Non-representational and more-than-human research

Vitalist methodologies for the end of data

Edited by Phillip Vannini

NON-REPRESENTATIONAL AND MORE-THAN-HUMAN RESEARCH

This book fosters new links between non-representational theories and more-than-human perspectives. Offering multidisciplinary perspectives, from geography and anthropology, to social theory and qualitative research methodologies, it reimagines the boundaries of research by arguing for a new concept of "data."

Original, bold, and creative contributions provocatively push us to reimagine what is meant by data. No longer something we can unproblematically understand as an empirical given, the notion of data is reimagined as the relational outcome of encounters, engagements, attachments, and more-than-human relations. As such, the book expands the field of non-representational scholarship, challenging the ideas of data collection, analysis, and representation.

This innovative book provides a courageous contemporary theoretical and methodological intervention. It will be valuable for students, researchers, and arts practitioners across the social sciences and will serve as the beginning of new methodological dialogues for years to come.

Phillip Vannini is a Professor in the School of Communication and Culture at Royal Roads University in Victoria, BC, Canada.

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1

MORE-THAN-DATA? AN INTRODUCTION TO VITALIST METHODOLOGIES

Phillip Vannini

These days, few topics are as popular as data. You probably heard this before. Data are seemingly everywhere. Our countless mobile technology interactions, constant online presence, omnipresent credit card usage, and related behaviors are generating unimaginatively large and diverse bodies of data around the clock—we are routinely told by all kinds of scholars, politicians, and newsmakers. As a result, new businesses, policies, technologies, and scholarly discussions focusing on data storage, management, and analysis seem to proliferate. Unsurprisingly, "Data, data, everywhere"—a reference to Samuel Taylor Coleridge's well-known quote from *The Rime of the Ancient Mariner* "water, water, everywhere"—is now one the most common titles of the day (e.g., see Bernhardt, 2016; Flood, 2010; Pistilli, 2018).

Not too long ago, the topic of data wasn't so hot. Researchers (especially of the qualitative variety) used to be more sober about data. Without much fanfare, they would collect their data, keep them in a binder, analyze them, and present them. After publication, these data would perhaps continue living unglamorously for some years in an office desk drawer, or perhaps a binder, until they were forgotten and eventually tossed away when an office had to be vacated, or data had to be "destroyed" as we routinely promise Institutional Review Boards. Data used to live short and rather uncomplicated lives.

Things are very different these days. The advent, for example, of "big data"—data that are massive and growing exponentially over time—results in data sets so huge, varied, and complex that no binder could store them. Big data even give rise to big money-making business opportunities, such as the development of new disciplines like data science: an interdisciplinary field that uses statistics, computing, and various methods of management, processing, and visualization to extrapolate insights and inform decision-making. The field is growing fast,

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with hundreds of brand-new graduate programs now being offered around the world. In my region, for instance, the University of British Columbia's brand-new Master's in Data Science program announces that:

> Data is [sic] everywhere. Continuously generated and collected across every domain, it is a vast and largely untapped resource of information with the potential to reveal insights about every aspect of our lives and the world we live in.

The contemporary fascination with data is intensified by the growing fetishization of artificial intelligence (AI). In the context of research, AI is now used for the collection, generation, analysis, preparation, management, and visualization of data, among many other tasks. With regard to qualitative data analysis, for instance, AI can help researchers identify patterns by automating a variety of coding tasks. AI can produce various types of coding and thematic analysis and can even decode data to engage in sentiment analysis and persona building. Above all, AI-based software like NVivo can make the job of data analysis *faster*. With NVivo—the makers advertise—you can "identify themes, run advanced queries, and discover evidence-based insights faster […] allowing you to achieve rigorous research results in less time." NVivo automatic text summarization can even "explain unfamiliar terms or local idioms, saving you time from searching for answers" and "summarize each of them in seconds, allowing you to get a sense of each document immediately." An undoubtedly useful feature that can make the year-long peer-reviewed research publication process several *hours* faster.

