



Williams, N., Patchett, M., Lapworth, A., Roberts, T., & Keating, T. (2019). Practising post-humanism in geographical research. *Transactions of the Institute of British Geographers*, 44(4), 637-643. <https://doi.org/10.1111/tran.12322>

Peer reviewed version

Link to published version (if available):
[10.1111/tran.12322](https://doi.org/10.1111/tran.12322)

[Link to publication record in Explore Bristol Research](#)
PDF-document

This is the author accepted manuscript (AAM). The final published version (version of record) is available online via Wiley at <https://rgs-ibg.onlinelibrary.wiley.com/doi/full/10.1111/tran.12322>. Please refer to any applicable terms of use of the publisher.

University of Bristol - Explore Bristol Research

General rights

This document is made available in accordance with publisher policies. Please cite only the published version using the reference above. Full terms of use are available: <http://www.bristol.ac.uk/red/research-policy/pure/user-guides/ebr-terms/>

Practising post-humanism in geographical research

[Article in *Transactions of the Institute of British Geographers*, <https://rgs-ibg.onlinelibrary.wiley.com/doi/10.1111/tran.12322>]

Authors: Nina Williams*, Merle Patchett**, Andrew Lapworth*, Tom Roberts* and Tom Keating*, * School of Science, UNSW Canberra, Campbell, ACT, Australia, ** School of Geographical Sciences, University of Bristol.

Abstract: Post-humanist theories shaping contemporary geographic research have unsettled the privileged position of the ‘human’ as a common reference to apprehend social life. This decentring of the human demands that we rethink our expectations of, and approaches to, methodological practice and the traditional distinctions made between the theoretical and the empirical. In this introduction and the following interventions, we explore how a material situatedness and attention to nonhuman agencies within post-humanist thought complement and extend existing methodological innovations within human geography. We do so with reference to a series of Masters workshops – a somewhat overlooked space of research-creation – each of which explored the implications of post-humanism on methodological practice. The introduction concludes with three key tenets that were followed in each of the individual workshops, and which set out an ethos for practising post-humanism more broadly.

Keywords: post-humanist theory; geographic method; Masters workshop; experimentation; nonhuman intensities; theory/practice divide

Practising post-humanism: why now?

Recently, there has been a push to explore more experimental orientations to the ‘doing’ of research and to develop practices that problematize methodological assumptions pertaining to rigour, reliability and representation within geography (Dowling *et al*, 2016, 2017, 2018; Whatmore, 2006; Vannini, 2015). In this paper we contribute to these exciting debates by engaging with the way post-humanist theoretical innovations shaping contemporary human geography require us to rethink the empirical demands and methodological responsibilities of geographical research. In bringing the material and affective registers of social life to the fore, post-humanist theories have the potential to reconfigure our relation to research practices in ways that trouble the traditional distinction between the theoretical and the empirical. It is in this potential for capturing novel aspects of contemporary social and cultural life, in excess of human durations, that we situate our concern for the practice of post-humanism within human geography.

Responding to the call to experiment methodologically, the turn to more-than-human geographies has done much to broaden the remit of contemporary research to include the agency of the nonhuman in shaping social life. As Bastian *et al.* (2016: 2) note, a key concern here is “to take nonhuman life, and the entanglements of human/nonhuman life seriously” in the production of geographical knowledge. This concern is precisely about the challenge of attending to diverse nonhuman agencies in ways that demand different approaches to the act of doing geographical research. In turning to the relationship between post-humanism and geographical research (Castree & Nash, 2004; Braun, 2004) we want to resist the temptation to simply look ‘beyond’ the human. Instead, we focus more acutely on the task of liberating our research practices from the constraints of the humanist tradition. Indeed, critiques have emerged in geography (McCormack, 2007) and elsewhere (Colebrook, 2014; Massumi, 2014; Hynes, 2016)

about the dangers of a post-humanism that would enact a renaissance humanism that is at odds with the critique of human exceptionalism (Wolfe, 2010: xv). In this set of interventions, we follow Massumi (2014) and Colebrook (2014) in cautioning against an “apocalyptic” post-humanism that re-establishes the illusion of a supposedly objective, removed subject (Hayles, 1999: 6). This orientation is about developing experiments and interventions that envision life without centralising the human: it is after or *post-* the dogmatic tendencies of humanism that fetishize the human as the sole agent of transformation. Throughout the set of interventions, we use the term nonhuman when referring to processes and entities of the workshops which exceed human recognition and/or framing, whilst post-humanism refers to the development of a theoretical logic that informed the workshops and interventions.

This Themed Intervention, therefore, examines the methodological problems arising when geographers ‘practise post-humanism’. By practice we refer to a number of processes that, at first glance, might be understood to be inherently ‘human’. In this paper we seek to re-inhabit these practices by experimenting with those nonhuman affective intensities and expressions that render such practices as *already* exceeding the human. Different to the task of including nonhuman others, our focus on practising post-humanism begins with refiguring the moralising constraints imposed on the doing of our thinking (Todd and Hynes, 2017). It does so by drawing on a series of workshops that were originally developed for a postgraduate Masters course, the aim of which was to explore and further advance methodological innovations for human geography in light of post-humanism’s ‘decentring’ of the human subject (Braidotti 2017; Wolfe, 2010). Each workshop was motivated by the possibility of reimagining a particular practice common to geographical research, from ‘*writing*’ and ‘*listening*’, to ‘*archiving*’, ‘*imaging*’ and ‘*sensing*’. Rather than instrumentalize, the aim of each workshop was to explore and examine – i.e. to ‘workshop’ – how post-humanist theories might reconfigure these research practices. The

workshops therefore demanded a willingness to put ourselves and our practices at risk. As event-spaces, each workshop provided a means to rethink not only the objects of our research but also to reflect upon broader assumptions regarding what it means to put geographical thinking into practice today. Our aim here is to write each of the workshops as an event or ‘happening’; that is, we seek to generate tentative and exploratory demonstrations, primed towards the post-humanist potentiality of a given practice.

The intervention as a whole builds upon a rich tradition of methodological innovation within human geography. Indeed, human geography as a discipline has a longstanding history of critically unpacking methodological practices to argue against the inappropriateness of standardised methods. Within feminist (Katz, 1994; Rose, 1997; England 2015) and postcolonial (Jackson, 2017; Sundberg, 2014) research we are presented with non-hierarchical, relational forms of research practice through an emphasis on positionality, situated knowledges and ideological formations of power. Indeed, if geography is able to practise forms of research beside a certain number of standardised methods, this is only possible because of a much wider effort by qualitative researchers to “break down hierarchical objectivistic ways of knowing” (Nast, 1994: 58). Crucially, post-humanism does not ignore political questions regarding the production of knowledge but seeks to advance these concerns by foregrounding material situatedness and nonhuman powers or agencies. The individual pieces within this themed intervention speak more specifically to conversations emerging around particular research practices, including familiar visual (Parr 2007; Lorimer, 2010; Zylinska, 2017; Brice 2018) and archival methodologies (Gagen *et al*, 2007; Lorimer, 2009; Mills, 2013; McGeachan 2019), to the more recent developments in sonic geographies (Kannigieser, 2012; Gallagher and Prior, 2014; Simpson, 2014), and the often overlooked processes of writing (though for exceptions see DeLyser and Hawkins, 2014; Boyd, 2017; Lorimer and Parr, 2014) and sensing (Ash, 2017; Paterson and

Glass, 2018). Our approach is to pay particular attention to the ways post-humanist thought can problematize and invigorate the practice of doing geographical research.

Post-humanist research and the geographical workshop

In exploring this problematic, our interventions focus on the implications of post-humanist thinking for a specific, and oft-forgotten, site of geographical research creation: the methods workshop. Geography has a long tradition of critical reflection on and experimentation with the spaces through which research is practised (Driver, 2000; Katz, 1994; DeLyser and Starrs, 2001). A leitmotif of these disciplinary discussions has been the centrality of ‘the field’ to geographical knowledge production, and indeed the methodological stakes of recent post-humanist and related modes of theorising have largely been framed in terms of how they might re-orient us to the question of what composes this field as well as transform the very performance of fieldwork itself (Whatmore, 2006; Dewsbury and Naylor, 2002; Daniels, et al 2010; Richardson-Ngwenya, 2014). In comparison, there has been much less attention afforded to how these contemporary theories might inform spaces of pedagogy and research training, except in relation to the geographical field as a crucial site for applying or grounding the concepts and approaches learned in lectures (Lorimer, 2003; Bassett, 2004; Latham and McCormack, 2009). There is thus a lingering sense in our discipline that real methodological innovation and experimentation is something that primarily happens beyond the walls of the methods classroom.

Motivating our interventions, and the workshops on which they are based, is the attempt to dramatise a different orientation towards the methods workshop, one concerned less with the application of ready-made methods and more with the creation of new techniques that transform how we relate to research problems. Here we take inspiration from recent interdisciplinary conversations across geography, the environmental humanities, and philosophy that conceive the

post-humanist workshop as a space of *research-creation* concerned with the production of difference rather than the reproduction of the same (Bastian et al, 2016; Murphie, 2008; McCormack, 2008). Exemplary for its ongoing and creative experiments in thinking method is the Montreal-based SenseLab, founded in 2004 by Erin Manning. Manning (2016) writes that the Sense-Lab's focus on the inventive potentials of research-creation is an attempt to untether research practice from its ongoing adherence to core humanist principles of cognitive reason, representational logic, and moral judgement that look to submit our encounters to the categories and values of the already-existing. This humanist apprehension of method is what she terms (after Whitehead) “a cut that stills” the creative process of experience, acting to safeguard thinking from the emergence and shock of the new (Manning, 2016: 33). Resisting this humanist tendency towards the “making-reasonable of experience” (Manning, 2016: 31), the rallying cry to which our interventions respond is instead how our methods might be reworked in order to make *more* of the virtual and nonhuman qualities of experience.

In the workshop on listening, such an orientation in research was engendered in the act of experimenting with field recording. Paired up and equipped with some audio recording devices, a group of postgraduate students crossed a busy road in Bristol and headed towards Brandon Hill park, recording the sounds of the journey *en route*. The process of monitoring the recordings through headphones alerted them to a different way of relating to the surroundings, whilst changing the direction of the microphones intensified and attenuated certain parts of the soundscape. In this way the microphones functioned to intensify the way an environment comes into expression through various sonic registers, irreducible to the way such an environment is heard. As a research output in themselves, the sound recordings further intensify that which is often devalued, unregistered, and not reducible to the human but nevertheless reverberates in our fields of listening.

