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The questionnaire survey as more-than-human achievement

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The questionnaire survey as more-than-human achievement

Abstract

Geography is fostering a diverse range of methodologies that engage the more-than-human dimensions of research. Debates surround the efficacy of both longstanding and emergent methodological approaches in grappling with how to do more-than-human geography. Much attention has been given to the methodological implications of theoretical debates that evoke distributed agency and calls to “enliven” research. To date, however, questionnaire surveys have not been considered as part of these deliberations. Survey response rates are normally reported as percentages, with scholarly attention focusing on how question design, financial incentives, and delivery format may influence human engagement with the questionnaire. Little attention has been paid to questionnaire survey methods in or for more-than-human research. Inversely, there is also little discussion of the agency of non-human bodies, processes, and materials, and how they work for or against survey completion. This paper contributes to these deliberations by exploring more-than-human agency in the delivery and completion of a postal questionnaire, distributed to rural households that are self-sufficient for water on the south coast of New South Wales, Australia. By focusing on the elements, infrastructure, and animals that work with and against survey delivery and completion, we show that questionnaire surveys are a more-than-human achievement. Consideration of the chewed and weathered survey, and the more-than-human processes that influence its delivery and completion, matters in challenging “human-centred” notions of field research. We argue that what we know about the world through a survey is always a performative process, not only by considering how research design aligns with politics and knowledge practices, but also the more-than-human.

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1 INTRODUCTION

The past 10-15 years have seen a “more-than-human turn”, as geographers seek to better understand the material alongside the social dimensions of the world (Thrift, 2007; see also Anderson & Harrison, 2010; Thrift & Dewsbury, 2000). The “representational approach” of inquiry and analysis has been troubled by questions of embodiment, performance, practice and affect (Crang, 2003; Lorimer, 2010; Whatmore, 2006). There have been repeated calls, like that by Vannini (2015, p.15), to apprehend matter as lively and to “enliven” research. As Lorimer (2005, p.83) argued, geographers must broaden and refine their methodological practices to enable researchers to “better cope with our self-evidently more-than-human, more-than-textual, multi-sensual worlds”. The rise of more-than-human geography has not been without challenges and spirited debates about how to *do* this research. The predominance and rigour of qualitative research pertaining to a more-than-human geography reveals itself in review articles discussing methodological implications for the discipline (see Dowling et al., 2017; Hawkins, 2015; Merriman, 2014; Sexton et al., 2017). Each of these reviews considers in different ways the implications arising from the theoretical move away from humanist and social constructionist underpinnings of qualitative research towards a more-than-human geography. Reconciling the ontological and epistemological challenges of more-than-human geography has played out through debate of the appropriateness of methods, both qualitative and quantitative as well as “conventional” and “innovative”.

Yet, the questionnaire survey is a notable absence in these debates. In this paper we turn our attention to the agency of non-human bodies, materials and processes in postal

questionnaire survey methods. We build on Law's (2009) argument that all methods, including surveys, are performative. That is, following Law (2009), our geographical methods do not simply describe the world, but bring the world into existence. We push this performative position on surveys further by reflecting on the implications of more-than-human agency for questionnaire response rates. We argue that the *doing* of questionnaire survey methods not only creates geographical understandings that are fit for a specific knowledge purpose by how they are embedded within specific politics and practices, but survey methods can be understood as a more-than-human achievement. The paper is divided into five sections. The next section reviews literature concerned with the challenges of more-than-human methodologies in research praxis, and the position of the questionnaire survey in contemporary geographical scholarship. We then outline the research method for this study, summarising the practical considerations in carrying out a questionnaire survey as part of a mixed-method project, conducted with households that are self-sufficient for water on the south-coast of New South Wales, Australia. Next, we examine how the questionnaire response rate is a more-than-human achievement, through examples of how elements, infrastructure and animals are implicated in delivery and completion of surveys. To conclude, we extend our argument beyond the postal questionnaire and outline why attention to more-than-human agency matters in what are often positioned as "human-centred" field research methods.

