Towards a more-than-human participatory research

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In *Spindrift: A Wilderness Pilgrimage at Sea*, participatory action researcher Peter Reason (2014, p. 71) tells the story of a seminar offered by philosopher Henryk Skolimowski at the University of Bath. While supporting the participation of a wider range of people in research has been, and continues to be, a significant challenge to academic norms, this seminar offered further challenges by exploring participatory ways of engaging with the more-than-human world.[1] As Reason writes, 'this was strange, even to me. In the abstract world of university seminars, participation was still what one did with other people. It had nothing to do with the natural world' (20 14, p. 71). While recognising the strangeness, a core question for this chapter is how participatory research (PR) might move in this kind of direction. Arguably issues like climate change, biodiversity loss and increasing rates of extinction create conditions where it is possible to put nonhumans explicitly on the PR agenda, and to ask how the commitments of PR – to situated knowledges, a wider recognition of agency and an expansive sense of stakeholders might be revisited. That is, these crises invite participatory researchers to explore whether the injunctions of Western anthropocentrism might have unnecessarily restricted how participation is imagined, and to reconsider to whom its commitments might be made.

One way of supporting such enquiries is to bring PR and emerging more-than-human approaches into direct conversation. As noted in the introduction to this collection, both Henry Buller (20 15), and Timothy Hodgetts and Jamie Lorimer (2015) argue that more-than-human geographies should seek methods that enable researchers to ask 'what matters' to nonhumans (e.g. Buller 2015, p. 7). For PR, this kind of question has been continually at its core, as participatory researchers seek

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ways of working with specific human communities to identify and respond to issues that matter to them. They do this by breaking down the boundaries between researcher and researched, ideally working in partnership to set research questions, determine which methods to use, analyse data, co-create outputs and develop dissemination strategies. In the process, broader questions of ethics, voice, knowledge and power are explored both practically and theoretically. Related questions also reside at the heart of more-than-human approaches, [20→] with issues of ethical relationality, the problem of representation, of exchange across different perceptual worlds and anthropocentrism constituting some of the area's most pressing issues.

These potentially fruitful overlaps between PR and more-than-human research (MtHR) were explored in a project called *In conversation with…: co-designing with more-than-human communities*, which took place in the UK in 2013, and which will be the focus of this chapter. Its two key objectives were first to ask whether participatory methods might extend towards a consideration of the more-than-human, and second whether the wealth of experience gained by participatory researchers, from working across social, cultural and other boundaries, might helpfully illuminate issues faced by more-than-human researchers. In order to respond to these questions we trialled the use of participatory methods, such as participatory design and participatory action research, as frameworks for two-day workshops with nonhumans. We wanted to know what might result from attempting to work with particular animals, insects, plants and elements specifically as research partners, rather than as subjects of experiments, for example.

This chapter will therefore share some of the insights generated by the project, as notes towards a more extended conversation about the possibility of more-than- human PR (MtH-PR). First, I outline the design and implementation of the project. I then place the project into conversation with PR literatures in order to highlight some of the ways that participatory approaches may indeed be open to working with wider understandings of who could be involved. Crucially, these literatures also offer cautions against the assumption that certain forms of inclusion are necessarily a good, and so this chapter will also discuss potential pitfalls of uncritically taking up the promise of participation.

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Speculative field experiments

In looking for ways to describe the overall approach of the *In conversation with…* project, I would suggest that it might be thought of as a kind of philosophical field experiment (Bardini 2014, Frodeman et al. 20 12), a form of speculative design (Dunne and Raby 2013) or perhaps even as a fantastic ethnography (Galloway 2013). That is, the project was not designed to establish MtH-PR as a definite possibility, since we were only at a preliminary exploratory stage. Instead, we were drawn to the speculative 'what if?' What if you could do participatory design with dogs? What if you could do participatory action research with bees? That is we primarily saw the workshops as putting ourselves in a position where we would be confronted with what it might mean to even try to include nonhumans in PR processes. In particular we were inspired by Clara Mancini and her colleagues, who argue that in seeking to conduct interspecies research there needs to be a willingness to explore the issues raised 'with genuine curiosity, no matter how challenging or ironic they may appear' (2012, p. 9). Thus even while recognising the stretching and cracking our questions might create within mainstream conceptions of what PR is and what it can do, we sought to take the tenets of both participation and the more-than-human as seriously as possible, put them into action. [21→]

Specifically, the project involved four exploratory workshops that took place between April and October 2013 in various locations in the UK. (Descriptions of each of these workshops can be seen in Boxes 1.1 and 1.2.) Attendees came from three main groups. First were members of a core team that included researchers from computing, environmental arts, forestry, geography, philosophy, sociology, theatre and women's studies, with further diversity in terms of the interdisciplinarity of their backgrounds and research methods used. Almost all were involved in the UK Arts and Humanities Research Council's Connected Communities programme, which has a particular focus on PR and which funded this project. Second, there were the nonhuman participants. In broad terms they included animals, insects, plants and the elements; more specifically dogs, bees, trees and water. The focus on these four was partly shaped by the expertise of the team and our pre-existing links with potential partner organisations. However, we were also interested in pushing the boundaries of who, or what, could potentially be considered as an active research partner, and so the workshops focused on nonhumans across a

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range of (commonly assumed) levels of sentience, even though we also sought to trouble this hierarchy. Third were human intermediaries, such as dog trainers and beekeepers, who shared their expertise and facilitated engagements with the particular nonhumans that they worked with. Here we drew parallels between our project and the role of community leaders or community experts within PR, as well as more general discussions of border-crossers who are able to link different social worlds (Anzaldua 1990).

