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Posthumanist data analysis of mangling practices

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In this paper, I argue against traditional coding in interpretive data analysis and offer a posthumanist alternative that offers qualitative researchers a new way to create ontological becomings in their reading of data. I begin with an overview of how humanism enables us to think qualitative data analysis as *coding*, and then counter human-centered inquiry with a description of Pickering's *mangle* and its potential as a both a figuration and a different tool for analysis. I then give an example of a reading of data as/in/of the mangle. I show the agentic features of both human and non-human elements of the mangle to move away from epistemological representations of the "real" to practices of decentering the human in social science inquiry. I conclude that using Pickering's posthumanist ontological theory of agency is one gesture toward the becoming of what the editors of this issue call post-qualitative research.

Keywords: post; qualitative; research

Conventional qualitative data analysis

Because I am working against conventional practices of qualitative data analysis (i.e. coding), I begin with a description of the humanistic tendencies in coding, with a particular emphasis on the subject. Humanism draws from Rationalist philosophers of the seventeenth century who claimed that knowledge of the world is mediated by innate structures of large social systems and human activity (e.g. language and/or culture) and that these abstract systems lead to the universal, unchanging structure of reality. Descartes (1998/1637), for example, set out to formulate clear, rational principles that could be organized into a system of truths from which accurate information about the world could be deduced. Descartes's emphasis was on the rational faculty of the (hu)man mind, which he considered an innate structure with a capacity for discovering outside truths. His method, based on mathematics, consists of following certain rules for thinking (i.e. deduction) in an orderly way so that we can know something with absolute clarity. Descartes's famous statement – indeed, his assertion of this theory – “I think, therefore I am” affirms the existence of reality in the mind and therefore the thinker's existence *outside the realm of the material*. (This distinction – “outside the realm of the material” – is an important one to which I will return in using *the mangle* as a figuration for post-humanist data analysis.)

The Cartesian vanity of one clear Truth (i.e. one way of thinking about and hence being in the world) and of things/people having “their own true and immutable nature, essence, or form which is unchangeable and eternal” (Descartes, 1998/

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1637, p. 88) fueled various aspects of humanism that have flourished in the last three centuries. For example, Enlightenment humanism of the eighteenth century defined the essence of (hu)man as a rational, reasoning individual and the center, creator, and master of meaning, truth, freedom, and reality (e.g. Davies, 1997; Foucault, 1984; Audi, 1999; Kramnick, 1995). Kant's description of humanism included theories of radical individualism and rational judgment that privileged *a priori* knowledge as clear and true; that is, Kant believed that we have a capacity to possess knowledge without an appeal to experience (Audi, 1999). For example, "man is free" is an *a priori* judgment because the idea of freedom is connected to all "men" even before we have experience of what "man" or "freedom" is (Weedon, 1997).

Both the word and the concept of humanism, adopted by and proliferated across Western countries and continents, were fully articulated in the nineteenth century and remain a powerful shaper of how we think about ontological concepts today, particularly that of *essence*. Ontologically, humanism refers to ways of thinking about human-ness that are essential and universal, with a single defining quality that is shared by everyone. As Davies (1997) explained, "Humanism signifies something that is everywhere and always the same ... it is a condition, timeless and localized" (pp. 24 and 32). Accordingly, it follows that the constant theme of *essentialism* can be used as a "precondition, even a definition, of humanism" (Davies, 1997, p. 124). In other words, a humanist view of identity, or human-ness, evinces an essential nature that stabilizes meaning about people who belong to a particular identity category, such as *woman* (Weedon, 1997).

Following Davies (1997), if essentialism is an indispensable characteristic of humanism's *human*, then we can put to use this concept for critique of humanist (i.e. essentialist) practices in qualitative data analysis. Essentialism imposes itself on qualitative methodology by assuming that people (*authentic, stable subjects of research*) who speak (*from a conscious center*) give us (*the researchers, also authentic*) rational, coherent truths that serve as foundation (*data*) for data analysis and interpretation. Traditional data analysis in qualitative research tends toward humanistic, essentialist practices of sorting and grouping data that appear to be similar and building themes from similar data based on coherence and patterns. This desire to stabilize essence is an attempt to produce order and regularity in the guise of categories that erase difference and privilege identity among seemingly similar things (St. Pierre, 2000). This tradition in qualitative data analysis mirrors the assumption in humanism that there are universal, abstract, structural characteristics that are foundational for grouping, structuring, naming, and categorizing. That is, in the practice of coding data, categories are created during data analysis, categories that supposedly possess coherent essences and consistent traits for theme-building and subsequent meaning-making. The codes, the themes, and the meanings become stabilized structures on which to ground an unchanging truth about the real – a knowledge claim. Thus, the practice of coding data that essentializes people and their experiences – and that leads to representations of the real and true knowledge – is an epistemological project flavored with humanism.

