

An Epistemology of Beauty:

Situating the Affect of embodied knowledge through the discourse of contact improvisation

Samantha Prouty

A Thesis

submitted in partial fulfillment of the

requirements for the degree of

Master of Architecture

University of Washington

2019

Committee

Vikramāditya Prakāsh

Nicole Huber

Program Authorized to Offer Degree:

Architecture

©Copyright 2019

Samantha Prouty

University of Washington

**Abstract**

An Epistemology of Beauty:

Situating the Affect of embodied knowledge through the discourse of contact improvisation

Samantha Prouty

Chair of the Supervisory Committee:

Dr. Vikramāditya Prakāsh

Department of Architecture

This thesis is a pursuit of beauty. Not a pursuit of perfection, of ideal form, or even composition, but to find a way of seeing the world that might make space for encountering beauty more often. There are many obstacles between me and the world of the beautiful, our very emergence, as a culture, as a society, myself as a person, has created preconceived notions of reality that make the beautiful something other and foreign that we sometimes are lucky enough to witness. Our previous attempts to understand beauty through rationalizing, measuring, quantifying and objectifying have only taken us further from it. I feel that we have lost something in distancing ourselves, and our field, from beauty. When I think of beauty, I don't think of the golden ratio, or a certain composition of color or shape, but of moments that are somehow greater than the sum of their parts, moments that are somehow enchanting and mystical. In this thesis, I am hoping to find a way to diminish that distance by deconstructing those preconceived notions and stitching together a different way of knowing ourselves and the world around us. Through the mind bending work of Karen Barad and the discourse of contact improvisation, I believe we can begin to situate ourselves in an understanding of reality where we might encounter, maybe even engage with, beauty in a new way; to know the world where the beautiful might be born.



I would like to thank my advisors, Vikram Prakash and Nicole Huber for their endless inspiration, encouragement and criticism.

...my partner for his support and openness in helping in this exploration.

...the entire fabrication lab staff for their patience, advise and tireless assistance.

...the wonderful humans at Common Area Maintenance for their blind faith, open minds and the gracious sharing of their space.

...my friends and family who have exposed me to the beautiful and introduced me to worlds I never could have seen alone.

...and finally thank you to my fellow witches, Amelia, Michelle, Dayton and Chris, for the late nights, early mornings and long conversations.

I cannot wait to see what we brew up next.

## An Epistemology of Beauty

### *Situating the Affect<sup>1</sup> of embodied knowledge through the discourse of contact improvisation<sup>2</sup>*

---

1 "Affect is in many ways synonymous with force or forces of encounter...all the minuscule or molecular events of the unnoticed...a gradient of bodily capacity-a supple incrementalism of ever-modulating force-relation...a body's capacity to affect and be affected" (Gregg, Melissa, Seigworth, Gregory: *The Affect Theory Reader*).

2 Contact improvisation has historically been a typology of postmodern dance used both on stage and in rehearsal. In the context of this exploration contact improvisation is understood as a critical discourse in which the dancing body (an body in motion) is, "... trying to realize a redefinition of self within a responsive, intelligent body" (Cynthia Novak, *Sharing the Dance*). This is investigation, not spectacle.

This thesis is a pursuit of beauty. Not a pursuit of perfection, of ideal form, or even composition, but to find a way of seeing the world that might make space for encountering beauty more often. There are many obstacles between me and the world of the beautiful, our very emergence, as a culture<sup>1</sup>, as a society, myself as a person, has created preconceived notions of reality<sup>2</sup> that make the beautiful something other and foreign that we sometimes are lucky enough to witness. Our previous attempts to understand beauty through rationalizing, measuring, quantifying and objectifying have only taken us further from it.<sup>3</sup> I feel that we have lost something in distancing ourselves, and our field, from beauty. When I think of beauty, I don't think of the golden ratio, or a certain composition of color or shape, but of moments that are somehow greater than the sum of their parts, moments that are somehow enchanting and mystical. In this thesis, I am hoping to find a way to diminish that distance by deconstructing those preconceived notions and stitching together a different way of knowing ourselves and the world around us. Through the mind bending work of Karen

---

1 I am referring here to the culture I have emerged within, a western, Christian, white, relatively conservative, culture that has significant power in most western nations.

2 Visual knowledge dominates our understanding of how we relate to the world, how we make sense of the space between things. The very idea of space is, "... bound up with the dominance of the visual as a way of knowing in Western culture, with what Lefebvre terms the 'logic of visualization'" (Briginshaw, 31). This logic of visualization is key in understanding and unpacking phallogocentrism, a way of conceiving the world through, "...the erotic gaze...powered by the interests of 'desire'" (Vikram Prakash, *The Interests of Desire*). To favor visual knowledge over other knowledges is to favor this sort of god like knowing of a thing we gain when looking at something as whole, thus empowering us to see something as object.

3 Beauty was once the motivator of much built work. John Ruskin declared its importance to the art of building by naming it one of his "Seven Lamps of Architecture". Ruskin believed beauty to be a production of the external landscape of nature, stating, "... I do not mean to assert that every arrangement of lines is directly suggested by a natural object; but that all beautiful lines are adaptations of those which are commonest in the external creation" (pg. 85). Christopher Alexander, author of *A Pattern Language* and founder of the architecture school, "Building Beauty" describes beauty as a property of a certain natural order that we as builders may be especially apt at engaging, but is still largely out of reach (Alexander, Christopher. "<https://www.buildingbeauty.org/foundingprinciples/#principles>." buildingbeauty.org). Finally, Richard Greenough established, possibly the most influential definition of beauty in Modern architecture, that beauty is related to the function, and perception of function, of any given object. This definition of beauty does transcend ideas of both the "natural" and man-made landscape, but still restricts it as an attribute to something's utility.

Barad<sup>4</sup> and the discourse of contact improvisation<sup>5</sup>, I believe we can begin to situate<sup>6</sup> ourselves in a an understanding of reality where we might encounter, maybe even engage with, beauty in a new way; to know the world where the beautiful might be born.

---

4 This project is based on the assumption that agency exists, not only in the minds of humans and animals, but at the atomic level. That all material and life has, to some degree; knowledge, memory, thought, emotion; that all matter are affective bodies. This assumption is the result of theoretical physicist, Karen Barad's theory of *agential realism*. I will unpack this perspective in depth later in the paper, but it is important to point out that I believe this is critical to imagining a world outside of the structure of phallogocentrism, and that exploring the embodied knowledge of our subjective, including (but not limited to); muscle memory, tactile memory, unconscious reactions, movement patterns...etc can reveal to us how our intra-action with these material actors shapes us and our reality.

5 Contact improvisation becomes an ideal methodology for investigating and becoming in dialogue with these other knowledges because it is rooted in an understanding of the body as containing these knowledges and accessing them through movement. "Culture is embodied. A primary means of understanding, knowing, making sense of the world comes through shared conceptions of our bodies and selves and through the movement experiences society offers us. Movement constitutes an ever-present reality in which we constantly participate. We perform movement, invent it, interpret it, and reinterpret it, on conscious and unconscious levels. In these actions, we participate in and reinforce culture, and we also create it. To the degree that we can grasp the nature of our experience of movement, both the movement itself and the contexts in which it occurs, we learn more about who we are and about the possibilities for knowingly shaping our lives." (Novak, Cynthia: *Sharing the Dance*)

6 To situate knowledge is to recognize the infinite complexity and entanglement all knowledge is embedded in, and to try and position this knowledge, or account for the position of that knowledge. Situated knowledges is a key component of Donna Haraway's investigation into a feminist objectivity which is, "... about limited locations and situated knowledge, not about transcendence and splitting of subject and object. It allows us to become answerable for what we learn how to see." (Haraway: *Situated Knowledges*, 583)

Where is Beauty?

*We will never find it so long as there is us and there is nature.*





As a guest on Vikram Prakash's podcast, Architecture Talk, screen writer Warren Ethridge reveals a secret to great writing. He says, "...write what you're most desperate to understand." Every time I step away from this document frustrated by not having a response to the statement, but it's occurred to me that the pursuit of a response is just as valid.

If I am to begin at the origin of this process of turning myself inside out in search of something I'm "desperate" enough to understand that I will dedicate the culmination of my academic self-worth to, I should start with, why do I do this? If we really wanted to dip into the psycho-analysis, I could probably dredge up enough childhood social life drama to explain why by the end of my first year of college I had become totally engrossed in the study of why the hell people behave the way they do. My sociology degree would launch me into an equally bottomless obsession with that, "...love whose name architecture does not dare speak,"<sup>1</sup> beauty. The practically indescribable desire to create, to capture, or even construct beauty has captivated the human world since its conception, yet it seems to escape us in some spiritual, other worldly manner. Having left the idea of spiritual faith at the ripe young age of 13, and having left it on a grudge, such lofty questions had to have an explanation in some sort of science, but when it came to beauty, what got me the closest was architecture.

