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# Posthuman data analysis?

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# Outline

Introductions

What is Posthumanism?

What is data in Posthumanism research?

Examples of Posthuman data 'analysis'

Doing Posthuman data 'analysis'

Reactions to doing Posthuman data 'analysis'

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# Eliane Bastos



Lecturer and PhD Researcher at the University of Bath.

Drawing on Posthuman, Feminist, New Materialist theoretical framings to explore how children understand the human-ocean relationship and how this changes through their formal education.

‘Storying-with-the-ocean’ as a multi-modal method for storytelling to explore with how children they integrate ocean learning into their everyday.

Bodies of water (Neimanis, 2017); Trans-corporeality (Alaimo, 2016); Thing Power (Bennet, 2010); Agential Realism (Barad, 2007); Storying (Phillips and Bunda, 2018).

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# Dr Karen Barr

Senior Lecturer in Education and Childhood at Sheffield Hallam University.

PhD in Education completed at University of Bath.

I'm interested in how learning emerges in unanticipated non-linear ways through relationships with the more-than-human material world.

My doctoral research investigated how students learn through work-based placement on an Early Childhood Studies undergraduate degree. I used creative research practices, including collaging and experimental writing, to explore how meaning emerges through material encounters with placement.

Research influences include: assemblage (Deleuze & Guattari, 1987; Bennett, 2010); agential realism (Barad 2007); affect (Massumi, 2002); concept as method (Lenz Taguchi, 2016); response-ability (Haraway, 2016)

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# Charlotte Hankin

Part time teacher, educational consultant, PhD researcher with University of Bath.

Lived internationally for 11 years.

Reviews editor for Australian Journal of Environmental Education.

Thesis title: *Multispecies Moments: Becoming-with animal(s)-child(ren) assemblages in international school contact zones*

Situated in posthumanist feminist new materialist philosophies.

Research influences: Donna Haraway (2008, 2016), Karen Barad (2007), David Abram (1999), Vinciane Despret (2012).

'*Multispecies Moments*' (Hankin, 2022; 2026): arts-based, sensory, embodied, affective exploration with animal-child relations.

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## Research Qs for this webinar:

1. In what ways can posthumanism enliven research relations?
2. How might we investigate data together?

Write down **ANY** responses to the following questions:

How is your **body** feeling throughout?

What **thoughts** run through your mind? Why is this?

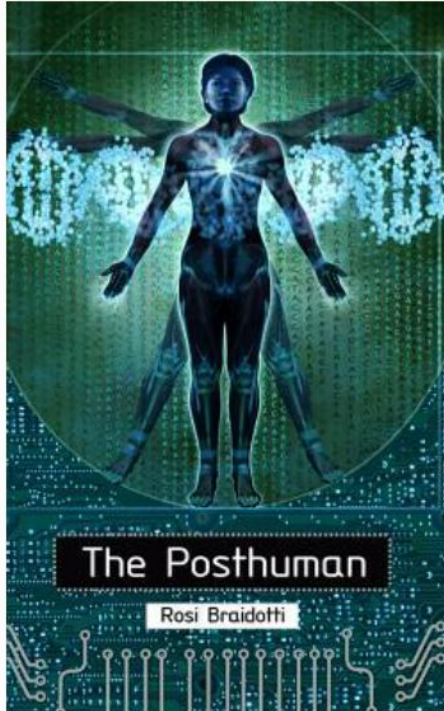
Do you **notice** something from your environment?

How are you in relation with **materials** in your surroundings?



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# What is Posthumanism?

