

Empathy for Earth and Farmland: A Bland Ranking of Attentions

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Submitted: October 21, 2022 – Revised version: March 9, 2023

Accepted: April 17, 2023 – Published: July 24, 2023

Abstract

The environmental crisis, so looming and diverse (climate change, pollution, loss of biodiversity), requires the social sciences to make every effort to identify attitudes and actions suitable for mitigating it. Empathy towards plants, animals and ecosystems appears to be a powerful category both analytically and pragmatically. The paper focuses on a great mediator between society and environment: the “agrosilvopastoral” sector, wondering how much empathy plays a role in this mediation. For reaching this goal, first, a definition of empathy is delineated; then thanks to a typology of the position and analytical levels of the social sciences, different pieces of literature on earth and farmland empathy are framed; and finally, a secondary analysis of over 60 abstracts collected from a conference on earth and farmland empathy is carried out. The literature and content analyses show two results: some scholars and practitioners do not recognise a role of mediator with ecosystems to agrosilvopastoral sector, some others adopt a bland ranking of empathy towards the human and non-human figures of agro systems. Because of their relationship with animals, shepherds are seen among the most important mediators between humans and non-humans, despite their relative isolation from social life.

Keywords: Empathy; farmland; earth; shepherds; animals.

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1 Introduction

This paper has a dual purpose: to review the sociological and psychological literature on empathy towards ecosystems, and to explore its application in agriculture, forest, and breeding activities (primary sector). The two purposes are complementary: empathy is now invoked as an important tool for facing environmental crises, the primary sector is a mediator between society and environment, but this role is recognised only in functional terms (e.g. ecosystems services), losing all the affective and motivational aspects provided by a powerful attitude like empathy.

The path to reaching these goals has the following stages: first, we attempt to frame the concept of empathy; then thanks to a typology of the position and analytical levels of the social sciences, different pieces of literature on *earth and farmland* empathy are framed; and finally, an exemplifying analysis of over 60 abstracts collected from an international conference on ecological empathy is carried out. The content analysis will be the main tool, integrated by the vision of the authors' presentations and slides.

The hypothesis that guides the review and the secondary analysis is that a) empathy is a polymorphic concept which lends itself to both speculative and practical references, and b) empathy is distributed in society with a specific order: firstly for humans, secondly for animals, thirdly for ecosystems, and finally for farmland. If the analysis confirms this hierarchy, then we conclude wondering what the eco-cultural frames that guide our societies are, and whether it is possible to integrate the different empathies in order to protect living systems with a better intermediation of farming and animals breeding.

2 Toward an Inclusive Definition of Empathy

The domain of our research concerns the quality of agrosilvopastoral relations through the lens of empathy, and thanks to emblematic cases in fragile rural areas. The question then becomes: what is the nature, form, and evolution of the relationships between farms and the habitat in which they operate? Is it possible to speak of a relationship characterised by elements of affectivity, emotionality, and spirituality towards the earth without falling back into magical visions of nature? Can we conceive an empathy between farmers and habitats?

There could exist three components of the empathic relationship between agro-forestry farm and habitat:

Recent research suggests that the classical two-dimensional model of empathy (affective vs cognitive) may benefit from a reconceptualization which includes a third process based on the concept named by Decety and Jackson as “intention to respond to the others' emotion” (Herrera-López et al., 2017, p. 2).

The quote concerns infrahuman relationships — in this case, between adolescents. Can such a categorisation be used for relationships with cultivated plants, farmed animals, or the forest? Some authors (Afroogh et al., 2021) believe so, although it is necessary to adapt the detection instruments. In fact, it is not possible to grasp any conscious reaction from inanimate parts of the ecosystems that the farmer interacts with.¹ This may not be a problem because

1. On this point, there are different and more extreme positions, a feeling of plants, for example (Mancuso, 2021; Kohn, 2013); in any case, the choice to begin from empathy, and not from other more relational concepts such as reciprocity, is derived from the desire to maintain a point of view of the human subject.

empathy is not an absolutely relational datum — a third product of the interaction of two or more subjects — but rather an attitude of one actor tuning in to another. Some strands of economics, for example, place empathy precisely in these terms:

MEF (Meta economics framework) and DIT (Dual-interest theory) posit that individuals are motivated by two inseparable, yet conflicting interests: self-interest and other (shared with others)-interest. This conflict gets resolved through empathy tempering self-interest, resulting in a balanced decision, in which neither of the interests is maximized, but we rather observe sacrifices in both interests. Empathy is based on imagining the struggle of others, on “walking-in-the-shoes-of-others” and, as a result, perhaps joining in sympathy with a shared cause like conservation and sustainability (Czap et al., 2014, p. 1).

