

Complementary Situations // ANY BODY THERE // To Mind is to Matter



Raoul Titulaer - 8663084

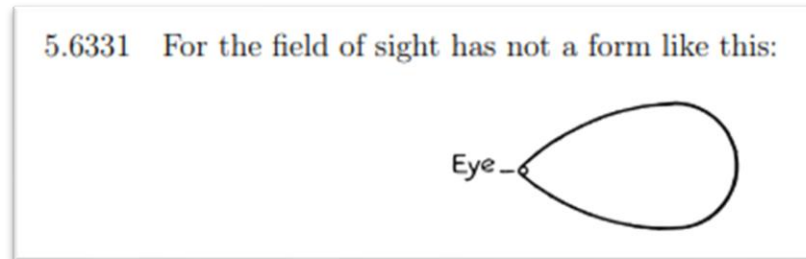
Utrecht University – History and Philosophy of Science

Complementary Situations

A transdisciplinary account of how our bodies come to matter to us.

“The body is to be compared, not to a physical object, but rather to a work of art.”

-Maurice Merleau-Ponty, *The Phenomenology of Perception*.



-Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*.

The ostensibly odd structure of this thesis project was consciously chosen to be both an example (or a case study, if you will) and a careful exposition of Karen Barad's agential realism as explicated in their seminal work *Meeting the Universe Halfway*¹ (MUH). The differential positioning of beings-in-phenomena as giving rise to things we commonly call subjects and objects, emerging through the world en-/unfolding itself, makes for an interesting and adequate account of theorising knowledge. This interest and adequacy I will address later, but what struck me as an interesting gap that was left undertheorised in Barad's work were cases in which a person grasps (at) themselves. Because this epistemological question² attends to the drawing of boundaries between entangled agencies, it raises issues about the boundaries drawn around, between, and through what is usually thought of as a *unified subject*. Equipping agential realism with an understanding of how human experiences can be understood on its own terms, might allow for its further application in fields dealing with conscious subjects. This would more easily allow for an agential realist account of specific experiences of neurodiversity, gender incongruence, or other aspects of human-specific becoming that are difficult to theorise under agential realism in its current form.

Post-structural critiques of the subject by Michel Foucault and Judith Butler form a part of the theoretical approach within agential realism, so the unified subject is out from the get-go.³ However, understanding the materialisation and subjectivation of people from a post-humanist perspective says relatively little about the lived experiences of these so-called subjects. These theoretical perspectives have dutifully deconstructed identity and shown them to be the product of the coming together of a large mesh of fluctuating agencies, stabilising over time. While inspiring different modes of constructing the person (such as can be seen in postmodern literary traditions), this may have drawn away from recognising and appreciated the raw intensity of the way the world presents itself to us as we move through it. I am going to draw back attention to the bodily experiences of sentient beings such as the one currently reading this and how we come to know them.⁴ Thus, the main question of this thesis can be summarised as follows: If subjects and objects are differentially enacted and bodies have no preexisting boundaries, what does it mean for someone to know something about themselves?

¹ Barad, K. (2007) *Meeting the Universe Halfway*, Duke University Press, London.

² Agential realism is an ethico-onto-epistemological theoretical framework, but the problem of how an embodied subject comes to know its own body presents itself initially as an epistemic question. It must necessarily be reformulated later.

³ MUH: 432f42.

⁴ It makes sense that Barad had little attention for this, as human bodies and how they come to matter had been the main point of theoretical focus for too long. In accounting for the materialisation and discursivity of all beings-in-phenomena and how they came to matter, however, a reconceptualisation for how this looks in the case of the human has to be considered as well. Just like how Newtonian physics cannot be understood as a limiting case of quantum physics, Butlerian subjectivation cannot be understood as a limiting case of Baradian subjectivation.

The main methodological feature of Barad's work is the fruitful combination of multiple viewpoints, without taking one to be norm against which others are measured. Knowledges grounded in different material-discursive practices, read diffractively, can produce new and interesting insights into the complexity of the world we are a part of. I have strived to do something similar in this thesis project in two ways. Attempting to juxtapose different material-discursive practices and read them diffractively through the lens of 'how we relate to our own bodies'⁵ on the one hand, and bring together different knowing practices in a material arrangement of an exhibition on the other. Despite my familiarity with one medium over the other, I must ask of the reader not to take one to be the norm against which the other is to be measured.

Firstly, I must either congratulate or slightly disappoint the reader, because the companion piece to this written thesis is an art exhibition that has already taken place. It will only be presented here in the form of written and photographic documentation that still cannot and could never be taken as an adequate replacement for the event itself. This irreducible event, *ANY BODY THERE* (May 2023, "De Kruisruimte", Eindhoven) was co-curated with my dear friend Quinn Zeljak, without whom many of these half-finished thoughts would never have half-started in the first place. Alongside her and my artistic contributions, four other artists contributed to the exhibition with their work and insight into curatorial practice. For the sake of my argument, I invite those who have attended the exhibition to substitute and supplement part of my descriptions with their memories of the event itself. However, since every presentation is also an articulation and reconfiguration of knowledge, I invite those who have not attended to see my description of the exhibit as a text in itself. The text (either partly supplemented by memory or not) is to be read alongside, within, and through the other half of my thesis.

"Of course!" you might exclaim, "It makes perfect sense to delve into the experiences of others if one tries to understand the way one understands themselves." These ways are myriad and rich, informative of the relations they embody, and form an ample resource for *my* considerations on the embodied self. But you will find no such delving here, I have tried to bring people together to let them speak for themselves, after which I could relay what they may have tried to say. I must press upon the reader that much is lost in this reduction to two dimensions. The arrogance of the written word is that of the philosopher themselves, in their axiological '*tout dire!*' However, as a saving grace I would like to conjure up some of Maggie Nelson's opening words to her 'autotheoretical' memoir *The Argonauts* to shed a light on attempts such as these:

"Before we met, I had spent a lifetime devoted to Wittgenstein's idea that the inexpressible is contained—inexpressibly!—in the expressed. This idea [..., i]ts paradox is, quite literally, *why I write*, or how I feel able to keep writing."⁶

The latter⁷ half of my thesis is mainly comprised of an agential realist reading of Maurice Merleau-Ponty's *Phenomenology of Perception*⁸ (PhP) in which I will take great care not to judge either work—this and *Meeting the Universe Halfway*—against the norms of the other, but to weave between the strands they leave hanging and to see where and how they can be taken as a part of a larger tapestry, resonating with the manner in which both halves of the thesis form a larger tapestry themselves. To aid this process I will also consider some secondary sources on Merleau-Ponty, to ground phenomenology in a more contemporary setting and to see what a new materialist⁹ reading could draw out specifically. Barad takes great care to distinguish the 'Bohrian' phenomena, forming the primary ontological unit of agential

⁵ Understood as in the common framing of this phrase in the exhibition text of ANY BODY THERE.

⁶ Nelson, M. (2016) *The Argonauts*, Melville House, New York: 3 – I found it comforting to see that another feminist critic, if I may be so bold, also harboured an unhealthy obsession with Wittgenstein. While mine has not quite yet lasted a lifetime, I feel a resonance with this statement, that is ironically difficult to put into words.

⁷ If read chronologically, which I advise against.

⁸ Merleau-Ponty, M. (1978|1945), *Phenomenology of Perception* (trans. Colin Smith), Routledge & Kegan Paul, London.

⁹ As a theoretical framework that seeks to address matter in its becoming, endowing it with agency, it falls in the tradition of new materialisms. MUH is often seen as a cornerstone in feminist new materialism and has cemented Barad in the field.

realism from the phenomena of the ‘philosophical phenomenologists’.¹⁰ We are going to see the ways in which these two terms may not be at odds with one another, if aptly reconceptualising what philosophical phenomenology might mean in the light of Merleau-Ponty’s work on perception.

Now that I have made my intentions clear, let me tell you where they come from. The bulk of this project has sprung off from reading Donna J. Haraway’s “Situated Knowledges: The Science Question in Feminism.”¹¹ It was nothing short of a revelation to see this attempt at recovering objectivity amid a sea of deconstruction, raising questions about the nature of subjectivity in its turn. If to see or to know is always to do so ‘from somewhere’, what then is this place from which one views? The shift from ‘being’ what one is to ‘being somewhere’. This characterises subjects as dynamic positionings, rather than things that are subjects by virtue of being endowed with certain faculties, naturally occurring traits, or ‘humanity’. It challenges our experience of subjectivity in a way that can be fruitfully examined by reading this poststructuralist approach alongside other disciplinary traditions that have bent themselves over the question of subjectivity. After saying ‘pace, Haraway’, I will now paying homage to my analytic heritage and give a brief overview of the overall structure of this text taken as a whole.

If read in order of presentation you are now reading this introduction in which the relation between the seemingly disparate legs of this project are described as being both capable of standing on their own, but also joining at the crotch to hold up an entire body. This is followed by a documentation and by necessity therefore an interpretation of the art exhibit *ANY BODY THERE*, which took place at *De Kruisruimte* in Eindhoven from the 26-28th of May, 2023. It is interspersed with explanations as to why this format lent itself well to both this project and my philosophical practice. I trust that this will adequately convey a sense of the event and what went into it, as well as why it is a valuable lens through which to view the other leg.

After this you will be reading ‘To Mind is To Matter’, a diffractive reading of mainly the previously mentioned works of Barad and Merleau-Ponty, in which the relationship between one’s perceived self and their embodiment is examined through offering a new materialist reading of the *Körper-Leib* distinction in phenomenology. This theoretical leg of the project attests to the interpretative apparatus that I have developed through my studies before and while engaging in the curatorial and artistic practices leading up to *ANY BODY THERE*. This is the way in which I would personally, given my disciplinary training in philosophy, have flown into the question—if it had not seemed theoretically inadequate and uninteresting to do so from only one angle. Agential realism’s processual ontology is wrapped around and into a pluralist epistemology, this led me to reject the perspective of the single eye in favour of the many hands. I do not want to decry the possibility of materialising philosophy, in fact, this very project can be read as an attempt to do so. The matter of embodying material entanglement in relation to making sense of the embodied self, however, simply demanded or an inclusion of material-discursive practices that more explicitly articulated with the material aspects of their practice.

When the two legs stand apart—a part of one another—I will conclude by ruminating on the project as a whole, to see if what has arisen can be adequately described as ‘webbed knowledges’.¹² In doing so, I try to offer a diffractive reading of this project as a whole through the differential positioning of myself as writer, artist, and curator. This cannot be taken as an attempt to subtract out an underlying truth that comes into being by letting these positions cancel each other out, of course, but I hope that by hopping around and looking from the one at, through, and next to the other in an iterative fashion, we can glean something about how we relate to ourselves and experience our bodies that a singular lens could not have offered.

¹⁰ MUH: 412f30. They seem rather dismissive of phenomenology, seemingly regarding them all staunch representationalists.

¹¹ Haraway, D. (1991) “Situated Knowledges: The Science Question in Feminism”, in *Simians, Cyborgs, and Women: The Reinvention of Nature*, Free Association Books, London.

¹² *Ibid.*: 194-195.

ANY BODY THERE

In what follows I will give a detailed account of the exhibition that is the companion piece to this written thesis. It arose collaboratively from the embodied minds of textile artist Quinn Zeljak and myself, as well as the four other participating artists we asked to join after settling on a topic. We wanted to organise an exhibition around the common theme in our research, the ambiguous connection one has to their own body. To this end we sat down to put our thoughts to paper, after which we compared the texts. We compared notes, rewrote, and exchanged again. In this iterative process, the following text arose as we developed a common language on the subject. The final version of this text can be found below, as it is the central text of this event. It constituted the online invitation as well as being handed out to visitors on paper. It was the lens through which the visitor was to look at the exhibition as a whole.