As for the specific content of the workshops, we aimed from the outset to support diverse 'ways of knowing' (Graham et al. 2015), and so avoided the usual focus on academic presentations in favour of learning from the nonhuman participants and human intermediaries via inductions, practical/experiential activities and facilitated discussion and reflection. The workshops thus included at least one day of exploration, which was experiential and hands on. This included inspecting beehives, wild swimming and wood carving. These activities were analogous to the project initiation phase of PR where potential research partners spend time getting to know each other and exploring issues that are important to the community partners. Next, the core team and participating intermediaries articulated issues that arose during these activities and tried to identify which ones might develop into research questions, again drawing analogies with the later stages of project initiation.

We then workshopped a particular participatory model (see Box 1.1), keeping our commitment to our speculative approach always in mind. This often meant working through a specific PR handbook or toolkit and identifying what affordances or frictions might arise if groups tried to apply the guidelines in a project with a specific nonhuman partner. Some conversations that resulted included: the possibilities of data-gathering with bees, where we felt there might be some interesting approaches that could be developed; or asking whether core principles of participatory ethics, such as privacy, would hold when working with water, where we found it almost impossible to develop any kind of coherent response. Both of these kinds of responses were important as they helped to shape our understand [22→]

Box 1.1 The *In Conversation with…workshops*

1. *In conversation with animals* (April20 13) was organised by computer interaction researcher Clara Mancini and philosopher Michelle Bastian and drew on a participatory design framework. It was conducted with the team from the Open University's Animal-Computer Interaction Lab and dogs and people from Dogs for Good (formerly Dogs for the Disabled). Activities included train the trainer exercises and interacting with service dogs and dogs in training.

2. *In conversation with insects* (May 20 13) was organised by geographer Phil Jones and drew on a participatory action research framework (specifically, Pain et al. 2012). It was conducted with bees and people from the Evesham Beekeepers Association, as well as the Vale Heritage Landscape Trust. Activities included hive inspections and bee habitat maintenance.

3. *In conversation with plants* (September 20 I 3) was organised by landscape and forestry researcher Richard Coles and drew on a community participatory arts perspective. It was conducted with the trees and people from the Wye Valley Area of Outstanding Natural Beauty and Wildwood Coppice Crafts. We explored techniques used by the Wye Valley InsideOUT project to connect excluded and under-represented groups with the forest. Activities included wood carving, materials collecting and making, as well as individual time spent in the woods.

4. *In conversation with the elements* (October 2013) was organised by geographer Owain Jones and artist Antony Lyons and used a set of ethical guidelines on community-based research developed within the Connected Communities programme (Banks and Manners 20 I 2). It was conducted with water, specifically the River Torridge and its catchment area, and the people of the North Devon Biosphere Reserve, Devon Wildlife Trust and skipper Dave Gabe. Activities included field trips to the culm grasslands and a search for the river source, a boat trip up from the river's mouth, salinity sampling to see the mixing of fresh and sea water in the river, and wild swimming.

Detailed accounts of each of these workshops, including images and films, are available on the project website (www.morethanhumanresearch.com).

how it might not. They also highlighted which nonhumans might be more readily

included than others and in what ways. Finally, each workshop also included a session where we stepped back from the speculative experiment and critically reflected on the process. Here we explored the differences between the 'what if' and the 'what was'. While some of these [23→]

Box 1.2 A detailed look at *In Conversation with Dogs*

When starting to plan the workshops themselves, we found that turning the wider inspirations and approaches for the *In conversation with...* project into a programme of activities required its own kind of translation work. Faced with the task of designing the first workshop, both Clara and I found ourselves puzzling over what we were actually going to do. Our plan was to build on work Clara had been doing with the Animal Computer Interaction (ACI) Lab at the Open University (see Mancini, this volume). ACI arises out of the field of Human-Computer Interaction (HCI), which focuses on designing interactions with technology that are experienced positively and respond to the needs of specific user groups. However, it is rarely acknowledged that nonhuman animals can also be users of technology. For example, service dogs can learn to use kettles, washing machines and even cash machines. The ACI Lab thus seeks to design for specific nonhuman users by taking into account their physical and perceptual abilities, how they learn and what constitutes positive feedback for them.

We were also lucky to have keen and interested partners for the workshop. Namely, Dogs for Good, including service dogs Winnie and Cosmo, as well as Helen McCain, Head of Canine Training, and Duncan Edwards, Head of Client Liaisons, both of whom acted as our human mediators. A core participatory approach within HCI is participatory design and so this was taken as our framework. Our building blocks were the core steps of the design development cycle, which include collaboratively identifying requirements, proposing designs, prototyping these designs and evaluation. As with the participatory methods we drew on for the other workshops, these steps require considerably more time than is available in a two-day workshop.

However within design there are also a range of methods that can create quick initial responses to a design problem. These include techniques such as paper prototyping, where initial design proposals are mocked up on paper, or design challenges where participants may cycle through the design process in a few hours to explore new ideas. Methods like these allow participants to get an initial sense of what kinds of tactics might work as well as what potential problems or blocks might arise. Given that our aim was principally to explore the potential for a dialogue between MtHR and PR, these kinds of approaches resonated well. As became customary for each of our workshops, the teams were first sent a series of preparatory readings. These looked at issues of dog perception and evolution (Range et al. 2008, Honeycutt 20 I 0, Taylor et al. 2011, van der Zee et al. 2012), examples of design focusing on dogs or [24→] human-dog interactions (Resner 2001, Mankoff et al. 2005, Wingrave et al. 2010, Higgin 2012) as well as texts on participatory design itself (Kensing and Blomberg 1998, Muller 2009).

