

Reflexive Practices for the Future of Design Education: An Exercise in Ethno-Empathy.

Manu J. Brueggemann^{a*}, Angelika Strohmayer^b, Matthew Marshall^b, Nataly Birbeck^b, Vanessa Thomas^a.

^aHighWire Centre for Doctoral Training, Lancaster University

^bOpenLab, Newcastle University

*Corresponding author e-mail: m.brueggemann@lancaster.ac.uk

Abstract: This paper responds to the growing body of literature that calls for more candour in discussing practical, social, and ethical problems that inevitably arise throughout the lifespan of research projects. We begin by describing our use of critical and anarchist pedagogies to inform the design of a recent academic workshop.

The workshop emerged iteratively and led to the core activity: our building of a totemic “*city of ethical conundrums*”. This collaborative artefact allowed us to discuss why and how we negotiate ethical issues *in vivo*, and how this matches up with the formal institutional ethics process. We uncovered what we called “ethno-empathy”: a concept that helped us understand, and give language to the circumstances, requirements and implications for our mutually shared experience of crafting a metaphorical city of ethical conundrums.

Keywords: Ethics, critical pedagogy, anarchist pedagogy, non-representational theory (NRT)

1. Introduction

In the contemporary practise of ethics as performed and conducted in the Euro-American academic context, the term “research ethics” pools together two distinctly different practises that are rarely untangled explicitly. On one hand is the formal institutional aspect of practised ethics, which are integrated into a researcher’s ‘methodology training’ and take place at the outset of a study, such as the funding stage or at formal ethics board hearings. On the other hand is the *in-field, ongoing, and embodied practise of acting ethically*, the latter of which goes beyond the activities in the field and encompasses considerations like the politics of writing (Clifford & Marcus, 1992), the politics of written accounts of fieldwork (Law, 2004), post-study impact (Clark & Ivanic, 1997), and self-preservation (Riach, 2009). Whilst undeniably related, these two sets of research ethics practises are sometimes disjointed.

Beyond formal funding requirements and institutional ethics processes, the *everydayness of practised research ethics* is neglected and hidden behind written accounts. An informal and more sensitive space is lacking, in which issues beyond those that are addressed through the formal process can be articulated. There are few opportunities for open reflection throughout the stages of any research project and in turn ethical conundrums, concerns, and issues are seldom integrated as

part of the research project write-up. Scope and opportunities for valuable knowledge transfer amongst subsequent researchers and to novice researchers are lost.

We contribute to the growing body of literature in design that highlights this concern and calls for more candour in discussing practical, social, and ethical problems that inevitably arise *throughout the lifespan* of a research project (Le Dantec & Fox, 2015; Vines, Clarke, Wright, McCarthy, & Olivier, 2013). Despite recent calls for discussions about ethics in relation to social justice (Steinhardt et al., 2015), and despite the development of workshops in some research communities (Waycott et al., 2015), ethics have been discussed in relatively limited ways using relatively limited methods. This paper offers insights into a creative and imaginative approach to ethical engagement as a practice of reciprocal and shared concerns. Drawing on *critical* and *anarchist pedagogy* (Freire, 1970; Darder 2011), whilst addressing the materiality, embodiment, and complexity of ethically sensitive work and research, we designed a workshop that incorporated in-depth conversations and group reflections regarding personal, institutional, and stakeholder-sensitive research ethics. In this sense we deconstructed the implicit abstract discourse of institutional ethics in research and *diffracted* (Barad, 2014) it with our subjectively empirical experience of practising research and the actor-network in which we are suspended. Hence, centring on the mundane and embodiment of '*researching ethically*' our workshop allowed us to tease out overarching tensions within our distinctly different situated research contexts.

Hence, in the backdrop of the anarchist pedagogical manifesto and in line with the spirit of the workshop, we - as *researchers, actors* and *authors* of this paper – attempt to engage into an evolving social process. We actively endeavour to move away from just being collectors of data and generator of articles and pieces of knowledge(s) towards being a convener of social processes both within and outside of academia. We postulate and conclude that the locus and potentiality of ethical acting sits within the researcher's own personal growth which needs to sit at the centre of attention when facilitating "ethically sound" research; paradoxically the institutionalisation of *Ethics* (as a formal process) can be a hindrance in doing so, respectively alluringly appears to remove the researcher individual responsibility *to act ethically*.

