on a continuum: They exaggerate for the sake of understanding and create a ‘space in between’ where most empirical manifestations can be allocated (Goertz, 2020; Hindriks, 2013; Stapley et al., 2022; Swedberg, 2014, 2018).

From the farming styles literature, two ideal-types can be distilled: peasant and entrepreneurial farming (see van der Ploeg, 2013; van der Ploeg, 2009; and especially van der Ploeg, 2018, p. 1–90). Peasant farming is characterised by the use of technologies that are skill-imposing, meaning that the operation of technologies involves a relatively high degree of handwork: Farmers and slaughter(wo)men are manually doing much of the caring, handling and slaughtering. Peasant farms host smaller herds, often outdoors, and the farmers’ guiding morality emphasises notions of care and stewardship. In contrast, entrepreneurial farming relies on technologies that are skill-excluding, and farmers and slaughter(wo)men do not directly care for, handle, or kill the animals. Much of the work is taken over by machines, and the technology tends to be complex and expensive. Herd sizes are large and organised to optimise production as the entrepreneurial farmers’ morals emphasise profit-making. Besides scale of operation, structural differences between peasant and entrepreneurial styles of farming include endogeneity, i.e., the degree to which farm practices are based on and use energy and resources obtained on-farm as opposed to off-farm (van der Ploeg et al., 2008). Endogeneity also concerns commodification of farm output: Entrepreneurial farm products are sold on the market, whereas peasant farm products are predominantly consumed on-farm (van der Ploeg, 2022).

We include slaughter in our analysis; it is part of animal farming, and we expect morals to become explicit in practices of killing. Conceptual insights from the farming styles literature can be extended to the stage of slaughter as it is too a socio-material practice shaped by scale, level of endogeneity, use of technology and morals (Blanchette, 2018; Higgin et al., 2011; McLoughlin, 2019; Pachirat, 2011). A number of studies have used farming styles theory to interpret traditional on-farm slaughter practices (e.g. Ventura & van der Meulen, 1994; van der Meulen & Ventura, 1995; Ventura & Milone, 2000), we build on this effort by expanding the empirical application and drawing on scholarly work on modern industrial slaughter.

Two ideal-typical slaughter styles can be discerned. While most slaughter in the Global North nowadays is performed according to an ‘entrepreneurial’ logic – taking place beyond the farmyard in large-scale industrialised slaughter facilities elsewhere – there are smaller, alternate ‘peasant’ slaughterhouses that form part of localised food systems (Blanchette, 2018; Davidson et al., 2016).

Case selection

The entrepreneurial and peasant ideal-types reflect the contemporary (re)structurisation of cattle farming in Sweden and elsewhere in the Global North. Farms are decreasing in numbers and growing in size as more labour is automated (Swedish Board of Agriculture, 2017; Wilkie, 2017). The same holds true on the killing front: Fewer slaughterhouses are slaughtering more animals faster as technological developments increase the line speed (Hultgren, 2018). Concurrently, there is development of alternative cattle farming practices that combine traditional methods and values with modern to resist industrial modes of rearing and slaughtering animals (Garnett et al., 2017; Hultgren, 2018; IPES-Food, 2016).
We use the ideal-types of peasant and entrepreneurial farming to select and think through two farms in Sweden. The first case is a small-scale diversified family farm in Northern Sweden that breeds and rears cattle. The second case is a large-scale industrial cattle farm in Southern Sweden specialising in the fattening stage. The farms’ respective slaughterhouses are also included in the study: A small-scale slaughterhouse serving a local network of farmers, and a large-scale slaughterhouse with both national and international distribution. Farms, slaughterhouses, people and animals have been pseudonymised: The small-scale family farm is called Smallville and the large-scale industrial farm Bigville. The slaughterhouses are referred to as Smallkill and Bigkill, respectively.

The cases were selected on the premise that different moralities underpin and emerge from different organisational set-ups. Importantly, while being reflective of theoretical ideal-types, the cases are not their respective ideal-type nor do they represent all diversity in Swedish cattle farming. To reiterate, (animal) farming is inherently heterogeneous: even within styles of farming, there is no one way to farm (van der Ploeg, 2022). Similarly, there is a hybridity both within and between ideal-typical practices of slaughter (Porcher, 2017). Consequently, there are many possible combinations of farming and slaughtering practices. Consider, for instance, smallholders selling animals to conventional slaughterhouses or large-scale farmers selling parts of their production through localised niche markets (Davidson et al., 2016). In addition, although our cases are opposite in many aspects, they also share similarities. In what follows, we use ideal types as a methodological tool to help us delineate convergences and contrasts between cases, and between cases and theoretical propositions.