The first day was spent 'identifying requirements.' This including presentations from Clara about HCI and ACI, as well as from Helen and Duncan who talked about the service relationship, how dogs learn their tasks, the different technologies they may interact with and some key issues that service dogs may face in their work. Helen and Duncan then led us in 'train the trainer' type activities where participants took turns being a 'trainer' or a 'dog' in order to practice clicker training, as well as attempting to navigate the workshop space using a wheelchair. After finishing our induction, Winnie and Cosmo joined us in the workshop to work on 'problem definition'. This time was relatively brief since Helen and Duncan did not want to overtax the dogs by bringing them into an unfamiliar environment or involving them in activities for too long. Even so, we were able to include a session where the human and nonhuman participants were able to interact relatively freely, as well as the dogs working with the human participants to demonstrate some of the interactions that occur within a service relationship. Around mid-afternoon the Dogs for Good team wrapped up their contributions to the workshop and the remaining participants articulated problems encountered in these interactions, as well as broader issues, difficulties and complications as part of further refining the problem definition stage.

Day Two encompassed the remaining stages of the design development cycle, namely by proposing designs, prototyping these designs and evaluation. For this, Clara developed two design briefs in consultation with Helen and Duncan and arising from our problem definition work from the day before. Two challenges for service dogs with Dogs for Good include operating doors and buttons, since they can operate in a variety of ways and are not designed in a uniform way. We split into two teams and used the knowledge we had gained so far to propose a user-centred design solution to these challenges, including developing paper-prototypes. After feeding back to the wider group we then split up again to think through how we might work with the dogs from Dogs for Good to evaluate and refine the proposals. One suggestion was to offer a dog a series of options for operating doors and see whether one was selected more often, or could be used more quickly and easily. Our last activity was to step back from the design experiment and reflect on the activities and processes overall, and particularly what insights our experiences might offer into the possibility (or not) of more-than-human participatory research. [25→]

reflections will be discussed below (and see also Heddon, in this volume), an example of an issue that arose was around the freedom of nonhumans to participate.

Questions that came up included the following: Was inspecting a hive really analogous to meeting a community partner? What did it mean that we wore protective suits and used smoke to avoid being stung? Was wood carving a useful way to participate with trees and learn about their qualities, or was it more similar to a dissection? These questions were indicative of the generative nature of our discussions, and the impossibility of any quick and easy answers.

Analogies and diffractions: approaches to reading PR and MtH together

Having set out the project itself, and before analysing it in more depth, I want to briefly suggest some frames for understanding the kind of claims I will be making about potential inter-relationships between PR and MtHR. Drawing on my background in philosophy, one way this field experiment in MtH-PR can be read is as a particular form of analogical argument.[2] That is, it sheds light on both fields by exploring their similarities and differences with the other. As philosopher Paul Bartha notes, analogies can play 'an important heuristic role, as aids to discovery,' in part because

they can be used 'to generate insight and to formulate possible solutions to problems' (2013, n.p.). In this sense an analogical reading of the two fields might open up unexpected proposals, such as drawing on PR to address more-than-human researchers' interests in asking 'what matters' to nonhumans.

Further, Bartha suggests that analogies can also be important when proposing something that might at first appear strange, or even nonsensical, from common sense points of view. That is, 'often the point of an analogical argument is just to persuade people to take an idea seriously' (2013, n.p.): For example, taking seriously the idea that all those affected by research have a stake in the research, including nonhumans.

Within philosophy the key to a convincing argument-by-analogy is that there are enough parallels between the two cases to support the extrapolation of characteristics from one to the other. That is, a known similarity between the cases is used to extrapolate other points of similarity and sameness. One such similarity may be found in the respective commitments of MtH and PR approaches to including those traditionally excluded from research processes. Within traditional forms of analogous reasoning developing such points of connection encourages one to seek out further examples of congruence. This would suggest that recognition of an inter-relationship between these approaches rests on proving their similarities to each other.

However, a move towards proving similarity would arguably be antithetical to practices of working across difference and diversity in ways that are attentive to multiple and conflicting needs (e.g. Reagon 1983). Thus it is also important to look to contemporary reworkings of analogous reasoning which offer more felicitous approaches.[3] One particularly well-known reworking is Donna Haraway and Karen Barad's development of diffractive logics, which contrasts with [26→] an optics of reflection by enabling a shift away from a problematic emphasis on static identity, towards the processual effects each might have on the other (Haraway 1992, p. 300). Under this logic, the aim would not be to prove that MtH and PR approaches are sufficiently similar to each other to support exchanges of ideas between the two, but rather to ask whether the process of producing an 'interference pattern' between the two can create beneficial insights into 'how different differences get made, what gets excluded, and how those exclusions matter' (Barad 2007, p. 30). In this

way, diffractive logics retain the benefits of analogies outlined by Bartha (i.e. as aids to discovery, generators of insight, persuasive supports)while avoiding the expectation of sameness. With this in mind I want to now tum to an analysis of the project itself.

Broadening participation

The first interference pattern I offer here is created by reading a recent review of PR with an eye towards the more-than-human. My focus is Jarg Bergold and Stefan Thomas' (2012) 'Participatory research methods: a methodological approach in motion', which provides an overview of the field and suggestions for development. Focusing on a review article enables me to engage with attitudes and approaches that are widely accepted and thus generally representative of the approach overall. This is important because I want to suggest that core features of the participatory approach, when viewed in light of the *In conversation with...* project, do indeed resonate with efforts to explicitly include nonhuman participants.

In this way I want to suggest some initial ways that an explicit focus on the more-than-human (as research partner) might help to move participatory research in 'strange' directions.[4] The first two suggest ways that the entanglements of human participants in PR with nonhumans could be made more explicit, while the second two open up possibilities for an explicit engagement with nonhumans specifically.

