
Article: This is a theory building and/or theory-in-action article. The context is a grade 5 teacher-student writing conference (5-room poetry writing) with a group of SOL students, a Teacher and the researcher (teacher). Article has been cited 11 times.

The ‘big’ guiding question/s from this field that this paper is addressing (Re)working an educational moment in a way that ‘diffepts’ and disrupts the traditional cause-and-effect linear thinking of processing (analyzing the moment) – and communicating (the article’s syntax and writing style) in order to appreciate other iterative possibilities. The author’s first unpack Barad’s material-discursive ‘intra-action’ concepts/practices and then applies Barad’s theoretical concept of agential realism to an educational moment. Ultimately, the article highlights the intra-active responsibilities which emerge through diffraction and discusses how to promote social justice in classrooms and opens teacher/Teachers/reader/learners to alternative understandings and possibilities.

The Lit Review background focuses heavily on Barad’s *agental reality* (1998, 2007, 2008), with some Foucault (1984/5) and a little Deleuze (1968/1994). The specific RQ of this article is: what are the relational human and non-human ‘agents’ present in this particular ‘experimental and our experiment’ context? The methods used were audio recorded and transcribed writing conferences, field notes, written notes from on-going data analysis conversations and written analytical memos.

The authors conclude that ‘anything is possible’ and that each performance(?) makes an agential ‘cut’ that then diffuses and differentiates the moment further. The authors note 7 take aways: they are committed to living in in line with affirmative possibilities; approach children knowing moments are entangled; asking ‘how can our actions begin a diffraction of affirmation’?; look for the power of material-discursive practices (labelling students); train themselves to go against habits of thinking; embrace writing as an intra-active activity that will set off another diffraction; view pedagogy as a relational with humans and non-humans (and all the histo-politi-socio-cultural constructions past and present) that ‘enfold’ into the present.

The strengths of this text is that it focuses solely on one moment and really unpacks who/what ‘participants’ and the ‘object/apparatus’ are. It also includes lots of great terminology and direct quotes from Barad. It has one main idea/case study and stays focused on it. However, the limitations are that 1) only one other (re)working of an alternative ‘diffepted reading’ is presented and 2) I didn’t feel it in went into the same detail analysis as the original description of the context – I wanted more problematizing/alternatives re-workings.

The authors did answer the RQ they posed by providing answers to the 5 key question to provoke/disturb habitual thinking. They explain at least 7 ways they have been a changed as researchers and teachers by undertaking this project.
Some **unique or helpful special features** of this article were: it includes some very good Barad quotes and own expressions and vocab that can be used as a guide on how to discuss these. Good stimulus to analyze my own researcher/teacher moments. Good model to use if want to get published in this Journal – it was easy to read and had some very interesting expressions.

**Other relevance or usefulness** of this text is it explains Barad’s theory in detail and includes the specific terms (and definitions) used in this field like: diffraction, becoming-with, always already, performed subjectivities, apparatus/objects (non-human), entanglement, iterative intra-actions and matterings.

> ‘the sedimenting historicity of practices/agencies and an agential force in the world’s differential becomings. Becoming is not an unfolding in time but the inexhaustible dynamisms of the enfolding of mattering’ (Barad 2007, 180).

The study relates to my study because (themes and concepts) agential reality recognizes the intra-action of humans and non-humans, which allows for the bicycle to be foreshadowed as a critical contextual object. Bicycles are material-discursively produced (p 725). This article is also important as it clearly explains and applies Barad’s concept so is a good entry point to understanding fNM better. As an emerging researcher, it is also important for me to be aware of my iterative relationality to others – in presence, responsibilities and impacts while co-creating, diffracting and (re)configuring moments. It is also exciting to read work that is ‘breaking the habits of thinking’ and using radical ways (use of syntax, narrative, mixed genre style) of sharing research. Also reminds me to consider ‘the exclusions’ within ‘material dynamics of intra-activity’ and that the materialization of bodies, apparatuses and practices have a whole complexity and boundaries (labels) phenomenon as well. Need to ‘rework the boundaries’. On page 725, the explanation of the apparatuses (poetry/school) and be equally transferred to the NGO BEEP program as an ‘instrument’ designed to exact a perceived result (increase girls’ educational outcomes).

**Other ideas and notes**

5 Key questions to provoke/disrupt habitual thinking based on Barad’s work:

1. What apparatus are in motion?
2. What are the discursive and material forces?
3. How is the past and present folded into this moment?
4. How do humans and non-humans emerge differently as we re-enact with experience through multiple readings and writing with the data.
5. What are the material consequences of our reading the data? and
6. How will we live differently as researchers and teachers?

