Building narratives of farmers' experiencing agroecological transition and peer group support

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Abstract

Agroecology transforms not only the farmers' agroecosystem but also their work situations and the way of being of a farmer. To support successful agroecological transitions, it is important to understanding the farmers' motivation and resources needed by farmers. In our work, we adopt a comprehensive perspective, to explore what farmers have lived, experienced and tried. Based on the pragmatist theory, we describe how farmers, embedded in their work environment, transform their experiences and how the forms of support they may receive from their peers can take place. To make peer support intelligible, we use the building of farmers' narratives of their experiences as a tool to organize data in coherence with the diverse work dimensions experienced by farmers. We thus illustrate with an example the recreation of the experience of a farmer who is developing a new livestock activity and also wants to convert to organic farming. Through the narratives, we can capture the relations that farmers build with their environment and the scaffolding role played by peers to support a farmer's inquiry when they face an indeterminate situation This study invites us to look at the potential for learning and transforming farmers' experience by considering the support of inquiry as a driver of the transformation of the work situation. It is an interesting avenue of work to be explored for thinking a renewed training strategies and rural advisory.

Keywords

Agroecology, peer groups, experience, narratives, support

Introduction

To support farmers' agroecological transition, we need to understand the drivers and resources that can sustain the changes involved. It is often pointed out that agroecology puts farmers in a position of uncertainty and complex decision-making in their work. Applying knowledge is not always sufficient for farmers to adapt or reinvent the way they manage the various situations of their farming activity (Coquil et al., 2018). Reflection on the transformation of the systems and services that often support farmers' activities becomes a serious issue to better help the professional evolution of farmers,

especially since it also requires us to think about the transformation of the work of those who support them.

Among the key resources, various studies specifically invite us to reconsider the role of farmers' knowledge and the importance of peer groups in the diffusion of the agroecological paradigm (Michael Rosset et al., 2011; Compagnone et al., 2018). Several studies have highlighted that transitions to more ecological systems often occur with the support of collectively constituted peer groups that support learning or practical arrangements among peers (Chantre et al., 2013; Blesh and Wolf, 2014; Lucas et al., 2019). By supporting collective dynamics between farmers (e.g., Economic and Environmental Interest Groups in France), public authorities also more or less implicitly postulate their important role in the diffusion of innovation. However, few studies explain how these groups support the transition process at farm level from a technical and socio-psychological point of view, and the articulation of individual and collective dimensions.

In this paper, we consider the agroecological transition on a shorter time scale, that of the reconfiguration of the farmers' experience. The paper explores how farmers, rooted in their working environment, **transform their experiences and thus their work with the help of their peers**. To do so, **we mobilize the methodological tool, storytelling**, to show how peers support can help to transform the farmers' work situation.

Investigating farmers' work transformation through narratives showing the re-elaboration of their experience

The aim of this section is to describe the theoretical and methodological elements that helped us to investigate the transformation of farmers' work. We first set out our conceptual framework, which is based on pragmatist theory, then explore the characteristics of the narrative and its added value in this work, and finally report the case study with which we illustrate this work.

A conceptual framework

We place our work within the framework of John Dewey's pragmatist theory. This allows us to anchor our thinking in the farmers' working situation, to understand what is changing and how. Dewey (1938) argued that individuals not only live in an environment, they also have to act by this environment, and to build compromises with it. Thus, he considers the situation as an *experiential environment*. Even though these situations are not equivalent in the degree to which they can induce the experience re-elaborating process. Dewey describes a particular situation: the indeterminate situation, which arises from an individual's ability to be affected, surprised, embarrassed or doubtful when a gap appears between their experiential environment and the means they usually mobilize (Thievenaz, 2019). As Dewey wrote: "*Nothing can be made a problem for a person simply because it has been labelled a problem, a difficulty must appear to him as his own difficulty, as an obstacle born in and through his experience, which he must overcome to reach his personal end*" (1913: 87). This indeterminacy triggers the process of re-elaborating experience, notably through the opening of an *inquiry* process (Dewey, 1938). Through *inquiry*, individuals identify and formulate the problematic situation, suggest

