



RESEARCH BECOMES ENTANGLED

PESQUISA COMO EMARANHAMENTO

LA INVESTIGACIÓN COMO EL ENMARAÑAMIENTO

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In this paper I seek to explore how we might conceptualise research when subject and object are entangled: when subject can no longer be thought as a unified body, a conscious Self, formed by its unique history of experiences and interactions; when object exceeds its passive identity and relations of analogy, resemblance and opposition (Deleuze, 1994) with other objects. This paper interrogates how an immanent materialism affects understandings of doing research, what it means to fail to distinguish researcher from research or method or findings, and to abandon attempts to fully extract the research data from its ongoing relations with all matter. Immanent materialism offers a view of the subject-who-researches and the object-researched as entangled in multiplicities of matter interconnecting, co-influencing, individuating and always becoming new. This is a metaphysics of univocity, in which each body or thing is placed in immanent connection with every potentiality of form. What we abstract or distinguish as data in this moment is connected to everything else - every other form, and every potential for form, past, present and future. Here the 'data' object and the 'researcher' subject become inclusive of all the universe, replete with virtual potential. Thus I argue an immanent materialism expands notions of data, compelling us to regard everything as data: the subject, the objects, their representation, and their virtual potential to become-new. The entanglement of a univocal data is presented as an alternative to the striations of methodology typologies and procedures in order to open lines of potentiality in research. Instead of subject-object, there is only data, and data, and data, and...

KEYWORDS: Deleuze. Immanent materialism. Research.

RESUMO

Neste artigo, procuro explorar como podemos conceituar a pesquisa quando sujeito e objeto estão entrelaçados: quando sujeitos já não podem ser pensado como um corpo unificado, um Self consciente, formado por sua história única de experiências e interações; quando o objeto excede a sua identidade passiva e as relações de analogia, semelhança e oposição (Deleuze, 1994) com outros objetos. O trabalho interroga como um materialismo imanente afeta compreensões de se fazer pesquisa, o que implica em não se conseguir distinguir o pesquisador da pesquisa ou da sua metodologia, e abandonar as tentativas de retirar completamente os dados da pesquisa de suas relações contínuas com toda a matéria. O materialismo imanente oferece uma vista do sujeito-que-pesquisa e o objeto pesquisado como um emaranhado, um entrelaçamento em multiplicidades de matérias interconectadas, co-influenciando, individuando e sempre em devir. Os dados se expandem para incluir tudo: o tema, os objetos, a sua representação e seu potencial virtual para devir o novo. Em vez de sujeito-objeto, só há dados e dados, e dados, e ...

PALAVRAS CHAVE: Deleuze. Materialismo imanente. Pesquisa.

RESUMEN

En este artículo, trato de explorar cómo se define la investigación cuando sujeto y objeto se entrelazan: cuando los sujetos ya no pueden ser considerados como un cuerpo unificado, un 'Self' consciente, formado por su historia única de experiencias e interacciones; cuando el objeto es superior a su identidad y a las relaciones pasivas de analogía, similitud y la oposición (Deleuze, 1994) con otros objetos. El em artículo se pregunta como un materialismo inmanente afecta a la comprensión de se hacer la investigación, lo que implica no ser capaz de distinguir la investigación del investigador o de su metodología, y abandonar los intentos de apartar los datos de sus relaciones en curso con toda la materia. El materialismo inmanente ofrece una perspectiva de la investigación de sujeto que investiga como enmarañamiento, un entrelazamiento de las multiplicidades de los

materias interconectadas, co-influenciando, individuando y agindo siempre em devenir. Los datos se expanden para incluir todo: el sujeto, el objeto, su representación y su potencial virtual para devenir en el nuevo. En lugar de sujeto-objeto, es sólo datos y datos, y los datos, y ...

PALABRAS CLAVE: Deleuze. Materialismo immanente. Investigación.