ANY BODY THERE

Embodiment and the experienced body on the intersections of visual arts and contemporary philosophy.

EXHIBITION DATE: 26th-28th of May

EXHIBITION LOCATION: De Kruisruimte, Eindhoven

Every person is confronted with the existence of their body and has to find some way of relating to it. Whether your body is a cage or a vehicle, whether it marks the edges of your being or initiates points of contact, whether it is authentically you or the sack of meat you happen to carry around.

How we relate to the world and ourselves as material beings is a centrally important theme in many contemporary currents of both philosophy and the arts. *Any Body There* is an attempt by Quinn Zeljak and Raoul Titulaer to take a closer look at this. After many heated arguments on the possibility of completely equating the self to its body, Quinn thinks we probably *have* a body, Raoul is still working on it. What sometimes presents itself as an inevitable truth theoretically, often doesn't line up with our experience. In their respective fields of the visual arts and philosophical research, both of their work is situated within this tension.

While we all navigate our relationship with our body, our society makes the politics of being or having one unavoidable. Whether it is your gender, a disability, your sexuality, or ethnicity, our bodies do not exist in a vacuum. Therefore, addressing the many differences in bodies and bodily experiences demands a pluralistic approach. The complexity of this tension calls not only for different viewpoints, but for different ways of seeing altogether. Artists and thinkers were invited to shed light on this multifaceted relationship and provide an interdisciplinary account together.

In *Any Body There* the tension between the experience of *having* a body and that of *being* one takes centre stage. We won't pretend to have all the answers, but we take joy in grappling with the questions.



Space for co-curation

What this text omits, for chronological reasons, are the five other participants of the exhibition. The works of Britt Dorenbosch, Samar Khan, Emmie Liebrechts, Mary Maggic, and Valentijn Schmitz also graced the walls and floors of the luminous exhibition space we had rented. Quinn and I selected and contacted these artists because we saw in their work a connection to the topic we had decided on, or thought that reading their work as being about the way one relates to their own body brings out an interesting aspect of embodiment as such.

This curatorial process (as well as the deliberation and writing process) stretched over the course several months. Some of the artists we encountered had already struck us as relevant a while before we had the first draft of our exhibition texts ready for comparison, while others were surprisingly fitting discoveries along the way. When we contacted the participating artists, with the exception of Mary Maggic¹³, we sent them our exhibition text and told them we thought their work was relevant for ANY BODY THERE. However, rather than only asking for permission to show either work 'x' or 'y' during the exhibition, we invited them to think along with us, along the lines of the text we had sent them, whether they saw a similar vein in their work and which they thought would be best to show at an intervention like this.

We had rented *De Kruisruimte* for a week, we were to use the three days before the exhibition to set everything up and the last day to break everything down again. It comes equipped with a kitchen and an attic space with a few beds, Quinn and I were to stay for the entire week. As the other participants slowly dropped by during the few days before the opening, they brought their works and their ideas on how to arrange the space with them. These were both very welcome, as we had explicitly tried to

¹³ Quinn saw their work at another exhibition and after showing *Housewives Making Drugs* to me, we both agreed it had to be included. This was the only work we curated specifically for the exhibition. The set-up dressed in aged domesticity that we eventually presented it in was also arrived at without consulting the artist, as they could unfortunately not be present.

make space for a co-curatorial practice to arise, in which the only limits were the availability of sockets in certain corners and the physical integrity of the work presented.

A certain collaborative logic took hold of the space, and while not everyone could stay, Quinn and I were working day and night to materialise the formative efforts of this spirit of co-operation. Of course, working together in a relatively small space in an early summer heatstroke that missed its mark by thirty days was not always easy. Chairs too large to fit in tiny cars and a can of spray paint fizzling out in the evening under the groan of an untold “I-told-you-so” so quiet that I still heard it made way for shared meals in the sunshine and celebratory splatters of paint to be scraped off the floor before the guests arrived. It may not always have been easy, but preparing together was a wonderful maelstrom I could not help but enjoy getting caught up in.

The opening was hectic, most people would come on this first day and we thought it would be nice to give all of those willing to make it all the way to Eindhoven a little bit of soup—it was, everyone loved it. It was also bewildering to see people wandering around the cruciform chamber we had so arduously arranged. We knew the works, we knew how they went together, we found them to be the most expressive of our shared intent in this specific configuration. Would they understand, would they find something of value in this collection of images? Around thirty to forty people showed up during the day, which was not a problem in a space of this size. At least, it was not a problem until they were all gathered in the foyer, gathered around me, gathered to listen. I was to give a speech on the occasion of our opening, to give thanks where appropriate and to give them a little push in the back with regards to the direction of their gaze. I have pieced together the speech here from scattered notes and incomplete video recordings:

“To address all of the bodies that have gathered here I have prepared a little speech—well, I didn’t prepare a little speech, I jotted it down quickly and didn’t have a chance to practice or revise. But it feels ... necessary to talk at an instance like this. Which feels odd, to try and speak on this exhibition when the whole point is that it tries to express something that is inexpressible by words alone. So I will not try and talk about the content of the work that is presented here. For that, I will direct you to a future thesis that I plan to write. * A slight wave of laughter ripples through the crowd. * So I will try to speak for myself and on the objects that have gathered here—not for them, mind—and how we’ve come to be in this space together.

I’ve always thought that the lived experience of a person is the most important and most interesting ‘object’ for people to think about and to study, but unfortunately the branch of philosophy that explicitly deals with this, phenomenology, is fraught with problems rooted in the conditions of its own emergence. Which is why recently I’ve found this wonderful book by Sara Ahmed, *Queer Phenomenology*, which I will now try to use to explicate some things that are happening here.

In *Queer Phenomenology*, Sara Ahmed analyses these problems of the field of philosophy by looking at their background as well as the things that it relegates to the background. She goes on to argue that phenomenology ought to be supplemented by an ethnography of things. * Gesturing at a work on the wall behind me: * Look, things. I quote: ‘what we miss when we look at the table [which is a classical philosophical stand-in for ‘the thing’], might be behind it in another sense. What is behind the table is what already must have taken place for the table to arrive.’

Now, I could go on to elaborate how this flows nicely into a Marxist critique of commodity fetishism or on the distinction between nature and culture as mapping onto that of object and subject, but I will not bore you with that. Rather, let me look at this notion of arrival. And let me

tell you how I—and subsequently we—have come to arrive here, through a long list of people and things I want to thank, which is always invariably too short.

** I fumble with my papers, trying to find the right pa-... **

The recording is cut short, what follows is extracted from the crumpled notes I managed to save:

The people who've inspired me to do interdisciplinary work: Samar Khan, Marijn Prakke, Susanna Bloem, and Donna Haraway. The non-humans I've met that came together to create this moment: the mirrors I found in a morgue at an underground rave a few years ago, the nuts and bolts my father and his father before him has collected over the past few decades, and the two glasses of wine that enabled me to give this speech to you in the first place.

I also want to express gratitude to my family for supporting me, even if they sometimes don't really understand what I am doing, or why I am doing it. Especially to my father, for hosting me in his workshop, and without whose guidance, expertise, and hard work the artwork I am presenting in the next room never would have come together. To the people at Utrecht University, who believed in me when I proposed to do something unusual: my thesis supervisor, Iris van der Tuin; David Banek; and Ariane den Daas and Bert Theunissen from the Descartes Centre, which is partially financially supporting this exhibition.

Most importantly, I want to thank the participating artists here. Especially my dear friend and co-curator Quinn, without whom this whole thing never would have happened. Who continuously inspires, challenges, and amazes me. I will let you continue to roam the space now and I hope you will be equally inspired, challenged, and amazed by the objects and bodies that inhabit this exhibit."



After that, everyone poured into the main hall. Visitors were engrossed in videos, touching fabric when they thought nobody was looking, and they asked us what it all meant. I would usually reply: "I am not sure what it all means, but I would love to hear what you think, then I will tell you my version." It was

the first time I had exhibited work; I was eager to hear what people thought, but I was equally happy to find that people wanted to hear what had gone into it. So I told them, and told them, and again. I am not sure if I ever settled on a coherent story, but several aspects kept rearing their head and I think this has slowly consolidated into what I could now call my own interpretation of the work I had made. The medium by which I will now relay this to you allows me to elaborate this a little more, so please bear with me as I try to explain.

A new ophthalmotrope

The title of *With whose blood were my eyes crafted?* (2023) may not be as strange to the attentive reader here as it was to most visitors of the exhibition, it is a sentence lifted verbatim from “Situated Knowledges”¹⁴ that always stood out to me as a poetic exasperation comfortably nestled in the midst of theory. Certainly, Haraway’s evocative writing style makes it no surprise that such sentences can be found, but normally these are embedded in paragraphs of their own. In reading “Situated Knowledges,” one can feel the text drift from irony to imagery to theory and back, the tongue in your cheek rarely comes at a surprise. “With whose blood were my eyes crafted?” stood out as a sore thumb, hearkening to Marxist material histories of fire and blood, evoking constructivism in more than just the social sphere, but also bringing these things eerily close to one’s own embodied experience.

I approach the practice of philosophy as the curation of thoughts, where they are spatiotemporally arranged to allow for the formation of something novel. My artistic practice follows a similar structure and is separable from my philosophical practice only in theory, the document in front of you attests to that. I collect things and thoughts that seem to be of interest in some way, often unaware of how exactly, until they come together in a concrete piece. The title of this piece and its context had been rolling around in the back of my mind before it came to be attached to this piece. The object that would house it is a collection of such thoughts and their material substrates, or a significant embodiment that presents these thoughts.

It is primarily a reconstruction of an ophthalmotrope, a didactic model of muscles of the eyes and the way they function to make certain movements. Encountering this strange object for the first time in its full historical glory in the Ghent University Museum (and later in the movie *Knives Out* (2022)), I found myself drawn to this stripped gaze. Supposedly telling us something about how our eyes work, while simultaneously depending on working eyes for this expression to function; I revelled in this paradox. A scientific model that not only purports to tell you what you see, but also how you see. For once I was surprisingly keen to do my historical research properly and I started to look for where this object came from, who made it, and why.

Diving through digital archives and even the physical collection of the Utrecht University library as the historian of science that I sometimes embody, I came across the works of Ruete¹⁵, Donders¹⁶, and Howe¹⁷. If I wanted to learn how to make one of these wondrous objects, I would have to do so from the same information that they had at the time.¹⁸ 19th century professors of ophthalmology were living through the rapid development of their field, and their arguments were based in a beautiful interplay

¹⁴ Haraway, D. (1991) “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective” in *Simians, Cyborgs, and Women – The Reinvention of Nature*, Free Association Books, London.: 192.

¹⁵ Ruete, C.G.T. (1845) *Das Ophthalmotrop, dessen Bau und Gebrauch* Vandenhoeck und Ruprecht, Göttingen, and Ruete, C.G.T., *Ein Neues Ophthalmotrop* (1857), B.G. Teubner, Leipzig.

¹⁶ Ruete, C.G.T., trans. F.C. Donders (1846) *Leerboek der Ophthalmologie*, Van Der Post, Utrecht.

¹⁷ Howe, L. *The Muscles of the Eye* (1907), G.P. Putnam’s Sons, The Knickerbocker Press, New York.

