What is the Place of the Human Being in Practice Theories? An Answer from a Posthumanist Position

Silvia Gherardi[1] – Sociology and Social Research, University of Trento

Abstract

This paper sets out a response to the journal's question - what is the place of the human being in practice theories? - from a posthumanist position. The article is positioned within the so-called re-turn to practice theories after the 2000s, inside work and organization studies. It explores the conception of 'the human being' once practice is assumed as the unit of analysis. The discussion is organised around three arguments. The first focuses on the decentring of the human subject, no longer universal, pre-given and the only seat of agency. The second articulates a processual vision of the human as becoming-with nonhuman, more-than-human, and earth. The third proposes a conception of the human multiple, emerging from ethic-onto-epistemic practices of knowledge production grounded in the concepts of sociomateriality and naturecultural. In conclusion, the article argues that the decentralisation of the human subject in posthumanist theories of practice opens up methodological possibilities that do not depend ontologically, epistemologically, or ethically on the figure of the human subject.

Keywords

agencement; becoming-with; nonhuman-human relations; natureculture; sociomateriality

[1] Corresponding author - contact: silvia.gherardi@unitn.it

Introduction

What is the place of the human being in practice theories? It is not easy to give an answer to the tricky question that was asked to me by the editorial board of the journal for its inaugural issue focused on the present, past, and future of practice theories. I will seek to tackle it without claiming to have a final word nor to explore and reconcile a plurality of concordant and discordant voices. Thus, I will begin by positioning my answer (and myself) in saying that just as it is impossible to speak of a singular theory of practice, it is equally impossible to consider the sheer variety of theorisations that have emerged around the concept of practice itself. Therefore, it is necessary to establish some fixed points from which this question can be addressed. One fixed point concerns the historicisation of the conversation around the concept of practice starting from the re-turn of this concept *circa* the 2000s (Miettinen et al., 2009) and its break with previous classical theories of practice (*à la* Bourdieu or Giddens) focusing on the tension between structure and agency. A second fixed point concerns the disciplinary context in which the concept of practice was taken up again, in which I was formed, and to which I contributed. Therefore, I will not consider classical theories and will make explicit my positioning within the sociology of work and organisation and my place in these studies as a feminist scholar (white, Western, and cis-gender).

The delimitation of a disciplinary field of study means that the interests of researchers' knowledge are formed on the basis of research questions that presuppose an expertise formed within a specific literature and which are addressed to a community of similar scholars while not excluding the aspiration to produce interdisciplinary knowledge. Whilst being wary of a reductive picture, I would say that theories of practice within organisational studies answer broad questions such as: what do people do when they work and when they organise their own and others' work? How do they know what they know and what is appropriate to what they do? How do they work with artefacts, technologies and the increasing digitalisation of their work? How do they use language to talk to each other and to coordinate their work? How do they preserve and transmit a common know-how? How do they question the effects that work and organisational practices have on nature and society? How do they develop a shared and/or contested morality?

Moreover, in making my positioning as a feminist scholar explicit, I declare my interest in the production of knowledge that is emancipatory and concerned with social justice in nature. Consequently, in my use of the term 'the human being', one can read both a note of irony for its supposed universality and an implicit affirmation that the human being is to be understood as racialised, Westernised, gendered and inscribed in a system of ongoing differentiation. Feminist philosophies contribute to the conceptualisation of practice in the reflections of feminist new materialism, feminist post-humanism and corporeal ethics. These philosophical positions allow me to consider the subject of knowledge as 'situated' (Haraway, 1988), materiality as vital and agentic (Bennett, 2010), and the production of knowledge as an ethical-onto-epistemological process, which emphasises that the human being is "becoming with the world" and that "the becoming of the world is a deeply ethical matter" (Barad 2007, 185). In theoretical terms, the previous assumptions continue the path of those practice approaches that distance themselves both from subjectivist and objectivist explanations of the social in an effort to locate a third road, less travelled, between methodological holism and methodological individualism (Alkermeyer and Buschmann, 2017).