1 INTRODUCTION

Undertaking a qualitative enquiry is to confront an entire system of understandings about what it means to do research. The concepts that we use to initiate and enact research (researcher, methods, ethics, research questions) quickly begin to produce connections with particular ontologies, practices and beliefs about research, which may not be productive and in fact may serve to limit what is possible in research. This paper will argue that the conventional activities of research referred in these concepts constitute a stratified assemblage narrowing possibilities for the conceptualization and enactment of research. Methodology concepts are fundamental in operationalizing such an assemblage, as a regime of “order-words” (Deleuze & Guattari, 1987, p. 91) that impose certain assumptions about what to think and how to behave, how, indeed, to conduct research. ‘Observation’ as research method, for example, entails a whole assemblage of attitudes, actions, and presupposes particular ontologies about the nature of being and acting in the world. These are human-centric notions, positing a human subject as a reflective planner, instigator and collator of research activities, and suggestive of a world that can be divided into parts to be represented and manipulated. This paper intends to offer alternative approaches to research methodology in education, enlargening what counts as data by drawing on new ontologies associated with new materialisms, and particularly, immanent materialism.

The recent post-qualitative turn of qualitative inquiry offers a space for researchers to reconceptualize research activity (Lather & St. Pierre, 2013; St. Pierre, 2011), and thinking with philosophy in particular can help to disrupt and deterritorialize the concepts and understandings of research (Koro-Ljungberg, Carlson, Tesar, & Anderson, 2015). New materialisms challenge constructions of the world based on a human-centric world view in which matter is the passive recipient of human representation and manipulation, and instead imbue matter and the material with productive power. The material is seen as an active agent in the construction of discourse and reality (Lenz Taguchi, 2010). This “material turn” (Hultman & Lenz Taguchi, 2010, p. 526) follows the linguistic turn of postmodernism, not in order to negate the linguistic turn, but to add another turn towards the material and matter that moves beyond the discursive (Tesar & Arndt, 2016) and also beyond human-centric perspectives. A posthumanist, materialist theoretical perspective posits a world teeming with human and non-human productions or expressions, and in doing so, elevates the becomings of matter to be in equal relation with the becomings of the human and social world. There is no transcendence of the human over the material, no reductionist and positivistic treatment of the material in which humans give form and expression to an inert, passive material (Pacini-Ketchabaw & Nxumalo, 2010).

2 THE PRIMACY OF THE MATERIAL

Deleuze and Guattari (1987) take the status of the material one step further, in reducing all bodies, whether human, organic, inorganic, discursive, semiotic or institutional, to matter. Deleuze and Guattari (1987) see bodies as assemblages, that is materialist, dynamic structures (Braidotti, 2005) consisting of material interconnections. This is not reductive but rather enlarges the potential becomings for bodies, by putting parts into an endless spiralling of connection and interaction. The immanence of any body in its connection to organic and inorganic materiality is a positive and productive force that enables the creative expansion of form in Deleuze and Guattari's ontogenetic philosophy, as combining forces and interconnections enable increased power and affect (Grosz, 2008).

Viewing everything as assemblages of matter within Deleuze and Guattari's (1987) immanent materialism encourages an appreciation of the vast and complex configurations of matter that make up not only a single human, or an object such as a microwave machine, but the co-influencing of these biological, chemical, electrical and physical elements. Assemblages accumulate, hybridity becomes chaotic in its complexity and entanglement: consider the human-making-scrambled-eggs-in-the-microwave, or, better, the human-researching-mealtime-practices-in-an-early childhood setting. Multiplicities of matter mattering (Barad, 2003).

Within these complex assemblages are many interacting parts, many connections, that are the source of actualized form and a resource for the ongoing transformation of form. These parts and their connections create a virtual plane of an untapped potential. At each moment of an event different possibilities for connection enable many potentials for action. One of these potentials is actualised, the rest remain in a virtual space, present for new and future becomings. Every action, every performance carries with it a virtual excess of potential. Drawing on this excess, even non-living material carries virtualities, that is, potential to be otherwise (Grosz, 2005).

