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Proposing a Gradient of Humanism/Non-Humanism and Understanding the Contributions of Body-Minds to Social Practices

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Abstract

The world is constantly changing, as are the social practices that comprise it. In view of the growing numbers and types of dynamic non-humans recruited into social practices, and what the significance of humans might be in this crowd, this article presents three interrelated lines of thinking in two main sections. The first section discusses whether there are any potential differences between humanist and post-humanist varieties of social practice theories, and instead of favouring one or the other, advocates for some middle ground by proposing a gradient of humanism. The second section explores how human body-minds (bodies) can be conceptualised more distinctively in theories of social practice, and in doing so, invokes the persistent question of whether distinctions between humans and non-humans in social practices can be usefully made and, if so, what roles they might play. The conclusion reflects on the previous discussion and revisits the recursive relationship between practices and bodies, highlighting important nuances and complexities while advocating for an expanded conceptualisation of bodies as more than simple carriers of practices and moving beyond dichotomies of humanist/post-humanist accounts of practice.

Keywords

bodies; dynamism; materiality; more-than-human; non-human; performance

Introduction

In discussing theories of social practice, it is worth briefly contemplating the obvious point that practices are by their very nature, social. 'Social' by definition is relational; meaning that every part and every member of a society or social world is in relation to all other parts and all other members in varying degrees of proximity over space and time. However, as definitions of what and who constitutes the social have been expanded to include materials and resources, other species, technologies and artefacts, accompanied by the generation of hybrid neologisms such as biosocial (Ingold and Palsson 2013; Meloni et al. 2016), nature-culture, (Braidotti 2018; Franklin 2006) and sociomaterial (Gherardi 2017), who and what counts as a part of social practices has been increasingly the subject of discussion (Maller & Strengers 2019; Reckwitz 2002a; Shove et al. 2024). While up to the early to mid-2000s practice theories tended to imply that only (but not solely) humans perform practices, positions on this topic have diversified as scholars have come to further contemplate the agencies, capacities and materialities of non-humans within practices (e.g., Rinkinen et al. 2019; Shove 2017; Shove & Trentmann 2019) in part drawing on cognate relational theories such as actor-network theory (e.g., Latour 1992), social studies of science (STS) (e.g., Mol 2008), and post-humanism (Braidotti 2006; Castree & Nash 2006). Closer examination of notions of performance, agency and materiality in theories of practice are further tested by recent discoveries into animal sociality, intelligence and language (Pepperberg 2013; Taylor 2024), the roles of microbes and genes in bodily processes and development (Meloni et al. 2022), and the growing capabilities and functionality of new technologies, including software (Morley 2019) and generative AI (Custers and Fosch-Villaronga 2022). At the present moment it is possible to argue that there is a greater magnitude of 'dynamic' non-humans than ever before, even compared to just a few years ago (e.g., Maller & Strengers

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2019). These developments have potentially opened a 'Pandora's box' (Stengers 2010), or several, as these 'new' actors and capabilities give rise to questions about what roles non-humans can, should, or do play in social practices and the making of social worlds, how they can be understood, and the extent to which it matters. As Reckwitz wrote with prescience in 2002: "in … modern times [we] are witnessing an unprecedented expansion of hybrids, 'quasi-objects' (Serres), non-human creatures that are neither pure nature nor cultural projections, but indispensable (by now, innumerable) components of social 'networks' or 'practices'." (Reckwitz 2002a, p. 207) Fresh interest in the relative humanism/posthumanism of practices and practice theories has also been stimulated by scholarship in new materialism (e.g., Coole 2013), more-than-human thinking (e.g., Maller 2018), and post-colonialism (e.g., Gherardi 2024; Maller 2018). To oversimplify, but nonetheless comment, on what these literatures have in common, they are essentially concerned with decentering white, westernised ontologies and experiences and elevating the multiple, dynamic, ongoing relations between humans, animals, materials, artefacts and other non-humans, guided by responsibilities of care and ethics, and informed by narratives of antiracism and feminism (e.g., Braidotti 2018; Coole & Frost 2010; Puig de la Bellacasa 2012; Todd 2016; Tynan 2021). This interest is accompanied by broadening recognition of and a desire to challenge, the anthropo- and Western- centrism pertaining to many past and present theoretical resources for explaining social life.