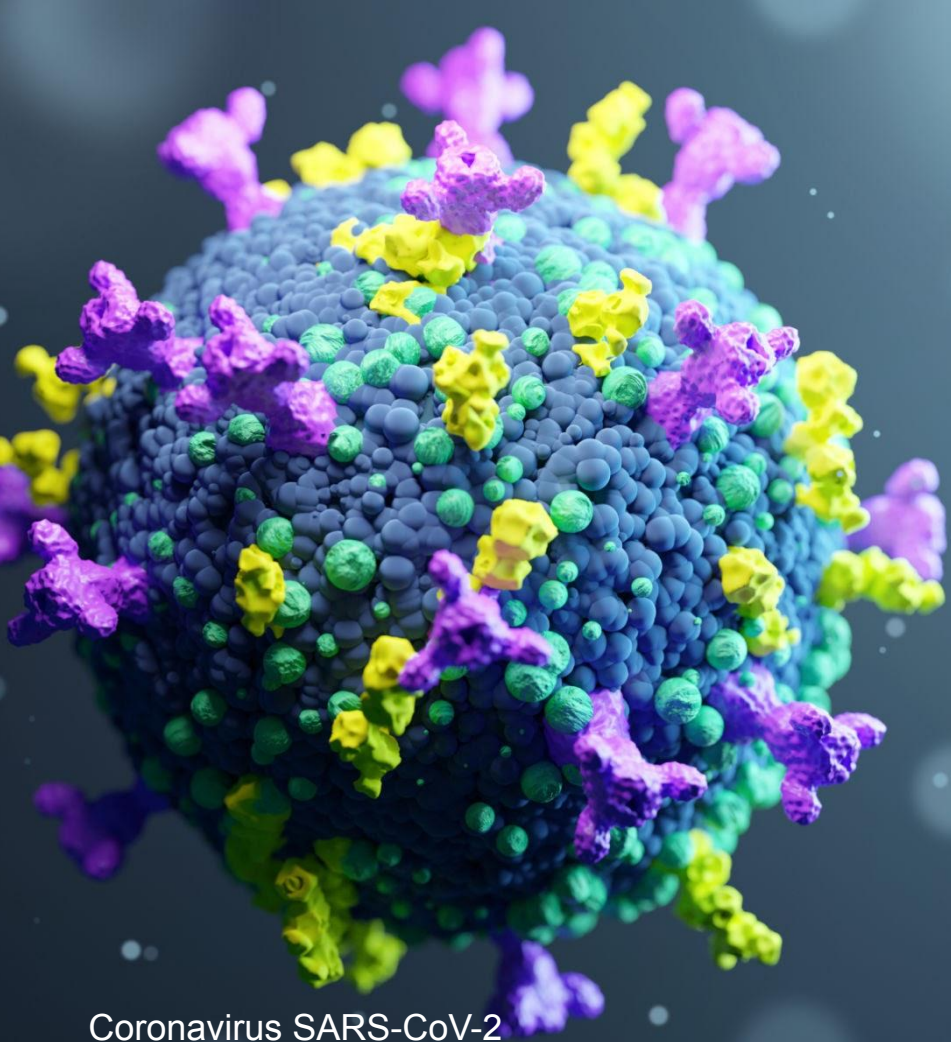


Posthumanism is “a generative tool to help us re-think the basic unit of reference for the human in [...] the historical moment when the Human has become a geological force capable of affecting all life on this planet.” (Braidotti, 2013, p. 5)

“Human genomes can be found in only about 10 percent of all the cells that occupy the mundane space I call my body; the other 90 percent of the cells are filled with the genomes of bacteria, fungi, protists, and such, some of which play in a symphony necessary to my being alive at all, and some of which are hitching a ride and doing the rest of me, of us, no harm.” (Haraway, 2008, p. 4)

Posthumanist ontologies reject “that humans are the only species capable of producing knowledge and instead creates openings for other forms/things/objects/beings/phenomenon to know.” (Ulmer, 2017, p. 834)

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Coronavirus SARS-CoV-2



Pollinator at work



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## A constellation of concepts...

Posthumanism is not one distinct paradigm with a readily traceable lineage, but “a constellation of different theories, approaches, concepts and practices” (Taylor, 2016, p. 6).

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# A constellation of concepts...

## Entanglement

“To be entangled is not simply to be intertwined with another, as in the joining of separate entities, but to lack an independent, self-contained existence” (Barad, 2007, p.ix).

## Intra-action

“*signifies the mutual constitution of entangled agencies*” (Barad, 2007, p.33), which is in contrast to interaction, which assumes that separate distinct agencies precede, rather than emerge through, their intra-action.

## Becoming-with

“We become-with each other or not at all” (Haraway, 2016, p.4).

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# A constellation of concepts...

## Thing Theory (Bennett, 2010)

“thing-power gestures toward the strange ability of ordinary, man-made items to exceed their status as objects and to manifest traces of independence or aliveness” (p. xvi).

things, too, are vital players in the world (p.4).

