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What is a farm? Mental framing and reframing as tools in communication between agricultural advisors and farmers

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ABSTRACT

Purpose: To explore how advisors communicate with farmers and the mental frames that they use in their communication.

Method: A case study in Norway observing meetings between farmers and advisors at 17 farm visits and 43 separate interviews with 26 different informants (advisors and farmers) related to these visits. Empirical analysis is based on theory of framing and categories of frames.

Findings: There is variation among advisors in how they communicate with the farmers at farm visits, and how they communicate is related to the mental frames that the advisors apply. The frames identified are those of a machine, the brain, an organism, culture, and family. Some advisors are more skilled than others at switching between these various mental frames – reframing.

Practical implications: The mental frames can be further developed and applied as tools for advisory services to improve communication according to farmers’ needs and thus make advisory services more relevant for farmers.

Theoretical implications: Mental frames are applied empirically in an advisory context, and the relevance of mental framing is confirmed.

Originality: Mental frames have not previously been applied in an agricultural advisory context.

Introduction

The impact of advisory services is heavily dependent on the communication between the farmer and the advisor (Hansen, Petter Stræte, and Kvam 2018). A number of variables influence farmers’ demand for advisory services (Labarthe and Laurent 2013; Prager et al. 2016), but less is known about the variety among advisors in how they communicate with farmers. Hansen, Petter Stræte, and Kvam (2018) found that how the advisors define their role influences their approach to providing advice and how they communicate. Furthermore, Hansen, Petter Stræte, and Kvam (2018) clearly showed the importance of
adapting advice to each farmer and the farming context, in line with Rogers (1969) and Proctor et al. (2012). Mutual understanding has been identified as crucial in advisors’ engagement with farmers (Ison and Russell 2000; Sheath and Webby 2000), together with advisors’ ability to view the situation from farmers’ perspectives in the diagnosis of problems (Rogers [1962]1995; Van den Ban 2000). Advisors’ approach to communicating with farmers is decisive in achieving this, and many researchers have emphasised a facilitative approach, especially when the need for change is complex. Some researchers have categorised advisors according to how they approach advice. Ingram (2008), for example, use a distinction between an expert and a facilitative approach as a conceptual framework to analyse knowledge exchange encounters between advisors and farmers. Ingram concludes that there is a need for a shift towards a more facilitative relationship to manage the need for change to more sustainable agriculture. Similarly, others suggest that more research is needed on ‘new, integrated advisory methods to both deal with complexity and uncertainty and to combine participatory approaches and decision support tools’ (Faure, Desjeux, and Gasselin 2012, 484).

In this paper, we apply Gareth Morgan’s theory of images of organisations as a primary foundation for our conceptual framework to study the communication between farmers and advisors (Morgan 1997). From this perspective, we regard farms, including the family household and farm workers, as an organisation. By organisation, we understand a system with actors who relate to one another and share a sense of community (Scott 2003). Morgan (1997, 4) applies images and metaphors to explain how we use frames to understand a situation. Hence, we regard images and metaphors as strongly related to frames, i.e. they are representations of different frames. Morgan is one of the academics who has categorised these frames to assemble and present the variation. We believe that frames are useful tools that advisors can use to improve their communication with farmers and service quality. Application of different frames can open new perspectives and strengthen the communication. In our understanding, images accompanied by metaphors and frames are to a large extent overlapping concepts and are in some cases applied interchangeably (Pisapia, Reyes-Guerra, and Coukos-Semmel 2005; Thurston 2000). However, we prefer frames over images, because framing is a well-known concept originating from psychology (Tversky and Kahneman 1981) and consequently recognised in studies of organisational behaviour (Bazerman 1984). As a starting point, we apply Morgan’s frames where we consider them relevant, supplemented with one frame obtained from Bolman and Deal (2017). To the best of our knowledge, mental frames have not yet been applied in studies of agricultural advisory services. Therefore, the aim of this paper is to show how mental frames can be applied in the context of advisory services in farming. More specifically, our research questions are: What mental frames of farms do advisors use at farm visits? If advisors switch between different frames, how do they reframe? How can the different frames be developed into tools to improve the advisory services?

This study was conducted in Norway where the advisory service is mainly private and dominated by farmer-owned cooperatives (Almås 2002; Klerkx et al. 2017). Food-industry advisors are often embedded in cooperatives, such as TINE for dairy (http://www.tine.no) and Nortura for meat (http://www.nortura.no/). This service is provided by organisations that buy product from farmers. TINE has organised its advisory service in a specific department, TINE Advisory Service, with a staff of about 350. In Nortura,
this service is incorporated with the membership service for farmers. About 150 of their advisory staff are divided between membership services and advisory services. In both companies, there are advisors dedicated to specific advisory-service tasks, such as key advisors for dairy farmers and advisors about suckler cows for beef producers.

We gathered empirical data through interviews and participant observations from 17 farm visits undertaken by nine agricultural advisors in Norway. The study was a part of the Competent Farmer project (2015–2018) with the aim of improving farmers’ competence by more efficient interaction between farmers, advisory services, and research. Data were generated from observations at the visits and from interviews with advisors and farmers. The results show that frames are useful for analysing communication. Frames can also be developed as tools for advisory services to improve communication with farmers and to make the advisory services more relevant. However, a significant condition to achieve improvement is the advisors’ capability to switch between the various frames, to engage in reframing (Palmer and Dunford 1996), given the variations among farms and farmers.

The remainder of the paper is organised as follows. First, we present our conceptual framework, followed by a section about farming and advisory services in Norway to show the study’s context. Second, we present our methods and the cases. Third, we present our findings together with our analysis. Finally, we discuss our findings and conclude.