¹⁸ Not only because it would offer a more accurate reproduction of the thing ophthalmotrope itself, but also because this reproduction would then be imbued with a similar sense of wonder at the marvels of biomechanics. The 19th century ophthalmologists seemed a little less disenchanting than their 20th and 21st century peers.

of empirical observations, mathematical biomechanics, and the construction of (physical) models. These models would not always find their way into concrete embodiments, but when they did, it was not only to argue with ophthalmologists; they were made as teaching tools, demonstrating biomechanical laws in an intuitive fashion.¹⁹

In “Simulation and the Eye” (2016), Harry Owen sketches the developmental trajectory of ophthalmotropes and showed that while the Ghent University Museum label described their apparatus as a “MYOMETER RUETE OPTHALMOTROOP”, it is more accurately described as the simplified model devised by Knapp.²⁰ This is a short outline of the historical research underpinning the apparatus that was eventually positioned in front of a set of five equilaterally triangular mirrors, joined together, oriented towards the ophthalmotrope with its concave side. Two small white globes mounted on their ball-and-socket joints, six off-red sinewy threads coming out of each, finding their way around the metal frame, holding afloat a hodgepodge of nuts and bolts, potential energy and tensile forces simulating living threads that pull this way or that way to look. Look, can you see? Can you see, yourself? Can you see yourself?



The mirrors invite the viewer to move around the setup, as the way their reflections intersect distorts any easy angle of approach. The muscles of the eye are begging to be pulled, to show the delicate movement of the eyeballs they make possible. The way one struggles to see what they enact when

¹⁹ Howe, L. *The Muscles of the Eye*: 180-181, quoting Donders' 1870 publication “Die Bewegungen des Auges, veranschaulicht durch das Phanophthalmotrop”.

²⁰ Owen, H. (2016). “Simulation and the Eye”. In: *Simulation in Healthcare Education*. Springer, Cham: p. 348. I traced this accusation back to its source, which was Howe's (1907) work mentioned above. This work was oddly silent on the oft-mentioned Ruete, however. Looking back into Howe's source, Helmholtz's *Handbuch der Physiologischen Optik* (1896), of which I had read the Dutch translation by Donders in the archives at Utrecht, I found the culprit. Ruete had devised the first ophthalmotrope with two eyeballs (published in *Ein Neues Ophthalmotrop*), yes, but his intricate design made it so that it was difficult to be reproduced as a teaching tool. Hermann Knapp's was a simplified version of the apparatus that was nonetheless capable of showing the basic principles it aimed to convey, i.e. Donders' and Listing's law.

pulling the threads of the apparatus resembles the difficulty with which one has to situate themselves as living bodies in scientific representations of ourselves. The distance a model creates at the moment it supposes to bridge it becomes palpable when interacting with the installation.

How someone engages with the apparatus also makes a difference. One could pull the threads to see how the eyeballs move as most visitors did at the exhibition, because of the way the ophthalmotrope was angled towards them. Historically, however, its didactic purpose also laid in showing the tensile forces on the separate muscles, as one manually moved the globes to which they attached. This purpose was obscured not only by the angle of approach, but also because of the lack of markings on the threads and the uneven heights of the weights attached to them. The difference between the living body and the scientific gaze can be enacted by different ways of engaging with the apparatus, effectively turning them into two complementary apparatuses altogether: one that questions the access we have to grasping our own perspectives on the one hand, and one that doubts the possibility of universal validity in scientific representations on the other.

This difference is integrated within the design of the installation through the juxtaposition of industrial, clinical and organic visual languages. Old bolts and metal scraps, sleek chrome, whitened wood, and red threads that have grown from a living being speak of the cyborgian nature of human knowledge projects. However, these also stand testimony to my own situatedness in the assembly of the piece. They attest to my father's experience in wood- and metalworking and his aid in constructing the plinths. Together in his little workshop where he leapt so fluidly from this cabinet here to that small drawer over there: "I might have something for that," never ceased to amaze. The gendered expectations of who goes into technical education and who stays home with the kids, the triangular mirrors I once found at a rave in an abandoned hospital, and the entangled histories of a working class family and the development of ophthalmology in Western Europe; all came together in *With whose blood were my eyes crafted?*

To Mind is to Matter

A New Materialist Phenomenology of the Body

“We must [...] not merely practise philosophy, but realize the transformation which it brings with it in the spectacle of the world and in our existence.” - *Phenomenology of Perception*: 62.

Do you mind? In this theoretical leg of my thesis project, titled *To Mind is to Matter*, I will be answering the question of how we can make knowledge claims of our own bodies from an agential realist perspective. Following this framework, the question is more aptly formulated as: How can we lay claim to knowing our own bodies and, per materialist extension, ourselves? In doing so, I will try to find a stable ground for accounts of our own embodied experience and even argue that such accounts could be described as objective under certain circumstances, following Karen Barad’s usage of the notion of objectivity. Their theory of agential realism, as articulated in *Meeting the Universe Halfway* (henceforth: ‘MUH’, 2007), is a rich account of scientific knowledge production designed to decentre the human in our descriptions of knowledge practices. Thus construed, we can find it to be strategically lacking in its description of human sense-making. However, as it gives a general account of how meaning materialises, it must be applicable to the case of humans making sense of their own embodied experiences.

To take a well-established account of this process –and as I will argue, one whose philosophical presuppositions mesh extraordinarily well with those held by Barad—we turn to Maurice Merleau-Ponty’s seminal work, *The Phenomenology of Perception* (1962|1945). In line with Barad’s reading of Bohr, I will argue that we can construe Merleau-Ponty as offering a proto-performative theory of psychology, after which I will diffractively read his theory on the way bodies come to be and come to be known through the work of Barad to find how we can make sense of it in their terms.

Our object of investigation, then, as well as that of the PhP, could be recast as what I will call lived experiential phenomena, now properly understood as a specific subset of Baradian phenomena. Rather than the ‘phenomenologists’ phenomena’ being a theoretical lens incommensurate with the onto-epistemological claims they put forward in MUH, this rereading of Merleau-Ponty’s work will allow us to articulate ways in which human bodies make sense of themselves. However, as all diffractions must do by necessity, the post-humanist reading of Merleau-Ponty cannot leave its body of work untouched. In the attempt to enrich agential realism with an account of bodies coming to know themselves, the classical phenomenology of embodiment will be enriched with a critique of its methodological disdain for metaphysics and the humanist tendencies that continue to linger between the white spaces dividing the lines of its text.

As concepts are representational technologies that must be applied to have any value, lived experiential phenomena will be put to the test in the last chapter of this thesis. I will show how we can use this term to make sense of our bodies and the way we come to know it in ways that are both commensurate with agential realism and supplement it where necessary. As a curious entity that is not one, but half of two, this text will then curl back in on itself to reach the *Complementary Situations* text in which it is embedded. By then, we will see why different

knowledge practices, philosophical as well as artistic apparatuses of bodily production, are capable of forming webs of knowing that are all equally necessary if we wish to give an adequate account of the irreducible richness of the bodies in which we find ourselves.

Before embarking on this, however, my allegiance to Donna Haraway's philosophical project compels me to account for my own 'apparatus of bodily production', in which I find myself entangled as I write this text. To situate myself in regard to it so as to allow the reader to make better sense of that which is written here and to grant some degree of objectivity to this writing insofar as the 'humanities' allow for it, I will tell you how and why this research question has come to matter for me. My place in this world and the path I have traced must inform the answer I formulate in response, so I'm afraid it might get a little personal. We're all adults here, however, and the banishment of the flesh in academia will be its downfall if we don't get less squeamish, fast.

Having been weaned largely on analytical philosophy, history of ideas, and phenomenology during my studies, my interest in critical theory only reared its head once I came to understand the stigmatisation that came along with inhabiting non-conforming subjectivities. The psychological labelling procedure I had undergone as a child is apparently not something one 'grows out of'. In my early twenties, mounting problems in the realm of social relations seemed to find its root in a disrupted connection to my own bodily feelings and a subsequent inadequacy to express them. I personally find little value in the exact term, but faced with the blunt force of a therapist it became impossible to disregard the representational violence of assigning the label of ASD²¹ to an eight year-old.

As I started to learn how to better understand myself with the help from both professionals and loved ones, the gulf between my bodily feelings and my grasp of them (in both a material and conceptual sense) grew smaller. However, the possibility of this discrepancy existing in the first place never quite lost its hold on me, which spurred me towards a more thorough philosophical investigation of this gap. It surely can't have helped to have been raised as a male in Western society when it comes to developing the necessary skills to properly make sense of my inner motions. Developments in this area may also have had a hand in my continuing and sometimes unfortunate disdain for masculinity; eventually leading to the choice I am making and remaking to actively distance myself from it. This too, affected my thinking, nudging me towards incorporating queer theoretical perspectives in my work. The path I have traced of my positioning thus not only shows my 'choice of experimental set-up', as Bohr might have it, but also continues to inform the way in which I engage with it and in turn constitutes an integral part of the knowledge that emerges here.

While there is no established procedure for describing the experimental apparatus of a philosopher in the broad sense, let me hazard a try. The situation of the philosopher tends to (woefully) be as follows: I am in the library, I am reading, I walk around and think, I think I see something I thought of in the patterns of differential becoming in the world around me. I

²¹ This was not exactly the diagnosis I received, but diagnostic criteria and categories have changed. Besides that, the contemporary reuptake of people explicitly identifying with a diagnosis of Asperger's Syndrome is not something I want align myself with.

return to the library, I turn another page, I discuss my ideas with my friends and ‘colleagues’, as sleep continues to elude me I jot down something that might be relevant in the middle of the night. I am in the library again, my eyes begin to hurt as the screen in front of me grows brighter in contrast to the rising dusk. Though this is already better than the image Ahmed sketches of Edmund Husserl in *Queer Phenomenology* (2006): sat at his writing desk, far from meddling wives and children, the master subject left to ponder; it still feels (woefully) less caught up in the ‘real world’ than most other of knowledge practices. We will return to this matter in the conclusion of *Complementary Situations*.²²

Lastly, if a forgiving reader would allow the anachronistic amalgamation: the autistic, queer icon of 20th century philosophy, Ludwig Wittgenstein always seems to peer over my shoulder when I write.²³ Extensive study of his life and work and an odd feeling of intergenerational kinship have informed my thinking on the way meanings come to matter. I have chosen not to explicitly include this here, as it is not pertinent to answering the question at hand, but please do not be alarmed if he pokes his head around the corner of a footnote here and there. Carrying my past and present material conditions as well as my distant relatives in the history of philosophy with me, the conceptual apparatus I am inextricable from is moved in its entirety as each letter I type turns the crank of bodily production. Hopefully the steam that rises from it can be made sense of in the light of these positionings.

²² Ahmed, S. (2006) *Queer Phenomenology*, Duke University Press, London.: 28-31.

²³ If we could momentarily bracket the poisonous manner in which posthumous diagnosis flies in the face of actual psychiatric practice as well as reifying stereotypes about autistic people, I would like to point to Michael Fitzgerald’s 1999 paper “Did Ludwig Wittgenstein have Asperger’s Syndrome?” to put a little weight behind the vague feeling of recognition I found in Ludwig’s writings, as well as my reclamation of him as an ‘autistic icon.’

1. What it means to 'matter'

"However strong one's dislike of metaphysics, it cannot be banished, and so it is ignored at one's own peril. How reality is understood matters. There are risks entailed in putting forward an ontology[.]" – *Meeting the Universe Halfway*: 205.