2 "DOING MORE" IN MORE-THAN-HUMAN RESEARCH

The more-than-human project calls for methodological experimentation staged around the emphases given to embodiment, practice-based thinking, distributional agency and a focus

“in-the-moment”. For example, Lorimer (2005, p.84) called for performative methods for more-than-human research that strive to better understand “how life takes shape and gains expression in shared experiences, everyday routines, fleeting encounters, embodied movements, precognitive triggers, practical skills, affective intensities, enduring urges, unexceptional interactions and sensuous dispositions”. The difficulties of embodied and affective modes of empirical research underpin the trialling of methods drawing on video and moving image (Büscher et al., 2011; Lorimer, 2010; Simpson, 2011; Spinney, 2009), sound and listening (Duffy & Waite, 2013), creativity and art (de Leeuw & Hawkins, 2017; Gibbs, 2014), and the visceral (Ash, 2017; Longhurst et al., 2008; Low, 2015; Wilbur & Gibbs, 2018). Alongside these “innovative” methods are sensory ethnographies that advocate for embodied, mixed-methods approaches that combine talking with walking and doing, or “knowing-through-showing” (Hitchings & Jones, 2004; Lorimer, 2010; Pitt, 2015), or what Bell et al. (2018) term “engaged witnessing”. However, the call for experimentation should not comprise the jettisoning of “conventional” research methods (see Hitchings [2012] for a defence of the interview, and Browne [2016] on focus groups). Rather, what these performative approaches share in their more-than-human dimensions is the idea that methodology is no longer simply a choice of method; the research is alive to how the project design itself brings the object of study into being through doing the research.

Questionnaire surveys have largely been absent from these methodological debates (e.g. Bastian et al., 2016; Buller, 2015; Dowling et al., 2017; Merriman, 2014; Sexton et al., 2017), consistent with suggestions that they lend themselves to quantitative expressions of knowledge, being informed primarily by a positivist paradigm (Babbie, 2013; Sui & DeLyser,

2012). Analyses of questionnaire methods tend to take the form of textbooks and guides for doing research (e.g. Dillman et al., 2014; McGuirk & O'Neill, 2010; McLafferty, 2016). Such resources offer valuable assessment of practical and ethical aspects of research method, including design, cost, sampling error, confidentiality and statistical data analysis. Scholars have argued that questionnaires have much to offer qualitative research as part of mixed-methods research design (Hoggart et al., 2014; McGuirk & O'Neill, 2010; Parfitt, 2013). However, to date there is very limited discussion of the more-than-human beings, things and processes enrolled in survey methods. Survey response rates are usually reported as percentages; scholarly attention turns to how practical elements such as question wording, survey length and format (online, paper, telephone, face-to-face), and social factors including age, social class, education and political beliefs (McLafferty, 2016), may improve or limit human engagement with the questionnaire. Here, we turn our attention to the agency of non-human bodies, materials and processes in questionnaire survey methods and how they may work for or against survey delivery and completion. Specifically, we illustrate how more-than-human agency shapes questionnaire response rate, and argue that the questionnaire survey is always a more-than-human achievement. We seek to build upon a nascent body of work concerned with the agency of the more-than-human world in shaping the research *process*—as distinct from work examining more-than-human research subjects—including research that attends to the roles of weather (Adams-Hutcheson, 2017; de Jong, 2015), daylight (Davies, 2011), and non-human animals and plants (Bell et al., 2018).

3 METHODS

This paper draws on fieldwork from a low-budget, mixed-methods doctoral project¹ concerned with the practices and experiences of households that are self-sufficient for water² in rural Australia. The postal questionnaire was one of a suite of methods—alongside semi-structured interviews and home-insight tours—employed to better understand the embodied, material and discursive elements of domestic water self-sufficiency. In this paper, we focus on reflections from survey delivery and completion in order to deepen understanding of how more-than-human agency shapes research method. This paper *does not* analyse the written responses to the survey questions. Nor does it consider how the survey responses provide insights into more-than-human agency in the context of householders' everyday experiences and practices of water self-sufficiency (the empirical case study). Rather, the paper examines the methodological question of more-than-human agency in doing the research.