My answer to the question 'What is the place of the human being in practice theories?' will be articulated in three steps that illustrate what theories of practice 'do' when assigning a place to the human being and what methodological implications for empirical research on practices follow from this. The first step develops the idea that in theories of practice, 'the human being' is decentralised and, therefore, is not pre-given, nor is it the central seat of agency. The second step continues the previous one by arguing that 'the human being' does not precede the practices in which s/he is involved, but arises in relation to them, always and already in a process of becoming-with other humans and more-than-humans. The third step deepens the idea of 'the human being' as a subject multiple, beyond the divide between sociality and materiality and beyond the divide between nature and culture. In this third step, the concept of sociomateriality will be discussed in the context of practices of digitalisation of work and the concept of naturecultural in relation to sustainability practices.

My personal motivation for answering the above question stems from the belief that the potential of practice theories is not fully grasped when the empirical research design proposes a human-centred methodology that privileges the intentionality of human actors from which meaningful action emanates.

The 'Human Being' is Not Pre-Given and is Not the Central Seat of Agency

The question about the place of the human in practice theories should consider the historicisation of what is considered as being human and one which should take into account the increasingly widespread reflection on the crisis of the subject of Western thought, historically defined as the bearer of rationality, free will, and universal moral values. We inherited from Enlightenment thinking an ideal of the rational, universal human being built upon the premise of a singular, coherent subject, often coded as white, male, heterosexual, and Western. Such a narrative has rendered other human beings invisible, peripheral, and less-human. Feminist philosophies undermine this vision of human exceptionalism and control over other species and work towards the elaboration of a nonanthropocentric, relational ontology. Thinkers such as Rosi Braidotti (2019) call for a posthumanist ethics that disrupts the notion of a fixed human centre and instead recognises our intrinsic entanglement with the nonhuman, the cyborgian, the ecological, the biological. The ideal of 'the human being' as the measure of all things and, represented in Leonardo da Vinci's Vitruvian Man, is "the emblem of Humanism as a doctrine that combines the biological, discursive, and moral expansion of human capabilities into an idea of teleologically ordained, rational progress." (Braidotti, 2013,13)

This humanistic universalism has undergone numerous cultural elaborations that lead to speaking of humanism in the plural (Schatzki, 2002) and which I recall in this context only in relation to the conception of the human being as the central seat of agency and knowledge because it is useful for contextualising how the conception of the human subject constitutes an important line of demarcation (Schatzki, 2025) between humanist theories of practice (human activity and human life) and posthumanist ones.

The decentralisation of the human subject, in posthumanist theories of practice, calls for a critique of agency as an exclusively human capacity, together with a critique of human superiority and exceptionality (anthropocentrism and speciesism). The debate on critical post-humanism (Braidotti, 2013) and post-epistemologies that began in the seventies, with radical thinkers of the post-1968 generation,

conflates post-humanism ("post" to the humanist universalism of "Man") and post-anthropocentrism ("post" to the exceptionalism of the human species). Once the centrality of *anthropos* is replaced by a relational self—which includes all other nonhuman beings and objects—numerous boundaries separating 'Man' from other nonhuman animals, plants, and earthly elements fall down. A cascade effect opens up unexpected perspectives with methodological implications on the conception of practice and for how to conduct the empirical study of practices.

A methodological focus on practice as a unit of analysis, rather than substances, structures, or individuals, from which meaningful action derives, has been translated in organization studies in the slogan 'focus on practices rather than on practitioners' (Nicolini, 2012). In other words, the human being (the practitioner) is not pre-given or pre-existing with respect to the practice in which s/he is engaged. With practice as the unit of analysis, the human subject is no longer the only and central seat of agency, the one in control of the world, the one from whom intentional actions emanate. Agency is no longer a human prerogative when theories of practice assume an ecological model in which agency is emergent, fragmented, and distributed between humans and nonhumans and in which the relationality between the social world and materiality is subjected to inquiry. Whilst theories of action start from individuals and their intentionality in pursuing courses of action (Cohen, 1996), theories of practice view actions as 'taking place' or 'happening', as being performed through a network of connections-in-action, as life-world and dwelling (as the phenomenological legacy calls them; see Chia and Holt, 2006; Sandberg and Dall'Alba, 2009; Holt and Sandberg, 2011). In other words, practices are not just activities but also the configuration of the world in which such activities are significant.