This “putting oneself in the shoes of others” could also concern the environment (Sevilano, 2007). Not by chance, the authors of the cited text exemplify their approaches precisely with the areas of conservation and sustainability. Additionally, the model is applied to farmers (Sheeder & Lynne, 2009), showing that those who balance their own interest with that of others through empathy show a greater propensity for protecting nature. While identifying with others is plausible, it is not the key to empathy in the philosophical sense. In fact, following the seminal work of German philosopher Edith Stein, *Zum Problem der Einfühlung* (1917), empathy is seen as:

a “realizing,” or “observing, noticing something that, emerging suddenly in front of me, is opposed to me as an object (like the sufferings that I ‘read on the face of the other’)” [...] According to Stein, therefore, there is a sequence, almost simultaneous, in which the other and his pain are not a concrete and immediately understandable event, but occur in the form of a rupture of the continuity of my experience. When we realize this, something begins that we can call the birth of meaning or, as the philosopher defines it, an act of empathy (Masera, 2007, p. 29).

And again, empathy, in a phenomenological sense, is:

not a feeling of participation or sharing, nor does it correspond to the innate or acquired mental capacity to read the mind of the other. Empathy is not identification (*idem* feeling) or sympathy, as it presupposes the distinction between the self and the other. It is the act through which each of us makes direct and immediate experience (sees and feels) the existence of other individuals who move in the world, feel emotions and have intentions in an autonomous perspective (Boella, 2018, p. 14).

Therefore, there exists no identification or the formation of an *us* (see Tomasello, 2019), but rather an unprecedented situation that modifies both “encounterers”; also, the other is paralysed, opposed, causing a rupture in the continuity of Ego and Alter experience. Edith Stein, like so many others who have applied her concept to the fields of care and listening, always imagined an infrahuman perspective. The relationship with the environment rarely is contemplated (Rock & Gilchrist, 2021). However, we are interested in that — particularly in the relationship between farmer and animals, fields and woods.

One way out of this theoretical-practical impasse is to reformulate the concept of *colere* (cultivating, at the base of the term culture, see Burton et al., 2012) by highlighting a sequence

that is typical of empathy: observing, noticing, being willing to change. In scientific terms, this means prefiguring a *set of signals* that the environment provides to the farmer about its state of health. For example, in the case of breeding, this is quite simple: diseases, grazes, milk reduction (Kielland et al., 2010; Hanna et al., 2009) or face expressions (Ly & Weary, 2021). For fields and soils, it is more difficult, but there are monitoring kits within the reach of farmers who are not experts in chemistry and biology — especially given that they can now connect via digital networks (Sachs et al., 2012).

However, if you read the presentation of these tools, it soon emerges that they are designed in a strictly functional sense for the growth of the cultivated plant, reduction of costs, and practicality of use.² In this kit, there is no reference to the health of the ecosystem the plant grows in. On the other hand, the choice of which indicators to insert is no small issue (Maritano, 2020). The chemical-biological indicator kits are good for the cognitive dimension of empathy; for the affective and conative one, typical tools of the social sciences are needed: interviews, participant observations, focus groups. This is additionally supported by the idea that empathy works at the imaginative level (Ruiz-Junco, 2017): we attempt to understand and feel the others' mood through a creative process, such as an independent dimension of each encounter.

An agro-pastoral-forest farmer could be thought of as a designer — an *architect of nature*. Sandman et al. (2018) show that *empathic design* is a good approach in poor contexts such as developing countries for planning sustainable dwelling. They take up the idea that participation and integration with nature is unbalanced towards the responsibility of the professional (the architect for them, and the farmer for us). This is another way to reaffirm that empathy is in charge of a responsible actor, and that it is not a quality or product of a relationship like sympathy.

At this point, the basic ingredients for a theoretical definition of earth and farming empathy are identified. They comprise the following:

- An affection, a transport, a love towards animals, crops, and ecosystems.
- A refinement of agroecological knowledge based on sensitivity; it is to focus on minute, every day, vital aspects, isolating them from the context, in terms of the *epoché*.³
- A disposition or attitude aimed at changing the current ways of doing agrosilvopastoral activities. Empathy produces a sensitivity to negative aspects, with respect to which there is a desire for change. The direction of such a change is not predetermined, as can easily be seen from the proliferation of types of agriculture (Pellizzoni & Centemeri, 2022).

There are two objections to this way of proceeding: 1) empathy alone is not enough for understanding and protecting earth/farmland, because it maintains a detachment with the object, even if there is an emotional transport (Kalfagianni et al., 2020). In other words, it is not *compassion*. Confusion between the two creates damage (Bloom, 2016); and 2) despite being a positive attitude and a value, empathy is rare, and if adopted, it is sweetened or mystified

2. <https://terraevita.edagricole.it/aziende-prodotti/strumenti-per-lanalisi-dei-nutrienti-del-suolo/?prd=103>, access 7 June 2021.

3. “In the thought of E. Husserl (1859–1938), the means to arrive at the philosophical attitude, ‘placing in brackets’ both what is subjective and psychological, and the empirical objective data” (Google Dictionary, accessed June 12, 2021). So expressed, *epoché* resembles the concept of *sociability* by Simmel. Barber (2017) with the idea of *ecological epoché* includes empathy for animals; Ardigò (2020) comes to argue the possibility of having a “systemic empathy” that is a system openness not only to signals consistent with its identity, but also perturbations that can change its auto-poietic nature.

(Legrenzi, 2017). Both objections have a foundation. A way to answer this is by looking at empathy according to a prism, a meta-frame that is able to provide a multiple-angle vision of the concept.