Six-hundred and ninety-seven postal questionnaires were hand-delivered by the first author to residents of four rural communities, not connected to mains-water, in the Eurobodalla Shire, New South Wales (NSW), Australia, between 12 and 16 March 2016. The mail-out questionnaire was identified as a more appropriate means of engaging participants in the target communities than an invitation to complete a digitized version of the survey online for two reasons: first, there was a history of poor-telecommunications coverage, impeding

¹ Conducted by [first author] and supervised by [second and third authors].

² In this paper we define “self-sufficient for water” as households that are disconnected from municipal mains-water infrastructures. Households that are self-sufficient for water rely on decentralized water infrastructure (namely rainwater tanks) for domestic needs and are responsible for the capture, distribution and disposal of water on-site. The majority of households in this study were connected to municipal electricity grids, with several being totally off-grid for both water and electricity.

internet access (O’Conner, 2015). Second, there are high proportions of absentee landholders; on census night 31.5% of private dwellings in the Eurobodalla Shire were unoccupied (c.f. 9.9% NSW and 11.2% Australia) (ABS, 2017). This suggests that householders were likely to miss publicity of an online survey through local print and radio media. Hand-delivery of the postal survey was necessitated by uncertainty in the coverage of Australia Post’s³ unaddressed mail service, which meant there was no guarantee questionnaires would reach or be restricted to the households in the target communities (Australia Post, 2017: pp.21-22).

The postal questionnaire was printed as an A5 paper booklet and delivered in a closed paper envelope, which also contained a reply-paid envelope. Distribution of the questionnaire was preceded by a paper pre-survey notification leaflet (also hand-delivered). One-hundred-and-ninety-one (191) postal surveys were completed and returned, representing a response rate of 27.4%. The following section employs first person narrative [first author] to reveal insights into how the more-than-human shaped response rate, by reflecting upon hand delivering the postal survey and the material condition of completed and returned surveys. These fieldwork reflections illustrate how response rates enrol the materiality and agency of elements, infrastructure and animals—of paper, humidity, frogs, dogs, snails, rain and rust—in survey delivery and completion. In so doing, we argue that the questionnaire survey is always a more-than-human achievement. In the discussion and conclusion, we return to the collective “we” and extend our argument beyond the postal survey to outline why attention

³ The government owned entity that provides postal services in Australia.

to more-than-human agency—in what are often positioned as a “human-centred” field research method—matters.

4 REFLECTING ON THE LIVELINESS OF THE QUESTIONNAIRE SURVEY

4.1 Elements

In six days, I walked just under 50 kilometres as I hand-delivered pre-survey notifications and questionnaire packets to 697 households. The weather was instrumental in setting the pace of questionnaire delivery. Being the end of a wet summer, the humidity, in particular, was constantly weighing on me. **Figure 1** shows a view during a morning break. I remember it being a really humid day and I was looking at sea-mist roll off the coast to the north, thinking whether conditions were right for rain. There was a thickness to the air that dissipated the brief feeling of relaxation I was enjoying whilst sitting down at a picnic bench, and replaced it with feelings of tension and anxiety. Was it going to rain? What should I do? I had limited time in the field to deliver my surveys.

Figure 1: Sea mist rolls off the coast on a humid morning (photo: [first author] 12 March 2016)

I finished my biscuits quickly and drove north to my next survey community where I spent a tense hour shielding the questionnaires under my raincoat from a light but persistent drizzle of rain—I didn’t want to compromise the packets by getting them wet; however, as the humidity pressed in on me I questioned whether the paper was staying any drier under my

raincoat given how much I was sweating. In defeat I retreated to the car (sans air-conditioning) to wait for the drizzle to abate. While waiting, I discarded two questionnaire packets on the back seat to dry; although by no means soaked through, the paper felt clammy to my touch and I was reluctant to put them in a mailbox where it was unlikely they would dry out before the householder collected the mail.

