

# Teaching in Higher Education

## Critical Perspectives

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/cthe20>

# Letting the ghosts in: re-designing HE teaching and learning through posthumanism

Kerry Chappell, Katherine Natanel & Heather Wren

To cite this article: Kerry Chappell, Katherine Natanel & Heather Wren (2021): Letting the ghosts in: re-designing HE teaching and learning through posthumanism, Teaching in Higher Education, DOI: [10.1080/13562517.2021.1952563](https://doi.org/10.1080/13562517.2021.1952563)

To link to this article: <https://doi.org/10.1080/13562517.2021.1952563>



© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



[View supplementary material](#)



Published online: 19 Jul 2021.



[Submit your article to this journal](#)



[View related articles](#)



[View Crossmark data](#)

# Letting the ghosts in: re-designing HE teaching and learning through posthumanism

Kerry Chappell <sup>a</sup>, Katherine Natanel <sup>b</sup> and Heather Wren<sup>a</sup>

<sup>a</sup>Graduate School of Education, University of Exeter, Exeter, UK; <sup>b</sup>Institute of Arab & Islamic Studies, University of Exeter, Exeter, UK

## ABSTRACT

Alongside the neoliberalisation of UK Higher Education (HE), the values of speed, competition, marketisation and individualism increasingly shape teaching and learning globally. This article takes seriously the feeling of unease expressed by lecturers and students in this context, proposing that posthumanism offers a theoretical, methodological and praxical means to challenge neoliberal logics and their effects. Through assemblages, diffractive analysis and an experimental film, we explore how module re-design and delivery around ‘posthumanist project-based learning’ (PBL) attends to materiality, embodiment, affect, ethicality, social justice and political transformation. We argue that by de-centring the human, posthumanist PBL alerts students, teachers and researchers to the ‘trouble’ that haunts educational experiences and centres an ethics of community that reshapes the boundaries of accountability. Our work indicates how posthumanism might offer new ways to engage in HE knowledge production – and position materiality, care and our common future as the drivers for teaching and learning.

## ARTICLE HISTORY

Received 3 June 2020  
Accepted 27 June 2021



## KEYWORDS


Creative pedagogies;  
project-based learning;  
Higher Education;  
posthumanism; materiality

I could see them sharing resources, sharing ideas, sharing concerns, gently correcting or problematising some things like a “Western view” or someone deciding to shift from third person narration as a white British woman to first person narration as a Palestinian woman living in Gaza. Students [are] really gently trying to tease out the ethics and politics of that in a lovely, lovely way. And I started having this feeling in the back of my mind like I did last year: ‘Oh, they could be leading this a lot more’. Lecturer

Will it shape the way I think permanently, or only while I am in the class?. Student

These words alert us to tensions felt in a University classroom where education is practiced via creativity, political engagement, social justice and personal transformation. Together, Lecturer and Student are drawn into a discovery process, accepting risk without necessarily knowing the outcomes. It is an uneasy time for both; their struggle is a profound aspect of their mutual education – and the grounds upon which they build community.

**CONTACT** Kerry Chappell  k.a.chappell@exeter.ac.uk; <https://www.facebook.com/kerry.chappell.79>;  @https://twitter.com/KerryChappell1

 Supplemental data for this article can be accessed doi:10.1080/13562517.2021.1952563.

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

This article details our experience(s) as educator-researchers attempting to work with students to carve out Higher Education (HE) learning spaces that attend to embodied slow(er) scholarship; dialogic, creative teaching and learning beyond the human; and social justice, political praxis and educational activism (Biesta 2004; Craft 2013; Darder 2002; Fielding and Moss 2011; Freire 1996 [1970]; hooks 1994; Horton 1997; Solórzano 1997; Ulmer 2017; Vergès 2019). Through the re-design and delivery of a module focused on gender, sexuality and violence in Palestine/Israel, ‘posthumanist project-based learning’ (PBL) emerges as a method that allows us to bring these elements into conversation, while exploring/experiencing the generative capacity of unease.

Unease is increasingly widespread in HE regarding the growth of neoliberal (Harris 2005), disciplinarily-siloed (Vergès 2019), disembodied, fast scholarship-style (Ulmer 2017) pedagogy and research. Here neoliberalisation refers to the project to restore class dominance following Second World War socio-democratic change (Harvey 2007), and in education especially the application of market, management and performance approaches with associated ‘measurable’ outcomes creating a deficit discourse which de-professionalises educators (Ball 2016). These practices can lead to a narrow care-less, transmission-based approach which perpetuates student-teacher power imbalances (Ball 2003), limits pedagogy through simplification (Molesworth, Nixon, and Scullion 2009), and prevents in-depth, personalised engagement. At its worst, neoliberal education reproduces oppression, injustice and violence, as curricula and student attainment are largely determined by race, ethnicity, gender and class (Burke 2015, 2018; Reay 2018; Stevenson et al. 2019).

This article presents our care-ful response to this unease, enacted through research into HE module re-design and new pedagogies. Our unease stems not only from neoliberalisation, but also, like Pitt and Moss (2019) and Strom et al. (2019), from discomfort with positivist<sup>1</sup> and interpretivist<sup>2</sup> approaches to research (Cohen, Manion, and Morrison 2018). Together these approaches overly emphasise human cognition and evidence-based stable verbal knowledge,<sup>3</sup> and side-line materially-embodied ways of knowing. By *de-centring* the human as dominant and rational, posthumanist research (e.g. Barad 2007) critically re-centres alternative ways of knowing, deepening and extending what we might learn and integrate into pedagogy. As illustrated by our research and analysis, and not intending a binary relationship, posthumanism allows us to counter the increasing neoliberalisation of HE; simultaneously, it attends to the complex and shifting entanglements among our material, affective, political, social, intimate and embodied worlds.

Our creative, posthumanist approach to teaching and learning manifests in three braided strands within this article. One strand is our journey through module re-design, working differently with students through creative posthuman ideas to de-centre the human and facilitate engagement with content focused on gender, sexuality and violence in Palestine/Israel. Another strand is our response to the research question *What emerges from this re-design of HE teaching and learning through posthumanism?* using a complementary (posthuman) methodology. As explained in the ‘Hauntings’ and ‘De-centring’ sub-sections below, this resulted in us ‘letting the ghosts in’ and being notified that there was ‘something to be done’, providing new materially-driven insights into HE pedagogy. And another strand is the emergence of an experimental film, developed to emphasise that teaching and learning happen *with matter* (Page 2018). This offers future students insights into the module’s fluid and experimental

character, and allows us to model our conviction to embrace the same risks and unknowns (Behari-Leak et al. 2019) that we ask of our students. The article culminates by offering departures and starting points, which move toward theoretically and practically addressing the unease emerging from the neo-liberalisation of HE – and underline the necessity of translating knowledge to action in ways that attend to materiality, care and our common future.

### **A (new) start**

At the outset, our research was framed by a pedagogic innovation initiative within our Higher Education Institution (HEI). Through a competitive process, we secured internal funding that partially released us from teaching commitments to focus on this project. The funding allowed for Kerry, a Graduate School of Education creativity researcher and associate professor, to collaborate with Katie, a Gender Studies lecturer at the Institute of Arab and Islamic Studies, and to be supported by Heather, an education PhD candidate. Funding also enabled us to build a supportive network of like-minded University colleagues who acted as a sounding board. Little of our work would have been possible without financial support.

We carefully considered the potential for students to participate as co-researchers and decided that, due to the very real demands upon their time and energies in an increasingly marketised environment (Molesworth, Nixon, and Scullion 2009), we would instead ensure that we worked with them dialogically. This risked re-inscribing hierarchical relations – specifically privileging teachers/researchers as ‘controlling’ and positioning students/participants as responding to decisions. However, we continually sought and prioritised student involvement through exchange and feedback, from in-class surveys to office hour discussion. Students thus regularly contributed to module content and delivery.

These students were enrolled on the 12-week module ‘Gender, Sexuality and Violence in Palestine/Israel’, convened at third year undergraduate and MA levels together. The course attracts students from across the University based on their interest in Palestine/Israel or gender studies, curiosity about PBL, and/or the module’s critical political framing. While some students bring experiences of or relations to Palestine/Israel, or identify as Palestinian or Jewish Israeli, most are white, middle-class British or European, reflecting the University’s demographics. We acknowledge that the module, therefore, risks engaging in a type of voyeurism, as ‘we, here’ study ‘them, there’; so too it might exacerbate the exploitative ‘centre’ – ‘periphery’ dynamics that underpin and emerge from colonialism, including British policies and practices. Yet as students engage in self-reflexive practices, they learn how these distinctions are made real, while simultaneously building connections across contexts through the module’s digital platform discussed below. This work requires more than a transformation of the self – as detailed in our diffractions and departures, it enables students to acknowledge their implication in historical and contemporary colonial projects as a step toward a shared decolonial future.