possible solutions, and experience the solutions and their consequences. This process ultimately makes it possible to produce intelligibility in the experiential environment and to re-establish continuity in the driving of the action, and consequently the continuity of the individual's experience (Thievenaz 2019). In our work, we consider the farmers' experience re-elaboration to be at the core of the work transformation during agroecological transition, for it requires local-based knowledge (Altieri, 2018). In this paper, we illustrate this framework with an example of the experience re-elaboration of a farmer with a new livestock activity and the way in which exchanges with peers' influence the farmer's indeterminate work situation. Thus, in order to show this interplay between the farmer's individual experience dynamic and what is exchanged within the collective, we will build narratives of experiences.

Construction of Experience Narratives

The above theoretical elements provide a framework for constructing narratives. We analysed the data that we had collected (see below) to build an experience narrative, i.e., a narrative which shows: **the situations experienced by a farmer during their agroecological transition; the construction of the indeterminacy of a situation; and the way in which peers allow for the weaving of continuity in action and ultimately continuity in the farmer's experience**. As Ricoeur (1983) and Beaujouan et al. (2013) argue, storytelling helps to structure and organize time as well as the intention of action and experience. It is this so-called "configurational" function of narrative (Beaujouan et al., 2013) that interests us here, because it allows us to account for the dynamic of experience in its multidimensionality (Delory-Momberger, 2020), which then enables us to transform "the succession of events into a significant totality that […] makes history follow" (Ricoeur, 1983: 17). We thus build narratives to show the process of re-elaborating experience (Barbier and Thievenaz, 2013) when farmers experience indeterminate situations in their work. We based the writing of our narratives on the principles cited by Beaujouan et al. (2013), Astier (2004) and Chizallet (2019).

It is important to point out, however, that a distinction must be made between the situations experienced by the farmers and the accounts they give of them a posteriori (Bertaux, 1997), especially since the farmers' account is presented through the researchers' reading.

Case study

We drew on two types of data to construct the narratives: i) transcriptions of the exchanges in the group [corpus 1] and ii) interviews with farmers [corpus 2] conducted using comprehensive interview (Darré et al., 2004) and explanatory interview (Vermersch 2008) methods.

This study was conducted with a local group of farmers in north-eastern France. The group was composed of fifteen farmers, all of whom wished to reduce their environmental impact without any technical preconceptions other than the protection of the soil ecosystem. Starting in February 2019, we took part in seven group meetings (e.g., field meetings) and interviewed four farmers from the group on four occasions to gradually build up their narrative of experience. In the following, we present an example of the experience narratives that we built, based on data from corpus 1 and 2, related to

the indeterminate situation lived by the farmer. First, we examine all of the data in these corpus. We then select the parts related to the indeterminate situation identified, and we assemble these parts according to their unit of meaning, so as to arrange several dimensions of the experiential environment (e.g., characteristic of the farm, objective of the farmer, the social and material environment). This allows us to describe (i) the situations that affect the farmer, as well as his doubts and questions, and (ii) the means he chooses in the material and social environment, in addition to his own previous experience, to cope with his experiential environment and transform his work situation.

Results: The Experience Narrative to give an account of the farmer's experience re-elaboration while he moves towards a mixed crop-livestock system

In this excerpt, we will follow some situations experienced by Luke, one of the farmers in the group, in February and March 2019. The aim is to show Luke's different concerns, as well as what and who support him to build the coherence in his experiential environment, creating continuity or, on the contrary, rupture. Luke is gradually reconfiguring and projecting himself differently in his working environment, which is changing, and his peers contribute to support his inquiry process.

Starting point - diversifying to hold out

Thirty-nine-year-old Luke is settled on a 105 ha farm in the Chatillonais region of France, with three types of production: cereals in conservation agriculture, free-range red-label poultry and free-range sheep. Marion, his wife, owned a battery farming rabbit that she had to sell due to economic difficulties. She is now thinking about her reconversion and, while waiting to find a new pathway, she is helping Luke with the poultry and sheep.