3 A Prism for Placing Literature on Earth and Farmland Empathy

The prism is built thanks to two metavariables. One is the position of a concept within a ladder of knowledge; such a ranking can be thought of, as well as the width of objects included in the concept: macro, meso, and micro. The last criterion is frequently used in social sciences for identifying the level of analysis — respectively, the entire society, organisations, and individuals. The other metavariable concerns a dichotomy that is again frequently used in social sciences, the polarity mechanisms-reflexivity, which is often summarised in terms of structure or actor primacy. This frame has been used for classifying different positions and functions of social sciences in interdisciplinary contexts — for example, those concerning environmental issues like energy transition or water management (Osti, 2020; 2022).

We send to those works for a wider justification of the framework. Here, it is used for classifying the literature on earth and farmland empathy in a parsimonious way (six approaches). According to this scheme, empathy in the “above” position and as mechanism works as a *new ideology* in the Marxist sense, used for covering inequalities and injustices. Stephen Morris (2020) argues that empathy discriminates political orientation in the USA; it is increasingly a value of Liberals versus Conservatives. Political psychologists go so far as to say that empathy is the main predictor of the distance between the two main American wings (Waytz et al., 2016). However, they “propose that liberals and conservatives do not differ in their capacity for empathy or willingness to empathise with others. Rather [... they] differ in terms of the *targets* toward whom they expend their empathy” (Waytz et al. 2016, p. 62). That is, liberals tend to empathise with larger, farther, less structured, and more encompassing social circles, whereas conservatives tend to empathise with smaller, closer, more well-defined, and less encompassing social circles.

Aside from the research content, we are interested in *frames* of these analyses; they allow saying that a) empathy is related to ideologies, not in the Marxist sense, but as a set of beliefs discriminating parties in the political arena and their voters’ cultural background; b) there are explicit references to ecosystems: “universalist versus parochial tendencies of empathy extend to humans versus nonhumans more generally” (Waytz et al., 2019, p. 1); c) there are not specific references to farmland, but a deduction is possible, once the discriminatory capacity of empathy towards political ideologies has been fixed. Farmland is likely a value that is linked to ownership and local identity, and thus a legacy of more conservative ideologies rooted in rural societies (Baldwin et al., 2017).

Crossing reflexivity and “above” approaches, empathy results in a source of sense in a period in which the great narratives are in crisis (Boella, 2008). In other words, it should be a universal value that is able to connect people beyond ideologies, parties, and countries; a sort of *civil religion* (Read, 2021). This happens in special moments of history; for example, the discourse of “human rights as empathy” arises in the Eighteenth Century as a policy of tolerance for religious differences (Hoffmann, 2016). According to von Harbou (2013), the connection between human rights and empathy is limited, but it is noteworthy to observe the attempt to find a common ground on rationality and the respect for ideas and feelings of others. The non-fiction futurist book of Rifkin (2010) should be framed as a recurrent attempt to establish a universal and integral parameter for understanding other people in a period of intense

exchanges at every level (see also Krznaric, 2014; de Waal, 2010). Even the Barack Obama reference to empathy would not be a search for positioning the internal political spectrum, but rather an attempt to relaunch the US moral leadership in the world.

Such an aim has empirical justifications (Persson et al., 2016) as well critics (Konrath, 2017). Thinking of empathy as a master frame helps understand the ways in which a value is constructed and de-constructed. The empathy for the earth has the ingredients for becoming a universal value because the environmental crisis is codified as global and interconnected, while empathy for farmland is more controversial, being — for the most part — agriculture organised for producing profits for few. It is possible that empathy for *peasants* can be a good frame for understanding some studies: peasants are marginal people, often oppressed by agro-industrial multinational companies, pushed to migrate and sell their land. According to van der Ploeg (2010), peasants have a better attention for environment. It is plausible to think that “agroecology” is a cognitive frame with a wide reference to empathy toward the local community, farm animals, and the landscape (Pellizzoni & Centemeri, 2022). A circle of empathy between public opinion, peasants, and ecosystems is formed because of the sense alignment: they are recognised with the same problem, the environmental crisis. We arrive at a general and plausible picture in which empathy for earth and farmland has a potential role as a master frame.

The meso level of analysis concerns the intermediations among organisations.⁴ The idea that empathy is only an attribute of individuals is overcome by the fact that behind every institutional relationship, there are truthfully always at least two persons. Their behaviour can be very formal, related to a bounded status/role; in any case, it can be studied according to a scale of empathy. This belief on empathy applied to organisations is confirmed by studies showing that companies are convinced empathy is quite useful for their employees (Pavlovich & Krahnke, 2012; Hunt et al., 2017; Clark et al., 2019).

In order to deeply use the hypothesis of our prism, empathy is seen in two ways: as a marker of an organisation’s style (bordering), and as a bridge between self-referential worlds (bridging). For exemplifying the first point, we use a text on organisational empathy produced by a consulting company (Bowden, 2019). At point 3 of their analysis of “common practices of high empathy organizations,” there is this sentence:

They share the brand’s backstory — Sharing the story of where your organization comes from helps customers and employees make connections between the organization’s origins and their own personal journey and encourages them to experience their own empathetic connections with the people who navigated the organization through its earliest days. It helps people see the company as part of someone’s human journey, rather than a detached entity focused on making money (Bowden, 2019).