Put together, these developments signal the timeliness of engaging in further conversations about the role or significance of humans in practices amongst other potential 'players' vying for attention and highlighting possible tensions between humanism and post-humanism. Before going further, some positioning. I come to address the question posed for this article having thought with theories of practice for over 15 years in the disciplines of geography, sociology, and public health, and in the context of research concerned with sustainability, resource consumption, and health in the daily routines of households. Therefore, the material I draw on is largely associated with these disciplines, forming a subset of the available literature on theories of social practice. I also have a persistent interest in moments of practice performance, in what is happening in the act of doing or becoming, who and what is involved and how this momentum propels practices along trajectories through space and time (Maller 2017; Maller 2019; Maller & Strengers 2015). This focus colours the way I have approached this article. The first section begins by discussing whether a distinction between humanist and post-humanist accounts can be maintained. In the second section, I revisit how I have conceptualised human beings, or their body-minds, in social practice theories in a series of works from the last decade or so. In the conclusion, I distil the main points from these two sections and briefly reflect on some further topics for discussion.

'Humanist' and 'Post-Humanist' Social Practice Theories

When addressing the significance of human beings in practice theories, a question that springs to mind is whether there is any value in discussing potential differences between 'humanist' and 'post-humanist' accounts. As has been observed many times, there are several waves or generations of practice theorists across disciplines, meaning there is no single agreed-upon version of the theory (Gherardi 2024; Schatzki 2001; Shove et al. 2012). Rather, there is reference to a family of theories that share certain ontological and epistemological characteristics; namely, that practices are enduring entities involving things and their use, practical know-how, and shared meanings reproduced through ongoing enactments (Reckwitz 2002b; Schatzki 2001; 2010; Shove et al. 2012). Social practices offer a recursive way of understanding activity and its effects that avoids favouring either structure or agency. A scan of more recent literature on theories of social practice indicates there are varying positions on how humans are conceptualised in practices (e.g., see Brümmer et al. 2017; Cozza and Gherardi 2024; Gherardi 2025; Maller 2019; Schatzki 2001). In so-called 'humanist' practice theories, practices are about what humans do, conceptualised as practices which are carried out in conjunction with non-humans and various forms of materiality (Gherardi 2025). Although they account for non-human agencies within practices, a human or multiple humans are usually centred (Cozza & Gherardi 2024), noting that agency is a quality of, inherent to, or produced by practices rather than being attributed to individuals or objects (Shove et al. 2012). In 'post-humanist' accounts of social practices, a broader remit appears that is overtly not only concerned with what humans do but also with other beings and non-human agents and their roles in practices. These varieties can be summarised as including, but not limited to humans, and are not only concerned

with human activity, but are concerned with activity more generally in processes of becoming that humans may be central or peripheral to (Cozza & Gherardi 2024). Gherardi writes: "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." (2025, p. 3)

That within the same family of theories there appear to be differences in the humanist or post-humanist position of the authors is not necessarily problematic. However they are defined or however they position humans, theories of social practice move beyond purely human, rationalist understandings of agency, doing and becoming (Shove et al. 2024). In my view social practice theories are therefore by default always post-human[1] (Schatzki 2001), and by definition are inherently more-than-human (Maller 2018) because practices always involve more than just human activity and materiality, and in fact wouldn't be performed without various things, artefacts, technologies, material elements and, as is increasingly recognised, other species (e.g., Shove et al. 2024). Rather than a binary between humanist and post-humanist accounts, if such distinctions are to be made, I suggest a gradient or sliding scale of humanism may be more useful. Positions along the scale would vary according to the questions being addressed, the practices of interest, or possibly with the variety of practice theory in operation. A gradient would resolve tensions, avoid the potential development of opposing camps and encourage further in-depth discussion about when categories and boundaries matter in understanding the world through social practices. Regardless of their degree of humanism, a pertinent ontological question concerns the relative value of humans and non-humans in social practices: are there distinct differences or are they all equal players? An early provocation in this regard can be traced back to the work of Latour. As Reckwitz (2002a, p. 208) explains, according to Latour (1993): "nonhuman 'actants', things ... are necessary and are so-to-speak 'equal' components of a social practice." However, Reckwitz goes on to argue that:

> "When artefacts can only be effective within practices insofar as they are 'handled' by human agents and when they are sites of 'materialized understanding', then their status obviously cannot be completely 'equal' with that of human agents and their embodied understanding. The distinction between such a position and Latour's pleading for a 'symmetric anthropology' should not be blurred; rather, the debate whether within social practices there is or is not any substantial difference between human agents and non-human 'actants' must continue." (Reckwitz 2002a, p. 214)