In posthumanist practice theories, humanism has become humbled. In fact, decentring the human subject does not mean removing it, but it means placing subjects, objects, technologies, discourses and instruments in an agential and material-discursive environment. To use Law's (1994, 24) expression, relational materialism is a process of "ordering [that] has to do both with humans *and* nonhumans". It provides the basis on which to construe agency as emerging from the interconnections between humans, nonhumans, discourses, and sociomaterial relations that affect and are affected by each other.

A shift from entities that have agency to relations that perform entities is at the core of the principle of relational thinking (Østerlund and Carlile 2005, p. 92) that "is neither a theory nor a method in itself, but rather, a loosely structured framework or scaffold around which various practice theories and methods are being developed". Within a relational epistemology, practice represents a mode of ordering the social in which doing and knowing are not separated, and the knowing subject and the known object emerge in ongoing intra-actions (Barad, 2007) rather than interactions.

The 'Human Being' is Always and Already in a Process of Becoming-With Other Nonhumans and More-Than-Humans

In the previous section, I argued that the posthumanist epistemology of practice is a project that reconfigures the concept of agency. This implies a flat ontology that does not privilege one form of agency over others. It is often associated with Latour's (2005) thinking on Actor-Network Theory, and it is also assumed within 'site ontology' (Schatzki, 2005) and broadly shared by feminist new materialisms and

critical post-humanism. A flat ontology assumes that the world is not made up of the workings of structures at macro and micro levels of analysis; instead, entities only exist in relations. The real is *done*, not *discovered* (Kuhn, Ashcraft and Cooren, 2017), and thus, society is reframed as a flattened and fluid assortment of interconnected practices. Flat and fluid are the adjectives associated with a process approach that privileges becoming rather than being. However, being and becoming are not a binary pair; both are processual. Deleuze and Guattari's ([1980] 1987) conceptualisation of becoming specifies that there is nothing other than the flow of becoming and that all 'beings' are just relatively stable moments in a flow of becoming-life. Following the same line of thought Donna Haraway (2008) writes that becoming is always becoming *with,* and this becoming-with aligns with Barad's (2007) agential realist ontology, where the world is not composed of discrete 'things', but phemomena-in-their-becoming. Not only are practices fluid but also (decentred) human beings are always imbued with and immersed in relational intricacies with other humans, nonhumans (artefacts, tools, technologies) and more-than-humans (nonhuman animals, plants, inorganic matter, the earth).[2] This focus on becoming thus conceives of organisations – and organisational practices as well – "not as an ontological stable object, but rather something that exists only in its duration." (Clegg et al., 2005, 159)

Human agency is reconstituted in dynamic intra-actions (not interactions), which repositions the relationality between bodies, things, objects, space, and time in order to develop a different perspective of practice as assembled relations of power. Whereas a humanist, phenomenological perspective of practice (e.g. Simonsen 2012) would ask how human bodily doings and sayings constitute meanings, identities, and social orders, a posthumanist perspective of practice would ask how the social is composed by the intra-actions of human, nonhuman, and more-than-human entities. Thus, we can inquire into how a working practice assembles and how it could be assembled differently. Moreover, we may ask what is the place of the researcher in studying a practice? Are researchers (also human, gendered, racialised, often Western, and white) external to the practice they observe? Do their epistemic practices not influence the object of knowledge? In discussing the place that humans as practitioners have in theories of practice, we should also contextually discuss the place that humans as researchers assume and the conception of how they think about knowledgeable doings.

In defining a practice as an *agencement*[3] of relations between elements (human and more-than-human) that do not pre-exist their being in relation, we consider that the activity of producing knowledge and the subjects who are engaged in this activity are also part of the same *agencement*. The term research *agencement* (Cozza and Gherardi, 2023) was introduced to express the idea that the ethic-onto-epistemologic practices of those who study and theorise practices are inseparable from the practices that are studied.

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[2] The term more-than-human (in some cases also other-than-human) may be used to include both the technological, the animal, plants, organics, inorganics and earth. I prefer to keep both the expression nonhuman and more-than-human because a wide debate has discussed the relation human/nonhuman, especially in organisation studies, following Actor Network Theory. In this debate the nonhuman is mainly referred to as artefacts, tools and technologies, while organic life (animals, plants, virus) and earthbound others entered the debate a second time mainly through the term more-than-human.