The workshop on archiving sought to similarly reorientate traditional research sites and practices by radically rethinking the archive as animal and archiving as an iteration of animal play and politics (Massumi 2014). Although a growing number of historical geographers are engaged in the wider disciplinary project of “Bringing the animals back in” (Wolch and Emel 1995) to their analyses, this logic of inclusion can end up subtly reinstating certain forms of human privilege and animal alterity. This is because while animals are included, they are made to fit within the ontological and narrative confines of human history. To move beyond the entrenched divides between humans and animals in historical understanding and practice the participants in the archiving workshop were introduced to a collection of feathered remains. With no interpretive material to accompany these remains, the participants were prompted to respond to their immediacy and materiality and thus place them at the heart of archival enquiry. This reorientation not only pushed the participants to intellectually relinquish human exceptionalism but also to viscerally sense shared histories and vulnerabilities. Moreover, by engendering an ethic of care and custodianship the workshop tentatively presented alternative lines of flight for intervening in the Anthropocene at large (van Dooren 2014).

Key tenets

Whilst methodologically aligned to distinct practices, the individual pieces that follow are united by what we see as three key tenets of a post-humanist methodology, not only that we taught in the workshop but also that we are writing from. As such, in this final section we outline some guiding principles of the workshops, and what we see as some key ‘take-aways’ of this intervention for wider social scientific experimentations. An important proviso here is that we do not see these interventions as a guidebook or collection of ready-made and reproducible methods to ‘do post-humanism’. Such an approach would foreclose the process of research according to pre-established schemas where what counts as knowledge has already been determined. Instead we are inclined towards a notion of research *practise*, which can be aligned to

Erin Manning's move from method to research creation as "an account of study that embraces the value of what must remain ineffable" and where the field is understood "as an ecology where knowledge occurs" (Manning, 2016: 30-31). By way of conclusion, we want to briefly draw-out these tenets and highlight their implications for geographical research more broadly.

1. Ethic of experimentation

An ethic of experimentation in the workshops and interventions that follow emerged through what we see as the demand of post-humanism to put our 'selves' and our theories at risk, where the risk lies in letting go of an orthodox perspective or framework so that another way of sensing might arise. This doesn't simply imply an immersive abandonment of structural methodological frameworks, but rather as Manning and Massumi suggest, "what is key is less what ends are pre- envisioned – or any kind of subjective intentional structure – than how the initial conditions for unfolding are set" (2014: 89). Taking risks is equally about embracing failure as something affirmative and generative - an event that helps us to develop new techniques for thinking experimentally in "the movement from theory to the empirical and back again" (Gerlach and Jellis, 2015: 143). We see this geographic appeal to experiment (see also Last 2012; Enigbokan and Patchett 2012; Jellis 2015; Jellis and Gerlach 2017) as intrinsic to the practice of post-humanism and, whilst by no means the only philosopher to experience an "aversion to humanism" (Gutting, 2011: 147), we follow a Deleuzian logic of experimentation as an alternative to the representational and humanistic logics of interpretation (Deleuze and Parnet, 2006: 36). It is thus an experimentation that is open to what emerges in the field, without overcoding the process with preconceived expectations that are not predicated on the result. Thus, the piece on 'Listening' explores how experiments in field recording intervene in the humanist imperative to master sites and practices of research, whilst 'Archiving' uses an encounter with fashioned feathers as an experiment in feeling and expressing transspecies histories.

2. *Articulating nonhuman intensities*

Practising post-humanism, as we understand it here, commences from an insistent hunch that the “world is more excessive than we can theorise” (Dewsbury et al, 2002: 437). Our interventions thus spotlight the potential for productive dialogue between post-humanist and non-representational theories in geography which emphasise how much of what happens in life takes place before reflexive subjective consciousness (Thrift 2007; Anderson and Harrison 2010). Methodologically, attention therefore turns to those forces and processes that occur *before and beyond* the formation of subjectivity, *transversally across* human and nonhuman materialities, and *in-between* distinctions between the corporeal and incorporeal (Vannini 2015; Ash and Simpson 2018). However, in orienting ourselves to these pre-individual intensities we recognise the impossibility of providing a “true reflection of the empirical experience” and instead affirm with J-D Dewsbury (2009: 332) “that it is the attempt at articulation rather than its success that counts”. Our pieces thus reflect on the capacities of existing research techniques in geography to express the nonhuman, affective, and asignifying textures of research encounters. For example, ‘Imaging’ explores how approaching the nonhuman powers of image-making practices – like photography – provide opportunities for disrupting an embodied subject’s evaluative and perceptive frames. ‘Sensing’, meanwhile, highlights how filmic encounters might disrupt the conventional anthropocentric framings of sense-making by rendering perceptible the nonhuman forces and relations that comprise research ecologies.

3. *Unsettling the theory/practice divide*

Our interventions resist a strict and antagonistic division between the work of ‘theory’ and the work of ‘practice’, as well as the relevant spaces in which these activities happen (the library/the field) (McCormack, 2013). These divisions and spatial conduits have traditionally been reproduced in approaches to methodological teaching, wherein methods courses are sold as an

opportunity to 'apply' abstract theories introduced elsewhere. We argue that to 'practise post-humanism' is to trouble this easy separation, and to instead conceive *theory as practice*, and *practice as a form of theory-in-the-making* (Manning, 2016). Here we take heed of the different way of thinking the relation of theory/practice outlined by Deleuze (2005: 268) when he writes that "philosophical theory is itself a practice, just as much as its object. It is no more abstract than its object. It is a practice of concepts, and we must judge it in light of the other practices with which it interferes". 'Writing' explores the implications of this alternative, which seeks to disturb academia's conventional relationship with the written word by presenting writing as a practice capable of capturing nonhuman forces through its expressive materiality.

The interventions that follow explore some techniques for moving forward with these key tenets in a research setting. This is significant in the current climate of political and ecological crises; in the geographic literature, it is becoming increasingly apparent that such Anthropocenic concerns require a fresh approach to ecological thought that extends "collaborations far beyond the realm of human relationships" (Ruddick, 2017: 120). Our minor contribution is in further emphasising in each of the following papers how forces and processes can be brought into collaboration beyond a particular humanist reduction of subjectivity, that is, before a reasoning subject as the master of making sense and outlining actions. Post-humanism opens-up a vital conceptual task in this regard, and yet, as we explore in the following interventions, it equally disrupts our methodological approaches for making sense of the research environments that we inhabit. Our aim, therefore, is to explore how post-humanist thinking demands a reconfiguration of both how we practise, and what we expect from, geographic methods that provoke new ways of relating to research encounters.

References

- Anderson, B., & Harrison, P. (Eds.) (2010). *Taking-Place: Non-Representational Theories and Geography*. London: Routledge.
- Ash, J. (2017). Visceral methodologies, bodily style and the nonhuman. *Geoforum*, 82, 206-207.
- Ash, J., & Simpson, P. (2018). Postphenomenology and method: styles for thinking the (non) human. *GeoHumanities*, 1-18.
- Badmington, N. (2004). Mapping posthumanism. *Environment and Planning A*, 36, 1344-1351.
- Bassett, K. (2004) Walking as an aesthetic practice and a critical tool: some psychogeographic experiments. *Journal of Geography in Higher Education*, 28, 397-410.
- Bastian, M., Jones, O., Moore, N. & Roe, E. (2016) *Participatory Research in More-than-Human Worlds*. London: Routledge.
- Boyd, C. (2017). Research poetry and the non-representational. *ACME: An International Journal for Critical Geographies*, 16, 210-223.
- Braidotti, R. (2017). Posthuman critical theory. In D. Banerji & M.R. Paranjape (Eds.), *Critical Posthumanism and Planetary Futures* (pp. 13-32). New Delhi: Springer.
- Braun, B. (2004). Querying posthumanisms. *Geoforum*, 35, 269–273.
- Brice, S. (2018). Situating skill: contemporary observational drawing as a spatial method in geographical research. *Cultural Geographies*, 25(1), 135-158.
- Castree, N., & Nash, C. (2004). Mapping posthumanism: an exchange. *Environment and Planning A*, 36, 1341-1343.
- Colebrook, C. (2014). *Death of the Posthuman: Essays on Extinction, vol. 1*. Michigan, MI: Open Humanities Press.
- Daniels, S. Pearson, M and Roms, H. (2010) Fieldwork: Editorial, *Performance Research*, 15(4), 1-5.
- Deleuze, G. (2005). *Cinema II: The Time-Image*. London: Continuum.
- Deleuze, G., & Parnet, C. (2006) *Dialogues II*. H. Tomlinson, B. Habberjam and E. R. Albert (trans.) Continuum, London.

- DeLyser, D. & Starrs, P. (2001) Doing fieldwork: Editor's introduction. *Geographical Review*, 91, iv-viii.
- DeLyser, D., & Hawkins, H. (2014). Introduction: writing creatively – process, practice, and product. *Cultural Geographies*, 21, 131-134.
- Dewsbury, J-D. (2009). Performative, non-representational, and affect-based research: seven injunctions. In D. Delyser, S. Herbet, S. Aitken, M. Crang, & L. McDowell L (Eds.), *Sage Handbook of Qualitative Geography* (pp. 321-334). London: Sage.
- Dewsbury, J-D. & Naylor, S. (2002) Practising geographical knowledge: fields, bodies, and dissemination. *Area*, 34, 253-260.
- Dewsbury, J-D., Harrison, P., Rose, M., & Wylie, J. (2002). Introduction: enacting geographies. *Geoforum*, 33, 437-440.
- Dowling, R., Lloyd, J., & Suchet-Pearson, S. (2016). Qualitative methods 1: Enriching the interview. *Progress in Human Geography* 40, 679-686.
- Dowling, R., Lloyd, J., & Suchet-Pearson, S. (2017). Qualitative methods 2: 'More-than-human' methodologies and/in praxis. *Progress in Human Geography*, 41, 823-831.
- Dowling, R., Lloyd, J., & Suchet-Pearson, S. (2018). Qualitative methods 3: experimenting, picturing, sensing. *Progress in Human Geography*, 42, 779-788.
- Driver, F. (2000) Editorial: Field-work in geography. *Transactions of the Institute of British Geographers*, 25, 267-268.
- England, K. (2015) Producing Feminist Geographies: Theory, Methodologies and Research Strategies. In S. Aitkin and G. Valentine (Eds.) *Approaches to Human Geography (Second Edition)* (pp. 361-372). London: Sage.
- Enigbokan, A., & Patchett, M. (2012). Speaking with specters: experimental geographies in practice. *Cultural Geographies*, 19(4), 535-546.