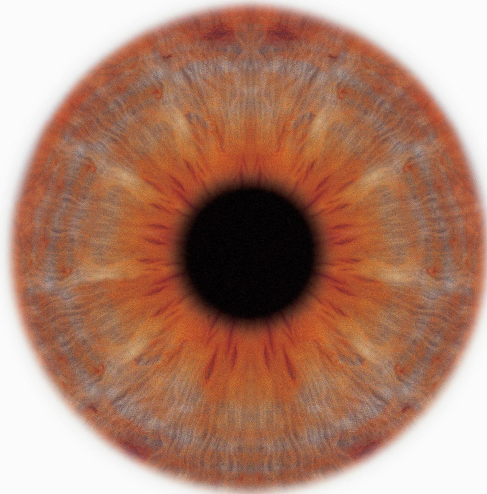
“Assemblages are ad hoc groupings of diverse elements, of vibrant materials of all sorts” (p. 23).



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# A constellation of concepts...

## Situated knowledges



"We need to learn in our bodies, endowed with primate colour and stereoscopic vision, how to attach the objective to our theoretical and political scanners in order to name where we are and are not, in dimensions of mental and physical space we hardly know how to name. So, not so perversely, objectivity turns out to be about particular and specific embodiment, and definitely not about the false vision promising transcendence of all limits and responsibility." (Haraway, 1991, p.190)

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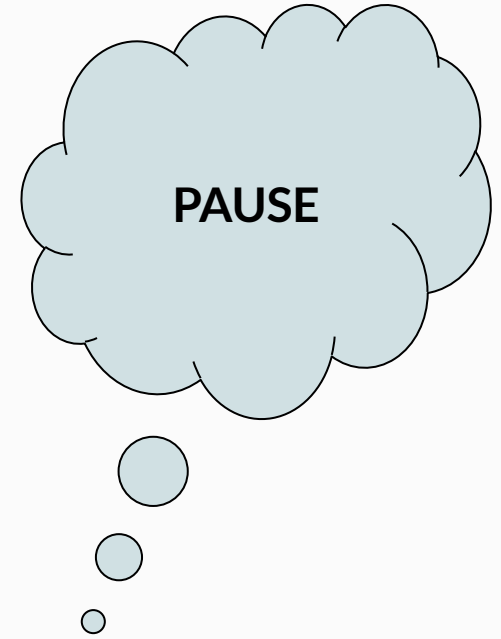
Write down **ANY** responses to the following questions:

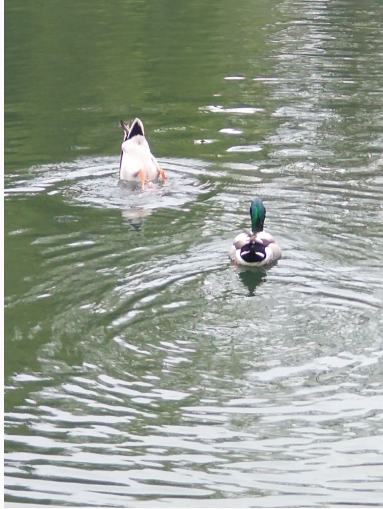
How is your *body/senses* feeling throughout?

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# What is data in posthumanist research?

Data emerge through each encounter with research

Meaning emerges from intra-acting with data

What counts as data?

Where does data begin, where does it end?

Not seeing from nowhere - transcendence vs immanence

What does the data provoke us to do and where does that lead us – insights emerge.

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# Diffraction patterns



The 'entangled structure of the changing and contingent ... world' (Barad 2007, p. 73)

'Water waves exhibit diffraction patterns, as do sound waves, and light waves. Diffraction has to do with the way waves combine when they overlap and the apparent bending and spreading out of waves when they encounter an obstruction.' (Barad 2007, p. 28)



Material reconfigurings enact 'agential cuts' (Barad 2007, p. 30)

'Cutting together-apart' (Barad, 2014, p. 168)

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# Researcher entanglements – from reflection to diffraction

‘Differences that our knowledge-making practices make and the effects they have on the world’ (Barad, 2007, p.72).

Reflection presumes distance and separation, something that posthumanist ontology considers impossible, so Barad (2007, p.29) proposes the need to replace ‘reflection’ with ‘diffraction’.