**Conceptual framework**

An important factor in communication and interaction between advisors and farmers is how they understand each other. Morgan’s (1997) concept of frames can be applied to elaborate on this issue. Morgan applies different images and metaphors, which we denote as frames, stating that ‘The use of metaphor implies a way of thinking and a way of seeing that pervade how we understand our world generally’ (Morgan 1997, 4). A situation is interpreted within these frames; hence, we call these mental frames. An advisor uses, more or less consciously, different mental frames (metaphorical reading glasses) and can ‘see’ and interpret different aspects in the same situation.

According to Simon (1957), human rationality is bounded. Thus, cognitive categorisation theory suggests that individuals use cognitive heuristics to make sense of complex situations (Mervis and Rosch 1981). Management studies have shown that, because of bounded rationality, managers do not achieve a complete understanding of strategic situations; rather, they use cognitive frames to ‘develop subjective representations of the environment that, in turn, drive their strategic decisions and subsequent firm action’ (Nadkarni and Barr 2008, 1395). Using cognitive frames, managers reduce complexity and ambiguity by selectively organising and interpreting signals from the organisational context (Dutton and Jackson 1987). As the term cognitive involves human activities such as thinking, perception, problem solving, and reasoning (Chaney 2013), we consider cognitive frames and mental frames to be two sides of the same coin. Managers need to develop and carry accurate maps in their heads. Such maps make it possible to register and assemble key bits of perceptual data into a coherent pattern – an image of what is happening (Bolman and Deal 2017). This is what we here consider a mental frame – the advisors’ mindset to interpret a specific situation. The idea of reframing is key because the same context or situation can be viewed in several ways (Palmer and...
Dunford 1996). Thus, in the context of leadership, Bolman and Deal (2017) emphasise that leaders need to know that the application of the same frame or a certain combination of the frames for every situation is not always the option in all circumstances. Similarly, Morgan (1997) uses a variety of frames as tools to consider various aspects of an organisation. Although well-understood in management and organisational literature, in our view Morgan’s frames are also well-suited to analysing the farm as an organisation and how advisors consider farms and farmers.

In our setting, different frames may help the advisor to be aware of different aspects of the farm and the farmer family. Thus, switching between frames or reframing may provide new perspectives and improve the communication. As frame analysis can be traced back to Goffman (1974), framing, mental models, and their dynamic aspects have been applied in various situations in farming, such as from the farmers’ perspective, in a peasant – entrepreneur typology of the farmer, or in how farmers’ mental model may change (Burton 2004; Burton et al. 2021; Hansson and Kokko 2018; Niska, Vesala, and Vesala 2012). Few studies are found on advisors’ mental models. However, Higgins et al. (2023) studied agricultural advisors’ role in applying different frames on agricultural soil research and extension. Their study shows how reframing is important to bring the advisors’ impression more in line with the situation, especially when the situation changes. By reframing, an advisor can switch from one frame to another. Like Goffman, we regard frames as both contiguous and overlapping (Niska, Vesala, and Vesala 2012). Mental models are understood as ‘internal images, gathered through experience and observations to collectively form an internal representation of the individual’s understanding of the world around her’ (Sax and Clack 2015). For our purpose in this paper, we regard this as very similar to frames.

According to Morgan, frames are the cornerstones of our understanding and thinking, and all suggested theories about organisations are frames by nature. Morgan discusses a number of different frames, such as machines, organisms, brains, cultures, political metaphors, psychic prisons, flux, transformations, and instruments of domination, but not all are directly relevant to farms. In our view, the three frames – psychic prisons, flux and transformation, and domination – are better customised for use in conventional organisations than in farming. In conventional organisations, the organisational structure, culture, and gallery of types of persons have greater influence on the situations and activities than they do at a farm. We could not find any relevant empirical situations where these frames apply in our cases. Therefore, below we present only the five frames that we found most relevant, four derived from Morgan (1997) and one from Bolman and Deal (2017).

Our theoretical framework, derived primarily from Morgan and partly from Bolman and Deal, has not yet been applied to farming and farmers as far as we know. It seems to be more applied in management, education, and conventional organisational approaches (Bolman 2024). However, organisational theories are shown to be relevant also in agriculture and farming (Grandori 2015; Knook, Eastwood, and Pinxterhuis 2022; Restrepo, Lelea, and Kaufmann 2016).

**The machine frame**

In this frame, organisations are regarded as a machine constructed by specific functions created to perform specific tasks, and management is concerned with making the
machine work efficiently and optimise operations (Morgan 1997). According to Håan and Iversen (2006), the farm can be regarded as a system where the various components are mutually dependent and where structure, rules, instructions, and manuals are important. Order and tidiness in documents and machinery is highly valued. The aim is to achieve predictability and optimise production. Scientific Management and Taylorism (Taylor [1911] 1967) are typical management schools related to this frame. With the machine frame, it is reasonable to assume that the advisor expects the farmer to be concerned with clear goals, planning, control, facts, logics, and doing things the right way.

The organism frame

The organism frame emphasises organisational needs and relations, and considers organisations as organisms that must adapt to changes in their environment, like an amoeba (Morgan 1997). Changes in the environment are considered forces to which the organisation must respond if it is to survive. A farm can be regarded as an open and flexible system that adjusts or changes in response to changes in external conditions and the environment (Håan and Iversen 2006; Morgan 1997). With the organism frame, it is reasonable to assume that the advisor expects the farmer to be a change agent, who accommodates easily to new thoughts and is responsive to external changes (Håan and Iversen 2006).