For Reckwitz at this time, the answer remained elusive. In the couple of decades since this publication, I ask has any further clarity been achieved in understanding the potential differences between human and non-human actants in practices? And if so, what does this mean for the significance of humans, and the perceived distinctions between humanist and post-humanist accounts of social practices? As a partial response to this question, it is worth examining what humans contribute to social practices on a pragmatic, material, or tangible level. Compared to STS where the dynamism and materiality of bodies is more often brought to the fore (e.g. Coole 2005; Meloni et al. 2022; Mol 2002; 2013), I have previously suggested that body-minds have traditionally had an 'absence-presence' in theories of social practice (Maller 2017). The next section reviews this claim and discusses whether differences in human bodies (capacities, biophysical materialities, and mutabilities) matter from a social practice starting point.

Conceptualising Human Beings (Body-Minds) in Social Practice Theories

It is not possible to discuss the role or significance of human beings in theories of social practice without discussing body-minds or, more simply, bodies (Gherardi 2017; Maller 2017; Nicolini 2012). In previous writing, I have approached the question of how to represent human bodies in theories of practice in several ways, which I discuss together here for the first time. These ideas and their progression are presented in the following four subsections.

[1] Depending on the definition of post-humanism employed. In this essay, I follow Schatzki (2001) where he highlights two possible post-humanist dimensions of social practice theory. The first is that practices involve non-human entities that also contribute to sociality and that practices are therefore not solely performed by humans, and the second is that it is practices, not humans or individual subjects, that are generative of social life and are the central phenomenon of study in practice-based approaches.

Practice Memory

I developed the concept of 'practice memory' to better understand the mobility of practices around the world and over time through the bodies of carriers or performers (Maller & Strengers 2013; 2015). Practice memory was used to explain how practices were carried through migration from one place to Australia (often from 10s of 1000s of kilometres away) and how practices from different times and places could be 'resurrected' in response to new local environmental and cultural conditions, in this case in the context of scarcity. When water restrictions were in place during the Millennium drought (early 2000s), practices carried by migrants from destinations without running water or with past water scarcity were quickly resurrected and enacted in these new geographies experiencing drought (Maller & Strengers, 2013). In some cases, practices brought from other places never stopped being performed (e.g., collecting rainwater in large bins and using buckets in showers to collect 'grey' water for the garden).

Practice memory borrows from 'muscle memory', a concept which explains how the fibres of muscles retain memories from previous activity (Bruusgaard et al. 2010). Practice memories are inscribed on the human bodies that carry and perform them (Maller & Strengers 2013). They are embrained and embodied (Braidotti 2018), primarily represented in physical and mental know-how and meanings, lying dormant and awaiting the right environmental conditions until they are needed (Maller and Strengers 2013). Reckwitz's (2002b) definition of social practices as primarily routinised bodily activities, movements of the body, and the regular, skill performance of (human) bodies underlies this conceptualisation. Human bodies are repositories of past practices, leading to the proposition that to be resurrected and performed again, practices must somehow leave their mark. Through repeated performances of, and familiaristation with, the evolving iterations of a practice entity, humans can carry both past and present practices and their comprising elements (Maller & Strengers 2015). In other words, practice memories can be said to capture embodied performative histories of practices (Maller & Strengers 2013; Shove et al. 2012). Practice memory proposes that the link between past and present practices is codified in the physical and mental structures of human body-minds across 'communities of practice' (Sahakian & Wilhite, 2014), or in other words, the people who have performed a particular practice or set of practices in the past. Human bodies are therefore key to the 'survival' and possible revival of past practices, as well as the continuation of current practices along particular trajectories. Although not explored in the original writing on this topic, it is also probable that practice memories or their fragments are also inscribed in other non-human forms of storage. For example, know-how, meanings and materialities of past practices are found in written and visual artefacts such as recipe books and photographs, in past technologies and artefacts displayed in museums, and in disused but still present infrastructures. Depending on the practices, there are likely to often be multiple forms of storage and memory, with storage in bodies likely to always be only part of the picture. Considering that bodies age and degrade over time, multiple forms of 'remembering' gain further significance.