‘Diffraction involves reading insights through one another in ways that help illuminate differences as they emerge: how different differences get made, what gets excluded, and how those exclusions matter.’ (Barad 2007, p. 30).

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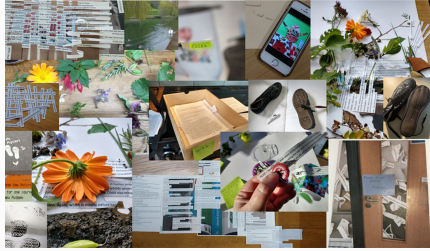
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# Some approaches to data analysis

‘Analysing’ data as an experiment ‘in relations’ rather than attempting to represent a universal reality.

- Improvising (Taylor 2016; Barr and Taylor, 2025)
- Edu-crafting (Taylor, 2018)
- Data ‘hot-spots’ (MacLure, 2013)
- Multispecies Moments (Hankin, 2022, 2026 fc)
- Posthumanist-Cli-Fi (Hankin & Hogarth, 2025)



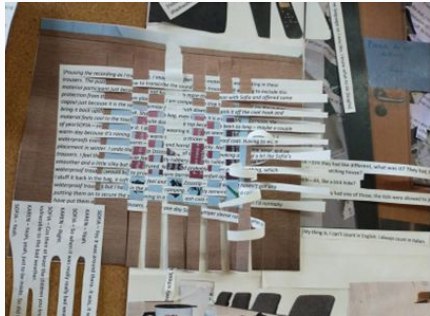


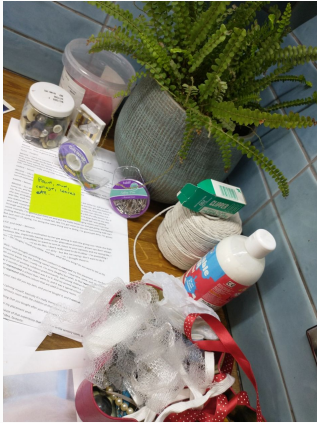
# Improvising and edu-crafting with data that glow

Improvising – responding to what data provokes and invites us to do and attending to how this produces insights through ‘knowing-in-being that emerges in the event of doing research itself’ (Taylor 2016, p.18).

Edu-crafting – with ‘cheap, low tech, and everyday experiments of entangled doing, being and thinking’ (Taylor, 2018, p.373)

Data hot-spots – ‘fragments of ‘data’ that refuse to settle under codes or render up decisive meanings’ and that ‘glow and glimmer’ (Maclure, 2013, p.171)



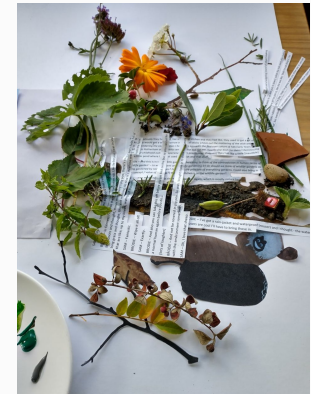


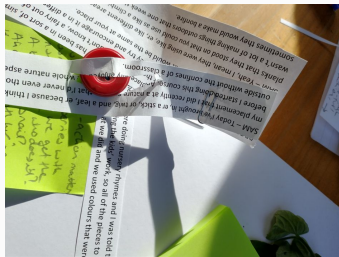
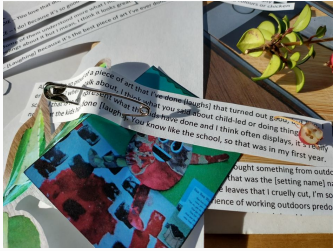
# Edu-crafting and improvising with data that glow – an example

Experimenting with empirical materials that took the form of printed out transcripts, photos, and various objects that I happened to have in my home'

Entanglements beyond 'expected' data.

'Becoming installed in the data... embodied engagement with the materiality of research' (Lenz Taguchi, 2012, p.265)





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## Insights emerging between human-nonhuman materials in the data assemblage



‘Mixing narratives, disclosures, and images ... craft[s] an overlapping and plural presence, ... possibilities for surprise and to get surprised, and overall more intensive experiences with research and texts’ (Koro-Ljungberg, 2012, p. 810).