The brain frame

The brain frame emphasises information processing, intelligence, and organisational learning (Morgan 1997). Organisational learning involves knowledge acquisition, distribution, and interpretation, and organisational memory (Huber 1991). This frame connects to exploration of new possibilities involving search, variation, risk taking, experimentation, play, and innovation (March 1991), single- and double-loop learning (Argyris and Schön 1996), and knowledge creation (Nonaka and Takeuchi 1995). In relation to a farm, issues like knowledge, innovation, learning, and efforts to improve these elements are of most interest. With the brain frame, it is reasonable to assume that the advisor expects the farmer to continuously seek new knowledge, to experiment with it and to take the risk involved, and to be more concerned with exploration than exploitation (March 1991).

The cultural frame

The concept of cultivation and culture can be traced to agriculture and cultivating land and emphasises the organisation as a society. Keywords in this frame include culture, a community of opinion, a vision motivating engagement, rituals, histories, and heroes.

We apply Morgan’s (1997) cultural frame to regard a farm as an individual society characterised by symbols, norms, values, routines, and constant interaction with the local and the global culture. For example, a farmer may think that it is very important that the farm remains within the family, or that it is important to maintain a tradition of working together with other farmers in the neighbourhood. With the cultural frame, it is reasonable to assume that the advisor expects the farmer to strive to make the farm the best of its kind, to use visible symbols, and to maintain and develop the farm’s unique culture (Håan and Iversen 2006).
**The family frame**

In the family frame, needs, skills, and relationships are emphasised (Bolman and Deal 2017). This Bolman and Deal frame is called the Human Resource, and we apply this frame and label it as a family frame because it is more relevant to family farming. As farming often involves the whole family, both as owners and workers, the family frame comes into play here. In this frame, the organisation is seen as an extended family, made up of individuals with needs, feelings, prejudices, skills, and limitations. From a family frame view, the key challenge is to find ways for people to get the job done while feeling good about themselves and their work (Bolman and Deal 2017).

However, Morgan’s (1997) political approach also has some relevance to the family frame, as interests, conflicts, coalitions, negotiations, and power form part of the relations in everyday family life. This frame is concerned with who is in charge; formality and informality; who allocates resources, controls decision processes, creates alliances, and controls the machines; and who possesses the power of definition and truth (Håan and Iversen 2006; Morgan 1997). In farming, this is a useful perspective to understand a situation and why things occur as they do. Both internal family relations and external relations are relevant. With the human resource frame, it is reasonable to assume that the advisor expects the farmer to build alliances, work for the community, negotiate, make unpopular decisions when needed, and think tactically (Håan and Iversen 2006).

To sum up, we assume that the frames presented above are relevant for the communication between advisors and farmers. Our working hypotheses are: (i) theoretical mental frames can be identified in practical situations of communication in advisory service; (ii) the capability to frame and reframe can improve the communication between farmers and advisors and the quality of advisory services.

**Methods and case description**

To answer the research questions in this study, we apply the deductive exploratory research method (Casula, Rangarajan, and Shields 2021). We started with an exploratory approach, observing meetings between advisors and farmers. However, to analyse the observations, we applied framing theory; and, by formulating working hypotheses with a deductive approach, we could generate conclusions from the empirical analysis. The working hypotheses must not be confused with the study’s research questions. The working hypotheses are just a helping tool as part of the method.

To test our working hypotheses as part of the method and answer our study’s research questions, we applied qualitative methods such as interviews and observations of meetings between advisors and farmers at 17 farm visits in Norway in 2016. This study examined advisory services for dairy farmers and farmers producing beef from suckler cows. We studied five dairy advisors from the TINE dairy cooperative and four advisors from the Nortura beef cooperative. We regard each advisor as one case, as we followed each advisor when she or he visited different farmers and therefore could observe the advisor in different contexts. Hence, this is a case study (Yin 2014). Eight of the advisors visited two farmers each, and one beef advisor visited one farmer, in total 17 farmers. Before and after visiting the farmers, the researchers interviewed the advisors face-to-face, for example in the office before we went on farm visits, most often the same day;
in about half of the cases, the pre-interviews were conducted in the car on the road to the first farmer. The interviews varied in length but lasted at least 45 min and often longer. After the first farm visit, the advisor was post-interviewed on the first visit and pre-interviewed on the upcoming second visit. This took place in the car, and the time could vary from 15 to 60 min. Finally, the advisor was post-interviewed after the second visit; the length depended on the distance back to the office but was at least 15 min. A few days after the visit, all farmers were interviewed by phone, for about 30 min. The study includes observations of the 17 farm visits, each of which lasted approximately 2.5 h. The researchers joined the meetings but were quiet and just took notes.

All in all, nine advisors were interviewed three times (one only twice), 23 farmers at 17 farms participated in observed farm visits, and 17 of these 23 were interviewed after the farm visits. In total, 43 separate interviews with 26 different informants were conducted.

Interviews in all nine cases (advisors and visited farmers) were recorded. However, the recorded data for two cases are missing because of technical problems with recording, but we have notes on all cases. The records and notes were transcribed and analysed with the NVivo software. The interview team was comprised of three researchers, but only one researcher attended each case. A semi-structured interview guide was applied by all researchers. The pre-interview for advisors was about their job as advisor (what they do, what succeeds, what fails, their role), what they know about the farmer they are going to visit, what they expect, and how they have prepared. The post-interview was about how they experienced the meeting with the farmer and the results that the meeting would provide. The farmer-interview guide was partly similar to the post-interview with the advisor and partly about experiences of advisory services in general, and in addition about the farmer’s sources of knowledge.