Confident in our own ability to still handle data the old-fashioned way, "manually," we may look to the automation of data processing with skepticism (I, for one, certainly do), but we must recognize that this is no trivial matter; the AI data business is causing a growing and unexpected number of problems all across the academic world. For example, growing numbers of peer-reviewed journals' editorial boards are becoming quickly overwhelmed by the sheer quantity of manuscript submissions generated by bots, paper mills, or simply by authors making increased use of AI to process data, write up reports, and even generate fake data to publish more and faster. A recent article published in *Nature* (Van Noorden, 2023) reports that over 10,000 papers (arguably the proverbial tip of the iceberg) were retracted in 2023 after they were found to be fraudulent in one way or another. But while fraud may be the ultimate distortion of the system, benign instances of AI tools like ChatGPT, Perplexity, or HeyGen—which can be used to "enhance qualitative research" by making it easier "to generate research questions, design interview prompts, analyze data, and create dynamic visual content" (Instats, 2025, n.p.) can result in generating an increasingly robotic and standardized research culture.

Versions of research culture like this are what Tim Ingold refers to when he quips that nowadays "knowledge is crap," "the waste product of a metabolic reaction" (2021, p. 9) generated by a neo-liberal alliance of universities, the state, and corporations for the sake of better "decision-making." According to this model, Ingold (2021, p. 10) charges, "knowledge is produced by harvesting quantities of data, and feeding into machines that digest or process this 'input,' and excrete the results, also known as 'output.' This excrement is the marketable currency of the knowledge economy." In this model, human beings are nothing but technicians at the service of machines charged with producing knowledge "better" and faster. "Could it be possible," Ingold (2023, p. 21) asks us to ponder, "that we know too much, or that we have too much information?"

Despite the fact that everyone seems to talk about data these days, reflections on what data actually are or what data actually *do* remain infrequent. So, what exactly is meant by "data"? According to Lincoln and Guba (1985, p. 333), qualitative data are "the observational and interview notes accumulated in the field, documents and records, unobtrusive traces, and the like." Another way of saying this is that qualitative data are translations or textualizations of the lifeworld (St. Pierre, 1997): the written outcomes of a process through which unwritten encounters or events take the shape of language and become classified as data to undergo categorization, coding, interpretation, and writing up. The textualization process is something that reifies events, phenomena, and relations by turning them into representations, bestowing them with an existence codified into text and turned into a given thing.

It is in this fashion that data truly are "given," in the original sense of the word (the word "data" is Latin for "given"). According to this model, data are "given" to us as something waiting to be textualized, then something ready to be stored, managed, computed, visualized, displayed, and reported. While many researchers might find this to be unproblematic, the contributors to this book do not. Intended this way, as "givens," we believe that data feel like amorphous things: "inert, lifeless, and disorganized" (Koro et al., 2018, p. 463). They feel like a corpse ready to undergo post-mortem analysis, their existence condemned to be nothing but a sign of something greater than themselves for which they have given up their being.

If this received notion of data is suspicious to you, if not downright dangerous, unethical, or even boring, then this book is for you. Contributors to this collection reveal how data are not passive or lifeless, but are instead full of vitality. Rather than something "given," inert, or lifeless, the chapters of this book show data as continuously *giving* themselves forth, forging new assemblages, weaving new kinships, transmitting affect, always becoming something new and something else, thus opening new lines of flight, enchanting, moving, surprising, agitating, performing, and much more. Chapters show these kinds of *data as* something animated by an *élan vital* that gives them texture, feel, force, and *puissance*. Data for us are unruly, lively, and irreverent.

Written at the intersection of two of the most vibrant intellectual currents of the moment—non-representational and more-than-human perspectives—this book will *not* show you methods of collecting, storing, managing, or processing data, but rather free up data so that their vitality may reveal itself in novel ways. In the process of doing so, we will collectively argue that, for a vitalist researcher, the received notion data is not only death-like but probably something that *should* be dead. In light of this, we hope that this book can mark *the beginning of the end of data*. To get to that endpoint, this introduction begins with a critical review of the received notion of data, then turns to a brief survey of non-representational and more-than-human methodologies, focusing on their shared approach to more-than-data as kinds of slowed-down, lively *encounters* with the lifeworld. Then, we will turn to vitalist methodologies as a possible way forward in our understanding of data.