4.2 Infrastructure

The papery-ness of the questionnaire was at the forefront of my mind during questionnaire delivery. I was constantly alert for situations where the integrity of the paper might be compromised by water and moisture. Several questionnaires were returned with water damage, suggesting the packet had been in a leaky mailbox for some time. I became attuned to the materiality of mailboxes as an indicator of whether I should expect potential respondents to receive my questionnaire in a timely manner (let alone whether they would respond to it at all), before exposure to the weather, or to the frogs, slugs and spiders resident in many mailboxes (**Figure 2**), relegated the survey packet straight to the bin.

Figure 2: A rusty mailbox being reclaimed by spiders (source: [first author] 16 March 2016)

A considerable number of dwellings in one community didn't have mailboxes, which reflects the high number of absentee-landholders. In these cases, I spent some anxious moments looking over my shoulder before approaching front doors to slip a pre-survey notification under a door mat, being careful that the paper would not be visible from the street so as to

ensure the place looked lived-in to deter any would-be thieves canvassing for empty houses. The material state of letter boxes, the rotting wood or rusted lid, the density of spider webs, or presence of faded letters and dried leaves within, made me think about whether the home was occupied and shaped my actions around how to deliver the questionnaire without drawing attention to what might be a seldom-occupied residence.

4.3 Animals

The weather and deliberations about mailboxes were not the only influence on the pace of questionnaire delivery. Encounters with frogs (**Figure 3**), spiders, slugs and snails occupying mailboxes slowed me down as I grappled with the ethical dilemma presented by needing to deliver my questionnaire packet without compromising animal or paper. While career postal workers may have less sympathy for such mailbox inhabitants, I found myself going out of my way to find an alternative spot to place my questionnaire lest I caused a disturbance to a much-loved mailbox tenant.

Figure 3: A frog seeks shade in a mailbox (source: [first author]⁴ 15 March 2016)

However, sometimes a disturbance was impossible to avoid in the course of my walking; my study sites were isolated communities where the streets are typically quiet. Working outside the daily routines of vehicle and pedestrian traffic, I felt displaced. Furthermore, pet dogs

⁴ With thanks to the survey participant who took a photo of their resident mailbox frog when [first author's] camera phone ran out of charge.

would often react to my arrival at the mailbox. I would freeze in fear at the bark of a particularly aggressive-sounding dog, until I could spy it behind a fence, and weigh up whether it was safe to approach the house. Judging the risk, I would dart quickly up to the mailbox, shove the survey in, before racing through delivery to the next few houses until the barking quietened down. Sometimes, the barking of an excited (or aggrieved) dog would bring out the occupant, if home at the time, or a neighbour, who would eye me suspiciously until I explained that I wasn't delivering junk mail. These encounters with barking dogs and curious residents facilitated a conversation in the study community about my research, potentially encouraging a response to my questionnaire and associated call for interview participants, through building a rapport with residents.

I had further opportunity to reflect on the agency of animals in shaping response rates when handling the completed questionnaires that had been posted back to me. One questionnaire was returned with tears and edges of paper missing. A handwritten note from the respondent explained that their puppy had "chewed the mail that was left on the coffee table". Attached to another questionnaire was an apologetic letter from the respondent explaining that, as the home was a secondary residence infrequently occupied, snails in the mailbox had started to digest the mail in their absence:

I have just completed your PhD survey which I came upon recently in our largely unused letterbox at our holiday home. The booklet has been munched on by snails—sorry about that!—and I don't know what happened to the envelope you supplied.

While these two respondents had posted me their damaged but completed questionnaires, these examples suggest that more questionnaires may have been inadvertently damaged or destroyed by non-human actors, in mailboxes and in homes, and thus were not returned. Taken together, what these examples show is that it is not just human agency dictating whether a questionnaire is received and responded to; animals, such as snails and puppies, play a role in shaping response rates.