[3] The process of *agencement* illustrates how the elements within a practice or the practices within a texture of practice connect and acquire agency through their connectedness. Hence, a practice is not viewed as a unit circumscribed by given boundaries and constituted by defined elements but rather as a connection-in-action: that is, as an *agencement* (Gherardi, 2016) of elements that achieve agency by being interconnected.

The roots of this non-positivist conception of knowledge can be traced back to laboratory studies (Latour, 1987; Knorr Cetina, 1981) of the 1980s in which the practices of scientific knowledge production were seen as situated working practices. In fact, defining work practices as 'situated' has a broader meaning than simply conceiving practice in time and place, that is, *in situ*. The concept of situated knowledge, which has been theorised in feminist studies starting from Haraway (1988), intends to be a critique of the 'God Trick' model of seeing everything from nowhere, which, from above and outside the object of study, produces a knowledge that claims to be objective, universal, and disembodied. Situated knowledge is not merely about having a perspective in contrast to the 'God Trick' (a position of masculine privilege and omniscient knowing), which sustains scientific normativity, objectivity, and the rhetoric of writing practices that effaces their author. Rather, it is about a methodological principle for accounting for how the specific visualising apparatus matters to practices of knowing (Barad, 2007). Thus, considering the place of the researchers as inside the same research *agencement* of entangled elements implies a focus on knowledge as activity and reflects the specific historical moment, cultural context, and the networks within which it is made. Methodologically, this focus offers contemporary practice theories a critical tool for recognising the 'semiotic technologies' for making meanings of the researchers themselves. This positioning of the researchers inside the research *agencement* becomes an ethical request "to become answerable for what we learn how to see" (Haraway, 1988, 583) and also for being accountable for what and how we write 'scientific' texts. It becomes an engagement with an ethic-onto-epistemology that does not separate the material from the social, nature from culture, knowing from being, but one which focuses on differences that matter and differing as the process of producing differences that matter. At the same time, contemporary practice theories are left with the empirical problem of how to account for the human when it is not stable, is processually embodied, never the same, and co-evolving with nonlinear causalities. How can one move from continuous becoming to being? Although being is temporarily 'stabilised' for the time necessary to become object and/or subject, through which epistemic practices is this done?

A Subject Multiple, Beyond the Divide between the Material and the Social, and Nature and Culture

When a posthumanist epistemology of practice informs our research (Gherardi, 2022), we find ourselves searching both for a way out of humanism and for a way through it to reimagine it as a practice of interconnection, an ethics of shared vulnerability, a humane becoming-with the world.

A possibility is to think of the 'human being' as an object multiple (in the sense of Annemarie Mol, 2002), emergent in and through relations that are heterogeneously material and semiotic, since it is only through research practices that "ontologies are brought into being, sustained, or allowed to wither away in common, day-to-day, sociomaterial practices" (Mol, 2002, p. 6). Thus, there are many ways of *practising* the human that are brought into being through researchers' epistemic practices. I propose to explore what the place of the human is when the divide between the social and the material is blurred (with the concept of sociomateriality) and when the divide between nature and culture is blurred (with the concept of naturecultural).

Sociomateriality

The issue is not whether or not materiality matters within practice theories. Rather, it is whether materiality merely mediates human activities – as in human-centred theories – or is constitutive of practice, as in posthuman practice theories. The term 'sociomateriality' enters this debate without resolving the tension between a substantialist ontology that assumes that the social and the material, human beings and things, exist as separate entities that interact and impact on each other and a relational ontology that assumes the constitutive entanglement of the social and the material.

The term 'sociomateriality', without a hyphen and in reference to the feminist onto-epistemology of Barad (2003), was introduced into practice theories by Wanda Orlikoswski (2007) together with Marta Feldman (Feldman and Orlikowski, 2011). The term 'constitutive entanglement' is present in their work, grounded in a relational ontology, and it refers to the fact that within a practice meaning and matter, the social and the technological, nature and culture are inseparable and they do not have inherently determinate boundaries and properties; rather, they are constituted as relational effects performed in a texture[4] of situated practices. In other words, who/what is a practitioner (or a technology), which one is its place in practicing, will emerge from a configuration of elements within a practice assuming a form, while different practices perform multiple beings (and multiple technologies).