The problem with "data"

The contributors to this book and I are not the first ones to criticize the received view of data. Nearly 100 years ago John Dewey noted that: "The history of the theory of knowledge or epistemology would have been very different if instead of the word 'data' or 'givens,' it had happened to start with calling the qualities in question 'takens'" (1929/1960, p. 178). With Dewey we agree that calling empirical materials "takens" rather than "givens" might be a more accurate reflection of the process by which researchers construct and extract knowledge (see Law, 2004), but we believe that this is hardly an ideal to aspire to. Like "givens," "takens" are but the outcome of an extractivist model of knowledge accumulation which has long objectified knowledge (Ingold, 2023) and has often resulted in the exploitation of myriad more-than-humans, as Wright and Daley remind us in the opening chapter of this book.

So, what should we call "data," in the context of qualitative social scientific research? To begin with, it behooves us to better understand the nature of the problem with the received view of data. As Koro et al. have noted, "little questioning has targeted the ontological status of data or our continued commitment to the very existence of data as a knowable and stable entity" (2018, p. 462). This unproblematic attitude has led many researchers to simply think of data as raw traces given to us by the world, brute facts which researchers can collect and interpret with a variety of more or less naturalistic methodologies.

Things are more complicated than this, but the idea of data is an elusive one. As Koro-Ljungberg and MacLure (2013) have insightfully noted, data seem to disappear from our awareness once we start thinking about them for what they are, rather than the realities they putatively represent. Data, they note, seem "to act at times like the vanishing goods in the sheep's shop in *Alice in Wonderland*, which fascinated Deleuze in his *Logic of Sense*: 'whenever Alice looked hard at any shelf, to make out exactly what it had on it, that particular

shelf was always quite empty, though the others were crowded as full as they could hold'" (Deleuze, 2004, p. 49, quoting Alice). It is no accident that we teach students different methods to collect data, different strategies to interpret and present data, and different ways to ascertain that data are valid, interesting, and faithful. But until we reflect on what data do, and until we stop thinking of data as passive objects waiting to be collected and analyzed, the received view of data and its unproblematic acceptance will remain in place.

As mentioned in the opening of this chapter, the received view of data is marked by a passive understanding of what data are and what they can do. Like rocks lying on the ground, passive data lay inert until "awakened to meaning through the ministrations of researchers and their specialist, methodic procedures" (Koro et al., 2018, p. 463). In fact, as pure givens, these raw passive data are seen as nothing but brute facts not only by positivists but also by most qualitative researchers (St. Pierre, 2013). Even among research studies influenced by post-foundationalist ideas the brute data of the world stay passive and mute until theoretical concepts and perspectives are invoked to speak for them. Thus, in and of themselves, data are not only given but uselessly lifeless until something is done to them, until a researcher is called to "develop ideas on a level of generality higher in conceptual abstraction than the qualitative material being analyzed" (Glaser and Strauss, 1967, p. 114).

"Now, hold on!"—a critical reader might charge, "qualitative data tell us about people's experiences, practices, and meanings! What is wrong with giving a voice to people and letting their words speak for themselves?" Well, leaving aside for the moment the problem that not every more-than-human can speak, the trouble is that these data are not as innocent as they may seem, nor do they ever speak for themselves. Data of the textualized kind (whether interview transcripts, field notes, or the similar) may look authentic at first sight, but with every act of selection, description, contextualization, and interpretation their further textualization becomes more and more reified. This is eventually how data lose their seeming innocence. This is how they become instrumental tools for advancing theories, informing policies, constructing social realities, and governing communities. This is how, in the end, we end up doing things with data that data themselves perhaps never intended to do. Things like reinforcing the value of realist and scientist epistemologies, and buttressing up neoliberal discourses of accountability and the related master narratives of evidence-based practices (Denzin, 2013; St. Pierre, 2013; Koro et al., 2018).

