Methodologies of voice: Towards posthuman voice analytics

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ABSTRACT

This paper rethinks the concept of voice in ways that resist normative humanist assumptions and explores the possibilities of an alternative posthuman ontologics of voice for qualitative praxis. I sketch the contours of a feminist posthuman phenomenology of voice in which the embodied, material, relational, and transcorporeal qualities of breathy bodies are foregrounded. Thinking with the figurations of 'breathy embodiment' and 'diffractive voices', I introduce posthuman voice analytics as a form of qualitative praxis. Five central aspects of posthuman voice analytics are outlined, namely: multivocality, process, interruption, dialogicality and the situated politics of listening.

1. Introduction

Qualitative research often involves listening to, collecting, and working with embodied[1] voices. Surprisingly, this fact is often lost in methodological discussions, with the result that fleshy and material voices frequently become abstracted (even erased) in debates about discourse, narrative, themes and rhetoric. The methodological implications of 'working with voices' are also rarely interrogated, nor is what we mean by 'voice' or how best to think and theorize bodily vocality. This paper highlights and reflects on the implications of 'working with voices' as qualitative researchers. In order to explore these implications, the concept of 'voice' is rethought in ways that resist normative humanist assumptions (e.g. of self-contained individuality and disembodiment). I sketch the contours of a feminist posthuman[2] phenomenology (see Neimanis, 2017) of voice in which the embodied, material, relational, posthuman, socio-political and transcorporeal qualities of breathy bodies are foregrounded.[3] Writing against the 'romance of voice' (Stephens, 2004), in which voice is understood as the coherent, stable, disembodied and valorized emblem of individual selfhood and authenticity, this paper is an invitation to rethink voice after posthumanism and critically interrogate established methodological frames of qualitative inquiry. The focus shifts from thinking about 'voice' as a stable essence that is unearthed or revealed by our analytic interpretations and representations, to thinking about voice as a emergent and unpredictable process involving fleshy bodies, more-than-human elements and the vitalized intertwining of discursive, ideological and sociomaterial relations. Thinking with/through the figurations of 'breathy embodiment' and 'diffractive voices', I introduce posthuman voice analytics as a form of qualitative praxis that aims to engage the multivocal, disruptive, excessive, and resonant rhythms of sonorous vocality. Five central aspects of posthuman voice analytics are outlined, namely: multivocality, process, interruption, dialogicality and the situated politics of listening. A case example drawn from a research project on women's birth stories is used to illustrate posthuman voice analytics as critical analytic praxis.

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[1] By drawing attention to the 'embodied' aspects of voices, I am insisting on substantive engagement with the fact that the voices we analyze (particularly in relation to interview based research), usually emanate from flesh and blood bodies. This is part of a broader project (inspired by theorists such as Julia Kristeva and Adriana Cavarero) to bring the speaking body back into language by insisting that bodily energies and rhythms are an integral part of meaning-making processes.

[2] 'Feminist post-humanism' refers to a shift towards 'neo-materialist' approaches and ontologies that are concerned not only with human subjects, meanings and realities but that are founded upon the recognition of matter more broadly (water, winds, earth, plant and animal bodies, micro-organisms, biology, genes, oceans) as agentic, forceful, and as entangled with our human worldings and realities. As such, a shift towards feminist posthumanism has resulted in renewed engagements and conceptualizations of 'biology' and analysis of various human, animal, machine and elemental entanglements (see Braidotti, 2013; Neimanis, 2017).

[3] It is important to acknowledge that not all 'voices' are breathy embodiments in the same way. Some materializations of voice are carried via sign language or assistive technologies and are not 'breathy' in exactly the same way as bodies that communicate via spoken, vocal language. Such modes of communicating are nonetheless still deeply embodied and posthuman (in the sense also of drawing on various assistive technologies). Furthermore, even when using sign language, many individuals still make accompanying sounds, whispers and utterances. As such, 'breathy embodiments' are not singular but encompass a range of different communicative signs, technologies, formal speech, noises and utterances. Please see Teachman et al. (2018) for a more extensive consideration of dialogical approaches in relation to augmentative and alternative communication.

2. The question of voice in qualitative inquiry

In many respects, the qualitative research paradigm is built on the assumption that voices carry and express identity, social meanings or lived experiences (St Pierre, 2008). Foundational to qualitative research is the belief that the talk that happens in interview and research interactions can be captured, transformed into texts (transcripts) and analyzed to reveal social truths, subordinate perspectives, practices of identity construction, and/or hidden meanings. In much qualitative inquiry, 'voice' is assumed to be the disembodied expression of cognition, an internal selfhood, discourse or experience and framed as the neutral carrier of speech and language. These assumptions are rooted in Western logocentrism, which reduces voice to speech and symbolic language, and erases the (excessive, ambivalent) material and bodily rhythms and resonances of sonorous and fleshy voices (Cavarero, 2005). The raw corporeality of voices, their inescapable embodiment as sounds emerging from moist bodily cavities and organs (lungs, throat, mouth and tongue), their composition as mixtures of moving breath, muscle contractions, saliva flows, chord vibrations, hand gestures and signs, machine-human entanglements (as in assistive voice technologies) and unstable sound waves, is disavowed. As a result, 'voice' becomes abstracted, disembodied and rendered insignificant, while analysis and interpretation proceed at the level of discourse, syntax and semantics (as if speech/language can be neatly disarticulated from bodily and material locations). As a result, qualitative inquiry, much like philosophy (see Cavarero, 2005: 9), largely, "avoids getting caught up in the very question of the voice". Instead, we often work within frameworks that assume voice to be a disembodied essence that can be reduced to language codes, depersonalized and separated from the specificity of embodied speakers. Further, there is often the assumption that raw, bodily vocal articulations: sounds, silences, laughters, bodily gestures, undecipherable utterances, crying, sighing and the fleshy and affective dynamics of embodied encounters, can be transparently converted or transformed into written transcripts that are then interpreted or analyzed through the lenses of various methods. We often hope that these analyses will 'give voice', highlight 'hidden' experiences or (counter) stories and challenge mechanistic and singular approaches to reality (i.e. positivism). We proceed as if the "sonorous materiality" (Cavarero, 2005:2) of voices speaking, gesturing, and communicating in research encounters can be recorded and frozen in time as "nuggets of truth" (Woolf, 1945: 5). This is the 'romance of voice' (Stephens, 2004) embedded in many strands of qualitative research. Underpinning such essentialist approaches to voice are logocentric, humanist and representationalist assumptions that conceptualize selves as stable, essential, singular entities separable from fleshy, embodied and sociomaterial relations.