To provide a way out of coding data that places an essential, stable human (and knowledge and experience) at the center of inquiry, I turn to post-humanist ontological theories that emphasize the complexity, or entanglement, of the human and the non-human in scientific practices. Specifically, I take encouragement from Hekman (2010), who, in her argument for an ontology of the social, draws upon Pickering's

(1995) book, *The Mangle of Practice*. While Pickering formulated the mangle as a concept and practice to exemplify a sociological view of science, I follow Hekman's (2010) assertion that the mangle is useful for social science inquiry and practice, particularly as it locates agency in the material, thus decentering the human individual as a "locus for understanding and explanation ... a posthumanist displacement of our interpretive frameworks" (Pickering, 1993, p. 561).

The mangle

In arguing for a posthumanist understanding of the structure of scientific practice – that which he calls the mangle – Pickering (1993) explained:

Traditional sociology of science, like traditional sociology more generally, is humanist in that it identifies human scientists as the central seat of agency. Conversely, traditional sociology of science refuses to ascribe agency to the material world ... I think that the most direct route toward a posthumanist analysis of practice is to acknowledge a role for nonhuman – or material, as I will say – agency in science. (p. 562)

At first blush, this assertion may seem offbeat to social scientists who do not work in labs with material equipment and invent "things." After all, we social scientists work with human- (or language-) produced data: stories, experiences, phenomena, and so on. Social scientists may factor the material into their interpretive work, be it through theorizing the materiality of the body or analyzing how material texts are made, yet oftentimes, such analyses (1) limit the material to the body *only*, and/or (2) position the non-human as produced by human agency. Pickering's post-humanist perspective, however, locates agency also in the *non-human*. Specifically, agency is an entanglement of constitutive human and non-human elements that make up the mangle. Pickering (1993) clarified:

Agents are continually coming into being, fading away, moving around, changing places with one another, and so on. It is important that their status can easily make the transit between being real entities and social constructs, and back again. (p. 563)

Pickering went on to explain that accounting for how both the human and non-human constitute (or mutually produce) one another avoids the trap of representation of a stable "real." That is, "things" constantly move between being socially constructed via discourse and existing as real, material entities. The human and non-human elements of the mangle have performative qualities that keep them from being confined to correspondence – or realist representations. Pickering (1993) referred to this performativity as "temporally emergent in practice" (p. 565). He wrote that the contours of human and material agency are never known in advance; instead, they emerge in real time, in real practice. Neither humans nor non-humans possess intentionality. Scientists may have goals, but they are always "temporally emergent" in that agency is not located in human intention but in mangled practice. To clarify, Hekman (2010) explained:

Sometimes experiments go according to the scientists' expectations and sometimes they do not. When they don't, when matter resists, the scientists must deal with this resistance and adjust their concepts accordingly. In other words, nature "punches back," and scientists must deal with these punches. (p. 22)

In this description, Hekman (2010) captured Pickering's assertion that any scientific practice "pulls material agency into the terrain of human agency and structures the goals of human agency" (p. 22). The material is not *purely* produced by human intention, nor does human agency pre-exist or transcend the material: *they mutually constitute one another*. Pickering (1993) insisted that agency for both is dialectical: "human and material agencies [are] reciprocally engaged in the play of resistance and accommodation" (p. 567). This reciprocal play of resistance and accommodation is the mangle.

If both human and non-human agency are temporally emergent in real time, in real practice, then what exactly *happens* in the mangle? How do we go about analyzing the play of "resistance and accommodation?" In a postcoding, post-qualitative frame, how does the mangle move us into a different way of thinking about social inquiry, mutually constitutive practices, and posthumanist ontology?