Fortunately, skepticism toward the received notion of what data are and what they can possibly do has been growing over the last decade, particularly within the post-qualitative inquiry movement (see Allums, 2020; Boyd, 2022; (Carlson et al., 2021). Koro-Ljungberg, one of the most outspoken critics, has argued that an uncritical notion of data is widespread even among the more progressively minded qualitative researchers. What most researchers think of data, she notes, is actually an illusion because data are inevitably a representation of a reality

that always escapes itself (Koro-Ljungberg, 2013). In light of this, what most researchers call data "are really our own constructions of other people's construction of what they and their compatriots are up to" (Geertz, 1973, p. 9). This, for Koro-Ljungberg (2013), is an unreflexive and uncritical approach that fails to recognize that data are interpretations and representations piled on more interpretations and representations with no authentic referent at the bottom of the pile (also see St. Pierre, 2013).

For over a decade now, the post-qualitative inquiry movement has exposed the "myth of the given" (Sellars, 1997) and argued that to think of data in the conventional sense inevitably leads us back to an outdated logical positivist position. Rather than something given, data could be understood as something that we ourselves have fully created, which is why some post-qualitative inquiry scholars have suggested we speak of "*creata*" rather than "data" (Brinkmann, 2014). *Creata* are explicitly constructed, selected, and ultimately taken—more or less kindly—by researchers (Freeman, 2004; Latour, 2005). Others within the post-qualitative inquiry movement believe that the old idea of data should simply be "dead" (Denzin, 2013) and replaced by a new perspective that recognizes that data cannot be controlled, contained, owned, commodified, or somehow cleaned, managed, or bent to the analytical will of a researcher. Following this line of argumentation, the late Norman Denzin (2013, p. 355) charges that there are as many as 15 reasons for going beyond data:

1. The word data invokes a positivist epistemology and a politics of evidence based on terms like reliability and validity;
2. The word data invokes a positivist ontology which turns the world into nouns and other things;
3. The word data turns things into commodities that can be counted and sold;
4. The word data perpetuates the myth that objective observers can make the world visible through their methodological practices;
5. Data are not things that can be collected, coded are analyzed; data are processes constructed by the researcher's interpretive practices;
6. Data has agency; it is not passive;
7. Data has had its day;
8. Data are ideological productions;
9. Data are the handmaidens of an audit culture;
10. Data cannot speak;
11. Data cannot be plugged in;
12. Data are too messy for positivists;
13. Real data cannot be quantified;
14. The word data should be outlawed; replaced by William James' term "empirical materials";
15. Data are dead.

Despite the soundness of the collective critique brought forward by the post-qualitative inquiry movement, it might be a bit of an overstatement to say that data are truly dead, and we should replace them with something like *creata*, or perhaps with nothing at all. To begin with, the notion that "we" (human researchers) are the ones who produce *creata* reeks of immodesty, anthropocentrism, and humanism, not to mention an exaggerated reliance on the principles of constructivism. Furthermore, doing research without data—as some within the post-qualitative inquiry movement advocate—seems to run counter to the very notion of doing research in the first place. The truth of the matter is that the received notion of data is very much alive, and at times perhaps unavoidable, as Greenhough and colleagues show in their contribution to this volume. Therefore, in calling for the end of data like we do in this book, we are advocating for the demise of scientist perspectives that view data as passive givens and hoping to move beyond well-accepted practices based on humanist and representationalist perspectives that, in their appealing convenience and simplicity, make it difficult to see that we are treating data as fixed, passive, and lifeless entities.

Going beyond data is necessary, we believe, because the textualization and excavation of symbolic meaning end up taming the vitality of our research-centered encounters with the lifeworld. This kind of taming can make research feel "sedentary"—to borrow from Deleuze's (1994) critique of representational thought. Sedentary, representational thought tames change, growth, becoming, and the ongoing emergence of the new (MacLure, 2013), reducing pure difference to whatever is identical, analogous, or similar (Deleuze, 1994, p. 174; also see Roberts, this volume). To solve these problems, we need to learn to slow down and attune ourselves to the vitality of data—as many of the chapters ahead will show us.