This diversification nevertheless entails its share of concerns for Luke: "With my henhouse and my 105 ha, I can't afford to make mistakes in my system … my private life, I have three children, and a house on credit … it has to work! There are people who admire that I manage to live in a system like that, compared to my neighbour who has 300 ha, but we try to put the odds on our side". On top of that, there is the dependency on the world market. So, according to Luke, diversification should generate added value for him, which would not have been the case with the expansion. That's how he started a new activity, sheep breeding.

This activity is motivated by various aspects related to: agronomy, the peer group, personal attachments, economic opportunity, risk assessment, etc. First of all, the agronomic argument: "The advantage of sheep is that we bring back fertility to the soil, it allows us to reintroduce the meadow and cut the rotations… I graze on my wheat". However, this is also the result of a process in which the group has helped to create interest in this activity: "I had done open days of sheepfolds I found around

here, when my colleagues [in the group] talked about Pâture'sens, I joined them in the training courses. It was Hervé [member of the group] who took charge of everything and organized a day with Pâture'sens. There were more than half the members of the group. Even some guys who didn't know if they would go on livestock's systems, but they came, a bit like a discovery training."

It's also the result of subjectivity: "It was more personal at the beginning, I was in a small system. In the old days, there were sheep on the farm. We used to talk about it."

And an economic opportunity: "My flock was financed up to 35% and I had an interesting return on investment: in a one-year cycle, if on average I sell one lamb for each ewe, in the shop it sells for 130 euros. The first lamb recoups your investment, so the financial risk is not huge in our system." This investment is all the more interesting if this activity becomes problematic: "if in three years, things don't go well or if I get attacks by a wolf. This winter, it was there, 15km away. If I decide to sell everything, the herd goes to the slaughterhouse, I don't have buildings, and I'm free. Besides, I'm crazy about the RAVA breed, a rustic Auvergne breed that makes up the herd with the IDF breed and the IDF and RAVA hybrids." Beyond these aspects, Luke particularly appreciates the fact that he has a dynamic job where "we never do the same thing". This is part of the way he sees his job.

The "sheep's" experience: work situations turned upside down

The arrival of the 180 sheep in August 2018 brought new concerns which prompted Luke to make new compromises with his working environment: there was the wolf, and a demand for attention that was greater than with crops: "I go to see them every morning and when I come back". This also impacts his health: "I feel like I've aged 10 years in six months".

Luke had not anticipated the change in the organization and the usual rhythm of his work caused by the introduction of this new activity, which changed his mental load and workload significantly: "Before the sheep arrived, everything was well set up, I had days in advance, free time. Now that the sheep are here, I don't have any free time, I'm under stress, I work every day, even on Saturdays, and on Sundays my head stays on the farm". Luke moves the animals almost every day to the pastures: "There's one hectare per day to fence". This required the purchase of a quad: "it's an expense of 1500 euros, it wasn't planned, but I don't regret it" and the making of a rack: "we used to give them hay, then it started raining and they didn't eat anymore, so we needed a rack." It also became imperative to fence off the entire farm perimeter bordering the woods because of potential attacks by sheep hounds, which have already broken the fences. Thus, as Luke readapts and builds new interactions with his experienced environment, he is able to adapt to the new environment.

The Pâture'sens training courses did not seem to be adapted to Luke's situation, which caused him to depart from some of their recommendations in order to adapt to his own environment, especially around the constitution of stock: "it's a firm that was set up by New Zealanders, who believe that sheep can thrive in the west, in the Vosges, everywhere, but no! They adapt to the soil and climate, and they struggled to understand that. The proof is that this year, they'd told us not to stock up and now we find ourselves with nothing for the sheep to eat and hay is expensive!" So Luke buys hay to

make up for the lack, even though it goes against his initial objective of feed autonomy for the flock. He explains that: “I’d rather buy hay than export it from home, which depletes your soil fertility. I want to leave everything on the ground, the objective is the self-fertility of our soils.”