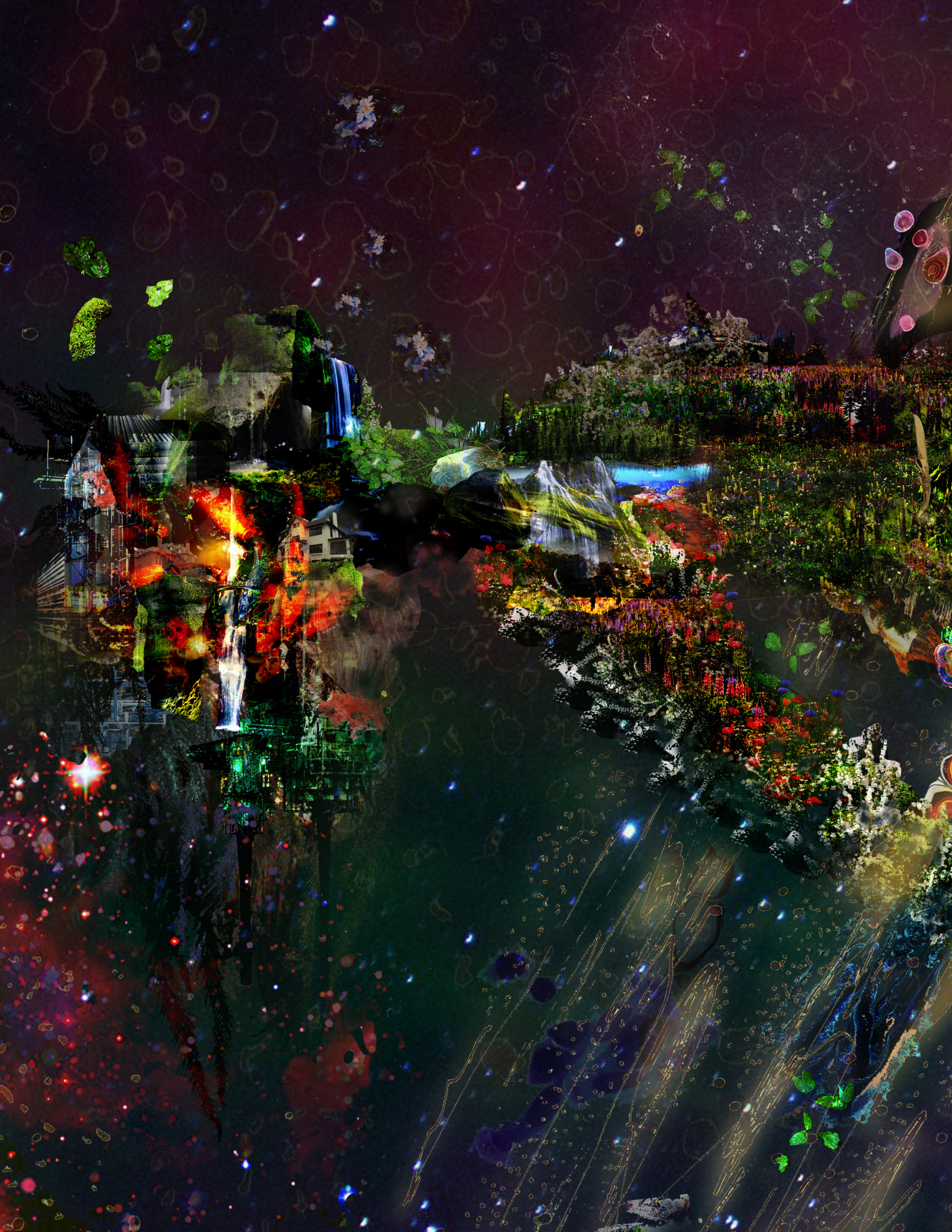
**When I move through a beautiful space, there is something present that wasn't there before.** Something is produced. Much of popular western theory describes this production as occurring when a work of architecture seems to belong in its site, appears to be one with its surrounding context, it will be beautiful. There is a longstanding Modernist conception that if you follow the logic of the context, create the most efficient solution to the program and express that logic through the entirety of the building, it will be beautiful. But it is rare for me to move through a space that belongs and feel this incredible, enchanting sense of completeness. It is even more rare that I move through a painfully efficient space and sense any of this ecstasy (though I will not discredit the possibility all together). I might even go so far as to say that it is as uncommon to have this experience in "built" or "organic" space at all. But when all the celestial members of space move together in some immeasurable and indescribable dance, there is something new. **There is, or has been, or I am affect(ed/ing) that radiates, or produces, something enchanting and quite frankly, beautiful.**

So the investigation has become, not what is beautiful, though it is possible that this is a fruitful repercussion of this investigation, but what is the world of the molecular, celestial, immeasurable and indescribable where beauty might be born, and to ask, can we get to know it? And thus, the search for this world, this epistemology of beauty, begins. But, where?

---

1 The most classic of Jennifer Dee quotations







## Movement: Body<sup>1</sup>

### *Diffraction of(as) Knowledge*

---

1 “...the soma provides the most basic tool for all spatial articulation by constituting the point from which space can be experienced and articulated...the soma provides that primordial point of view through its location both in physical and social space” Shusterman, 224

I was in a dance class, probably at the barre warming up, while trying to manipulate my stubborn right leg into an even plié when the instructor suggested I, “think about the whole body elongating as it lowers, your feet want to spread across the floor”. The change in quality of the movement was immediate and dramatic. How could just a suggestion, a thought, transform my entire body’s motion? It was almost as if every muscle in my body understood the idea<sup>1</sup>. They likely did.

At this moment, the entire six months prior spent grappling with Karen Barad’s, “*Matter feels, converses, suffers, desires, yearns and remembers*”<sup>2</sup> suddenly, not only made some bit of sense but, I felt it! In the midst of this incredible epiphany was also, “Holy shit. The discipline of dance *lives* in this mind/body/thought/motion/intention/emotion/space world. Why doesn’t architecture?” If I wanted to imagine an epistemology of beauty, one that deconstructs phallogocentric relationships of subject and object, perhaps dance is the discourse; a discourse of motion, contact, reaction (diffraction?) and emotion. The practice of contact improvisation, though deeply rooted, literally and theoretically, in Modern dance practices, offers a particularly stunning conception of (my understanding of) Barad’s ideas that can be situated<sup>3</sup> within a larger socio-spatial context.

Perhaps once we can begin to situate the moving body within the entanglement of incremental in-betweenness we can begin to approach the questions of: How do we learn what we see <sup>4</sup>? More importantly, what

---

1 “...can you locate where balance is? Only the body knows balance...”(B.V. Doshi interviewed by Vikram Prakāsh, as part of the podcast series, Architecture Talk)

2 In an interview discussing her book, *Meeting the Universe Half Way*, Karen Barad, a feminist quantum physicist, states, “Materiality itself is always already a desiring dynamism, a reiterative reconfiguring, energized and energizing, enlivened and enlivening. I have been particularly interested in how matter comes to matter. How matter makes itself felt... feeling, desiring and experiencing are not singular characteristics or capacities of human consciousness. Matter feels, converses, suffers, desires, yearns and remembers.”

3 Here I am again referring to Donna Haraway’s, *Situated Knowledges*. By placing ideas of material consciousness and agency within a body oriented discipline of contact improvisation, we are forced to recognize two other critical elements in the phallogocentric deconstruction. 1. that dance, as a conceptual framework and practice, is a highly subjective production and creative expression and 2. that particularly within the model of contact improvisation, dance is a form of play, such that it is an entangled free expression and can exist both outside of and within phallogocentrism.

4 Karen Barad describes the affect of diffraction as the “direct cutting together-apart” that translates knowledge from one thing to another, what I am calling contact improvisation. She argues that a new feminist objectivity thus should reflect, a “...responsibility to the entanglements of which we are a part”. This responsibility to entanglement is the fundamental idea of *Situated Knowledges* (Haraway), that a, “Feminist objectivity is about limited location and situated knowledge, not about transcendence and splitting of subject and object. It allows us to become answerable for what we learn

don't we learn? And why is this not considered knowledge? Why are the instinctual and intuitive cast away to the alien realm of nature? Why do we believe the human body and its consciousness are so separate and opposed to nature, why was this distinction ever considered necessary? And finally, if Karen Barad's conception of knowledge exists in a world where all material thinks and feels, defines objectivity as being, "...about accountability to marks on bodies, and responsibility to the entanglements of which we are a part," than perhaps this discourse could create the space for that very accountability and help to uncover an epistemology of beauty, which may also be the beginnings of a feminist objectivity.

Deconstructing phallogocentricism is a deep, deep problem. So deep, that to conceive of the world outside of its bounds requires the unraveling of the very foundation of how we understand our production of knowledge and consequentially, space. **So what is it to know?** The first three definitions from Merriam Webster are: *to perceive directly; have direct cognition of; to have understanding of; and to recognize the nature of.* These definitions reflect the *affect* of gaining knowledge but are less specific about the actions through which this knowledge came to be. Perception, is defined as a noun: *the ability to see, hear, or become aware of something through the senses.* **But how do we perceive?** How do we gain knowledge of the things around us?