Throughout the term, students and lecturers analysed ‘conflict’ using the frames of feminist, queer, postcolonial and decolonial theory, interrogating how gender and sexuality animate and sustain violence, while also making visible how people practise resistance and imagination. They paid close attention to the role of power in knowledge

production, asking who has authority or permission to narrate (Said 1984) and engaging with the experiences/accounts of those who have long been framed as objects of scholarship and violence. Project-based work enabled students to build and sustain a learning community, grapple with narratives of displacement and erasure, and contribute to transformative action. PBL had always been a part of module assessment as its 'extended inquiry process structured around complex, authentic questions' (Markham et al. 2003, 4) suits the creative, justice-driven, political, activist course ethos. Yet we questioned whether and how we could push farther, particularly as the module's political critique and transformative aims sit uneasily with the neoliberalisation of HE described above.

### ***A theoretical rationale: putting what matters into practice***

In response, we undertook our re-design from a creative, posthuman standpoint, following scholars like Lennon, Riley, and Monk (2018), Charteris, Nye, and Jones (2019) and Ulla et al. (2019) who endeavour to make space for more in HE teaching and learning. For us, 'more' meant countering the encroaching neoliberalisation and responding to the provocations of transformative critical theory/practice by fully attending to the tension between unease and care.

In theory and practice, we sought to explore what emerges from a posthuman approach to PBL, tempered through creative pedagogies. Posthumanism re-centres ways of knowing marginalised, dismissed or elided by other (dominant) approaches – when included, these ways of knowing allow us to teach and research differently. While critical feminist, queer, postcolonial, Marxist/materialist and crip frameworks have powerfully insisted on the inclusion of gender, sexuality, race, class and disability within research and pedagogy, posthumanism argues for the significance of *matter* – objects, environments, technology and materials that are 'more-' or 'other-than' human.

Key posthumanist theorists (e.g. Braidotti 2013) argue that in order to engage materially-embodied ways of knowing (and their full potential) we must recognise our blind-spots and attempt to understand how we are enmeshed materially with other-than-humans; we need to de-centre. We should not see ourselves as purely rational, scientific and dominant over others, whether they are human or other-than-human (Bozalek and Zembylas 2016) as this denies a huge part of how we (in the very broadest sense of the term) come into being and are constantly becoming.

Our re-design and research draws strongly on Barad's (2007) posthumanism, which considers a different (new) take on materiality (i.e. new materialism<sup>4</sup>) and, in doing so, compels us to reconsider agency. Barad's understanding of agency moves beyond humans' capacity to act and instead argues for agency as 'a doing, a being, a becoming' (2007; cited in Taylor 2019, 41), which emerges from the intra-action of material and embodied humans and other-than-humans. Different to the more familiar notion of 'interaction' – which posits that individuals are already existing, independent agents – *intra-action* contends that individuals only exist through materialising relations.

Re-centring material relations means that students could immerse themselves in materially-driven PBL, shifting focus from assessment. For example, rather than engaging with sexuality solely through reading scholarship, a student was allowed the space and digital resources to create a project with a pole-dance performance at its heart,

incorporating touch and felt experience. The pole and the student/dancer's movement with/on/around it produce new knowledge about sexuality and power, just as she comes to better understand her own experiences and identity through a highly physical, affective and political material engagement. A posthumanist approach centres the pole and the student's intra-action with it – arguing that they gain form and meaning (materialise) *through* one another – rather than a human-dominated written account of what the dance represents. In turn, this enables the student to grapple with the generative power of embodied unease, to think care-fully and to locate herself within a wider community.

Through this kind of play between agency and intra-action, Barad's (2007) ideas and our students' experiences make intelligible how 'we are part of the world in its differential becoming' (185). For some, this may be an uneasy realisation. In the pages that follow, we consider how the inclusion of materiality/matter as 'an agentic factor' (Barad 2007, 178) offers new ways for lecturers, researchers, students and others to engage in knowledge production, raising the possibility that agency can materialise differently within HE pedagogy.<sup>5</sup> We aim to work care-fully together, learning through materialising relations as they arise.

Within this process, it was vital to forefront the creative potential of posthumanism for developing new teaching practices and learning outcomes. Kerry's previous posthumanising creative pedagogy work argues for ethically-driven teacher and student creativity in tackling societal, environmental and political challenges, which resonates strongly with the aims of Katie's module. As Chappell's (2018) scholarship makes clear, the methods and philosophies that facilitate transformation are defined in the inter-play among teacher creativity, creative teaching and creative learning – they emerge through materialising relations. For Chappell et al. (2019), *posthuman* creative pedagogies occur through materially-driven dialogue between human and other-than-human: 'new knowledge is created through dialogic interactions where question leads to answers leads to questions to generate this newness. 'Voices' are embodied not just in humans, but are re-centred in relations with 'others' – texts, movements, artefacts, experiments' (298). These relations enable new subjectivities to emerge, allowing shared agency and ethics to generate new ideas and experiences which, in turn, contribute to change (Chappell 2018; Chappell et al. 2019).

Applying these creative pedagogies in our research meant creating online and workshop spaces where materially-driven dialogue could happen. In these virtual and physical environments, students encountered a range of resources, experiences and narratives, from infographics and interactive timelines, to archives, digitised oral histories, documentary and experimental films, broadcast journalism, performance poetry, virtual exhibitions and speculative/futurist imaginings. Creative pedagogies were also evident in Katie's frequent and intensive support sessions, which provided the ethical 'care work' highlighted by our network colleagues as pivotal to facilitating students' agency. Katie provided evolving scaffolding (Greening 1998) within taught sessions, on the virtual learning platform (VLE) and in office hours, which led students through PBL aims and the creative process; showed them how to utilise digital resources; and created space/time for intimate conversations about ethics and material engagement. This support reassured students and attenuated the anxiety that came with 'unlearning' what they knew about HE's process and function.

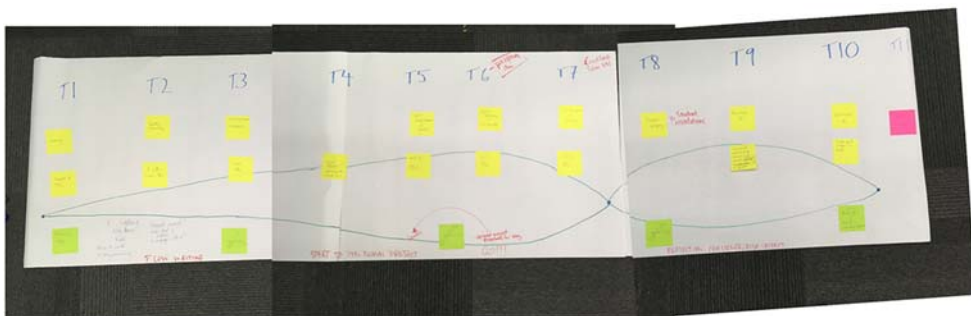
Our experience with posthumanising creative pedagogies thus underpinned the decision to structurally shift student projects from an assessment to the central learning method. In doing so, we aimed to substantively deepen students' experiences of 'extended inquiry' (Blumenfeld et al. 1991; Lee et al. 2013) and encourage them to engage in a dialogic, posthumanising creative process – the practice we now name 'posthumanist PBL'. We tapered down the 'taught' academic units as term progressed, gradually decreasing lecturing and increasing discussion time, peer feedback and collaborative workshops. Students were introduced to PBL in Week 4 (T4, [Figure 1](#)), submitted project proposals during Week 6 (T6), presented their ideas for peer feedback in Week 8 (T8), and focused on design and production during workshops in Weeks 9 and 10 (T9-10).

We also remained alert to Barad's (2003) argument that the intra-acting human and other-than-human have porous or 'inherently [in]determinate boundaries' (cited in Chappell 2018, 11). In particular, we sought to draw out the creative potential of digital technologies in relation to posthumanist PBL, finding ways to pierce the presumed boundary between (human) students and their (other-than-human) VLE. Katie shifted the VLE to a more visually engaging tile format ([Figure 2](#)), which allowed for curiosity and resources to 'flow' in ways that would enrich students' discovery processes (Phung-suk, Viriyavejakul, and Ratanaolarn 2017). Each tile contained links out to websites where students could dialogue with activist initiatives (Bakhtin 1981; Ganesh and Zoller 2012) and engage in current events, whilst also building their own blog-based narratives. Critically, the module's digital platform attenuated the risk of voyeurism by empowering students to position themselves as allies and accomplices to those working toward justice and transformation in Palestine/Israel.