- Gallagher, M., & Prior, J. (2014). Sonic geographies: exploring phonographic methods. *Progress in Human Geography*, 38, 267-284.
- Gagen, E. Lorimer, H. and Vasudevan, A. (eds.) 2007 *Practising the Archive: Reflections on Method and Practice in Historical Geography*, Historical Geography Research Group, Research Series, No. 40.
- Gerlach, J., & Jellis, T. (2015). Guattari: Impractical philosophy. *Dialogues in Human Geography*, 5, 131-148.
- Gutting, G. (2011). *Thinking the Impossible: French Philosophy since 1960*. Oxford: Oxford University Press.
- Hayles, N.K. (1999). *How we Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago, IL: University of Chicago Press.
- Hynes, M. (2016). Indifferent by nature: a post-humanist reframing of the problem of indifference. *Environment and Planning A*, 48, 24-39.
- Jackson, M. (2017). Introduction: A critical bridging exercise. In *Coloniality, Ontology, and the Question of the Posthuman* (pp. 17-34). London: Routledge.
- Jellis, T. (2015) Spatial experiments: art, geography, pedagogy. *Cultural Geographies*, 22(2): 369-374.
- Jellis, T. and Gerlach, J. (2017) Micropolitics and the minor. *Environment and Planning D: Society and Space*, 35(4): 563-567
- Kanngieser, A. (2012). A sonic geography of voice: towards an affective politics. *Progress in Human Geography*, 36, 336-353.
- Katz, C. (1994) Playing the field: questions of fieldwork in geography. *Professional Geographer*, 46, 67-72.
- Last, A. (2012). Experimental geographies. *Geography Compass*, 6(12), 706-724.
- Latham, A. & McCormack, D. (2009) Thinking with images in non-representational cities: vignettes from Berlin. *Area*, 41, 252-262.

- Lorimer, H. (2003) The geographical field course as active archive. *Cultural Geographies*, 10, 278-308.
- Lorimer, H. (2009). Caught in the Nick of time: archives and fieldwork. In D. Delyser, S. Herbet, S. Aitken, M. Crang, & L. McDowell (Eds.), *Sage Handbook of Qualitative Methods in Human Geography* (pp. 248-273). London: Sage.
- Lorimer, H., & Parr, H. (2014). Excursions: telling stories and journeys. *Cultural Geographies*, 2, 543-547.
- Lorimer, J. (2010). Moving image methodologies for more-than-human geographies. *Cultural Geographies*, 17, 237-258.
- Manning, E. (2016). *The Minor Gesture*. Durham, NC: Duke University Press.
- Manning, E., & Massumi, B. (2014). *Thought in the Act: Passages in the Ecology of Experience*. Minneapolis, MN: University of Minnesota Press, Minneapolis
- Massumi, B. (2014). *What Animals Teach Us About Politics*. Durham, NC: Duke University Press.
- McCormack, D. (2007). Molecular affects in human geographies. *Progress in Human Geography*, 39, 359-377.
- McCormack, D. (2008) Thinking-spaces for research-creation. *Inflexions Vol I* (May 2008).
- McCormack, D. (2013). *Refrains for Moving Bodies: Experience and Experiment in Affective Spaces*. Durham, NC: Duke University Press.
- McGeachan, C. (2019) Historical geography III: Hope persists. *Progress in Human Geography*, 43(2), 351–362.
- Mills, S. (2013). Cultural-historical geographies of the archive: fragments, objects and ghosts. *Geography Compass*, 7, 701–13.
- Murphie, A. (2008) Clone your technics: research creation, radical empiricism and the constraints of models. *Inflexions Vol I* (May 2008).

- Nast, H. (1994). Women in the Field: Critical Feminist Methodologies and Theoretical Perspectives. *The Professional Geographer*, 46(1), 54-66.
- Parr, H. (2007). Collaborative film-making as process, method and text in mental health research. *Cultural Geographies*, 14, 114-138.
- Paterson, M., & Glass, M. (2018). Seeing, feeling, and showing “bodies-in-place”: exploring reflexivity and the multisensory body through videography. *Social and Cultural Geography* online early (doi: 10.1080/14649365.2018.1433866).
- Richardson-Ngwenya, P. (2014) Performing a more-than-human material imagination during fieldwork: muddy boots, diarizing and putting vitalism on video. *Cultural Geographies*, 21, 293-299.
- Rose, G. (1997). Situating knowledges: positionality, reflexivities and other tactics. *Progress in Human Geography*, 21(3), 305-320.
- Ruddick, S. (2017). Rethinking the subject, reimagining worlds. *Dialogues in Human Geography* 7(2), 119-139.
- Todd, R., & Hynes, M. (2017). Encountering the animal: Temple Grandin, slaughterhouses and the possibilities of a differential ontology. *The Sociological Review*, 65(4), 729-744.
- Simpson, P. (2014). Falling on deaf ears: a postphenomenology of sonorous presence. *Progress in Human Geography*, 41, 256-275.
- Sundberg, J. (2014). Decolonizing posthumanist geographies. *Cultural Geographies*, 21, 33-47.
- Thrift, N. (2007). *Non-Representational Theory: Space, Politics, Affect*. London: Routledge.
- van Dooren, T. (2014) *Flight Ways: Life and Loss at the edge of Extinction*. Columbia UP, New York.
- Vannini, P. (2015). Non-representational ethnography: new ways of animating lifeworlds. *Cultural Geographies*, 22, 317-327.

Whatmore, S. (2006). Materialist returns: practising cultural geography in and for a more-than-human world. *Cultural Geographies*, 13, 600-609.

Wolch, J. and Emel, J. (1995) Bringing the animals back in, *Environment and Planning D: Society and Space* 13(6), 632-636.

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

Zylinska, J. (2017). *Nonhuman Photography*. Cambridge, MA: The MIT Press.

Writing

Abstract: This intervention poses a question about the practice of writing in contemporary geographical research, namely, in what ways might post-humanist thinking reconfigure geography's relationship with writing? I explore the idea that academic writing remains thoroughly entangled with the excessive force of nonhuman matters. My intervention is inspired by Manning and Massumi's (2014) call to approach writing as a process of research creation, one that cannot be reduced to the communication of information generated by other means. Post-humanist thinking thus requires not only that we situate writing in the world, but that we, as practitioners of human geography, approach our relationship with words as a post-human practice in its own right.

Keywords: writing, post-humanism, materiality, non-representational theory.

Too often, writing stands to the side, outside the action, as though the 'real' work happened elsewhere, as though what writing was equipped to do with 'real' practices was merely to describe them – or to proscribe for them, in judgement.

- E. Manning & B. Massumi (2014: ix)

How might post-humanist critiques reconfigure our relationship with writing, that is, between the happening of thinking and the doing of the written word? There is a sense in which the very act of posing this question introduces a welter of unfamiliar forces into writing's wording of thought. Language buckles and groans through the practice of its thinking, inflected by ideas whose dynamism it can only express: writing as word-strain. Through the wording we lure a second question into being: what constitutes the dynamism of a post-humanist idea, as expressed in the sensation of the writing's straining? In the workshop, our thoughts are tentatively

assembled through the febrile shuddering of concepts: ‘more-than-human’, ‘nonorganic life’, ‘human exceptionalism’, ‘anthropocentrism’, ‘assemblage’, ‘affect’, ‘materiality’, ‘immanence’ ... The question tenses language along new vectors through the singular wording of thought, probing the fragile consistencies of an emergent, provisional response.

Post-humanist thinking, I want to suggest, entails a refusal of the metaphysical privilege typically granted to human beings when conceptualised as knowing subjects. This raises significant problems when thinking about the practice of writing because it challenges our persistent tendency to index the movement of words and the mutations of meaning that this movement generates to the vanishing point of an individual subject. This is a tendency that, by situating thought within the hermetic interiority of a Cartesian *cogito*, invariably excludes writing from the process of thinking by rendering it in purely descriptive, representational terms. To the extent that we refuse this Cartesian model, our post-humanist experiments will need to situate writing in the tumult of material practices that precede the subject because they think ‘us’ into new becomings, generating “possibilities for making more of experience” (McCormack, 2013: 26). It is in this regard that the process of putting post-humanism into practice poses a peculiar problem for geographical writing, namely: how to think the world through the materiality of our words?

This is a difficult prospect, not least because the inertial mass of linguistic convention always makes its presence felt at the barely-conscious cusp of articulation. The trajectories of the written word oscillate between two poles. On the one hand, words and language have a functional purpose, representing the world as it appears to us in order that we might operate more efficiently within our biological, social and informational milieus. On the other hand, writing can also be used to think ‘beyond’ our world, abstracting thought from the organic tendencies and socially-validated habits of human perception. As the process philosopher Alfred North Whitehead (1978: 4) explains, writing attains its singular power of creativity in moments when it

manages to ‘stretch’ words beyond the limitations defined by their ordinary usage. This oscillation of writing between the functional and the speculative, the worldly and the cosmic, tells us something important about its relationship to post-humanist thinking, for the one practice that so often appears to trap us within the most human of worlds can also tune us in to the reverberation of nonhuman forces.

The workshop is a provisional territory, it provides shelter for the post-humanist potentialities of our writing practices by delaying the onset of questions that a successful research project will eventually need to address: a moment in which to breathe the strain. Within this moment, we find time to let our thinking dwell alongside fragments of social research that have sought to intensify writing within the context of post-humanist debates. We re-live the poignant ethnographic vignettes of Kathleen Stewart’s *Ordinary Affects*, composing a fractal scenography through a mode of writing that pulls the reader’s body “into a tangle of trajectories, connections and disjunctures” (2007: 5). We feel the nascent swell of materiality in Jane Bennett’s *Vibrant Matter*, a book that takes inspiration from literary figures including Thoreau, Kafka, and Whitman in learning “how to induce an attentiveness to things and their affects” (2010: xiv). We sense the gestural charge of dancing bodies in Erin Manning’s *Relationescapes*, which strives to express, through words, “how thinking through movement can alter the force of thought” (2009: 3). These examples speak of research practices that are thoroughly invested in the problematic materialities currently animating social and cultural life: collective atmospheres, affective forces, incipient movements. In each case, specific empirical concerns are addressed in and through an experiment *with* writing that strives to loosen language from its functional constraints.

Armed with this experimental palate, the workshop participants were sent out of the classroom for thirty minutes of fieldwork, where the brief was, quite simply, to choose a space and to write its sensation. Upon reconvening, the students were then asked to reflect upon the experience of writing space in this way, and, if they felt comfortable doing so, to share their writing with the

group. One aspect of the exercise that particularly interested the students was the sense in which the very practice of writing – and, in particular, the experimental ‘loosening’ of words – was capable of generating subtle registers of sensation without necessarily distinguishing between subject and object: thus, the students noted how the challenge of writing space in this way sensitised their bodies to that which, in sensation itself, exceeds subjective experience. Moreover, as some of the students observed, this practice raised the question of whether there might be intensities of matter that can *only* be captured and expressed through an experimental engagement with writing. Put simply, by approaching the very process of writing as an empirical practice in its own right, the students were able to see, feel and hear the world in ways that were not entirely ‘human’.