The action of producing, or transferring, knowledge is key to understanding Karen Barad's agential realism. Agential realism is an epistemology that places agency, rather than representation, as the mechanism through which knowledge is produced or shared. This is a sort of two pronged attack on representationalism <sup>5</sup>. From one end,

---

how to see" (pg. 583).

5 "...representationalism is the belief in the ontological distinction between representations and that which they purport to represent; in particular, that which is represented is held to be independent of all practice of representing. That is, there are assumed to be two distinct and independent kinds of entities- representations and the entities to be represented." (*Meeting the Universe Halfway*, pg. 46) Barad describes this as often being discussed as a tripartite arrangement, she uses the example of knowledge, which from a representationalist perspective exists as knowledge the representation, the known which is

"Indeed movement improvisation can be seen to be an important part of our everyday existence as humans, for **there is no script for social and cultural life. People have to work it out as they go along.** since, Elizabeth Hallman and Tim Ingold argue, life is fundamentally 'unscriptable' (2007:1)" (Middelow, Vida: *Improvising Dance: A Way of Going About Things*, March 2019, pg. 2)

Barad is re-evaluating the nature of experimentation<sup>6</sup>, from the other, the power of representation. I'll start with what seems like a lofty example, stick with me. When Barad introduces this idea, she starts by explaining how an STM (Scanning Tunneling Microscope) works, this is the kind of microscope used to "look at" atoms. The microscope uses a, "...tunneling current to 'feel' the surface"<sup>7</sup> of the atom. The successful use of this technology starts to undermine previous assumptions about representation, particularly in the community of science where representation is thought to be created objectively using experimentation and evidence. Here Barad introduces the first deconstructive move of her case for agential realism, that in terms of experiment, representationalism fails to take account for the "constitutive nature" of the interaction but also that, "Turning the mirror back on oneself is not the issue, and reflexivity cannot serve as a corrective here. Rather, the point is that **these entangled practices are productive, and who and what are excluded through the entangled practices matter: different intra-actions produce different phenomena**"<sup>8</sup>.

Before moving on to how this becomes a matter of all material feeling, wanting and conversing, I want to describe my understanding of Barad's theory thus far. Representationalism requires an isolation of object, subject and idea, but if we are to conceive Barad's critique within Haraway's Situated Knowledges, this entanglement makes more tangible sense: that there is a complexity to who the subject is, how that subject might understand the idea of the object, and how that subject represents said object, thus **the resulting phenomena is entangled within the representation; entangled within how the object was perceived.**

Consider this in reference to the STM example, the method of "tunneling" to understand the object under the microscope yields dramatically different results than perhaps trying to take a photo. When we design an experiment, our understanding of what results the experiment will yield reflect a perception of the situation. Thus, by the very designing of an experiment, we have already limited the possible outcomes. Now much of science already understands this, social sciences in particular have been practicing "...turning the mirror back on oneself..." for generations<sup>9</sup>. So why is this insufficient for Barad? Why must we go beyond this reflexive exercise to unpack knowledge?

---

what is being represented, and the knower whom does the representing.

6 Challenging our confidence in the nature of hard science experimentation seems a bit out of left field here, but it's really important in that much of what we understand to be reality through a representationalist perspective is built on knowledge born out of scientific experimentation. We believe that the scientific method of making and testing hypotheses reveals objective truth.

7 Ibid, pg. 47

8 Ibid, pg. 58

9 When studying sociology as an undergraduate, I found this process fascinating, but also incredibly challenging. During my Research Methods course, my group was tasked with creating a survey. We were trying to measure "felt pressures of the sexual double standard" on our campus. Operationalizing this incredibly fluid and emotional idea into something we could quantify required making a lot of assumptions about what people meant in their responses. To account for those assumptions, the paper included a sort of disclaimer that describes the position (socially, economically, racially...) of the authors.

Perception seems to be where Barad is asking us to stretch the reflexive practice of stating assumptions and listing positions in stratification systems. Being reflective in this manner, only challenges our perception through our social position. It does not however, challenge the nature of that perception nor its construction (representationalism). Returning to the STM, it is in the challenging of perception that this particular microscope and what it has taught us about quantum physics becomes so interesting. The STM *perceives*, not through a visual method of magnification, but through the use of an electronic wave which creates an image of an atom through contact. Not only is the apparatus, and the knowledge it produces, entangled within a landscape of other variables, it also alludes to a new understanding of how we come to know a thing, such that, **“...knowing does not come from standing at a distance and representing, but rather from a direct material engagement with the world”<sup>10</sup>**.

If we are to conceive of perception as a direct material engagement, than we can conceptualize knowing as feeling, and making oneself felt; being affected and affecting. We can then also ask Barad’s driving question of agential realism: How does matter makes itself felt <sup>11</sup>? This question starts to open up the possibility that the object being perceived may be as much an actor in this production of knowledge as the actor perceiving. That there is an action, an agency, which produces the object of observation<sup>12</sup>. For Barad, agency is about the, “...possibilities and accountability entailed in reconfiguring material-discursive apparatuses of bodily production...”<sup>13</sup>. It is in the very being, that one becomes an affective body and producer of space. But again, **how does the body affect, how does it produce? What is the direct material engagement through which bodies in motion translate knowledge?**

How does being in the world simultaneously create the world? This is Barad’s second attack, diffraction, or in this thesis, contact improvisation.

Diffraction, as defined by Merriam Websters dictionary is a noun, derived from the field of physics as such; the process by which a beam of light or other system of waves is spread out as a result of passing through a narrow aperture or across an edge, typically accompanied by interference between the wave forms produced. Diffraction offers a critical idea for this epistemology, that, “...diffraction is marked by patterns of

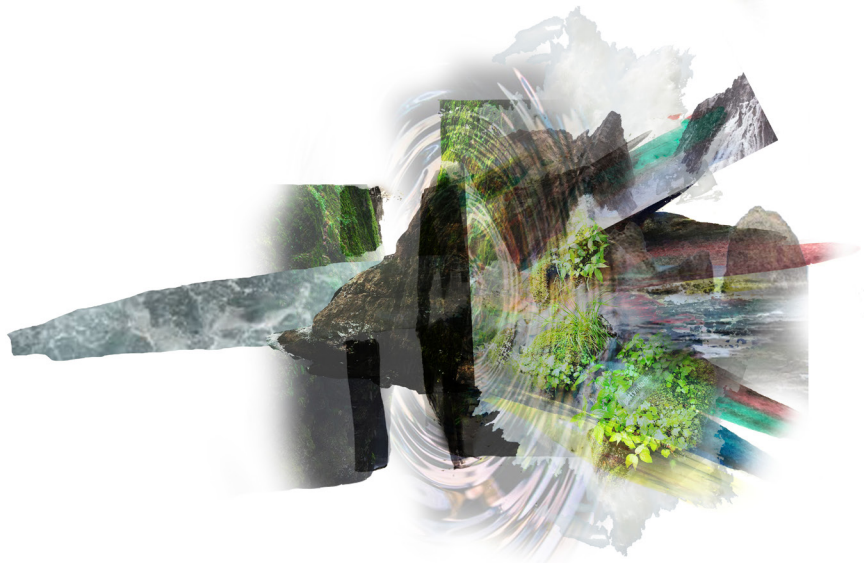
---

10     Ibid, pg. 49

11     Karen Barad, (interview) “*Matter feels, converses, suffers, desires, yearns and remembers*”

12     When I ponder this question, I often think about my early introduction to quantum mechanics. I remember a physics teacher in High School describing how there is space between all things; atoms, objects, actors. When we touch something, we don’t actually touch it, but we feel the space in between ourselves and the object. “Technically,” he would start, “there is no reason we shouldn’t be able to just shove our hand right through anything we touch! It is a mystery to science that any object can be a solid”. Perhaps that mystery is solved here, there is an agency to that object. To some degree or another, all matter had some say in taking the form believed to be bestowed by us. Feeling the space between ourselves and these agents? That’s intra-action.

13     Ibid





### Diagrams 1-3

(1) A simple example of diffraction illustrating how light and a slot create a diffraction that opens up the white light and expands the possible colors it is producing. Again, Karen Barad asks us to consider this as not the interference of light as it collides with the slot, rather an intra-action in which the motion of the light and the motion of the slot produce diffraction.

(2) When we start to unpack how that motion came to be, how this moment of beauty emerged, the collision of two agents becomes much more complex. Like the second diagram, an example of the diffraction between rocks and water's motion that produces ripples. That water also emerged to move in a certain manner, shaped by the ice it melted from, the debris it has collected, the other bodies it has moved over and around on its way to meet this rock. And the rock, shaped by the constant flow of water around it, carved from a wall of earth, settlement for moss and small creatures. This entanglement is part of that ripple.