How do I feed my sheep?

Among the concerns mentioned above, it was this issue that was to take an important place in the construction of Luke’s new system. He described the elements that made his problem situation “indeterminate”, as he experienced new work situations.

First of all, there was the cover crops that would evolve. “I previously used to use a lot of legumes: beans, peas to produce nitrogen and phacelia for the flowers because we still have a few hives, but today I’m going to go back to cruciferous plants: turnips, rapeseed for forage, radishes because sheep like to eat them. These cover crops must be sown with as little humidity as possible, “that’s why the seed drill has to follow the machine”. However, with drought this reasoning has its limits, especially when it comes to young ewe lambs: “I had to give them only good food, so I found myself at one point, with not much left.” To cope with this, Luke called on his neighbour to graze his cover crops for two months, especially since the growth of the meadows was disrupted. “All the weeds came out, I’d never seen anything like it. Then winter came and there was no temperature for the grass to grow, so the meadows didn’t develop.” Luke realized that it was not so easy to say: “I need so many hectares per year of cover, so many hectares per year of wheat to feed the sheep outside. That’s on paper, but afterwards, in the face of bad weather, it can be complicated.”

If I go organic…

But Luke didn’t stop there; he planned to switch to organic farming in 2019. He had already planned his conversion the previous year, but that would have required having his seeds in advance (peas, triticale, faba beans, wheat, etc.) and having exchanged certain plots, as it would not be possible to do that once the conversion had begun. So today, he sees a ‘correlation between the organic system and the sheep, as he considers reducing the nitrogen input loads. He projects himself into the situation: “we’re going to fertilize with the sheep, instead of using mineral nitrogen. I’d have to put manure, instead of putting it on the wheat crop, I’d have to put it on the cover crops to boost them I have my poultry, but I won’t have enough to cover everything.” He is nevertheless aware that fertilizing with sheep is not instantaneous, it will take several years. Luke has chosen not to opt for the “classic” organic farming system proposed in particular by the chambers of agriculture, with rotation based on three years of alfalfa. He explains this decision primarily in terms of hay exports. Another level of complexity is thus added to Luke’s “indeterminate” situation.

How do I feed my sheep if I go organic on the crops?

Luke continues to weigh up the pros and cons of conversion to organic farming, particularly in relation to the initial undetermined situation: “In organic farming, with less nitrogen, four times more land will be needed. Additionally, the cereals will be sown later and will not be sufficiently developed for sheep. Organic farming will require a bit of tillage, the soil will be less load bearing, and the sheep will make

holes in the ground, which will result in problems of lameness." The price of organic cover is also one of Luke's factors of indeterminacy, because the success of the cover becomes imperative, especially since drought increases the chances of failure of the levees. Moreover, the hesitation of his colleague, with whom he already shares a seed drill and who lends him pastures, weighs on his decision. If they were converting together, he could continue to pool the potential new equipment (hoe, harrow, etc.) which represents a fairly substantial investment and for which Luke has no significant contribution, particularly because of the current "sheep" investment.

When the peer group gets involved

Conversions to organic farming, such as the introduction of sheep, were topics discussed in the group. Luke welcomed the members of the group to his farm on 4 March 2019. One of the questions that animated this meeting was: how do I feed my sheep if I go organic? The group made several proposals on various aspects. Through their exchanges, the peers participated in clarifying several potentially effective dimensions to help resolving the indeterminacy of Luke's situation[1].