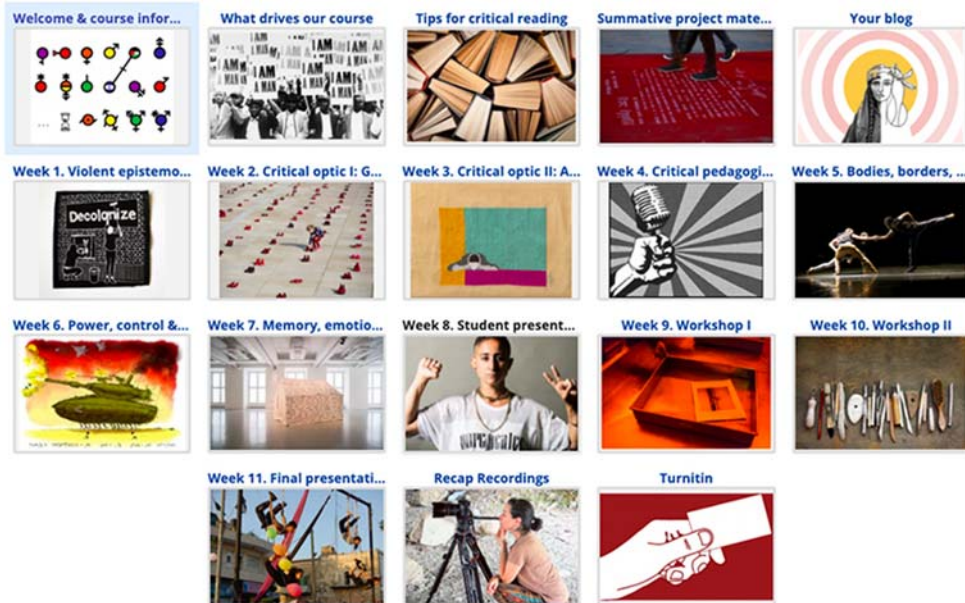
In putting what matters into practice we, therefore, paid close attention to how creative posthumanising approaches might deepen and extend PBL. The methodology that enabled us to see what emerges from this re-design of HE teaching and learning through posthumanism follows next.

### Creating complementary methodological space

Methodologically, we embraced posthuman approaches and worked in a way that acknowledged the intra-action of humans (including ourselves as researchers) and other-than-humans, gathering words, visuals and material artefacts as data (Barad



**Figure 1.** New module structure.



**Figure 2.** VLE tile format.

2007). Following Jackson and Mazzei (2012), we carried out early and late interviews with teachers (2 and 2) and students (3 and 2)<sup>6</sup> selected as representing undergraduate and MA levels, as well as differing PBL experiences. Fieldnotes were compiled during regular observations. We incorporated materially-driven interview questions, focused on materiality and affectivity in fieldnotes, and used images to reflect how students intra-acted with notepads, objects, art works, rooms and building (Figures 3 and 4). Student projects, which were often arts-based, provided materially ‘alive’ data with emotional, aesthetic and imaginative/dream-based elements that otherwise would have been absent (St Pierre 1997). This summative work (30 projects) included short films,



**Figure 3.** Students intra-acting with artefacts.





**Figure 4.** Students using different materials to dialogue.

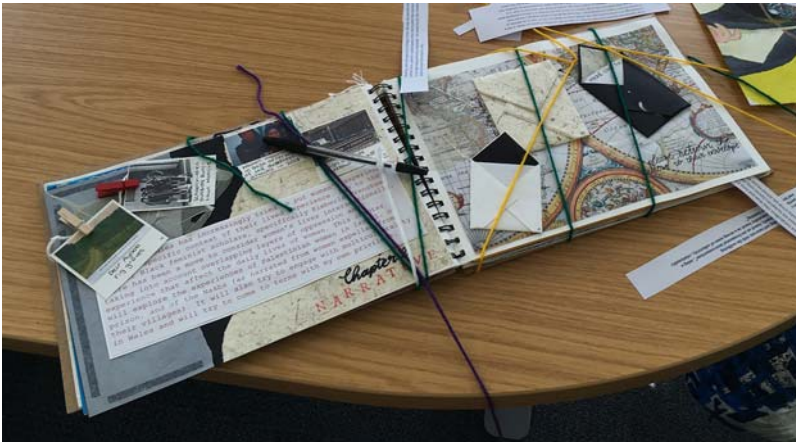
play scripts, newspapers, poetry, plastics-based sculpture, scrapbooks, radio broadcasts, choreography, Instagram accounts and more.

Following our University's ethics procedures, we worked to ensure that participants had fully understood the research and given consent (understanding their right to withdraw without detriment), and that anonymity and confidentiality would be appropriately addressed. To ensure that we dealt ethically with other-than-human data, we adopted Barad's (2007) approach to ethics as a collective, rather than individualised process that emerges through intra-action. Haraway (2016) refers to this practice as care and response, which we enacted cyclically, continually returning to the questions 'Who are we to be researching this, asking this, writing about this? Who/what else is here/matters?'

With all of this in mind, we responded to our research question: *What emerges from this re-design of HE teaching and learning through posthumanism?*, working with our data somatically and digitally. We each chose 'glow moments' from the data that reached out to 'grasp us' (MacLure 2013, 228) or created wonder within us. By focusing on the researcher's emotional response this approach radically departs from much qualitative research, which might select data as critical for a particular rational insight. Wonder can be unexplainable; it can be comforting, but also shade into emotions such as disgust. We approached data seeking this, so that we could respond appropriately to students' learning experiences. Through a selective process these were honed down to 12 moments, which 'glowed' the most (see Appendix, supplemental data).

Following Deleuze and Guattari (2004 [1980]), we then developed an 'assemblage' (Figures 5 and 6): an unstable relational arrangement of material elements that allowed our data to continue glowing. As shown in the images, we did this using wool to trace connections, enacting a playful type of ethical storytelling (Niccolini, Zarabadi, and Ringrose 2018).

This processes of selecting, building and connecting led us down two avenues. Firstly, we decided to 'diffract' two theory pieces through our assemblage (Barad 2007; Mazzei



**Figure 5.** The first assemblage.



**Figure 6.** The first assemblage.

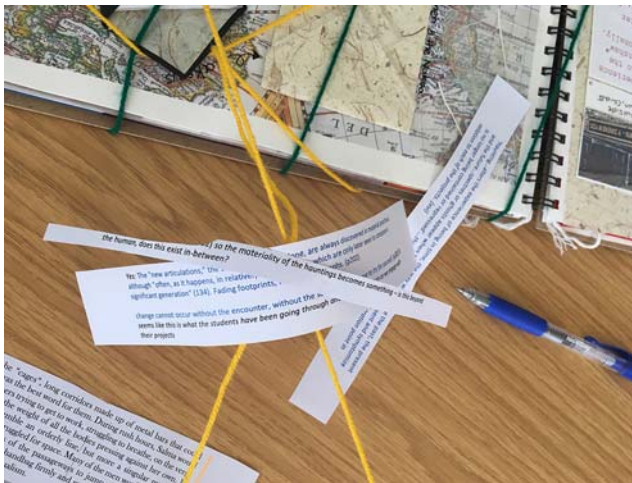
2014); this common practice in posthumanist research creates new ways of understanding data. Borrowed from wave theory (physics), diffraction describes how light, water or sound waves overlap, bend and spread out as they encounter an obstacle (Barad 2007; Bozalek and Zemblayas 2017). Diffracting theory into data enabled us to bend and splay ideas in a way that ‘spreads thought in unpredictable patterns, producing different knowledge’ (Barad 2007, 742), allowing new trajectories to emerge. In practice, we ‘cut’ theory into the assemblage, physically inserting quotations into it and then discussing familiar and unfamiliar emergent ideas. Based on their resonance with our research questions and process, we selected Avery Gordon’s (1997) *Ghostly Matters* and *The Posthuman* by Rosi Braidotti (2013) as our theoretical texts. You will encounter the results of our diffractive analysis below.