Of course, realist and humanist approaches to qualitative research or what St Pierre (2014: 3) refers to as "conventional humanist qualitative methodology" and the associated 'romance with voice', have been challenged by poststructuralist, post-qualitative and feminist researchers since the 1990s (i.e. Lather, 1991; Fine, 1994; Denzin and Lincoln, 2002; Lather, 2001). However, nuanced retheorizations of voice have not necessarily been forthcoming. Instead, the 'turn to language' inaugurated by poststructuralism, in large part precipitated a wholesale rejection of voice-centred research and a focus instead on discursive formations, rhetorics and relations of power. Alongside this rejection of voice has been a tendency (particularly in discourse analysis) to abstract language and discourse from embodied subjects, resulting in the analysis of disembodied texts, discourses and themes, even when such data originates from speaking bodies (Chadwick, 2017). As a result, the 'romance with voice' was replaced (in some quarters) by poststructuralist analyses that eradicted any mention of voices and embodied persons altogether (see Jackson and Mazzei, 2009 as exception). The preoccupation with discourse and depersonalized texts in poststructuralist scholarship has been described by some as a form of 'discourse determinism' (Hekman, 2010), resulting in a broader sense of frustration with its denial of embodied experiences, fleshy viscerality and agentic materiality. This frustration has (in part) inaugurated the 'new materialisms' in which discourse is reconceived as just one dimension of an entangled network of sociomaterial relations (Barad, 2007). New theorizations of voices, silences and qualitative research encounters have been enabled by new materialist, decolonial and other critical frameworks (see Mazzei, 2013; Jackson and Mazzei, 2009; Malhotra and Rowe, 2013), offering possibilities for the beginnings of an alternative engagement with voice beyond either romanticization or dismissal. At the same time, the inauguration of 'new materialisms' and posthumanisms has also, in some quarters, led to the dismissal of 'voice' and 'the body' as overly humanist and individualized concepts. We have thus seen a shift towards thinking about 'assemblages' and 'materiality' as broader posthuman phenomena (incorporating machines, biology, discourses, animal and plant bodies etcetera) and a move away from questions of 'voice' (and 'the body'). Important work has however been done by scholars such as Jackson and Mazzei (2009), who have argued for the reconceptualization (rather than dismissal) of voice in posthuman and postqualitative approaches.

As part of a broader rethinking of voice among scholars working with postqualitative and new materialist frameworks, Mazzei (2013) deconstructs assumptions that, "voice is produced by a unique, essentialist subject" (p. 732) and argues that voice "is produced in an enactment among research-data-participants-theory-analysis" (p. 732). Further, in their edited collection, Jackson and Mazzei (2009) seek to trouble 'easy' assumptions and "deconstruct the epistemological limits of voice" (p. 3). Assumptions of voice as a privileged site in which authentic selves, experiences and lives are revealed, is rejected by attempts to *think otherwise* with new materialist frameworks. Instead of a valorization of homogenous, coherent and easily categorized voices, Mazzei (2009) encourages us, "to seek the voice that escapes our easy classification and that does not make easy sense" (p. 48). Normative assumptions about the ontology of voice is also troubled. Voice is no longer a stable thing that resides or happens in individual bodies or is waiting submerged for a moment of emancipation/expression. Instead, voice is reconceived as a transindividual process enacted in particular assemblages. This breaks the 'romance with voice' prevalent in humanist qualitative research and allows us to begin to think voice in broader, heterogeneous and entangled terms (i.e. with silence, silencing and power). While these developments open space for alternative engagements with voice in qualitative inquiry, more consideration needs to be given to the embodied materiality of voices and what this means for qualitative research and analysis. We need to develop methodologies and phenomenologies of voice that depart from the recognition that voices are, "stubbornly, insistently, unabashedly bodily - it is the voice of the this one, this throat of flesh" (Kottman, 2005: xxii) and engage the analytic implications of the embodied materiality of voices. To this end, I explore what happens when we think voices with feminist posthumanism while working to foreground the corporeality and lived phenomenology of voices.

3. Breathy embodiments: towards a posthuman phenomenology of voice

Given that 'working with voices' is integral to qualitative research and inquiry, alternative conceptualizations and figurations of voice are needed that counter (western) logocentricm and its disavowals of bodies and our fluid interminglings with the material world and each other. Central to such a project is epistemic recognition of the embodied, moving materiality of voices and their rootedness in bodies as sounds emerging from within fleshy cavities, vibrating throats and wet mouths. We are capable of voice because of our status as bodies; with every breath we pull into our lungs we underline our relational dependence on more-than-human bodies and environments: the terrestrial plants, ancient forests, living oceans, algae, plankton and cyanobacteria producing planetary air/oxygen (Morsink, 2017). With each inhalation, we take in a mix of gases recycled by plants and plankton bodies; we are connected to the living breaths of plants and algae produced on other sides of the planet (Stager, 2014). We are also connected to the toxic breaths of cars,

industrial factories and power plants. As bodies, we are not closed systems or self-contained individuals but radically interpermeated by (industrial and organic) plant and algae breaths, gaseous air molecules and planetary winds moving air across the globe; we are connected to, "other bodies, to other worlds beyond our human selves" (Neimanis, 2017: 2). Our bodies are always already more-than-human and our breaths intermingle endlessly with the breaths of plants, factories, machines, animals, algae and bacteria.

A 'posthuman phenomenology' of voice, inspired by the watery figurations of Astrida Neimanis (2017), takes seriously these more-than-human dependences and relations as part of our embodiment. Through the figuration of 'breathy embodiments', voices are conceptualized as fundamentally rooted in, and flowing from, permeable and porous bodies, always connected to other (more-than-human) bodies, industrial and organic plants, organisms, bacteria, watery and oceanic algaes and toxic gases. A posthuman phenomenology of voice does not depart from the perspective of the individual, human subject neatly self-contained in its own skin, but thinks the lived embodiment of 'voicing bodies' as fleshy, more-than-human, and transcorporeal. 'Lived experience' and our 'breathing embodiment' thus extend beyond the confines of individually bounded human bodies, opening up the potential for rethinking 'voice' as a moving, transcorporeal process rather than a 'thing', essence or property of an individual self. As a result, "experiences below and beyond the individual humanist scale…a gurgling gut, sweaty dispersal into the fog… are also strata of our lived experience" (Neimanis, 2017: 56). Our voices are living movements and relational exchanges involving the entanglement of all these energies and elements: physiological vibrations and vitalizations, geomaterial air currents (life-giving and/also toxic), plant, algae, industrial and bacterial breath, affective energies, ideological and semiotic relations of power and embodied, geophysical and sociomaterial histories – all intermingling into a kind of "patina of experienced life" (Cavarero, 2005:1). Our 'breathy embodiments' are also, however, material phenomenologies marked and differentiated by the discursive 'socio-atmospherics' (Choy and Zee, 2015) of racism, coloniality and patriarchy. For example, anti-blackness is not just a structural or discursive construction residing 'out there'; it materializes as a visceral, embodied and elemental aspect or attunement of black lives that is woven into the very air we breath and depend on. As such, anti-blackness can manifest as a kind of thick, oppressive, hostile, suffocating fleshy-affective 'atmosphere' (what Christina Sharpe (2016) refers to as 'the weather') or as a visceral and embodied sense of 'breathlessness' associated with the lived experience of being black in white-dominated and racist societies (see Sharpe, 2016; Neimanis, 2019). As a result:

> "anti-blackness… and other socioatmospherics of power are made by molecular mixes in matters that enter mouths, lungs, and blood, but they are also made by human bodies that channel power and violence into the air" (Neimanis, 2019:2).