In this paper, we offer an account of our workshop, which enabled group reflection to elicit those subtle and fragile notions in research that may fall between the cracks of institutional and/or philosophical ethics, and the theoretical backdrop that underpinned the theoretical rationale of the experiment. We seek to acknowledge the practical and theoretical outlines to enable the reader to draw on our workshop and re-iterate their own versions of the workshop or comment on our practise. Emphasis in our account will be given on aspects of (non-)representation, its relation to the material-semiotic practise of *making*, and the embodiedness of researching, accounting, and empathy. Here, material-sensitive readings are a gateway to decipher subconscious embodied practise as a gateway to reflexivity, which helped us to open previously hidden aspects of difficult ethics.

2. Designing the Workshop

"[N]othing can survive in isolation" (Darder, 2011, p.357)

In early 2016, we decided to dissect and address the issues associated with research ethics practices by organising a workshop that considered our personal experiences with ethics. We wanted to explore the frictions between what the university implies with their procedures for ethical approval and what our experiences with the realities of research had been. We had found that many ethical conundrums arose throughout the entire research process (from ideation to documentation and ultimately publication and presentation). We explicitly acknowledged that ethical issues underpinned every decision we made, conversation we had, and personal reflection we processed. As such, we wanted to design a workshop to help ourselves and our fellow researchers *reflect on, engage with, and externalise* personal and wicked ethical conundrums.

Critical pedagogues, such as Freire (1970) and Darder (2011) explored how we as researchers should embrace the subjectivity, messiness, and non-coherence of our work. It is the aim of Freire (Freire, 1970), and critical pedagogy more broadly, to support learners in becoming full subjects of history (Darder, 2011) where knowledge is constructed through collective interactions of the world, our bodies, and nature; to learn things about the world by interacting and changing it (Freire, 1970). In order to do this, as well as hold the fullness of our human existence, we are required to incorporate the totality of who we are both within and outside the classroom; to cultivate imagination, create opportunities for students to experience new and unfamiliar contexts, and to encourage the thought of ambiguity and dissonance as being an ever-present social phenomenon. Particularly when looking at institutional procedures, in the case of this workshop university ethics procedures, “*we need critical pedagogy that is unapologetically political and moral*” (Darder, 2011 p.402).

We also looked to *anarchist pedagogies*, which are buttressed in the idea of being emancipated from enlightened paradigms of teacher/student dualisms, non-knowing/known and expert/novice pigeonholing. *Anarchist* (DeLeon, 2006; R. H. Haworth, 2012; Mueller, 2012) and *critical* (Darder, 2011; Freire, 1970; Nicholas, 2012) *learning* happens in a sense of togetherness, mutual exploration, and exploring together. In practise, formal learning curricula become not only enacted and met, but find themselves rooted in (and empowered through) their local ecology, rather than hindered by it (Hodgson & Spours, 2013). For Darder and Freire much of the reason for education is to move towards a world that is more fair and where social justice is a reality. To make this move, anarchist pedagogies encourage us to rethink the world we are in now, pointing towards the pedagogical importance of imagination.

Similarly, we noticed that many social scientists and designers have embraced the need for allegory as a method for representing non-coherence through the research process (Law, 2004) (Kara, 2015) (Cuta, 2011; Gillies & Robinson, 2012; Woelfer, 2014; Young & Barrett, 2001) (Preece, Sharp, & Rogers, 2015). Allegory is seen as a tool through which we are able to discover, enact, and extend new, partially connected, and non-mainstream realities. By opting to use allegory in our workshop, we realised we could craft non-linear, non-representational (Thrift, 2007), creative expressions to externalise the *partial perspectives* of the processes of ‘going through ethics’ throughout research projects (Haraway, 1988). By using allegory (inventive methods book) as a mode of discovery for our different realities and experiences, we intended to challenge and escape the limits of heteronormative patriarchal categories that current ethics processes uphold. To achieve this, we structured our workshop so that it would iteratively build on methods created for and with its participants (Gillies & Robinson, 2012; Hillgren, Seravalli, & Emilson, 2011).

2.1 Structure of the workshop

We began our workshop by carefully establishing safe-space rules, which acted as a fundamental baseline premise for everything that happened within the workshop space (see: Figure 1). The aim of these rules was to ensure a safe, comfortable, cooperative healing environment in which sensitive and personal observations and sentiments could be articulated and treated with the necessary responsibility, diligence and care. Creating the safe space was a critical starting point for the workshop; it helped participants feel comfortable with fully embracing the openness demanded of the workshop, and it set the grounds for respectful engagement with one another.