Secondly, in the interest of allowing emotions, materiality, and absences to fully irrupt into our processes (St Pierre 1997), we pushed beyond written forms to make a film which could actively acknowledge that teaching and learning happen in relationship *with matter* (Page 2018). Full methodological details regarding this are available in Chappell et al. (2020), as they are beyond this article's scope. Suffice to say we worked with a professional filmmaker, using diffractions and assemblages, as well as film-based posthuman research practices (Hofsess and Thiel 2017; Rantala 2017; Nordstrom and Ulmer 2017). Via the film, we engage with and prioritise matter/materiality, mirroring what we ask of our students in their learning. In this spirit, the film is now made available and screened for students at the start of their module; you too can experience the film following our diffractions.

Across all our outputs the question of 'quality' in posthuman research is key. Strom et al. (2019) and Taylor and Bayley (2019) argue for 'responsability' as the legitimacy criteria which challenges calls for researcher objectivity, because whatever we are researching becomes entangled with how we research it (Barad 2007). We should judge posthuman research quality ethically, and consider whether it intensifies engagement and agitates to action (Strom et al. 2019). Therefore, in what we offer, we aim to be judged on the creative, ethical and provocative quality of our analysis and imaginings.

### Hauntings, troublings and crackings

In diffractively cutting excerpts from Gordon's (1997) *Ghostly Matters* through our assemblage, we were alerted to the role of trouble as a disruptive but productive force within the module. Gordon's text became significant to our research, when the absent presence of our students made itself felt/known during data review. Thinking with *Ghostly Matters* gave us a way to confront the forces, objects and actors that 'haunt' our data, and to engage with the dreamlike, imaginary and spectral qualities of our research. When we intersected Gordon's writing into our assemblage (Figure 7), we intuitively cut it into two student assignments.



**Figure 7.** Gordon's writing cut into the assemblage.

One piece was a story about Salma, a young Palestinian woman, detailing her daily experiences of passing through border checkpoints to reach work; the evocative written text was punctuated by photographs and blueprints of Israeli military installations. The other project was a beautifully executed and, in places, fraught exploration of a student grappling with her sexuality, race and identity, contrasted and intertwined with explorations of these themes in Palestine/Israel. The quote from Gordon (1997) that found its way into the assemblage read: ‘Haunting ... alters the experience of being in time, the way we separate the past, the present, and the future. These spectres or ghosts appear when the trouble they represent and symptomize is no longer being contained or repressed’ (xvi).

The module’s pedagogy had taken the lid off the troubles. Katie watched students experience trouble with how they should ask authentic questions, trouble with the emotional impact of learning about violence, trouble with narrative ownership, trouble with their own identities. And yet it was not just that the pedagogy had allowed space for the trouble – it allowed space for what Gordon indicates the trouble represents.

Where a British student created an imaginative narrative of Salma’s highly visceral daily tribulations, he entered into and joined his present with the pasts of those that Salma and her troubles represented. For this student, drawing upon his own memory of crossing a different checkpoint – Allenby Bridge, rather than Qalandia – was key to representing Salma’s embodied and affective experiences. In no small way was his identity as British-Egyptian part of the story; he understood what it meant to ‘pass’ as white, but upon inspection of identity documents by border guards be read as ‘other’ (*read*: Arab). There is a haunted understanding of the issues at stake, for the student writing the narrative, the reader, and for us as researchers.

Similarly, the second student’s art workbook used 3D art techniques (bi-coloured glasses for reading what initially looked like coded, illegible musings; letters and missives to be taken out of envelopes in the book; intersected maps; unfolding pages) to materially bring those experiencing the portfolio into troubled interaction with her questions. These related to both her explorations of sexuality and race in the UK, and similar explorations for those living daily with political violence in Palestine/Israel. For this student, tensions around her identity as Welsh, bisexual and working-class cross-cut her project’s aesthetics and aims. In particular, she provocatively drew Wales and Palestine/Israel together within the frame of colonialism. She implicated Wales in (British) colonial rule of historic Palestine, but also interrogated violent Welsh-English internal power relations. The portfolio created a material entry point connecting her past and that of others, their presents and futures, allowing the questions and learning to haunt and draw in creator and reader/viewer.

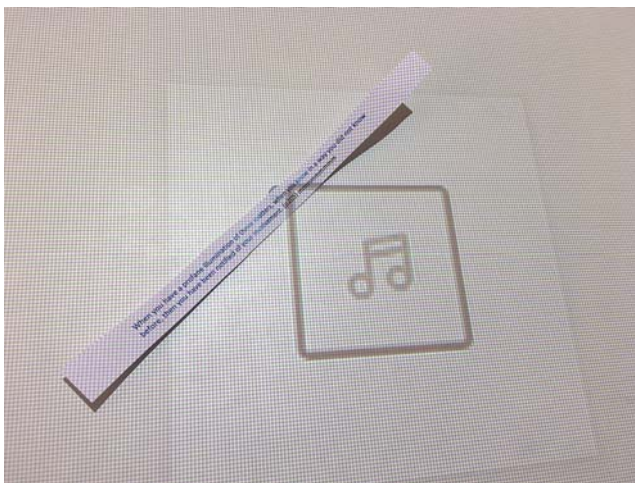
We cut another excerpt from Gordon (1997) into the assemblage; one which articulated the call to action indicated by the appearance of ghosts:

[H]aunting ... is distinctive for producing a something-to-be-done ... haunting was precisely the domain or turmoil and trouble, that moment ... when things are not in their assigned places, when the cracks and rigging are exposed, when the people who are meant to be invisible show up without any sign of leaving ... [it] is this sociopolitical-psychological state to which haunting referred. (xvi)

Salma and the portfolio and the lives of others that they represented showed no signs of leaving either the students' consciousness or ours. For the students especially, cracks had appeared in their relationships with assumed knowledge, with their geographical environment, with their own race, class and sexuality and how these manifested. The module was not simply an aggregation of knowledge and facts about Palestine/Israel, it was a troubled, cracked, haunted, and at times, life-changing experience of shared issues that required 'something to be done'. These 'somethings' included Katie and her students sharing the creative projects at the Exeter Respect Festival,<sup>7</sup> which enabled them to collaboratively design an interactive exhibition and roundtable discussion that reached and moved a public audience. This was a further step in bridging the assumed divide between here and there, us and them – in a way that directly implicated viewers and listeners. This strongly connects to the module's intended political aims, its grounding in decolonial feminist theory,<sup>8</sup> and an understanding of classrooms as radical spaces of possibility beyond the University (hooks 1994). Those involved in the module were working to decide whether history can help build the future, taking us back to Gordon's point about altering the experience of being in time in a fruitful way: What can students do? How can they reconcile this? How do they situate themselves? What is their sense of 'something to be done'? Gordon refers to these 'somethings-to-be-done' as 'always discovered in material practices' (1997, 202); in this case, the students' assignments materialised as the productive site of troubles, cracks, hauntings and action.

This resonates with Chappell et al.'s (2019) argument that creativity in education needs to de-centre itself from a purely human focus and allow space for the other-than-human and its/their materiality. In taking this creative, posthumanising approach to HE teaching and learning, the module was able to disperse learning in a differently productive and deeper way. A final diffractive cut of Gordon's writing through the assemblage underscored this.

Figure 8 shows the digital screen via which a radio journalism assignment could be experienced, with Gordon's words across it: '[...] when you have a profane illumination



**Figure 8.** Gordon's text cut through audio data.

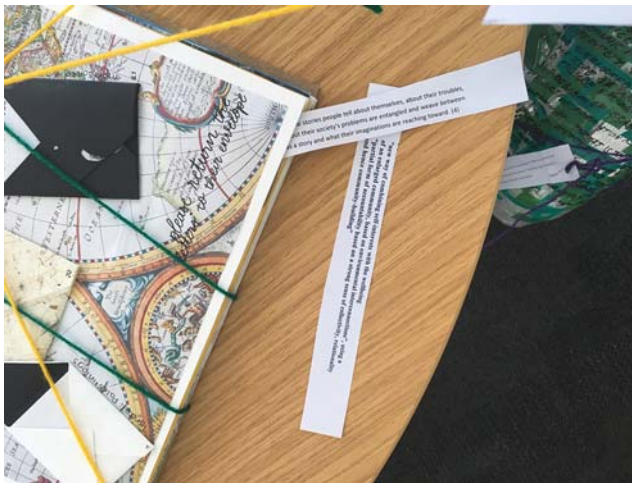
of these matters, when you know in a way you did not know before, then you have been notified of your involvement' (1997, 205). Kerry cut this text here because of the experience of 'literally putting on the headphones ... I felt as if I was immersed ... It was so physically on me ... the sound going into my brain I was being notified of my involvement' (diffractive discussion, 27.6.19). As the radio journalism segued from an authoritative, male voice to a young female radio journalist, the student was materially present within her text: her voice was audible as the second 'reader', while her father was the first. That both are German journalists adds a further layer of entanglement and involvement. For Kerry, questions around disempowerment, encroachment and suffering arose as the focus shifted from detached 'issue-based' reporting (male voice) to an audio potent with the trials faced by young Palestinian women in conditions of violent conflict (female voice). Kerry's aural-material experience was accentuated by the intra-action between data (radio broadcast) and digital technology (headphones) – she had been notified of her involvement, becoming an accomplice in the students' learning. Both remained haunted by the lives of those in Palestine/Israel who they had never met, but who have since shown no signs of disappearing.