A posthuman phenomenology of 'breathy embodiment' recognizes all of these flows, atmospheres and interminglings as part of our lived experiences. Moreover, we are not just 'affected' by these more-than human organic and mechanical flows and socioaffective atmospherics; we are literally 'made up' as processes of 'becoming-with' (Haraway, 2016) all these energies, elements and relations of power. We are entangled, as bodies, with more-than-human, historical, ecopolitical, semiotic and sociomaterial worlds. Our voices are vital materializations of 'breathy embodiments'. As such, voices are living movements, relational enactments and entanglements of physiological, semiotic, more-than-human, affective, material, historical and geophysical vibrations, resonances, and (colonial, racialized, gendered) atmospheres and sediments. Voices are not carriers or expressions of symbolic language or stable selves. Voices are also not transparently equivalent to speech (see Cavarero, 2005), rational language or semantic content. Instead, mixed into the vocal sounds and gestures that become recognized as sensible speech are layers of resonances - affective, geomaterial, ideological, historical and

relational - that always exceed the bounds of what is (recognizably) said/uttered.

As recognized by psychoanalysts (see Cavarero, 2005), voices are also performative enactments of psychofleshy and affective energies, drives and libidinal currents that potentially destabilize normative, rational order, language and societal/moral conventions. In essence, there are multiple layers of meaning vitalized in the process of voicing that are not reducible to symbolic language. For example, Julia Kristeva (1980, 1984, 1986) provides a powerful theorization of the materiality of language as a signifying process made up of two contradictory 'orders' of signification, namely – a semiotic (broadly akin to bodily energies, rhythms and residues) and a symbolic (coherent, univocal and rational) mode. Sense-making and signification are regarded as products of the dialectical and unpredictable interplay between these discontinuous modes. As a result, 'voice' and fleshy bodies can be theorized as inherently unstable processes (Grosz, 1989; McAfee, 2004). Kristeva brings the speaking body back into language by insisting that bodily energies and rhythms are an integral part of the signifying process and that the fleshy, uncontainable, and affective energies of bodies continue to infuse, interrupt and disrupt speech and language (Oliver, 1993). In a subversion of logocentric traditions in which bodies and the embodied materiality of language is denied, in Kristeva's (1980, 1986) theorization, meaning-making and signification resonate with the psychofleshy rhythms of the semiotically-infused speaking body (see Chadwick, 2017).

Embodied voices are therefore irreducible to formal symbolic language, singular univocal meaning or bounded human individualism. Rethinking 'voice' as part of an invigorated qualitative praxis means departing from the recognition that our sonorous soundings are deeply fleshy and relational phenonema. Thinking voices with/through the figuration of 'breathy embodiment' acknowledges the entanglements of our speaking and communicating bodies with other bodies (plants, factories, motor vehicles, algae, forests, oceans, bacteria) as well as the violent and toxic socioaffective atmospherics of oppressive power relations (Neimanis, 2019).'Breathy embodiments' thus refigures voices as movements (rather than static essences that 'belong' to individual selves) that vibrate and resonate with transcorporeal currents, geomateriality, as well as semiotic and ideological "flows of significance" (Neimanis, 2017: 78) and atmospheres in which, "meanings ebb and flow, gather and disperse" (p.77). As a result, voices are radically heterogeneous phenomena. Our voices are never singular or autonomous; as such they do not *belong to us* but are rather always infused with other voices, refractions and (historical, geomaterial, structural, ecological, environmental) accents (see also Bahktin, 1981).

So what does a posthuman phenomenology of voice, refracted through the figuration of 'breathy embodiments', mean for qualitative praxis? How does an alternative conceptualization of breathy and speaking bodies as transcorporeal, entangled with other bodies and the material, more-than-human world, and as resonant with ideological and semiotic-discursive currents, socioaffective atmospherics and psychofleshy energies, trouble assumptions on which (humanist and logocentric) qualitative research is based? What does it mean that the voices that we listen to, 'collect', try to capture and analyze as qualitative researchers, are bodily flows of moving (more-than-human) breath, fleshy vibrations, affective intensities and sediments, contextual, geomaterial and psychofleshy histories and ideological, material-semiotic reverberations? Fundamentally, it means that we cannot proceed with qualitative research in 'the old ways' (see Maclure, 2013), in which voices were/are assumed to be carriers of symbolic language, discourse, narratives, themes or transparent individualist experience, and the embodied materiality of language and speaking bodies is ignored, dismissed and rendered irrelevant. We need analytic and methodological approaches that are able to engage with the complex materiality of language – "the fact that language is in and of the body; always issuing from the body; being impeded by the body; affecting other bodies" (Maclure, 2013:663). Recognizing and attending to the relational, transindividual and affective phenomenology of embodied voices is the first step in the

development of a posthuman analytics of voice. In the next section, I think voices with new materialist concept of 'diffraction', exploring what the figuration of 'diffractive voices' offers as a way of reimaging working with voices as qualitative researchers.

3.1. Diffractive voices

Diffraction is a concept used by new materialist thinkers (Barad, 2007; Van der Tuin, 2014) as a metaphor for an alternative imagining of the world. Originally introduced by Donna Haraway (1992) as an 'optical device' to think an alternative ontology of relational differences beyond categorization, othering and appropriation, diffraction is conceptualized as the mapping of patterns of difference or 'interferences' rather than the repetition of "reflecting images" (p. 299) characteristic of reflexivity (another popular optical apparatus). Human subjects (as Harawayian cyborgs) are regarded as "imploded entities" (Haraway, 2016: 104), comprised of unstable assortments of, "technical, organic, political, economic, textual" (Haraway, 1997: 11) elements. Haraway's cyborg subject is, "not a thing but a dynamic process of elements, imploding forcefully into one another, intensifying relationalities and generating new ones" (Haraway, 1997: xxvi). Barad (2007: 72) describes diffraction as, "patterns of difference that make a difference" (p. 72), putting the concept to work in order to think, "the entangled structure of the changing and contingent ontology of the world" (p. 73). As a material phenomena rooted in physics, diffraction describes the patterns, combinations and interferences that occur when waves collide and the ways that waves bend, ripple, swirl or radiate upon encountering an obstacle (Barad, 2007; Chadwick, 2018). As such, it is a physical concept highlighting the ways in which the relational intra-action of different energies ('waves') produce different patterns, movements, energies and phenomena. New materialist thinkers have translated diffraction into a concept with which to think our entangled and intra-active relationality in posthuman worlds. According to Van der Tuin (2014), the goal of new materialist praxis is to use diffraction as a conceptual tool to show differences *differing*. Frameworks that assume that pre-existing 'things' precede relations and processes and that conceptualize difference as a matter of stable ontological categories, are rejected in the move towards modes of theorizing that prioritize relational processes as the fundamental onto-logics of subjects, worlds and matterings. Diffractive approaches are thus interested in, "questions of pattern, not of ontological difference" (Haraway, 1997: 37). What role then does diffraction play in rethinking voice as embodied materiality? And how might diffraction, as a critical apparatus, open lines of thinking towards a posthuman qualitative analytics of voice? Reconceptualizing voice in ways that reimagine and resist humanist, masculinist and individualist conceptualizations of voice as a stable, essential and self-contained 'thing', requires an alternative 'onto-logics' (see Neimanis, 2017) of bodies, relations and worlds. To this end, I think with/through the idea of 'diffractive voices' as a way of refiguring methodologies of voice.