(3) Here as we imagine these entanglements as agents in the production of a single occurrence of beauty, we can start to see diffraction as the infinitely scalable production of life, intra-actions of different movements.

“Diffraction, understood using quantum physics, is not just a matter of interference, but of entanglement, an ethico-onto-epistemological matter. This difference is very important. It underlines the fact that knowing is a direct material engagement, a cutting together-apart, where cuts do violence but also open up and rework the agential conditions of possibility. There is not this knowing from a distance. Instead of there being a separation of subject and object, there is an entanglement of subject and object, which is called the “phenomenon.” Objectivity, instead of being about offering an undistorted mirror image of the world, is about accountability to marks on bodies, and responsibility to the entanglements of which we are a part.”

- Karen Barad, (interview) “*Matter feels, converses, suffers, desires, yearns and remembers*”

difference”<sup>14</sup>. It is this difference between the affective body that is light, moving along side the body that is the slot, or edge, that produces the diffractive waves (or particle shadow, it depends on if you are testing light to be a wave or to be a particle). The effect of this interaction is the very cutting together apart, that produces change in the world. It is the difference, the space between everything that makes *being* productive<sup>15</sup>. Perhaps diffraction can be understood as *being* within itself.

Diffraction, is very much a both/and idea, especially when applied to various (infinite, actually) scales. Our bodies are constantly diffracting, our cells, the air that we move through, everything around us. Thus the reflective methodology of investigating knowledge becomes insufficient, because the self is both product and producer of perpetual diffraction; each mark our bodies make in the world, is entangled within every mark the world has made on us.

So how do we investigate our knowledge of beauty while also recognizing ourselves as actors in its production? If we are to conceptualize the body as the landscape through which we engage with

14 Karen Barad, *Meeting the Universe Half Way*, Duke University Press 2007, pg. 71

15 What is the value of similarity? Perhaps similarity becomes mundane, ugly. But sameness is only defined as the moments that are lacking in difference. Sameness is an abstraction, an imagined reality. Plato believed that sameness was the only inert knowledge the human spirit was endowed with. That, “...it must, surely, have been before we began to see and hear and use other senses that we got the knowledge of the equal itself, of what it is, if we are going to refer to equals from our sense-perceptions to it, supposing that all things are doing their best to be like it, but inferior to it” (Partenie, Catalin: *Plato, Selected Myths*, Oxford University Press, 1993. pg. xxi). This idea of an unreachable equal to which all things are measured creates a sort of paradox that ideas about diffraction might interrupt. (1) That there is some spiritual, inert, perfection that we evaluate all of life against, and (2) that the truth about the world will always exist on some other, unreachable, plane. Much of western understanding of how the self and the world emerges, is based in this conception of reality. Lacan’s mirror phase describes the self as emerging out of the pursuit for one’s ideal self, the perfect whole that cannot be manifested in our lived experience. An epistemology of beauty would claim that that very idea of “equal” was a body who made enormous marks on the world. How might we learn to see the world if our desire is, not the ideal form, but the pursuit of intra-action with difference?

beauty, than perhaps contact improvisation can offer a discourse to describe those encounters as, "direct material engagements" with other dancing bodies. This complexity, this framing of the body as both marked and marking makes contact improvisation an effective method of engaging these ideas within the socio-spatial field of architecture; through contact improvisation, we can begin to understand the body's motion as the marked body, and the translation of that motion into a means for improvising with other bodies.

Here we can understand diffraction as sharing of weight, as a touching, sliding, feeling between bodies that yields a reaction that is a production of that contact. One that through repetition and exploration, we can get to know better and eventually, dance more beautifully with.

If an epistemology of beauty is to strive for a new objectivity, than it must investigate other possibilities for what knowledge can be and how it is exchanged. Barad's agential realism understands the production of subject and object as emergent, becoming in all directions, being affected by perpetual contact improvisation. Here we return to body as both site and intervention. We can understand the intervention as its agency. Through the body as site, we might begin to account for the material engagements that are producing how we perform that intervening; how the self emerges through contact improvisation as an unique way of moving through the world; how we learn to perceive; how we find the beautiful. This is dance. This is where we must begin to situate our selves and our embodied knowledges. ***We must investigate how we have learned to move through space in order to re-conceive what we have learned how to see and to uncover some of what we are blind to.*** Now we must turn the mirror not on the self as an image, but on the self as a dancing, entangled body, to uncover how we encounter those fleeting moments of enchantment.

## Where is Beauty?

*I believe Beauty holds a secret. But in order for it to reveal that secret, we must look into ourselves.*

*We have to unpack how we have learned to encounter Beauty.*

*So this thesis is not about re-defining Beauty, or really defining it at all, but about locating within myself how my understanding of Beauty emerges:*

*getting to know that beauty, and what it tells us about being in the world.*



I want to learn to see the world where  
beauty is born,

but it always seems to escape me.

My preconceived notions of beauty have  
learned to see...



*Diffraction of The Self*

---

1 Subjectivity and body cannot be separated. How am I to understand that I do, that I see, think, hear, feel, taste, smell, without body? The body is our self. The subjective body is in constant contact improvisation with the subjective bodies around it. Affect thus may be understood as the result of two or more bodies interacting, improvising through contact.

The intimacy between the very skin of my feet and the carpet of my cheap apartment have more to say about their relationship with the structure of the floor than the vain thoughts of my eyes<sup>1</sup>. “You should really vacuum and shampoo,” is all I could possibly make out from the image of dingy beige. Too consumed with the desire to see clarity, cleanliness, unaware of the entire world vision cannot dance with. Even if my hands were to tear up the carpet and reveal to my eyes what lies beneath, I would only know the *what*. I would still be unaware to how exactly the carpet was once tethered to the floor beneath; the story of its displacement.

Is this what my hands desire, or just the soft pads of my fingers? Where is the desire of subconscious, what pulls the dancer to investigate? Perhaps this is the erotic<sup>2</sup>, a spiritual sort of motivation; the immeasurable vibrations of affect bouncing about in quantum in-betweenness. Would I realize that without this improvisation that I never could have known the material beneath?<sup>3</sup> Vision does not dance so it cannot

---

1 I know the space I live in. I know that my hand barely pushes the door once the deadlock is released because the lightness of the hollow core box swings so freely in the door-jam.

My feet know the rigid support of the floor, though they are suspicious of its commitment. They feel each beam of the framing under the thin carpet, compacted and rolled into a thick slap of itchy, probably pretty dirty, textile. It's much like the patches of excess, or recently removed, carpet that would transform a home garage into the bars, music halls, pool rooms, and lounges I had known as a child. Underneath my carpet is not a cool slab of concrete speckled with oil stains and gasoline, rather a crude replica of my own space. The balls of my feet try to be gentle stepping onto those rigid beams and structure. The quiet carpet smirks when its hidden support yelps at the pressure of my foot on one of its many weaker points.

2 Lorde, Audre: *The Erotic as Power*, 1989

3 As I push against the loose pocket of carpet just ahead of the bedroom's corner, the material's edge is lifted, creating a pocket of space just large enough for my fingers to wiggle in. First only one, it lifts the carpet's edge just enough to slide another partner in. They feel the rough grid of glue holding the tapestry together.

Each finger tip timidly explores the unexpected surface, searching for whatever has been holding the carpet in position all these years. They are to be released, their dance in this space is over, their once lush and soft partner has hardened from the unapologetic dance of youth and its messiness. One finger's slight motion to the side uncovers a staple, committed to its position along the edge, it scrapes right through the plump pillow underbelly of the finger.

I started to pull on the corner, wedging my feet against the loose pocket of carpet in the corner, stretching upward against the ground, through my arms, up to my chin. My butt the only counterweight. Pop, pop, pop, the staples lift from some unknown anchor, releasing a cloud of dust and fibers smelling like the crawl space I had hoped to never be reminded of.

know or can vision dance, but it seriously needs to let someone else lead? It can only imagine what it might know from a moment, or simplify what it has seen into something that can be known by being seen, an object <sup>4</sup>. But can you know an object? Again, I return to; what is it to know? <sup>5</sup>

Knowing always appears as such a totality. Yes! I know that! A declaration of truth, strength and stability <sup>6</sup>. But it sits in such temporality. As knowledge works its way through the body, diffracting, splitting as it navigates amongst the massive cast of dancers, it is changed. What happens to that knowledge as it dances? How does knowledge diffract? And is this diffraction, perhaps, that vibrating aura of life that creates such moments of beauty <sup>7</sup>? The glistening of transformation that plumes from each diffraction, each moment of contact; a rolling mist of production.

The drawing, “Sea Anemone, First Contact” <sup>8</sup> is a single example of a mist of production. This drawing is a key moment in the development of my methodology (more on this in the following section) for it forces me

---

I was surprised by what I saw below the carpet, a spongy tide pool of blues, greens and beiges. It was itchy to my fingers, but when mediated by my socks was a soft earth that seemed to inflate beneath me every time I released my heel from its surface.