New materialisms have drawn attention to the vitality and the performative and productive agency, of not only human, but non-human, organic and inorganic, elements as the source of actions. Data becomes vital. Vitality is here interpreted with reference to Spinoza's ideas on the conative inclination of all bodies, as "the tendency of matter to conglomerate or form heterogeneous groupings" (Bennett, 2010, p. xvii) as part of a conative nature to persist. The language used here, to *persist*, indicates that even maintaining form is an action. Material form is thus a process, not a finite shape; a verb, not a noun. The material is constantly engaged in its ongoing materialisation through flows of force and agency (Lenz Taguchi, 2010); it is "as much force as entity" (Bennett, 2010, p. 20). While there might be a continuation of form, such continuation of form is produced in a struggle with all kinds of (overpowered) forces. And each 'continuation' of form is in fact a new expression. What does it mean to 'research' these complex assemblages? What is our 'data' and what role does it play in research?

Given the ceaseless battling of forces which result in form's constant reformulations, Deleuze and Guattari (1987) refute ontologies based on recognition and the stasis of form that that entails. In conventional research methodology, an ontology based on recognition assigns fixed identities (codes) to form (data), and masks the continual struggles of forces within matter that strive for continuation and persistence, as well as transformation and change. The operations of identity and representation are a discursive layer which not only misrepresent matter as passive and unchanging, but also restrict the potential of matter to become so much more.

What if we were to take the step of reducing all research to data, that is, the *material* data of research? In immanence, all is matter, and all is data, including the researcher, the strata of conventional research activities and its order-words. If data becomes synonymous with the material, and all bodies are seen as material assemblages, then all becomes data. Data consists of material interconnections, and is full of potential to become otherwise, by putting parts into multiple connections and interactions. Data expands to include the virtual, that is, the non-actualized potential in any data-set. Data is never still, never final but is always in process, data shifts, deviates, transforms (Benozzo, Bell, & Koro-Ljungberg, 2013). Data has agency: “never silent, they speak up, get rowdy, act up, resist” (Denzin, 2013, p. 354). And so I see data everywhere (Amatucci, 2013; Bridges-Rhoads & Van Cleave, 2013; St. Pierre, 2011): entangled, agentic, moving. If everything is data, I am able to evade activities and conventional methods such as observation and interview for collecting more data. Everything I think research with is data. I think with theory, with books and texts, with experiences and sensations remembered and new experiences and sensations that pass through me and connect with thought. I think with language, with computer and screen, notebook and pen, highlighter and post-its, a cup of caffeine, baby stirring in sleep. Everything is included: “the entire assemblage that is a life thinking and, and, and...” (St. Pierre, 2011, p. 622).

3 UNIVOCITY AND VIRTUALITY

Identity, and its associated operations of analogy, resemblance and opposition, is also problematic because it separates what are entanglements of bodies and things, and sets in place what Deleuze (1994) calls a “sedentary” (p. 36) distribution of bodies and events. In a sedentary distribution, the world is divided through applying opposing pairs of predicates, such as human and nonhuman, research and non-research, data and non-data, which provide a world of identities and subjects with properties and attributes. A world of fixed things is determined when bodies are separated from what they can do, which then makes necessary the assignation of identities and properties: the researcher who researches, the theory that explains. Data only becomes data when it is positioned as such by the analysis of a research project. Actions - coding, analysis - are then applied to data, so that it is the analyst or coder that is attributed with agency. Does data not contribute to analytic decisions and findings?

For Deleuze, such problems of agency do not occur, because all bodies are are their actions. The actions of a body cannot be separated from that body, because it is the actions or expressions that make the body what it is. Data is data because it does data-ing (providing

material for research). A researcher is a researcher by virtue of his or her research activity. Thus it is not the schoolteacher that teaches, but the teaching that makes the schoolteacher of a body. Bodies are their potential and actual actions and expressions, in which case it is artificial to distinguish things from their expressions.