Researchers rarely have access to farm visits (Messervy 2014), because advisors do not want to share their working practices with their competitors. This case method gave us hands-on access to the advisors’ practices rather than just listening to the informants’ answers in retrospect, and we could combine observation and interview with both participants.

To obtain some variation and robust material, the advisors were picked from four different regions in Norway. Regional leaders from TINE made a list of candidate advisors from which researchers could choose. The researchers selected advisors for further contact. This selection was random and practical, based on whether there was a match between the advisor and the researcher having time for the farm visits. The advisors selected two farmers to visit after talking with the researcher. The advisors, two women and seven men, consented to the researchers attending the farm visits. In six of the 17 cases, both female and male farming partners attended the advisory visit. In the remaining cases, the farmers were male. Interviews and observations were conducted by three researchers; one researcher had six cases, one had two, and one had one. The gender balance in the sample reflects the situation in Norwegian farming, about 16% female farmers (Zahl-Thanem and Melås 2022). For the post-interview, the farmer couple decided who was doing the interview; we used a phone and not a video (this was pre-Covid).

It can be argued that the selection of advisors and farmers is too small to reveal anything about the advisory service. However, for the purpose of searching and exploration, there is no need for a representative survey of all advisors and farmers (Yin 2014).
gained insight into how the advisory process can take place. Using this material, we present five cases that are represented by episodes from the farm visits. We regard these five cases as sufficient to answer the research questions (Casula, Rangarajan, and Shields 2021). We have to limit the numbers because of the restricted in text length. We chose these five because they show variation in situations and possible interpretations of frames in action.

The farmer and advisor selection process imparted a systematic bias to the material. There is a danger that advisors suggested candidates who were among the best performing and least problematic farmers to visit. This was offset by researchers and contact managers in the companies emphasising that this was not a personal evaluation of advisors, that the data would be anonymous, and that the purpose was to gain knowledge to everyone’s benefit. To what extent this explanation worked, we do not know. Furthermore, we can imagine that there is a possibility that the advisors chose not to visit farmers that they find difficult to meet. As one advisor stated, ‘Today, I do not think I have chosen the hardest ones’. On the other hand, the advisors follow an annual plan of whom they visit and when, and the plan to visit two farms every day had to be carried out in practice because farms are visited in a certain order. In retrospect, we conclude that a potentially biased selection of advisors is not a problem for our analysis. The material is so diverse that our working hypotheses were confirmed. The advisors and farmers were different, and each farm visit was unique.

We must emphasise that the advisors did not have frames in mind when providing advice. It was we as researchers who interpreted the communication. However, we assume that, if the advisors were trained in framing and reframing, they might have a tool that could support them in the advisory role. We furthermore assume that, if farmers also were trained in framing and reframing, the whole advisory communication could be further improved.

Findings and analysis

Case Advisor A

Advisor A is a male beef advisor from Nortura. He is in his early 40s and has worked as an advisor for 16 years. His main task in this case is to support farmers who plan to establish or expand suckler cow production. Advisor A defines his tasks very clearly: ‘Yes, of course, to help the farmer to optimise his farming practices so they can in fact make some money on this too’ (Advisor A).

The advisor visited two farms in very different situations (AF1 and AF2). At the first visit (AF1), a young couple were considering establishing suckler cow production. They were not farming at the time of the visit, the farm had poor resources, and the couple had little experience in suckler cow production. Advisor A asked questions about the conditions for having suckler cows on the farm, observed the condition of the buildings, and finally made an economic calculation. He was very polite and careful, but still did not conceal the challenges with a start-up. The advisor responded to the couple’s questions with respect and patience, while raising fundamental questions about their life situation. This approach is in line with the organism frame, related to the growth of the farm. In our opinion, the advisor also applied the family frame, because at first there was an
interplay between the couple about the husband’s parents, who still lived on the farm and had an interest in maintaining production. The process ended with the couple shelving their plan. The advisor’s role was to help the couple to make a decision, in which he succeeded. The potential farmer was satisfied with the farm visit, but not necessarily with the realities that were revealed: ‘I experienced this as a positive meeting, constructive for me at least, and light was shed on some issues’ (Farmer AF1). In our opinion, the advisor had succeeded; he applied both the organism and the family frame and thus managed to reframe. We note that the cultural frame also contributed, with the farmer’s parents representing the traditional milk production at the farm. The brain frame is also relevant, as we observed that the advisor together with the couple tried to generate new ideas for the future. This episode illustrates the importance of re-framing, and there is no one answer as to which frame suits best.

The second visit (AF2) was different, because the farmer couples were already in business with suckler cows. Their challenges were now twofold: to plan a new cowshed and to decide on farm expansion while simultaneously running their existing production. The farm visit included a dialogue about both practical questions related to the present production and the plan for the future production and the new cowshed. The advisor switched between frames. In the beginning, he applied the machine frame and analysed the operational measures needed to improve current production. We therefore deduce that he reframed and also applied the brain frame to sort out relevant measures for the future. After the farm visit, the farmer explained: ‘This is about what I do when he visits the farm, that we first have a look at the status outside, and then walk in-house. And that I feel is a very good way … because then we know more about what we are talking about afterwards’ (Farmer AF2). In this episode, we observed that the farmer was able to determine the direction of the meeting. Tacit support from the advisor contributed to the farmer taking ownership of the decisions, thereby increasing the likelihood that it would be carried out.

The advisor showed strong flexibility in switching between various frames related to the advisory situation. He thought about farm expansion at both the farm and the regional level; this is associated with an organism’s growth.