4 As a critical producer of knowledge in an increasingly alienated, capitalist condition, the spectacle is a mechanism. It orders all of being into either actor or acted upon. It produces space between bodies in contact, a sort of literal and physical alienation.

5 Once, out of a moment of shear panic when my partner was unusually late, I threw myself down the rabbit hole of guilt realizing how little I had known him. I knew much of his life, I knew things he liked, foods he enjoyed, all of his hobbies and friends, many of his memories. But in this brief moment of loss, I felt I never knew him at all, and that I never would. That I could never learn *him*, never memorize every freckle, spot, curve and edge. That I could never know how any single part of him would react to a touch too hard, or too cold, never know how we felt moving through the world. That all I could possibly learn of him would never accumulate into the knowing I desire. In this moment I was devastated, feeling shallow, though surface level seems more appropriate.

I have excepted that I will never know him in the way that I yearn to. Regardless, I have tried to learn more of him since.

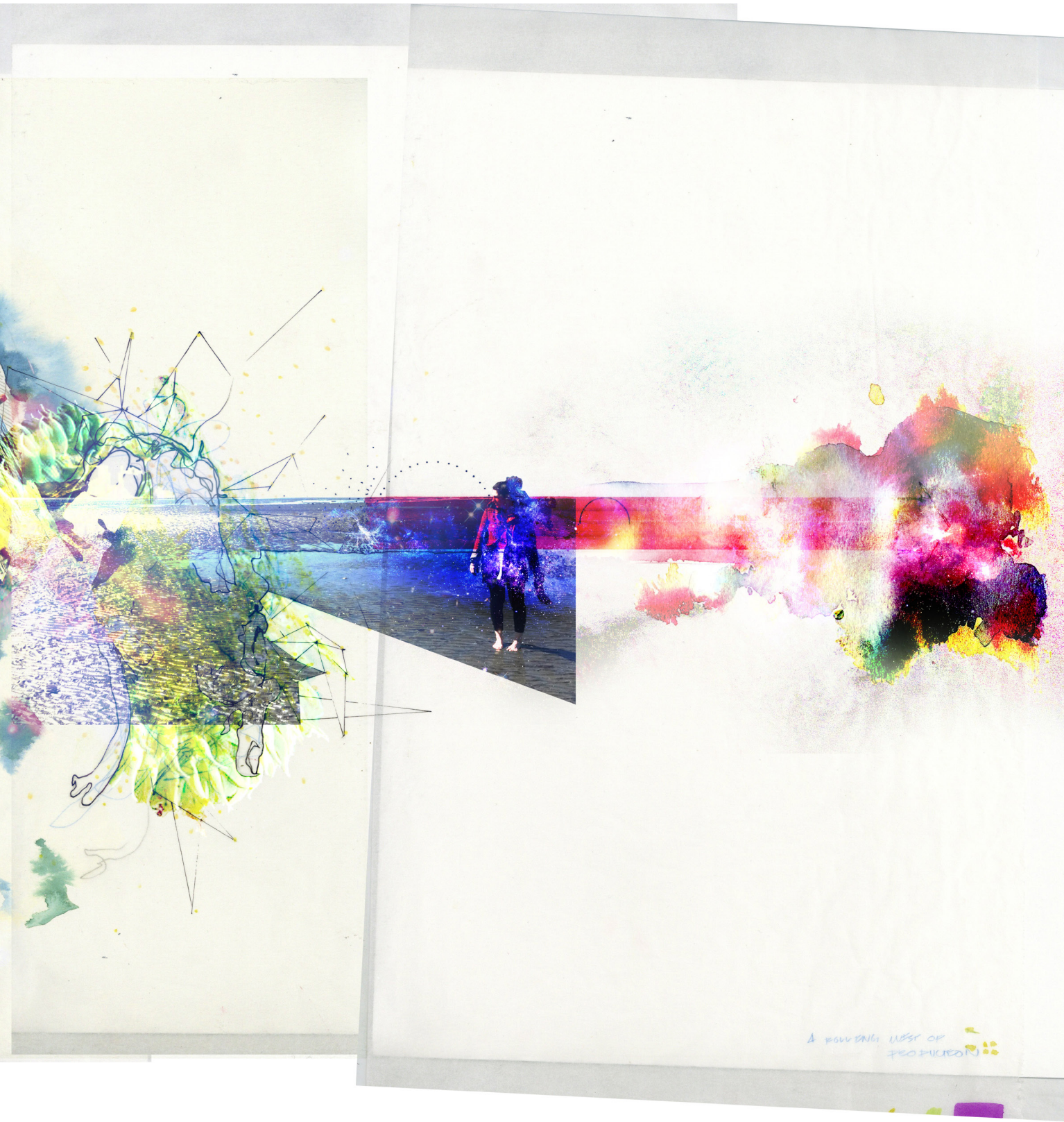
6 Stability is an idea that should always be under scrutiny. The very idea of something standing rigidly through space and time is in some ways, off-putting. We love to write our histories in such a manner, affixed in our collective memory as the truth of how we arrived here. But history is fluid, only becoming monument when made stable. Perhaps vision is how we monumentalize our knowing? The tidy museum to our slaughterhouse world.

7 At the conclusion of the 2018 Scan!Design trip to Copenhagen (Autumn ‘18), we all gathered around a wine and charcuterie covered table in the office of Lundgaard and Tranberg. We were having a sort of round-robin review of our sketchbook studies from our various tours of Jørn Utzon spaces. It was during our discussion of the sketches from the Kingo Housing project that one of my drawings struck a chord with our co-professor, Lene Tranberge. I described the drawing as being of something, though I wasn't sure what. She said I had captured the, "vibrations of life" in that space.

8 It was a field trip when I was young, sticking my hands in the tide pools, poking Sea Anemones was something only the boys did, I was brave to let this alien try and pull me into its dark underworld. I had never felt anything like it. It took me many tries to be able to leave my finger in the Anemone's grip, to know its embrace was gentle to prey of my size. The Ocean has always frightened me. Tide Pools became the way I could explore the unseen world below the surface.

Sea Anemone, First Contact





A POWERFUL USE OF  
TECHNIQUE

to examine the beautiful moment of poking a sea anemone from a number of directions; how I remember making first contact, how I felt and why, my reactions to that moment, the effects of multiple dances with the anemone, my thoughts now... To approach situating the self, we have to identify as many as possible agents in the dance that produced, not only the moment of diffraction, but the present effects of those diffractions. It is possible that this investigation must be repeated for each iteration of the self that emerges, each diffraction of the self. I imagine it as a sort of post-colonial paradox <sup>9</sup>. In order to situate the encounter with beauty, I need to locate agents dancing in that first contact and my memories of that contact, but also how the experiences of my life since has shaped those memories <sup>10</sup>. This is an investigation into both the epistemic violence that is the very naming of things, as well as the constitutive nature from which that violence emerged <sup>11</sup>.

How do thoughts affect other thoughts? How do thoughts affect the physical world? Donna Haraway might describe these thoughts as “material-semiotic actors”, or the object of knowledge, which has agency in bodily production. This is most clear in defining and giving meaning to materials, but meaning is not derived out of nothing and thoughts are not abstract clouds from a higher plane. Our thoughts are things in the world, they are bodies. They move through us, they impact that body as they improvise with our cells, veins, muscles and bones <sup>12</sup>.

---

9 “The clearest available example of such epistemic violence is the remotely orchestrated, far-flung, and heterogeneous project to constitute the colonial subject as Other. This project is also the asymmetrical obliteration of the trace of that Other in its precarious Subjectivity.” (Spivak, Gayatri: From ‘Can the Subaltern Speak?’ in Cary Nelson and Lawrence Grossberg (eds) *Marxism and the Interpretation of Culture* London: Macmillan, 1988. pg.24) How do we engage the beautiful and claim our own subjective view of the beautiful while also recognizing our role in its production? Can the materials we name, measure and manipulate ever have a voice outside of the one we have learned to hear?

10 Sometimes it seems cruel and harsh to recall those first interactions with anemones. There is shame. Watching the boys poke curiously, I wanted to feel fearless in my exploration too. But the way the anemone curled up in retraction from my touch, the edge of my fingernail like a blade to that soft blossom of color. Looking back on it now, it seems I was careless, not considering the anemone's typical partner to be the edgeless rolling sea. But I've gotten to know the anemone better, my fingers have learned the soft, sand-paper wrapped jelly's caress. My fingers have learned another balance.

11 If we are to expand Barad's deconstruction of the scientific method, than we might understand all of our being in the world, all of the meaning in the world, as emerging from diffraction, we must consider how those meanings came to be reality. That ideas about what the world is, are affective bodies, those marks they make are the epistemic violence that is representationalism. Again, I'll refer to Spivak in asking, can the subaltern speak? Can we learn to engage with diffraction and affective bodies we might consider “other” without erasing the very marks of those epistemic violences?