Without separation, everything is entangled with everything else. Deleuze (1994) offers a metaphysics of univocity, a singular force of being for all forms which differ only in intensity and not as distinct or separated kinds of beings. Deleuze claims a nomadic distribution which is not based on division and negation. Rather than regarding matter as consisting of finite forms, with univocity, everything exists as “a moment of an infinite concept which encompasses everything” (Somers-Hall, 2013, p. 44). Being (which, since it is never static, is better termed becoming) is conceptualised to differ only because it is experienced and expressed at different intensities. Just as the colour blue has a range of intensities on the colour spectrum, bodies (human, organic, object) are strength at different intensities. These are differences of degree rather than differences in kind. Sand, as free-flowing grains, is one possibility, one degree of matter’s actualisation; while a bucket, the fluidity of plastic arrested in a specific form, is the actualisation of matter at another degree; hands another organisation (cells and organs) of matter at yet another degree. All is matter mattering (Barad, 2003), resonating at its own particular degree of a potential actualisation that encompasses all possibilities. This distribution for Deleuze and Guattari works to “destroy categorical gridding altogether, to push the apparatus of identity beyond the threshold of sameness” (Massumi, 1992, p. 88). Here is an immanent and univocal ontology of form in which all is connected, a continuum of form. There is not a core life force that is the source of all beings, from which life forms begin to differ and distinguish themselves, as might be represented by theories of evolution. Being/becoming is more of an all encompassing spirit in which parts (never really apart) come together in assemblages which are inclusive not only of their constituent parts but also, in being one with the univocal life force, of all that is outside of their assemblage. A univocal view sees immanent connections between sand, bucket and hands to engender a greater potentiality for the becoming of form. In a sense what is actualised is merely part of being brought to the fore, momentarily prioritised and visible, but immediately collapsible into the immanence of all form. If every being is constituted of the entire potential of the whole world, there really are no differences of kind but only dynamic temporal-spatial differences of the particular moment of being’s becoming.

Here we can connect the univocity of being with the concept of virtuality. All matter in its univocity is never separated but always connected with every potentiality of form; all matter holds within it the virtuality of an unrestricted potential. What we abstract as data in this moment is connected to everything else - every other form, every potential for form, past, present and future. It is this univocity that is held as virtuality in every expression of form and that serves as a resource for the ongoing becoming of form.

Data, and indeed, every aspect of research, become entangled, immanent and univocal. Most qualitative researchers experience this entanglement, a difficulty in properly

ordering the data into codes (something always escaping), and researcher presence in terms of affecting the data produced is a commonly recognized problem of validity. Labels, coding and other research procedures function to attempt to tame the chaos of data, to order it into something recognisable, representable and useful (Grosz, 2008).

Perhaps in a reinigorated conceptualization of research, collecting and sorting data is not about labelling and organising objects, but opening the object up to the immanence of its connections, appreciating the univocity which connects each object or body with all others, potential and actual. With the reduction of subject and object to immanent connections of matter, might subject and object become indistinguishable? How can we think about the world in all its univocity without resorting to a chaotic swirl of nondistinction, and without cementing potentiality in the regime of identity and representation?

Here we are presented, in the work of Deleuze and Guattari (1987) with two planes: a plane of immanence, or a plane of univocity, and a plane of organisation which takes from the plane of immanence (while never able to disentangle itself from immanence). The potential of the plane of immanence is captured and contained within “life-defining nets” (Massumi, 2002, p. xxi) that create particular and reproducible functions and articulations, resulting in determinate bodies. Sand, bucket, child, teacher, lesson. The plane of organization is required as a method of ordering chaos to produce something useful and functional. The important move here is in recognising the precedence of a plane of immanence into which all is collapsible and which provides an abundance or excess of potentiality for transformations of form. No structure or identity is to be understood as inherent or given, but instead, stratified. The plane of organization is a stratified space. Strata form the “ready made facilitating paths” (Deleuze & Guattari, 1994, p. 49) of “habitual assemblage” (O’Sullivan, 2010, p. 199). Strata are boundaries thickened by the repetition of form which become almost magnetic or viscous (Saldanha, 2006), channelling elements and compelling expression to follow their trajectory or join their assemblage, while overpowering, repelling or making invisible other potentials for becoming. The powerful force which compels us to follow a path already marked out is thus to be likened to the repetition of form and behaviour in other spheres: from cooking scrambled eggs by following a particular order for a similar product every time, to the genetic order of growth in a human embryo.