Expanding life-worlds

In their review, Bergold and Thomas' initially define PR as being ·geared towards planning and conducting the research process with those people whose life-world and meaningful actions are under study' (2012, §1). While the focus is clearly on humans, the latter part of the definition, which emphasises meaningfulness and differences between life-worlds, suggests a shared epistemological approach with more-than-human research. This shared approach emphasises foregoing the search for universal truths and instead attending to specificities of experience and context. Indeed the reference to life-worlds calls to mind Jakob von Uexkull's (2010) notion of 'umwelt' and his observation that 'we comfort ourselves all too easily with the illusion that the relations of another kind of subject to the things of its environment play out in the same space and time as the relations that link us to the things of our human environment' (2010, p. 54).5 Such an observation resonates with PR's own critiques of

hegemonic knowledge production and of the [27→] ability of objectivity and detachment in social scientific research to work with the diversity of human experience.

However, beyond this conceptual link, which draws an analogy between theoretical approaches, a diffractive view also points to what potentially gets excluded from the PR concern with people's life-worlds. In our project a key observation was the way that the life-worlds of our human intermediaries were not radically separated out from the nonhumans that they worked with. A good example of this was during the *In conversation with insects* workshop where the beekeepers suggested that working with bees had changed their behaviours, and their perceptions of the environment. For example, because of their concern for the bees' welfare, their life-worlds now included a greater awareness of the weather and the availability of forage. Thus, our project highlighted the way people can be 'differently human', as Niamh Moore (2013) put it, depending on how their lives are shaped by the various human and nonhuman agents that play a role in their life-worlds.

When 'planning and conducting the research process' with the people under study, then, a MtH lens would challenge the exclusion of this more expansive field of stakeholders. Instead a diffracted PR might more explicitly recognise the nonhuman actors that also participate in and shape the life-worlds of the people in question.

Supporting cognitive estrangements

A further aspect of PR that Bergold and Thomas' outline is the ability of PR to create experiences of estrangement. This is important because it makes room for challenging embedded assumptions about how the world works, particularly assumptions held by those with more power. That is 'the participatory research process enables co-researchers to step back cognitively from familiar routines, forms of interaction, and power relationships in order to fundamentally question and rethink established interpretations of situations and strategies' (Bergold and Thomas 2012, § 1). Here too we can make analogies with MtH research, which challenges fundamental assumptions of human exceptionalism and the 'forms of interaction' with the more-than-human world that it supports. Thus, when MtH and PR were brought into conversation in the context of the project, we found that the power relationships between humans and nonhumans could also be foregrounded and questioned.

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This is illustrated first by a further example from the *In conversation with insects* workshop. In reflecting on the session one of the beekeeper participants, Martyn Cracknell, President of the Worcestershire Beekeepers Association, commented:

> I have been an amateur beekeeper for over 40 years, and I have always considered myself to be quite caring and empathic. I am very fond of my bees. When a colony requires management, e.g. to avoid losing a swarm, there are often several different strategies that might be used to achieve the desired end result. Ordinarily my choice would have been made by considering the efficacy of the method, the convenience for me, the timeframe for the operation [28→] and so on, but as a result of the workshop discussions I am now more mindful of how closely my intervention accords with the bees natural behaviour, and whether my intervention is sympathetic to the bee's needs. I had never really stopped to think about this before. (personal communication, 13 May 20 16)

Second, in some cases, established cognitive frameworks were so thoroughly challenged that they were rendered almost absurd. Our efforts to think though the ethics of community-based research with water (i.e. Banks and Manners 2012, see also Banks *et al*. 2013), for example, which included discussing issues such as informed consent and anonymity with research partners (in our case, water), provoked as much silence as discussion. That is, the participatory framing pushed us so far away from familiar 'forms of interaction' that we found we had almost no conceptual frameworks to draw on.

While this may raise the criticism that we were trying to apply frameworks in contexts where they were simply not suited, this disorientation proved fruitful in that it allowed us to ask questions of the guidelines themselves. For example, having moved towards a position where our watery project partner was seen as inseparable from the other systems it is a part of (i.e. from an abstract 'water', to the specific Torridge watershed, supported by our shared reading of Linton [2010]), some participants wondered to what extent liberal notions of individual rationality might persist in the guidelines, which in our context were deeply problematic.

This potentially opened up broader critiques of the way the subject is traditionally conceptualised within PR and illustrates a further way that

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PR might benefit from its interference pattern with MtH research.6 Most importantly for us, however, this challenge could potentially be met by emphasising resources internal to PR, specifically the emphasis on cognitive estrangement.

The two preceding discussions of life-worlds and cognitive estrangements suggest potential ways that PR approaches can highlight the entanglements of human participants with more-than-human worlds. However, a further interest of the *In conversation with...* project was in the possibility of working with nonhumans directly. As such, the fundamental question remains of whether nonhumans could participate in research in ways that might be recognised as a form of PR. While this seemed highly doubtful during *In conversation with the elements*, other workshops suggested greater possibilities. This in itself points towards the need to augment our research questions further, and to attend to questions of which nonhumans are potentially involved, and what kinds of ways participation might be reconsidered for each of them. As moving from animals to insects to plants to the elements demonstrated for us, the question of what PR might offer to specific nonhuman actors needed to be asked again within each hoped for collaboration.