12 We were touring the Royal Danish Theater House with architect, Lene Tranberg. We walked across the speckled deck of the lobby and lounge, ceiling dripping with soft streams of glass. It was warm, like the sun reflecting off the harbor. Up a, relatively, subtle staircase, we gather casually outside the theater doors enjoying the view of the lobby from above. As my peers trickle in and quickly disperse, little oohs and ahhs as each person steps through the threshold, I wait until the door has closed again before slipping in. As soon as I squeeze quietly between the doors, I feel the soft draft of cool air as the raw stone cladding of the theater interior drew the sun speckled warmth from the mezzanine. Just as the dim texture of walls emerge in my adjusting eyes they are just as soon met with the rolling hill of red velvet, and all that warmth came seeping back into the space. I think I cried? It was beautiful.

When Haraway describes a material-semiotic actor, I understand her as exploring what it is to know, the meaning of things, and how knowing comes with a lifetime of baggage. That knowledge is not innocent. It came to be, it emerged. Trying to tell knowledge's story is a tedious and endless task, but knowledge is our life. Should we not know how it came to be? <sup>13</sup> How we came to know it? <sup>14</sup>

Perhaps we came to know it by dancing. If our own subjectivity is inescapably us, if our body is alive with a galaxy of memorized notions and directions, the impressions of partners past and the hopes of those in the future, than the body may be the landscape through which knowledge is known, for, "I do not think 'move,' then do move. No! **I am the dance; its thinking is its doing and its doing is its thinking. I am the bending and I am the whirling. My dance is my body as my body is myself**"<sup>15</sup>. Through its motion, living as a perpetual contact improvisation can be imagined as how we become, how we learn, how we are; "... all the minuscule or molecular events of the unnoticed..."<sup>16</sup>.

Again, the body/self is both site and intervention to my search for an epistemology of beauty. However, dance is both body and motion (each a repercussion of the other) the very act of producing space <sup>17</sup>. The

"I wish to translate the ideological dimensions of 'facticity' and 'the organic' into a cumbersome entity called a **material-semiotic actor**. The unwieldy term is intended to portray **the object of knowledge as an active, meaning-generating part of apparatus of bodily production**, without ever implying the immediate presence of such an object..."  
Haraway, 595

13 "As the American feminist theorist Susan Bordo observes, Descartes conceptualized the body 'as the site of epistemological limitation, as that which fixes the knower in time and space and therefore situates and relativizes perception and thought' (1995:227) It is within this context of the body/space relations that subjectivity and subjects' relations to the world are understood" (Briginshaw, 9) The body as a means through which we orient becomes a landscape of memories and futures, our way of being is performed through a world of history. In order to understand how it is we know, we must investigate this landscape.

14 When the carpet was changed in my room, the shadow lands of space between my top bunk and my parents bedroom seemed to stretch. My toes would reach down from the bottom step of the ladder and struggle to get their bearings meeting the unfamiliar new texture. So much of me was still paralyzed with the imagery of lingering nightmares that my feet exploring the new rug were more like an expedition digging for a hidden light switch that could instantly show my eyes a truth they could not reach.

15 Horton Fraleigh, Sondra: *Dance and The Lived Body*. University of Pittsburgh Press, 1987. pg. 32

16 Gregg, Melissa, Seigworth, Gregory: *The Affect Theory Reader*

17 Space: *noun*; 1. a continuous expanse which is free, available, or unoc-

O.G. chicken or the egg. As the body, dance manifests the life of the self. It is the, "...putting life into..." B.V. Doshi pursues in his architectural practice<sup>18</sup>. It is through this movement, that there is contact. Motion, as energy, is never created, but exchanged. Within contact there is a transference, during which there is translation, diffraction. This diffraction could be understood as the improvisation, the reaction rendered from one particular moment of contact between some number of bodies.

We are imagining knowing space bodily, "...a touch that returns to the body, as the skin of the object "impresses" the skin of the body"<sup>19</sup> and that these impressions, these dances are held within the memory of the particular moment of the body which was impressed, and that this dance is affecting the dancing bodies. If the body is continuously being affected as it improvises through life, each dance is performed by a new iteration of that body, by a new subjective. The knowledge of that body is thus constantly interpreting and reinterpreting the lingering memories and anticipations of its previous self. Perhaps knowledge is this very investigation. Contact improvisation is as intimate with its partner(s) as it is with itself. To dance, to be an affective body, is to be physically ensnared with the memory of bodies past and future; it is to be aware of one's self. For the body to be aware in this capacity, it must be in motion<sup>20</sup>. To be in motion is not just to moving, it is to be moving through, or along, against, around. It is to be reacting...

To be in contact with something, is to get to know something, we need this motion. We may share our weight, explore the balance between our bodies. We may throw ourselves through an other, feel the resistance of our forces. **We may glean a bit of understanding of how an other moves through space.** Movement situates the body's many fragments to the whole, to the memory of each fragment and all of its apprehensions or hopes. If we are to expand our notion of subjective from vision (perspective<sup>21</sup>) to how

---

cupied 2. the dimensions of height, depth and width within all things exist and move 3. an interval of time 4. the portion of a text or document available or needed to write about a given subject 5. the freedom and scope to live, think and develop in a way that suits you. *verb*; 1. position (two or more items) at a distance from one another.

How do we talk about space when emptiness has been debunked? Perhaps we should consider a socio-spatial definition; *the perception of difference, in position of self relative to other be it; social, physical, economic, gendered, racial, ethnic, digital, agential or otherwise.*

18 During an interview with Vikram Prakash for his podcast, Architecture Talk, Architect B.V. Doshi describes how the, "...building is a living thing. But how do you celebrate life?" When discussing the question, he begins to unravel the entanglement of knowledge that gives life. He uses a mythical analogy of a sculptor who wishes to make a shrine to god. The god replies, "How will you make my image? First you must know dance, so that you don't make me still as stone. But to know dance, you must know music...to know music, you must know rhythm...to know rhythm, you must know language..." and so on.

19 Ahmed, Sarah, *Queer Phenomenology*, pg. 164

20 "...one of the most prominent of those senses is proprioception, which concerns the orientation of the body's parts relative to each other and the orientation of the body in space, and which therefore includes both our sense of balance and our kinesthetic sense of our bodily movement in space." (Shusterman, 226)

21 "The concrete living space that the soma architecturally defined is not an abstract fully homogeneous space

the body knows (movement<sup>22</sup>) than, perhaps, we may begin to navigate our own entanglement by dancing through the knot; reacting, improvising, with each moment of contact.

This change in thinking inherently transforms the nature of the knowledge, from an object or material that through observation can be understood, to an actor with which, through interactions of movement, one might get to know. To call this a performance would begin to imagine subjective knowledge as a series of affective relationships which we perform<sup>23</sup>. These relationships are also the very affects that form the body. Perhaps to know the body is to know the self; as to know the self is to know others? But, what is it to know?

If movement collapses time and space, transforming our perception of a single, whole, object in space into a landscape of bodies in contact, each with their own past and future, each in their own moment in time.<sup>24</sup>

**Perhaps it is, more simply, that movement is knowledge; that movement is both affect of and affecting.**

How do we talk about self when self is made up of millions of agents, transformed by thoughts, actions, intra-actions? How far does the self reach? Am I a perpetually morphing collection of matter that drifts about, collecting and distributing knowledge? Or am I a network spanning the world, entangled in the web of our contemporary social world<sup>25</sup>?

---

but rather a space shaped by the body's directionality..." (Shusterman, 224-25) Our visual perspective is situated from the body, it has a position vertically, horizontally, it moves in a direction. There must be a dance of vision, or is vision the abstraction of another dance?

22 "A primary means of understanding, knowing, making sense of the world comes through shared conceptions of our bodies and selves and through the movement experiences society offers us. Movement constitutes an ever-present reality in which we constantly participate. We perform movement, invent it, interpret it, and reinterpret it, on conscious and unconscious levels. In these actions, we participate in and reinforce culture, and we also create it. To the degree that we can grasp the nature of our experience of movement, both the movement itself and the contexts in which it occurs, we learn more about who we are and about the possibilities for knowingly shaping our lives....the history of the dancing serves as a vehicle for investigating the powerful interrelationships of body, movement, dance and society" (Novak, Cynthia: Sharing the Dance)

23 My knowledge of concrete, though gathered through many relationships of my body, is still one of performance. The way in which I have become intimate with concrete is situated. The instance I described of dancing in my high school cafeteria is derived from a position, a gender, a class, a social power, a moment in time surrounded by circumstances. It is through these circumstances, these positions and structures I perform constantly, that I have learned to dance with concrete.

24 When describing this scene I imagine the quantum landscape. A chaotic dance of minuscule bodies, bouncing about with one another. What appears to be an almost indescribable world of motion, where even time and space have disappeared, is the world of improvisation within each affective body. It is the affective galaxy of each affective body. I wonder if the quantum world knows of its affect? Does each ensemble of dancing molecules dream of creating something larger than themselves? Do they desire and does that motivate their affectiveness? Does our galaxy think the same of us?