Another kind of data is possible

Another kind of science is possible, writes Stengers (2018), in an incisive critique of the current neo-liberal model of scientific production. Echoing Stengers, the contributors to this volume believe that another kind of data can become possible. Another kind of data becomes possible with the acknowledgment that all forms of being are always already entangled in a multitude of relations. Then, the possibility of another kind of data begins with slowing down our research practices and coming to terms with the fact that the lifeworld is messier than it seems and less transparent than we'd like it to be. In slowing down, in learning the arts of noticing (see Tsing, 2015), in thinking of research as modest acts of witnessing (see Haraway, 1997), we might then realize that there are no "given" units of information that can be disentangled from their relations and that there are no underlying meanings that description and interpretation can deconstruct and decode. In slowing down we might realize that there is wisdom and vitality in the world's ongoing transformation

of itself (Ingold, 2023) and that the true test of our methodologies is not whether they accurately allow us to "mine" for information or uncover truths, but rather how they allow us to become attuned to whatever is "interesting, remarkable, or important" about life (Deleuze & Guattari, 1991/1994, p. 82).

Making another kind of data possible by slowing things down begins with learning to cultivate a proximity with the lifeworld made possible through slow and intimate encounters (Rantala et al., 2024). This requires an ontological re-orientation that, following non-representational and more-than-human perspectives, we might call affirmative. An affirmative perspective demands that researchers hold "a belief in the world" as "our most difficult task" (Deleuze & Guattari, 1991/1994, p. 75). It demands hope in the possibilities of worlds we haven't yet envisioned (Koro-Ljungberg and MacLure 2013; St. Pierre, 2013). This is not an easy business. The challenge issued by the contributors to this volume is mighty. As a collective, the interventions incite us to re-think data as something that exceeds our capacity to know, understand, and make sense of the lifeworld, something that exceeds our ability to condense the world into objects to be computed or coded. The challenge is to re-envision data as something not fully known or familiar, something agentic, creative, engaging, and lively.

According to all the contributors to this volume, what is essential to this re-envisioning of data is a realization that the world is always in excess. Non-representational and more-than-human perspectives work as instrumental tools to this effect. Combined together, these vitalist orientations allow us to generate knowledge in imaginative and speculative ways that are unafraid of asking how possible worlds could unfold otherwise. This is a kind of "speculative scholarship," that "acknowledges that research matters relationally and that different forms of agency and vitality are likely beyond our human understanding, language, and consciousness, beyond our human vision of possibility" (Koro et al., 2024, p. 678; also see Kanngieser et al., 2024; Gorman, this volume; Rantala and Höckert, this volume). In learning to slow down, imagine, and speculate we might re-learn to see data as things we do not take, but rather things that largely choose us, enchant us, and affect us. This is a new vision of data as sense-events, as intimate encounters, as vitalist forces weaving new connections and sparking new imaginations, vitalist happenings that allow us to catch a glimpse of the lifeworld from the inside (see Amatucci, 2013; Ingold, 2023; Koro-Ljungberg, 2013).

Non-representational research

This book grows out of a turn toward non-representational methodologies that coalesced ten years ago around the production of a book titled *Non-representational methodologies: Re-envisioning research* (Vannini, 2015a). Back then, while writing the introductory chapter to that book (Vannini, 2015b), I argued that non-representational theory (or "more-than-representational"

theory; see Lorimer, 2005) was one of the most influential theoretical perspectives within the social and cultural theory of the time. As evidence of that, I noted that Nigel Thrift's (2008) *Non-representational theory: space/politics/affect*—which is vastly considered to be the foundational text of this perspective—had already been cited 646 times only five years after its publication.

Today, 17 years after its publication, Thrift's book has been cited 7,471 times. And it is far from being the only evidence of the popularity of non-representational ideas. For example, both *Non-representational methodologies* (Vannini, 2015a) and Anderson and Harrison's (2010) *Taking-place: non-representational theories and geography* have been cited well over a thousand times each. A variety of comprehensive literature reviews have also since been written (e.g., Andrews, 2014, 2017; Dowling et al., 2018; MacLaren, 2019), a new introductory reference book for students has been made available (Simpson, 2021), and several encyclopedic references have been penned (e.g., Simpson, 2017a; Williams, 2020). Unlike it was in the mid-2010s, today a search for "non-representational" on Google Scholar yields thousands of citations, spanning across all the social sciences, arts, and humanities. What was at the beginning of the millennium a UK-based and geography-rooted perspective is now a truly global and cross-disciplinary theoretical and methodological force.