**Multispecies logic**

The study combined participatory observation and semi-structured interviews. In 2019, the first author spent a week on each farm observing and partaking in daily activities, and one additional day at respective farm’s slaughterhouse. Participant observation was done with both human and animal farm workers. While the cows were included as ethnographic subjects, limitations applied. We cannot know or ask about animals’ intentions, but, while not sharing language with cows, we do share bodily existence. Our bodily meetings are ‘contact zones’ (Haraway, 2008, p. 205) in which activities, understandings and relationships emerge. The first author observed how cows – both as individuals and in groups – interacted with their surroundings, and what the consequences were for the farm practice and the cows’ lives.

Our multispecies logic means that, rather than speaking for farmers and cows, we tell stories of them: using a narrative writing style, images and sound, we move from a logic of representing to presenting and invite readers to experience farm life (see also Ingold, 2002; Pitt, 2015). It is a commitment to the possibility of multilinear narration during both research process and communication. In the field, audiovisual data allowed us to go beyond text-based representations of nonhumans’ role in the practices through listening to the work of farm materials and visually capturing the movement of animals. The first author also collaborated with an artist to interpret written and audiovisual field notes to craft ‘perspectives of perspectives’ (Freidenberg, 1998) that both confirmed and contrasted her experience of the field. Parts of the audiovisual material are included in the article to invite readers to their own, however limited, multisensory experience of the field sites. The ‘Findings’ section includes drawings and soundscapes from the farms, and the ‘Discussion’ section includes a selection of the artistic interpretations.
MEET THE CASES: FINDINGS

Following are two case portraits written in first person from the perspective of the first author that describe the moral practices of raising and slaughtering cattle.

Smallville

Smallville is a diversified family-farm with 25 cattle, of which 11 are steers (all bull calves are castrated), and 1 is a bull. They also have pigs, sheep, chickens, and grow vegetables. All animals are kept outside year-round with access to windshields during the winter months (see drawing 1 Outdoor Living). Smallville is run by Emil, Anna and their children Max and My. They bought Smallville in 2012: it was love at first sight. Neither Anna nor Emil had any prior farming experience and all that they know they have learnt by doing. Today, they produce everything they eat except for cheese and milk. Of which they buy a lot.

Drawing 1. Outdoor living. By: First Author
Steers are sent to slaughter at the age of two and a half years and Anna and Emil question the common standpoint that low meat prices necessitate scale-enlargement. They say that the low prices are generated by the big slaughterhouses. There are other options. They slaughter their cattle through Smallkill, sell their meat online and get SEK190 (EUR17) per kilo. The key is to educate consumers about what they do and why. Their goal is to live off the farm but, for now, they are dependent on external incomes. Emil has a forestry company and Anna works extra hours at the slaughterhouse.

While neither Anna nor Emil come from farming backgrounds, they understand cattle farming as a cultural heritage, meaning that the way things are done and understood are modelled on the past, anchored in local tradition. Tradition is not clearly defined but much of the practice and the values behind it stand against scale-enlargement and intensification. ‘The way forward’, Emil says, ‘is to have more of us, not more animals on bigger farms, but more and smaller farms, because we can adapt to the environment we live in and be close to our animals’.

Consequently, what is perceived to be ‘good’, sustainable, meat depends on local conditions and therefore varies across space. In Smallville, this translates to a diversified small farm where animals are extensively held on pasture because ‘here the natural environment does not allow for large-scale specialised farming’. Anna and Emil refer to their cattle as stewards of the land and they have meticulously worked out a rotational grazing schedule to enhance the soil’s capacity to sequester carbon dioxide emissions.

For Anna and Emil, their local farming community is an important source of knowledge and support. They contrast this to the resources available from the Swedish Board of Agriculture. Some years back, they took a course in sheep farming, and the only information they received, Anna tells me, was how much protein feed they needed to ‘buy and stuff into their animals’. They dropped out: ‘why should we buy feed when we have fodder here, in the form of pasture and hay?’. This is a common idea in their local farmer community: It is even prohibited to feed cattle protein feed if they are to be slaughtered in Smallkill. Cattle, these farmers say, are not meant to eat protein feed; it is a processed and often unsustainable input, and it is unnecessary, ‘you only give them that to make them grow faster’.

With the help of neighbours and friendly locals, Anna and Emil manage to do most things themselves, including repairing buildings and machinery. They own all their equipment; alternatively, they contract someone in the neighbourhood to do the work for them, such as mowing hay.