One of the farmers drew a parallel with another situation he experienced to show a possible balance between the dimensions of the situation in relation to the size of Luke's flock: size of the flock, surface area, duration and alfalfa cultivation: "*The flock I took in, 250 sheep, in the 4 months they grazed 135 ha of alfalfa…*"

Another farmer identified relevant dimensions in which to act with a view to planting summer crops in order to lengthen the cover crop cycle as Luke's system is cover crops-based: "Afterwards, you have to grow summer crops again so that you have cover crops in the spring…"

Yet Luke did not seem satisfied with the idea of growing soybeans on his land. His peers suggested him another object, sunflower, or another balance between various dimensions: "You've made 68 q of wheat, you're going to grow soy, you're not going to be able to grow soy everywhere, but there should be plots where you can have some." These high-potential plots allowed Luke to launch his "sheep" project when wheat prices were high. His colleague, while drawing a parallel with another situation he had experienced, and weaving in continuity with Luke's cover crop-based system, did not give up. He suggested: "You can reduce your area of temporary grassland to grow summer crops, because your cover crops can go far into May. I still have 48 ha of cover crops to eat. I'm going to have only 10 ha of grassland to manage, just for my 200 ewes." This piqued Luke's interest. He asked his colleague about the timeframe of these operations: "So the sheep will arrive in the meadows from April?" Then "and you're going to last until?" Then on the objects of the action, "And you're going to plant what?" His colleague responded by drawing a parallel with his situation: "Sunflower and soy, I'll put my sunflower there as soon as … then I have another 30 ha where I'll put my soy. I'll take them back to my pastures as late as possible, if it's possible, my pastures will have to be eaten a little bit

[1] Among these dimensions there are objects for action concerning the sheep's palatability, but to facilitate the intelligibility of the account we have retained only the dimensions related to Luke's indeterminate situation and those that are co-dependent on each other.

beforehand to make them a small clean place that goes back to a nice pasture in May." Luke replied that he was satisfied with this return: "That's what I'm waiting for, remarks like Paul's. To leave the cover crops until 15 April, then plant sunflower."

Another colleague went on to draw another parallel to his own situation: "For the next year, we have the same number of sheep as you do. We have 32 ha of alfalfa, and then I have 20 ha that are far away. I think we're going to bale them and then I'm going to keep it as emergency stock." This remark launches an exchange on the difficulties of the open-air system and particularly the need to stock up. His colleagues thus took part in another problematization of Luke's situation: "It's complicated to set up, you need food in advance… dry food, hay or something. A month of snow, you have to feed them well, after a month of dryness". Another colleague suggested: "In my opinion, you should take the cover crops as a plus… But on the other hand, you should use two thirds of the organic alfalfa in your crop rotation for your safety." This remark breaks into Luke's experiential environment, a system based on the cover crops, that he was quick to remind him of, justifying it by the "small" surface area of his farm.

A colleague finally intervened to weave the continuity between the objects of his action (the cover crops) and various operations in a given time frame: "I'll have three types of cover crops, one that I'll sow soon, one cover crops in autumn, and the third is a permanent cover crop. There I'm sure to have it every year […] once I've harvested my triticale, I'll have 34 ha of clover for my sheep very early. After what I sowed in the spring, I'll have it after [the harvest], and my harvest cover crop will be there after [the fall]. At the very least, you can get two of them."

What Luke finally retained with regard to this problem at the end of the day mainly concerned the adaptation of the cover crops' layout, especially because it did not challenge the way he wanted to "practice organic farming", or his system based on cover crops. Thus, he projected himself into this new potential future: "The vision that some people have shown me does not reassure me at all. The vision that Paul has given me speaks to me more. If you grow a sunflower crop, which you don't plant until the 20th of April, if you grow cover crops before that crop, and from the summer before until 20 April, you have to extend three cycles of cover crops. Previously, in my system, the cover crops had to be destroyed by 15 February, because I would plant other crops. With sunflower you can save two months." Luke also felt that perhaps he had too many sheep in relation to his surface area: "Paul is at 200 sheep on 200 hectares in Chatillon, Hervé is going to go up to 400 for 200 hectares, and I'm going to go up to 250. Maybe I need to rethink my strategy."