**Article:** This is a theory building and/or theory-in-action article. The context is following on data from 2 previous jobs without training studies with 114 16-21 year olds in South West England. Article has been cited 25 times.

The ‘big’ guiding question/s from this field that this paper is addressing is how young people engage with ‘nature’.

The **Lit Review background** focuses developing theoretical approaches to ‘outdoor learning’ and draws on her own previous work. The two key authors drawn on are Barad (2007) ‘agential realism’ and Bennet’s (2010) ‘vital materiality’.

**The specific RQ of this article is:** Can post-human ideas expand understandings of ‘outdoor learning’ and how young people engage with nature? This article focuses on the social marginalization of young people and describes the entanglement in nature through a post-humanist lens while cautioning that a focus on materiality MUST NOT eclipse the enduring power of social inequity.

The **methods used** in the 2 studies were: qualitative interviews (some interviewed twice), questionnaires, seminar groups and focus groups. The **authors conclude results** that post-humanist theory is a beneficial to understanding this research problem, but that social inequalities permeate the establishment of ‘new bodies’ (Barad) and that the role of ‘humans’ cannot be dismissed.

The **strengths** of this text is that it does not advocate for a total acceptance of Barad and Bennet’s work- it gives a balance and fail trial to both theories commenting on the opportunities and limitations of both. Some interesting points made about animal magic, landwise youth, orality and intergeneration opportunities and anxieties. The writing is clear and easy to read, and the paragraph link sentences are exceptional. However, the **limitations** were that I thought a few of the direct quotes used to back up some points (social engagement p 748) did not clearly articulate the point the author was making- that is, the author needed to explain what theme she was extrapolating from the comment, as opposed to the idea being easily identifiable from the quote alone. The author did **answer the RQ** they posed by (re)vising the study to look for emerging themes from previous work and applying various selective aspects of PH approaches.

**Other relevance or usefulness** of this article is that there are many expressions and structural features I can adapt for my own study. Some of the critiques of Barad and Bennet can be used as justification in my Chapter 2 & 3. Helps me understand what to look for when reading critically of fNM work. Many of the ideas (ie animal magic) is transferable to bicycles. Some great vocab to help describe phenomena. The point about there being enough references that a previous study was developed further – this is an idea I can use to link in my CoS-SDP work (p 741).

**The study relates to my study** of this article were phrases/expressions and structures I can adapt and apply. Justification ideas for why I should ride a bicycle myself, not just relying participants (and photos). The role that nature and the environment has on the young people who live and work in and through it – links to my own study.
Talking and seeing a one-dimensional relation (cognitive-interview of participant) to a multidimensional physical phenomenon (riding a bike) - cannot talk about riding a bike - need to go and ride the bike. Transference of social structures of (NGO) stereotyping and social labelling – ‘girl-bicycle recipient’.

**My term:** In attempting to theorise X, my thoughts *fractalise* out of control with endless (re)working possibilities. Fractalisation = endlessly/keep going down the rabbit hole. “As McClure (2010, 284) suggests, one of the joys of theory may be ‘the gift of the headache’.”

**Bicycle METHOD.** Walking/Moving: Link of Wylie’s (2005) “landscaping” to Ingold’s “wayfaring” and Porter.

**Vocab:**
Continuum and cross over between body and land
Young people are ‘landwise’ as opposed to ‘streetwise’
Rapturous intra-activity
‘open nature’
“the characteristic of that phenomena is joy and delight in otherness.” (p745)

**Barad:** ‘new bodies’ (747), ‘thing power’ (749)

**Bennett:** vital materiality, waste and vibrant matter,

**Other notes:**
- Comment of recalled *Ginsberg’s poem ‘In back of the real’* (2006)
- Warning/observation to include in my own PhD is the challenge of applying post-humanist (fNM) theory to a humanist world in practice.
- Link to Porter’s work = ‘Whilst a socio-cultural perspective alters us to barriers and boundaries, post-humanism offers a way of understanding that these boundaries are not immutable.’” (p 744)
- Children relating to animals – meow like a cat, move like a dog.
- JA – young people understand that things are not good or bad – they just ‘are’ = vipassana ‘annichur’ approach

**RQ consideration:**
What happens to girls’ education when the human subject is decentered and bicycles (the non-human) are allowed to emerge as subjects rather than objects, signifiers and/or transport? (adapted from Pederson 2011, p 3)

**Follow up References:**