Let’s not mince our words here: experimenting with writing in this way is difficult, particularly when operating within a research context that would so often prefer “to get things done immediately with the language, economy of communication, and knowledge we have” (Dewsbury, 2010: 148). The difficulties are often acute because we are so used to reducing language to a vehicle for the communication of information. The lure of post-humanist research methods is not, therefore, to simply escape the written word through practices that we deem, albeit mistakenly, to be somehow more concrete or embodied (Ahmed, 2006). On the contrary, the ontological challenges raised by post-humanist thinking also demand a sensitivity and spirit of openness towards those writing practices that, through their stretchings and strainings, refuse to operate within a universal system of meaning.

The significance of the ‘post-human’ here lies precisely in the need to push the practice of writing beyond the phenomenological thresholds constitutive of our subjective experience (see Roberts, 2018). Thus, while human geographers have certainly reflected upon the practicalities of writing as “a research method and a mode of making geographical knowledge” (DeLyser and Hawkins, 2014), recent developments in post-humanist thought pose difficult questions about

the role played by writing when the figure of the knowing subject is no longer assumed (see Ash and Simpson, 2016). During the workshop, we experiment with what Ash and Simpson refer to as a post-phenomenological writing style, which, rather than reflecting upon reality, is about “creating languages and vocabularies that establish connections between previously unrelated things and, through this connection, generates new ways of thinking, seeing, and feeling such things” (2018: 7). Making our practice post-human might require, therefore, not only that we reflect upon writing in its iterative constitution of our research (DeLyster, 2010), but that we also strive to free writing from the heavy burden of narrating or ‘storying’ experience (Lorimer and Parr, 2014). Perhaps then might we begin to give body to perspectives on/of the social that we cannot embody and that, for this reason, are not our own.

To sum up, what we produced in the workshop was a modest experiment with the material intensities of the written word, one in which writing’s capacity to sensitize thought to perspectives beyond the human was temporarily amplified. To experiment with our writing practice is thus to think with/through words: a wording of thought, energized by the incipience of a research problem on the cusp of its emergence. Whilst the material dynamism of a research problem will escape any practice, it is by capturing the deformations weathered by the practice itself that thought finds itself, paraphrasing Gilles Deleuze (2004: 176), forced to think. Approaching writing in this way – that is, as a practice capable of generating nonhuman perspectives – allows us to bypass deeply-held concerns regarding the need to write ‘about’ the world in ways that can only be validated in representational terms (Dewsbury, 2014). Writing – when it really *writes* – captures its content through an intensification that renders it expressive (Johnson, 2019). The question that post-humanist thinking leaves us with, as geographers, is not simply a matter of ‘writing about’ the emergent spatialities of our nonhuman environments, at least not directly. Rather, the question posed by the possibility of a post-humanist writing practice is: how might geographical research intensify writing in response to the encounters that currently force it to think?

References

- Ahmed, S. (2006). *Queer Phenomenology: Orientations, Objects, Others*. Durham, NC: Duke University Press.
- Ash, J., & Simpson, P. (2018). Postphenomenology and method: styles for thinking the (non)human. *GeoHumanities*, DOI: 10.1080/2373566X.2018.1543553.
- DeLyser, D. (2010). Writing qualitative geography. In D. DeLyser, S. Herbert, S. Aitken, M. Crang and L. McDowell (Eds.), *The SAGE Handbook of Qualitative Geography* (pp. 341-358). London: SAGE.
- DeLyser, D., & Hawkins, H. (2014). Introduction: writing creatively – process, practice, and product *cultural geographies*, 21, 131-134.
- Bennett, J. (2010). *Vibrant Matter: A Political Ecology of Things*. Durham, NC: Duke University Press.
- Deleuze, G. (2004). *Difference and Repetition*. London: Continuum.
- Dewsbury, J.D. (2010). Language and the event: The unthought of appearing worlds. In Anderson, B., & Harrison, P. (Eds.), *Taking-Place: Non-representational Theories and Geography* (pp. 147-160). Farnham: Ashgate.
- Dewsbury, J.D. (2014). Inscribing thoughts: the animation of an adventure. *Cultural geographies*, 21, 147-152.
- Johnson, F. (2019). The writing-machine as method; affect, Acker, and the traumatized subject. *GeoHumanities*, DOI: 10.1080/2373566X.2019.1586561
- Lorimer, H., & Parr, H. (2014). Excursions – telling stories and journeys. *Cultural geographies*, 21, 543-547.

Manning, E. (2009). *Relationescapes: Movement, Art, Philosophy*. Cambridge, MA: The MIT Press.

Manning, E., & Massumi, B. (2014). *Thought in the Act: Passages in the Ecology of Experience*.

Minneapolis, MN: University of Minnesota Press.

McCormack, D. (2013). *Refrains for Moving Bodies: Experience and Experiment in Affective Spaces*.

Durham, NC: Duke University Press.

Roberts, T. (2018). Resituating post-phenomenological geographies: Deleuze, relations and the

limits of objects. *Transactions of the Institute of British Geographers* (early view), doi:

10.1111/tran.12280.

Stewart, K. (2007). *Ordinary Affects*. Durham, NC: Duke University Press.

Whitehead, A.N. (1978). *Process and Reality: An Essay in Cosmology*. New York, NY: The Free

Press.

Listening

Abstract: Listening as a methodology is about an enhanced receptivity to what is taking place in a research encounter. Reflecting on a process of workshopping audio methodologies, this piece highlights the diverse set of pre-individual and nonhuman agencies that occupy fields of listening, indifferent to, and often against, the predefined intentions of the researcher. In directing us to the field in these ways, the intervention in listening makes apparent that post-humanist methodologies are not only about finding new ways of communicating, documenting, or representing research environments, but rather about engendering new ways of relating to them.

Keywords: post-humanist theory; listening; sonic methods; field-recording; receptivity

A journey from Seminar Room 1 to Brandon Hill and back again recorded on five separate devices. A door closing, the sound of footsteps becomes softer against a new surface, a whistling, background hum becomes more intense. Car engines, pedestrian crossings beeping, bike bells and crowds of people fighting for space on the audio tracks. As footsteps continue this cacophonous soundscape eases and an emptier noise in the relative silence of a new location remains. Bird calls are layered over the top, a burst of music interrupts the background, wind creates distortion, and a muffled clap rings in time with footsteps. A conversation begins, the volume of two voices shifts sporadically alongside heavier breathing and the click of a dry mouth as it opens before speaking.

To practise post-humanism, as it is understood in this set of interventions, is a task of exploring the potential of holding-off the subject as the I or the ego, in order to engage an experiential mode of subjectivity. This might mean to follow a vitalist philosophy, which acts upon sensation as opposed to the intellect to avoid further endorsing, as Colebrook suggests, “man’s tendency to reify himself” (2014: 15). Encountering sound through a post-humanist lens, then, would

require us to take seriously the sometimes fleeting or unheard resonances of a soundscape that operate in an experiential field. That is, to explore and intensify sound beyond the already audible in 'my' field of listening.

Listening emerges as a key pedagogical and methodological tool within geography through the turn to sonic and audio methodologies as a means of disrupting the centrality of the visual image within the discipline (Duffy et al 2016; Gallagher and Prior, 2014; Kanngieser, 2015), creating space (Butler, 2006; Revill, 2016), and provoking sensory habits (Gallagher et al, 2017). Yet we have, of course, always been listening in research, whether that be in the interview, during ethnographies, at the cinema, even. A key difference has emerged amidst geography's continued fervour for the affective and more-than-human, where listening, as Gallagher, Kanngieser and Prior recognise, might be said to "enlarge what we understand by human subjectivity and also make space for other kinds of audio receptivity" (2017: 631). What I want to emphasise here, is how this human and nonhuman audio receptivity unsettles the process of extracting meaning from the research subject, directing us instead to what is taking place in the field, however unexpected that may be. This emphasis avoids a common distinction between listening and hearing, where the former represents a process of deciphering and the latter a more physiological one. Listening as deciphering privileges the interpretations of a passive sonic object by a phenomenological subject, and overlooks what Roland Barthes (1985: 259) describes as "the very dispersion, the *shimmering* of signifiers, ceaselessly restored to a listening which ceaselessly produces new ones from them without ever arresting their meaning".

This is a level of listening inclined towards by Paul Simpson, who draws on Jean-Luc Nancy to "decentre the role of interpretation in recent academic accounts of listening and in doing so approach an understanding of listening that is not predicated on the pursuit of meaning or the act of interpretation" (2009: 2558). The potential of the receptive state of listening arises here in the way it exposes expressions of sound (where sound is felt in vibration as much as it is heard

and understood) beyond the meanings we subsequently read into a soundscape. In Nancy (2007: 6) this is posited as a process of “straining toward”, which is not altogether passive listening, but implies that signification is not immediately accessible. Going further still, we might follow Felix Guattari’s (2015: 49) conceptualisation of sound as “trans-semiotic”, which means that it cuts across direct denotational or semantic understanding, and whereby listening needn’t return the listener to a process of meaning-making but is about immersion in a sonic environment.

This decentred, receptive state is exemplified in this intervention with reference to a practice of listening through audio recording devices, where the listener cannot be rendered simply as human and what is listened to is radically transformed in a way that unhinges the process of interpretation in listening. This practice was a core component of a postgraduate workshop on ‘Sounding’, which explored how techniques in field-recording invite us to hear, sense, and document an environment differently.

The opening vignette is a description of some audio files taken during the workshop, and attempt to articulate a sound recording itself as well as the altered mode of attention enabled when monitoring the soundscape through headphones attached to the recording devices. Listening in this way intensifies certain aspects of our hearing according to the angle the microphone takes. Individual noises that compose a broader soundscape become focused so that noises that might go unheard - footsteps, breathing or a clicking mouth - appear much louder, shifting how we in turn understand and relate to the space. Listening here cannot be reduced to meaning making but acts as a “spectrum of different kinds of responsiveness that includes but also goes beyond *active* human audition” (Gallagher, Prior and Kanngieser, 2017: 622, emphasis added). The implication of listening through the technical object is not only a transformation of the sonic event, where a change in the direction of the microphones and our own proximity to a site of emission alters the soundscape with more precision than a human ear. Moreover, and by effect of this change, the practice highlights the diverse set of nonhuman agencies that occupy

fields of listening – both in situ and in playback – not as passive sonic objects but as vital matters, indifferent to or even against a process of deciphering by the listener.