Understanding The Effects of Practices on Bodies

In a subsequent article, I considered more deeply how practices can be ingrained in bodies via epigenetics (Maller 2017). Epigenetics is concerned with cellular and molecular changes to bodies based on interactions between genes and environments, including how some genes or their expression can be switched on or off in certain environmental conditions (Meloni 2014; Milagro et al. 2013). This piece explored how the embodiment of practices changed the biophysical and genetic composition of bodies using the example of obesity, and how these effects accumulate and are carried not only across geographies but in ways that also matter for the bodies of future generations (Maller 2017). As Handel and Ramagopalan explain, humans are "acquiring changes to our epigenome all the time" (2010, p. 2), which, from a social practice ontology, arises from the ongoing performance of practices.

In this article, I wrote that in the moment of performing a practice, bodies interact materially with the world in complex ways and experience certain material conditions, receiving a range of environmental exposures that could trigger epigenetic changes (Maller 2017). I would now express this as bodies always are in constant material interaction with the world, but the moment of practice performance (and its repetition) is where genes, bodies and material environments interact in

specific combinations. This interaction represents an opportunity to understand how practices not only shape the physical appearance of bodies but also their biophysical and genetic processes. Some of these changes may be temporary and of little consequence, while others have more serious implications for health and well-being, longevity, and the health of future generations of people as their impacts accumulate over time (e.g., drug use, poor nutrition). On the flip side, performances can involve or require minute variations that add up over time, after all, practices are often considered to be in a constant state of flux (Shove et al. 2012). Some of these variations will be due to differences and changes in individual practitioners' bodies or communities of practice, while others will not be. The achievement of skilful performances of practices (Nicolini 2012; Reckwitz 2002b) relies on bodies being continually shaped by and 'improved' through practice, drawing attention back to the effects of practices on mental patterns, muscular and metabolic changes, and the development of know-how. The development of skill is another way bodies are essential for practices.

How Bodies are Represented in Theories of Practice

It was in 2017 that I proposed that bodies have a 'present-absent' status in theories of social practice. They are clearly 'present' in that practices are embodied and carried by bodies, but they are 'absent' because differences in the physical and affective capabilities of bodies have been largely unrecognised or dematerialised (Gherardi 2017; Maller 2017). By this, I meant that the materiality, physicality, and health status or capacities of bodies and communities of practitioners are rarely foregrounded in early work drawing on theories of practice, unintentionally giving rise to rather homogenised or opaque representations. The significance of bodily differences for practices is assumed or taken for granted without ever much being the subject of detailed discussion (Gherardi 2017). At the time, I offered two ways bodies could be further developed in theories of social practice, depending on the context. The first idea discussed the material contributions bodies make to practices, including energy, metabolic, genetic and sensory capacities, and as repositories of performance, as already discussed above (Maller 2017) and as suggested in a broad sense by Reckwitz (2002a) and Schatzki (2010). I also touched on movement and skill (which are generally acknowledged in practice theory literature) as well as aesthetics.

The second way I proposed bodies could be conceptualised in a more detailed way was as human-non-human assemblages, comprised of biophysical, affective, and mental capacities, as well as the various microbiomes of the skin, gut, and other orifices. Drawing on assemblage theory (Greenhough 2011; Marcus & Saka 2006; Wallenborn 2013), this contribution aimed to make evident the fact that human bodies are never a single body, that component material parts can sometimes offer essential material contributions as well as interact with each other, and to illustrate the porousness and impermeability of perceived boundaries of bodies as a counter to individualisation. These ideas were exploratory rather than definitive and share much in common with post-human and STS literatures, including the work of Ingold (Ingold and Kurttila 2000; Ingold and Palsson 2013) and Braidotti (2006; 2018), and more recently in the social practice literature, Shove et al (2024).

Accounting for the Dynamism of Different Bodies

In a later piece of writing (Maller 2019), I picked up these suggestions again to take a more detailed look at the materialities and capacities of human bodies that make them dynamic. Dynamism and change in theories of social practice is attributed to practices - or practice bundles, complexes or nexuses - rather than materials or bodies (Shove et al. 2012). However, I argued that alongside this, considering bodies as changing over time encourages reflection on the capacities of different bodies, how bodies are made different through practices, and how bodies might also change practices (potentially in more socially or environmentally just directions). I posited that bodies at various life stages and differently abled, gendered, classed or racialised bodies, may not only perform practices differently, but are also likely to perform different sets of practices due to opportunity (or lack of it) and the structuring of effects of practice bundles and complexes (Shove et al. 2012). I suggested two further advances in the way that bodies could be conceptualised in theories of social practice, turning to a broader set of more-than-human thinking, including new materialisms (Bennett 2010; Coole and Frost 2010; Pickering 1993), assemblage theories (Anderson and McFarlane 2011; Wallenborn 2013) and STS (Mol 2002). The first was to consider