The quotation contains three bordering elements: a special method (narration), a unique story, and a distinction creating unity between customers and company. Thus, bordering and labeling with relational methods — according to this counselor — is functional to greater empathy, a sort of firm climax producing beneficial effects for all the organisation stakeholders.

4. Our idea of farming as mediator between society and environment can be framed within the Actor-Network Theory, especially in the distinction between mediation and intermediation (Latour, 2005). Usually, agrosilvopastoral activities have been framed as “intermediation” between known human worlds and not as “mediation” able to keep open the relationship with voiceless ecosystems (see, not for farming, Beveridge & Guy, 2009; Schlierf & Meyer, 2013).

For the second meso level approach (bridging), there is another exemplary case presented by Pavlovich & Krahnke (2012). For them, empathy would be useful in an organisation for three reasons: it “enhances connectedness through the unconscious sharing of neuro-pathways that dissolves the barriers between self and other.” In other words, it is a spontaneous mechanism reducing the transaction costs. “Second, empathy enhances connectedness through altruistic action. In giving to others, feelings of joy and harmony are activated.” That is, a source of pleasure and identification with the organisation which presumably increases the member’s performance. Third, empathy “means living beyond self-interest in a coherent world based upon interdependent wholeness.” In other words, it reduces the cognitive dissonance with other people and the world, another characteristic that increases organisational well-being.

If organisational empathy has many references for companies and institutions in general, then a literature on specific fields such as farming and environment protection is quite rare. One interesting paper highlights the importance of some structures like “zoos, aquariums, museums, sanctuaries, shelters, nature centres, and other informal learning facilities (that) offer opportunities for people to have educational experiences with wildlife and nature” (Young et al., 2018, p. 327). Such structures have both a spatial and fruition organisation which facilitates the proximity with single animals that are, in turn, conditions for developing empathy. Such practical observation must take account with criticism toward structures that are considered by animalist movements as inappropriate. This raises an ethical topic about empathy: to understand the feeling of others — human or animal — you need proximity, or violation of “territories of self,” to use a Goffman’s term. This ethical dilemma does not arise for impersonal entities like land and ecosystems, even if a kind of respect or distance is also claimed for them.

A reference to organisational empathy for nature is developed in Lumber et al. (2017). They structure their analysis with two opposed hypotheses: nature knowledge/learning is not enough for developing nature empathy and protection. It is necessary to have an organised path made of “contact, emotion, meaning, and compassion, with the latter mediated by engagement with natural beauty,” for increasing a sense of connection with nature. The organisational value added is evident: a) cognitive activities must be coupled with sensorial and local activities, b) to practice nature alone is less effective than doing together, and c) special spaces must be equipped for these experiences. According to Lumber et al. (2017), environmental organisations start to understand this experiential in situ method. They would, however, still be within a cognitive bias for which knowledge produces action.

A similar cognitive bias is contained in the Burton et al. (2012) study on stockpeople and their interaction with animals. They argue that the attitude-behaviour connection is quite weak, due to the interposition of many contextual variables. For them, the most important factor for reducing the attitude-behaviour gap is *culture*, echoing the studies on organisational cultures (Berg & Wilderom, 2004). That sentence, however, risks creating a short circuit argument, as culture is — first and foremost — a shared mental representation of reality. In fact, in their conclusion, they insist on in-field research methods that are able to measure the proximity and contact frequency of stockpeople with livestock. In such a way, however, the organisational dimensions are still undervalued. The organisation of work and the farm technology for taking care of animals — such as milking — are crucial factors for real human-animal empathy.

Social sciences position (and analytical level)	Key words (approaches)	
	Mechanisms	Reflexivity
ABOVE (macro)	Empathy for Earth (EforE) is seen as <i>ideology</i> for masking interests and power imbalances	EforE is a liberal horizon of sense (<i>master frame</i>) in a period in which great narratives have finished
IN BETWEEN (meso)	EforE is an organisation's <i>bordering tendency</i> for self-positing into society and markets	EforE is a powerful message of social sciences for <i>bridging</i> self-referential political, religious and economic fields
BELOW (micro)	EforE is a <i>behaviour</i> developed also toward non-human according to some rules, e.g. anthropomorphism	EforE facilitates dialogue and earth <i>care</i> because of its intrinsic universal value; useful for every life domain

Table 1: Social sciences position relative to empathy for earth, according to keywords and approaches⁵⁶

The below or micro level of analysis is substantially identified with psychology, even if empathy is part of a larger framework including all levels of human organisation and thinking. Also, in this case, the literature will be forced into the two tendencies — mechanisms and reflexivity — that we have used for “above” and “intermediate” disciplines’ placement (Table 1). The operation is indicative without any pretension to catalogue in exhaustive manner studies many times conducted with a plurality of instruments.