The use of the concept of sociomateriality has implications for the empirical study of situated practices and, to give an example, I suggest considering the texture of practices put in motion by the intra-action of algorithmic technologies and algorithmic management, starting from the consideration of how generative artificial intelligence (AI) is driving a socio-economic transformation based on new practices in which human–AI intra-actions shape the interdependencies among managers, employees, and platform workers. Contemporary algorithms embedded in computers, digital platforms, mobile apps, and wearable devices rely on different infrastructures for data collection and offer outputs through the elaboration of several screens and devices. These techno-logical components of daily life constitute the *algorithmic technologies*, which are "able to render decisions without human intervention and/or structure the possible field of action by harnessing specific data" (Issar and Aneesh, 2022). Leaving aside technological determinism in favour of an approach to technology as social practice (Suchman et al., 1999), I favour the study of situated practices (the *agencement*) in which algorithms relate and order a multitude of entangled elements such as different types of data, materials, methods, times, places, and social relations. Algorithms are constitutively entangled with different normativities, and these normativities come to shape our world (Lee and Björklund Larsen, 2019). Algorithmic technologies, humans, and discourses constantly change their configuration as humans move through their everyday worlds and experience the material, discursive, and symbolic affordances of digital data use (Lupton and Watson, 2020). I follow those practice scholars who are interested in showing how algorithmic technologies are programmed to reshape the daily lives of their users and, in turn, how users are involved in appropriation processes, transforming algorithms into terrains for participation, resistance and conflict (Miele and Giardullo, 2024). In an AI-driven scenario, the opacity of algorithms and of machine learning in the design of algorithmic management systems leads to a double transformative process since both workers and management take part in changing working practices, and both are disappearing under the

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[4] The term 'texture of practices' (Gherardi, 2016) denotes the interdependencies (material and semiotic) of practices. This term brings out the definitive feature of texture, its endless series of relationships which continually move into each other. Texture is a strongly evocative concept which recalls the intricacies of networking but at the same time allows for an analytical, qualitative framework (Strati, 2000).

smokescreen of algorithmic technologies. Workers are becoming less visible as many of their tasks are automated and directed by algorithms. At the same time, bosses are perceived as more distant but still effective in their algorithmic management practices (Arcidiacono and Sartori, 2024).

Digital labour platforms are just one of the most studied areas of algorithmic management practices through which planning, staffing, commanding, coordinating, and controlling workers are performed via databases or digital devices that elaborate on data from and to the workers of digital platforms (Burrell and Fourcade, 2021). Platforms like Uber, UberEat, Lyft, or Foodora represent examples of the infrastructuring of practices that direct, evaluate, and discipline workers, users and managers at the same time. They are built on algorithms that automatically allocate tasks via digital devices. Through algorithmic management practices, companies manage workers as invisible bosses, directing activities, sending notifications, monitoring and collecting data. The evaluation of workers follows a customer-generated reputational system, and customers' ratings are aggregated to score, prioritise, and recommend workers for the next task. Platform reputation systems produce a loss of meaning and control in the worker experience (Arcidiacono and Sartori, 2024), especially when the assignment of tasks to workers is automated and is also based on customers' ratings. These ratings have an impact on the visibility of workers and are folded into a disciplining practice through a structure of punishments and rewards meant to guarantee collaboration and compliance with the company's terms of service.

Workers' resistance to material and discursive algorithmic management practices exploits 'fissures' in algorithmic power (Ferrari and Graham, 2021), moments in which algorithms do not govern as intended. These moments show that algorithmic power is inherently partial and is emerging from the configuration of past practices that play into the present, affecting the present practices that do not hold together and the obduracy of those that stay in place despite it all. This is just an example of the pervasiveness and the non-directionality of the power to connect. It illustrates how resistance is not only a human affair but also an effect of the dynamic entanglement of humans, technologies, and other vital materialities. It differs from assuming a central focus on humans and their agency but also from enlarging the attribution of agency to other separated entities that later interact with each other.