The methodology concepts and procedures with which we engage in research are products of the plane of organization, a reification of actions which simplify notions of what it means to do research, and which make certain activities recognisable as doing research. A concept such as ethics is carefully delimited and structured in research with sub-categories such as participant consent, protection, benefit, risk, plagiarism. ‘Ethics’ is a particularly powerful mode for the stratification of research, a sequence of events and considerations which are strongly policed by ethical approval systems, but all aspects of research are pushed towards the norms of strata by the desire for credibility. It is thus this plane of organization that might be undone as we consider post-qualitative research methodology. What is required is for the stratification of the plane of organization to be pierced or broken to enable new becomings that stretch outside of the boundaries of what is normally produced. We can attempt to follow the strata and produce something recognisable as research, or we can try to

carve a new path. Such a path might be enabled by beginning methodology with intention to engage the univocity of a plane of immanence as ontology. Here, rather than ascribe data with determinate identities and logics of recognition, we might engage with the indeterminacy of data.

4 INDETERMINATE DATA ON THE MOVE

The concept of a virtual potential contained in every expression or articulation of form presupposes a moment of selection, a moment of capture, in which some of this virtual potential is actualized, positioning the remaining potential as excess. In the moment before capture, then, is presupposed a creative play, a dynamic dance of indeterminacy. Indeterminacy is “an unending dynamism” (Barad, 2015, p. 396) as indeterminate particles, seen as lively, vibrant and self-organising, virtually explore every possibility for their actualization. Barad (2015) describes a space of virtual possibilities, excess and creative interplay as a ‘void’ in which matter playfully explores the different potentialities for its actualization before settling into form. The void is thus a space entered en route to the actualization of form.

Virtual particles are not in the void but *of* the void. They are on the razor’s edge of non/being. The void is a lively tension, a desiring orientation toward being/becoming. The void is flush with yearning, bursting with innumerable imaginings of what might yet (have) be(en)... particles do not take their place in the void; rather, they are constitutively inseparable from it. And the void is not vacuous. It is a living, breathing indeterminacy of non/being. The vacuum is an extravagant inexhaustible exploration of virtuality, where virtual particles are having a field day performing experiments in being and time (Barad, 2015, p. 396).

Barad draws on scientific studies of the electromagnetic patterns of lightening bolts and cell regeneration as examples of this playful exploration of diverse potentialities before form is actualized. Studies which have shown electrical patterning of the face on an embryo before the cells have divided into facial parts, and the flashes of light in different directions that occur before a lightening bolt, suggest matter creates and tests experimental trajectories as “virtual diagrams” (Barad, 2015, p. 407), in a space of indeterminacy before taking determinate shape. Deleuze and Guattari (1987) likewise theorise of “*intermediate states* between content and expression” (p. 51, original italics), which function to provide a “mutational gap-state” (Massumi, 2002, p. xx) in which virtuality can be explored as part of the process of actualization.

If indeterminacy is integral to what matter is, Barad (2015), alongside Deleuze and Guattari (1987), argues that matter can never hold a finished form, but always holds potential. Matter’s virtual potentiality before becoming-determinate suggests that it has an infinite alterity (Barad, 2015), that it is a condensed multitude of virtual possibilities and already contains its potential interactions with other matter, to the extent that it may be said to include other matter in its virtual makeup. This is its univocity. In positing each piece of matter’s immanence with all other things and possibilities, univocity provides all formation with a virtuality in excess of what is actualized in that moment. The virtual is not simply the unactualized, in opposition to the actual, but is included in the actual, as the “energetic throbs of the ... material forces of creativity and generativity” (Barad, 2015, p. 410). This also means that the parts which make up form cannot be seen as individually constructed building

blocks or disconnected pieces, but remain virtually and multiply connected to other actual and virtual parts, “threaded through with the entanglements of part-ing” (Barad, 2015, p. 406). Parts are merely loosened, so that in their looseness becomes visible and possible the virtual potentiality which is held subordinate and suspended under the relative fixity of articulated form.