If we start with the “mechanisms” pole, we find that among the psychosocial variables that have been investigated in reference to a closeness to the earth and nature are those related to the concept of *biophilia*, defined as “the innate tendency to focus attention on life forms and anything that reminds us of them, and in some cases to become emotionally affiliated with them” (Wilson, 2002, p. 134). In other words, it is a natural tendency of human beings to establish a kind of mutual collaboration and closeness with nature and other life forms. Scientific research carried out in recent years has produced numerous studies demonstrating the profound well-being generated by recovering our connection with nature and the empathy that is generated with it. An intense relationship with the environment — and with the natural environment in particular — is essential, especially during childhood, for the proper development of the personality and of cognitive, sensory, and spiritual capacities (Barbiero, 2009), and for a sense of care and responsibility (Kellert, 2002).

Human beings attribute to places a series of cognitive and emotional meanings which give rise to a specific quality of connection with the environment. This bond is characterised as a *co-dependence* between humans and the environment itself. Several researches (Eom et al., 2016; Onwezen et al., 2014; Galpin et al., 2015) show that the physical characteristics of a place have

5. “Approaches” in the sense of “paradigm” (Boudon & Bourricaud, 2011)
6. On *anthropomorphism*: “One way to recognize something non-human as sentient is through anthropomorphism, that is the attribution of human characteristics to something non-human (Guthrie, 1993). This leads us to think that it is possible, therefore, to empathize with natural elements by perceiving them as human. According to some studies (Gebhard et al., 2003), those who assign mental and emotional qualities to natural objects or entities show more interest in them” (Lorenzoni, 2022, p. 10, authors’ translation).

a direct influence on the psychophysiological well-being or malaise of individuals, and on the balance or disequilibrium between mind and body. Therefore, the physical environment is capable of generating responses in individuals and influencing their perception of well-being or discomfort; the environment appears to be a determining factor in the way that people feel and act. Fido and Richardson (2019) have shown that connectedness to nature, mediated by empathy, is an *innate affinity* that stimulates people to behave correctly and respect the environment.

From the perspective of psychological research, it is highly important to understand what factors motivate people to be aware of the environment, and thus change their behaviour to protect it. Pro-environmental attitudes, seen as the antecedent of behaviours, can be defined as a person's tendency to show some degree of favour towards the natural environment; they facilitate concrete actions (including self-restraint) — deliberately or otherwise — that positively affect the natural environment, such as recycling, buying organic products, and reducing water or energy use (Lange & Dewitte, 2019). The formation and development of pro-environmental behaviours could be the result of a process involving not only the rational mind (i.e., beliefs and values) of the individual, but also their emotional and unconscious side (Berenguer, 2017). For example, the Self-Determination Theory is a framework for the analysis of motivation supporting sustainable behaviour. In this theory, people's internal motivation is of great importance in predicting the enactment of a variety of pro-environmental behaviours; in particular, a subject's level of individual motivation carries as much weight as the difficulty that the behaviour to be enacted is assessed to be (Aitken et al., 2016). Additionally, concepts such as *ecological solidarity*, which examines human-environment relations as interdependencies based on trust and reciprocity that go beyond notions of service or feedback, are increasingly emerging (Brown et al., 2019).

In recent years, the concept of empathy towards the earth and the world has also begun to take on great relevance in environmental psychology, since the mind and body of human beings are not separate from the location they are in. Empathy for places leads to a sense of responsibility for the environment. Studies show that a higher level of empathy towards nature correlates with environmental protection attitudes and behaviours, as well as a greater interest in the environmental crisis (Tam, 2013). We argue that empathy with the non-human world provides a basis for overcoming the conventional dualism between humans and nature, potentially encouraging a more interdependent mode of engagement with the environment. This seems all the more true for attitudes towards animals.

Animal science deals with the issue of improving stockmanship by focusing on the relationships between attitudes and behaviour, under the premise that improved attitudes will lead to improved behaviour (Burton, 2012). Empathy for nature can have a double effect: on the one hand, involving people in campaigns that aim to enhance best environmental practices; and on the other, empowering people to optimise the policies and economic resources that are relevant to the planning of these actions (Czap et al., 2014).

There also exists a focus on methods for detecting empathy, some of which have investigated *empathy through manipulation*, inducing empathic feelings in experimental subjects to arouse their concern for certain natural elements. Among the first results on this topic is a study carried out by Berenguer in 2007, which tested the effectiveness of inducing feelings of empathy in increasing protective attitudes towards nature. Participants were presented with images representing injured animals and damaged plants, and empathy was manipulated by dividing the subjects into two experimental conditions: a low empathy condition, in which they were given instructions to remain objective while viewing the slide, and a second-high em-

pathy condition, in which they were asked to imagine the feelings of the damaged animal or plant. Afterwards, the participants filled in a form where they were asked if they wished to make a contribution to an environmental protection association. The results supported the hypothesis that pro-environmental behaviour and helping attitudes towards nature depended on empathic attitudes towards a natural object, such as an animal or a tree (Berenguer, 2007).