After establishing the safe space, we undertook a silent, individual, and reflexive activity to reflect on our individual experiences with ethical dilemmas and practices, and to create a personal art piece based on those experiences. When this activity ended, we set the tone for the rest of the day by openly sharing stories about our individual totemic artefacts. This early process of sharing stories and experiences encouraged collective openness, trust, and vulnerability amongst participants.

PROMISE ONE

Be in the room

We promise to give each other all the attention and time we have. We are making conscious effort not to bring the stresses from outside of the room into the shared space.

PROMISE TWO

What is said in the room, stays in the room

Everything in this room is considered strictly confidential. This rule reinforces the notion that everything in this room is deemed as a precious contribution and everything will be tendered as an honest and sensitive comment.

PROMISE THREE

Say yes with good intent

We are caring for each other and each other's contributions. Every statement is assumed to be made with good intent. If needed, for those cases where there is a need for clarification, this will be resolved by addressing them in a friendly and positive/emphatic manner. Immature ideas, gut feelings and raw impressions have their place here and will be constructively fostered.

PROMISE FOUR

Embrace empathy, use no names

Be empathetic towards yourself, towards each other, and towards those who are outside of our circle and room, yet are stakeholders in the greater scheme of things nonetheless.

Figure 1: The four promises of our safe space.

Building on this spirit of openness and vulnerability, we began working on the more complex, main activity of the day, which involved building a physical totem of our collective memories, thoughts, feelings, impressions, and concerns: the “city of ethical conundrums”.

We selected the cityscape metaphor because it aligned with our vision of the state of research ethics: cities include nodes of complex relationships with varying degrees of dependence, power, and custody. Cities furthermore possess dense composite histories, tangible and intangible structures, fluid boundaries, and ambiguous interpretations and meanings, few of which are stable over time and space. For those people who navigate cities smoothly and are at ease with the explicit and implicit rules that govern cities, many of these complexities fade into the background. For others, the same city-space can appear to be an uncooperative and friction-laden terrain, which is full of hurdles and hindrances to easy navigation. Consequentially, the city metaphor inherently and intentionally rejects simple definitions and enables constructive ambiguity amongst the meanings projected *onto* and *into* it.

We began the building process by solely using black building blocks (as a single homogeneous design language) which later became enriched by the inclusion a large assortment of colourful crafting materials and play sets, ghosts of forgotten ethical issues, and balloons full of glitter. The blocks and crafting materials were first affixed to a plinth to construct the cityscape. The process of selecting materials, placing them in a confined space, and building the city allowed us to discuss why and how we were negotiating the physical incarnation of *ethics* in relation to people and institutional structures, ourselves etc. As we added more pieces and colourful crafting supplies, our discussions unravelled the depth of our experiences with ethical conundrums and our opinions on how far a comprehensive ethical practise ought to go. The city became a metaphor for the construction of ethical procedures.

Gradually increasing in complexity, the *codified-yet-explicit* material totem grew physically and semiotically in complexity as the conversations evolved. *Codified-yet-explicit* in this context refers to the way our conversations have been embodied explicitly in the artefact, yet simultaneously have been sufficiently allegorically encrypted to protect ourselves, our informants, stakeholders or other explicitly or implicitly involved parties (e.g. faculty, supervisors, non-academic staff) and above-all the *fragility of the memories* represented.

In the same way that our conversations were kept safe and intentionally partial in perspective, our jointly created artefact was curated safely *per* our rules. Through this safe and reflexive ‘making’ process, we discussed many sensitive topics that usually only arise in most intimate conversations, if

at all. On several occasions participants admitted to not having shared certain experiences or impressions with anyone in the past (certainly not within an academic context). It was through this delicate and personal process that we uncovered what we called *ethno-empathy*: a concept that helped us understand, and give language to, our mutually shared experiences and the circumstances that enable their bringing to light. Spectators of the final cityscape artefact are invited to derive and impose their own meaning, just like we did in the course of experiencing/shaping the artefact and the workshop.

3. Experiencing the Workshop

We each brought our fieldwork experiences to the table. These experiences included research with indigenous communities, sex worker support charities, youth organisations, people with complex needs, and many others. In this passage, we describe how we mobilized our experiences from our deeply situated positionality across to the fellow workshop participants, and our experience of this; how this became facilitated through building our *city of ethical conundrums*.