5 DISCUSSION & CONCLUSION

In this paper, we have offered insights from the field processes of survey delivery and completion to extend understandings of how more-than-human agency shapes research method. In particular, we have explored the agency of non-human bodies, processes and materials (elements, infrastructure and animals) and how they work for or against delivery and completion of a postal survey. In this way, we consider how the more-than-human is entangled in survey response rates. In this final section we reflect in greater detail on two field observations presented above; the first interrogates the more-than-human implications arising from doing surveys on foot; the second illustrates the more-than-human implications arising from the example of barking dogs, which operated in a process for and against inclusion of people in the survey. We then expand these observations to consider the broader implications of understanding survey questionnaires as a more-than-human achievement for other research methods and contexts.

5.1 The questionnaire survey as a more-than-human achievement

Response rate is usually presented as an outcome of human action and social phenomena.

The field insights presented above trouble this assumption by demonstrating how the delivery, completion and return of surveys are tied up with the agency of elements, infrastructure and animals. [The first author's] encounters with storm clouds, humid air, mailboxes, frogs, dogs and spider webs during the course of survey delivery prompted a change in walking pace, a shift from feeling relaxed to anxious, and a conscientiousness and attentiveness to non-human bodies. As scholars concerned with geographies of walking remind us, while fieldwork on foot is by no means an uncommon research practice, it is worth considering in its own right: "The repeated action of putting one foot in front of the other necessitates contact with the ground and, often, a state of being attuned to the environment" (Lee & Ingold, 2006, p.69). As a PhD candidate with limited funding and field support, [first author] found that the hours spent "pounding the pavement"—or, more accurately, of traversing front lawns and loose tarmac at the street verge—allowed insight to how the field and response rates are always an ongoing process of the coming together of the social and material. Arguably, such insights would not be offered by doing an online survey or by driving through. In this sense, and following Bell et al. (2018), we have sought to make visible the non-human agents in the field work of survey delivery while walking. From this perspective, the postal survey may be understood as an embodied weather-walking action (Edensor, 2000); the delivery of the survey is reliant upon an ongoing process whereby certain subjectivities and bodily capacities emerge through the interplay between the elements, moving-on-foot, infrastructure, non-human bodies, ideas, emotions and affects. Who receives, and potentially completes, a survey is then always a more-than-human accomplishment, through the coming together of socio-material arrangements.

Furthermore, the *delivery* of a postal questionnaire is not normally conceptualised as a recruitment or data gathering exercise. As a process that is typically delegated to a third party (i.e. Australia Post) a postal survey can become disconnected and disembodied from the researcher and the field site. The postal questionnaire passes through multiple hands once it leaves the researcher's desk before it lands in the mailbox of a potential respondent. By hand-delivering the postal questionnaire and having boots on the ground, connections and disconnections facilitated by the social and material dimensions of the field site, which enabled the delivery and completion of a survey (or not), became apparent. Taking the case of [the first author's] encounters with barking dogs, the properties and processes of sound, for example, may activate particular meanings, emotions or feelings that worked for and against survey delivery and completion. Following Revill (2016), sound is understood as simultaneously having a social dimension, aligned to emotions, as well as a material dimension, through generating vibrations through the air, bodies and things. Consequently, sounds are understood as socio-material forces embedded in an ongoing process of forming and sustaining associations through which subjectivities and places are stabilised or transformed. In this case, the sounds of barking dogs that interpellated the researcher as an "intruder" sometimes resulted in fears that prevented delivery of a survey and, in other instances, it allowed connection with concerned and curious residents by facilitating a conversation about the research, potentially encouraging a response to the questionnaire through building rapport. This example points to the importance of being alive to the field as always a relational achievement, where the weather, energy levels, fitness, sounds, animals and different modes of mobility may enhance or diminish the emotional and affective capacity of a person to deliver a survey, for instance, and thus become a researcher.

5.2 Lessons for other methods

Extending these observations to other research contexts, thinking about response rates as a more-than-human achievement can help us to think more critically about other methods and research processes, particularly those aspects conceptualised as human-centred, such as interviews (duration and quality), recruitment rates, and structured field surveys.