Although set-up as training in recording where part of the practice involved ‘capturing’ various sounds into an audio file format and implies a degree of mastery – much like the reading of listening as an act of deciphering - in practice the workshop was much less certain than an image of mastery implies. Rather than orchestrating a site of analysis we were responding to a soundscape through the altered state of listening enabled by the field recording equipment. Loose directions as well as instructions for the equipment were given in advance, but our movements were driven by an attempt to amplify certain sounds and attenuate others, thus we were not only bystanders producing a frame on the field but were actively engaged by it. Thus, the listener in the field was not an autonomous being extracting sense, but a “body always in constellation with the environmentality of which it is part” (Manning, 2013: 19), thereby being produced by it. This is a valuable starting point for practising post-humanism because it refuses the privileged position of an autonomous, intentional subject entering the field to experiment with the possibility that subjectivity is nothing other than a temporary result of the diverse relations taking place within it.

Thus a post-humanist logic was engaged in the workshop as an imperative to recognise the limitations of perception so to explore how something like a subject as we might perceive it is produced as such. This post-humanism raises questions about how to research certain qualities of life that are not easily deciphered by representational frames. Listening in the workshop was not done by ‘experts’ or in controlled environments, and thus the resulting process was aleatory: it was not entirely random (a clear task and tools had been set-up) but the process and the results depended on a degree of indeterminacy. The value of such indeterminacy is that it is sentient to the nonhuman agencies that shape a situation but which may evade comprehension.

Listening in the field is thus not entirely volitional because there is always unintended interruption which punctuates a soundscape or a field recording - an excess of wind; of traffic; of mobile interference. The aim to record sounds on a walk to Brandon Hill brings to light the tension between the intentional field of a subject and the multiplicity of an event as it unfolds - the tracks are discordant and distorted, many are muted or simply of nothing in particular, and some are cut short or abruptly begin. This element of chaos need not imply a lack of rigour if we reinterpret our expectations for representation so that the researcher is not the master of an event. This is a question of asking, as Manning does, how can we “give way to understand research acts differently, in order to account for the involuntary as well as other agencies?” (2016: 16). The approach taken during the workshop was not about how to develop new ways of recording and representing our environments, nor was it about how to listen ‘better’. Instead, it was about relating to an environment in a way that gives affordance to the unpredictability of a soundscape to which we cannot necessarily attribute sense or meaning.

The implication of embracing post-humanism for research is not about replacing one way of working with another - sounds over images for instance - as if we could find a new set of impersonal methods. Rather, the implication is to accept that all modes of research operate in uncertain ways corresponding to the ambiguity of the fields we place them in. This is a move that takes us beyond a logic of commensurability and replicability and “gives the feeling that there is always an opening to experiment, to try and see”, which “brings a sense of potential to the situation” (Massumi, 2015: 2). In approaching listening in these uncertain terms, the potential is in the receptive state enabled, through which we are reminded how sound operates in the production of subjectivity, thus drawing into question the idea of an a priori research subject entering the field and revealing how attempts at mastery in research can obfuscate the (audible) uncertainties and excesses of fieldwork. In directing us to the field in these ways, listening makes apparent that post-humanist methodologies are not only about finding new ways of

communicating, documenting, or representing research environments, but rather about engendering new ways of relating to them.

References

- Barthes, R. (1985). Listening. In R. Barthes *The responsibilities of forms: critical essays on music, art and representation* (pp. 245-260). Oxford: Blackwell.
- Butler, T. (2006). A walk of art: the potential of the sound walk as practice in cultural geography. *Social and Cultural Geography*, 7, 889-908.
- Colebrook, C. (2014). *Death of the posthuman: essays on extinction, vol. 1*. Michigan, MI: Open Humanities Press.
- Duffy, M., Waitt, G., Harada, T. (2016) Making sense of sound: Visceral sonic mapping as a research tool. *Emotion, Space and Society*, 20, 49-57
- Gallagher, M., & Prior, J. (2014). Sonic geographies: exploring phonographic methods. *Progress in Human Geography*, 38, 267-284.
- Gallagher, M., Kanngieser, A., & Prior, J. (2017). Listening Geographies: landscape, affect and geotechnologies. *Progress in Human Geography*, 41, 618-637.
- Gallagher, M., Prior, J., Needham, M., Holmes, R. Listening differently: A pedagogy for expanded listening. *British Educational Research Journal*, 43: 1246-1265
- Guattari, F. (2015). *Machinic Eros: Writings on Japan*. Minneapolis, MN: Univocal.
- Kanngieser, A. (2015) Geopolitics and the Anthropocene: Five propositions for sound. *Geohumanities*, 1, 80-85
- Manning, E. (2013). *Always More Than One: Individuation's Dance*. Durham, NC: Duke University.
- Manning, E. (2016). *The Minor Gesture*. Durham, NC: Duke University Press.

Massumi, B. (2015). *The politics of affect*. Cambridge: Polity.

Nancy, J-L. (2007). *Listening*. New York, NY: Fordham University Press.

Revoll, G. (2016) How is space made in sound? Spatial mediation, critical phenomenology and the political agency of sound. *Progress in Human Geography*, 40, 240-256

Simpson, P. (2009). Failing on Deaf Ears?: A Postphenomenology of Sonorous Presence. *Environment and Planning A*, 41, 2556-2575.

Archiving

Abstract: What do animals teach us about historiography? This intervention explores this provocation by restaging a methods workshop that sought to radically rethink the archive as animal and archiving as an iteration of animal play and politics (Massumi, 2014). To do so it recounts what happened when a group of human geography Masters students, armed only with a few key readings and some gloves, were introduced to a collection of feathered remains. With no interpretive materials to accompany these remains, the students were prompted to respond to their immediacy and materiality and thus place them at the heart of archival enquiry.

Keywords: Historiography, animal, archive, feather trade, post-humanism.

Workshopping transspecies histories

A black bird, wing and plume are stored within a box marked 'FEATHERS'. On careful removal and close inspection, it becomes clear from the responses they elicit that they are fashioned creatures that would have once adorned hats. For example, the black bird "fascinator" is described as "the preserved head, wing and display plumes" of a bird with "iridescent throat" plumage. Meanwhile the black wing lacks "original bone-structure" but the feathers are "glued in shape" and attached to its underside is an aged-brown label stating: "Paris: NO. 8062". And the "voluminous" black plume is "probably ostrich" in origin yet shows subtle evidence of manufacture: tiny knots act as "feather extensions" to every individual barbule. Although these avian-accessories clearly archive their fashioning by human hands, Steve Baker directs us that if "tattiness, imperfection and botched form count for anything, it is that they render the animal abrasively visible" (2000: 62). These botched-birds therefore also actively archive their prior existence as living creatures, prompting the question: are they animal or artefact? However, for a group of geographers workshopping what these botched-birds might teach us about transspecies

histories, Massumi (2014) warns that the logics of classification and categorisation can only lead to dead-ends. Rather it is our aim to enact their “mutual inclusion”, which Massumi says “knows nothing of exclusive oppositions” (2014: 46), into not just the workshop but historical understanding and practice.

Historical geographers are productively bringing animals into their analyses (Garlick, 2015; Pearson, 2016; Forsyth, 2017; Lorimer 2019). Yet they must also overcome perceived archival absences and inarticulacies. For example, as dead and animal the botched-birds might be considered doubly mute. However, Massumi (2014: 21) disagrees with the humanist presumption that animals cannot “comment on” things because they do not talk. Drawing on Gregory Bateson’s observations of wolf cubs he argues that animals in play are simultaneously reflexive and expressive. Thus, although dead and dismembered, we play with the botched-birds’ reflexivity and expressivity in the workshop. They are reflexive in that they archive their lives as living birds. But working out which requires ornithological study. We recognise black bird as a dyed bird-of-paradise species, possibly Raggiana, while black wing is fashioned out of farmyard feathers, perhaps duck, and the black plume’s distinctive morphology gives it away as ostrich. Rather than limit our enquiry to “species-identifying” (Philo and Wilbert 2000: 6), we refocus on their reflexivity. Given the botched birds archive their *prior* livingness they also archive the event of death, an act of killing most likely perpetrated by human hands. And on closer inspection they reveal workings of human design: a glass eye and millinery fastening on black bird, traces of glue and a provenance label on black wing, and knotted feather extensions on black plume. All are dyed-black.

Still, the botched-birds’ animal expressivity ensures that they are more than an object enframed by human designs. Therefore, while much is given through their reflexivity, what is clear is that the subject/object is not. The botched-bird’s excessive sensual and semiotic effects ensure that

they resist classificatory clarity and embody aesthetic and ontological ambiguity. This excess links to what Massumi (2014: 32) calls the animal ability to yield an aesthetic surplus, understood as “the gestured expression of the as-yet inexpressible”, through the expressivity of play. And just as in the wolf cub’s ludic gesture – “this is a nip, not a bite” - “two logics are gathered together in one metacommunication”, the botched-birds’ – “this is and is not a bird” – also activates such a paradox. However, where animals in play affirm paradox by “charging the situation with possibilities that surpass it”, humans are “agitated by it”, illustrated by our initial inability to pin the botched-birds down (7).

Yet rather than agitate over categorisation and meaning, the botched birds’ charge the situation with possibilities to surpass it. For just as the logic of play does not observe “the sanctity of the separation of categories, nor respect the rigid segregation of arenas of activity” (6), nor do the botched-birds. They do not observe the sanctity of the separation between animal and artefact, nor, indeed, do they respect the segregation between the arenas of natural and human history. Moreover, by placing them at the heart of our enquiry they demand an exploration of archiving not as a human impulse but as an iteration of animal play and politics.

Archiving as animal play?

Hal Foster (2004) has already articulated archiving as a mode of creative practice and the archive as a site of creation. However, his depiction of “an archival impulse” privileges the “play” of the archivist and thus depends on anthropocentric and individuated understandings of creativity (5). Following Massumi, it is more accurate to consider play to be animal in origin and to view human creativity on “the continuum of animal life” (2014: 3). Subsequently, rather than creativity being a capacity only the human individual possesses, it is “closer to a set of relations or forces in which beings [of all kinds] find themselves” (Calarco, 2015: 4). Geographers are increasingly drawing on and out the creative forces and relations enacted by encounters with archival materials (Bide 2017; Patchett 2017, Mann 2018). By privileging the play of the botched-birds in

the workshop they push us to meet them in the “included middle”, a “zone of indiscernibility” where we must relinquish our human sovereignty and exceptionalism and reconnect with our own animality (Massumi, 2014: 6). And it is through this sympathetic realignment that we begin to *feel* the ways in which we are moved by the botched-birds and how they can be mutually included into the unique event of the workshop.