The two farmers know all of their cows well, and individual cows impact the daily practices in a very tangible way: if a cow does not want to move, one waits until (s)he does. They say that cows ought to be allowed to live as freely as possible, ‘to lead their own lives, the lives it feels like they are meant for’. Anna and Emil tell me that, most of the time, the cows manage on their own. From calving to deciding when and how much to eat, the cows have got it covered and their job as farmers is to follow their lead. For instance, when the pasture is running low, the cows ‘spread over the field, searching for food’, signalling that it is time to move them to new pastures.

Smallville operates on solar time, a consequence of an outdoor practice. There is a dynamism and seasonality to activities: Calves are born in April, all cattle are on summer pasture from mid-May through October, the bull mates with cows around Midsummer, and steers are sent to slaughter in the fall (listen to audio file 1 Smallville soundscape). But farm life rhythm is also set by family life: they aim to wean calves around the age of 6 months but, ‘it really depends on parent meetings at kindergarten and Lucia celebrations in school’.

Smallkill

The Smallville cows are slaughtered in Smallkill: A small local slaughterhouse that measures just over 20 square metres and has a maximum capacity to slaughter six animals per week. It resides in the premises of what was previously a manufacturing industry of some sort, neatly tucked into a forest clearing in the outskirts of the village. They slaughter on Tuesdays – if there are animals to be slaughtered. On their website it is said that their opening hours vary, they start when ready and finish when done.

Smallkill was founded in 2012 by a group of farmers tired of sending their animals on long travels to the nearest large-scale slaughterhouse. The slaughterhouse is run like a share-based corporation with around 30 owners. Smallkill does not buy animals; instead, farmers buy the slaughter as a service and manage meat sales and distribution themselves.

Besides the director of the slaughterhouse, there is one full time Smallkill employee, the butcher Bea and a few hourly paid extras, including Anna. Gender-wise, there has always been a close-to equal division between women and men among the staff, but gender is not considered important: I am told that the profession of slaughter is for those who care, about animals and people.

Most of the equipment in the slaughter hall is mobile, and depending on the activity – killing, butchering and packaging – the room is re-designed. The Smallkill founders built the slaughterhouse themselves and have tweaked the construction throughout the years. None of the machinery is fully automatic; instead, the machinery functions as extensions of human hands. The skinning is done by hand, saws are handheld, and the overhead rail system can be lowered or raised to adjust for sticking, splitting or trimming. Smallkill owns all their equipment and does most of the maintenance and repairing in-house, sometimes with the help from people in the village.

Bigville

Bigville is a large-scale farm that is home to 500 bulls7 and 150,000 chickens. All animals are held indoors in new facilities with many of the latest features available on the market, such as climate control systems and automated systems for feeding, watering and cleaning. Bulls grow faster than steers, which is why castration is not part of the practice. Bull calves are bought from neighbouring dairy farms and raised on a 15-month cycle. The first 6 months are spent in the calf stable where the bulls live in groups of seven in straw bed boxes. The remaining 9 months the bulls spend in the bull stable on slatted rubber floor in pens of 15–20 animals (see drawing 2 Indoor Living).
Bo is the owner of Bigville. He was born on the farm and took it over from his father in 2015. Bo has a university degree in agronomy, is active in various farmer associations, and has received several industry awards. While Smallville refers to their cattle farming as reflective of a locality and an inherited way of life, Bigville refers to societal norms regarding meat consumption and animal welfare, and farming as a business that must be economically viable. To this end, Bo considers an industrial logic necessary, and he has made big investments to scale up and automate the farm. Bo tells me that people sometimes get surprised when they hear that he raises more than 500 bulls and 500,000 chickens each year: ‘they think it sounds enormous. But it is about economy of scale and efficiency. There is no profitability in 20 bulls’. In fact, Bo says that his confined system is not ideal, that cows should be able to move freely outside, but ‘this is the way we have to do it if we are to eat this amount of cheap meat’.

While Swedes want cheap meat they are also said to have high demands on animal welfare. Rather than being explained as this is how we do it here, the Bigville practice is presented to me as representative of a ‘Swedish model’ that sets a normative standard to which other countries are compared. This comparison concludes that Swedish farming is resource efficient in terms
of emissions and water usage, and animal welfare standards are high. What makes for ‘good’ sustainable meat, in the eyes of Bo, is meat that is produced according to the Swedish model.