[M]aking the item was interesting. I've never made something that was meant to physically represent an issue before. When discussion came around, I didn't go first so I was comfortable in my understanding of what was expected of me – I talked through some of the physical characteristics of the object I'd made and what they were a metaphor for. Mine was relatively straightforward compared to some of the others' objects, but they listened intently and we discussed the issues.

Reflection by participant/author/stakeholder

Throughout the process of placing, moving, annotating and converging individual pieces and clusters of pieces, we began gluing blocks to each other and on to the plinth (pictured in Figure 2). This process made the combination of blocks and the position of these clusters permanent. Once anything had been glued down, it became difficult, if not impossible, to move the pieces around; the malleable and movable space was turned into a fixed yet interwoven artefact.



Figure 2: Photos from the process of labelling and gluing blocks, ghosts, .

This became our common language, and the experience of developing it—through the act of moving pieces around on the plinth—was shared. Each participant was permitted to move another's

building blocks, accepting damages that might ensue. This changed the meaning of the building and the space it inhabited, as well as its relations. Often these movements sparked new topics of conversation or allowed for the construction of different and new structures.

Populating the city that we had built prompted me to think how the smallest of material changes completely changed the tone of the piece, like transposing music from major to minor. Beforehand city for me was light-hearted even when the monuments in it were outwardly named some concerning things; things that we understood as ‘coming with the territory’ and we could laugh at. After modifying it, the city seemed more concerning and like a bad joke. The people in it were struggling to survive and were in dangerous positions. Whereas before, the presence of the city was comforting: I could see and acknowledge it as flawed but ultimately as somewhere that I resided in. Now the city was a problem for me, and it felt like somewhere that I did not want to be.

Reflection by participant/author/stakeholder

In this reflection, the participant’s experiences with modifying the city were centred on their position as both creator and inhabitant of the ‘structure’, alongside their position to others. The city was a contested space, as intended. The transformation of the city from “light-hearted” in nature to that of being “a bad joke” shows how the participant experienced a group event. Features of the city were “concerning” yet were acknowledged by all participants as “coming with the territory”. In this way, the shared *joke* illuminates the existence of an experience shared by all participants; the experience of dealing with aspects of their work that concerned them. Later in the vignette, the participant details how the shift in the city’s physical aesthetic, likened as a transposition across musical scales, problematised the cityscape for them. The participant even goes so far as to directly say that the “city was a problem” and that they “did not want to be” in it. Notably, they distance themselves from the city and its residents by referring to them as “the people” instead of the alternative such as us/we.



Figure 3: the ‘city of ethical conundrums’, pictured at the end of the workshop.

While it may seem simple to say that the final artefact (see: Figure 3) is the ‘end product’ of the workshop, following anarchist and critical pedagogies, we also understand that there are multiple divergent and more (or less) tangible outcomes. The final artefact is as much a result of this workshop as the internalised reflections each researcher partook in about their work, or even this paper as an academic meta-reflection of the process and outcomes. The chronological analysis of the workshop, the workshop structure, culture, and environment allowed participants to find commonalities despite our huge variety in backgrounds, research areas, and ethical dilemmas. Together, through the use of anarchist pedagogies embodied in non-representational craft practices

of *making*, we were able to find a common ground; we were able to establish a space where we were comfortable to talk about these often very private matters in a way that brought harmony to the unique roots of each paradox. We came to refer to this as “*ethno-empathy*”.

4. Defining Ethno-Empathy

While our current notions of ethno-empathy are not yet explicitly oriented towards particular sociological, anthropological, or philosophical frameworks, we must set it in context with the work we feel that it draws upon; that is the infrastructure and mind-set that enable the structural support for working in a manner that enables to give agency to situated ethical sensitive acting. We aim to provide an open proposition of “*ethno-empathy*” which we deem useful, as it fits well with and responds to a broad set of related work. Ethnomethodology provides a framework where group members conduct themselves in a way that is ‘naturally accountable’ to each other (Crabtree, Rouncefield, & Tolmie, 2012; Garfinkel, 1967). In the performance of mundane activities, such as meeting or discussion, members attend to interactional work that allows them to account for their actions to others. In doing this, they allow others to engage with them without explicit thought and navigate their everyday world.