According to Neimanis (2017), feminist figurations are embodied concepts and modes of protest that provide, "keys for imagining and living otherwise" (p. 5). Figurations, concepts and the work of thinking with theory are not abstract affairs separate from material realities and sociomaterial problems; instead these are ethical-semiotic interventions that *matter*. Thinking voice as diffractive disrupts assumptions that voices are static things that 'belong' to self-contained, individual selves and works to advance the conceptualization of voice as a disruptive, differentiated process or movement. Significantly, the figuration of 'diffractive voices' also opens room for a methodology of voice built on a posthuman and embodied phenomenology (Neimanis, 2017). Such a methodology, or posthuman analytics, departs from the recognition that language and voice are not simply carriers of meaning or acts of individual cognition but corporeal, enfleshed sites of diffraction, generation, heterogeneity and disruption. Conceptualizing voices as diffractive processes means that circulating in/through tellings are multiple energies, currents, socioaffective atmospheres (Neimanis, 2019) and modes of disruption. It

is useful to think of these 'disruptions' as material-semiotic interferences. According to Haraway (1992: 300), a diffractive analytics is concerned with the, "mapping of interferences, not of replication, reflection, or reproduction". As we speak and generate utterances and make signs, our voices reverberate, echo, vibrate and resonate with intermingling bodily-affective, material, semiotic, situational, ideological and more-than-human elements, waves and energies (as part of 'breathy embodiments'), all of which generate interference (diffractive) patterns. A posthuman analytics of voice traces or maps these diffractive patterns, disruptions and resonances. The goal is not to uncover 'the truth' or 'represent' authentic voices or finalizable forms of meaning (see Frank, 2005), but rather to explore our collaborative worldings, build theories and situated knowledges (Haraway, 1988) rooted in bodies, geo-materialities and social-environmental justice, and counter colonizing, individualist, imperial and patriarchal logics that work to speak for/about others, reproducing epistemic injustice and representational violence (Alcoff, 1991).

Developing a posthuman voice analytics requires, first and foremost, that the fleshy, bodily aspects of voices are acknowledged and that we (as qualitative researchers) resist imperatives to reduce voices to symbolic language, discourse or themes. As we speak and tell (stories, anecdotes, opinions), we are involved in an emergent, unpredictable and relational process in which moral, ideological, bodily-affective, socioatmospherics and relational interferences constantly interrupt, diffract and co-produce our tales. Telling and voicing are thus transcorporeal processes that are not neatly contained within individual bodies. We are interpermeated by semiotic, ideological, affective, relational, historical and sociomaterial flows, currents and energies (Neimanis, 2017). We are called to account, to negotiate complex diffractive positionings and make embodied, ethical, and collaborative worldings each time we performatively engage in acts of telling. Such diffractive enactments often occur via a process of interpellation, defined by Haraway (1992: 300) as being, "called through interruption". In Althusser's conceptualization, interpellation refers to the process whereby subjects recognize themselves and are positioned (as particular kinds of selves) in relation to ideologies via discursive and sociomaterial acts of 'hailing' (Van der Tuin, 2014). As such, interpellation is a process whereby both selves and ideologies become vitalized (bought to life) or materialize. We can thus conceptualize interpellations as modes of interference and disturbance.

Thinking with concepts of interpellation, interference and disruption, enables a rethinking of voices as diffractive and multivocal processes. As a result, it is not a singular or homogenous voice that talks, or tells stories. Instead acts of tellings resound with heterogenous voices. Embodied, entangled, relational voices tell stories via words, symbolic language, plot lines and genres but the affective and psychofleshy body also speaks in other, irreducible ways and with other (sometimes contradictory) meanings (breath, tone, gesture, laughter, inarticulate sounds, rhythm and intonation). At the same time, it is not just psychofleshy bodies that speak. Ideologies and sociomaterialities also speak. Affective bodies, ideologies and sociomaterialities can be thought as 'diffractive voices' which challenge and counter semiotic order, univocality and homogeneity. These voices jostle, vibrate, interrupt and reverberate in collaborative worldings (tellings). Rather than being abstracted or separate from lively, speaking bodies, the residual sediments, afterlives, and echoing vibrations of historical, socioeconomic, familial, geopolitical, ideological and ecomaterial relations continue to move affectively through bodies as 'diffractive voices'. Sociomaterialities, structural and contextual histories and ideologies are vitalized, materializing as polyphonic voices. These disruptive, diffracting and interrupting voices shape, produce, and potentially colonize acts of telling, rendering embodied selves as unstable processes. As such, embodied voices are alive with the resonances, remnants or reverberations of material, ideological and social relations. Thinking with concepts of interference, disruption and interpellation, we can trace the ways in which speaking subjects are positioned by, and caught between, multiple ideological, fleshy-affective, moral and material-semiotic voices, all of which produce active differings or

diffraction patterns. In the next section, I outline the contours of 'posthuman voice analytics': a methodology of voice in which the embodied, diffractive and relational dimensions of voices are foregrounded.