Going back to the sociomateriality of algorithm multiple, we have to consider that there is not just one Uber algorithm that manages all drivers in the exact same way. On the contrary, workers are being governed by, and interact with, different permutations of code that are "only knowable in their becoming as opposed to their being" (Bucher 2018, 49). The point is that there are multiple realities of how workers feel, act, imagine, and know in their becoming-with algorithms in situated practices. The algorithm multiple and the human multiple transcend the boundaries between local and global practices. We can notice it in relation to how machine learning intra-acts with the knowledgeable collective doing of humans and nonhumans. The language of learning and knowing has often been reserved for human only capacity. However, situating those activities in working practices makes visible how power relations are embedded in configurations where the abstract human being is racialised, gendered, and colonised in different ways within different practices. If we take, for example, the case of ChatGPT, we may consider how machine learning requires pre-training and training phases that need to be supported by large masses of data. These pre-training practices have fully been outsourced to the Philippines, Türkiye, India, South Africa,

and Kenya, giving rise to a new 'data colonialism' that takes place in sociomaterial practices of domination across those who are fully human and the less human being.

The sociomaterial conception of algorithmic technologies makes visible the texture of practices in which society, technology, tools, and discourses are differently configured through the intra-actions among humans, nonhumans and more-than-humans. In a similar way, the next paragraph illustrates how the concept of naturecultural illuminates the texture of sustainability practices.

Naturecultural

The binary pair nature-culture has been a pillar of Western thought, but the collapse of the hyphen between the two terms has acquired a new meaning within the conversation about the Anthropocene (Latour, 2017), in which the idea of nature as an 'environment' external to the human being and relatively separate from society is no longer sustainable since it hides the humans' role in perpetuating ecological catastrophes. The view that humans are ontologically separate and superior to nature (human exceptionalism) is discursively challenged by concepts such as natureculture but also materialsemiotic (both attributed to Haraway, 1988) and biosocial (Ingold, 1998). They have become marks of a specific understanding of the human being's place in the world and in relation to nature not opposed to human. Their adoption has methodological consequences. For example, the concept of biosocial becoming (Shove, Blue and Kelly, 2024) has been employed for describing in a single frame, the dissolution of the divide between the biological and the social world and the dynamics of the biological and material processes of the living world. For simplicity, I will assume such a complex debate under the label 'becoming earth' meaning that what is included in the more-than-human is not only the animal but also other living and not living beings.

In referring to the study of practices of sustainability, it has been stressed how this literature seldom questions explicitly the premises of human superiority over nature nor inquires sufficiently about power within human–Earth relations (Ergene and Calas, 2023). The material-discursive tangle of anthropocentrism and economic capitalism creates the illusion that socioecological crises can be addressed by market stakeholder capitalism and green technology (Gibson-Graham, 2006, 2011). An imaginary based on the separation of the human from nature and a conception of producing knowledge on the world by standing outside of it grounds the discourse of sustainability in an imagination in which it is in 'our' (human) capacity to save or to ruin the world.

To reproduce human-centered (and technology-centered) practices of sustainability is not going to change human–Earth power relations. Rather a project for going beyond the nature/culture divide and for conceiving the human in posthumanist practice theories as earthbound human beings is described by the term 'becoming naturecultural' (Ergene and Calas, 2023, 1962): "a material-discursive assembling process of more-than-human and more-than-capitalist entanglements." In methodological terms, it means tracing the webs of relations that lead to the materialisation of power asymmetries and observing more-than-human and more-than-capitalist practices on the ground.

An example of the complexities and the methodological challenges of conducting an empirical study of human–Earth power relations in everyday organisational practices is offered by Ergene and Calas

(2023), who conducted fieldwork at an organic cotton t-shirt supply chain in Türkiye, following the movement of cotton seeds from the farms until the becoming of a 'sustainable t-shirt'. They entered this supply chain's industrial practices by conducting an affective ethnography (Gherardi, 2019). The case study illustrates the ongoing assembling process of cotton plants, workers, managers, textile materials and machines, photographs, and various discourses of sustainability, as well as the researchers' embodied knowing and becoming-with-data. The story is not one of a privileged human gaze nor of an anthropomorphised nature, but rather of humans entering a research field and becoming inscribed in it as the story unfolds. Here, the assemblage *becoming naturecultural* materialises, and the sedimented, uneven human–Earth power relations become visible as they maintain some configuration of interests over marginalised others.