bodies as vibrant and dynamic materials, more than what could be said is part of the background hum of simply being alive. Schatzki (2010, p. 137) had previously proposed that "the materiality and composition of human bodies and of [other living and non-living] entities" are preconfigurations of practices. To illustrate bodily vibrancy and dynamism in more detail, I focused on two essential practices that involve temporally dependent, rhythmic biological processes: sleeping and eating. These two practices are examples of activities essential for keeping bodies alive, and each involves specific metabolic and biochemical functions and systems. Considering that there are fewer such internal processes involved in practices such as laundering, the non-essential nature of practices classified as hobbies, and the physically demanding requirements of practices such as cycling, it could be said that, depending on what parts of bodies are involved, they may be more engaged, vital and dynamic in some practices than others. I summed this up by saying that "just as bodies are made by practices, so are practices made by bodies." (Maller 2019, p. 91)

At the time, I explained that in differentiating between different bodies, materialities, vitalities and capacities, theories of practice could better address complex questions of health inequality and related social issues. But reconsidering this line of argument now, what would considering different bodies and their capacities contribute to theorising social practices that might be distinct? Although there may be value in addressing this question, it ultimately may not matter much for theories of practice. Bodies, as part of practices and practices as entities, change over time in a constantly recursive, co-constituting manner, which vary from place to place and community to community. Further there are always different practice variations in circulation at any given time and place (Shove et al. 2012). This leads me to now conclude that rather than seeking to differentiate practices by differences in the bodies of performers, it is more consistent with the theories to examine practices, complexes and bundles (Shove et al. 2012) or practice material arrangement nexuses (Schatzki 2002) in their geographic and temporal contexts, which would - and should - reflect these variations. This method would be a more consistent way of understanding the creation of difference using social practice theories than coming from a starting point of seeking to differentiate between the bodies of individuals.

The second suggestion was that theories of practice remain overly focused on human bodies rather than acknowledging bodies of other kinds and their roles in practices. This positioning connects with logics in post-human practice theorisation and extends the point made in 2017 about practices being comprised of human-non-human assemblages. In 2019, I argued that in acknowledging non-human bodies, practices could be thought of more overtly as more-than-human assemblages. The idea behind this suggestion was to better represent the multiple dynamic bodies present in some practice performances and entities. Reflecting on other types of bodies that might be enrolled, I focused on plants and animals in gardening and dog-walking practices. My point here was that gardening and dog-walking directly involve the bodies of non-human species (including plants and dogs, as well as soil microorganisms and other species present in gardens and parks), without whom such practices could not be performed in the same way. These ideas built on other work with co-authors in 2016 (Strengers et al. 2016). In considering non-human animals who are implicated in practices that consume energy, such as heating and others that take place in homes with pets, we discussed how animals are recruited into practices through accepting or refusing food, standing near heaters, making sounds, or simply occupying interior settings (Strengers et al. 2016). We argued that in these instances agency is distributed (Bennett 2005) within practices, in addition to the agency of practices themselves, spread between human and animal 'consumers' in different bodily and material assemblages. Taking this a step further, we also suggested that as well as people, animals could also be considered performers of practices, rather than simply material elements as the alternative classification.

Following Bennett (2005) and Latour (1993; 2005) in this paper we proposed that animals (human and non-human) as performers of practices "have equal ability to exert agentic capacities (even though these are likely to be unequally distributed within an assemblage...)." (Strengers et al. 2016, p. 765 emphasis added) This focus on the relative potential capacities of humans and non-humans allowed for changes in the internal dynamics of agency within practice performance to occur over time, and from moment to moment. This stance reflected the ongoing dynamism inherent in practices where the agencies of any bodies (human or non-human) within practices "[emerge] in relation to other actants and their interactions within an assemblage." (Strengers et al. 2016, p. 765) The reasoning here responds to Reckwitz's (2002a)

plea for the debate to continue about whether there are any differences between human agents and non-human actants in practices. However, Reckwitz was referring only to artefacts, not to other living beings or non-human species.