He, however, put the words of his colleagues back into his experienced environment: "In my mind, it was impossible to grow soybeans here, because of the soil. If I grow soybeans up there, it means I have to grow them in good soil. It means that I have to cut back the plot to do something else, it still disrupts the crop rotation."

The collective also discussed Luke's conversion to organic farming, highlighting not only the advantages of livestock farming to manage grass cover, but also the psychological and health impact of all these changes in such a short period of time.

That’s it, it’s signed, and the sprayer is put away!

After the field tour, Luke continued his work on the conversion to organic farming: “I waited almost until the last minute […] because I was busy with the sheep.” But several elements allowed him to find compromises for resolving his initial problems and thus building the continuity of his breeding experience. First, from an organizational point of view, “I said to myself, sheep are to be monitored in the morning. In conventional farming, you have to treat in the morning; in organic farming, you have to go to work in the fields in the afternoon. I told myself that I would be better off in this work organization.” This was all the more so as Luke was fed up with phytosanitary treatments. He again emphasized his initial concerns, “like these stories of cover crops, all things considered, it’s going to challenge my system a bit. We started out raising sheep on cover crops and, for me, in organic farming, they would be less successful than in conventional farming.” Yet Luke reverted to what some members had suggested to him during the field tour: “I have other ideas to succeed, it won’t be the same basis, but sowing the cover crops directly in the crops. As Paul said, planting more summer crops, so that the cover crops last longer, answered my questions about that approach.” A visit to Paul, who lived about ten kilometres away, also supported the idea of planting cover crops as Luke noted the red clover in the triticale that Paul had sown. Luke also took part in farm visits on the theme of conversion to organic farming, a theme organized by the local organic farming group, which reassured him on the economic aspect as he may not need to rely on public subsidies: ‘the theme was: Organic for me or not? I had signed up, we visited farms in an area of 40 km around, guys who had been organic for 5 years. Maybe that was the trigger. When you hear the testimonies, the guys have been organic for five years, they say it’s been three years since they’ve had subsidies. In fact, we wouldn’t be getting them, and we’re already living economically secure. From now on, as soon as you sell your goods at the organic price, Emile says, you don’t need subsidies anymore, it’s during the conversion that you need them because you sell cheaper, which is logical […] there are a lot of things to do, it opened my eyes.’

This was followed by the commitment of a colleague with whom he could share equipment, which was a great comfort to Luke: “Well, I was afraid to be alone without being alone. When my colleague told me that he was in, I didn’t hit the roof, but it reassured me. It’s especially the material aspect, if you need some material, it is easier to invest with several people. If tomorrow we have to buy a hoe, because he doesn’t have livestock, he would go more on a hoe system. Since we have the seed drill together, I will also be able to hoe at home. That way I don’t have to put 50 or 80 thousand euros aside”. It’s also comforting for Luke to be in a group with people who are looking back on organic farming and the conversion period: “I don’t feel alone in the group, I don’t know how many hectares are committed to organic farming … as I don’t want to follow the cycle of the Chamber of Agriculture, it’s reassuring.”

Luke has not finished wondering about his system, not only because of what he hears at new peer meetings, but also his own experiences of farming: drought, lambing, sales, the arrival of new sheep

to complete the initial flock, and his wife's livestock project. In this excerpt from the constructed narrative, we have been able to put into words the various dimensions and their arrangement that create indeterminacy in Luke's situation. His peers in particular supported him by suggesting potential dimensions for action that were anchored in Luke's experiential environment: grazing sheep on cover crops by using the high-potential plots for summer crops that would allow him to have spring cover in addition to winter cover. Nevertheless, we note that other elements of Luke's experienced environment played a role in resolving the indeterminacy of the initial situation: other farm visits, his own progression, the organic commitment of his colleague, peers who were already committed, and so on.