The six employees in Bigville originate from Sweden, Eastern Europe, and the Middle East. Joyce is responsible for the bulls. She is in her early 20s and employed through a staffing agency that specialises in foreign farmworkers. Two additional male employees work with the animals, whereas two others are hired to do construction and forestry. At one point, Bo was contemplating to focus only on the more automated and lucrative chicken farming but then he would have been working pretty much alone. He decided to keep the bulls, telling me that, ‘it is the people that make farming fun’. He is social, Bo, and I soon learn, a much-appreciated boss.

Bo leases all machinery. He wants the best available and neither he nor Joyce want to spend time maintaining the mechanical equipment that is such a vital part of the Bigville operation. When needed, they call the technicians of the Danish leasing company.

Animal caretaking in Bigville is organised based on knowledge of cows and cow behaviour at species level. Bulls are recognised as having certain basic physiological and social needs that must be met to make healthy bulls that grow and, subsequently, the business profitable. For example, I am told that the bulls are kept in pens of 15–20 because, at this number, they form good social hierarchies among each other, where no bull is bullied by another, and everyone can access feed and water. Starting from the day the bulls are unloaded in the calf-stable, there are several skills they must acquire including drinking milk from milk buckets, water from automatic cups, and avoiding the automated manure scraper moving across the floor.

Bigville operates on clock time and there are no seasons. There are new calves coming in every 2 weeks and every month 30 bulls are sent to slaughter, year-round. There is a scheduled regularity to daily life: The workday starts and ends on set hours, vacations and time off are scheduled, and the animals are automatically fed four times a day following a set plan (listen to audio file 2 Bigville soundscape).

**Bigkill**

The Bigville bulls are sold to Bigkill, one of the *Big Three* in the Swedish slaughter landscape. The slaughterhouse is located in a middle-sized city some 40 min away from Bigville. Bigkill dates to the beginning of the 20th century and, while the slaughterhouse is no longer Swedish-owned, their niche is to only slaughter animals that are born and raised in Sweden. Bigkill slaughters pigs, cattle and sheep: A total of 10,700 animals every week of which 1200 are cows. The workday starts at 06.30 AM and ends 3.30 PM, Monday through Friday.
Bigkill buys animals from farmers and competes with other slaughterhouses through price point (price paid per kilo meat). The meat is sold to retail, food service and industry, including through exports. Bigkill also does processing and makes the lasagnes and pasta sauces of several best-selling brands. The Bigkill Director says that their food has high quality, it is not like homemade, but almost. They also produce many vegetarian dishes to ‘keep with the times’. Not that the Director thinks that meat will ever become obsolete, but you have to ‘stay openminded’, he says.

There are 630 employees of which the majority are non-Swedes. Official working languages include Swedish, English and Polish. Only a third are women and all of them work in either management or with cutting/processing/packaging, none on the killing floor. ‘It is a heavy job’, the killing floor manager tells me. They have a high turnover of the floor staff – many quit on the first day – and mainly hire seasonal staff through staffing agencies recruiting in Poland and Ireland. When hiring staff that work with live animals, I am told they look for people with the ‘animal eye’. Having the ‘eye’ is distinct from proficiency in animal welfare legislation, instead it is about ‘having a feeling for animals’ and it is something you either have or you don’t. The Director says they often have visitors commenting on how calm and quiet it is in the holding area – a sure sign they have succeeded with the recruitment.

The cattle slaughter is organised into a disassembly line, with 17 stations covering the journey from knocker box to packaging. No time is wasted: The line speed is set to slaughter 35 cows every hour and breaks are timed. The slaughterhouse equipment was purchased used in a neighbouring country, it ‘was cheaper than buying new and works well’ says the Bigkill Director.

SCALE AND ENDOGENEITY: DISCUSSION

There is morality in both Smallville/kill and Bigville/kill but the nature and source of morality differs. To understand how killing animals for food is made morally possible in the two cases, we connect scale and endogeneity of farming to two key concepts that emerged in the data: animal agency and interspecies relationships.

Animal agency or, worked and working subjects

Whether the cows are related to as individuals or as a herd matter for how animal agency is understood by way of putting different emphasis on the role and importance of cow subjectivities, that is, individual cow personalities.

This is not to say that Smallville cows have agency while Bigville cows do not. Instead, it is the locus and nature of animal agency that differs between the farms, not its existence. Our cases suggest a nuance to the notion of farm animals as either ‘working subjects’ or ‘worked objects’ (Haraway, 2008, p. 80; also Emel et al., 2015). In Smallville, cows’ individual wills and personalities are recognised and allowed to influence the practice: each Smallville cow enacts direct immediate agency and is a working subject alongside the farmer (see artistic interpretation 1 Working Subjects). But while the focus is on basic needs in Bigville, this is not to disregard cow subjectivity: it is
to recognise and manage it. The agency of individual Bigville cows is limited but each cow enacts indirect, mediated agency by virtue of belonging to the group ‘cows’ and cows are worked subjects (see artistic interpretation 2 Worked Subjects). The cows are related to as subjective, social beings that are taught numerous skills. The goal is to ensure standardised living conditions in which certain bull behaviours are encouraged over others and even and consistent growth is achieved across individuals.