Thus there is always the possibility of movement and transformation, never a static being or identity but always a dynamic becoming of an object connected to all of its potentials and all that is Other or Outside of it. The ‘data object’ is more than its passive identity and relations of analogy, resemblance and opposition (Deleuze, 1994) with other objects; instead it encompasses all the universe as the univocity of virtual potential. The same caveat applies to the notion of subject. The subject is no longer a unified body, a conscious Self, formed by its unique history of experiences and interactions, but a material assemblage of actual and virtual parts of the infinite concept of univocity. These parts traditionally labelled object and subject merge and become indistinguishable: a sand-bucket-hands assemblage that forms a sandcastle-becoming. From an immanent and indeterminate swirl of matter, demarcations to designate ‘subjects’ and ‘objects’, ‘signifiers’ and ‘signified’ are imposed. The subject, discourse, the social, are merely organizing constructs or machinic assemblages with which we attempt to pose order on the world. To remove these constructs is to enable other assemblages that might work in different ways. Does this mean we must loosen all stratification? How will we discuss research objects and data?

5 PUTTING LANGUAGE TO WORK

Language is so often a force of stratification, functioning to impose order and thus to mask potentiality and restrict connections in the events it labels. Deleuze and Guattari (1987) considers language a semiotic machine, a regime of signs, a determining agent which creates formalisations, both within the language system itself (ways of reading and writing) and within the content of things. Alongside the material, the discursive becomes part of machinic assemblages or desiring production, that is, the social, multi-agential construction of subjects and events. Yet as Hekman (2008) argues, “our only access to ontology is through the discursive” (p. 98). Language is needed, and while it represents a force of stratification, stratification is but a *tendency* for a particular organization of form rather than a transcendent realm of signification: “We are never signifier or signified. We are stratified” (Deleuze & Guattari, 1987, p. 77). Such an understanding of stratification as a tendency for particular organizations of form or for certain presuppositions does not negate the presence of a gap or space to escape such structuring. Each concept that we use to discuss methodology must be evaluated, considering how it works and what it produces.

To put language to work for the development of alternative methodologies is to use language in ways that promote diversity of approaches and avoid creating any sense of ‘this is how research is done’. This is to put language into play. Putting language into play, (re) inventing concepts and disrupting conventional meanings can disturb the order-word and

agitate the stratification of representation. Putting language into play is to consider the words used for becoming-research as verbs (Amatucci, 2013) rather than signifying nouns; processes, not objects but perhaps a “passage *between* objects” (Benozzo et al., 2013, italics in original, p. 310). Creative interplay and movement can be provoked through the ontological theory and practice of the ‘and, and, and...’ of diversifying relations between parts. Data becomes a machine (Jackson, 2013), and requires an experimental plugging together of its parts. To proliferate connections, I seek data-developing-intensity, an accentuation when forces of energy collide or overlap (Benozzo et al., 2013). I see what data finds me, connects with me, and then my task is to experiment (MacLure, 2013).

To resist the stratification of doing conventional research also means finding ways to conceptualise the researcher which enact the non-divisive immanence of a univocal force present in research. The stratification of subjectification is to be resisted as that which demarcates and separates me from the immanence of connections that might enhance research activity. Instead then, of a human-centric positioning of my researching body, my researching-I becomes a machinic entity in-between relations, an ‘and’. Opening up to an immanence of connections, becoming ‘and’, my researching-body can entangle with data, live data and join its flows of becoming.

6 AND TO CONCLUDE...

Entanglement is a methodology of connection, of the ‘and’. This is a method, then, which involves working with immanent, material, bodily affects in dynamic time and space, to enable becoming rather than represent being (St Pierre, 2013). Potentiality is put to work when data, the active and agentic material of research rather than its object, remains entangled in its ongoing relations with all matter, inclusive of and enveloping all matter in the virtual potential of its univocity, remaining indeterminate and always on the move. To engage entanglement in methodology requires language to lose its descriptive function and to become productive in a playful and experimental use. The notion of subject must shed its humancentric focus and be seen instead as dispersed over a series of ‘ands’. To reduce the researcher/subject and the concepts and activity of research methodology to material parts or data as part of enacting a univocal immanent materialism draws us beyond recognition and representation and into the uncharted and unlimited methodological potential of creative and transformative entanglement.

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