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More generally, then, finding responses to these questions requires exploring whether particular nonhumans have competencies that could support their involvement in PR, and whether PR could develop methods that would support any such competencies. Continuing with our diffractive reading of Bergold and Thomas's paper provides support for both explorative forays. [29→]

Challenging assumptions of competency

As Bergold and Thomas discuss, within PR there is a long history of rejecting claims that particular groups lack the competency for engaging in research. This includes challenging suggestions that they may have deficits in ability, or lack the appropriate social capital. Recognising that claims of a deficit are most often made by those in power, Bergold and Thomas suggest that from the perspective of PR 'the difference between the academic worldview and that of the research partners from the field is actually an asset which must be exploited in the exploration process' (2012, §42). Indeed they suggest, in reference to some of Bergold's earlier work, that 'participatory research can be regarded as a methodology that argues in favour of the possibility, the significance, and the usefulness of

involving research partners in the knowledge-production process' (2012, §2). Within PR, then, competency is not a *fait accompli*, but an open and evolving question that further requires researchers themselves to reconsider their own competencies and develop capacities appropriate to the specific research context. For the *In conversation with...* project, starting from an orientation towards possibility, rather than assuming from the outset that nonhuman participation was impossible, led to a number of insights into ways that different nonhumans might potentially contribute their worldviews to a research project. At *In conversation with animals*, for example, we explored the possibility that assistance dogs could provide feedback on prototypes designed to respond to issues they encounter in their work. Mancini and other members of the ACI Lab reminded us that there are already ways of working with pre-verbal or non-verbal humans that might provide useful insights, but also that situations could be designed that would suggest a dog's preference for one prototype over another. When discussing this at our *In conversation with insects* workshop, in a session on working with bees during the evaluation stage of a project, one of the beekeeper participants pointed out that assessing preferences for prototypes had also been adopted by biologist Thomas Seeley (2010) to try to understand which design of beehive particular hives might prefer. Understanding the significance and usefulness of MtH-PR (for the nonhuman as well as the human partners) may very well draw on the initial orientation towards competency-as-possibility that is at the core of PR, particularly in combination with the 'genuine curiosity' that Mancini and her colleagues have argued for.

Designing methods for inclusion

Building upon a basic curiosity in relation to competency requires the further step of developing methods and frameworks that are suitable for working with a research partner in light of their specific capabilities and needs. Such a statement would not be unfamiliar within PR circles, with Bergold and Thomas emphasising that PR places the onus on those designing a project to find ways for stakeholders to be involved, even if this means developing new approaches and techniques in order for them to do so. One example they discuss is mental health and disability [30→] PR where concerns have been raised about the tendency to work with health professionals rather than with those directly affected by an illness or disability, in part because the latter may be 'in a very poor position to participate in participatory research projects, or to initiate such a project

themselves' (Bergold and Thomas 2012, §20). However, self-advocacy groups of mental health service users have argued for the need to produce research that is independent of professional and institutional providers because of concerns around the hegemony of the medical model or entrenched economic interests within health-care (Bergold and Thomas 2012, §22). Thus the ideal of participation continues to push PR to develop ways of including those who have been rendered 'quasi-invisible' (Bergold and Thomas 2012, §26) and to innovate methodologically in order to do so. The *In conversation with...* project pushes such questions even further by highlighting the way that whole hosts of 'earth others' (Plumwood 1993, p. 156) have been rendered 'quasi-invisible' (if not just plain invisible) within PR. However reading PR diffractively also suggests that the ideal of doing research with those who are often unseen by dominant actors may very well support the experiments with method and approach that would be necessary to recognise the specific interests and needs of particular nonhumans.

The dangers of participation

The discussions above highlighted the ways that core ideals underpinning PR might be re-read as opening onto a much wider field of 'participants' than is usually supposed. Even so, while the ideal of participation emphasises inclusion and empowerment, critics of PR have pointed out that it can often be mobilised in highly programmatic and narrow ways. For example, Bill Cooke and Uma Kothari's (2001) collection *Participation: the new tyranny?*, has called attention to its problematic institutionalisation within the development context. Contributors to their collection question the presumption that participatory methods always unlock hierarchies and suggest that, in fact, they can maintain them. As Cooke and Kothari set out in their introduction, the aim of the collection is take a step back from the internal critique that is a core part of the participatory model itself, and instead ask fundamental questions about the approach as a whole (2001, pp. 1-2).

Given the unclear use of terms such as participation, co-production and co-design within MtH research (see Introduction), the second interference pattern I want to set into motion draws on these types of critiques to focus on some of the potential dangers of using participation as a framework for working with nonhumans. That is, while the sections above used insights from the *In conversation with...* project to pose questions to PR about what

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is excluded from it, here debates within PR encourage a deeper questioning of the project itself.

Assuming participation is beneficial

In her contribution to Cooke and Kothari's collection, Frances Cleaver (2001) asks perhaps one of the most fundamental questions for PR, namely whether [31→] participation can be considered to be intrinsically beneficial. Discussing common understandings of the types of incentives for involvement in development projects, she notes that it is generally assumed that participation is in people's rational interest either because of the 'assurance of benefits to ensue' or because it is 'socially responsible and in the interests of community development as a whole' (Cleaver 200 I, p. 48). Cleaver argues, however, that these assumptions are simplistic and more attention needs to be paid to the costs of participation and the benefits of refusing to participate. Indeed she points out that 'there are numerous documented examples of situations where individuals find it easier, more beneficial or habitually familiar not to participate' (Cleaver 200 I, p. 51). Indeed within all human-based research there is a duty to support non-participation as an option.