Artistic interpretation 1. Working Subjects. By: Claes Wernerson

To pay attention to animal subjectivity has long been considered crucial by farmers across farming styles (Holloway, McLoughlin & Casey, 2022; Santori & Driessen, 2022; Wilkie, 2010). Take the example of stunning: Independent of size and type of farm, animals are made sentient at the moment of slaughter, why they need to be stunned (Buller, 2013; Higgin et al., 2011). Indeed, countering the notion of a de-emotionalised slaughterhouse (Cudworth, 2017; McLoughlin, 2019; Wilkie, 2010), slaughter is said to be work for people ‘who care’ (Smallkill) and have ‘a feeling for animals’ (Bigkill). Rather than treating ‘them as objects so that we can kill them’ (Bernardina, 1991, p. 35 in Buller, 2013), Bigville and Smallville cows are treated as subjects so that they can be killed. But this means different things in the two cases following the notion of working versus worked subjects. In Bigkill the cows are stunned with a high-pressure stunning gun and their heads are mechanically held immobile. A Bigkill knocker responds to cow subjectivities by assessing the size of the animal and adjusting the pressure accordingly to ensure that the cow is stunned properly. Focus is on physiological general cow needs (the cow is a worked subject). In Smallkill, they use two different kinds of hand-held captive bolt guns: one for shots from in front of the cow, and one for shots from above. The cows’ heads are not fixated, and the stunner must read each cow and wait for the moment when the cow stands still enough so that the shot can be placed. Focus is on situated individual cow actions (the cow is a working subject).
The locus and nature of animal agency — conceptions of *animality* — on the two farms reflect the farms’ different levels of endogeneity. Contrarily to the ideal-typical distinction between entrepreneurial and peasant farms, both farms are commercial and the farmers have the ambition to live off their cattle farming. To raise and kill cows for human food is equally considered moral, but the way the practices are organised and made moral differs depending on the reach and nature of the farms’ commercial relationships, that is, their endogeneity. Smallville operates what could be termed a local commerce in which intimate and close relationships are key (e.g. farm input is obtained from local networks and the meat is consumed on farm or sold directly to local consumers). In terms of farming style theory: the endogeneity is high. Bigville, on the other hand, operates a global commerce where institutions and regulations are key, making relationships indirect and mediated (e.g. farm input is obtained from various national/international suppliers and the meat is sold to national/international consumers by a third party). Bigville’s endogeneity is low.

Wilkie (2010, 2017) introduced the idea of cows as *sentient commodities* to address the perceptual paradox that cows are simultaneously living beings to be cared for, and meat commodities to be sold. While agreeing with Wilkie (2010) that commodification is a dynamic process, we suggest that whether cows are primarily related to as commodities or as sentient beings is not only a question of whether the farm is commercial or not. Both Bigville and Smallville are commercial, and all Bigville cows are recognised as sentient beings, whereas all Smallville cows are commodities. Our distinction between worked and working subjects suggests that it is rather a question of the nature of animal agency that, in turn, differs in relation to the farms’ degree of endogeneity. In Bigville/kill, cows are bought from and sold elsewhere: They are resources that are worked upon and valued, literally, when bought and sold. In Smallville/kill, cows play a role as endogenous resources that contribute to (re)produce a particular way of farming. They are always meat-in-waiting, but they are also working subjects alongside the farmer that are valued for providing calves and manure for fodder production, for managing and sustaining a cultural landscape, and
for offering guidance to the farmers with regards to their needs. The nature of the farms’ commercial relationships trickles down onto the farmyards and carves out different agential spaces for the cows.

Recall, however, that the Smallville farmers make their living separately from the farm. Their farm practice is financed by other sources of income, and this is largely what gives them freedom in deciding how to rear their cows. This freedom may or may not be circumscribed the day the Smallville farmers reach their goal of living off the farm. Today, breeding is an inherent part of the Smallville practice, and cows that are easy to handle, have good hoofs, and give birth to calves that grow well are selected for breeding while others are sent to slaughter. In other words, the agency of cows is ultimately fenced in by human ideas of good and bad and by commercial needs (Holloway, 2007; Tallberg & Jordan, 2022). The day the commercial orientation of their farm is given a different and more prominent role, their farming practice and its guiding morality may be further rewired along these lines.