The workshop setting’s explicit foci on the co-construction of physical metaphors and creativity allowed us to construct a setting wherein we became naturally accountable to each other, and thus able to engage empathically as group members even though we only met for the first time at the workshop. The images and reflections from the participants can be read as a physical manifestation of the ethno methodological learnings described above. The collaborative and communal facilitation of this learning, as well as the shared ethnomethodological setting allowed participants to create a shared physical city. It also allowed them to develop mutually understandable allegories and metaphors (Kara, 2015; Law, 2004) for the co-constructed reflection and learning that was taking place (Todd, 2012).

Craft and creative research methods (Kara, 2015), as well as metaphor (Law, 2004) are important throughout the research process. Garfinkle pragmatically named ‘Ethnomethodology’ to refer to his studies of the methods used by social groups in their everyday lives. In keeping with this spirit, we named “*ethno-empathy*” after its purpose of exploring and making use of the methods and ways in which social groups engage empathetically with each other through shared experiences and metaphors. This is perhaps best illustrated by the example of our case study: our social group consists of academic researchers within a disciplinary intersection (HCI), from which they shared language and experiences; forming common ground for empathy. We then used this shared experience alongside design techniques which explicitly sought to build upon this initial empathy by constructing a shared metaphor *with which it became easier for members of the group to engage with others’ individual experiences in the context of their own*. The group thus entered an empathetic state and successfully co-navigated a complicated topic to develop insights.

What then, can we say about the larger implications of what Ethno-Empathy does? Rather than ‘thinking about’ research subjects or participants, an ethno-empathetic premise invites and enables, through the means of mindful practice to *think with* stakeholders and acknowledge how we are part of the stakeholder group. Ethno-empathetic thinking therefore eliminates any conceptual distinctions between researcher and target community, and invites the development of a safe, reflexive, and open shared language amongst peers.

5. Conclusions

Reflecting back on the entity of the workshop is a provocation to constructively engage oneself with the limits of direct representation, as well as the possibilities and potentials of allegorical speculative and collective discussions in design practise become clearer (Haraway, 1012; Lury & Wakeford, 2014; Thrift, 2007). Our workshop can be placed at the nexus of several existing and

emerging streams in the critical, feminist and techno-scientific literature. Law's critiques of representation, we conclude, need not be understood as a paralyzing critique of the foundations of western academic practise as conducted today, but may be an emancipating call to constructively bring together rational, theoretical and establish paths of reason and practise, together with meditative practise, embodied intimate and acknowledgment of situated specific hurdles in the everydayness of research.

Whilst it is commonplace to acknowledge the limitations of certain methods and the feasibility of a study regarding the local context and ecology, it seems that similar lenience is only seldom granted explicitly to individual researchers, albeit they are an integral part in the production of research and design. Manifesting ourselves as a full and complex but muted actor in the production of research enabled us to adopt positions, languages, insights and perspectives that—we reckon—were hindered, unacknowledged or implicitly discouraged in the way we have been educated as designers.

Design practices are frequently applied to, and entangled with, *in-vivo* contexts that lie well outside of traditional design school curricula. These situations and contexts can present researchers with a variety of ethical conundrums, difficult decisions, and sensitive scenarios. Being thoroughly grounded and familiar with the richness of socio-ethical challenges is crucial, right from the outset of a research project—from its conception, through the research stage, to externalisation, and all iterations or implementations of interventions. However, there are very few explicit opportunities within the framework of existing institutional ethics practices for open reflection throughout the stages of any research project regarding the in-depth ethics of research and/or intervention. Ethical conundrums, concerns, and issues are seldom communicated as part of the research project, and valuable knowledge transfers amongst researchers are often lost.

By accounting for our workshop and offering our experiences to the literature on design education, and qualitative empirical social studies in general, we hope to provoke researchers and institutions to reflect about the limits of contemporary ethics practices and contribute a constructive proposition how to resolve some of the issues we identified. Our workshop suggested that the future of design education could reimagine how we explore and address ethically complex and messy issues. We can foresee future courses turning the formal “ethics process” into a source of support for developing an ethical backbone, rather than a perceived hurdle and undesirable necessity as it is sometimes portrayed (Dyer & Demeritt, 2008) and frequently perceived.

We believe our workshop offers a novel and creative suggestion for engaging learners and educators in conversations around sensitive research issues. Further explorations of non-representational (and sibling theories) resolutions may provide further fruitful suggestions to contribute further to the diversification of design research practices.