4. Towards posthuman voice analytics

In this section, I reimagine a qualitative praxis of 'working with voices' grounded in a posthuman phenomenology of voice (i.e. 'posthuman voice analytics'). While this approach builds on earlier methodologies of voice such as the listening guide, also known as the voice-centred relational method (see Gilligan et al., 2003), and various other forms of multivocal and dialogical analysis (Davies et al., 1997; Salgado and Hermans, 2005; Buitelaar, 2006; Frank, 2005, 2010), it also departs from these approaches in its rejection of logocentric humanism and its location within a 'posthuman phenomenology': an approach to voices as fleshy-affective, more-than-human, relational and diffractive movements. I have termed this approach, 'posthuman voice analytics'. As an approach to the diffractive analysis of embodied voices, posthuman voice analytics involves five key ingredients. First, this methodological praxis begins with the acknowledgment that voices are fundamentally multivocal and radically heterogenous phenomena and that nobody speaks in a singular, self-contained or individually bounded voice (Frank, 2010). As outlined earlier, within a posthuman phenomenology, voices are diffractive and more-than-human vibrations and interpermeations of psychofleshy and physiological energies, environmental, elemental and socioaffective atmospheres, ideologies, geomaterialities, affective relations and situated histories. Analytic and methodological tools which engage the multivocality and heterogeneity of voices are thus critical ingredients in the development of a posthuman voice analytics. As such, poetic methodological tools drawn from approaches such as the listening guide (Gilligan et al., 2003), which trace and engage narratives as polyphonic assemblages involving multivocal and contrapuntal voices, are extremely useful. In particular, the use of 'I-poems',[4] an analytic device proposed as part of the listening guide methodological approach, provides a way of identifying and tracing the multiple and potentially contradictory 'I-voices' within acts of telling. While not prescribed by the listening guide, engaging in affectively charged sensory engagements (listenings/feelings) with research participants' embodied voices (by repeatedly listening to audio-recordings) can also facilitate ways of identifying, 'tuning into' and following the sonorous qualities of different 'I-voices' (see Chadwick, 2017). Jostling, contrapuntal voices (i.e. an authoritative moralizing voice versus an intuitive voice) can actually *sound* different and be characterized by different vocal tones, rhythms and sonic idiosyncracies. Engaging in an auditory process of 'embodied listening' (Chadwick, in press) works well as an analytic tool in conjunction with the visual methodology of reading and extracting 'I-pronouns' from transcript texts to form stream-of-consciousness like 'I-poems'. Furthermore, choosing to foreground and engage analytically with audio-recordings as a form of 'data', works to complicate and diffract qualitative analysis, making it more difficult to homogenize, domesticate and categorize wild tellings and moving, uncontainable, embodied utterances into neatly packaged categories.

The second ingredient of a posthuman voice analytics is an understanding of voices (and subjectivities) as processes, movements and emergent (and relational) becomings rather than static entities, things or essences. Translating a process-oriented ontological approach to voice into methodological praxis requires attending to the representational politics of qualitative analysis. Reducing moving, diffracting and multivocal voices to decontextualized snippets, cut-and-paste extracts and chunks of quotation blocks is antithetical to a conceptualization of voices as relational processes and becomings. As such, a posthuman voice analytics needs alternative modes of representing voices in qualitative research. Poetic modes of representation are once again extemely useful in this regard as they allow for the representation of longer extracts of talk and also allow for a multisensory engagement (by readers, listeners, researchers, audiences) with participants' utterances. The use of creative and performative modes of transcription (i.e. ethnopoetic transcription) that respects fleshy voices and the embodied rhythms and excesses of speech/talk are also important in this regard. While the use of graphic transcription notations (such as boldface, italics, upper and lower-case, capital letters, stars, hashes, exclamation marks, ellipsis, brackets etcetera) can be used to performatively re-enact the disruptive excesses of embodied voices, attention should also be paid to the ways in which speech and utterances are visually represented on text pages. For example, in ethnopoetic transcription, the poetic and performative aspects of telling are highlighted (see Blommaert, 2006). Efforts are made to represent the performative qualities of talk and encourage readers/audiences to enter into an affective relationship with the embodied telling. As a result, the transcription becomes a "sensory experience" and "prompts new forms of performativity from the bodies of the transcript's reader" (O'Dell and Willim, 2013: 318). Transcription involves representational politics and is never simply a neutral and transparent reflection or reproduction of original speech (Chadwick, 2017). Furthermore, the way words and utterances are arranged on transcript pages are not neutral or insignificant but can function as a way of generating meaning, affecting mood and re-performing the rhythm and idiosyncratic flow of a particular narrative (O'Dell and Willim, 2013). Transcripts are thus sensory and affective textual echoes and their "rhetorical architecture" (Moore, 2013: 15) is an important and active agent in interpretative and analytic processes. The rhythms, vocal peculiarities and idiosyncratic 'ways of telling' that materialize during acts of embodied telling are layers of meaning (akin to the Kristevan semiotic mode) that intra-act (see Barad, 2007) with formal symbolic language to produce meaning-making and voice as a heterogenous and multivocal processes. Ethnopoetic forms of transcription and poetic representational modes ('I-poems', narrative and research poetry) enable performative tellings to be organized in relation to aesthetic and poetic vocal patterns and not only statically reproduced in terms of content (Blommaert, 2006). As a result, the significance of bodily ways of telling are foregrounded, allowing the recognition that, "what there is to be told emerges out of how it is being told" (p. 182).

The third ingredient of posthuman voice analytics is an engagement with the interruptive aspects of voice/s. As outlined earlier, 'diffractive voices' are transcorporeal processes in which a raft of currents, energies, flows and atmospheres become vitalized/materialized. Thinking diffractively allows us to think of the psychofleshy, ideological, socio-symbolic and geopolitical as energies that puncture and permeate our embodied voices, calling us to action and flowing through breathy bodies as interruptive, interfering and interpellative forces. A posthuman voice analytics focuses on interruptions and disruptions as analytically interesting and productive; instead of regarding bodily eruptions (i.e. silence, laughters, breathiness, crying) and contradictions in stories and acts of telling as inconveniences or matters to be smoothed over and erased, posthuman voice analytics is interested in highlighting and attending to the moments when coherent and univocal speech breaks down. Akin to the methodology of ideology critique, posthuman voice analytics concepualizes contradictions, gaps and disruptions within tellings or utterances as refractions of sociomaterial and structural conditions (see Hennessey, 1993; Ebert, 1996; Boulous-Walker, 1998). For example, according to Ebert (1996: 7), ideology critique is, "a mode of knowing that inquires into what is not said, into the silences and the suppressed or

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[4] Constructing 'I poems' is an analytic strategy drawn from the Listening Guide (see Gilligan et al., 2003) in which the analyst works through transcripts and sections of transcript talk by highlighting or underlining the use of the 'I' pronoun (along with adjacent words/phrases). These are then pulled out of the transcript and placed onto separate lines so that they form a kind of 'poem' or stream of consciousness tracing or documentation of the ways in which the narrator uses and talks about the 'I' voice. These 'I poems' are used to identify different 'voices' within the story being told. In my experimentation with 'I poems' I also traced the use of other pronouns - such as 'they', 'it', 'you' and 'we'. Please see Gilligan et al. (2003) for more information about the process of constructing 'I poems'.

missing", with the aim of exploring power and sociomaterial relations. The material, semiotic and ideological thus do not exist as separate realms, abstracted from fleshy, speaking bodies. Instead, breathy bodies and their speaking, crying, screaming, gesturing, laughing and sounding voices are unstable processes through which a multiplicity of disruptive, interruptive and interpellative forces, energies, and atmospheres collide, converge, resonate, diffract, and differentiate. A posthuman analytics of voice is interested in exploring, tracing, and attending to these interruptive voices. As such, it is the wild and excessive aspects of voice, "the voice that escapes our easy classification and that does not make easy sense – the voice in the crack" (Mazzei, 2009: 48) that becomes analytically most interesting.