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Participant information sheets often carry phrases like 'you are free to withdraw at any time without negative consequence' and contributions to a research project (participatory-based or not) are supposed to be free of any kind of coercion. That this is not always the case for humans, as Cleaver argues, suggests that attention to the option of non-participation should be even more important with nonhumans who are often in positions of significantly less power and autonomy.[7]

Arguably then, prior to focusing attention on 'what matters' to animals as Buller suggests, there should first be a consideration of the negative consequences such an investigation might have for the animals (and indeed other nonhumans) themselves. Indeed, as was noted at the time, within *the In conversation with...* project, smoke was used to pacify bees in order to inspect their hives, a cherry tree was cut down to provide wood for our wood carving activity and dogs had already been trained (and bred) to consent to the activities. As Clara Mancini suggested in our discussions (see also Mancini, this volume), the 'right to withdraw' could be understood as one of the key dividing lines between collaborative knowledge seeking and animal experimentation. In what way these considerations might apply to plants or elemental partners remained an

open question. This suggests that any MtH-PR would need to ask to what extent participation is simply being assumed to be a 'good thing' and to interrogate the initial impulse toward 'inclusion' further.

Overlooking wider inequalities

A further critique posed by the Cooke and Kothari collection centres on the scope of participatory projects done with marginalised communities, and particularly the narrow focus of many development projects. The worry is that 'an emphasis on the micro level of intervention can obscure, and indeed sustain, broader macro-level inequalities and injustice' (Cooke and Kothari 2001, p. 14). lf PR is to challenge entrenched power structures then it cannot focus on the smallest or easiest interventions.

This kind of claim resonated with some of our own questions in the project. *In conversation with animals* for example, focused on involving service dogs in co-designing tools that made their work easier, but had less room for exploring the service relationship itself. Our experience of 'meeting the bees' during the hive inspections was also based on a prior relationship between bees and beekeepers [32→] that some (though not all) might argue is fundamentally problematic. An important question for our project then was that in focusing on issues that seemed manageable (in part because what we were doing felt so unconventional) did we close off the option of tackling macro issues to do with the very nature of the relationship between the humans and nonhumans at the focus of our workshops?

Overall, I would suggest that there was an awareness of these kinds of broader issues, in part because of the wide variety of participants and the emphasis on physical interaction and critical reflection. *In conversation with insects,* for example, ended with discussions of the power structures within beekeeping associations and suggestions for the development of forms of 'co-responsible beekeeping' within them. However, given that ours was an explorative project, where we were speculating about tangible projects, a more concerted effort at a potential MtHPR may very well encounter different pressures around what seems reasonable to tackle and what does not. Here then it would seem useful to draw on work in PR that explores how groups can tackle both the macro and the micro, as Virginia Eubanks (2009, p. 113) discusses in her work on popular technology.

Pseudo-participations

Earlier I suggested that the emphasis within PR on approaching competency in an open way, and innovating methods to support varying needs and interests seemed promising for a potential MtH-PR. However, by returning now to Bergold and Thomas' paper we can also see that in practice there has been a disparity between these ideals and who PR is most often done with. That is, they argue that PR is more common with and amongst professional practitioners, such as with mental health professionals, than with 'the immediately affected persons', such as mental health service users (Bergold and Thomas 2012, § 19). This is in part because, despite aspirations for inclusion, the competencies of practitioners are still more likely to support their participation in, or initiation of, PR projects.

An awareness of this dilemma seems particularly important for a MtH-PR since it also appeared in the *In conversation with...* project. As some readers might have already noted, for all the project workshops the human mediators participated more fully over the two days, than did the dogs, bees, forest and river.

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Indeed for all of the workshops, our nonhuman partners were involved in the initial information gathering phase only, and the later stages of data-gathering, evaluation, dissemination and so on were completed by trying to imagine or extrapolate what might happen if researchers tried to support the inclusion of nonhumans in them.

In this speculative attempt at imagining what MtH-PR might mean in practice we focused on what Bergold and Thomas refer to as 'so-called "early" forms of participation, such as the briefing of professional researchers by those who are affected by the problem under study' (2012, §32). This could possibly be thought of as a step in the right direction, particularly if understood as 'preparatory joint activities that may facilitate participation in the research project at a later date' [33→] (20 12, §32). However, it should also not be discounted that what took place could alternatively be understood as 'pseudo participation' mobilised for ends other than those that seek to benefit the participant (20 12, §32). Indeed in the later sections of the workshops many human participants commented on the difficulty of retaining a sense of what, for example, a bee's perspective might be in relation to the issues at hand. While further attempts at MtH-PR might still retain certain divisions of labour (again see Eubanks 2009, p. 115), it would seem important to identify any tendency

to avoid the hard task of working out the possibilities of working with specific nonhuman partners or overly relying on human mediators.

No wider context of support

My fourth and final point is also suggested in Bergold and Thomas's review and raises the question of what kind of context might be needed in order to support these kinds of participatory experiments. At the outset of their review they argue that 'every type of research calls for social conditions that are conducive to the topic and to the epistemological approach in question' (Bergold and Thomas 2012, §32). They use this assumption to suggest that only within a broader political context of democracy is participation a viable research method. While these claims are made rather quickly in their article and would need to be explored more fully, the issue they raise is important for thinking about what broader social and political contexts might be necessary for MtH-PR to both appear legitimate and be viable. As suggested above, we had already found that some questions are easier to ask than others (e.g. the micro rather than the macro).

Further, the beliefs that nonhumans could (or indeed should) be treated as knowledgeable agents in their own right, and that they might have a stake in broader knowledge making processes, not only challenge political and social contexts but also many of the fundamental assumptions of Western ontological and epistemological frameworks, including the assumptions of many PR approaches.

Indeed, as suggested previously, in the *In conversation with the elements* workshop we often felt that we ended up in a context where it was impossible to find frameworks or terminologies that could orient us when seeking to answer the strange questions put to us when drawing on PR approaches to work with water.