Case Advisor B

Advisor B is a male dairy advisor from the dairy cooperative TINE. He is about 60 years old and was educated at an agricultural college. He has worked with advisory-related tasks for most of his occupational career. His main task in this case is to be the main contact between the farmer and the advisory service, including one annual visit to the farm at a minimum. Advisor B expresses his view on the tasks in his job as an advisor:

I feel that the ‘herd recordings’ [Norwegian Dairy Herd Recording System (NDHRS)] is the basis for much of the rest and that the data must be there to be able to make use of the tools we have. So, I feel that a part of this [advisory service] must be to ensure that data are there and that they are correct. (Advisor B)

Advisor B emphasised that the data and the system must be in shape and that control is an important task in his job; this fits well with the machine frame.
We followed Advisor B on two farm visits (BF1 and BF2). The first was a traditional farm larger than the average in Norway. Advisor B had prepared by looking for improvements in the farm’s herd recordings. Farmer BF1 was satisfied with the visit but commented on the interviewer’s question about things that could be improved: ‘Eventually … some more pressure on challenges, and to challenge me on some issues, maybe …’ (Farmer BF1). The advisor was very satisfied with the farm visit:

This is a very interested farmer, and for me the goal is to maintain his interest. I feel it was good enough, and now we also may have some economic advisory service as well. And I feel I did not need to push on very much here, the progress came more or less by itself. (Advisor B)

Advisor B did not see the need to challenge the farmer more than he did. From his perspective, the machine frame worked well. However, in light of the farmer’s comments, the organism frame could also have been useful to challenge the farmer. Thus, during the visit, the farmer came up with some hints about future development, but the advisor did not note or follow up on this.

The second farm had installed a milking robot about 1.5 years earlier. The farmer already had support from advisors specialised in milking robots and feeding. Having expended all their effort on the building process, the farmer couple were now in a state of consolidating, trying to optimise their farming operations and results. Although Advisor B had prepared for the farm visit, he struggled to maintain a dialogue. The husband and wife did not engage much as Advisor B embarked on a detailed review of possible improvements in the dairy herd based on the previous year’s results. One obvious reason for this was that, over the year, production had increased significantly, and therefore the earlier results were not that relevant anymore. Advisor B was not dissatisfied, but a bit uncertain about the outcome of the farm visit:

They are maybe a bit more reticent to join activities and make efforts. But it is frankly very good as they seem to manage well; they follow up on the farming, and make it work, and all this is good … (Advisor B)

The farmer was not very satisfied; he experienced the farm visit as almost a waste of time, as was obvious from his body language during the conversation. In the interview afterwards about the impact of the farm visit, Farmer BF2 said: ‘In fact, not much …’

Advisor B did his best to help both farmers and had some success with the machine frame at the first farm. However, he did not reframe when Farmer BF1 challenged him, and he could have applied an organism frame. Instead, he stuck to his routines and functioned as an inspector, which is in line with the machine frame, and showed little capability to reframe as the conversation progressed. We deduce that, in this episode, Farmer BF2 took on a machine frame about implementing new routines in the cowshed. However, as he was eager to learn more about the robot and how to optimise performance, the brain frame was also relevant. Given that the couple had made a huge investment in a new cowshed, one would expect them to have several topics to discuss with, and learn from, an advisor, as Farmer BF2 admitted: ‘Yes, there are many topics I would like to know more about, the milking robot, herd, fertility, and the economy’. When asked whether these topics could have been discussed at the farm visit, he answered: ‘Well, I am not sure whether he (Advisor B) is the right person, it is more interesting to have someone who really knows the different subjects … who can contribute’ (BF2).
Farmer BF2’s questioning of Advisor B’s competence explains the couple’s low expectations about the outcome of the visit. Although they were eager to learn, in their view Advisor B had little to offer. Thus, there was a mismatch between the couple’s need for an advisory service and the service provided by the advisor. If the advisor had reframed and been more aware of the farmers’ needs, he might have involved other advisors to support the farmers, as every advisor cannot be expected to have competence to follow up every question that farmers ask.

**Case Advisor C**

Advisor C is a male beef advisor similar to Advisor A. He is more than 60 years old and has been a farmer himself. One of the farmers whom we visited (CF2) was considering expanding his farming to beef cow production in addition to dairy farming, and the farm visit was about this issue. At a certain stage during the visit, the advisor challenged the farmer and asked whether the farmer had discussed his plans for expansion with his children, his successors. After the farm visit, we asked the farmer about this challenge:

Yes, what is strongest in my feelings after the farm visit and what has bothered me is what he mentioned about involving the next generation several times. I feel for my part that it is very difficult. (Farmer CF2)

The farmer felt that his children were too young (15–23 years old) and did not want to bother them about future issues. However, the farmer did not perceive that the advisor said too much, as the issue was relevant. We deduce that Advisor C used an organism frame in this episode, and he challenged the farmer to take on the same. We also see elements of a family frame when the advisor in a gentle way raised the issue about involving the children in the process by asking open questions. Thus, the advisor achieved a good balance between the organism and the family frame, which worked well.