I move to an illustration in the next section. I use some data to hang onto, though I am not attempting to represent subjectivity, or experience, in any humanist method that seeks meaning, stability, and essence. Rather, I give a very brief example¹ of the mangle in practice via a story told by a participant in a research study with first-generation academic women, an interview study that I conducted with Lisa Mazzei.² Cassandra, an African-American professor who participated in the study, told a story about her office at the university. As I present the short episode of her office, I provide some analysis of the contours of the mangle. I use Cassandra's office as a site of non-human agency, and I explain how its material agency as well as its discursive construction were "emergently produced in the real-time dialectic of resistance and accommodation" (Pickering, 1993, p. 568). I analyze Cassandra's practices of resistances and accommodations (her agency) as equally "emergently mangled," constituted not only by the materiality of her office but also by her and her students' discursive practices. This mangling captures the complex elements of both human and material transformation.

Data analysis as/of the mangle

Cassandra, a first-generation, late-career academic African-American woman, taught at a comprehensive university in a rural portion of the southern USA. Cassandra was aggressively recruited to her current institution, Regional State University, in 1992. Cassandra said that the university needed someone to:

teach and enhance diversity, and they had gotten a very large grant that allowed them to bring in minority, primarily African-American students, to get their master's degree in [my area of academic specialty] and they wanted someone to serve as their mentor and also to develop a course and some programs that would promote diversity within the profession, so that's what I came here to do.

So in 1992, Cassandra was hired into RSU as an African-American woman academic at the level of associate professor to recruit and mentor African-American students in her area of specialty – a role that she had filled for 15 years at Southern State University, a smaller, historically black university. Cassandra, then, entered RSU, a university that was predominately white in terms of faculty and students, a mid-sized comprehensive university that, as of 1992, had never promoted to full professor an African-American woman. Cassandra herself had been educated, as an undergraduate student in the late 1960s, at Southern State University, and she had

returned to that state university to teach while completing her master's and doctoral degrees. It was during those 15 years at SSU that she firmly established herself as an effective teacher and mentor, and Cassandra explained that she took seriously her role as a mentor and used practices with minority students at RSU similar to those she had used for many years before at Southern State (e.g. open-door policies that welcomed students into her office for "hanging out time").

In the discursive and material fields of the predominantly white university, RSU, Cassandra struggled with non-human agency. This was visible in her description of a group of white students' responses to her mentoring of minority students. Cassandra explained that some white students wrote "long, very critical letters" that accused her of reverse discrimination and "showing favoritism to the black students." Cassandra said:

My office is small now, but it was even smaller then and they [the black students] would be sitting all on the floor and everything and we just hung out together. I was a mother figure; that was pretty much the same thing that I did at [Southern State University], so I knew how to work with those students and I knew that [they] need a lot of personal attention. Now there was never a time when I didn't give the same amount of attention to any white student who wanted it.

The accusations travelled all the way up to the university provost's office, and Cassandra wrote what she described as "letter after letter of rebuttal" to university administration. Her case was resolved in her favor.

Cassandra arrived at RSU with a history of success as a teacher and mentor. As she encountered minority students, she enacted an agency that was not intentional but that was "temporally emergent" – or that which emerged in real time in a real place. Her practices of mentoring were mutually constituted by historical and discursive elements of what she understood to be good teaching and mentoring, as well as the material forces of her office. The arrangement of furniture produced a discourse, as Cassandra put it, of "mothering" – a particular discourse of openness, casual ways of being, and personal attention. The material agency of the furniture and the office entangled with Cassandra's agency (e.g. mentoring values, goals, and practices) to emerge as mutually constitutive. Yet "temporal emergence" is only one aspect of Pickering's mangle; the other is the dialectic of resistance and accommodation that shifted Cassandra's understandings of herself as she responded to the material agency of her office and the human agency of her Others. White students seeing black students "hanging out" constructed a different ontology of the office. The emergent interplay between human agency (of white students, black students, black professor) and material agency (of the office) led to forms of resistance and accommodation. Pickering (1993) wrote that resistance takes the shape of an "occurrence of a block on the path to some goal" (p. 569) and explained:

The resistances that are central to the mangle are always situated within a space of human purposes, goals, and plans ... Resistances, in this sense, are *liminal*: they exist on the boundaries, at the point of intersection, of the realms of human and nonhuman agency. They are irrevocably impure human/material hybrids, and this quality immediately entangles the emergence of material agency with human agency (*without, in any sense, reducing the former to the latter*). (p. 577; emphasis added)

Cassandra's mangled practices were temporally emergent (not intentional or planned in advance) as she encountered "blocks" or resistances in her mentoring practices.