These discussions in particular highlighted the liberal frameworks that many PR approaches draw on (e.g. justice, rights and inclusion being predicated on individual autonomy, agency and shared rational dialogue) and the ways that a potential MtH-PR would provoke questions around the humanism underlying them. As my colleague Franklin Ginn asked me, could the very idea of seeking to include nonhumans in PR not itself risk becoming what Cary Wolfe (20 10) has called a 'humanist posthumanism ', where their inclusion is judged according to humanist

ideals? This again suggests that an MtH-PR would need to tackle macro issues, such as those of epistemology and ontology, at the same time as meso issues of methods and approaches, and micro issues of developing specific interventions in specific contexts. [34→]

Conclusion

This chapter has highlighted the potential of a diffractive reading ofPR and MtHR for reconsidering the methodological possibilities of each. Adopting elements of the ethos underlying PR, such as insisting on the responsibility of researchers to ask which stakeholders are being excluded from the process, and on the non-neutral character of determinations of competency, could add a certain kind of boldness to MtHR. Further, internal and external critiques of PR could help MtHR think through the fraught nature of participation and the gap that can exist between theory and practice. While for PR, MtHR could push these approaches to question their focus on the human, and also to explore the differences between the liberal frameworks common to PR and frameworks of mutual entanglement more common within MtHR. Moreover, issues such as inclusion and exclusion, the contextual nature of knowledge, and the relationship between power, voice and agency have been central to both PR and MtH approaches and yet have been approached in very different ways. The *In conversation with...* project suggests that these interconnections are worthy of exploration, and hopefully future research will delve further into the strange patterns produced by the diffraction of each with the other.

Acknowledgements

Notes

[1] See Reason in this volume, for further details.

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[2] Noting that other project participants have used different frames (see, for example, Goto Collins and Collins.,Heddon, Pigott and Lyons in this volume).

[3] Thank you to Affrica Taylor for making this point and reminding me of the importance of diffraction in this context.

[4] Here I want to note that these 'strange' directions might also draw on heritages within PR, such as research focused on sustainability and the environment, which, while not explicitly including the more-than-human as participant, often have the aim of making a positive difference in these more-than-human worlds. Further, participatory work with indigenous peoples has also emphasised the participation of the more-than-human (see Coombes *et al.* 2014, pp. 849-851). Thanks to Niamh Moore for prompting me to think about this more explicitly.

[5] Importantly this should not be read as suggesting we therefore occupy radically separate spaces and times. That is, even while Uexkull likens the *umwelt* to a soap bubble [35→] this is still in a context where 'relations between things expand and mesh with one another in intricate webs of life' (Buchanan 2008, p. 25).

[6] During our discussions it was also recognised that the practice of PR often enacts more

complex and fluid understandings of the subject (e.g. Eubanks 2009), and of processes such as consent (e.g. Dewing 2007). However, some also commented on a seeming disconnect between this and the subject that was assumed in the handbooks, toolkits and guidelines that we drew on for the project.

[7] Although as we discussed in the *In conversation with the elements* workshop, nonhumans can also be much harder to coerce (see Bastian 2013). For example, those working with water ignore its capacities at their peril.

References

Anzaldua, G .. 1990. Bridge, drawbridge, sandbar or island: lesbians-of-colour *hacienda slianzas*. *In:* L. Albrecht and R.M. Brewer, eds. *Bridges of power: women s multicultural alliances.* Philadelphia, PA: New Society Publishers, 216-231.

Bastian, M. (2017) 'Towards a more-than-human participatory research'. In Bastian, M., O. Jones, N. Moore, E. Roe eds. *Participatory Research in More-than-human Worlds*. London: Routledge, 19-37. Accepted version.

Banks, S., and Manners, P., 2012. *Community-based participatory research: a guide to ethical principles and practice.* Bristol: National Coordinating Centre tor Public Engagement.

Banks, S., Armstrong, A., Carter, K., Graham, H., Hayward, P., Henry, A., Holland. T., Holmes, C., Lee, A., McNulty. A., Moore. N., Nayling, N., Stokoe, A., Strachan. A.. 2013. Everyday ethics in community-based participatory research. *Contemporary Social Science,* 8 (3), 263-277.

Barad, K., 2007. *Meeting the universe halfWay: quantum physics and the entanglement of matter and meaning.* Durham & London: Duke University Press.

Bardini. T .. 2014. Preface: a field philosopher with a certain taste for fish, and who does not mistake his hat for an ethology. *Angelaki.* 19 (3), 5-9.

Bartha, P., 2013. Analogy and analogical reasoning [online]. *In:* E.N. Zalta, ed. *The Stanford encyclopedia of philosophy.* Stanford, CA: Stanford University. Available from: http://plato.stanford.edu/archives/fall20 13/entries/reasoning-analogy/ [Accessed 23 May 20 16].

Bastian, M.. 2013. *Co-designing with water* [online]. Available from: http://www.morethanhumanresearch.com/home/co-designing-with-water [Accessed 23 May 2016].

Bergold, J.. and Thomas. S .. 2012. Participatory research methods: a methodological approach in motion. *Forum: Qualitative Social Research,* 13 (I). Art. 30.

Buchanan. B., 2008. *Onto-ethologies: the animal environments of Uexkull, Heidegger, Merleau-Ponty, and Deleuze.* Albany, NY: State University of New York Press.

Buller, H., 2015. Animal geographies II: methods. *Progress in Human Geography.* 39 (3). 374-384.

Cleaver. F.. 200 I. Institutions, agency and the limitations of participatory approaches to development. *In:* B. Cooke and U. Kothari. eds. *Participation: the new tyranny?* London and New York: Zed Books. 36-55.

Cooke, B. and Kothari, U.. eds., 200 I. *Participation: the new tyranny?* London. New York: Zed.