‘The materials with which we work prompt us to remember experiences, to modify materials in certain ways rather than in others, and to have emotional, sensory, intellectual, and memory-based responses that are quite specific to the material assemblages of making practices.’ (Hickey Moody, 2018, p.725)

‘A sort of cumulative picture, layering together flashes of insights and moments of analytical revelation on top of each other, so that no layer of the argument or analysis captures the others, and such that each is mixed in with each’ (Bauman, 2021, p.1150).

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A rural scene featuring a traditional thatched-roof hut in the background, partially obscured by lush green trees. In the foreground, there is a pond with a black plastic liner. A wooden sign is placed in the water, and a dirt path runs alongside the pond. Several small white ducks are visible on the path. The overall atmosphere is peaceful and rural.

Who will care for Duck?

TOLONG JANGAN  
MELEWATI PAGAR



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## ***Multispecies Moments* (Hankin, 2022, 2026 fc)**

- i) *pre-interpretative*, because they are often noticed before analysed;
  - ii) *co-produced and immanent*, because they emerge from within encounters rather than being observed from ‘the outside’;
  - iii) *temporal, fleeting, and mundane*, because they pass, linger, recur, and register within the ordinary, everyday and happenstance rather than the spectacular;
  - iv) *more-than-representational*, because the ‘data’ from the encounter is felt, sensed, and carried.
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ARTICLE

## The Promise for Posthumanist-Cli-Fi: Writing with/in/for/as Stormy Worlds

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Corresponding author: Charlotte Hankin; Email: [cmh93@bath.ac.uk](mailto:cmh93@bath.ac.uk)

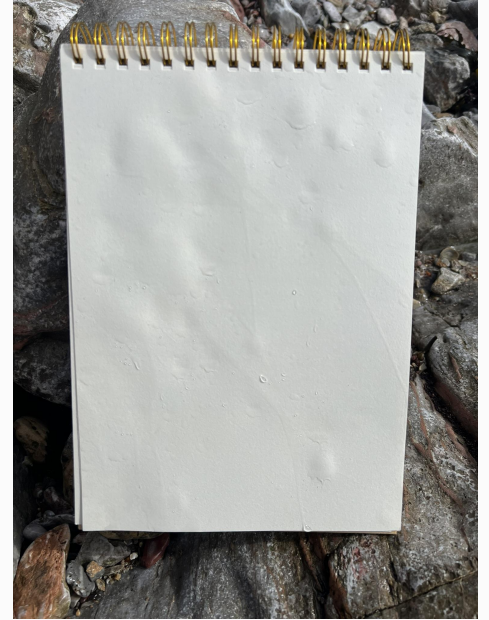
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# Knowledge production with the ocean (Bastos, 2026fc)



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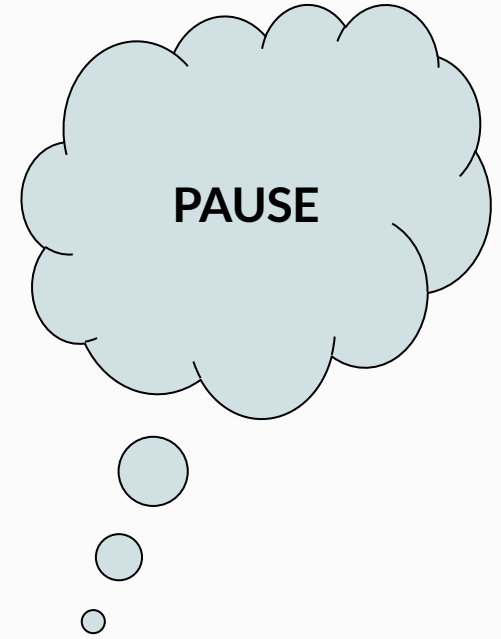
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# Thinking-feeling-doing together

1. **ONTOLOGY**: *How* does this experience with posthumanist data analysis provoke/challenge your research *orientation*?
2. **EPISTEMOLOGY**: *How* might you account for the relations between *humans and nonhumans* in your research?
3. **ETHICS**: In your research, whose voices are *excluded*, how and why?

Ethico-onto-epistemology (Barad, 2007)

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## PLENARY

Please write 1 question about 'Posthuman data analysis' that you would like resolved/challenged/extended?

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# PLENARY

**Write 1 word that summarises how you are feeling-thinking at the end of this webinar**

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