Feather-light and animate to the gloved-touch, the botched-birds retain an animal expressivity that mobilizes our affections. However, the clear marks of human intervention also indicate that this vivacity was historically to their detriment. Although this suggests the botched-birds as witnesses to the mass avicides of the feather trade (1860-1920), as they come with no accompanying documentation additional evidence is required to enable fuller appreciation of such marks. Introducing an interpretative framework at this point might be considered a normalising gesture, however, as Massumi (2014: 18) views play as an attempt to invent “the new”. Yet it is important to acknowledge that even these curated materials - including natural histories, customs export returns, scientific papers, fashion catalogues, and wild-bird protection campaign materials - were produced in the collaborative company of the hundreds of millions of birds caught-up in the feather trade and that our creative interplay with them and the botched-birds in this context has the potential to generate new relations and insights.[i] As Kevin Hetherington (2001: 26) argues, archival play ‘has indirect ways of telling us stories... about power, agency, and history’ that can be missed through conventional forms of historical enquiry.

With black bird we are transported to the rainforests of Papua New Guinea where we learn about the seductive appeal of birds-of-paradise, how they have for millennia been commodities, ornaments and gifts, and the key role they played, via their entanglement with Alfred Russel Wallace, in the theory of sexual selection, which articulated that the birds’ sought-after plumes evolved according to their own aesthetics. With black wing we learn the arts and crafts of the Parisian plumassier, the staggering scale and global reach of the feather trade, and the female-led

campaigns against “Murderous Millinery”, which led to the first wild bird protection laws and forced plumassiers to work wonders with farmyard feathers. With black plume we are confronted with the colonial violence of South African ostrich farms, the hazardous working conditions of plumage sweatshops in London and New York, and the “willowing” work carried out by tenement children that produced the tiny knots for the “plumes that pay”.

Emerging from this mode of archival play, although still feather-light to the touch, the botched-birds are now weighed down by both the slow violence of colonialism and the corporeal violence the Capitalocene (Haraway, 2016). This is because the “lived importance” of the botched-birds – their telling of animal aesthetics, mass avicides, eco-feminist activism and feather-work and workers - actually “corresponds to the *ethical*: the anchoring of incorporated experience in the imperatives expressed in the already given” (Massumi, 2014: 38). However, if we are to commit to archiving as an iteration of animal play and politics, Massumi argues (2014: 74) we must, “leverage creativity... even out of the most denunciation-worthy situations”. The surviving vitality of the botched-birds offers such leverage, as it enables them to resist being completely pinned-down by “the already given” and even gestures towards future ways of realigning human-avian relations along more sympathetic lines of flight: “how are the botched-birds Merle?”.

We arrived at this sense of care and custodianship in the workshop not simply through the intellectual exercise of relinquishing human exceptionalism but also by recognising our shared vulnerabilities as animals: the wearing of gloves being essential to protect not just the botched-bird bodies from further damage but to also protect our own bodies from traces of arsenic. And it is through this movement beyond the entrenched ontological divide of humans and animals in historical understanding *and* practice that we might better safeguard the shared vulnerabilities of humans and birds in the Anthropocene at large (van Dooren, 2014). For it was only through the botched-birds' mutual inclusion at not just at an intellectual level but also at a visceral and affective level in the workshop that we simultaneously came to feel and care for the ways in

which our histories - past, present and yet-to-be - *coincide* with avian ones. This is because, to echo and extend Dipesh Chakrabarty (2009: 220), the animal-play of these avian-archives contests “in quite fundamental ways the very idea of [human exceptionalism], historical understanding” and archival practice.

References

Baker, S. (2000) *The Postmodern Animal*. Reaktion Books, London.

Bide, B. (2017) Getting close to clothes: using material objects to rethink the creative geographies of post-war London fashion. *Area* Online first: doi:10.1111/area.12407

Chakrabarty, D. (2009) The Climate of History: Four Theses. *Critical Inquiry* 35, Winter, 197-222.

Calarco, M. (2015) Animal Studies. *The Year's Work in Critical and Cultural Theory*, 1-20.

Foster, H. (2004) An archival impulse. *October*, 110, 3–22.

Forsyth, I. (2017) A bear's biography: Hybrid warfare and the more-than-human battlespace. *Environment and Planning D: Society and Space*, 35(3), 495–512.

Garlick, B. (2015) Not all dogs go to heaven, some go to Battersea: sharing suffering and the 'Brown Dog affair'. *Social & Cultural Geography*, 16(7), 798-820.

Haraway, D. (2016) *Staying with the Trouble: Making Kin in the Chthulucene*. Duke UP, Durham.

Hetherington, K. (2001) Phantasmagoria/Phantasmagora: Materialities, Spatialities and Ghosts. *Space and Culture*, 11/12, 24-41.

Lorimer, H. (2019) Dear departed: Writing the lifeworlds of place. *Transactions of the Institute of British Geographers*, <https://doi.org/10.1111/tran.12278>. Advance online publication.

Mann, J. (2018) Knitting the archive: Shetland lace and ecologies of skilled practice *Cultural Geographies*, 25(1), 91-106.

Massumi, M. (2014) *What Animals teach us About Politics*. Duke UP, Durham.

Patchett, M. (2017) Taxidermy workshops: differently figuring the working of bodies and bodies at work in the past. *Transactions of the Institute of British Geographers*, 42(3), 390-404.

Pearson, C. (2016) Canines and contraband: dogs, nonhuman agency and the making of the Franco-Belgian border during the French Third Republic. *Journal of Historical Geography*, 54, 50-62.

Philo, C., and Wilbert, C. (2000) *Animal Spaces, Beastly Places: New Geographies of Human-Animal Relations*. Routledge, London.

van Dooren, T. (2014) *Flight Ways: Life and Loss at the edge of Extinction*. Columbia UP, New York.

Notes

[i] The ludic gesture of this paper is the author's suspending of their curatorial knowledge of the botched-birds and the history of the plumage trade to write the encounter with them as a new. Just as the botched-birds were not presented with any accompanying documentation on that encounter, nor was any attempt made to normalise the botched-birds in advance of their deployment in the actual workshop. Apart from the workshop's three key general readings (Baker, 2000; Chakrabarty, 2009; Massumi, 2014), they were offered no specific introduction or interpretive information, which might be the predictable gesture in an archival methods workshop.

Imaging

Abstract: This piece intervenes by developing an understanding of the nonhuman power of images. It does so by attending to a different style of thought for approaching images and imaging practices: that is, as something composed of and open to a much wider ‘ecology of experience’ (Manning and Massumi, 2014). Engaging with a recent geographical concern with the affective power of images, it argues for the need to affirm in imaging a specific intensive power to defamiliarize human-centred frames of thought used to think about the active powers of images.

Keywords: affect; images; post-humanist theory; visual methods; nonhuman intensities

In the oft-cited introduction to *Matter & Memory*, Henri Bergson (1911: xii) defines an ‘image’ as that strange existence halfway *between* a “thing” and a “representation”. All images, according to Bergson, exist as a perceptive experience for a given subject, yet *also* have an existence that exceeds the subject’s representation without ever becoming equivalent to an objective ‘thing’. In this piece I intervene by engaging with this understanding of an image for the narrow task of thinking about their affective powers (see Latham and McCormack, 2009; Colebrook, 2015; Dekeyser, 2017; Dewsbury, 2015). To do so, I begin with the supposition that there are two ways of engaging with images and imaging practices after Bergson. On the one hand, there is an *embodied* approach that considers the way images affect the production of new forms of perception and human experience. Here, the embodied subject is often understood as a necessary ‘ground’ to apprehend the relationship between images and affect (Hansen, 2004). On the other hand, though, there is another approach – *post-humanist* – where images and imaging practices are understood in terms of intensity and nonhuman powers of affect. In what follows I consider this latter approach insofar as it instructs a style of thought for contemplating and

experimenting with imaging practices. In doing so, imaging is understood not just in relation to embodied human perception but, rather, as something composed of and open to a much wider ecology of experience (Manning and Massumi, 2014).

In part, the appeal of approaching imaging practices through embodied experience is the promise that this engagement might reveal how human thought and perception is variously transformed by images. On one level, imaging practices like photography would be a quintessentially human process involving, amongst other things, a specific relationship between the technical apparatus of a camera and a human subject whose practice of observation is the outcome of a “particular cultural economy of value and exchange” (Crary, 1992: 13). Recognising that the practice of imaging is not merely ‘beyond the human’ but something today understood through a particular set material and discursive remains (Parikka, 2019), the challenge of workshopping a post-humanist approach is to respond to a tendency to restrict social scientific engagements with images around the conventions of a human subject’s ready-made perceptive experience. And whilst there is a rich body of geographic research into the active powers of images (Rose, 2008) in producing of certain ‘spatialities of vision’ (Doel & Clarke, 2007; Ash, 2015) – such as through mapping (Gerlach, 2015), drawing (Brice, 2018), and video methods (Laurier, 2016) – nonetheless, there remains a tendency within human geography’s practice of visual methods to privilege the figure of the embodied human subject. The challenge, then, is to consider a different way of engaging with imaging practices that would counter the tendency to privilege the givenness of the embodied subject’s evaluative and perceptive frames: what might it mean to approach images in this way?

Gilbert Simondon, a philosopher who was well aware of Bergson’s writing on affect and images, seems to countenance something of this challenge in his primary thesis on ‘individuation’, wherein he writes that:

“...a very contrasted photograph, that is to say with a very violent light and shade effect, or an out of focus one can have more value and intensity than the same photograph in a perfect graduation...” (Simondon, 2005: 242 in Carrozzini, 2015: 46).

For Simondon, to evaluate photographic images merely in terms of certain ready-made visual conventions (focus, contrast, shading etc.) would be to lose sight of their intensive value. Besides a subject’s evaluation of a contrasted or out of focus photograph, there is an intensive value – or what Simondon (2013) refers to as an ‘informational condition’ – that is expressed openly as an expressive event of individuation. Thus: “[i]t is at the level of different gradients – bright, colourful, dark, olfactory, thermal – that information takes on an intensive...meaning” (Simondon 2013: 238), where intensity is not an embodied experience but is “pre-individual” insofar as it is involved in modifying the production of perceptive experience at its genesis (Keating, 2019).

Developing a similar line of thought about the intensive and affective value of images, Joanna Zylińska (2016) has also engaged with this generative power of images through what she terms ‘nonhuman photography’. Nonhuman photography marks a departure for the “humanist paradigm in photography” (Zylińska, 2016: 210) in its attention to the way photography makes palpable an affective potential to disrupt the sensibilities of the human subject. Illustrating this, Zylińska refers to amateur photography, wherein “supposed human-centric decisions are often affective reactions to events quickly unfolding in front of the photographer’s eyes” (Zylińska, 2016: 208).