References

- Barad, K. (2014). Diffracting Diffraction: Cutting Together-Apart. *Parallax*, 20(3), 168–187.
<http://doi.org/10.1080/13534645.2014.927623>
- Clark, R., & Ivanic, R. (1997). *The Politics of Writing*. Oxon: Routledge. Retrieved from
https://books.google.lu/books?hl=en&lr=&id=ERcsRs3WdNQC&oi=fnd&pg=PP2&dq=politics+of+writing+&ots=Sol3kRbftu&sig=nQTMTEfU1W6lgaHjiDTxOtumnI&redir_esc=y#v=onepage&q=politics+of+writing&f=false
- Clifford, J., & Marcus, G. E. (1992). *Writing Culture: The Poetics and Politics of Ethnography*. Berkley: University of California Press.
- Crabtree, A., Rouncefield, M., & Tolmie, P. (2012). *Doing design ethnography*. London ;;New York : Springer.
- Cuta, N. (2011). Wendy Sarkissian, Dianna Hurford, Christine Wenman: Creative Community Planning: Transformative Engagement Methods for Working at the Edge. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 23(3), 830–831.
<http://doi.org/10.1007/s11266-011-9216-2>
- Darder, A. (2011). *A Dissident Voice*. (S. R. Steinberg, Ed.). New York: Counterpoints.

- DeLeon, A. P. (2006). The time for action is now! Anarchist theory, critical pedagogy, and radical possibilities. *Journal for Critical Education Policy Studies*, 4(2), 72–94. Retrieved from <http://www.jceps.com/wp-content/uploads/PDFs/04-2-04.pdf>
- Dyer, S., & Demeritt, D. (2008). Un-ethical review? Why it is wrong to apply the medical model of research governance to human geography. *Human Geography*, 33(1), 46–64.
- Freire, P. (1970). *Pedagogy of the Oppressed*. London: Penguin.
- Garfinkel, H. (1967). *Studies in ethnomethodology*. Englewood Cliffs N.J.: Prentice-Hall.
- Gillies, V., & Robinson, Y. (2012). Developing creative research methods with challenging pupils. *International Journal of Social Research Methodology*, 15(2), 161–173. <http://doi.org/10.1080/13645579.2012.649407>
- Haraway, D. (2012). *SF, Speculative Fabulation and String Figures: 100 Notes, 100 Thoughts: Documenta Series 033*. Kassel: Dokumenta. Retrieved from <https://www.amazon.com/Donna-Haraway-Speculative-Fabulation-Documenta/dp/3775728821>
- Haraway, D. (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14(3), 575. <http://doi.org/10.2307/3178066>
- Haworth, R. H. (2012). *Anarchist Pedagogies*. (R. H. Haworth, Ed.). Oakland: PM Press.
- Hillgren, P.-A., Seravalli, A., & Emilson, A. (2011). Prototyping and infrastructuring in design for social innovation. *CoDesign*, 7(3–4), 169–183. <http://doi.org/10.1080/15710882.2011.630474>
- Hodgson, A., & Spours, K. (2013). Tackling the crisis facing young people: building “high opportunity progression eco-systems.” *Oxford Review of Education*, 39(2), 211–228.
- Kara, H. (2015). *Creative Research Methods in the Social Sciences*. Bristol: Policy Press.
- Law, J. (2004). *After Method: Mess in Social Science Research*. Oxon: Routledge.
- Le Dantec, C. A., & Fox, S. (2015). Strangers at the Gate. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing - CSCW '15* (pp. 1348–1358). New York, New York, USA: ACM Press. <http://doi.org/10.1145/2675133.2675147>
- Lury, C., & Wakeford, N. (2014). *Inventive methods : the happening of the social*. Routledge.
- Mueller, J. (2012). Anarchism, the State, and the Role of Education. In R. H. Haworth (Ed.), *Anarchist Pedagogies: Collective Actions, Theorie, and Critical Reflections on Education* (pp. 14–31). Oakland: PM Press.
- Nicholas, L. (2012). Anarchism, Pedagogy, Queer Theory and Poststructuralism: Toward a Positive Ethical Theory, of Knowledge and the Self. In R. H. Haworth (Ed.), *Anarchist Pedagogies: Collective Actions, Theorie, and Critical Reflections on Education* (pp. 242–259). Oakland.
- Preece, J., Sharp, H., & Rogers, Y. (2015). *Interaction Design: Beyond Human-Computer Interaction*. John Wiley & Sons. Retrieved from <https://books.google.com/books?hl=en&lr=&id=n0h9CAAAQBAJ&pgis=1>
- Riach, K. (2009). Exploring Participant-centred Reflexivity in the Research Interview. *Sociology*, 43(2), 356–370. <http://doi.org/10.1177/0038038508101170>
- Steinhardt, S. B., Menking, A., Erickson, I., Marshall, A., Zelenkauskaitė, A., & Rode, J. (2015). Feminism and Feminist Approaches in Social Computing. In *Proceedings of the 18th ACM Conference Companion on Computer Supported Cooperative Work & Social Computing - CSCW'15 Companion* (pp. 303–308). New York, New York, USA: ACM Press. <http://doi.org/10.1145/2685553.2685561>
- Thrift, N. (2007). *Non-representational Theory: Space, Politics, Affect*. Oxon: Routledge.
- Todd, J. (2012). From Deschooling to Unschooling: Rethinking Anarchopedagogy after Ivan Illich. In R. Haworth (Ed.), *Anarchist Pedagogies: Collective Actions, Theorie, and Critical Reflections on Education* (pp. 69–85). Oakland: PM Press.
- Vines, J., Clarke, R., Wright, P., McCarthy, J., & Olivier, P. (2013). Configuring participation. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems - CHI '13* (p. 429). New York, New York, USA: ACM Press. <http://doi.org/10.1145/2470654.2470716>
- Waycott, J., Davis, H., Thieme, A., Branham, S., Vines, J., & Munteanu, C. (2015). Ethical Encounters in HCI. In *Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems - CHI EA '15* (pp. 2369–2372). New York, New York, USA: ACM Press.