**Interspecies relationships or, the cow Dunbar number**

You are more likely to love a cow than a herd of cattle. The farming practice in Smallville requires intimate relationships with, and knowledge of, each cow. From hoof trimming to moving the cows between pastures (the farmers simply walk with them), close to every work task entails physical contact. Anna and Emil also need to know their cows to select for breeding and killing. In Smallville, it is this intimate relationship that makes cows killable and eatable. The very point of the practice is, ‘to know what you eat. If we were not raising our own animals we would not know who we are eating. That is why we feel that we can do it’.

One example of intersubjective relationships as prerequisite for killing is the story we were told about the Big White Bull. Once, a bull escaped from Smallkill by jumping the fence in the holding area and exiting the slaughterhouse compound through a gate left open. The bull was on the run for days and became a local celebrity. Similar to the Tamworth Two pigs that escaped the Malmsbury slaughterhouse (see Morgan & Cole, 2011), the Big White Bull was humanised in the public discourse by being described as ‘intelligent’ and ‘smart’ for having understood that ‘he was to be slaughtered’, and eventually someone offered to buy the bull for tens of thousands Swedish crowns to spare his life. The offer was considerably higher than what the farmer would have gotten from selling the meat, yet it was rejected. In fact, the offer was considered naïve: how would the bidders be able to handle and care for the bull? In the Tamworth Two story, the assignment of anthropocentric traits to the pigs is what exempted them from their destiny as food: They became individuals as opposed to anonymous heads within the large undifferentiated group of food animals called ‘pigs’ (Taylor, 2017). In contrast, the *raison d’être* for the Big White Bull and all Smallville/kill cows is as food animals, and, here, that necessitates the possession of a known individualised subjectivity. The morality of the Smallville/kill farming practice springs from their intimate relationships with their cows and the eating at the end of it is a prerequisite for this intimacy (see also McLoughlin & Casey, 2022). It is a situated and embedded morality that is not easily made accessible to outsiders.

In contrast, to form personal relationships with each of the 500 bulls in Bigville is not practically possible. It is also not needed for the farm practice to function. The built environment of farms enables or disables physical closeness and, thus, influences what emotional bonds are possible or impossible (see also Bock & Huik, 2007; Buller, 2013; Porcher, 2010). The materiality of
Bigville does not have the ‘affordances’ (Gibson, 1979) for intimate animal–farmer relations. As an example, consider the task of moving calves between pens in the calf stable. Bo told us that, before, they used to halter them and move them one at a time. The calves would always resist, planting their hoofs into the ground and refusing to move. Bo said that, of course, ‘you can train a calf for two months and it will be like a dog on a leash’, but there is no time for that in Bigville. Nowadays they herd the calves onto a cage attached to a bobcat, no personal knowledge or interaction farmer–animal needed, and all calves are moved in 10 min, easy. ‘It is all about building systems’, Bo said.

The automated systems typical for Bigville serve to minimise human–animal contact to enhance efficiency, and we were told that you could manage all 500 bulls in two minutes. And yet, there are limitations to the degree in which technology can replace human–animal interaction. Where interaction came habitually with the work (as it still does in Smallville), technological progress has made it obsolete in Bigville and, somewhat paradoxically, Bo now has to ‘force’ himself and his workers to spend time with the animals because the human eye is still needed to check that the bulls are doing well. For this purpose, the workers walk up and down the aisles twice a day in the bull stable, waving red cattle sorting paddles to make the bulls stand so that they can check that legs look okay and that everyone is growing according to schedule. If there is an injury or a sickness, intervention is needed to get the bull back on growth track.

Scale of farming is, thus, next to endogeneity, a key factor shaping the relationships of the farmyard because there is a limit to how many cows farmers can know. There is a Dunbar number beyond which it becomes impossible to get to know the cows in your herd, because to get to know a cow and build a relationship requires time and physical closeness. For the people of both Smallville and Bigville, around 60 cows are said to be an ideal herd size if you want to know your cows. Beyond that it is hard, if not impossible, to keep track of individual cow personalities. The relation also goes the other way around: The more cows you have the less time you will spend with each one and the less they will know you. If you exceed ‘the rule of 60’, you must handle the animals indirectly as a herd and rely on generic knowledge about cows and technology: Individual animals disappear and become ‘a category of life’ to be managed and cared for (Buller, 2013, p. 163).