Conducting research at a park, festival or beach on a rainy weekend, for example, may reap very different results on a sunny day. Closer attention to the material, the elemental, the non-human in research processes and outcomes is merited, and we argue that, more often than not, these details are not included in the published geographical literature; we tend to rely on anecdotes from passing colleagues in corridors, who recount a home-insight interview waylaid by an inquisitive cat knocking over an audio recorder, or a weekend surveying beachgoers boosted by a heatwave. Only occasionally do we catch glimpses of the more-than-human forces at play in shaping the research process and outcomes, as work by Davies (2011), de Jong (2015) and Adams-Hutcheson (2017) attest.

Davies (2011, p.295), for example, reflects on the role of the weather and seasons in her efforts to engage interview recruits via doorknocking, concluding that the positive encounters with residents in front yards during the long hours of summer would be difficult to replicate if doorknocking on a cold, dark winter afternoon. Similarly, de Jong (2015, p.80), in describing a failed survey methodology in festival research, highlights the affective intensities of festival atmospheres, weather and other more-than-human forces—such as time of day, soundwaves, and blood-alcohol content—in working against response rates and

data quality: “A second limitation [of the survey method] resulted from elements of the festival assemblage including heavy rain, loud music, large crowds and alcohol. An invitation to complete a survey was unwelcome in this context, particularly in the afternoon”. One of the more detailed examples of more-than-human agency in the research process comes from Adams-Hutcheson (2017, p.15), whose research on the everyday farming practices of sharemilkers in New Zealand has illuminated the role of weather and animals in shaping the affective atmospheres of field sites and interview data: “The cows, Pete [interviewee] and I felt anxious and oppressed by the wind and mud, and it pressed on us stirring mood and feeling [...] Thus, the ambience of the interview was cold, hard and intense, just like the weather.” Collectively, these methodological reflections show how the material, the elemental, and the more-than-human are significant in research processes and outcomes.

5.3 Final provocations

In this paper, we have examined the methodological question of more-than-human agency in the research process through examples of how elements, infrastructure and animals are implicated in the delivery and completion of a postal questionnaire. We argue that survey response rates are a more-than-human achievement, a collaborative process not only with human research participants, but with the materiality of field sites—in this case, paper, water, humidity and sweat, snails, rain, rusted mailboxes, spider webs and dogs. Notions of questionnaire surveys and response rates as “human-centred” are therefore challenged by consideration of the chewed and weathered postal survey, of the emotional and affective capacities of bodies, and of the socio-material dimensions of field sites. There is, instead, a multitude of materialities and agencies at play (Bennett, 2010).

Like Law (2009), we suggest that survey research remains an integral part of an increasingly diverse geographical method “tool kit” that generates different versions of the world.

Thinking of survey methods as performative reminds us that they offer insights into the world that are always embedded somewhere. Our discussion of more-than-human response rates has three important implications for scholarship in and beyond questionnaire survey methods. First, we illustrate how attending to the more-than-human has the potential to prompt a rethink of low recruitment numbers or short interviews, which might otherwise be positioned and internalised as “failures” to engage human subjects. Our reflections from research using a postal survey confirm Davies (2011), de Jong (2015) and Adams-Hutcheson’s (2017) observance of the fundamental importance of more-than-human agency in research praxis. Rather than understanding response rates in ways that emphasise the design of research methods, apprehending response rates through more-than-human agency draws attention to the sensuousness and fleshiness of the body and its capacity to affect and be affected.

Second, this paper calls for all researchers, regardless of method, to consider participant engagement as an ongoing spatial process of inclusion and exclusion in everyday life. As this paper illustrates, attending to the role of the more-than-human, alongside ideas, design and skills is integral to the processes and practices by which an invitation to participate in a questionnaire survey, in this case, is made sense of, or not, within a particular context.

Finally, we suggest that becoming alive to the more-than-human dimensions of field sites helps draw attention to the role of materiality, emotions and affects in the wider process of mobilising research and becoming researchers, and underscores the importance of capturing those moments of ephemeral experience. Critically understanding the non-human bodies and processes that shape research practice and outcomes might be particularly acute and/or informative for research conducted in rapidly changing or post-disaster environments, contexts in which research practice and outcomes are likely to be substantially altered by dramatically changed socio-material forces and connectivities.

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