Please listen through headphones: <https://soundcloud.com/user505338185/women-in-gaza-report-marie-sina>

### De-centring selves, (re-)centring an ethics of community

Our second diffraction shifted from Gordon's (1997) work on haunting to Braidotti's (2013) theorisation of 'the posthuman', through the question of precisely *how* creative pedagogies and digital technologies are materially entangled – and with what effect(s). Katie cut the following quotation into the workbook on settler colonialism in Wales and Palestine, selecting pages that attested to the author/creator's positionality as a white, Welsh bisexual woman (Figure 9):

Complex personhood means that the stories people tell about themselves, about their troubles, about their social worlds, and about their society's problems are entangled and weave



**Figure 9.** Gordon's text cut through the assemblage.

between what is immediately available as a story and what their imaginations are reaching toward. (Gordon 1997, 4)

Intimate layers of subjectivity – and intersecting axes of difference (Crenshaw 1991) – haunt(ed) our first diffraction, most significantly for Katie who knew many of the her-stories and his-stories underpinning students' projects. Again, the trouble raised through students' creative work was/is profoundly generative: they came not only to locate themselves as actors capable of responding to 'something to be done', but also to articulate how their multiple identities entangle them (intellectually, politically and ethically) with others. This 'process of becoming' (Chappell et al. 2012; Chappell et al. 2019) is at once individual and relational, subjective and collective. Echoing posthumanising creativity (Chappell 2018), 'complex personhood' becomes intelligible as a form of emergent subjectivity made possible through intra-action with the other-than-human. For students on the course, this included organisation websites and online databases; blogs containing digital images and personal narratives; sound studios and digital recording equipment; and glue, markers, pens and paints. The indeterminate boundaries among actants allowed for flow across membranes, for ruptures and seepages that shaped both the creative projects and their creators.

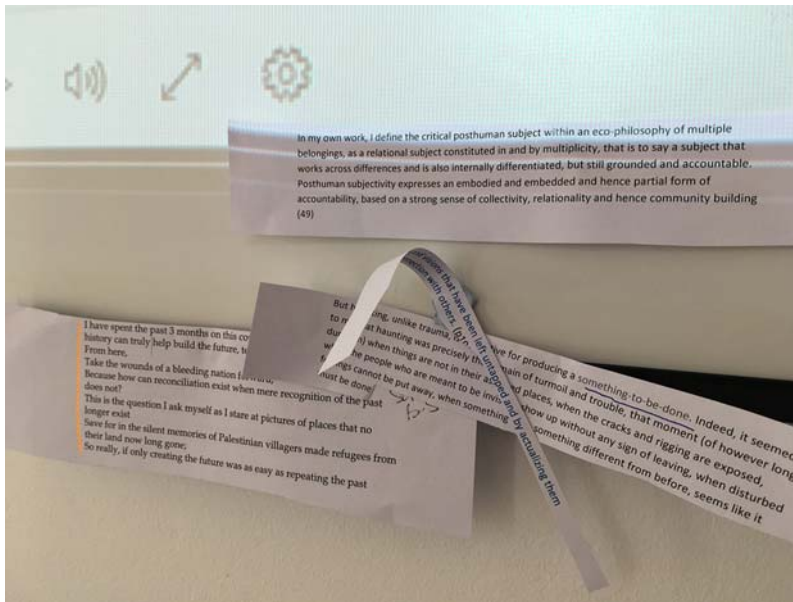
As ripples spread from this diffraction, we layered a resonant section of Braidotti's (2013) text beneath the passage by Gordon (Figure 9):

In my own work, I define the *critical posthuman subject* within an eco-philosophy of multiple belongings, as a relational subject constituted in and by multiplicity, that is to say a subject that works across differences and is also internally differentiated, but still grounded and accountable. Posthuman subjectivity expresses an embodied and embedded and hence partial form of accountability, based on a strong sense of collectivity, relationality and hence community-building. [emphasis added] (49)

This combined/double diffraction signifies the person-in-becoming, but in ways that critically de-centre the (human) self. We thus became able to perceive how layers of 'complex personhood' and 'emergent subjectivities' extend beyond the human and render her accountable to an enlarged sense of community, including objects, materials, spaces and environments.

The embedding of complex people within new constellations of community became strikingly tangible in the process of cutting Braidotti's (2013) theory into our data, as the passage above (or fragments of it) was actually diffracted into our assemblage twice – once layered beneath the workbook (Figure 9), and once as a suspended 'connector' between the radio journalism piece and a human sculpture (Figures 10 and 11).

Through this entanglement of theory with both digital and material artefacts, we can see how posthumanising approaches to HE render humans accountable beyond themselves. Braidotti's (2013) assertion alerts us to flow across forms and forums, enmeshing three projects and their creators in a wider political project and community. This is a powerful example of what students' imaginations might be 'reaching toward' once they push past 'what is immediately available as a story' (Gordon 1997, 4). For all the students whose projects feature in the assemblage, the process of creation drew them into a whirlpool of risk and agency, which allowed them to engage in transformative action – not as the focal subjects, but as allies.



**Figure 10.** Braidotti's text as connector [close up].

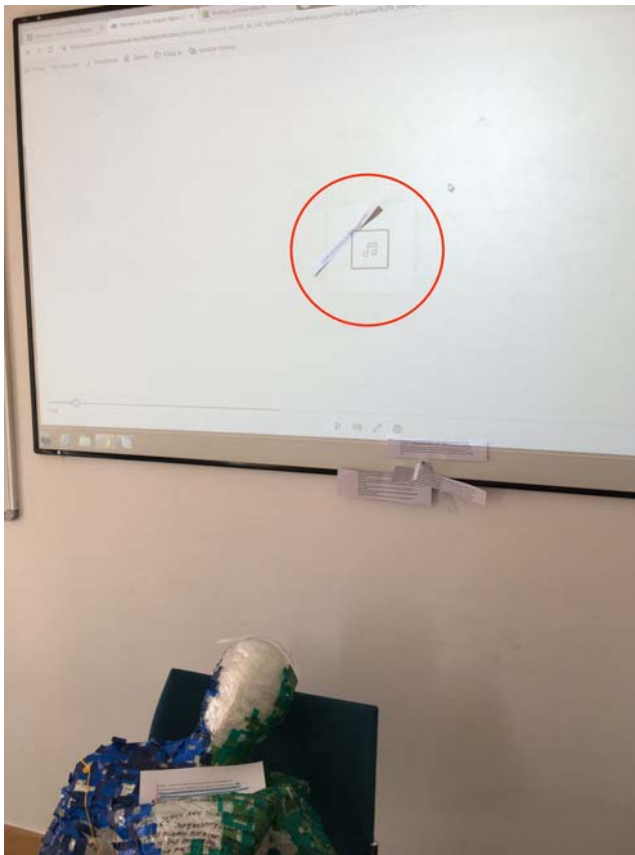
In making these cuts, the intra-action between theory and data also raised the question of what it means to be ethical as an emergent practice. Set to the side of the human sculpture and laced loosely to the workbook with wool, we placed the following text(s) by Braidotti (2013) atop a painting of a Palestinian woman wearing religious dress and a noose labelled 'slut' around her throat:

A posthuman ethics for a non-unitary subject proposes an enlarged sense of inter-connection between self and others, including the non-human or 'earth' others, by removing the obstacle of self-centred individualism (49-50);

We are becoming posthuman ethical subjects in our multiple capacities for relations of all sorts and modes of communication by codes that transcend the linguistic sign by exceeding it in many directions (190) [Figure 12](#).