Crucial at the heart of empathy is the concept of *care*. Care is strongly linked to that of empathy towards the environment and the earth, because both are based on the idea that when we enter into empathy regarding something or someone that exists outside of ourselves, we cultivate an attitude of care for the *world* (Stuart Smith, 2021). In this sense, care plays a fundamental role, seen as the means and the end to which we tend when we move towards the outside world, a world potentially without borders that includes animals, plants, and habitats. Empathy prepares us to take care of and help them.

It is precisely from these scientific findings that we must start to change the exploitative situation towards farmland and livestock. In fact, the increasing demand for meat and food has brought about several changes in the production chain which have consequently led breeders and farmers not to form intense relationships towards the animal or the land that they care for. Within new “industrialised systems,” farming is becoming more and more difficult (higher costs) and contradictory for food production. In addition to the critical role that farmers play in detecting disease, lameness, or parasites within a herd or plant pests, studies have clearly shown that the quality of care provided by livestock handlers or farmers can become critical to the proper development of commodities by identifying livestock management and land care as a key issue in promoting good animal/vegetal welfare (Burton, 2012). According to the perspective of Segerdahl (2007), the attitude of farmers and breeders is not only based on cognition/knowledge, but also developed through being part of a wider *farm culture*. This perspective suggests that an empathic response is the result of the interrelationship between the subject and the object, and that the greater the interrelationship, the greater the likelihood that similar representations will be activated, thus triggering a response (Preston & de Waal, 2002).

Scientific research conducted in recent years has produced several studies demonstrating the deep well-being that is generated by reconnecting with nature. This is a natural inclination of human beings to establish a type of collaboration and mutual closeness with nature and other forms of life, with positive effects on well-being on the one hand, and environmental care on the other. Based on this premise, the research findings suggest that reconnecting humans with natural environments could be an important strategy for addressing the environmental crisis. The psychological concepts that are most frequently investigated in relation to environmental behaviour are place attachment, place identity, connection to nature, and environmental empathy. All these concepts are probably linked in some ways to pro-environmental attitudes and behaviours. There are many instruments and scales in the field of psychology that offer a quantitative measurement of the relationship between human beings and the environment. Mayer and Frantz (2014) defined connectedness to nature as a person’s individual affective experience with the natural environment. To measure this, the authors developed the Connectedness to Nature Scale (CNS), which is the most widely used scale for investigating this construct. The CNS consists of 14 items, and differs from other existing scales in that its measurement is affective, it is easy to administer, and it can reliably predict pro-environmental behaviours.

Another test to measure people’s dispositional empathy with nature — i.e., the dispositional tendency to understand and share the emotional experience of the natural world — was developed in 2013: the Dispositional Empathy with Nature Scale (DENS), consisting of 10

items to be answered on a seven-point Likert scale (Tam, 2013). In Tam's studies, Dispositional Empathy with Nature is distinct from both empathy with other humans and other items investigated in relation to conservation behavior (Tam, 2013).

In addition to these important instruments, the relationship between farmers and care for the environment will be described below in a study by Gosling & Williams (2010). The connection between people and the natural world has attracted particular attention from those who are involved in agriculture. Individual farmers, in fact, play a fundamental role in the management of this biodiversity, prompting those concerned with environmental psychology to ask to what extent emotions are involved in influencing their choices in land management. It seems that the choice of innovative technologies in the management of their land by primary caregivers is influenced by the relationship that they have with their land.

Research on farmers' environmental behaviour initially focused on the importance of financial drivers. However, there is a growing recognition that economic factors are not the only ones driving decision-making in agriculture. Gosling and Williams (2010) investigated the relationship between pro-environmental behaviour, place attachment, and connection to nature in farmers' management of their property. The research was conducted on 141 farmers in Northwest Victoria, Australia, and measured how connected farmers felt to nature and their land. The results of this study suggest that emotional feelings towards nature lead to an expanded sense of self and a greater appreciation of non-human species, and thus to the enactment of protective behaviours towards the environment. Specifically, farmers who feel a sense of connection and interdependence with nature are more motivated to care for and protect the vegetation on their land — and vice versa, performing such actions may lead to farmers feeling more connected to the natural world (Gosling & Williams, 2010). This study has important implications for farmers' involvement in conservation behaviour, highlighting the need to consider affective ties to nature — rather than financial factors — to increase nature protection (Sheeder & Lynne, 2009).

4 Agrosilvopastoral Empathy among Practitioners and Scholars through a Content Analysis

The content analysis was applied to materials collected at a Conference⁷, attended by more than 60 speakers, most of whom were from Italy. Thus, an international comparison, even at the Western European level, was impossible. A considerable proportion of the contributions consisted of the presentation of experiences. A minority presented theoretical and/or research reflections.

Next, we performed a content analysis of the contributions (Krippendorff, 2019; Nobile, 1999). In more detail, we have applied *qualitative content analysis*, based on thematic/categorical evaluation, with the aim of identifying the themes present in the analysed texts and coding them into categories. The identification and structuring of the analysis categories was done ex-post through an inductive process; thus, a careful reading of the documents was first performed, and then the conceptual grid was constructed. The conceptual framework provided the basis for interpretation and enabled the different ways in which discourses were constructed around each theme to be captured. Through this analysis, the following themes were identified: *animals*, *environment*, *people*, and *plant/nature*. Each one refers to the main

7. Conference "Agro-sylvo-pastoral Empathy in Rural Fragile Areas", 18–19 March 2022, Rovigo, Italy. <https://www.areefragili.it/storico-convegni/convegno-2022/>

theme that is covered within each contribution. Note that a good percentage of contributions present integrated and overlapping themes; for example, dealing with the theme of “animals” often involves reference also to the territory, and thus to the theme of “environment,” while the actions of “people” are always present — albeit at different levels.