Reflecting on these arguments now, as already suggested in the first section of this present article, I return to the idea of a gradient of 'humanness' or 'non-humanness' and suggest that the status of humans and non-human animals in practices would depend not only on the sets of practices of interest but who is involved. As I stated in 2019, there are many other (animal) bodies that can be recruited to, implicated in, or are otherwise indispensable to practices: "different bodies do, and are made by, different practices; this applies not just to human bodies but also to non-human ones." (Maller 2019, p. 93) A final comment on the dynamism and vibrancy of bodies as more-than-human assemblages is that human bodies (and those of other animals) are always made of multiple others; they host and are made by vast numbers of microorganisms that perform a variety of fundamental processes, with only a small percentage causing disease (Maller 2023). How and whether these organisms are counted as part of social practices is directly discussed by Shove et al. (2024, pp. 159-160), who argue that "social practices engender and are outcomes of multiple habitats and microbiomes, the dynamics of which constitute processes on which forms of biosocial becoming depend". As they explain, the processes and interactions of non-humans have been recognised as part of the dynamics of social practice in the literature; however, their significance has not attracted much attention until more recently. Clearly, there is more to discuss and debate on this topic, beyond the scope of the present paper.

Conclusion

The discussion above has summoned multiple juicy dimensions of the theorisation of practices, including materiality, embodiment, performance, agency and humanism. Although these topics have been touched on briefly, the intent of this article has been to consider the significance of human beings in social practice theories. I have approached the topic through a discussion on whether there is value in distinguishing between humanist and post-humanist varieties of the theories, with the idea that this might reveal different forms of significance or help determine a definitive response. Instead, I proposed that there is not a clear distinction to be made and that a gradient of humanism is more useful as well as less divisive. Underlying this rationale is my stance that social practice theories are inherently more-than-human, meaning that humans and non-humans will have more or less significance depending on the practices, bundles, complexes, or material arrangements under investigation, and in their geographic and temporal contexts. Ultimately, there is no straightforward answer to the question of who and what count as part of social practices; it will always depend on the particulars of a given context.

To address the related question as to whether there are any fundamental differences between human and non-human actants in practices, I explored what human bodies materially contribute to social practices, drawing on my earlier work. Most obviously, and as has been written about in the practice theory literature already, bodies are the key vehicles or carriers of practice and are necessary for every practice performance. Beyond carriage, the development of the skills necessary to successfully perform practices is one key contribution bodies make. In embodying mental and practical know-how, bodies are shaped by, and shape, practices over time in an ongoing recursive manner. Embodiment is more than 'skin deep' however; performing practices involves interactions between things, bodily capacities, genetic makeup, other non-human actants, and environmental conditions that can produce biophysical and epigenetic effects that transcend generations, impacting performers and practices of the future. Bodies also transform matter through the act of being alive, and the vibrancy and dynamism that that entails (Bennett 2010), creating energy and the vitality needed for practices. When practices are not performed regularly, they are stored as practice memories until such time as they are needed. In this way, bodies hold the key to the revival and survival of past practices, resurrecting them under the right conditions.

There is an unavoidable recursivity between practices and bodies. Bodies are activated and made by practices, as practices are by bodies. As has been written about previously, bodies are commonly thought of as sites where multiple practices intersect (Coole 2005; Gherardi 2017; Mol 2002). This line of thinking challenges the idea that one stepping off point for

understanding difference and inequality is to acknowledge that different bodies have different capacities and opportunities. Taking practices as the unit of enquiry rather than bodies means knowing that difference arises from the structuring effects of practices which vary from place to place, over time, and from community to community. Another way to understand bodily differences is that depending on what parts of bodies are required, they may need to be more engaged, vital, and dynamic in some practices compared to others, with varying outcomes. Structured by practices, different bodies have different capacities, and different practices require varying bodily involvement and demands of bodies. Difference matters because it leads to innovation in the evolution of practices, which can alter their course.

Although I have expressed some ambivalence on humanism-vs-post-humanism in theories of practice by cultivating the idea of a gradient, I stand by an expanded conceptualisation of bodies (human and non-human) that acknowledges their dynamic, vibrant nature and their existence as more-than-human assemblages, rather than seeing bodies as only human and as simple carriers or performers of practices. As introduced above and explained elsewhere, human bodies are never singular, and in some circumstances the bodies of non-human animals are clearly performers of practices, or at the very least they share skills and meanings in distributed models (as can objects, artefacts, and technologies). It is clear by now that new knowledge about the emergent and changing nature of social worlds is only going to further challenge ideas of who and what can perform practices. The question as to whether there can ever be social practices without humans, I leave for future debates.

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