25 The augmentation of myself through the digital realm is fundamental in the middle and high school years of my life. The introduction of these digital dancers, the possibility of creating other bodies, other selves, was a playground for

For Donna Haraway, embracing this interwoven network of all that is *natural* and *mechanical* as a cyborg imagery, "...can suggest a way out of the maze of dualism in which we have explained our bodies and our tools to ourselves"<sup>26</sup>. She describes the human condition as intertwined with everything around us; materials, animals, machines. We dance with these *others*. They are, by their very constitution, part of us; diffractions of us. **If I am to explore the possibility of an epistemology of beauty, I must do so through the knotted tapestry of myself as a cyborg body; across space and time and reality, positioning myself and my movement.**

**"Positioning is, therefore, the key practice in grounding knowledge organized around the imagery of vision..."** Haraway, 587

It seems that it is in these infinite moments of diffraction that something produces the beautiful or not. That when one dance intersects with another and that dance is filtered through the dance of the other, that it is given context. It is in this moment that site and intervention are exchanged. For the beauty produced is not a form or composition or even idea, rather a body's encounter with the phenomenon that is, momentarily, beauty. Thus, beauty is not a thing, or something that can be attributed to things; beauty<sup>27</sup> happens.

---

exploring myself outside of rigid social bounds. These are buoyant relationships, as my body diffracts through this network of multiplicity, my negotiation with other bodies is disoriented. It is not that the physical world is not present in this space, that knowledge is there too, but the relationship of that knowledge to body seems to have been rearranged. Suddenly, I was moving through many spaces at once.

26 Haraway, Donna: *A Cyborg Manifesto*, University of Minnesota Press, 2016. pg. 67

27 *Beauty verb*: a moment or encounter in which one feels beauty's own production.

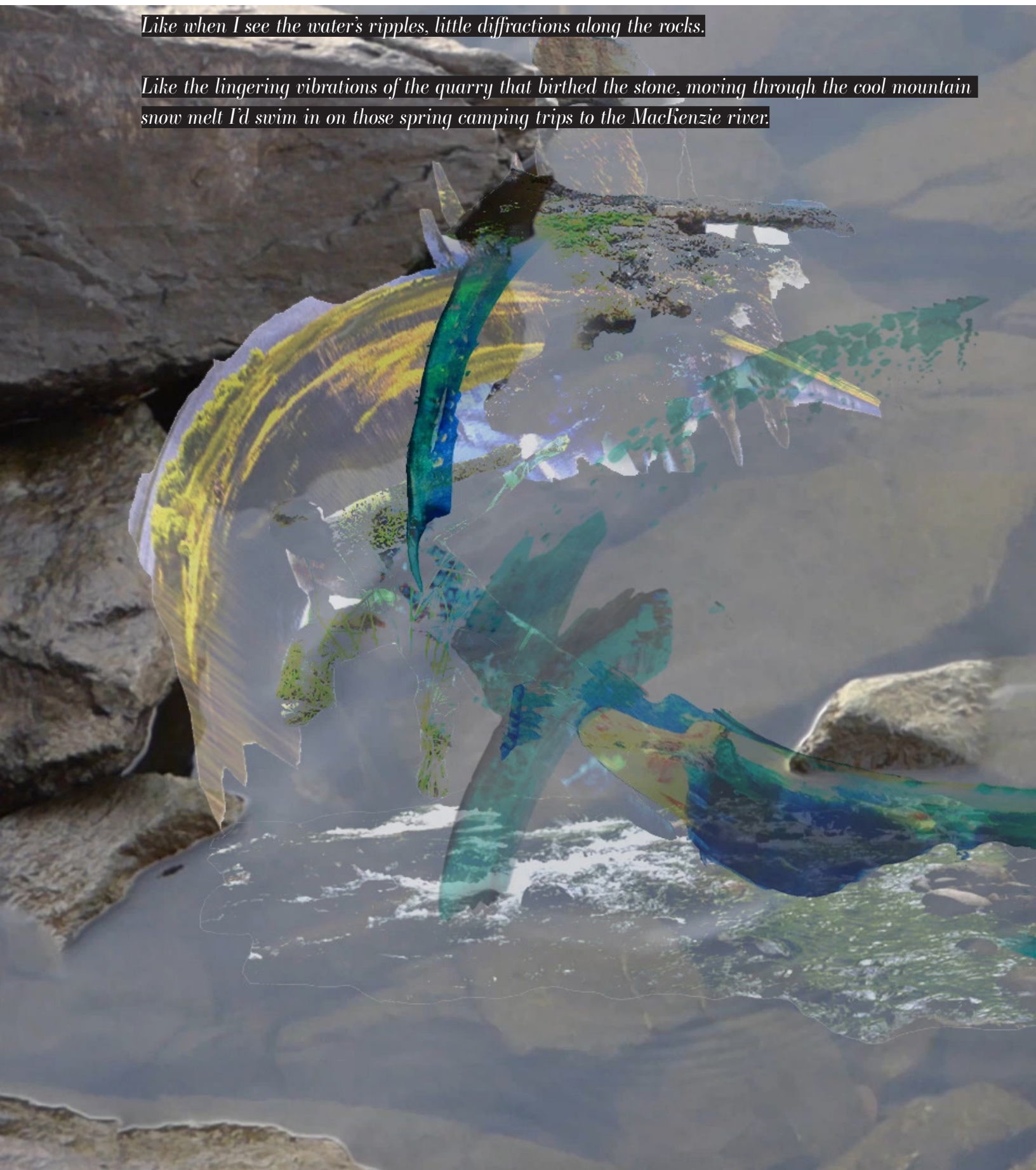
Khora in The Space of Flow

*Diffraction of the cyborg self*



*Like when I see the water's ripples, little diffractions along the rocks.*

*Like the lingering vibrations of the quarry that birthed the stone, moving through the cool mountain snow melt I'd swim in on those spring camping trips to the MacKenzie river.*



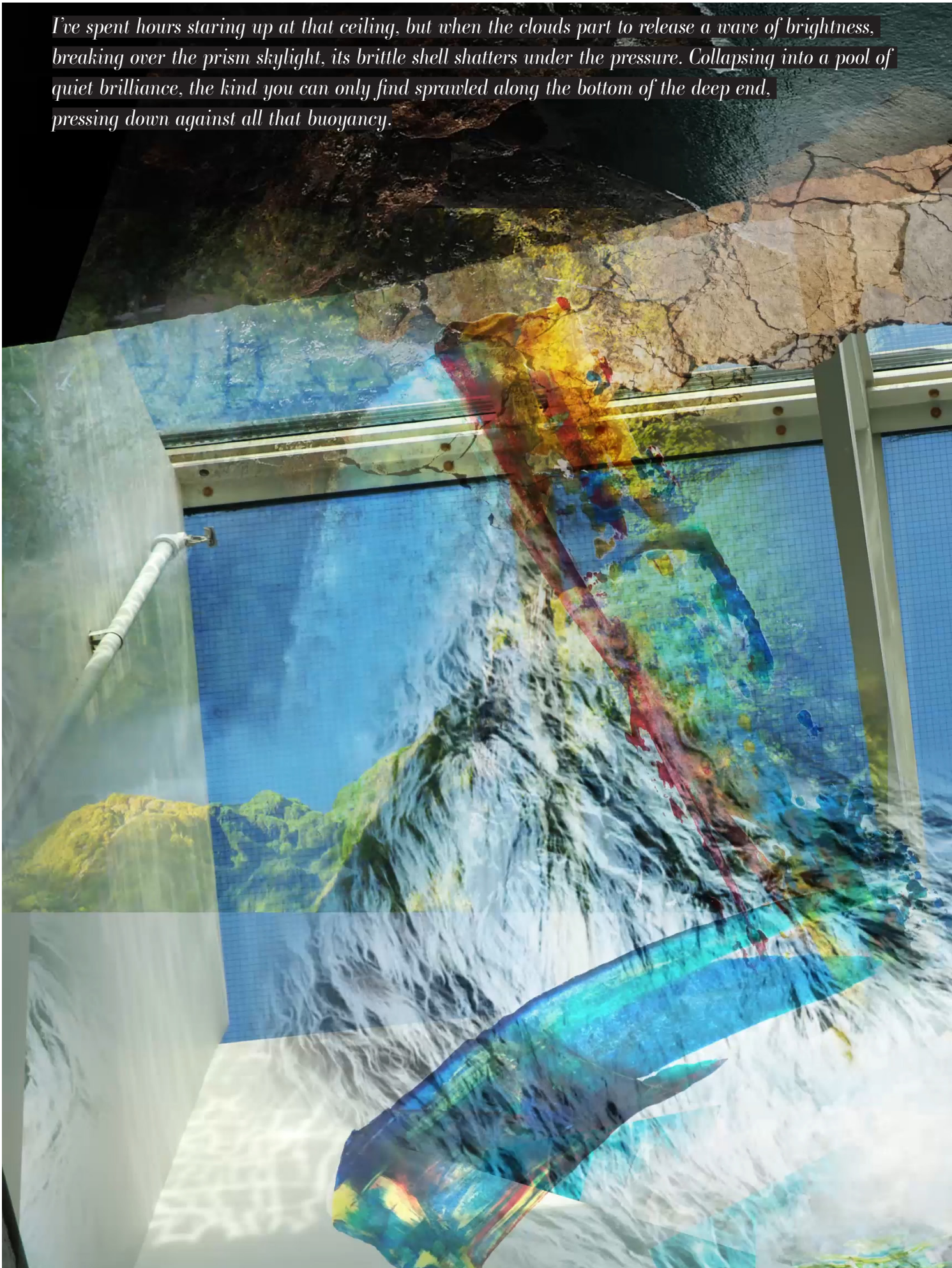


*Or the warm summer light pouring through the tired leaves, shivering with the quick touch of spring.  
Fresh rain balancing on cut lawn while the maple tree bark gently claws my knees as I climb.  
The uneven sway of the pebbled sidewalk, like soapy water down the driveway, softly carries me  
across the block.*