Let us now turn to Barad to formulate a philosophically grounded excuse for oversharing. In *Meeting the Universe Halfway*, Barad formulates an answer to the problem that has been haunting feminist science studies for a few decades. "[H]ow to have *simultaneously* an account of radical historical contingency for all knowledge claims and knowing subjects, a critical practice for recognizing our own 'semiotic technologies', and a no-nonsense commitment to faithful accounts of a 'real' world, one that can be partially shared and friendly to earth-wide projects of finite freedom, adequate material abundance, modest meaning in suffering, and limited happiness."²⁴ An adequate answer to this will have to, as Barad shows us, comprise of an epistemological, ontological, and ethical aspect. An adequate answer must also recognise, as Barad does, that these aspects are inseparable if one wishes to take the problem seriously. To address this inseparability directly—the simultaneity in Haraway's statement of the problem—Barad states that we need "an analysis that enables us to theorize the social and the natural together, to read our best understandings of social and natural phenomena through one another in a way that clarifies the relationship between them."²⁵

The spectres of representationalism and metaphysical individualism are prefigured as the main opposing ideologies, where the absolute stability of both the natural world as well as the objects that constitute it facilitate an account of scientific practices as a tuning, turning, and polishing of artificial mirrors to eventually provide the best pictures of nature 'as is'.²⁶ These are challenged on the basis of empirical findings in fundamental physics, positioning Barad as a staunch naturalist, where empirical findings can and must find a foothold in our philosophical accounts of the world we inhabit.²⁷ In doing so, they put forward a performative account of knowledge production by reading post-structuralist theory through and into the work of Nils Bohr, who they argue to have put forward a proto-performative account of scientific knowledge production himself. While this forms the theoretical soil of agential realism, Barad also addresses the aforementioned philosophical opposition methodologically. Treading the path set out before them by other feminist epistemologists, this methodological development is centred around the metaphors of vision.

Reflection as an epistemic virtue is an extension of the philosophical premises of attribute-bearing objects and the capacity of concepts to fully grasp them, of propositions to exhaustively document the relationships between them. It must be done away with in light of the performative account that Barad offers, where relations pre-exist their relata, and objects, matter, and meaning come into being through specific material arrangements of the world.

²⁴ Haraway, D. (1991) "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" in *Simians, Cyborgs, and Women – The Reinvention of Nature*, Free Association Books, London.: 187.

²⁵ MUH: 25.

²⁶ Ibid.: 86.

²⁷ This reading of Barad is supported by Rouse, J. (2004). "Barad's feminist naturalism." *Hypatia*, 19(1), 142-161. Which I will later discuss in more detail.

Instead, Barad offers us the metaphor of diffraction, where knowledge is enacted in the change that occurs when a passage is made from one medium into the other. There is no easy recognition of sameness to be read from our perfect mirrors, it is only through adequate understandings of the lenses we look through that we can ground our readings of the things we see through them.²⁸

This recasting of an entire web of beliefs is a long and difficult process. Barad frequently repeats herself in this work and seems to want to hammer home the ideas put forward in them by doing so. Shifting one's metaphysical worldview is not easy, and it helps to see the same new and old words pop up in slightly different constellations over time to get a grasp of how they now function. Due to the spatiotemporal constraints of this work, I cannot afford to make the same repetitions. Instead, this chapter will focus on a few key philosophical premises that Barad holds, as well as some conceptual innovations, that will become central to our reading of Merleau-Ponty. The former as a way to make sense of our comparative account, which together with the latter will facilitate our agential realist reading of *The Phenomenology of Perception* in a later chapter.

Setting up a Baradian glossary

The difficulty in writing on Barad is that the words we commonly use to describe the world are steeped in philosophical baggage. While Barad introduces new terms to contradict these habits of mind, the substances and their properties that emerge in the structure of English grammar itself, these terms are still submerged in the English language. The difficulty in writing on Barad lies thus in overturning certain conceptions with the use of novel concepts, while remaining intelligible—while continuing to rely on a common tongue. As previously stated, they bridge this gap through repetition on a scale I do not have the space for here. Therefore, an unfortunately small handful of concepts and terms must be plucked from the rich field that is agential realism to serve the purposes of this thesis.

In genuflection to the analytical tradition that I was raised on, and which also rears its head in the style of Barad, I offer the reader a handy list that can provide a few handholds to make sense of our trajectory. The philosophical (presup)positions I will discuss are (1) metaphysical individualism, (2) representationalism, (3) anthropocentrism, and (4) naturalism. The relevant concepts I will discuss in light of Barad's agential realist account are (a) phenomenon, (b) intra-action, (c) agential cut, and (d) phenomenon. These concepts are impossible to neatly separate and might bleed over into one another, but this will be of use later when we analyse the way these philosophical positions come up in Merleau-Ponty, and when we apply these concepts to his work.

Metaphysical individualism, broadly conceived, is the idea that reality is made up out of separate things. These are often, though not necessarily, construed as bearers of individual properties, whereby relationships and complex phenomena arise by the way in which things interact with other things by virtue of their properties. Agential realism as a metaphysical theory disjoints individualism by positing the phenomenon as the basic unit of reality, rather

²⁸ MUH: 88-91.

than the things within them. It is the (be)coming together of different parts of the world in which things and meanings come into being, relations ontologically precede their relata.²⁹ A phenomenon is thus not given rise to by a set of interacting objects, but rather is *intra-action* itself—a whirl of agencies in which things show themselves to be things to one another, rather than properties showing themselves between stably existing entities.³⁰

Intra-action becomes the basic unit of reality, an open-ended mesh of interrelated agencies, in which mediated marks transfer through an apparatus from the thing showing itself to be an object-within-the-phenomenon onto the thing that thereby materialises as subject-within-the-phenomenon. These relative object and subject positions, in short, are the marking and marked agencies respectively. The dynamic boundary of subject and object within a given phenomenon, Barad calls the agential cut. This cut is the enactment of boundaries that results from the specific configuration of agencies within a given intra-action. The dynamicity of this cut, or its contingency, is not the same as saying that reality can be whichever way we look at it. Rather, the intra-actions that come to be and thereby the beings and meanings enacted within it are guided by all the material agencies caught up in it. Any contingency that remains leaves room for contestability in knowledge claims, especially when humans care to concern themselves with them. We will return to this point when discussing the new role of objectivity.

Again, in broad strokes, representationalism can be conceived as a metaphysical position that claims knowledge or meaning is formed through the object leaving an impression on the subject. This representation as an arrow from object to subject may be skewed, or discoloured, but the subject is in principle a mirror of the world, its primary problem is that of adequacy. Representationalist epistemologies fail to take account of the practices through which representations are formed and the way these actually influence the world they set out to study.³¹ A performative understanding of scientific practices would address this problem.³² Within the agential realist framework, the necessary presence of the apparatus in a given phenomenon most precisely articulates its challenge to representationalism. The apparatus, as the given set of ‘mediating’ agencies within a phenomenon, always influences the process by which a subject-object relation can come to be. Agential realism thus radically posits context and circumstance as an active force in the way meanings materialise and matter comes to mean something.

Scientific knowledge-making as the simple one-to-one correspondence of objects out there with their relevant pictures contained within subjects is thus upended. “Making knowledge is not about making facts but about making worlds, [...] about making specific worldly configurations [...] in the sense of materially engaging as part of the world in giving it specific

²⁹ MUH: 444f33: “[P]henomena are the new atoms, where atoms are not individual objects, but rather practices/doings distributed in space and time.”

³⁰ Ibid.: 33: “‘intra-action’ signifies the mutual constitution of entangled agencies. [...] agencies are only distinct in relation to their mutual entanglement; they don’t exist as individual elements.”

³¹ A tap on my shoulder, a stern Austrian face with glimmering eyes. The primacy of relations over relata forms the ontological core of Wittgenstein’s *Tractatus*,. (§§1-1.2, 2.04-2.05) The fact that representations themselves constitute facts in the world they aim to describe (§2.141) forms the tension at the heart of his work that would eventually tear at this picture theory of meaning.

³² MUH: 49.

material form.”³³ Representation exists only insofar as it is a re-presentation, the way in which an object comes to be understood within a specific material arrangement. All the moving parts within an intra-active whole determine the shape and form of the object-within-the-phenomenon, as well as what it can possibly mean. The problem of adequate representation that inheres in representationalist epistemologies—when is picture/concept ‘x’ an adequate representation of object x?—must therefore be radically rephrased. Because agential realism demands on aforementioned ontological grounds that we take into account a larger set of agential influences when talking about the way an object appears to us, this problem of adequacy also becomes one of ethics: ‘what is a *good* presentation x’ of object x, and what is adequate account of manner in which this presentation is enacted?’³⁴

The shift towards agency as grounding both matter and meaning, situates agential realism as a performative theory. Matter and meaning are not simply there, they are enacted within phenomena, they come into being by the world’s ongoing intra-action, unfolding and enfolding. It is thus at once a performative theory of matter and a performative theory of meaning. When we consider it as a theory of meaning,³⁵ rather than running aground in the muddy space between honesty and competence; truthfulness and trustfulness; and speakers and listeners, agential realism moves away from the anthropocentrism that inheres in other theories of meaning. If meaning inseparably arises alongside matter within phenomena, there is no reason to sequester ‘meaning’ to the realm of the human.³⁶ The human, as a separate sphere of phenomena exists only insofar as it denotes a set of phenomena in which human agencies are entangled, it exists only extensionally and is not granted a special position within the theoretical framework. While the world being ‘meaningful’ to some extent, all on its own, might be a hard pill to swallow for some, it only poses serious inconsistencies when not taking on agential realism as a whole. Internally, decentring the human follows quite neatly from Barad’s ongoing commitment to naturalism as well as the overarching ontological structure I have sketched out thus far.

As Joseph Rouse discusses in his 2004 paper “Barad’s Feminist Naturalism”, Barad’s naturalism is, like that of feminist science studies scholars before them, not built on a static conception of nature against which philosophical enquiry has to be measured. Rather, it is a constructivist position in which scientific understandings of nature are themselves a part of the nature which they seek to understand. Theoretical accounts of such understanding themselves are then in turn also parts of that nature which seeks to understand itself. Science studies becomes contiguous with science becomes contiguous with nature, since all are

³³ Ibid.: 91.

³⁴ By moving away from representational epistemological frameworks and towards the latter formulation as a guiding question of scientific practices, one sees how these practices, ironically, could become more self-reflexive. This is what agential realism aspires to methodologically, baking ethics into scientific practices themselves.

³⁵ Another tap on my shoulder. In Wittgenstein’s *Philosophical Investigations*, he addresses the tension that arose from his earlier representationalism. Meaning, rather than lying in the way it corresponds to an actual entity or situation in the world, lies in its use. (e.g. PI, §138: “Of course, if the meaning is the *use* we make of the word, it makes no sense to speak of such ‘fitting’ [of one word’s meaning with another.]”) I do not have the time or space to belabour this point, but I suggest that we call this a proto-performative theory of meaning.

³⁶ MUH: 139: “[P]henomena are the ontological inseparability/entanglement of intra-acting *agencies*.”

grounded in the same basic ontology of phenomena in which different scales of material arrangements can give rise alongside different meaningful wholes.³⁷

Given this scalability, agential realism should account for the material arrangement of black and white pixels, electric current running through the screens in front of us, repetitive motion of finger flesh on plastic keys, books and papers and centuries of philosophical tradition, hours and hours of work, so many conversations, frustrations, and also the joy that are condensed in this paper forming a meaningful whole. And I will return to how it does, but given the same scalability, it should also be able to account for the central question this paper seeks to answer, how do human beings make knowledge claims of their own bodies? The ontological groundwork thus far forces me to rephrase this question. How can we understand human experiences of their embodied selves as a phenomenon in which meaning arises intra-actively from a theoretical standpoint in which these human experiences do not enjoy a privileged position? I will tease out an answer from a diffractive reading of Merleau-Ponty's *Phenomenology of Perception* through the Baradian glossary set up above.