From a methodological point of view, most of the contributions are narrations of experiences conducted in specific areas, domestic or foreign. A minority of contributions deal with theoretical topics, interdisciplinary and/or inter-institutional linkages under the banner of a decidedly systemic and holistic conceptualisation. These are contributions that have a desire to explain, from the perspective of conceptualization and research, the link that exists between people, the environment, animals, and empathy. Some contributions illustrate the basic premise of the inter-connectedness between human animal plant systems, which has been manifested in several works, through the notion of *One Health*, a holistic approach that conceives of ecosystem health and well-being as the interrelated outcome of virtuous and mutually respectful actions between human, animal, and plant environments. Here follows a summary of each categorisation. Because of the small empirical base (only abstracts) and simplicity of content analysis, this report has only an exemplifying meaning.

Animals. Within this macro-category, the topic of animal welfare is emphasised as the central pivot of an appropriate relationship with work activities and the environment. Indeed, the safety of the food chain is directly related to animal welfare, particularly in the case of animals raised for food production, given the close links between animal welfare, animal health, and foodborne diseases. The welfare of food-producing animals depends largely on how they are managed by humans, and therefore on the empathetic relationship that humans are able to generate. There are numerous factors that can affect their welfare; for example, the type of stabling and resting areas, the space available, and the density of animals in the barn. The various interventions of this convention provide insight into how herders (young and old) have a desire to promote balance and a bond with the animals that they care for, describing them as *thinking beings* with whom they can create a feeling of closeness and caring.

Environment. The impact on the environment by human activities is analysed: these are described as the types of interventions that should not threaten the surrounding environment, but rather aim to protect it. The theme of empathy, then, is linked to the environment precisely because, in many contributions, the willingness of farmers and growers to protect the land is also highlighted in relation to the presence of the animals that inhabit it. In particular, the focus emerges on the theme of sustainability, environmental protection and the need to reduce the use of elements like pesticides that can harm the environment. Another important theme concerns the enhancement of the area through empathic involvement. In fact, there is a positive link between empathy and behaviour in respecting and promoting the *territory*, a topic on which the need for further investigation is called out.

People. Work activities under the sign of sustainability and harmony between people, animals, and the land are emphasised. The concept of empathy is repeated, especially in the sense of the outcome of good practices (such as building relationships between urban areas and farms, or eco-museums) whose goal is precisely the induction of empathetic attitudes and behaviours. One consideration that understands empathy as a *personological endowment* is found in the hypothesis that empathy is a more feminine characteristic. Attachment to place and the circular economy, experiences such as the role of agriculture in enhancing local communities, social and therapeutic horticulture, eco-museums, empathy influences in gender differences on environmentalism, and proactive involvement in environmental sustainability are all themes that have found their way into numerous contributions.

Plant/Nature World. This category includes a minority (about ten) of the contributions analysed. In them, there exists a specific focus on nature. They discuss how plants can impact human life and the relationship between nature and human beings. In addition, the topic of agriculture and the new relationship with it is also discussed. The human species thus depends on plants for basic needs such as food, for products that improve the quality of life (vegetable oils, essentials, rubber, wood, textile fibers), and for many raw materials of modern industry. This dependence has affected the development of human culture and technology. Plants are renewable sources of energy, and it is reasonable to assume their use in replacing rapidly diminishing, non-renewable resources. However, this implies careful management of plant resources coupled with continued research into the plant world.

5 Discussion and Conclusions

The search for an empathy for the earth and the farmland was preceded by a systematic overview of the literature and exemplified in a brief analysis of the contents of the abstracts sent to a conference focused on marginal areas and primary sector. The novelty elements which emerged by the abstracts sent to the conference by practitioners and researchers are not many, compared to the massive literature on the empathy, but are nevertheless meaningful.

We can start with what the conference did not collect, and which was also among the objectives. A basic idea was to gather the experiences and empathic reactions of professional farmers in their daily work of contact with less transformed ecosystems. This occurred to a limited extent, especially for a specific segment of the primary sector: breeders and shepherds. The latter are well-represented in the abstracts; indeed, we can say that they are the largest category. The theoretical consequence for empathy is easy: it is a professional group that fits well with the animal world; in cognitive terms, there is a *structural coupling* between the two ones, in practical terms a sort of *alliance for surviving*.

The high number of cases on pastoralism shows a sort of bad conscience of modern society toward animals, especially farm animals. Their breeding has become very artificial and distanced by people. Thus, pastoralism is a way to recreate a more spontaneous and affective relationship with animals. This is a hot point which is all in all unresolved in world agriculture. In fact, the human-animal relationship is split into at least three sections: wild animals, on which the whole ecological problem insists, companion animals (pets), for which there is now a sort of care industry, and farm animals, which most times are genetically “improved” and raised in big mechanised sheds. The three sections of animals’ handling do not communicate each other.