Experimenting with this intensive and nonhuman approach to imaging in the workshops involved thinking about instances where images produce surprising forms of perceptive experience. The aim: to foreground the ways images might be said to initialise a “strategy of defamiliarization or critical distance from the dominant vision of the subject” (Braidotti, 2013: 88). One example to emerge from these discussions was the ‘blue gold dress phenomenon’, or

'*The Dress*'¹ (Bleasdale, 2015): a digital photo that was first published online on the 26 February 2015 that depicts the dress Cecilia Bleasdale planned to wear to her daughter's wedding later that year. Other than this, though, the image depicts the colours black and blue *and/or* white and gold. *The Dress* first appeared on the multimedia website Tumblr and, to the surprise of the author, created 10 million Twitter mentions in the week after its publication summoning international discussion. Much of this discussion focused on the question of '*what colour The Dress really is*': the majority of observers see *The Dress* as blue and black, with a third perceiving white and gold and a tenth "blue, black, white and gold" (Lafer-Sousa et al., 2015). *The Dress*, it is argued, 'really' is blue and black (*ibid.*) but a bleaching effect associated with the lighting in the image disrupts this reality for certain observers, allowing other stable colour forms to be perceived.

However, during the workshop *The Dress* became differently notable for the way that it foregrounds the potential for a photographic image to vastly exceed the anticipation and intentions of the photographer (Zylinska, 2016). As a photograph, *The Dress* opens up a number questions around the variability of a subject's perceptive experience of images, and about how differing shades of light and colour might modify this variability in surprising ways. In at least one sense, then, *The Dress* would demonstrate the need to understand the affective power of images as embodied: the varying appearances of colour invites attention to the surprising contingency of the human body in shaping the production of perceptive experience.

And yet, the problem with understanding the relationship between photographic images and affect as grounded in the figure of the embodied subject is the tendency to think that our habituated range of responses to an image also serves as an adequate barometer for understanding their intensive potentiality. As Colebrook (2014: 227) argues, images, but also

¹ See: <https://web.archive.org/web/20150227014959/http://swiked.tumblr.com/post/112073818575/guys-please-help-me-is-this-dress-white-and>

intensities of light and colour, “harbour their own tendencies, and...enter into contingent relations, generating distinct rhythms and lines of becoming”. Against attempts to redeem the embodied subject as a ground to understand the relationship between images and affects (Hansen, 2004), Colebrook insists instead on foregrounding the affective intensities of images beyond embodied meaning-making insofar they have an intensive value that surpasses a given subject’s evaluative and perceptive frames. After Bergson, images might be said to impart not just an embodied response but also the affective “quality of a possible sensation, feeling or idea” (Deleuze, 2013: 109). Photographs are not just representations or things because they also express affects that have a “certain ‘stand alone’ quality” (Colebrook, 2015: 8). More than subjective experience, these ‘stand alone’ qualities of images allow for relations between intensities of light, colour and shade that produce affects that concern the potential for new kinds of perceptive experience. In the case of *The Dress*, we might recognise the way that this photograph is involved in the production of *a new visibility ‘colour’* via the unconventional sense of the variability of what a colour ‘really’ is – *a sense of colour as affect*. This visibility is not gauged as an embodied experience; rather than existing only in relation to an observing subject, this affective visibility of colour is at least as much to do with the energetic tendencies of a digital photograph as a moving and mediating body of luminescence that can defamiliarize a subject’s sense of what a colour is.

To acknowledge the affective and intensive qualities of images means also to accept that they are always more than our embodied response to them. This line of thought directs us towards the way that photographic images exhibit their own durable intensities that enter into relations often in excess of the perceptive capacity of the human subject. Imaging, as a post-humanist practice, would not presume that the task of critically and creatively engaging with images is divorced from nonhuman processes – those easily overlooked tendencies of light, matter, or colour – that might prefigure the perception of an image at its genesis. From this sharpened perspective, we might begin to consider the intensive qualities of *The Dress*; that is, to understand the affective

power of an image to disrupt the stable connection between a 'colour' and the perceptive syntheses, prompting a subject – however briefly – to contemplate the possibilities of *what else* an image might do.

References

- Ash, J. (2015). *The Interface Envelope: Gaming, Technology, Power*. London: Bloomsbury.
- Bergson, H. (1911). *Matter and Memory*. London: George Allen and Unwin.
- Bleasdale, C. (2015) The dress (viral phenomenon). *The Internet Archive*. Retrieved from:
<https://web.archive.org/web/20150227014959/http://swiked.tumblr.com/post/112073818575/guys-please-help-me-is-this-dress-white-and>
- Braidotti, R. (2013). *The Posthuman*. Cambridge: Polity Press.
- Brice, S. (2018). Situating skill: contemporary observational drawing as a spatial method in geographical research. *cultural geographies*, 25, 135-158.
- Carrozzini, G. (2015). How to Invent a Form: An Inquiry into Gilbert Simondon's Philosophy of Perception. In A. Sarti, F. Montanari, & F. Galofaro (Eds.), *Morphogenesis and Individuation* (pp. 33-48). Chicago, IL: Springer.
- Colebrook, C. (2014). *Death of the posthuman: essays on extinction, vol. 1*. Michigan, MI: Open Humanities Press.
- Colebrook, C. (2015). The Becoming-Photographic of Cinema. *Philosophy of Photography*, 6, 5-24.
- Crary, J. (1992). *Techniques of the observer: On vision and modernity in the nineteenth century*. Cambridge, MA: The MIT press.
- Dekeyser, T. (2017). The gaps of architectural life: the affective politics of Gordon Matta-Clark's Conical Intersect. *Transactions of the Institute of British Geographers*, 42, 179-191.

- Deleuze, G. (2013). *Cinema 1: The movement-image*. London: Bloomsbury Academic.
- Dewsbury, JD. (2015). Non-representational landscapes and the performative affective forces of habit: from 'Live' to 'Blank', *cultural geographies*, 22, 29-47.
- Doel, M. A., & Clarke, D. B. (2007). Afterimages. *Environment and Planning D: Society and Space*, 25(5), 890-910.
- Gerlach, J. (2015). Editing worlds: participatory mapping and a minor geopolitics. *Transactions of the Institute of British Geographers*, 40, 273-286.
- Hansen, M. (2004). *New Philosophy for New Media*. Cambridge, MA: The MIT press.
- Keating, T. (2019). Pre-individual affects: Gilbert Simondon and the individuation of relation. *cultural geographies*, 22, 211-226.
- Lafer-Sousa, R., Hermann, K., & Conway, B. (2015). Striking Individual Differences in Color Perception Uncovered by 'The Dress' Photograph. *Current Biology*, 25, R545-R546.
- Latham, A., & McCormack, D. (2009). Thinking with images in non-representational cities: vignettes from Berlin. *Area*, 41, 252-262.
- Laurier, E. (2016). YouTube: fragments of a video-tropic atlas. *Area* 48, 488-495.
- Manning, E., & Massumi, B. (2014). *Thought in the Act: Passages in the Ecology of Experience*. Minneapolis, MN: University of Minnesota Press.
- Parikka, J. (2019) Remain(s) Scattered. In I. Jucan, J. Parikka and R., Schneider (Eds.), *Remain*, MN: University of Minnesota Press.
- Rose, G. (2008). Using photographs as illustrations in human geography. *Journal of Geography in Higher Education*, 32(1), 151-160.

Simondon, G. (2013). *L'individuation à la lumière des notions de forme et d'information* (2nd edn.).

Grenoble : Jérôme Million.

Zylinska, J. (2016). The Creative Power of Nonhuman Photography. In K. Kuc, & J. Zylinska

(Eds.), *Photomediations: A Reader* (pp. 201-224). Michigan, MI: Open Humanites Press.

Sensing

Abstract: This intervention addresses contemporary interest in the development of multi-sensory methods and pushes against a lingering humanism in such work that continues to bind the event of ‘sensing’ to discrete and already-constituted subjects. It spotlights film as a generative site for a different thinking of sense outside the myopic perspective of human subjectivity. Through pedagogical encounters with the films of the Sensory Ethnography Lab, the piece explores how film might work differently in geographical research to express nonhuman forces and intensities that are a crucial part of our research ecologies, but which are so often obscured by our disciplinary habits of striving to uncover meanings and representations.

Keywords: Sense, film, encounter, affect, nonhuman perception, Sensory Ethnography Lab

This intervention addresses the growing interest within qualitative human geography around the sensate ecologies and affective materialities of ‘the body’ as a crucial site through which research is conducted (Crang, 2003; Ash, 2017). An important outcome of this ‘embodied’ turn has been the attempt to shift geography’s sensory palette beyond its traditional preoccupation with ‘the visual’ through creative engagements with ‘multi-sensory methodologies’ that stress the material plenitude of the body’s relations with the world (Paterson and Glass, 2018). However, in a recent review of methodological innovation and experimentation in the discipline, Dowling et al (2017:8) briefly highlights the pressing need for geographers to move beyond the (specifically Western and humanist) assumptions that underpin our “dominant conceptualisations of ‘the body’ and ‘the senses’”. In this piece, I specifically want to challenge the lingering humanism in recent ‘experimental’ and ‘creative’ geographies that continues to bind the event of sensing to the

lived experience of a discrete and already-individuated (human) subject. I argue that the real challenge of any post-humanist methodology worth its salt is not only about attending to previously neglected registers of our bodily sensorium, through research on sound, touch, smell, and so on. Instead, and taking my lead here from the radical reframing of the questions of sensing developed in the work of geographers like McCormack (2018) and Suchet-Pearson et al (2013), it is also about *dismantling the very humanist architecture upon which theories of 'sensing' continue to be built*.

In this piece I specifically highlight the capacity of filmic encounters to shine an interesting light on the more preindividual and nonhuman dimensions of the event of sensing. While geographical interest in film can be traced back to at least the 1950s in a series of articles in *The Geographical Magazine* on the pedagogical value of film in representing landscapes in fieldwork (Wright, 1956), it is only in the last decade or so that we have seen a more sustained engagement with the potential of film and other moving-image media for geographical research (Aitken and Dixon, 2006; Doel and Clarke, 2007 Sharp, 2018). In this recent work, film has emerged as a privileged site for expressing the material intensities of research encounters (e.g. Patchett, 2016; Laurier, 2014; Simpson, 2018). The popularity of film relates to its perceived reputation as the ultimate multisensory art, combining sound, talk, colour, movement, and haptic sensations in ways “that frequently move spectators to think and feel beyond the sensorial limits of sight and sound” (Totoro, 2002 in Lorimer, 2010: 240). A common refrain in geographical discussions of film has thus been to expound its value as an ethnographic tool for ‘capturing’ the *lived and embodied experience* of specific research practices and encounters (Jacobs, 2013; Garrett, 2011; Merchant, 2011). Here, the phenomenological privileging of the subject-world correlation remains centre-stage of the ‘filmic gaze’ (Rose, 2016). In contrast, the question posed in the context of the ‘practising post-humanism’ workshop was whether this is all that film and

moving-image methods can do in our research? What might film contribute to the post-humanist task of thinking sense outside the myopic perspective of human subjectivity, and to imagine what Claire Colebrook (2014: 23) describes as “a world without us”?