But why Merleau-Ponty?

Starting points matter. If we were to take up Barad's naturalism, it might seem odd to address the question of how we come to know our()selves as embodied beings through the lens of phenomenology. Why not look at the scientific disciplines that deal with these matters? What of psychology, neuroscience, or even medicine and anthropology?³⁸ In *Queer Phenomenology*, Sara Ahmed asks herself the same question. "Phenomenology can offer a resource for queer studies insofar as it emphasizes the importance of lived experience, the intentionality of consciousness, the significance of nearness or what is ready-to-hand, and the role of repeated and habitual actions in shaping bodies and worlds."³⁹ This latter role can be read in Baradian terms as describing the way in which iterative performances of intra-active becoming are the way in which matter and meaning comes to be. If that is already inherent in a phenomenological outlook, a marriage between it and agential realism might be arranged.

No other discipline has bent itself over the question we have set out to answer as much as phenomenology, as far as I know. The matter of how we get to know our embodied selves has been cast in the crucial distinction between the body qua *Körper* and the body qua *Leib*. The German language was fortunate enough to have two separate words for the body around the time Husserl first cracked open an inkpot, so the difference between the body as touching, lived, and experiencing and the body as felt, seen, and being a thing among others in the world was enshrined in the phenomenological tradition.⁴⁰ French was less fortunate, however, and while Merleau-Ponty made work of trying to elucidate this difference, translations remained difficult and tended to reinscribe certain philosophical baggage into the terms that the simple German terms lacked. To this end, I will continue to use *Körper* to refer to the body as it appears

³⁷ Rouse, J. (2004) "Barad's Feminist Naturalism," in *Hypatia*, 19(1): 142-161.

³⁸ Despite how this thesis may look, there are a few works I have actively chosen not to include. Here I would like to include a slight nod to Annemarie Mol's *The Body Multiple* (2002), which unfortunately did not make the cut as part of my theoretical apparatus in this work, but would undoubtedly have been an invaluable resource in this regard.

³⁹ Ahmed, S. (2006) *Queer Phenomenology*, Duke University Press, London.: 2.

⁴⁰ Slatman, J. (2022), "The Körper-Leib Distinction", chapter 29 in *50 Concepts for a Critical Phenomenology*, Northwestern University Press, Evanston: 203.

as an object within conscious experience, and *Leib* to refer to the body to the extent that it appears as a subject within conscious experience, until it is no longer helpful to do so.

In a contemporary textbook for critical phenomenology, Jenny Slatman writes: “the work of this French philosopher [...] has been, and still is, of vast importance for contemporary studies on the body and embodiment in philosophy, anthropology, and sociology; in gender, queer and race studies; in disability studies; and even in the more practical field of health and nursing studies.”⁴¹ Instrumental as it thus shows itself to be to all kinds of transdisciplinary research, I would be remiss not to include it in this transdisciplinary project myself. This methodological resonance found in Merleau-Ponty’s reception, however, is still rather external to this leg of the thesis. So let us turn to the manners in which the *Phenomenology of Perception* lines up with Barad’s own philosophical positionings as outlined above. In doing so, I will argue that much Merleau-Ponty offers a proto-performative account of embodiment, much like Bohr gave a proto-performative account of scientific practices in Barad’s reading of his work.

⁴¹ Ibid.: 204.

2. The phenomenologists' phenomenon

“For some readers, the term ‘phenomenon’ will no doubt carry what for my purposes are unwanted phenomenological connotations. Crucially, the agential realist notion of *phenomenon* is not that of philosophical phenomenologists. In particular, phenomena should *not* be understood as the way things-in-themselves *appear*[.]” – *Meeting the Universe Halfway*: 412f30.⁴²

To rehabilitate the phenomenon of the ‘philosophical phenomenologists,’ I will argue that Merleau-Ponty offers a proto-performative account of embodiment.⁴³ Barad’s main argument for a calling Bohr’s philosophy-physics performative *avant la lettre* is his implicit rejection of representationalism and the processual nature of his understanding of scientific concepts, their material embodiment being enacted through a given apparatus.⁴⁴ We can see that without making it entirely explicit, Merleau-Ponty’s understanding of the body is also processual in nature. The body is not a thing, but rather is enacted: “I do not bring together one by one the parts of my body; this translation and unification are *performed* once and for all within me; they are my body itself.”⁴⁵ It is not only his understanding of embodiment, however, that can be regarded as performative. Like with Bohr, this flows out from a wider epistemological understanding of how knowledge-making practices function in general.

In “The Phenomenal Field,” the fourth and last chapter of the introduction to the PhP, he systematically does away with the reductive influence of the empiricist tradition on our understanding of perception on the one hand, and that of Kantian nominalism in the way we theorise the relation between knowing subject and known object on the other. The extension of this understanding of perception has extended into scientific practices and crystallised into a neat way of fixing the objects of perception into scientific concepts.⁴⁶ However, Merleau-Ponty argues, the objects we study in science are not simply ‘given’ to perception, they are actively constructed through phenomenal experience. To truly understand ourselves and the world around us, we must become aware of the manner in which this experience hides itself in consciousness behind the construction of ‘things’.⁴⁷

Besides a criticism of cartesian dualism and the concomitant representationalism, this chapter offers further likenesses to Barad’s philosophical presuppositions. From “[t]he recognition of phenomena as an original order,” to his criticism of ‘reflection’, which “never holds, arrayed and objectified before its gaze, the whole world [...] and that its view is never other than *partial* and of limited power,”⁴⁸ the ontological primacy of phenomena over the subjects and objects that show themselves within them and a nascent critique of the metaphysics of vision in epistemology are made quite explicit. Not only is our engagement with the world that which brings about our subjectivity and the things we see in it, but the way we understand the world

⁴² The full quote would be “[...] *appear*: that is, what is at issue is not Kant’s notion of phenomena as distinguished from noumena.” But to pull apart to what extent ‘philosophical phenomenologists’ maintained this Kantian notion in their work is outside the scope of this work. Regardless, we will not be looking at ‘philosophical phenomenologists,’ but at Merleau-Ponty.

⁴³ It appears that Barad already considered this possibility, as footnote 34 to chapter four notes that “it might be interesting to contemplate an agential realist post-phenomenological elaboration of lived bodily experience[.]”

⁴⁴ MUH: 67.

⁴⁵ PhP: 150, italics added.

⁴⁶ *Ibid.*: 54.

⁴⁷ *Ibid.*: 58.

⁴⁸ *Ibid.*: 61, italics added.

itself, is part of the world we seek to understand: “Reflection cannot be thorough-going, or bring a complete elucidation of its object, if it does not arrive at awareness of itself as well as of its results. We must [...] realize the transformation which it brings with it in the spectacle of the world and in our existence.”⁴⁹ In this we can see that for Merleau-Ponty, as for Bohr, an articulation of the functioning of the apparatus we use to understand the world around us is required to properly understand the world around us. Likewise, this grasping at, or of the world, is worldly in itself and therefore affects it in our attempts to grasp it.

While I could go on to point out Merleau-Ponty’s building on contemporary scientific findings and case studies that show his realist and naturalist commitments, the more compelling similarity lies in the manner in which these case studies are being used. Extensive reports on people with perceptual impairments and their reception are discussed to shed light on perception in a wider sense. I will not neglect to pay attention to the role of disabled bodies in the work of both Barad and Merleau-Ponty, but for now the salient feature of this methodological choice is that it resonates with the manner in which fundamental physics figures in Barad’s wider framework. The fringe experiences and highly specific apparatuses of quantum physicists play a large role in the theoretical structure of agential realism. The fringe experiences of people living with perceptual impairments, or rather, the psychologists that interviewed them, play a large role in Merleau-Ponty’s account of embodiment. Having finally offered sufficient ground to situate the following analysis, I will now give an agential realist reading of Merleau-Ponty’s account of embodiment, drawing mostly from part one of the *Phenomenology of Perception*: “The Body.”

The theory of the body

“This incarnate significance is the central phenomenon of which body and mind, sign and significance are abstract moments.” – *Phenomenology of Perception*: 166.

Welcome to the beating heart of “To Mind is To Matter.” Here I will show that the central phenomenon Merleau-Ponty speaks of, that of ‘our’ being-in-the-world, that of ‘our’ very existence, can be understood as a subset of the phenomena Barad concerns herself with. It is thus not the case that the agential realist elaboration of a Bohrian phenomenon cannot be a phenomenological phenomenon, but rather that most of them are not. To distinguish the two, I introduce the term lived experiential phenomenon to denote the latter, while I follow Barad in maintaining the use of the word phenomenon for all processes of intra-active becoming in the world in which agencies congeal into matter and meaning. In short, I argue that the experiences of sentient beings are to be understood as this kind of phenomenon. While the same charge of anthropocentrism levied against Bohr may also be levied against Merleau-Ponty, his work has been taken up within biosemiotics and critical animal studies, suggesting that while the *Phenomenology of Perception* mostly treats of human perception, the views on embodiment it puts forward can be applied to that of other sentient beings.⁵⁰ I will not be able

⁴⁹ Ibid.: 62.

⁵⁰ See for example, Tønnessen, M., Maran, T. & Sharov, A. (2018) “Phenomenology and Biosemiotics”. *Biosemiotics* 11, 323–330. As for Merleau-Ponty, the transgression committed on page 87 of the PhP we will have to regard—through gritted teeth—as a relic of the phenomenological tradition he was embedded in. “[...] the reflex in its pure state is to be found only in man, who has not only a setting (*Umwelt*), but also a world (*Welt*).”

to adequately answer what counts as a 'sentient being,' in this thesis, but this denotes the range of lived experiential phenomena. Although I must confess the line gets blurry as we go down the scale of organismic complexity, see for example Barad's discussion of the brittle star in terms of its being and knowing.⁵¹

Blurring the boundaries of our lived experiences and whom is said to possess such experience at all is an intended outcome of this agential realist reading. It is not a matter of mere smudging, however, this is motion blur, the very dynamicity of these boundary-drawing practices within the lived experiential phenomenon accounts for the manner in which the body qua *Körper* and the body qua *Leib* are somehow always located elsewhere and appear differently to us. Merleau-Ponty situates the primitive awareness of our()selves and our world within the body as dynamic and situated.⁵² To retain his commitment the primacy of phenomena over subjects and objects, he introduces the term 'phenomenal body'. This is the apparatus of the lived experiential phenomenon, this is how we move, feel, and simply *are*; this is us. It is at once a "potentiality of this or that part of the world," and "no more than an element in the system of the subject of the world," the performance of this system being the way it is able to produce subjects and worlds at all.⁵³

Now that we can read the phenomenal body as the apparatus of bodily production within the lived experiential phenomena we inhabit, we must ask, how does it know? The meaning Merleau-Ponty first describes with regard to the body in its motility is that of motor projects, by which the goal of a movement is enacted through it. An object to-be-grasped, a sign to-be-pointed-out, gets infused with significance by the way it is entangled within our lived experiential phenomena. Ascribing meaning has classically been a part of the human realm, so it may want for less of an explanation in regards to an agential realist reading of it. However, this is precisely at stake, for we must see how the process of significance in the *Phenomenology of Perception* would align with a more general view of meaning as arising from the material configuration of the world. "A meaning then is less definable in terms of the indescribable quality of its 'mental contents' than in terms of a certain manner of presenting its object, of its epistemological structure having its quality as concrete realization[.]"⁵⁴ We can see again that Merleau-Ponty refuses to give a classical reading of significance, relating it not to the mind as representation, but to the phenomenal body as a presentation. That which means, does so in virtue of the manner in which it is concretely realised with regard to our experiential apparatus.