<http://doi.org/10.1145/2702613.2702655>

Whitehead, A. N. (1978). *Process and Reality*. (D. R. Griffin & D. W. Sherburne, Eds.). New York: The Free Press. Retrieved from

[https://books.google.lu/books?hl=en&lr=&id=uJDEx6rPu1QC&oi=fnd&pg=PR3&dq=process+and+reality+whitehead&ots=V08E7eIEus&sig=EKuPCorLSj_-](https://books.google.lu/books?hl=en&lr=&id=uJDEx6rPu1QC&oi=fnd&pg=PR3&dq=process+and+reality+whitehead&ots=V08E7eIEus&sig=EKuPCorLSj_-4E64JDyvvhwfwG0&redir_esc=y#v=onepage&q=process+and+reality+whitehead&f=false)

[4E64JDyvvhwfwG0&redir_esc=y#v=onepage&q=process and reality whitehead&f=false](https://books.google.lu/books?hl=en&lr=&id=uJDEx6rPu1QC&oi=fnd&pg=PR3&dq=process+and+reality+whitehead&ots=V08E7eIEus&sig=EKuPCorLSj_-4E64JDyvvhwfwG0&redir_esc=y#v=onepage&q=process+and+reality+whitehead&f=false)

Woelfer, J. P. (2014). Engaging homeless young people in HCI research. *Interactions*, 21(1), 54–57.

<http://doi.org/10.1145/2543580>

Young, L., & Barrett, H. (2001). Adapting visual methods: action research with Kampala street children. *Area*, 33(2), 141–152. <http://doi.org/10.1111/1475-4762.00017>

About the Authors:

Manu J Brueggemann add an author bio that describes research interests and main achievements in a maximum of 40 words. [LEAVE BLANK UNTIL FINAL ACCEPTANCE]

Angelika Strohmayer add an author bio that describes research interests and main achievements in a maximum of 40 words. [LEAVE BLANK UNTIL FINAL ACCEPTANCE]

Matt Marshall add an author bio that describes research interests and main achievements in a maximum of 40 words. [LEAVE BLANK UNTIL FINAL ACCEPTANCE]

Nataly Birbeck add an author bio that describes research interests and main achievements in a maximum of 40 words. [LEAVE BLANK UNTIL FINAL ACCEPTANCE]

Vanessa Thomas is a Canadian computer scientist turned designer/social scientist/professional generalist. Her mixed disciplinary background is currently being applied to research on the environmental footprint of computing. She likes cycling, giggling, and long walks on the beach.

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