Just as most inputs in Bigville come from outside the farm, the moral intuition that enables their killing originates elsewhere, from Swedish animal welfare regulations. The regulations are taken to reflect consumer preferences: They stipulate animal handling methods that are (supposedly) anchored in the preferences of the majority by way of the democratic legislative process (Higgin et al., 2011). Animal welfare frameworks are thus more than ‘mere’ technical specifications for animal handling (contra Buller & Morris, 2003). Instead, they are ‘moral technologies’ (Asdal & Druglitrø, 2016, p. 66–84) that enable a certain kind of human–animal relationship, one in which we can – morally – rear large numbers of animals for food in intensive settings.

The physical separation imposed by the automated systems and the Dunbar number are, however, not absolute. In terms of physical separation, not all spaces and moments where human and animals meet are eliminated in Bigville: They remain where workers sweep feed troughs and clean water cups. In these spaces, bullheads poke out through metal bars, ‘always seeking contact’ and ‘it is up to the humans to meet their request’ Bo told us. The first author often saw the workers ruffle hair tufts on dehorned heads, small talking, saying hello and goodbye, seemingly without thinking about it but often smiling when doing it. The
humans and animals of Bigville are, in a way, resisting the built-in separation of scale and automation.

Similarly, there is room for building relationships with individual animals even in big herds. The Bigville workers told us about ‘Hampus the fighter’. Hampus was a calf born with crooked legs that made him unfit for the standardised farm environment. He could not reach feeders, water cups or step over the manure scraper on the floor. Contrary to the veterinarian’s recommendation to kill him, the Bigville team decided to dedicate extra time and care for him, making sure he could eat and drink; they made room for alterity and personal care in a place of sameness and indirect relationships. Joyce said she will never forget Hampus, ‘he was one of the best’ (see artistic interpretation 3 Hampus the Fighter). Entrepreneurial large-scale farming practices like Bigville’s are not only a place for suffering (contra Porcher, 2010, 2011), nor are emotions and care for individual animals rendered an impossible part of the practice (contra Buller, 2013). Instead, even in standardised farm settings, affective sensibilities may inform a tweaking of daily doings that challenges conventional structures (Bassi et al., 2019).

Artistic interpretation 3. Hampus the Fighter. By: Claes Wernerson
CONCLUSION

Changed foodways in the Global North are key to reduce negative human impact on the biosphere (Fairlie, 2010; FAO, 2006; IPES-Food, 2022) and to improve human and non-human quality of life (Donaldson & Kymlicka, 2011; Godfray et al., 2010). Indeed, there is growing acceptance and advocacy for reduced meat production and consumption in the Global North. Against that backdrop, we wanted to know how cattle farming is moralised by farmers: how they feel and think about raising and killing animals for human food, what their moral concerns are, and if and why moralities differ between farms.

Our two cases exemplify two distinct and contrasting practices of rearing and killing cattle. The farm we call Smallville, and its slaughterhouse Smallkill, resemble the ideal-type of peasant farming where continuity is secured using on-farm resources and limits to scale of operation. The farm we call Bigville, and its slaughterhouse Bigkill, resemble the ideal-type of entrepreneurial farming where continuity is maintained through a high degree of commodification of in- and outputs and scale-enlargement. Descriptions of these two ideal-types figure widely in rural sociological literature and our study adds to this body of work a specific attention to the role affective sensibilities, farm materiality and animals play in the constitution and continuity of farm practices.

Our comparison points to an intimate interrelation between farming practices, especially in terms of its scale and endogeneity, and moralities. The scale of the farm governs how and in what way farmers engage with and know the animals. Beyond a certain scale, farmers become dependent on technology, and hence indirect contact and mediating regulation, to know and care for their cows. Animals are also known and valued differently, depending how they contribute to the endogeneity of the farming practice: Whether they are worked subjects serving primarily as inputs, or if they are working subjects, actively co-shaping everyday doings. In these different styles of farming, certain human–animal relationships are made possible, whereas others are made impossible, and it is in and through these relationships that ideas of right and wrong emerge (see artistic interpretation 4 Emergent Moralties).

Artistic interpretation 4. Emergent Moralties. By: Claes Wernerson

Today, killing animals is morally controversial but eating them is commonplace. We are all – farmers, sellers consumers – perversely implicated in the ‘livestock’s long shadow’ (FAO, 2006).
The two farming and killing practices reflect different understandings of what constitutes sustainable cattle rearing. Notions of ‘sustainability’ are, indeed, situated and embodied perspectives that include ways of talking, doing, feeling and caring (Pink, 2012). In Bigville, the sustainable cow is portrayed as foremost a technical issue. Feed and digital monitoring innovations ‘work’ the cow as to shorten her life span, generate lower emissions and feed ratios, while increasing her growth rate. In Smallville, the sustainable cow is foremost a relational issue. The cow is ‘working’ alongside her farmer, and herd size and movements are shaped by and shaping a specific cultural landscape. To pay attention to on-farm moralities thus offers a different discourse on sustainability transitions in animal farming: The question of sustainability is also the question of how humans (are to) relate to nonhumans (Davison, 2015).