If the phenomenal body is the apparatus delineating the agencies of observation from our experienced (for measured) objects, how then do we make sense of its workings as we relate them to our own body? In specific intra-actions where we come to grips with our own embodiment, our being-in-the-world must in some way disclose itself. Here we can reach back to the distinction between *Körper* and *Leib*, which has been troubled somewhat by our previous considerations. We can read this distinction as the dynamic division delineating the body

⁵¹ MUH: 374-381.

⁵² PhP: 100.

⁵³ Ibid.: 106.

⁵⁴ Ibid.: 114.

inasmuch as it appears to consciousness as experiential object, and the measuring agencies response-able to the experience and enacting each other in consciousness.

When we consider Merleau-Ponty's famous example of touching one's own hand with the other, the touching hand figures as *Leib*, an aspect of our body as opened towards the world and capable of receiving it, while the other appears to consciousness as an object. Notably, for the agential realist, the touching hand can never simultaneously appear to consciousness as the touched hand, these are complementary apparatuses of separate lived experiential phenomena. In one case the—let's say—left hand is part of the measuring agencies in relation to which the right hand shows itself to be an object in the physical world. In the specific material arrangement that is our lived experiential phenomenon this "bundle of bones and muscles which my right hand presents to my left"⁵⁵ intra-actively emerges. To have the bundle of bones and muscles to be presented the other way around, however, constitutes a necessary exclusion of the former presentation. This is a 'small' example of response-ability in its purest form, accountability towards the one being allowed to materialise as subject over the other, the mark it leaves on the body.⁵⁶

The body understood in classical terms must continue to elude us under a rigorous agential realist reading of Merleau-Ponty's *Phenomenology of Perception*, as it resists to be defined as such. The body is at once object, subject, apparatus, and phenomenon. The body is all of these —and yet none of them. If to Barad, "[e]mbodiment is a matter not of being specifically situated in the world, but rather of being of the world in its dynamic specificity,"⁵⁷ and "[t]o be a body, [to Merleau-Ponty,] is to be tied to a certain world; [...] our body is not primarily *in* space, it is of it."⁵⁸ It seems these are not as much at odds as Barad's rejection of the phenomenon of the 'philosophical phenomenologists' had us think. To both, the body is phenomenal, bodily boundaries can dilate and contract, the body can entangle itself in different material arrangements and yet never fully distance itself from the world of which it is part. If it turns its gaze inwards, this very movement is grounded on its incorporation of an 'outward', the interiority it can exhibit is always only interiority-within-a-phenomenon, which depends on it being within a phenomenon, embedded in the world.

Conscious phenomena

"Self-knowledge requires a semiotic-material technology linking meanings and bodies. Self-identity is a bad visual system." – "Situated Knowledges:" 192.

Now that we have pulled Merleau-Ponty towards Barad a little, let us try to pull the other way. While Barad makes clear in no uncertain terms that "[...] as long as representation is the name of the game, the notion of mediation—whether through the lens of consciousness, language, culture, technology, or labor—holds nature at bay [...]," they nonetheless remark in a footnote to this claim that "[t]his is not to say that language, culture, technology, or labor don't

⁵⁵ Ibid.: 92-93.

⁵⁶ The beauty of an agential realist interpretation is that it would easily allow one to expand this smallness into the way right hands more readily figure as measuring agencies in lived experiential phenomena. From a lack of left-handed tools all the way into classroom design, even this agential cut between the right and left hand comes to matter in many different ways.

⁵⁷ MUH: 377.

⁵⁸ PhP: 148.

matter;”⁵⁹ I would like to see this potential oversight as a Freudian slip, a repression of the human as a remnant of their post-humanist philosophy. However, consciousness matters as well as language, culture, technology, or labour, if we disregard it as serving a mere mediating function. Consciousness matters and it comes to matter in entanglements involving humans and other conscious beings. Consciousness is the name of our lived experiential phenomena as the phenomenal body figured as the apparatus delineating me as a subject from the objects of my perception or projects within it.

“To be a consciousness or rather *to be an experience* is to hold inner communication with the world, the body, and other people, to be with them instead of being beside them.”⁶⁰ Thus consciousness, in Merleau-Ponty, is not the (p)retentious mirror or the clear slate ready to receive impressions. It presents the world to us (here understood as the subject-of-experience within the lived experiential phenomenon) through projecting its own entanglement with the world. Consciousness is the entirety of the lived experiential phenomena, it is real in the manner in which it appears to us, and it demands for it to be taken as so.⁶¹ However, as Merleau-Ponty explains this in terms of love, showing how affect influences and directs consciousness, he leaves a lot of room for interpretation. “Besides true love, there is false or illusory love[,]”⁶² which he distinguishes from active misconstruals and deceit, but can also only reveal itself as such in retrospect. The objective reality of our experiences do not make them incontestable, nor protect them from later revision. The conscious self is never in complete possession of itself, self-knowledge owes its dynamicity to the manner in which our entanglement with the world shifts as we incorporate differences and accumulate marks and traces of the past in our apparatuses of experiential production.⁶³

Merleau-Ponty demands of us a new materialist reading of our being-in-the-world. Appeals to consciousness must be made to make sense of our existence, but never an appeal to “Consciousness or Spirit.” He attempts to ground meaning and expression in being itself, rejecting it to be the result of a projection of mental truths.⁶⁴ The being of the world is dynamically revealed as we move through it, swimming around in its shifting boundaries, drawing ourselves together/apart as a function of the way our becoming is entangled with that of it and others within it. The rejection of a static universe allows for us to appreciate its richness, but has a critical side to it which we must now turn to examine.

The body that can is the body that knows

“[T]he utterance “I can” points to the future only insofar as it inherits the past, as the accumulation of what the body has already done, as well as what is ‘behind’ then body, the condition of its arrival.” - *Queer Phenomenology*: 159.

⁵⁹ MUH: 375, 470f41.

⁶⁰ PhP: 96.

⁶¹ Ibid.: 376-377.

⁶² Ibid.: 377.

⁶³ Ibid.: 379. The necessary incompleteness of the conscious self can also be found in MUH, 432f42: “The subject cannot fully characterize itself without splitting. Or perhaps more to the point, the world can never characterize itself in its entirety; it is only through different enactments of agential cuts, different differences, that it can come to know different aspects of ‘itself.’”

⁶⁴ PhP: 166: “we must, [...] recognize a primary process of signification in which the thing expressed does not exist apart from the expression, and in which the signs themselves induce their significance externally.”

Situating being in motility, and knowledge in ability, the *Phenomenology of Perception* warrants a diffractive reading through the lens of critical disability studies of a size that I cannot offer here. However, as it stands, I also cannot simply ignore it. As I mentioned before, the extraordinary cases Merleau-Ponty constructs his theory around, as Barad does around the findings of fundamental physics, are often those of psychologists' accounts of people living with impairments. Despite treating of these experiences almost entirely from a clinical perspective (referring to the people in his case studies as 'patients' throughout the work), he takes care akin to that of Barad not to fall into the trap of simple analogy when going from extraordinary case to general theory.⁶⁵ Where Barad moves fundamental physics through ontology to lend a sense of wider applicability to these concepts, Merleau-Ponty moves the 'pathological case' through a mode of existential analysis to find what it can teach us of our being-in-the-world.

For Merleau-Ponty, disabled people figure not simply as deficient. "Illness, like childhood and 'primitive' mentality, is a complete form of existence and the procedures which it employs to replace normal functions which have been destroyed are equally pathological phenomena. It is impossible to deduce the normal from the pathological, deficiencies from the substitute functions, by a mere change of the sign." (PhP, 107) While we may object to the language and the pathologizing gaze Merleau-Ponty employs, the sentiment of treating disabled as complete forms of existence in their own right can be seen as a rather radical result of his theory. Especially considering the fact that this was published in 1945, arguably not a good time to be a disabled person in Europe, or anywhere for that matter. The pre-objective reality of embodiment drives Merleau-Ponty to recognising the reality of the experiences of the perceptually impaired, even as they appear distorted through the cold gaze of the clinical psychologists that report on them.

The problem with developing a performative theory of embodiment is that defining a body through what it can do, runs into some issues with the normativity inherent in able-bodiedness. We can see this reflected in Barad, who comes up against this in their own way. An agential understanding of embodiment, on doing over being, must contend with differences in the things that certain bodies can do. It is no coincidence that chapter four of *Meeting the Universe Halfway*, which deals with the theoretical intricacies of intra-action, also includes a discussion on able-bodiedness from this perspective. After having gone over Merleau-Ponty's understanding of incorporation, they include the perspective of a disability scholar. For Barad, the construction of able bodies rests on the boundary-making practices that distinguish "able-bodied" from "disabled." Disabled people from the constitutive outside of ability. The agential realist commitment to response-ability, the ethical entanglement with this onto-epistemological framework, requires Barad to make explicit why it matters how we describe embodiment.⁶⁶ Ways of being in the world, specific lived experiential phenomena, are thus given an equal playing field. The way in which our selves and our experiences come to be are all 'objective' and real insofar as they emerge as subjects and objects within our lived

⁶⁵ MUH: 70, 471f47: "The issue here is not whether macroscopic entanglements at this scale have been observed; the issue is one of ontology[.]"

⁶⁶ Ibid.: 158.

experiences. Putting 'objectivity' in quotations felt necessary. As both Barad and Merleau-Ponty worried what their work would mean for the concept, we must devote some attention to this worry ourselves.⁶⁷

The New Problem of Objectivity

"Embodiment is significant prosthesis; objectivity cannot be about fixed vision when what counts as an object is precisely what world history turns out to be about." – "Situated Knowledges," 195.

As we have shown, taking up Barad's revised notion of objectivity offers grounds to grant a sense of objectivity to lived experiential phenomena. It thereby gives theoretical weight to the validity of speaking on one's own experiences. This is a neat consequence of the Baradian reading of Merleau-Ponty, as it is nicely aligned with agential realism's wider 'goal' of redistributing agency, despite falling more—although not exclusively!—into the realm of the human. However, one might rebuke, does this revised notion still offer us the things we want objectivity to offer us? Are we not, so to speak, throwing out the able-bodied baby with the bathwater? Objectivity as "accountability to marks on bodies," does not depend on an ontologically necessary condition of absolute exteriority, as classical conceptions of objectivity do. Having shown this condition of absolute exteriority to be impossible to attain, the beauty of Barad's argument is that what we may want from objectivity is not just undesirable, but untenable. Nobody is throwing out any bathwater and there was never even a baby.

Objectivity as such never required a condition of absolute exteriority, this requirement was tacked on as the absolute separation of nature and culture was etched further and further in the minds of the modern scientific subject. In their excavatory analysis of the way in which 'objectivity' has functioned as an epistemic virtue within scientific practice from the 18th to the 21st century, Lorraine Daston and Peter Galison show that what we regard as 'objective' has a history and is contingent on the material-discursive practices which the concept is embedded in.⁶⁸ What we can borrow from this analysis, wanting for space and time to treat it fairly in its own regard, is that conceptions of objectivity have always shifted along with shifts in scientific practices. If the agential realist conception of lived experiential phenomena upends our idea of objectivity to the point where it becomes unrecognisable, perhaps we should not worry if this does what we want 'objectivity' to do for us, but perhaps we should worry about why we want 'objectivity' to do these things at all.