The fourth core ingredient of a posthuman voice analytics is attention to the dialogical aspects of voices. As theorized by Bahktin (1981), voices are never singular phenomena but involve sets of "dialogic relations" (p. 293). Utterances are always responses (to other voices, arguments, interpellations, questions, geopolitical conditions, pasts and futures) and as such cannot be abstracted from material, environmental, historical and discursive contexts. As dialogical, voices are never discrete, self-contained or singular but resonate with other voices, meanings, responses, others (real and imagined) and contextual histories (Bahktin, 1981; Frank, 2010). A posthuman voice analytics actively engages the dialogical relationality of voices and acts of telling. It is not enough to analyze participants' voices and utterances as if they were standalone configurations separable from contexts of telling. We need to engage analytically with (at least) two central aspects of dialogicality, namely: (1) the dialogical contexts of research encounters and the research process more broadly and (2) the sociomaterial contexts, conditions and constraints within which acts of telling (voices) are embedded and enabled (Blommaert, 2005). Interviews and other researcher-solicited encounters must be recognized, analyzed and represented as dialogical events in which tellings (stories, accounts and voices) emerge as co-productions in processes of 'becoming-with' (Haraway, 2016). Furthermore, the contextual histories and relations of research encounters are not extraneous noise or background material, but should be included in analytic work as part of a broader 'research-assemblage' (Fox and Alldred, 2017). The concept of a 'research-assemblage' is a critical feature of new materialist research praxis and refers to the ways in which researcher/s, research instruments and technologies, recruitment strategies, interview schedules and questions, sociomaterial settings, theoretical approaches, research questions and ethics protocols, function as agentic and dialogical capacities that shape participants' responses, stories and voices in particular directions; they are productive vitalities that are inextricably part of relational and entangled knowledge production processes. While tracing the dialogical contexts of research encounters and framing tellings as co-productions or processes of 'becoming-with' is central to posthuman voice analytics, it is also imperative that we explore the broader sociomaterial and geohistorical atmospheres that enable, constrain and shape acts of telling. Acts of telling reverberate with the diffractive and affective energies and echoes of other events, situations, experiences and embodied histories. These reverberations make their way into stories and voices as further strands of interruption and interference that require analytic listening.

The fifth aspect of posthuman voice analytics is attunement to the generative politics of listening. Several feminist, anti-racist and postcolonial writers have engaged the problematics of 'speaking for others' (Alcoff, 1991), exploring the colonizing and oppressive effects of 'speaking about' and 'speaking for' others (Mohanty, 1988; Minh-ha, 1989; Page, 2017). Posthuman voice analytics must actively subvert and counter the positivist 'god-trick' (Haraway, 1988) in which researchers and analysts adopt the all-seeing and yet invisible (authoritative and yet silent) position of detached objectivity. While tellings and voices are conceptualized within a posthuman phenomenology as relational co-productions and processes of 'becoming-with', as researchers we have responsibilities in terms of how we make knowledge, epistemic connections and research stories as part of broader processes of epistemic

and sociomaterial 'worlding'. Within a posthuman approach, practices of research are ethical engagements that *matter*. According to Barad (2007: 91), "making knowledge is not simply about making facts but about making worlds". As we make analytic stories and create research texts, we are thus making worlds, generating orientations and connections, and vitalizing certain ways/lines of thinking, being, and relating. We are thus accountable to the connections, worlds, voices and ways of being and relating that our research activates as part of relational and epistemic world-making. Posthuman voice analytics is grounded in a dialogical and relational praxis of 'speaking with' rather than 'speaking for' or 'about' others (Alcoff, 1991). At the same time, we need to cultivate accountability for the generative capacities of our research texts and acknowledge the failures and shortcomings of the situated politics of listening and representation, particularly when we occupy historical positions of privilege as researchers. We must take responsibility for the ways in which we benefit from positions of privilege, both as researchers (often with institutional and epistemic resources and capital) and in relation to historic structures of whiteness, coloniality, gender, sexuality and able-bodiedness. We are also accountable to the ways we engage practices of listening and representation as qualitative analysts. As such, we need to trace the consequences and effects of our analytic and representational praxis - what do we hear, foreground and silence in our analytic listenings? How do we transcribe voices and represent them? Which voices do we attend to and which voices do we ignore/mute? These are questions that are central to the development of an accountable and ethically responsible posthuman voice analytics. Using poetic forms of representation and transcription highlights the generative politics (and selectivity) of representing embodied voices (which is often hidden in more conventional forms of representation). As such, poetic devices can be useful as ways of calling attention to the inevitably contested politics of representation. In our efforts to engage embodied and diffractive voices as part of an alternative relational and posthuman world-making, we must acknowledge the risk of re-enacting forms of appropriation and silencing (Neimanis, 2015). At the same time, it is also clear that we cannot go about working with voices in 'the old ways' (Maclure, 2013) and enacting interpretive violence in/through the disembodiment, depersonalization and decontextualization of embodied voices.

In the next section, I use a case example drawn from a larger research project on low-income women's birth experiences (see Chadwick, 2018 for more details), to explore what 'posthuman voice analytics' might look like in practice. Using poetic representational devices drawn from the 'I-poem' technology of the listening guide (Gilligan et al., 2003), I vitalize a series of dialogical exchanges between myself and a research participant known as Jamila (a pseudonym), as a narrative poem, and explore the ways in posthuman voice analytics might work to engage voices as multivocal, process-oriented, interruptive and dialogical and foreground the representational politics of 'working with voices'.

5. Posthuman voice analytics: Jamila's birth story

I spoke to Jamila in the dark lounge of her mother's shack. The shack was located in a cramped informal settlement on the 'Cape Flats' (a poverty-stricken area of the Western Cape in South Africa). It was a windswept summer's day and I remember wishing I was somewhere else. Earlier I had gotten lost on my way to the interview. Being a white, middle-class South African living in suburban Cape Town for most of my life, I was in my hometown and yet on unfamiliar terrain. I had little experience of driving to or visiting the 'Cape Flats' and the still racially-marked 'informal settlements'. Later I thought about the ways that histories of oppression and inequality were still written into the landscapes of Cape Town, still reverberating with the long afterlives of apartheid.[5]

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[5] In Cape Town, racial groups often still live in separate areas, with those that are poor and brown living in concentrated settlements on the desolate low-lying sand-flats situated on the outskirts of the city.

Table 1
Transcription notation.