Katie found this particular piece of work uncomfortable. Its representation/signification grated against the module critiques, despite the student's intention to express solidarity with Palestinian women experiencing violence. Not all projects 'succeeded' equally in conveying a nuanced message and/or contributing critically to public and political debates; for example, this representation risked being re-inscribed within Islamophobic discourses. Yet this student's methodological reflection on her analysis of 'slut shaming' in Palestinian society drew the viewer/reader's attention to the embeddedness of women within both Palestinian patriarchal social relations and Israeli settler colonial violence; enacted a detailed and complex political economy critique; and drew connections between activist movements. Research and creation entangled her deeply within a new political community of which she had previously limited knowledge as a Chinese business management student. Her emergent ethicality – and indeed the immediately available story that she





**Figure 11.** Braidotti's text as connector.

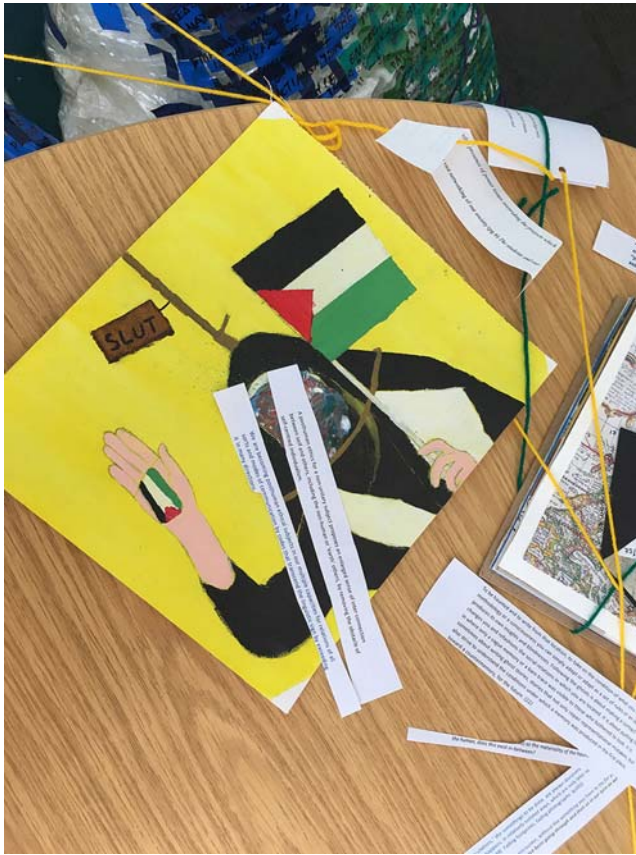
sought to push past – is visible within the rich layers of paint, which swirl particularly intensely upon the woman's blotted-out face. A sense of (in)justice emanates from the art-as-text. So too the student's ethics become knowable through the backstory that she enrolled in a painting course specifically to produce 'better', more nuanced work. In keeping with Braidotti (2013), here ethics connect self and other through acts of de-centring, they exceed the linguistic sign in relational ways. Yet so too they are contested and contingent, as evident in Katie's discomfort with the image if 'read' alone.

### **The film: when is my story my own?**

Please now watch the experimental film: *When is my story my own?* (4 min). This visual and sonic artefact honours the material, emotional, creative and aesthetic elements of our students' work: <https://vimeo.com/376500938>

### **Departures**

Through the film, you have begun your own departure, moving from our text (written and visual) toward your own understanding of what emerges from the re-design of



**Figure 12.** Braidotti's text layered atop the painting.

HE teaching and learning through posthumanism. Perhaps you have at times felt uneasy or uncomfortable – with theoretical frames, narratives of violence or our experiments with form. Almost certainly you have felt care, not least for our students as they undertake the risky work of creativity and political accountability. We understand these sensations and shifts to indicate cracks in the ability of neoliberalism to determine what HE can and should be.

We now offer further points of departure – suggestions of other (some)things to be done if we are to continue pushing at the boundaries of teaching and learning in ways that create new horizons of possibility. In these ways, posthumanist PBL might indeed shape the way we think permanently, not only in our module's space/time. These thoughts might be read as a practical starting point for those who wish to undertake post-humanising work in their own teaching and learning.

### ***Departure/Starting point 1. Caring and slowing down***

Through our entanglement with the module re-design process, we have been moved and changed by it. Gradually, each of us was 'notified of our involvement' from identifying

our initial unease, and seeing it as generative, through an accumulation of glow moments, analytic experiences, and ghostly encounters; we experienced the need – at times – to take care of an other. Initially this left us with an ethical uncertainty held in the question ‘Who am I/are we to ...?’ In trying to ‘do something’ in response, we drew confidence from the idea that, having become involved, we could warm to the invitation and ally ourselves with our students, others and their troubles: the human-esque sculpture and its cracks and hauntings; the stories of Palestinian villages – homes – flattened, buried, made into a park; most disturbingly, of the deaths, encroachments and abuses that students brought through in their assignments, learning from them as they allied themselves to ideas, conflicts and issues beyond their previous understandings and experiences. For students and us, the sometimes painful and uncomfortable new knowledge produced was not just ‘knowledge in the moment’ or of a particular context, but rather part of a lifelong learning process – it stays and travels with us.

This leaves us all working to maintain a more responsive ethics of care in our HE teaching and research, resonating with early discussions among network colleagues about the risky emotional support and ‘care work’ needed to facilitate students’ agency. In looking forward, despite the pressures of the neo-liberal HE climate, we are attempting to keep something of the slower pedagogy and scholarship that we have found together. While the delivery of our module was as fast paced as any other within research-intensive HE, our process of research and analysis enabled us to linger with texts, sensations, voices and data. This gives us hope to be able to move beyond the frustrations and anxieties of neo-liberal banking and attainment models of HE, and to continue developing more empathetic practices with our students.

### ***Departure/Starting point 2. Moving beyond the word***

As educational researchers and practitioners, we increasingly understand – see, hear and *feel* – the necessity of working in ways that better reflect the messy contingency of lived experience, intra-action with and accountability to the other-than-human, and the significance of affect/materiality in both our data and our pedagogical process. The question from here is how to build upon the potential made visible, audible and tangible by our film-based assemblage. It constitutes a first step toward crafting pedagogy and scholarship that reaches and moves people in ways that do not privilege language, but rather underscore the inseparability of ‘being’ from ‘knowing,’ as raised by Black, indigenous, postcolonial and decolonial feminist scholars (Million 2009; Todd 2016; Vergès 2019). This means paying attention to the cracks, trouble, haunting and unease generated within and by our work, how it ‘irrupts’ and glows – and how capturing/re-creating/intensifying these sensory experiences is critical as knowledge. Our work suggests that creative, aesthetic and embodied teaching practices might amplify the powerful learning experienced through mediums such as visual art and spoken poetry, which linger with audiences/learners beyond the encounter. So too it highlights how the complex textures and affectivity of non-linguistic forms enable academic scholarship – whether our own or our students’ – to resonate and intervene in the world. By moving beyond the word, we might move toward others.

### ***Departure/Starting point 3. De-centring as an invitation to a shared future***

Throughout, we have remained acutely aware of the debts owed to new materialist and posthuman scholars, and to thinkers, writers and activists whose work precedes our own, while having been marginalised (silenced, elided) within academia. As Chappell (2018) highlights in her work on posthumanising creativity, indigenous and arts-based scholars have been theorising embodiment, aesthetics and relations with other-than-humans far before the ‘ontological turn’ (Todd 2016). So too Black, Chicana, Latinx, indigenous, postcolonial and decolonial scholars have alerted us to the significance of experiential knowledge, sensation, ethicality, community building and political praxis in the classroom (hooks 1994; Solórzano 1997; Vergès 2019). Our call to ‘de-centre’ then responds to both posthumanist and decolonial imperatives: to reject the self-centring of (human) individuals, and to re-centre alternative epistemologies and ontologies within knowledge production. We invite academic researchers, students and educational practitioners to break down traditional hierarchies and to de-centre – who is known, who is knowing, who is know-er (Kilomba 2015) – as a means of making space for more.

Together, through module re-design and new module design, we aim to facilitate modes of thought and praxis that will continue the unease of unlearning what (and who) we know, the unease of grappling with disempowerment and suffering, the unease of stretching material and virtual learning environments to their limits, and the unease of handing over pedagogy to students. We believe deeply in the generative capacity of this unease. We aim to keep working with the discomfort, haunting and trouble, which notifies us of our involvement not only in past and present (re)production of normative models, but also in the creation of our collective future.