While agential realism ascribes a sense of objectivity to lived experiential phenomena, once these experiences are to be shared, they enter an intra-action at a different scale. Intersubjective practices are themselves intra-active phenomena in which collective subjectivities can stably delineate objects. Objectivity for the psychologist may not be the same as that of the physicist. The extent to which heteroglossia can be overcome by 'accounting for marks left on bodies', thus relies partly on the communicative strength of this account. While we can easily point to

⁶⁷ MUH: 174, 346-351, cfr. PhP: 203

⁶⁸ Daston, L., Galison, P. (2021) *Objectivity*, Princeton University Press.

existing collective subjectivities and weigh them off against each other, agential realism gently tugs on our shirt as we try to brush past it, towards the end of *Meeting The Universe Halfway*.

What then, does this new objectivity look like? Exteriority-within-phenomena as the new standard for objectivity rests on the possibility of articulation, giving an account of the “entangled apparatuses or practices that produce particular phenomena.”⁶⁹ It is not a checklist of correct laboratory practices, a simple correction of the angles of reflection to make the mirror of science reflect reality properly. The further effects of these knowledge-making practice must be accounted for, the materialities they enact and those which it excludes. Objectivity under agential realism, Barad argues, is always already ethically charged.⁷⁰ The things we come to regards as objects in our knowledge-making practices—which we have come to understand are all the material-discursive practices we are engaged in—matter in the sense that they are material being, they matter in the sense that they mean something, and they matter in the sense that it is not morally neutral when things come to be.

In “(Dis)entangling Barad,” (2017) Gregory Hollin, Isla Forsyth, Eva Giraud, and Tracey Potts write: “The ethical significance of agential realism, therefore, is not just in extending the idea that things ‘could have been otherwise’ to the ontological realm, but in conceptualizing the precise moments at which things congeal ‘as they are’ by understanding the processes through which particular material properties emerge and other realities are excluded from being.”⁷¹ The fact that one way of seeing is complementary to another is not to say that all ways of seeing are equally valid, or that anything goes in (extra)scientific theorising. Rather, we must hold ourselves and others accountable for the agential cuts that are being enacted, the material configurations that are being given shape.

Drawing this closer to our question at hand, if ‘it could have been otherwise’ in our experience of things, of our own body, we must be response-able to it, and responsible for the agential cuts we enact in the matter of our own embodiment. Response-ability with regards to the way we divvy up the world matters at every scale. What gets cut out when we draw the scalpel of perception matters. How I see myself is not a neutral act, how we look at our bodies changes the world.⁷² Much like how Hollin and his colleagues situate the value of agential realism in its entanglement of ethics with (meta)physics, I would argue the same for its role in the work you are reading right now. Putting objectivity in terms of accountability to marks left on bodies is one of the main reasons why a new materialist reading of the phenomenology of embodiment enriches this saturated philosophical landscape.

⁶⁹ MUH: 390.

⁷⁰ Ibid.: 394.

⁷¹ Hollin, G, et. al. (2017) “(Dis)entangling Barad,” in *Social Studies of Science*, 47(6): 933. In a flash of what one may call ‘early’ recognition, Rouse also acknowledges this as one of two valuable additions Barad makes to feminist science studies, in the aforementioned 2004 paper “Barad’s Feminist Naturalism.”

⁷² For a more concrete example of this, consider the passage on gender in *Queer Phenomenology*, pp. 60-61.

3. (Re)marks on bodies

If we return to our main question of this thesis: how does one make knowledge claims of their own body? “It depends,” seems like a rather shoddy answer, but to acknowledge the complementarity of different kinds of knowing apparatuses, it must be our answer. Unsurprisingly, it turns out that the question this theoretical leg of the thesis has actually answered is the following: How can we make sense of the way embodied subjects gain objective knowledge of their own bodies from an agential realist perspective? We can make sense of this process through regarding these processes as intra-actions, as lived experiential phenomena. In a sense, I would argue, we have succeeded in Merleau-Ponty’s challenge of “defining a variety of comprehension and reflection altogether more radical than objective thought,” and have thus added “[t]o phenomenology understood as direct description[, ...] a phenomenology of phenomenology.”⁷³ Merleau-Ponty sought to answer this in a critical reuptake of the *cogito*, we have found a more satisfying answer in Barad, by adding a Bohrian phenomenology to a philosophical phenomenology.

Thus far we have mainly talked about phenomenology, rather than actually done any. To do so, we must shift gears and slot all of the aforementioned considerations into our apparatuses of phenomenological production. Methodologically, the incorporation of diffraction into the phenomenological method, which seeks to describe things as they appear to us, might seem to clash a little. Barad may have been right to call out the phenomenological method, classically understood, for its representationalist baggage. However, Merleau-Ponty’s work itself was already far from classical, and I have shown how his work can be read through that of Barad’s to offer a performative account of embodied experience. We will now see if this interpretation in terms of lived experiential phenomena actually brings something to the table when we seek to understand our own embodied experiences. So buckle up, because we are going to leave Cassirer, Husserl, and Heidegger biting our dust as we round off the theoretical leg of this thesis with three short exercises in what Barad might call ‘an agential realist post-phenomenological elaboration of lived bodily experience.’⁷⁴

On driving

It may be a relic of the past by now, both on a larger and more personal scale. The car is not something people in certain strata would readily identify themselves with. In fact, most people that do, do so under the banner of a kind of perverse masculinity I no longer subscribe to. Mechanistic mastery and momentum, oil smears and gears and burning fuel and rubber. When figured as object-within-the-phenomenon of ... take your pick: global warming, traffic policy, soundscapes after dark, or even that of walking through the city as a pedestrian, I must agree that cars are ‘bad’. I cannot help myself, however, I love them. I love them once they disappear as monsters chewing up our ancient past and spitting on our future. When they are incorporated into my being-in-the-world, I embody speed, freedom, and relative anonymity.

⁷³ PhP: 365.

⁷⁴ MUH: 431f34.

Merleau-Ponty, too, drew on the example of driving to explain the matter of incorporation.⁷⁵ The agential cut shifts as soon as I sit behind the wheel, I check my mirrors, and release the clutch. The car is taken up into my body schema as I extend myself through it, the car falls on the side of the measuring agencies in this lived experiential phenomenon; I *am* the car. I speak to others with blinking lights and the occasional honk; I wince as my rims scrape the sidewalk. I register the scratch before I have seen it with my eyes: that left a mark.

The intra-action of the lived experiential phenomenon of driving a car brings a certain way of seeing the world into existence, as well as a certain way of being more-than-human. I feel for the car and I feel with the car, but my feelings and the way I come to know the car as freedom and joy is hinged on my being-of-the-world with it. However, it does so to the exclusion of others. The apparatus of the car is complementary to that of the pedestrian, the walking body cannot be the driving body and they have competing interests. The way a driving body experiences the world sediments into a way we see ourselves and our bodies, it makes for a body that yearns to bridge distance, it makes for governing bodies that build cities to reflect this way of seeing and being. This focus on complementarity helps us not just on a theoretical level, but serves as a way to direct us to consider the material effects of exclusion

While one could argue that it offers but little elaboration on top of Merleau-Ponty's account of incorporation, it makes sense to speak of incorporation and embodiment as a type of entanglement.⁷⁶ The second added value of agential realism in phenomenology is that it accounts for lived experiential phenomena in the same way as it does other phenomena, thus allowing us to scale freely from the one to the other. What is figured as an object-within-a-phenomenon on one scale is the entire apparatus on another, entanglement occurs not just at the end of my skin as I extend through the car I inhabit, but also on the edge of the car as it becomes part of traffic, part of policy, part of destruction.⁷⁷

On climbing

Bouldering is a sport in which people seek to climb a wall of up to 4 meters high, without the aid of ropes, using only a certain set of hand- and footholds. This is an abstract form of bouldering. This sport is derived from a game people play, bouldering, in which they try to climb on top of a large rock from the side of the rock which makes doing so the most difficult. Bouldering is a material-discursive practice in which human subjects emerge through a skilful apparatus geared towards seeking support, bits of rock emerge as objects to-be-grasped, on-which-to-stand, and to-push-oneself-off-against. The rock offers this support through

⁷⁵ PhP: 143: "If I am in the habit of driving a car, I enter a narrow opening and see that I can 'get through' without comparing the width of the opening with that of the wings, just as I go through a doorway without checking the width of the doorway against that of the body."

⁷⁶ Here we must also regard the possibility of reading this concept through the reception of his work, as well as the concurrent developments in the philosophy of technology, that would indubitably prove fruitful in this discussion.

⁷⁷ I would like to thank theatre company *De Warme Winkel* for their beautiful exploration of the many sides of being-with-a-car in their radical reinterpretation of Stravinsky's *Le Sacre du Printemps*, called *Het Zomeroffer* (trans.: The Summer Sacrifice). In this moving production, put on in Het Amsterdamse Bostheater in the summer of 2024, a car was ritually sacrificed, 35 days in a row. Real cars donated for this purposes by regular folks who wanted to purposefully disengage from this lived experiential phenomenon of driving. 35 people chose to draw a new line, the agential cut now forever separating them from their car, materialised as scrap.

entangling its own material arrangement with that of the climbing body, coming to mean 'support', 'just-out-of-reach', 'disappointment', and 'victory' in the process.

When I started climbing over two years ago, I had not engaged in any sports on a regular basis for a long time. I felt weak, and did not trust myself or my capacities. I gradually learned to find the limits of what my body had to offer, in relation to the kinds of things I had to hang on to in the world. There are no inherent limits, the limits exist only in relation to the way the world is materially arranged. A slight tilt in the way a handhold is mounted on the wall means that I *can* actually make it to the top. The skilful practice of climbing reconfigures the climbing body and the world as it appears within its consciousness. The lived experiential phenomenon of bouldering habituates the subject that emerges within it as one that seeks support, that scales vertical surfaces, and on that knows when to let go and trust its own capacity.

Within the body, these experiences slowly sediment. Not only do muscles respond to repetitive strain by reinforcing themselves, but the phenomenal body responds by extending itself through this reinforced musculature. By trying, the phenomenal body as characterised by what the subject conceives of as possible, the range of what it *can do* is slowly extended by what it *does do*. My joyful practice orients me towards world anew. It appears fuller, richer, and provides it with a whole new dimension in a quite literal sense—a forest is much more interesting when a tree presents itself something-to-be-climbed. This is great, but as I look at my bank account around the time my bouldering gym subscription gets deducted from its balance, I am forced to consider the way in which this material-discursive practice enacts certain boundaries.

It is almost a running joke at this point: “bouldering is a sport for *yuppies*,” and “bouldering is a white people sport.” And while this characterisation is of course by no means categorical, it is not entirely false that the bouldering hall (and the boulders and caves, for that matter) attracts a certain demographic.⁷⁸ The game of going into a forest or the mountains to climb rocks in the most dangerous way possible to test the limits of one’s body against the blunt force of nature resonates with a certain masculinist history of establishing dominion over nature. This is bouldering’s heritage. It is not erased at the moment queer joy is found in the bouldering hall. It is there every time a he finds it appropriate to comment on her climbing technique, every time unwanted advice is readily dispensed.

The dynamics of gender oppression have a history that is enacted on the margins of the climbing body, but never truly separate from it. To jump from the lived experiential phenomenon that turns the side of a church into a ladder to the conquering gaze of the wanderer above the sea of fog may seem absurd, but agential realism offers the necessary hand- and footholds to seamlessly theorise the connection between the two. An objective account of my joyful experience cannot leave out the fullness of the materialities of adjacent practices and the exclusions that they constitute.