Bastian, M. (2017) 'Towards a more-than-human participatory research'. In Bastian, M., O. Jones, N. Moore, E. Roe eds. *Participatory Research in More-than-human Worlds*. London: Routledge, 19-37. Accepted version.

Coombes, B., Johnson, J.T., and Howitt, R., 2014. Indigenous geographies Ill: methodological innovation and the unsettling of participatory research. *Progress in Human Geography,* 38 (6). 845-854.

Dewing, J., 2007. Participatory research: a method for process consent with persons who have dementia. *Dementia.* 6 (I). 11-25.

Dunne. A., and Raby, F .. 2013. *Speculative everything: design, .fiction and social dreaming.* Cambridge, MA and London. UK: MIT Press.

Eubanks, Y., 2009. Double-bound: putting the power back into participatory research. *Frontiers: A Journal of Women Studies,* 30 (I), I 07-137.

Galloway, A., 2013. Towards fantastic ethnography and speculative design. *Ethnography Matters* [online]. Available from: http://ethnographymatters.net/blog/20 13/09117/towards-fantastic-ethnography-and-speculative-design/ [Accessed 17 February 2015].

Graham, H., Hill, K., Holland, L Pool, S., 2015. When the workshop is working: the role of artists in collaborative research with young people and communities. *Qualitative Research Journal, IS* (4), 404-415.

Haraway, D.. 1992. The promises of monsters: a regenerative politics for inappropriate/d others. *In:* L. Grossberg, C. Nelson, and P. Treichler, eds. *Cultural studies.* New York and London: Routledge, 295-337.

Higgin. M .. 2012. Being guided by dogs. *In:* L. Birke and J. Hockenhull, eds. *Crossing boundaries: investigating human-animal relationships.* Leiden: Brill, 73-90.

Hodgetts, T., and Lorimer, J., 2015. Methodologies for animals' geographies: cultures, communication and genomics. *Cultural Geographies,* 22 (2), 285-295.

Honeycutt, R., 2010. Unraveling the mysteries of dog evolution. *BMC Biology,* 8 (20). 1-5.

Kensing, F.. and Blomberg, J., 1998. Participatory design: issues and concerns. *Computer Supported Cooperative Work (CSCW),* 7 (3--4), 167-185.

Linton. J., 2010. *What is water? the history of a modern abstraction.* Vancouver and Toronto: UBC Press.

Mancini, C., van der Linden, J., Bryan, L Stuart, A., 2012. Exploring interspecies sensemaking: dog tracking semiotics and multispecies

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Bastian, M. (2017) 'Towards a more-than-human participatory research'. In Bastian, M., O. Jones, N. Moore, E. Roe eds. *Participatory Research in More-than-human Worlds*. London: Routledge, 19-37. Accepted version.

ethnography. *In: Proceedings of the 2012 ACM Conference on Ubiquitous Computing 5-8 September Pittsburgh, PA.* New York: ACM, 143-152.

Mankoff. D., Dey, A., Mankoff, J., Mankoft- K .. 2005. Supporting interspecies social awareness: using peripheral displays for distributed pack awareness. *In: Proceedings of the 18th annual ACM symposium on User interface sojiware and technology 23-26 October, Seattle, WA.* New York: ACM, 253-258.

Moore, N., 2013. Geneaologies, promises/dangers and modest interventions. *Presentation at In Conversation with... reflective workshop.* Birmingham.

Muller. M.J., 2009. Participatory design: the third space in HCI. *In:* A. Sears and J.A. Jacko, eds. *Human-computer interaction: development process.* Boca Raton, FL: CRC Press. 165- 186.

Pain, R., Whitman. G., Milledge, D., Lune Rivers Trust, 2012. *Participatory action research toolkit: an introduction to using PAR as an approach to learning, research and action.* Durham: Durham University.

Plumwood, Y.. 1993. *Feminism and the mastery of nature.* London and New York: Routledge.

Range, F., Aust, U., Steurer, M., Huber, L., 2008. Visual categorization of natural stimuli by domestic dogs. *Animal Cognition,* II (2), 339--347.

Reagon. B.J., 1983. Coalition politics: turning the century. *In:* B. Smith, ed. *Home girls: a black feminist anthology.* New York: Kitchen Table: Women of Color Press, 356-368.

Reason, P., 2014. *Spindrift: a wilderness pilgrimage at sea.* Bristol: Vala.

Resner, B. L 200 I. *Rover@Home: computer mediated remote interaction between humans and dogs.* Thesis (MSc). Massachusetts Institute of Technology.

Seeley. T. D.. 20 I 0. *Honeybee democracy.* Princeton, NJ: Princeton University Press.

Taylor, A.M., Reby, D.. and McComb, K .. 2011. Cross modal perception of body size in domestic dogs *(Canis jamiliaris). PLoS ONE,* 6 (2), e 17069.

van der Zee. E.. Zulch, H .. and Mills, D., 2012. Word generalization by a dog *(Canisfamilian's):* is shape important? *PLoS ONE,* 7 (II), e49382.

Bastian, M. (2017) 'Towards a more-than-human participatory research'. In Bastian, M., O. Jones, N. Moore, E. Roe eds. *Participatory Research in More-than-human Worlds*. London: Routledge, 19-37. Accepted version.

von Uexkull J.. 20 I 0. *A foray into the worlds of animals and humans.* Minneapolis and London: University of Minnesota Press.

Wingrave, C.A.. Rose, J., Langston, T., La Viola, Jr., J.J., 2010. Early explorations of CAT: canine amusement and training. *In: CHJ'/0 Extended Abstracts on Human Factors in Computing Systems,10-15 April, Atlanta, GA.* New York: ACM, 2661-2669.

Wolfe, C.. 2010. *What is posthumanism?* Minneapolis. MN: University of Minnesota Press.