The “block” in this case was the function of her office – the work of the office was not the same for white students as it was for black students. In this instance, *the non-human materiality of the office pushed back against Cassandra’s goals*, and she then accommodated by writing “letter after letter of rebuttal,” mangling practices that shifted her ways of being through encounters with both the non-human, material agency of her office and the human agency of her Others. That is, she arrived at RSU with cultural, historical, discursive and material understandings about herself as an academic minority woman who valued certain mentoring practices of minority students. Cassandra, as an active agent, had goals and subsequent practices that were temporally emergent in a field of material and human agency. Yet she struggled with both human *and* non-human agency. Cassandra’s agency (i.e. her goals and practices) emerged in the discursive and material construction of what she *did with her office*: how she arranged furniture, kept the door open, placed herself in a chair as black students spread out on her office floor. Both the place *and* the space of her office – what Pickering (1993) would call its “character” (p. 575) – temporally emerged with human agencies – Cassandra’s, black students’, and white students’.

The point in analyzing mangled practices is not what they *are* but what they *do*. That is, in a posthumanist analysis, the office’s agency is not produced only by discourse or by human agency – what is vital to the mangle is how, in the real time of real practice, both the non-human and human are simultaneously and continually transformed. Cassandra had no way of knowing in advance that her mentoring practices with minority students would be criticized; i.e. she had no control over the effects of her intentions. In a post-humanist analysis of practices, agency does not lie in human-centered intentionality but in mangled responses to non-human forces: Cassandra confronting accusations about what her office *is doing, or failing to do, or is criticized for doing*. Thus, Cassandra’s office is also transformed in what it *does*: it is a material place that holds black bodies together in both real and symbolic ways, *and* it becomes a material place that incites Cassandra to advocate for herself. The desk chair that she inhabits as she “mothers” black students with confidence is the same desk chair she inhabits as she composes letters in her own defense. Cassandra’s real-time practices of confident mentoring, followed by attempts to protect her practices, are “part and parcel of the mangling process, as products of the dialectic of resistance and accommodation” (Pickering, 1993, p. 576). Both Cassandra *and* her office are ontologically becoming in their temporal emergence. The contours of their agencies emerged alongside one another, and could not be determined in advance.

Analyzing the posthuman in qualitative inquiry

A posthumanist analysis of mangling practices is one alternative to human-centered data analysis in qualitative research. Earlier, I argued for data analysis that resists essentializing human experience via a reductive process of coding. Pickering’s (1993) mangle assists in a move away from analyzing humans as rational, free, conscious subjects (the center of inquiry) to thinking about “the emergence of both material agency and the social contours of human agency along the same lines” (p. 579). Human agency emerges not as intentionality but as “transformations of goals in practice ... contingently formulated accommodations to temporally emergent resistance” (p. 580). Other theorists, including Foucault (1982) and Butler (2004), did take

into account a post-humanist view of agency in their analyses and attended to material practices and effects that are discursively produced. However, what Pickering's mangle *adds to* post-humanist analyses of agency is the assertion that human agency is a dialectic:

Resistance [and accommodation] exists only in the crosscutting realms of human and material agency. Resistance (and accommodation) is at the heart of the struggle between the human and material realms in which each is interactively restructured with respect to the other ... material agency, scientific knowledge, and human agency and its social contours are all reconfigured at once. (p. 585)

The analytic potential of Pickering's mangle, then, moves us from the trap of representational meaning that is supposed to provide knowledge about human activity. That is, the analysis of Cassandra's mangled practices is not a purely epistemological project. Rather, it shows what she *does in the world* via an interplay of human and non-human agency. In the mangle, Cassandra is decentered as a knowing subject, and instead her ontological practices are analyzed as entangled and performative. The mangle encourages a shift in social science from "epistemology to ontology, from representation to performativity, agency, and emergence" (Pickering, 2002, p. 414). We make this shift with an analysis of the mangle because, as Hekman (2010) reminded us, the mangle:

is both a noun and a verb. It is the entity in which the interactions take place, but it is also the action that occurs ... What the mangle gives us is an image of how we are located in the world and how the elements of that world interact. (pp. 24–25)

In the mix, the boundaries of all the constitutive elements fall apart, and the researcher's goal is to explain the elements' interactions, as well as the complex effects of those interactions on human life. We are both *a mangle* and *in a mangle* when we do our analysis:

The purpose of analysis in/of/as the mangle compels us to reassess how we understand social phenomena and how we un-naturally divide the world into categories that include the "social" and the "natural" ... The implications for how we think data differently given this entangled state is to move away from thinking the interview and what is "told" discursively toward a thinking of the interview and what is "told" as discursive, as material, as discursive *and* material, as material <-> discursive, and as constituted *between* the discursive and the material in a posthumanist becoming. (Jackson & Mazzei, 2012, p. 126)

Doing analysis in/of/as the mangle, we cannot separate discursive practices from their production in/of/as the material. Nor can we fail to take into account the material effects of discursive practice:

The advantage of looking at this from the perspective of the mangle is that ... it allows us to stop expecting to separate the elements of the mangle and find the 'right' answer. The right answer is that we are in the mangle. (Hekman, 2010, p. 26)

Notes

1. I want to acknowledge that the analysis here, for the purposes of this paper, is limited; that is, it is indeed possible (and desirable) to complicate a mangled analysis to include

more critical discussions of race, class, gender, embodiment, power, and so forth. Because I want to focus on particular aspects of Pickering's mangle (i.e. agency) to make an argument for a different way of conducting post-humanist analysis, I refrain from pulling in other analytic threads. This analysis of mangled practices, therefore, is admittedly selective and narrow, but nonetheless detailed. I hope to give readers an introduction to the possibilities of analyzing the mangle, rather than even a partial representation of meaning.

2. This work comes from my and Lisa Mazzei's recent book, *Thinking with Theory in Qualitative Research: Viewing Data Across Multiple Perspectives* (Jackson & Mazzei, 2012). Our purpose in the book is to challenge qualitative researchers to use theory to think *with* their data (or use data to think *with* theory) in order to accomplish a reading of data that is both within and against humanistic practices of analysis and interpretation.

Notes on contributor

Alecia Youngblood Jackson is an associate professor of Educational Research at Appalachian State University in Boone, NC. Her research interests bring feminist, post-structural, and post-humanist theories of power, knowledge, language, and subjectivity to bear on a range of overlapping topics: deconstructions of narrative and voice, cultural studies of schooling (with an emphasis on the rural), and qualitative method in the postmodern. Her collaborative book with Lisa Mazzei, *Thinking with Theory in Qualitative Research* (Routledge), was published in 2012.

References

- Audi, R. (Ed.). (1999). *The Cambridge dictionary of philosophy*. Cambridge: Cambridge University Press.
- Butler, J. (2004). *Undoing gender*. New York, NY: Routledge.
- Davies, T. (1997). *Humanism*. London: Routledge.
- Descartes, R. (1998/1637). *Discourse on method and meditations on first philosophy*. (D. A. Cress, Trans.). Indianapolis, IN: Hackett Publishing.
- Foucault, M. (1982). The subject and power. In H. L. Dreyfus & P. Rabinow (Eds.), *Michel Foucault: Beyond structuralism and hermeneutics* (pp. 208–229). Chicago, IL: The University of Chicago Press.
- Foucault, M. (1984). What is enlightenment? In Paul Rabinow (Ed.), *The Foucault reader* (pp. 32–50). New York, NY: Pantheon Books.
- Hekman, S. (2010). *The material of knowledge: Feminist disclosures*. Bloomington: Indiana University Press.
- Jackson, A. Y., & Mazzei, L. A. (2012). *Thinking with theory in qualitative research: Viewing data across multiple perspectives*. London: Routledge.
- Kramnick, I. (Ed.). (1995). *The portable Enlightenment reader*. New York, NY: Penguin Books.
- Pickering, A. (1993). The mangle of practice: Agency and emergence in the sociology of science. *American Journal of Sociology*, 99, 559–589.
- Pickering, A. (1995). *The mangle of practice: Time, agency, and science*. Chicago, IL: University of Chicago Press.
- Pickering, A. (2002). Cybernetics and the mangle: Ashby, Beer and Pask. *Social Studies of Science*, 32, 413–437.
- St. Pierre, E. A. (2000). Poststructural feminism in education: An overview. *International Journal of Qualitative Studies in Education*, 13, 477–515.
- Weedon, C. (1997). *Feminist practice and poststructuralist theory* (2nd ed.). Malden, MA: Wiley-Blackwell.