⁷⁸ Aubel, O., Lefèvre, B. “What climbing means...: The diversity of climbers in 2020” in *Journal of Outdoor Recreation and Tourism*. 40. While this does not comment on race specifically, they do note the extreme masculine and university tertiary education skewing of the population of climbers.

On knitting

I know I should be writing, but the words elude me. Sometimes it feels like my incapacity to produce the things expected of me (by whom?) says something about my inner worth. In what one may call a desperate attempt to hold myself together, I cast on 76 stitches. Bamboo needles gently tick-tick-tick together, fibres slide around and through my fingers, through each other, casting a net. Left hand, right hand? A measuring apparatus on a stiff spring, a state of indeterminacy is embodied in the way I hold my work together, my work holds me together. Neither hand and needle quite fully object, nor subject. The working yarn is pulled from my last stitch to the next not-yet-next stitch, a productive tension arises across the fibres of my being and the fibres I am weaving. I lose myself in this, the tension softens the edges of the agential cut. That word doesn't even cut it anymore, the fuzz of separation gets balled up, folds in on itself in so, so many ways.

I take a step back, the needles themselves and the hands that hold them push and pull on each other as the yarn passes through them. From here, however, it doesn't matter which is pushing on which, I am the needles and the hands, this wider me and the active loops that hang from the needles are a part of the apparatus textile production. The tension of the work as it hangs from the needles contributes a little, and the winding ball of yarn that gently spins as it is used up, being transformed into a 'thing.' An actual thing; I made a thing! Or, we made a thing? Or did the thing make itself? Knitting as a material-discursive practice is the closest I could get to symbolically enacting entanglement, mainly because it is a very concrete practice of material entanglement. The manner in which an agential realist reading accounts for the possibility of something being neither fully object, nor fully subject, but something rather in between⁷⁹, an orthodox Merleau-Pontyan phenomenological account of knitting may not even have been possible. I am glad to have embarked on this.

I take another step back. I finish my knitting as I finish my writing. This apparatus of bodily production churns out texts and textiles alike. I breeze past everyone going a little too slow on the right side of the highway, I find support among the coloured plastic rocks and my peers, and drive away my despair in the productive tension between two pieces of bamboo. Slowly tangling everything together, it takes shape. It may not be what I had hoped it to be from the outside, but I don't mind, it doesn't matter. Arranged as letters on the page on a screen, on your screen after mine, let us take one last step back and see if this tangled mess of lived experiential phenomena can itself offer support to the other half of this project. I am certain it will, I always knew it had legs.

⁷⁹ MUH: 424f25 touches on this possibility, an apparatus can partially embody certain concepts, or rather, embody their indeterminacy, as is the case in an apparatus measuring the position/momentum of an electron on a semirigid support.

Errant Continuity

If you are reading this, you now possess ample understanding of the agential realist terminology outlined above to make proper sense of the way in which the two legs of “Complementary Situations” hold up its frame. The entanglement of matter and meaning it intra-actively performs greatly depends on the way in which over sixty human bodies have gathered over a span of seven days in Eindhoven well over a year ago (at time of writing) as well as the way in which the written works of Barad and Merleau-Ponty have become a part of me, writing this. To make sense of the way these aspects can (be)come together, it is up to the following section to enact the agential separability between these things. After which, of course, it is up to you to further this entanglement.

The arrangement of a work of art is, like with all material-discursive practices, the way in which its materiality and meaning are enacted. The beauty of this analysis is its scalability, because the arrangement of several works of art must then necessarily enact a different collective materiality and meaning. Furthermore, each visitor and each set of eyes that dares wander through this arrangement becomes a part of it and changes again the collective materiality of the art and the space it resides in, thereby changing what it comes to mean. Finalising the co-curation of ANY BODY THERE rested on agreeing that the way the works of art arranged within it gave rise to a concept we meant to share. Of course, the nature of art and its manner of presenting us with myriad ideas in the way we intra-act with it made it difficult to know that we agreed. Many words accompanied this slow process of finding resonance together in the space. Many words enacted the process of more or less constructing an apparatus of bodily production that does not so much fix its subjects and objects, as it leaves them indeterminate.

Artistic practice seeks to construct apparatuses of stable indeterminacy, like those found in knitting, like a semirigid apparatus detecting partial momentum and position readings. The kinds of subjects that appear within artistic material-discursive practices are never delineated in quite the same way, as each visitor intra-acts differently as they work through and with the art. However, articulating the structure of the artistic apparatus makes the way subjects can appear in relation to it—or we might say, how the visitor feels—and how the work of art itself appears as meaningful object within the lived experiential phenomenon at least communicable. The work of art is like our bodies, itself a phenomenon, but also an apparatus of bodily production. The way it is entangled with the other works in the space, the text handout you carry, previous experiences you may have had with visiting exhibitions, all influence what the work can mean to you and how it makes you feel.

In ANY BODY THERE these nested phenomena, each intra-active artwork materialising meaning on its own accord, draw from different material-discursive practices with each their own histories tying to the development of film, histories of needlework, metallurgy, painting. They nest together by proximity, one wall relates to the other by virtue of where you stand to look at it, the order one had to walk through to get there, each combination and every curatorial gesture that went into it entangles these sedimented histories further. Not only does each work itself present its material knowledge, but so does the exhibition as a whole. This event and the traces it left, captured in this thesis then again form the object-within-the-phenomenon against which the reader, given the apparatus of *To Mind is To Matter*, is to materialise as subject in relation to. The way in which the one can teach us about embodiment excludes a simultaneous lesson from the other, these complementary situations of embodied learning of embodiment are enacted at different times, at different sites. Complementarity, however much it might function as a logic of exclusion however, also remains inseparable from that which it excludes. The apparatus of *To Mind is To Matter* serves as the constitutive outside of ANY BODY THERE. The agential cut delineating one from the other, cuts together as much as apart. Barad’s terminology bears the traces of their history, the ‘movability of the cut’ is borrowed from a quantum physical lexicon, I will henceforth let go of the knife and pick up the needle; I speak not of a cut, but of an agential knit.

Appendix A – Extended picture gallery ANY BODY THERE

What follows is still an incomplete representation of the organisation of *De Kruisruimte* during the time of the exposition, some works of the participating artists have been individually photographed and added for the purpose of documentation:



Digital scan of one of the hundred hand-printed flyers Quinn and I made for the purpose of promoting the exhibition.



Visitors intra-acting with the installation housing Mary Maggic's video *Housewives Making Drugs*.⁸⁰

⁸⁰ More information on this work, first shown in 2016, can be found at: <https://www.media.mit.edu/projects/housewives-making-drugs/overview/>, see also <https://maggic.ooo/>

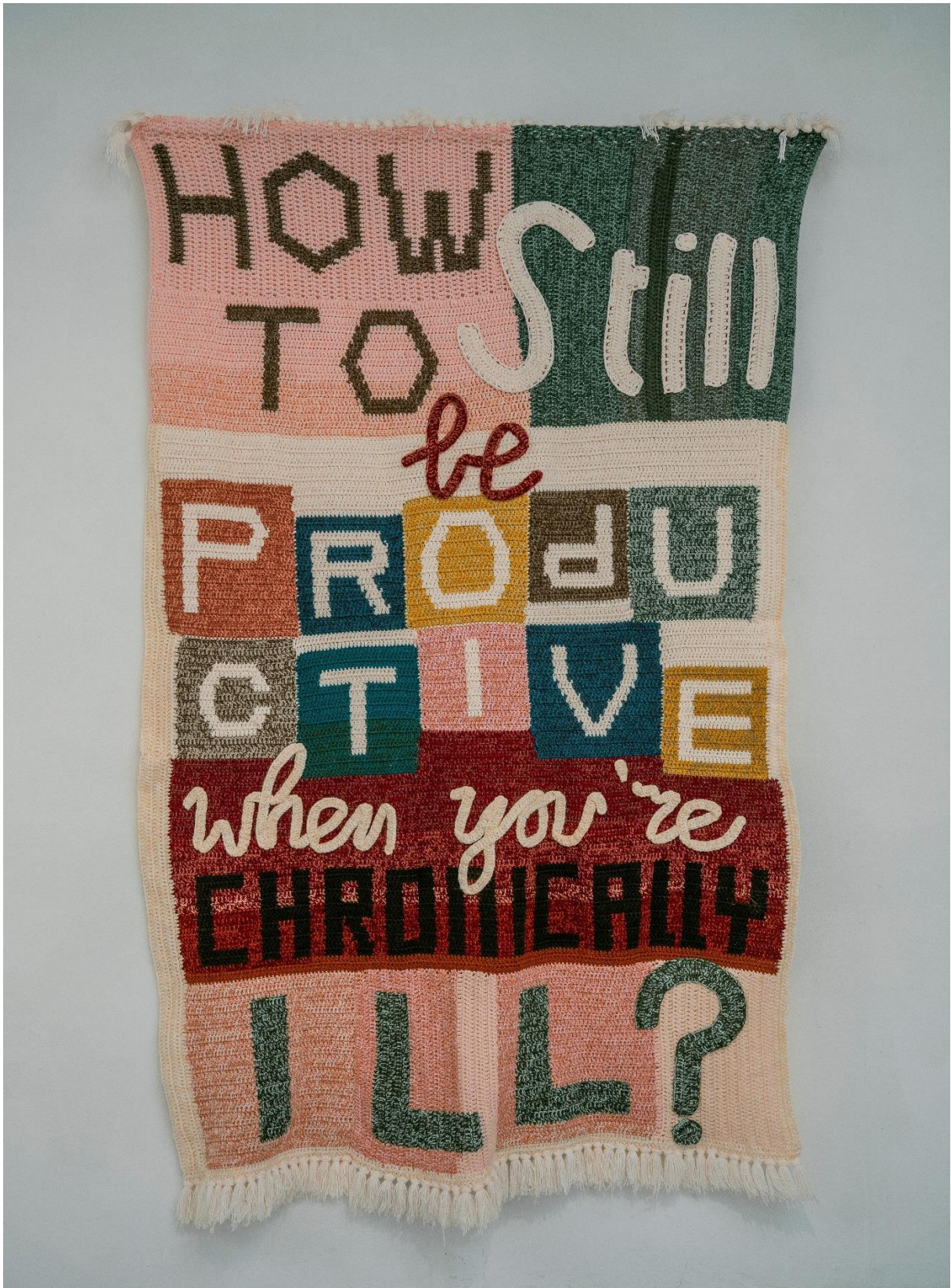


Emmie Liebrechts' latex cast of her body which would loosely inflate for five minutes every half hour.⁸¹

⁸¹ See <https://emmieliebrechts.com/> for more of Emmie's work, which focuses on embodiment.



Valentijn Schmitz' *Flower Girl* (2022)



Quinn Zeljak's *200 hour meditation on the meaning of words* (2023)⁸²

⁸² Visit <https://www.quinnzeliak.com> for more.



Participating artist Britt Dorenbosch and visiting child intra-acting with the video work embedded in Samar Nasrullah Khan's *Listening, with Dairy Cows* (2023)⁸³

⁸³ See <https://linktr.ee/spokentwice> for more of their work.



Britt Dorenbosch' *The Guardians of the Egg* (2023)⁸⁴

I would like to thank the attentive and energetic Eline Bollaart for capturing inasmuch as possible the essence of an event like this. A diffractive reading of ANY BODY THERE through the lens of her camera was an invaluable addition to this project, as well as having contributed to the materialisation of the many fond memories I personally have of organising and living through it. To see more of her work I refer the reader to <https://www.instagram.com/elines.lens>.

⁸⁴ See also: <https://www.brittdorenbosch.nl/>.