Another example with Advisor C is a farm visit to beef Farmer CF1 who had built a new suckler cowshed one year prior to the visit. Advisor C had also invited an advisor from a feed supplier to the farm visit. Afterwards, Farmer CF1 said:

Well … I am not there yet … I mean when you start fine-tuning feeding, feeding plans, and that kind of thing, all other things must first be in order. So, all the stuff about concentrates and mixing concentrate and so on … I must have things in order first, it must have worked for at least another half year before we can start to see whether it is a plus or a minus. So, the meeting we just had now, I think that was … In fact, we postponed it for half a year until I had gained sufficient experience with the concentrate I already had. This is what I have tried to say but we will see … . (Farmer CF1)

Our interpretation of this sequence is that advisor C failed to grasp the farmer’s needs. The advisor expected to find a farmer who was eager to seek new knowledge and to be more concerned with exploration than exploitation. Advisor C’s approach was a mixture of the machine and the brain frame, concerned as he was with fine-tuning the concentrate feeding. However, the farmer was obviously not yet ready for that many details and retained the machine frame of the farm. If the advisor had talked more with the farmer ahead of the visit, he could have got a clue that the farmer still had a machine frame and either adapted the visit to that frame or postponed the visit.
Case Advisor D

Advisor D is a man in his early 50s. Like Advisor A, his advisory service is on suckler cows. Advisor D emphasised that farmers must learn and achieve insight; we regard this as related to the brain frame. He spoke about a method he uses:

Very often, at least in my cases, I bring them [the farmers] with me to visit two or three others [farms] according to where I consider they are in the process, what they need, their own plans, and so on. But of course, I ask ‘are you interested?’ ‘should we spend a day or a half travelling around?’ And I have some farmers who have already invested with whom I have an appointment … to demonstrate their production … I feel I get good feedback from those I bring with me, and those who have invested feel it is fun to receive visits as well. It is mutual. (Advisor D)

Farmer DF2 mentioned Advisor D’s visiting method on his own initiative: ‘ … the day we followed him was good … very useful’. This confirms the importance of learning and the usefulness of the brain frame.

Advisor D was also concerned about the future for farmers who plan to invest in farm expansion. Often, there is an older generation at the farm, who may have strong wishes about maintaining the traditions. This involves the cultural frame, but possibly also the family frame. The advisor liked to involve everyone in strategic decisions, and he wanted both generations to take part in the discussion: ‘Yes both generations … to make openness related to the questions’. Here, we deduce that Advisor D used the family frame. He answered a question about the role that he adopts at these farm visits where farmers consider plans for the future, e.g. to increase production to become fulltime farmers:

Nothing more than saying, … what opportunities at large I can see on the farm. At that stage, I can be a sheep advisor and I can be a beef advisor – yes, opportunities. And then I talk about how much time they must expect to spend. But maybe I try to turn the issue to what they have most interest in. For if they are going to embark on what they are talking about when they take over, it is a lifestyle. Are they there? (Advisor D)

Advisor D’s approach is a combination of the organism and the family frame. The first frame puts strategic issues on the agenda. What opportunities exist at the farm based on the resources available? Then we deduce that Advisor D applied the family frame to shed light on possible conflicting interests between the two generations, or between wife and husband. The latter frame includes a search for the strength of the farmer’s motivation. Advisor D switched between the frames, and this helped the farmer to make a better decision for the future.

Case Advisor E

Advisor E is a female advisor about 60 years old. She delivers a dairy farming advisory service similar to Advisor B. Additionally, she has a special responsibility for organic farming. We studied her visits to two different dairy farms and identified several frames.

At farm E1, there was a rather challenging situation with some illness, various personal difficulties in the family, and halted farming, but at the same time there were ambitions to expand farming. There were also some challenges related to communication within the family, so the advisor faced a rather complex situation. Her practical approach
was to alternate between open crossroad questions with proposals of concrete solutions for farming, while manoeuvring between family members in a balanced way. For example, at a previous visit, we deduce that she had applied the family frame and convinced the wife to take over the registrations for NDHRS from her husband, a task that had been neglected lately. When asked, the family said that they had no particular topics that they wanted to discuss at the visit. Therefore, given her earlier experience with the family, Advisor E then switched to the machine frame and embarked on a systematic review of their production results.

After the farm visit, both the advisor and the male farmer stated that they were satisfied with the conversation. At the visit, Advisor E managed to switch smoothly between the family frame and the machine frame.

The second farm, EF2, had mixed farming with 10 dairy cows, as well as vegetables, herbs, and berries, and was also a host for cooperative urban farming. This diversity in production, together with the fact that this farming is based on bio-dynamic principles, signals that values are important, pointing to the cultural frame. This was Advisor E’s first visit to the farm, and her aim was to create trust and to get updated on the farm. Alternatives such as organic farming and bio-dynamic farming constitute a minority in the dairy cooperative. Therefore, for an advisor, it might be challenging to switch, e.g. between conventional and organic farming where the dividing lines are both sociocultural and agronomic, and the advisor must take this into consideration. Farmer EF2 gave a clear message on that:

She [Advisor E] shows her broad spectrum of interest, which may not be common, as we say we want hay with a mix of [grass] varieties where we cut the grass later with increased dry matter, for example. Of course, the most common answer would be that this is nonsense because there will not be efficient production from that. So, I feel it is very good that she follows our mad thoughts based on using hay as a main fodder in 2016 … We want diversity … and she understands this, she understands what I am talking about … (Farmer EF2)

The farmer’s statement illustrates that he has made a conscious choice about bio-dynamic farming. The advisor recognised his choice and realised that she needed both the family and the cultural frame. Moreover, we observe that she managed to switch between these two frames and the brain frame, as she noticed that the farmer was very eager to learn.

Discussion

The aim of this paper is to show how mental frames can be applied in the context of advisory services in farming, and the findings support this. Further, we discuss our research questions: What mental frames of farms do advisors use at farm visits? If advisors switch between different frames, how do they reframe? How can the different frames be developed into tools to improve the advisory services?