Oftentimes a moral change in the way we perceive animals is thought to be a prerequisite to change meat consumption patterns, but our study suggests that such changes could be initiated by limiting the scale of farming practices and privileging their endogeneity. Any such changes must, however, pay attention to viability to ensure that farmer livelihoods can be sustained. As our cases make clear, the price we are willing to pay for meat matters for what farming practices and, thus, what moralities are made possible.

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Endnotes
1 Cattle can only be used in the plural: no singular form of ‘cattle’ exists but the age-and sex specific terms of cow, heifer, bulls and steers. Technically, ‘cows’ thus refer to mature female bovines, but colloquially it is used to refer to all kinds of cattle. The *plurale tantum* of ‘cattle’ is problematic. As pointed out by Govindrajajan (2018) there is a de-singularising tendency in multispecies ethnography whereby animals are spoken of in terms of species or collectives. In this article, we therefore use ‘cattle’ when referring to the bovine species or a herd of bovines, alongside using ‘cows’ in its colloquial sense to speak about a specific herd or individual animals. When ‘cow’ refers specifically to a mature female bovine this will be made clear.
In studies of animal behaviour, needs, instincts and impulses are readily accepted as motivations for behaviour while the role of habits and personalities is less well recognised. This is an unfortunate neglect. Their importance for animal behaviour has been demonstrated and argued for in great detail by Buytendijk and Jacobus (1918).

But, contra Darnhofer (2020) we make a qualitative difference between animals and the farm – both living and non-living farm material – with regards to the question of how cattle farming is (made) morally possible. While recognising that human moral responsibility includes the farming practice’s impact on, for instance, the ecosystem, the focus of this article is on human–animal relationships.

For further problematisation of binary distinctions in farming styles research such as conventional/organic, see Campbell and Rosin (2011), Darnhofer et al. (2005), Darnhofer et al. (2019), Fairweather et al. (2009), Lehtimaki and Virtanen (2020), Lehtimaki and Virtanen (2020), Rosin and Campbell (2009), Schewe (2015) and Sutherland (2011); and small-scale/large-scale agriculture, see Mahon et al. (2017), Mockshell and Kamanda (2018) and Weltin et al. (2018).

With industrial we mean modes of production where focus is on volume and efficiency, two values that are achieved through processes of automation (e.g. automatic feed and water systems), standardisation (e.g. low genetic diversity in herd and animal care practices), digitalisation (e.g. the generation of data of individual animal performance) and the use of synthetic input (e.g. protein rich feed, hormones and antibiotics) (see also Cudworth, 2017; IPES-Food, 2016).

In October 2022, Swedish farmers were paid an average of SEK56 (EUR5) per kilo of meat, with the highest price paid for meat from young bulls (Swedish Board of Agriculture, n.d.).

The average herd size for a Swedish cattle farm is around 40 cows, whereas a large cattle farm is defined as a farm that has more than 100 cows. Compare this to, for instance, Germany where the average herd size is 190 cows (European Parliament, 2017). The comparatively low Swedish numbers are due to specialised cattle farms – farms that breed and rear cows for the exclusive purpose of meat production – a relatively new phenomenon. Traditionally, the vast bulk of Swedish beef derives from dairy farms: bull calves and retired dairy cows (Swedish Board of Agriculture, 2022).

The Dunbar number refers to Robin Dunbar’s theory that there is a cognitive limit to the number of stable relationships humans can maintain (Dunbar, 1992).

Abidance by animal welfare frameworks is necessary but not always sufficient because outsiders may become critical when experiencing what they have ‘themselves’ sanctioned. Bigville and Bigkill are both willing to engage in public dialogue and show what they do and how they do it but limitations apply. Both refer to a public discourse in which farmers are questioned, criticised, and sometimes even threatened or attacked. Bo says he would show someone the chickens when they are in the early stage of their 30-day life cycle, but eventually it starts to look, |j]usty and crowded in there, it is not crowded, if you would herd them to one side of the barn you would realise there is plenty of space, they can move around as they please […] but when you look into that white ocean you’ll think that “this is a factory”, and yes it is a factory, but … you need to look at it with sober eyes.

REFERENCES