The main contribution of the empirical approach—*becoming naturecultural*—is to imagine different research practices for the Anthropocene that acknowledge their political and ethical commitment to a liveable world for all. Moreover, a relational view of agency in which a primary ontological status for agency is not limited to humans can effectively contribute to sustainable practices since, on the one hand, it enables non-anthropocentrism and, on the other hand, admits that practices bind potential outcomes (Heikkurinen et al. 2021). We have to consider that sustainability practices are pervasive; they are developed and diffused in programs for total quality environmental management, life-cycle analysis, product stewardship, ecoefficiency, pollution prevention and waste-management strategy, environmental risk and liability management, and environmental banking and investment. A growing number of scholars are aware of the need for responsible managing practices that cannot be institutionalised and socially sustained by abstract ethical principles or codes of conduct but by the capacity to see the more-than-human sphere in ethical terms (Gherardi and Laasch, 2022), as situated ethics-in-practice.

Sustainability practices cannot be identified *tout cout* with 'grand challenges'; however, they may be considered as part of the same debate about "matters of concern that entail complexity, evoke uncertainty, and provoke evaluativity" (Gehman, 2022, p. 260). Practice theories participate in this debate through a specific contribution on how past and present practices contribute to the development and persistence of grand challenges (Danner-Schöder et al, 2025).

A Concluding Reflection

Decentring the human being in practice theories is the starting point for elaborating a knowledge production practice that criticises the place of the human as the sole possessor of agency, its exceptionalism as individual, and its supremacy over other species. The fiction of the universality of a 'human being' cancels the fact that who is conceived as the 'human being' is man, male, Western, white, heterosexual, and able-bodied, and thus it supports an epistemic practice grounded in a tangle of ethics/power/politics. The epistemic practice that positions the 'human being' as universal and the measure of all things is a fantasy (or a nightmare) that conceals its historical construction inherent in Enlightenment and Eurocentrism. This subject is said to produce knowledge standing outside of the world and mastering nature and all the other-than-human elements, deeming them to be passive and controllable.

An epistemic practice that assumes the human being as part of the world and as a product of situated knowledge practices blurs the boundaries between ethics, ontology, and epistemology. It reframes agency as flow and gives to the subject a relational positioning as emergent from the intra-action of humans with materiality, discursivity, and nature. The human being emerges from an unfolding of becomings-with others (human and more-than-human) and is only temporarily stabilised by the knowledge production practices that draw boundaries around and inside entangled elements (what Barad names agential cuts). The social is also emergent and entangled with all materialities (corporeal, biological, technological, and discursive) and expressed as sociomaterial. Furthermore, the social is also generatively entangled with nature and this concept is expressed as becoming naturecultural.

The above assumptions pose a methodological question: How to do empirical research on situated practices when what counts as an element in a flow of becomings is an onto-epistemological move that 'freezes' an element within an *agencement* long enough to observe it? I cannot enter in this discussion here, rather, I limit myself to the simple observation that researchers are inside the practice they study with their ethic-onto-epistemologic practices and are responsible for the effects of their knowledge production practices. Moreover, I pose another question: Are researchers the only 'human being' in my story? Algorithms carry an inscription of epistemic practices that generate machine learning in collaboration with human and generative AI participants in the social construction of categories from which humans and organisations make sense of the world. The borders between humans and nonhumans are porous. Rather than a category of distinction, they signal the inseparability and co-dependence of humans and materiality (technology and artefacts), humans and earthly-bound beings. The same consideration about porosity can be affirmed in relation to other categories that operate a dichotomous separation between humans and what counts as human, animal, plant, organic, and inorganic, and their earthly relations. For contemporary practice theories, it is crucial to reflect on the construction of the above categories, their methodological implications in research design, and the theoretical conversations to which practice theory aims to contribute.

This article has worked for positioning the human being while breaking the boundaries (and working in the interstices) between the following categories: the individual/practice unit of analysis; being/becoming; socio/material; nature/culture. Most importantly, it has given to the researchers (and their epistemic practices) a place within the practice they study, breaking the boundaries between an external/internal positional divide.

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Acknowledgements