A thinker who was especially attentive to this nonhuman potential of filmic encounters was the philosopher Gilles Deleuze. In his two volumes on *Cinema* Deleuze (2005a, 2005b) developed a radically new theoretical and methodological approach to moving-images, one that circumvents traditional critical-representational approaches that reduce images to questions of signification and meaning. Deleuze’s focus was instead on the question of what moving-images *can do* in the world, and especially their material capacities to participate in new events of thinking by provoking affective shocks that disrupt our habits of thought and open new capacities for sensing difference (Lapworth, 2016). What interested Deleuze were the different techniques and processes developed in the cinema (from the splicing of space-times through montage, to the disjuncture of sound and image in post-war cinema) that enable it to push beyond the molar territories of human-centred perception by “abolishing subjectivity as a privileged image in the ‘aggregate of images’ that is the material universe” (Trifonova, 2004: 134). In the opening chapters of *Cinema I*, he specifically rallies against the phenomenological tendency in film theory to reduce cinematic encounters to the subject-object coordinates of “natural perception” and the “lived time” of human experience, instead highlighting how film can bear witness to the ‘unliveable’, nonhuman world of intensities, affects, and forces that make up the preindividual field of sense in which an experience comes to find itself (Deleuze, 2005a). This preindividual universe of sense is not somehow ‘beyond’ the world. It is instead, as O’Sullivan (2006: 50) writes, “our own world seen without the spectacles of habitual subjectivity”.

To explore this capacity of ethnographic film to open thought to the preindividual intensities and nonhuman durations composing research sites, the methodological workshop involved encounters with clips from the work of the Sensory Ethnography Lab (SEL), followed by reflective discussion that drew on texts about posthuman cinema and affective methods that students read in advance (see Colebrook, 2014; Lorimer, 2010; Rushton, 2009). Based at Harvard University, the SEL was set up was set up in 2007 to support experimental approaches to ethnographic filmmaking that are concerned, as the lab's director Lucien Castaing-Taylor puts it, "not to analyse, but to actively produce aesthetic experience [...] and to transcend what is often considered the particular province of the human and delve into nature". A common theme of SEL's various ethnographic films has been the ambition to "relativise the human [...] through the creation of a multiplicity of perspectives". This ontological renaturalisation of the human is given its most vivid expression in arguably their most experimental offering to date: Castaing Taylor and Verena Paravel's 2012 film *Leviathan*, which presents an intense sensorial portrait of the nonhuman assemblage of an industrial fishing trawler off the coast of New Bedford, Massachusetts. Conversations in the workshop drew out two key features that made encountering *Leviathan* such a disorienting experience. First, *a dis-orientation in relation to the genre of ethnographic filmmaking*. The film abides by barely any of the conventions of traditional ethnographic or documentary cinema. It has, for example, no identifiable protagonists, little by way of narrative, and hardly any discernible human dialogue. In contrast to other films about industrial fishing (e.g. *The End of the Line* [2009] and *The Cove* [2009] in which human subjects and their actions are placed front and centre – the film instead works directly through the intensive registers of affect and sensation to give viewers the disorienting sense of being among the multiple forces and materialities composing the nonhuman ecologies of the ocean.

Second, encounters with *Leviathan* also entail a *disorientation of the human*. A distinctive feature of the film is its near-constant refusal to provide a fixed or identifiable ‘human’ perspective to which we might tether our perception as viewers. Instead, what we find in *Leviathan* is an attempt to more fully tear perception away from any specific body to instead express what Deleuze (2005a: 83) terms an “immanent perception of the world”, which displaces the human as the stable foundation from which all other images must emerge. Crucially, the film’s acentered and asubjective aesthetic owes much to its innovative use of GoPro cameras (Thain, 2015). These small digital cameras have recently been the focus of methodological discussions within and beyond geography, with researchers highlighting their potential to generate evocative impressions of people’s embodied relationships to practice and movement (Vannini and Stewart, 2017). In *Leviathan*, Paravel and Castaing-Taylor instead experiment with the perceptual affordances of these technologies for expressing a nonhuman and disembodied vision of the world. Many of the shots in *Leviathan* were captured by attaching the GoPro cameras to long metal poles, which enables the film to render spaces usually inaccessible to human perception visible (such as below the surface of the water, or at the bottom of a gutting tank). The ‘nonhuman eye’ of the film is therefore not an immobile centre at a transcendent remove from the world, but instead emerges immanently as a mode of perception immersed in and affected by the world’s material forces (from the jerky camera movements caused by the relentless storm, to the splashes of water and fish viscera that frequently blur the screen). When human bodies do pass into frame, they are seen through this translucent material haze that renders their form unfamiliar to our conventional (human) modes of seeing and sensing. Another feature, contributing to the film’s acentered aesthetics, is its dense and expressive soundtrack composed by sound artist Ernst Karel. The film makes use of the low-quality, muffled recordings of the GoPro cameras to disrupt what theorist Michel Chion (1994) terms ‘*vococentrism*’: the traditional approach to sound design that privileges and prioritises the human voice over nonhuman and ambient noise. Instead, the film’s mixing of multi-directional sounds with the incessant buzzing

of machinery creates a sonic ecology composed of sounds that retain a sense of their virtuality in no longer being assignable to any one identifiable body, reaching a zone of indiscernibility between the human, animal, and technical.

Leviathan helpfully dramatises what a post-humanist approach to research on and with film could look like, shifting ethnographic attention away from the province of the human to engage with nonhuman forces and durations that are a crucial part of our research ecologies, but which are so often obscured by our disciplinary habits of striving to uncover meanings and representations (Dewsbury, 2009). Like other strands of contemporary qualitative research, such an approach demands a renewed attention to the question of sense. But where it pushes further is in its attempts to uncouple sense from its containment within already-individuated bodies (human or otherwise), thinking sense instead as a preindividual event that is composed across different ontological registers. It is this immanent image of sense that encounters with film can give expression to, disrupting notions of the human subject as a discrete and autonomous entity and highlighting how ‘we’ are always-already connected to and becoming through the nonhuman.

References

- Aitken, S. and Dixon, D. (2006) Imagining geographies of film. *Erdkunde – Archive for Scientific Geography*, 60, 326-336.
- Ash, J. (2017) Visceral methodologies, bodily style, and the nonhuman. *Geoforum* 82, 206-207.
- Chion, M. (1994) *Audio-Vision: Sound on Screen*. Claudia Gorbmann (trans.). New York: Columbia University Press.

- Colebrook, C. (2014) Framing the end of the species: images without bodies. In: *Death of the Posthuman: Essays on Extinction Vol I* (pp. 9-28). Michigan: Open Humanities Press.
- Crang, M. (2003) Qualitative methods: touchy, feely, look-see? *Progress in Human Geography*, 27, 494- 504.
- Deleuze, G. (2005a) *Cinema I: The Movement-Image*. London: Continuum.
- Deleuze, G. (2005b) *Cinema II: The Time-Image*. H. London: Continuum.
- Dewsbury, J-D. (2009) Performative, non-representational, and affect-based research: seven Injunctions. In D. Delyser, S. Herbet, S. Aitken, M. Crang, and L. McDowell (Eds.), *Sage Handbook of Qualitative Geography* (pp. 321-334). London: Sage.
- Doel, M. and Clarke, D. (2007) Afterimages. *Environment and Planning D: Society and Space*, 25, 890-910.
- Dowling, R., Lloyd, J. and Suchet-Pearson, S. (2018) Qualitative methods 3: experimenting, picturing, sensing. *Progress in Human Geography*, 42, 779-788.
- Garrett, B. (2011) Videographic geographies: using digital video for geographic research. *Progress in Human Geography*, 35, 521-541.
- Jacobs, J. (2013) Listen with your eyes; towards a filmic geography. *Geography Compass*, 7, 714-728.
- Lapworth, A. (2016) Cinema, thought, immanence: contemplating signs and empty spaces in the films of Ozu. *Journal of Urban Cultural Studies*, 3, 13-31.
- Laurier, E. (2014) Dissolving the dog: the home made video. *cultural geographies*, 21, 627-638.
- Lorimer, J. (2010) Moving-image-methodologies for more-than-human geographies. *cultural geographies*, 17, 237-258.

- McCormack, D. (2018) *Atmospheric Things: On the Allure of Elemental Envelopment*. Durham, NC: Duke University Press.
- Merchant, S. (2011) The body and the senses: visual methods, videography and the submarine sensorium. *Body & Society*, 17, 53-72.
- O'Sullivan, S. (2006) *Art Encounters Deleuze and Guattari: Thought Beyond Representation*. London: Palgrave.
- Patchett, M. (2016) Witnessing craft: employing video ethnography to attend to the more-than-human craft practices of taxidermy. In C. Bates (Ed.) *Video Methods: Social Science Research in Motion* (pp. 71-94). Routledge: London.
- Paterson, M. and Glass, M. (2018) Seeing, feeling, and showing “bodies-in-place”: exploring reflexivity and the multisensory body through videography. *Social and Cultural Geography*, online early (doi: 10.1080/14649365.2018.1433866).
- Rose, G. (2016) *Visual Methodologies: An Introduction to Researching with Visual Materials*. London: Sage.
- Rushton, R. (2009) Deleuzian spectatorship. *Screen*, 50, 45-53.
- Sharp, L. (2018) “But how do you show that in a film?”: absence, cartographic anxiety, and geographic realism through the landscapes of Akira Kurosawa’s *Dersu Uzala*. *Geohumanities*, 80-96.
- Simpson, P. (2018) Elemental mobilities: atmosphere, matter and cycling amid the weather-world. *Social & Cultural Geography*, Online early DOI: 10.1080/14649365.2018.1428821.
- Suchet-Pearson, S., Wright, S., Lloyd, K., Burarrwanga, L. and Hodge, P. (2013) Footprints across the beach: beyond researcher-centred methodologies. In J. T. Johnson and S. C. Larson

(Eds) *A Deeper Sense of Place: Stories and Journeys of Indigenous-Academic Collaboration* (pp. 840-855) Corvallis, Oregon: Oregon State University Press.

Thain, A. (2015) A bird's-eye view of *Leviathan*. *Visual Anthropology Review*, 31, 41-48.

Trifonova, T. (2004) A nonhuman eye: Deleuze on cinema. *SubStance*, 33, 134-152.

Vannini, P. and Stewart, L. M. (2017) The GoPro gaze. *cultural geographies*, 24,149-155.

Wright, B. (1956) Geography and the documentary: Britain since 1945. *The Geographical Magazine*, 29, 586-595.