Massive (bold)	Words spoken loudly
…	Speech trails off
Good thing (italic)	Words spoken slowly for effect
<u>Definitely</u> (underlined)	Words that are emphasized
Tiny	Words spoken slowly and loudly
ˆˆOh my wordˆˆ	Words spoken with laughter in voice
OH NO	Words shouted out
[name removed] (square brackets)	Explanatory material
********** (stars)	Omitted speech

As I drove and moved around the dry, dusty, and dilapidated landscape devoid of trees and greenery, I was met with stunned looks. People on the streets seemed genuinely shocked at the sight of my whiteness. White individuals were clearly a rarity on these streets. Eventually I found Jamila, who had agreed to meet with me to talk about her recent birth experience. Jamila, a young, twenty-something brown woman was the single mother of four small children. She lived in a 'back room' adjacent to her mother's shack with no furniture (apart from a bed) or electricity. She had no fixed income and depended on her relatives for basic necessities (food and clothes). She was being verbally and physically abused by her brothers and had been abandoned by the father of her most recent child (a six-week old baby). During the interview, we were constantly interrupted as relatives, her small children, and neighbors, moved in and out of the room. As a result, during our conversation, I struggled to concentrate on what Jamila was saying. She also spoke quickly and moved swiftly from topic to topic while the affective weight of her anecdotes were (for me) heavy and difficult to process. During the interview, I was thus unsettled by Jamila's story (of abuse and hardship) and subsequently also found listening to the audio-recording of this interview difficult[6]. This was a story about the everyday realities of living in poverty as a single mother, with little financial or familial support. Her story reverberated with anecdotes of physical and emotional violence, attempted suicide, substance abuse and extreme hardships (hunger, cold and the absence of everyday comforts). At the same time, Jamila was upbeat and energetic in her storytelling, responding enthusiastically both to me and the research project. In what follows, I present chunks of our interview encounter in poetic form (see Table 1 for transcription notation details) using the 'I-poem' device of the listening guide but also tracing and including other pronouns (i.e. they, you, it). I use this poetic representation of my encounter with Jamila to engage with what posthuman human analytics offers as a critical analytic praxis.

Interviewer:

At what point did you go to the clinic?

Jamila:

I wasn't *there* [at the maternity clinic]
I was shy
I was afraid also
I told X
That was my main reason

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[6] Participating in this interview and later listening to the audio-recordings was 'difficult' on many levels. I was in unfamiliar terrain, I felt my whiteness via a strong bodily sense of discomfort, it was hard to listen to a story containing multiple layers of abuse and deprivation, and I felt guilty for doing this research (listening to Jamila's story) and not being able to help or assist her in any sufficient or substantive way. Listening to the audio-recording was hard because all of these emotional discomforts returned and as a result, I avoided analyzing this interview for a long time. Recently, I have written elsewhere about the 'politics of discomfort' (see Chadwick, in press) in relation to qualitative praxis in which I reflect on this interview encounter and the ways in which 'discomfort' and a sense of disconnection or difficulty can be opportunities to engage the affective politics of feminist research practices.

I didn't go book [at the clinic for the birth]
I didn't
I didn't have kimbies [nappies]
I didn't have baby clothes
I was well off before
What are people gonna say if
I *uh* (*) gonna *give birth* like that?
****

Jamila:

They're [nurses] RUDE
They will just tell you
They will say
You did that [have sex] *lekker*
They will
I remember [from previous birth]
I was supposed to
walk up and down
They were sitting
They were sitting
You say the pain is coming
You go get on the bed
They will **shout** at you
Rude remarks
They will
They will
They're gonna treat me like that

I was scared
I've got three children also
They're gonna say
They're RUDE man
That's why
I don't want to [give birth at clinic]
****

Jamila:

Pains were coming
I was standing
I went
They're still coming
And then
There's pressure
I'm standing
My mom said I'm in labor
"I'm gonna take you"
I try not to
I come here

I was sitting
I had jeans on
I was shouting
The neighbors <u>came</u>
I was sitting
'***Come, come*** to the doctor'
They
They don't **understand**
I didn't want to go
<***they're gonna skel me out***> [shout]
I was
I started
I feel the
It's *the head*
ˆˆI still feel here IN FRONT pressingˆˆ
They said
'**Come, let's still do it now**'
They say

They said
'No come!'

I was pressing
I feel just a head
I feel *the body*
I'm saying
I'm praying
I'm standing up
They say
The child is out
****

Interviewer:

Weren't they [medical staff] angry?
Jamila:

They were
'Why didn't you come?'
I was
I know
I'm gonna
I have to be honest
I was
I
So I
I
I'm not gonna lie to you
I didn't
I can't remember what
I said
I was
I just
I thought they were gonna skel [shout] me

I say
I said
Let me bring my full responsibility
To my kids
Not like in my pregnancy
'Tomorrow I'm gonna book'
'I'm gonna book'
****

Jamila:

˜I'm very glad˜ (both laugh)
˜I'M VERY GLAD IT HAPPENED HERE˜
I'm very glad
I had a lot of support
It was a nice experience
You would have had the pain there
They would've walked up and down
They will ignore you
I had that experience before
They will ignore you
It's almost like
'You don't talk the truth'
'you don't know when the baby is gonna come'
That kind of stuff

But it was good
It was good
But it's life and death also
You or the child

Jamila's story is a multivocal, contradictory and often resistant *response* to my initial framing question, 'At what point did you go to the clinic?' With this question, I bring into being or 'vitalize' a medical script

of pregnancy and birth which assumes that all pregnant women will (and should) report to healthcare facilities to confirm and get appropriate 'care' for their pregnancies. As a dialogical response to my (ideological) medicalizing framing, she voices her story (of a birth outside the medical system) as a tale of trying to escape her positioning as a 'bad mother' who is poor, brown, pregnant with her fourth baby, unmarried and has no baby supplies to take to the clinic when she gives birth. She knows that her lack of baby goods (toiletries, clothes, nappies) interpellates (calls and marks) her as a problematic mother. She is able to anticipate the voices in the maternity clinic ('What are people gonna say if I *uh* (*) gonna *give birth* like that?') that will label her as a problem. As a result, she is called to find a dialogical way of negotiating (and fending off) these moralizing and stigmatizing voices. She knows (via her earlier birth experiences) that the relational, somatic and socioaffective atmosphere, or what Sharpe (2016) would refer to as 'the weather', in the local maternity clinic is oppressive, hostile and discriminatory towards young, black/brown, multiparous, poor, and unmarried mothers. Complex "socioatmospherics of power" (Neimanis, 2019:2) and oppression function as entangled forces shaping her voice (actions and story) in particular ways. Anticipating the oppressive socioaffective atmosphere at the clinic, Jamila resists by avoiding and rejecting the localized medical script (i.e. book in and report to the clinic for birth). She also counters her interpellative positioning as a 'bad mother' by framing medical healthcare providers as the problem (i.e. they are rude, violent and abusive). In her story, Jamila goes on to narrate her birth experience as an intensely fleshy event in which her vocalized telling teems with bodily eruptions[7] and disruptions (shouting, laughing, loud speech, high-pitched speech) and in which she is the centre of a neighbourly hub of others who support her but also constantly interrupt her experience to plead with her to report to healthcare services. These neighbors thus function as interruptive 'normalizing voices' in her story, re-enacting and vitalizing a hegemonic medicalized script which she constantly resists, counters and subverts. After having her baby at home (with no trained healthcare provider), Jamila reports to the local clinic so that she and the baby could be 'checked'. My response to this is to pose a question, namely: 'Weren't they angry?' With this dialogical move, I (inadvertently) position Jamila as someone who has done something 'wrong'. She responds to this positioning of self as morally dubious through multiple contradictory voices – one which affirms that she was wrong and irresponsible in her actions and another that asserts that she was right, that she had a good birth (which would not have happened at the clinic) and that it is 'they', the medical staff, that are the problem (and not her).