To summarise, the examples of frames recognised are not exhaustive in all cases. The most frequently used frames are those of a machine and a family, along with brain, organism, and cultural, as shown in Table 1. There are not always sharp borders between the frames, and, when advisors switch frames, the transition may be smooth. We also observe differences between advisors in their ability to change between frames during visits. Whereas some, especially Advisor B, tend to apply the same frame(s) irrespective of
the situation at the farm and the farmer’s needs, others are flexible and adapt their frames to the situation at hand.

The results show variation among advisors in the frames that we deduce that they apply in communication with farmers. There is also variation in how the individual advisors communicate with various farmers, indicating how flexible they are about switching between frames during the conversation. The frames are not concrete tools that the advisors use in the communication. They are our interpretations of what advisors actually do. However, the analysis shows that the advisors vary in their capability to see, interpret, and understand different aspects of farms, farming, and farmers’ needs.

In some episodes in the cases, we observed that these capabilities contributed to shedding light on more aspects of importance for the topic discussed. Then, the farmers also tended to be more satisfied with the farm visits. The analysis showed that the communication between farmers and advisors could improve if the advisor was capable of switching between various frames. The effect would be improved advisory services, and hopefully it would also improve farmers’ situations and satisfaction, and in some cases farming results. Thus, our analysis shows that Morgan’s frames in combination with that of Bolman and Deal are relevant in the study of the dialogue between advisors and farmers. The application of this approach reveals that the frames that the different actors adopt can serve as an analytical tool for research.

Further, the frames can be a tool in the communication between the advisor and the farmer. The advisor is the professional actor in this communication and must be capable of reframing when necessary. An example of a lack of reframing can be found in case C, where the advisor did not recognise that the farmer was not ready for the brain frame but instead stuck to his initial plan. Moreover, advisors also benefit from helping the farmer to use different frames, like in case A where the advisor manoeuvred between different frames. Thus, there is a need for advisors not only to have expert knowledge but also to be competent in identifying and operationalising the implications that arise in practical situations when visiting farmers (Landini, Brites, and Mathot y Rebolé 2017).

Most advisors have an agricultural education where mental frames are not part of the curriculum. Their domain of knowledge is mainly within the agricultural sciences. Therefore, a practical implication of this study is the need to educate advisors to become familiar with these different frames so that they can apply them in their work. We believe that mental frames are relevant as a theoretical foundation for improving communication between advisors and farmers. For advisors, reflection upon, and training in, applying different frames could be helpful. For example, it could make them more conscious about the frames that they use themselves in their daily work and also contribute to giving them more options in the form of frames between which to choose. Thus,

<table>
<thead>
<tr>
<th>Frame/ Farm visit</th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
<th>Case E</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Machine</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>AF1</td>
<td>x</td>
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<tr>
<td>AF2</td>
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<tr>
<td>BF1</td>
<td>x</td>
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<tr>
<td>BF2</td>
<td>x</td>
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<tr>
<td>The Organism</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>CF1</td>
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<td>CF2</td>
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<tr>
<td>DF1</td>
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<tr>
<td>DF2</td>
<td>x</td>
<td>x</td>
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<tr>
<td>The Brain</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<td>CE1</td>
<td>x</td>
<td>x</td>
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<td></td>
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<tr>
<td>CE2</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Example of switching frame</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

Table 1. Frames interpreted as occurring in cases and farm visits.
training in framing and reframing can expand advisors’ toolbox. A competent advisor has a repertoire of frames and a high capability to reframe. The frames that we identified as relevant are a contribution to this repertoire.

An interesting finding in case B is that Farmer BF2 and the advisor had quite different perceptions of how successful the encounter was. Consultants’, like advisors’, perceptions of success are influenced among other things by the intensity of collaboration between the consultant and the client and the consultant’s expertise (Bronnenmayer, Wirtz, and Göttel 2016). Likewise, clients’ perception of success in an encounter is driven by the consultants’ characteristics, the degree of customer focus including an understanding of clients’ needs, and the value of the outcome (Haverila, Bateman, and Naumann 2011). In Advisor B’s encounter with the farmer couple, the intensity of collaboration was low, and the advisor was unsure of how useful the visit was for them. An obvious reason was that the advisor did not have the competence that the farmer couple needed. Thus, our finding above supports the finding of Bronnenmayer, Wirtz, and Göttel (2016). Farmer BF2 was dissatisfied with the outcome of the encounter and felt that the advisor did not understand his needs and did not have the competence needed; this supports the finding of Haverila, Bateman, and Naumann (2011). In this case, competence in framing might have improved the communication. By framing and reframing, the advisors may discover the competence that is needed. The advisor may not possess this competence but hopefully have access to it or know where to go to find it. This relates to the capabilities available in the back office of the advisory service organisations.

Our study indicates that the roles of the advisor and the farmer differ from one frame to another. For example, in the machine frame, the advisor acts more as an expert or controller, in the brain and cultural frames as a coach or facilitator, and as a discussion partner in the organism frame. In the family frame, the advisor can take, for example, the mediator role. These different roles require different skills on the part of the advisor. Even though our study explores person-to-person relations, the application of frames may not be limited to this situation. Complex technologies ‘require a collaborative approach for successful innovation and diffusion’ (Eastwood, Klerkx, and Nettle 2017, 10). Thus, the frame approach could also be relevant in cases where collective frames are relevant, when a group of people share frames, or about mental frames in organisations; this could be explored in future studies.