### **Notes**

1. Objective world to be validly/reliably discovered.
2. Socially constructed meaning-making between human individuals.
3. This is not to deny HE PBL researchers’ contribution (e.g., Peterlicean and Morar 2013; O’Brien, McGarr, and Lynch 2020; Lee et al. 2013 and more), however this scholarship does not explicitly attend to materiality, affect and care as dimensions of teaching and learning.
4. Bozalek and Zembylas (2016) differentiate ‘new materialism’ from posthumanism through its focus on theoretical work that counters the dominance of linguistic practices, emphasising embodied materiality and difference. We are working at the intersection of these two highly enmeshed philosophical approaches.
5. While we frame our work within posthumanist and new materialist approaches here, we acknowledge the significance of postcolonial and decolonial pedagogies to our understanding of agency and our call to re-centre alternative ways of being/knowing. The knowledges produced by marginalised, colonised and structurally disadvantaged communities are all too often elided by critical theory ‘turns’ (Hemmings 2006; Todd 2016). We consider the potential synergies between posthumanist, postcolonial and decolonial approaches at the end of this article.
6. Due to personal circumstances, one student withdrew from the interviews during the period of our research.
7. Running since 1997, the Exeter Respect festival describes itself as “[...] the city’s annual celebration of diversity where we use the performing and creative arts to engage the wider community in saying no to racism and all forms of prejudice.” Attendants number approximately 20,000 people per year; see <https://exeter-respect.org/>.

8. This body of scholarship and praxis highlights the entanglement of gender and sexuality with colonialism and its logics of race and capital. Decolonial feminists argue that transformative action must target the co-articulation of these relations of power, as a practice of resistance led by those subject to its violence (see Lugones 2010).

## Acknowledgements

We are grateful to the students and staff on the module for giving their time and offering their learning and precious assignments for exploration in our study. We are also grateful to the Education Incubator project within our University which supported this research and funded the film, and to colleagues Vivienne Baumfield, Justin Dillon, William Gallois, Deborah Osberg and Carol Taylor who provided influential critical reviews during preparation. We also wish to thank Guy Natanel and Preston Street Films for helping us to tell the ‘story’ of our research, and enriching this process with their own voices and vision. Finally, our research and re-design could not have been undertaken without the support of our network – we thank Bryan Brown, Judith Kleine-Staarman, Katie Orchel, Sabrina Rahman, Laura Salisbury, Kate Tyler and Erin Walcon for their time, energy and inspiration.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

This work was supported by University of Exeter Education Incubator.

## ORCID

Kerry Chappell  <http://orcid.org/0000-0002-9964-1128>

Katherine Natanel  <http://orcid.org/0000-0003-2276-7889>

## References

- Bakhtin, M. M. 1981. *The Dialogic Imagination: Four Essays*. Edited by M. Holquist and translated by C. Emerson & M. Holquist. Austin & London: University of Texas Press.
- Ball, S. J. 2003. “The Teacher’s Soul and the Terrors of Performativity.” *Journal of Education Policy* 18 (2): 215–228. doi:10.1080/0268093022000043065.
- Ball, S. J. 2016. “Neoliberal Education? Confronting the Slouching Beast.” *Policy Futures in Education* 14 (8): 1046–1059. doi:10.1177/1478210316664259.
- Barad, K. 2003. “Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter.” *A Feminist Companion to the Posthumanities* 28 (3): 223–239. doi:10.1086/345321.
- Barad, K. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham & London: Duke University Press.
- Behari-Leak, K., S. Josephy, M. Potts, G. Muresherwa, J. Corbishley, T. Petersen, and B. Gove. 2019. “Using Vulnerability as a Decolonial Catalyst to re-Cast the Teacher as Human(e).” *Teaching in Higher Education*. doi:10.1080/13562517.2019.1661376.
- Biesta, G. 2004. ““Mind the Gap!” Communication and the Educational Relation.” In *Counterpoints, Vol. 259, No Education Without Relation*, edited by C. Bingham, and A. Sidorkin, 11–22. New York: Peter Lang.

- Blumenfeld, P. C., E. Soloway, R. W. Marx, J. S. Krajcik, M. Guzdial, and A. Palincsar. 1991. "Motivating Project-Based Learning: Sustaining the Doing, Supporting the Learning." *Educational Psychologist* 26 (3&4): 369–398. doi:10.1080/00461520.1991.9653139.
- Bozalek, V., and M. Zembylas. 2017. "Diffraction or Reflection? Sketching the Contours of two Methodologies in Educational Research." *International Journal of Qualitative Studies in Education* 30 (2): 111–127. doi:10.1080/09518398.2016.1201166.
- Bozalek, V., and M. Zembylas. 2016. "Critical Posthumanism, new Materialisms and the Affective Turn for Socially Just Pedagogies in Higher Education." *South African Journal of Higher Education* 30 (3): 193–200. doi:10.20853/30-3-652.
- Braidotti, R. 2013. *The Posthuman*. Cambridge, UK: Polity Press.
- Burke, P. J. 2015. "Re/Imagining Higher Education Pedagogies: Gender, Emotion and Difference." *Teaching in Higher Education* 20 (4): 388–401. doi:10.1080/09540253.2017.1308471.
- Burke, P. J. 2018. "Trans/Forming Pedagogical Spaces: Race, Belonging and Recognition in Higher Education." In *Dismantling Race in Higher Education: Racism, Whiteness and Decolonising the Academy*, edited by J. Arday, and H. S. Mizra, 365–382. Cham, CH: Palgrave Macmillan.
- Chappell, K. 2018. "From Wise Humanising Creativity to (Posthumanising) Creativity." In *Creativity Policy, Partnerships and Practice in Education (Creativity, Education and the Arts)*, edited by K. Snepvangers, P. Thomson, and A. Harris, 270–306. London: Palgrave Macmillan.
- Chappell, K., A. Craft, L. Rolfe, and V. Jobbins. 2012. "Humanising Creativity: Valuing our Journeys of Becoming." *International Journal for Education and the Arts* 13 (8): 296–322. <http://www.ijea.org/v13n8/>.
- Chappell, K., L. Hetherington, H. Ruck Keene, H. Wren, A. Alexopoulos, O. Ben-Horin, K. Nikolopoulos, J. Robberstad, S. Sotiriou, and F. X. Bogner. 2019. "Dialogue and Materiality/Embodiment in Science|Arts Creative Pedagogy: Their Role and Manifestation." *Thinking Skills and Creativity* 31: 296–322. doi:10.1016/j.tsc.2018.12.008.
- Chappell, K., K. Natanel, L. Hetherington, and H. Wren. 2020. "Posthumanising Creativity in Higher Education: Making Change for New Educational, Social and Political Futures." British Educational Research Association presentation (peer-reviewed), September 2020.
- Charteris, J., A. Nye, and M. Jones. 2019. "Posthumanist Ethical Practice: Agential Cuts in the Pedagogic Assemblage." *International Journal of Qualitative Studies in Education* 32 (7): 909–928. doi:10.1080/09518398.2019.1609124.
- Cohen, L., L. Manion, and K. Morrison. 2018. *Research Methods in Education*. London: Routledge Taylor and Francis Group.
- Craft, A. 2013. "Childhood, Possibility Thinking and Wise, Humanising Educational Futures." *International Journal of Educational Research* 61: 126–134. doi:10.1016/j.ijer.2013.02.005.
- Crenshaw, K. 1991. "Mapping the Margins: Intersectionality, Identity Politics, and Violence Against Women of Color." *Stanford Law Review* 43 (6): 1241–1299. doi:10.2307/1229039.
- Darder, A. 2002. *Reinventing Paulo Freire: A Pedagogy of Love*. Boulder: Westview.
- Deleuze, G., and F. Guattari. (1980) 2004. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by B. Massumi. New York & London: Continuum.
- Fielding, M., and P. Moss. 2011. *Radical Education and the Common School: A Democratic Alternative*. London & New York: Routledge.
- Freire, P. (1970) 1996. *Pedagogy of the Oppressed*. London: Penguin.
- Ganesh, S., and H. M. Zoller. 2012. "Dialogue, Activism and Democratic Social Change." *Communication Theory* 22 (1): 66–91. doi:10.1111/j.1468-2885.2011.01396.x.
- Gordon, A. 1997. *Ghostly Matters: Haunting and the Sociological Imagination*. Minneapolis. & London, MN: University of Minnesota Press.
- Greening, T. 1998. "Scaffolding for Success in Problem-Based Learning." *Medical Education Online* 3 (1): 1–15. doi:10.3402/meo.v3i.4297.
- Haraway, D. 2016. *Staying with the Trouble: Making Kin in the Chthulucene (Experimental Futures)*. Durham, NC: Duke University Press.
- Harris, S. 2005. "Rethinking Academic Identities in neo-Liberal Times." *Teaching in Higher Education: Critical Perspectives* 10 (4): 421–433. doi:10.1080/13562510500238986.