A posthuman voice analytics of Jamila's birth story (facilitated by the poem) shows the multiple, jostling, diffractive and transcorporeal voices contained within any one telling. Jamila does not voice her birth experience as a homogenous, stable experience standing outside of relations with others, the interview encounter, interpellative moral and sociomaterial positionings, concrete contexts, socioaffective atmospheres and the fleshy body. Instead she speaks (and generates voice) as a dynamic response to a multiple set of 'emergent relations' (Tuana, 2008: 189). Her voice is not one and it is not self-contained. Instead it shows dynamic and diffractive movement as it shifts, morphs and changes according to certain modes of questioning and sociomaterial positionings. As she tells and 'makes voice' she uses an array of imaginary voices (the nurses, her mother, the neighbors) to enact her own positioning as a social problem

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[7] While Jamila's telling was characterized by loud exhuberance, not all narrative tellings will be similarly filled with bodily and vocal excesses. Some narrators will use silences, long pauses, stuttering and sighing and may even communicate disinterest or lack of engagement. Working with a 'posthuman voice analytics' means regarding all these aspects as salient elements of analysis. Just like an 'excessive' or voluble encounter, a 'sterile interview' is also a relational exchange with particular affective currents/energies - i.e. lack of eye contact, deadened use of speech, silences, curt responses - all of these elements would need to be unpacked and engaged as part of a voice-centred approach.

(the poor, single, multiparous mother). Jamila then moves to negotiate this positioning via another complex array of voices in which she attempts to escape a stigmatized and oppressed identity by naming medical violence within the clinic and positioning medical staff as problems. My voice as the interviewer also works to position her in problematic ways and results in her having to negotiate the moral dilemma of her (in my framing) dubious decision to birth at home with no caregiver. Jamila responds to this moral dilemma by invoking contradictory response voices – one which counters and asserts that she was right and that her birth was good because she gave birth at home – and another which affirms that she was wrong and did act as an irresponsible or 'bad' mother. As a result, the telling is a co-production and series of relational and dialogical moves. Jamila's voice (and telling) are permeable to my interjections, responsive to a transcorporeal set of ideological and sociomaterial interpellations and thick with the visceral, oppressive and hostile atmospheres of state-funded maternity clinics. These atmospherics are complex materializations of social hostilities towards black and brown poor mothers embedded in longstanding historical, medical and sociomaterial relations.

Jamila's telling demonstrates the extent to which, "each voice [is] the site of multiple voices" (Frank, 2005: 972). It also shows that voice is a moving, unstable and transcorporeal process involving the contradictory entanglements of dialogical relations, power dynamics, fleshy energies, ideological currents and sociomaterial formations. Voices are radically embodied, permeable and porous entities. Our 'lived embodiment' is not restricted to the singular and bounded individual body but extends across time, space and imaginary spaces. We make voices and enact forms of (contradictory) enunciation only in relation to other voices, concrete material realities and intersubjective responses and encounters. Thus, the voices that we make in encounters do not finally and essentially 'belong' to us but are elicited in relation to a complex set of multivocal, interruptive and dialogical relations (Alcoff, 1991).

6. Conclusion

I have argued that the methodological implications of 'working with voices' as qualitative researchers requires more explicit theoretical and ethical discussion. In efforts to engage these implications, I offered a rethinking of voice after posthumanism, exploring the ways that a posthuman phenomenology might offer opportunities to reconceptualize voices in alternative ways, countering the humanist 'romance with voice' and the disembodiment and decontextualization of logocentric understandings. I argued that a posthuman phenomenology of voice thought in/through the figuration of 'breathy embodiments' enables a conceptualization of voice as a transcorporeal, unpredictable and relational process or movement. Our breathy voices are fleshy, excessive, permeable and open to more-than-human currents, energies and atmospheres. As such, embodied voices are irreducible to the formal codes of symbolic language and extend beyond the individual boundaries of our human bodies. Our voices are lived embodiments of moving diffractive energies, currents and forces (bodily, ideological, more-than-human, atmospheric, affective and relational). As a way of reimagining how we might work with these flows and currents as qualitative researchers, I explored the concept of 'diffractive voices' as an opening towards an alternative onto-logics of voice (Neimanis, 2013). Thinking diffraction as a process in which sociomaterial, ideological and psychofleshy interferences constantly subvert or interrupt the homogenity or singularity of voice, opened a way of forging a methodology of voice in which these interruptive currents or interpellations are thought as part of the entangled, relational and heterogeneous onto-materiality of voices.

Building on the posthuman phenomenology of voice developed earlier in the paper, I outlined the contours of an alternative methodology of voice, what I have called, 'posthuman voice analytics'. Five key ingredients of a posthuman voice analytics were discussed, including: multivocality, process, interruption, dialogicality and the situated politics of listening. Each of these ingredients speak to the broader

posthuman framework of voice (against logocentric humanism) conceptualized in the paper and offer a way of re-orienting qualitative analysts to an alternative 'onto-logics' of voice as diffractive, moving, heterogeneous, dialogical and situated. Arguing for poetic representational devices (such as the 'I-poems' drawn from the listening guide), alternative modes of poetic and performative transcription (such as ethnopoetics) and practices of embodied, sensory listening to audio-recordings, in this paper I have begun the work of thinking about how we might engage and create analytic and methodological tools that vitalize and re-enact the multivocality and heterogeneity of voices. More work is needed to explore the full possibilities of arts-based methodologies, technologies and tools, in forging voice-centric modes of listening, representing and analysing diffractive and posthuman voices. My 'posthuman voice analytics' is offered as a set of onto-logical orientations that hopefully offer alternative openings into an alternative praxis of working with voices. It is not a definitive, fixed 'method' or finalized set of analytics but is offered here as a set of methodological notes that might open the lines towards a posthuman analytics of voice that is able to engage and trace the transcorporeal, more-than-human, relational, diffractive and sociopolitical logics of voice. More work is needed to engage the ethical and representational politics of voice and representation. In this paper, I have offered the broad contours of a posthuman voice analytics, vitalized and exemplified by a set of dialogical exchanges I had with Jamila during interview fieldwork for a project on women's birth experiences. Through this example, I showed the ways in which attention to the five aspects of posthuman voice analytics outlined in the paper, namely: multivocality, process, interruption, dialogicality and the situated politics of listening, might work to open space for a tracing of voices as embodied, permeable and diffractive processes. As qualitative researchers, we need to constantly work to interrogate the ethical, representational, methodological and sociopolitical implications of 'working with voices'. This paper has begun the work of offering an alternative posthuman methodology of voice; it is hoped that other researchers will respond to the call to rethink voice after posthumanism and develop innovative, creative and accountable ways of conceptualizing and working analytically with fleshy, excessive and transcorporeal voices.

Credit author

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Declaration of competing interest

There are no conflicts of interest with respect of this paper.

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