Our findings show that flexibility and ability in applying frames may improve capabilities to better target farmers’ needs. In essence, applying different frames relates to what Kierkegaard (1859) means when he talks about the importance of finding the other (the help seeker) where he is and start there. According to Kierkegaard, this is the essence of helping other people reach their goals. The ability to use different frames will increase the probability of the farmer experiencing both the advisor and the service as relevant. Moreover, the ability to reframe includes a clear understanding of one’s own role as an advisor, a capability to analyse what the farmer is interested in, knowledge of the different frames, and a capability to communicate adequately. Moreover, when advisors arrange visits with farmers, they could ask what the farmer is concerned with and thus try to get an impression of the farmer’s frame or perspective and adapt to this (Hansen, Petter Stræte, and Kvam 2018; Kvalsund 2015).

The variation of frames points to new challenges for advisors. New roles for advisors, such as being a discussion partner with the farmer and strengthening the business
network for the farmer, demand new capabilities on the part of the advisor (Carolan 2006; Miaris, Löfgren, and Hansson 2022). Coaching methods and relational competence become as important as traditional agronomic knowledge and facilitative approaches, as mentioned in the introduction (Ingram 2008). Our finding adds to other studies on the issue of advisor roles (Hammersley et al. 2023; Hansen, Petter Stræte, and Kvam 2018; Turner et al. 2021).

Farmers could also be trained in the use of frames as a tool for self-reflection. Thus, according to Hislop (2002), the management consultancy literature frequently mentions the central role of the consultant in understanding consultancy processes, but clients have been largely neglected. The advisor can stimulate the farmer to reframe the situation. To do so, the advisor must remain updated on farmers’ needs to be able to deploy the most relevant frame. Furthermore, advisors must prepare examples or cases that illustrate other frames to present to the farmer. One important tool for the advisor is to ask open questions, as our study shows.

We find it rewarding to apply mental framing and reframing as a conceptual framework. As framing is a well-developed research field in other sectors, we argue through our empirical study that it is also relevant for agricultural advisory services. Mental frames are determined by a number of factors that we do not have space to elaborate on in this paper, but we have found that a framework based on images or metaphors from Morgan, with one supplement from Bolman and Deal, is an efficient tool to analyse the real communication between advisor and farmer. Frames are thereby categorised in terms of different perspectives. This inspired us to formulate the first part of this paper’s title – ‘What is a farm?’. The answer to this question is not obvious, as it depends on how we interpret what is going on at the farm. As researchers, we are a factor that influences the analysis by interpreting the situation at meetings. To balance this factor, it is helpful to apply a theoretical set of frames. The five frames that we have applied seem to cover most of the ‘normal’ situations when advisors and farmers meet. Although we did not include all of Morgan’s (1997) frames, we recognise that other frames could have been observed during the visits or in different farming contexts. Future research could explore how the three frames not applied in this paper could be developed as practical tools adjusted to the different roles that advisors may have vis-à-vis farmers. There may also be other frames that can be applied or even developed based on empirical studies. However, to make practical use of the theoretical framework, we consider it useful to limit the number of frames. Instead, it could be a research task to improve the description of the most applied and relevant frames, and further adjust them to the farm sector.

Our two working hypotheses are confirmed in this study. Theoretical frames can be identified in practical situations, and, further, the capability to frame and reframe can improve the communication and the quality of advisory services. Future steps for research and practical application could be to improve the dynamics of framing and reframing in practice, and to include also the farmers’ mental framing as a perspective in the analysis.

Regarding our method, interestingly, it was easy for us to get access to the farm visits and the dialogue. Both farmers and advisors were interested in, and appreciated, the aim of the study. Moreover, in our view the dialogue was open, and it did not seem that either farmers or advisors felt inhibited by our presence. Consequently, it can be argued that we should have given each advisor structured feedback on how we experienced the visits.
Feedback was not planned, and we were not prepared to do that. However, we will recommend others to do that if suitable.

Conclusions
This study shows that advisors vary in how they communicate with farmers and how they deal with various types of farmers. According to our findings, Morgan’s (1997) work on images of organisations, which we interpret as frames, supplemented by Bolman and Deal’s (2017) frames are useful tools to analyse encounters between advisors and farmers. We observe that advisors, and also farmers, have different mental frames of what a farm actually is. We observe that most advisors manage to reframe between a repertoire of frames, although to varying degrees. Those who master this flexibility achieve better communication with farmers, and farmers are more satisfied with their advisory service. In some cases, advisors and farmers have different frames, and if the advisor does not adapt the frame to the individual farmer’s frame, the quality of the communication suffers, and both parties may become dissatisfied with the farm-visit encounter. In other cases, advisors try to influence farmers to reframe in order to discover aspects that the advisor considers important. Most often, farmers appreciate these challenges, although they might be reluctant in the beginning.

Our study also indicates that the advisors’ role is linked to their ability to use and switch between different frames. For example, in the machine frame, the advisor acts more as expert and controller, whereas, in the brain and the cultural frame, the advisor takes the role of a coach. We think farmers too can be trained in framing and reframing to improve their communication with advisors. Finally, the concept of framing can also prove useful in the education and training of farm advisors.

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Bjørn Gunnar Hansen is an employed researcher at TINE SA, one of the organizations studied. He has written this paper as a researcher with the necessary academic independence. The other authors have no competing interests.

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Author Contributions

Egil Petter Stræte has conducted interviews in advisory organizations, has written in all parts of the paper and edited the work. Bjørn Gunnar Hansen has written in all parts of the paper. Gunn-Turid Kvam has done interviews, has contributed to the text in the results section, and commented in all parts of the paper. All three authors have contributed to the paper and are equally responsible. The order of authors reflects the work done.

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