Discussion and conclusion

In this study, we built experience narratives to make explicit the reconfiguration process of the experience of a farmer engaged in an agroecological transition with the support of his peers. Building experience narratives was crucial for capturing key elements that describe the process of reconfiguration of experience in the complex work situation experienced by the farmers. The narrative thus made it possible to set together some dimensions of the working situation (i.e., the farming system, the farmer's goal and concerns, etc.), the dimensions of the indeterminate situation (i.e., small farm surface, cover crops in organic farming, no export of hay, the herd size), and the way in which the inquiry evolved with the help of peers. The configurational function of narratives allow us to show how these dimensions were woven together by the farmer. As farmers' transition is often described over a longer time scale (Lamine et al., 2009), our study shed light on what is at stake in the course of individuals' experience in their work situation, in an agroecological context. The narrative allows us to further our understanding of how the agroecological transition sets in motion ways of doing and organizing work, as much as ways of thinking and being as a farmer (Coquil et al., 2018, Chizallet et al., 2020). The narratives make it possible to consider how the subject or, as Coquil et al. (2017) define it, the professional world (norms, values, way of acting of a subject), holds together and readjusts itself, to deal with working situations under tension.

It appears that peers can be seen as playing a support role of the inquiry process. They can develop the problematic situation and bring in other problematic dimensions such as winter food stock. They also make suggestions that can be taken into consideration when they forge links with the dimensions of the experiential environment: e.g., planting spring cover crops and relying on the potential of certain plots to grow summer crops. Supporting the inquiry process has thus enabled the farmer to reopen the field of exploration of possibilities and imagine other means of action in his work situation. As Dewey says: 'The suggestion becomes an idea when we wonder whether it is functionally appropriate; if it can be a way to solve a given situation' (1938: 175). The peers also appear as a resource for reassurance, for an experience reconfiguration is also an emotional affair. More precisely, the commitment and involvement of several peers who opted for organic farming reduced the uncertainty generated by this change of farming model and offered some reassurance on the existence of a reference framework that could be relied on in the future. This complements sociological approaches that studied the

network's influence on change dynamics according to their shape, the positions occupied by a farmer in the network, or the network's geographical dimension (Wood et al., 2014; Compagnone and Hellec, 2015; Compagnone, 2019). Building narratives of how change can occur with the support of exchanges between peers gives a comprehensive view of the change dynamics, especially to catch the farmer's cognitive and psyco-affective dynamic when examining and managing the diverse resources of his or her environment.

This work opens up perspectives for Agricultural Knowledge Innovation System (AKIS) players in terms of supporting farmers involved in these transitions, more specifically in the problem-solving process of the individuals. While we used the narratives as a research tool, experience narratives can be envisaged in the support situation as a tool for farmers by getting the farmer to describe his or her experiential environment, to gain insight into what composes and sets in motion or discourages the farmer. Then, through dialogue, the AKIS player can help to explore the problematic situation, opening up possibilities to explore new means, and affording access to a farming reference system that builds continuity with the experiential environment. Building synthetic narratives can help AKIS players to follow the farmer's inquiry as a guiding thread. It allows them to take a step back from the situation and examine their own support, especially in the induction of the inquiry (Chantre et al., 2014). As Dewey argues: 'Its task is to cultivate the spirit of curiosity, to prevent it from being stifled by abuse, fixed by routine, derived by dogmatic teaching' (1910: 48). It is thus a matter of understanding and inducing the inquiry drivers. The narratives can also be used as an intermediary object to discuss the diverse point of view and way to handle change at farm level (Cerf et al., 2011) by AKIS actors and thus create a space for peer support and debates. The configurational characteristic of the narrative can also contribute to the farmers' awareness of their experiential environment and the inquiry they have engaged in, to build new means of action and thinking the action. Experience narratives can also be proposed in the professional training of future farmers, to bring a more comprehensive approach of farmers' work, in addition to more technical and quantitative learning approaches. Processing inquiry and finding appropriate support can be considered as necessary skills for carrying out the farming work. The narratives can constitute an interesting intermediary object (Cerf et al., 2017) to immerse oneself in multiple farmers' situations as they drive inquiry and manage rupture and continuity in their work situation.

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