Furthermore, two aspects should be highlighted: first is the leading role of women; several reports were made by a female pastor. The question of women touches the empathic attitude so much that it risks to lead to a gender bias. The second aspect concerns pastoralism in peripheral areas: for a series of well-known reasons, western countries agriculture has retreated from less favourable land (high, steep, arid) to give way to the forest, rather than to semi wild pasture.

Pastoral activity then becomes the tip of the balance in an oftentimes problematic relationship between agriculture and forestry. It is known that interposing the woods with clearings populated by goats, sheep, and cows is a way to increase the biodiversity of these places (Niamir-Fuller, 2012). If anything, the problem is the shepherds; it is no coincidence that in Western Europe, they are almost all foreigners coming from poor countries. So, the content analysis has identified an empathic triangle which is comprised of marginal categories: shepherdesses, farm animals, and inner areas (Nori, 2021).

In the conference abstracts, an evocative, impressive, and generic use is made of such a triangle. This is not a lack of scientific requirements of works. Certainly, the meeting lacked the *psychometric approach* which is widely used on empathy studies (de Lima & Osorio 2021). There was a clear prevalence for so-called holistic approaches. It is a complementary form of knowledge based on visual direct experience. A subsequent application of empathy tests in those experiences that feel a strong closeness to plants, animals, and people is possible — and perhaps necessary — to arrive at a more complete knowledge of the phenomenon. This is evident in other sectors such as health and social care (Moudatsou et al., 2020).

Having recognised that, the gap of empathy with industrial agriculture still remains. There were two expectations regarding this: a link between empathy and organic agriculture, and an analysis of integration with the digital one. In both cases, this did not happen. It is possible that the conference did not “fish” in those worlds, as well as that these are rather closed in technical paths, for which the empathic model of knowledge is considered useless. Empathy cannot be a recipe for every human action. Nonetheless, several agriculture transitions are closed in rigid mental schemes, unable to make the voice of the earth heard.

Here, we reach the heart of the paper, which was focused on empathy for the land and farmland. In many abstracts, the extraordinary ability of empathy to capture relevant aspects of agricultural activity arise; these are aspects which sometimes border on sentimentality or an almost magical perspective. All of this is not to blame, but rather to understand precisely with the category of empathy towards several forms of symbolisation and attachment to the earth. What the abstracts strongly testify is the importance of the ancillary functions of agriculture: empathy for farming increases when local development, civic education, environmental protection, and enhancement of cultural heritage are included. For understanding and promoting these functions, the empathic method is indispensable.

On the other hand, the recurring question of what the function of empathy can be in the more technical phases of agricultural production and contact with the earth remains unanswered. The *intermediation* (in Latour’s terms) between farmer and land took place with three technical packages: chemical, mechanical, and (now) digital tools. It is almost certain that many farmers after the Green Revolution in the 1960s felt more empathy for their tractor than they did for their land, thus denying their role of *mediation* with ecosystems (Schlierf & Meyer, 2013). The same feelings are probably absent for pesticides, while the relationship with the computer is certainly ambivalent. However, the claim is that empathy works precisely on these apparently distant tools, considered a prerogative of the experts (Ingram, 2008). Even only hypothetically, apart from the small investigation of the abstracts, we can imagine three ways. They are the prospective conclusions of the paper.

Empathy is social. The literature is predominantly based on empathy on an individual level, but we can imagine that there exists a collective feeling, understanding, and action toward others, both humans and non-humans. The term “social empathy” exists in literature, and was presented in the conference through the intriguing idea of “chain of empathy,” very similar to circular reciprocity in the Kula ring (Malinowski, 1922). Not only anthropology but also developmental psychology insists on the idea that full knowledge of others, that is empathy, passes through a robust formation of a collective identity (Tomasello, 2019).

Farmland is the most neglected dimension in the abstracts, despite being a declared goal of the conference, annoying hierarchy of attentions arises. This means that we need a re-symbolisation of the earth, fishing in traditions overwhelmed by global modernisation. The model is not a reductionist analysis of farmland components (Kvaløy, 2004), but rather *The Good Earth*, a novel written by American author Pearl S. Buck (1931) during her long

stay in China. Aspiration capacity, that is mainly developed by Indian scholars (Nandi & Nedumaran, 2021), is similar, because it contains the deep conviction that land and farmer can achieve a redemption only together. Thus, empathy declination in extra European cultures can improve the comprehension of Western Europe suffered relationship with land.

Empathy was defined during the conference as a *tentacular* concept, like the sprawling city. This means that it envelops and suffocates the prey, which does not quite make for an attractive image. In the same meeting, empathy has been compared to a *velvet revolution*, a way of approaching things and people to cause a gentle change. Farmers in this historical juncture are not the object of great empathy; rather, they are a small category, closed in on themselves and accused of poisoning the environment. The empathic velvet revolution must be applied first of all to them; then surely will come the changes towards the earth.

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