- Harvey, D. 2007. "Neoliberalism as Creative Destruction" *The Annals of the American Academy of Political and Social Science* 610. NAFTA and Beyond: Alternative Perspectives in the Study of Global Trade and Development (Mar., 2007): 22-44. Accessed May 25, 2021. <http://www.jstor.org/stable/25097888>
- Hemmings, C. 2006. "Invoking Affect: Cultural Theory and the Ontological Turn." *Cultural Studies* 19 (5): 548-567. doi:10.1080/09502380500365473.
- Hofsess, B. A., and J. J. Thiel. 2017. "Pause/Play: Curating as Living/Aesthetic Analysis." *Reconceptualizing Educational Research Methodology* 8 (3): 31-53. doi:10.7577/term.2549.
- hooks, b. 1994. *Teaching to Transgress: Education as the Practice of Freedom*. New York & London: Routledge.
- Horton, M. 1997. *The Long Haul: An Autobiography*. New York: Teachers College Press.
- Jackson, A. Y., and L. A. Mazzei. 2012. *Thinking with Theory in Qualitative Research: Viewing Data Across Multiple Perspectives*. New York: Routledge.
- Kilomba, G. 2015. "Decolonising Knowledge" [lecture-performance]. *Voice Republic*, 'We Don't Contemporary' series. Accessed 18 November 2019. <https://voicerepublic.com/talks/gradakilomba-decolonizing-knowledge-016ae920-48de-445f-845d-dcfe6926c4b4>.
- Lee, J. S., S. Blackwell, J. Drake, and K. A. Moran. 2013. "Taking a Leap of Faith: Redefining Teaching and Learning in Higher Education Through Project-Based Learning." *Interdisciplinary Journal of Problem-Based Learning* 8 (2): 19-34. doi:10.7771/1541-5015.1426.
- Lennon, S., T. Riley, and S. Monk. 2018. "The Uncomfortable Teacher-Student Encounter and What Comes to Matter." *Teaching in Higher Education* 23 (5): 619-630. doi:10.1080/13562517.2018.1458711.
- Lugones, M. 2010. "Toward a Decolonial Feminism." *Hypatia* 25 (4): 742-759.
- MacLure, M. 2013. "The Wonder of Data:." *Cultural Studies-Critical Methodologies* 13 (4): 228-232. doi:10.1177/1532708613487863.
- Markham, T., J. Larmer, and J. Ravitz. 2003. *Project-Based Learning Handbook: A Guide to Standards Focused Project-Based Learning for Middle and High School Teachers*. Novato, CA: Buck Institute for Education.
- Mazzei, L. A. 2014. "Beyond an Easy Sense: A Diffractive Analysis." *Qualitative Inquiry* 20 (6): 742-746. doi:10.1177/1077800414530257.
- Million, D. 2009. "Felt Theory: An Indigenous Feminist Approach to Affect and History." *Wicazo Sa Review* 24 (2): 53-76. doi:10.1353/wic.0.0043.
- Molesworth, M., E. Nixon, and R. Scullion. 2009. "Having, Being and Higher Education: the Marketisation of the University and the Transformation of the Student Into Consumer." *Teaching in Higher Education* 14 (3): 277-287. doi:10.1080/13562510902898841.
- Niccolini, A. D., S. Zarabadi, and J. Ringrose. 2018. "Spinning Yarns: Affective Kinshipping as Posthuman Pedagogy." *Parallax* 24 (3): 324-343. doi:10.1080/13534645.2018.1496582.
- Nordstrom, S., and J. Ulmer. 2017. "Editorial: Postqualitative Curations and Creations." *Reconceptualizing Educational Research Methodology* 8 (3): 1-15. doi:10.7577/term.2558.
- O'Brien, R., O. McGarr, and R. Lynch. 2020. "Students' Perceptions of Lecturer Power and Authority in a Higher Education PBL Business Programme." *Teaching in Higher Education*. doi:10.1080/13562517.2020.1725881.
- Page, T. 2018. "Teaching and Learning with Matter." *Arts* 7: 82. doi:10.3390/arts704008.
- Peterlicean, A., and F. Morar. 2013. "Project-Based Learning in Higher Education." *Applied Mechanics and Materials* 371: 739-743. doi:10.4028/www.scientific.net/AMM.371.739.
- Phungsuk, R., C. Viriyavejakul, and T. Ratanaolarn. 2017. "Development of a Problem-Based Learning Model via a Virtual Learning Environment." *Kasetsart Journal of Social Sciences* 38 (3): 297-306. doi:10.1016/j.kjss.2017.01.001.
- Pitt, P., and J. Moss. 2019. "Enabling International Student Families: new Empiricisms and Posthumanist Entanglements in Higher Education." *Teaching in Higher Education* 24 (5): 709-722. doi:10.1080/13562517.2019.1618820.
- Rantala, T. 2017. "Maternal mo(ve)Ments in Memory Work." *Reconceptualizing Educational Research Methodology* 8: 27-30. doi:10.7577/term.2554.

- Reay, D. 2018. 'Race and Elite Universities in the UK.' In *Dismantling Race in Higher Education: Racism, Whiteness and Decolonising the Academy*, edited by J. Arday and H. S. Mizra, 47-66. Cham, CH: Palgrave Macmillan.
- Said, E. 1984. "Permission to Narrate." *Journal of Palestine Studies* 13 (3): 27-48. doi:10.2307/2536688.
- Solórzano, D. G. 1997. "Images and Words That Wound: Critical Race Theory, Racial Stereotyping, and Teacher Education." *Teacher Education Quarterly* 24 (3): 5-19. <https://www.jstor.org/stable/23478088>.
- Stevenson, J., J. O'Mahony, O. Khan, F. Ghaffar, and B. Stiell. 2019. 'Understanding and Overcoming the Challenges of Targeting Students from Under-Represented and Disadvantaged Ethnic Backgrounds'. Report to the Office for Students. Access at: <https://www.officeforstudents.org.uk/media/d21cb263-526d-401c-bc74-299c748e9ecd/ethnicity-targeting-research-report.pdf>.
- Strom, K., J. Ringrose, J. Osgood, and M. Renold. 2019. "PhEmaterialism: Response-Able Research and Pedagogy." *Reconceptualising Educational Research Methodology* Special Issue 10 (2-3): 1-39. doi:10.7577/rerm.3649.
- St Pierre, E. 1997. "Methodology in the Fold and the Irruption of Transgressive Data." *International Journal of Qualitative Studies in Education* 10 (2): 175-189.
- Taylor, C. 2019. "Diffracting the Curriculum: Putting "New" Material Feminism to Work to Reconfigure Knowledge-Making Practices in Undergraduate Higher Education." In *Theory and Method in Higher Education Research*, edited by J. Huisman, and M. Tight, Vol. 5, 37-52. Bingley, UK: Emerald Publishing Limited. doi:10.1108/S2056-375220190000005004.
- Taylor, C., and A. Bayley. 2019. *Posthumanism and Higher Education: Reimagining Pedagogy, Practice and Research*. Cham, CH: Palgrave Macmillan.
- Todd, Z. 2016. "An Indigenous Feminist's Take On The Ontological Turn: 'Ontology' Is Just Another Word For Colonialism." *Journal of Historical Sociology* 29 (1): 4-22. doi:10.1111/johs.12124.
- Ulla, B., N. Sandvik, A. Larsen, M. Nyhus, and N. Johannesen. 2019. "Sounds of Scissors: Eventicising Curriculum in Higher Education." In *Posthumanism and Higher Education: Reimagining Pedagogy, Practice and Research*, edited by C. Taylor, and A. Bayley, 31-53. Cham, CH: Palgrave Macmillan.
- Ulmer, J. 2017. "Writing Slow Ontology." *Qualitative Inquiry* 23 (3): 201-211. doi:10.1177/1077800416643994.
- Vergès, F. 2019. "Decolonial Feminist Teaching and Learning: What is the Space of Decolonial Feminist Teaching?" In *Decolonization and Feminisms in Global Teaching and Learning*, edited by S. De Jong, R. Icaza, and O. U. Rutazibwa, 91-102. Abingdon: Routledge.