Introductions to both non-representational theories and methodologies are widely available (see Andrews, 2014, 2017; Dowling et al., 2018; Simpson, 2021; Vannini, 2014, 2015a), so here let it suffice to say that, as Lorimer (2005, p. 83) put it, the non-representational "is an umbrella term for diverse work that seeks to better cope with our self-evidently more-than-human, more-than-textual, multisensual worlds." More precisely, non-representational perspectives are an assemblage of theoretical concepts, methodological orientations, and styles of doing research that have emerged from various crossroads of performance studies, material culture studies, science and technology studies, contemporary continental philosophy, political ecology, cultural geographies, ecological anthropology, biological philosophy, cultural studies, the sociology of the body and emotions, and the sociology and anthropology of the senses, among other fields. As it did at its onset in the early 2000s, non-representational thinking assembles ideas from post-structuralism, actor-network theory, relational theories, more-than-human philosophies, feminism, biological philosophy, neo-materialism, process philosophy, speculative realism, social ecology, new vitalism, performance theory, critical theory, post-phenomenology, and pragmatism.

Attempts to contain and summarize the sheer diversity of non-representational thinking typically begin by referring to Thrift's seven core principles of what he provocatively defined as a new science/art hybrid that works as a "supplement to the ordinary, a sacrament for the everyday, a hymn to the superfluous" (2008, p. 2). This is a science/art/philosophy that attempts to witness the multiple time-spaces in which life takes place through encounters, movements, and intensities (Anderson and Harrison, 2010). Thrift's (2008) seven tenets include a focus on

the onflow of everyday life, an anti-biographical and pre-individual orientation, an ongoing concern with practices and performances, a rootedness in relational materialism, an experimental and playful spirit, an emphasis on embodiment, and the stressing of novelty in the ambit of both theoretical and methodological work. Following these seven tenets, non-representational research ought to strive to be animated, to be mobile, and to be playful, not refuting representation but pursuing it in parallel with differentiation (Doel, 2010). Moreover, non-representational research aims to attune itself to the contingent, messy, unpredictable, subtle, often un-spoken, and often un-reflexive performative achievements of everyday life (Andrews, 2014).

Following early pronouncements of what non-representational work started to concentrate on, I (Vannini, 2015b) made the case that non-representational research worked best when it focused on events, relations, doings, affect, and backgrounds. Little did I know back then that non-representational ideas would spread like wildfire and allow researchers to expand the scope of the perspective from the early focus on cultural geographies to fields as diverse as the study of news-making (Parks, 2021), media and popular culture (Moores, 2016), marketing (Hill et al., 2014), planning (Buser, 2014), the life course (Barron, 2021), mindfulness (Asker, 2023), infancy and childhood (Holt and Philo, 2023), education (Zembylas, 2017), health and well-being (Andrews, 2014), nursing (Andrews, 2016), sports (Thorpe and Rinehart, 2014), organizational complexity (Lorino et al., 2011), memory (Jones, 2011), heritage (Waterton, 2014), weather (Wright, 2024), tourism (Haanpää, Salmela, et al., 2022b; Prince, 2019), and music (Doughty et al., 2019), only to cite a few of countless examples.

What I did write back in 2015 about non-representational research consisting of a unique *style*—rather than particular methods—however, still holds. As I noted, this consisted of a style resolutely not timid (see Latham, 2003) and keen on cultivating creativity, novelty, performativity, extemporaneity, vitality, emergence, experimental creativity, and a fearlessness toward failure (Dewsbury, 2009). Thus, in an attempt to concentrate on animation as the essence of this style, I wrote:

> By animating lifeworlds non-representational research styles aim to enliven rather than report, to render rather than represent, to resonate rather than validate, to rupture and reimagine rather than to faithfully describe, to generate possibilities of encounter rather than construct representative ideal types. If indeed there is a quintessential non-representational style, then it is that of becoming entangled in relations and objects rather than studying their structures and symbolic meanings.
>
> *(Vannini, 2015b, p. 15)*

Back then and still to this day, much has been made of the "non-" in non-representational theory. Rather than denying the possibility of representation, the "non-" works in an affirmative way, as an incitation to work differently and