*I've spent hours staring up at that ceiling, but when the clouds part to release a wave of brightness, breaking over the prism skylight, its brittle shell shatters under the pressure. Collapsing into a pool of quiet brilliance, the kind you can only find sprawled along the bottom of the deep end, pressing down against all that buoyancy.*





## The Emergence of beauty: self

*I see these memories in many moments of beauty, feel the cool salt breeze from the top of cascade head as the rolling hills of wildflowers reveal themselves with open arms, those worm holes into the cool bright world of the northern pacific. But they don't exist in isolation, they are no longer just romantic images of the sublime.*

*These spaces, the memories tethered to them and all of the minuscule thoughts, motions and actors in-between are part of the construction of the landscape through which my knowledge of beauty and self have emerged.*





*A Way of Going About Things*

Contact improvisation has become both diction and methodology in this investigation. Much of this work began as a combination of hand cut and digital collage, enacting disorientation as a method of deconstructing how we know the image presented. When applying contact improvisation as both the actual method of creating collage as an intuitive process of reactions to its own assembly, but also as a diction for describing how the agents collaged together diffract. As I developed the methodology and expanded my exploration, the additional layer of complexity in animating these collages starts to introduce a bit of how the drawings themselves emerged as a representation. I was also able to go into detail in describing how the individual parts of the collage relate to the production of the whole.

I have described that this project understands my body/self as both site and intervention. As a method for exploring and situating what that body/self sees and how I dance with other agents in life, I begin with a series of collages that started to imagine my self and many fragments of my body as a living, dancing, landscapes. Each collage is accompanied by a description of how that dancer, or ensemble, knows to move with their partner. Each description is expanded by a series of notes that start to unpack the endless knot behind every fleeting moment of beauty in those dances.<sup>1</sup>

In Sarah Ahmed's *Queer Phenomenology* she describes perception as how we come to see matter. Ahmed, like Barad, collapses the subject/object relationship by describing perception not as a *truth* to be known by seeing, but as a direct result of the constructed approach, or orientation, by which we investigate the object. Ahmed however, liberates this argument from the realm of hard science and physics by defining that approach as directional, that, "...what matters is shaped by the directions taken that allow things to appear in a certain way".<sup>2</sup> In order to engage with my own perception as a diffractive body, I am utilizing collage as disorienting mechanism and diffractive medium. By re-appropriating imagery and representing it as agent through composition and animation I am exploring, "...a way of transforming the relationship between the body and the object it perceives,"<sup>3</sup> by quite literally disorienting the direction by which you approach the imagery in the drawing. By carving into the material as a means of production, collage is analogous for, and may be, the very cutting together-apart that is affect.

As an investigative tool and process, collage has disoriented my perception of my surroundings and self

---

1 During a preliminary phase of this project, I was desperately trying to put into some visual language what I was understanding about subject/object relationships and movement. I had earlier written the first piece in this methodology series, foot and concrete. I wanted to perform a whole contact improvisation just exploring how the flesh of my foot knows to dance with polished concrete. I also wanted to demonstrate, as a creative process, how re-iterating improvised movement can produce unexpectedly beautiful reactions through the bodies of the dancers. Each collage in the series is derived from this piece of contact improvisation, in particular, a rippling of movements in a particular moment that felt particularly stunning.

2 pg. 165

3 *ibid*

as well. Trying to represent oneself so abstractly opens up the possibilities of imagining, perhaps more accurately even, how complex the relationship between the self and the body is. Suddenly, each fragment of my body has its own past and future, feelings and desires, but they were all tangled up in my life; in my feelings and desires. Not to say that these things were always the same feelings and desires, in fact they rarely are.

The following collages and narratives are the first steps in my search for beauty. They began in hope of uncovering the various ways our body knows the materials around it through contact improvisation. I first performed an improvisation, exploring how I might dance in the space provided relative to the material of the ground. As the improvisation develops the movement expands, diffracting through the body and becoming a larger dialogue of how my body moves through space as a dance amongst itself, the air around it, and the floor.

These drawings were my first contact with the landscape through which I engage with the world and its beauty. These drawings were also, and continue to be, critical in the development of the visual language that has led to the final drawings and animations in the second and third sections of this paper. It would be months until I realized how much my youthful obsession with those little coastal wormholes has framed my enchantment with life and beauty.

Perhaps this is the real discovery of this project. Returning to these early drawings and their text, these previous memories and futures, and realizing their presence in all of my work since. It's almost as if they are little artifacts of myself nearly six months ago, just scratching the surface of the deep underworld of diffraction I had no idea I was looking for. It seems fitting to enter the conclusion of this paper practically where it started, I think it speaks a great deal to the process of the work. Like our selves and our perspectives, we are constantly cycling around ideas, memories, fears, seeing them as both new and familiar with each revisiting.

# How does the body know space?

## Situating the affect<sup>1</sup> of embodied knowledge through the discourse

- 1 "Affect is in many ways synonymous with force or forces of encounter...all the minuscule or molecular events of the unnoticed...a gradient of bodily capacity-a supple incrementalism of ever-modulating force-re-  
Grego, Melissa, Seigworth, Gregory: The Affect Theory Reader
- 2 "...trying to realize a redefinition of self within a responsive, intelligent body"  
Héviak, Cynthia: Sharing the Dance

A sudden, exhilarating thought of the shoulder sends first elbows, then hands, gasping backward. The soft underbelly of each arm is lifted with the idea of feeling that touch again, the fleeting moment of perfect suspension in air's grasp. They feel the most beautiful then, their softness disappears in the arms of the air. In and out of the partnered leap, their ideal moment is often missed, but when each is on point, each listening to and anticipating the other, their magic happens, they float in that single instant forever. And forever after try desperately to feel this perfect breath together again.

Each vertebra of my spine wobbles back and forth, a tower of clenching bodies, one over the other. Muscles and skin whisper motivations and concerns to the tower as the volumes of air brush over and around, distracting skin with its caress. Muscle and skin fold under the drip of the tower as it leans into the soft touch of breeze. A restful moment of balance, suspension and release, a beautiful moment.

I am overly sympathetic. My proximity to my very hardworking, but occasionally self-conscious, ass keeps me gently swaying back and forth as it timidly dips back and forth with the gentle toss of air around it. I feel the pressure of the muscles in the right thigh attempting to loosen the tension between the knee and titanium. Those muscles will forever slowly waltz and turn around the young new femur titanium has impregnated in the memory of the ensemble before. Titanium and the young femur know they will long outlive the waltz of those kind, but stroop, muscles. Perhaps this is cause for such tension.

The group of bones that make up the ensemble of my knee feel the rage of the concrete passing from the leg to pull on them. Bound together with the scar and tensions of their near death two years ago, supported by the titanium life who has re-imagined their future, a new prop to move with, a new dancer in a already whole company. The concrete's rage is loud here, the knee ensemble feels it pulling them, colliding with their new titanium member. The knee could once flow with this rage, absorb it, bounce back in forth with concrete's exposed frustration. But in the face of their own death, titanium's addition was welcomed. Titanium continues to grow irritated by the knee's lingering fondness for his rage for it once motivated so much of their complex, buoyant movement ambivalently hearing the healing group's complaints. For titanium sacrificed a freedom to help revive the landscape of connection, knowledge and memory, fill the canyon whose sudden arrival threatened their entire sense of each other.

So much tension between flesh, concrete and I. The flesh along the bottom of me loves concrete, the coolness emanating from its face always bring this flesh relief as they roll across one another. But the city of small forgotten dancers just behind this flesh is aggressively turned and crushed against itself trying to navigate the flesh's loving waltz with, what we understand to be, a rigid and cold soul. The group screams to escape being pulled along in this dance, for flesh to love another.

It's complicated, my relationship with concrete, especially when it is poured in a smooth slab. I understand its angst, pushing hard against me, shooting pain and resistance through me into my caves. But when left exposed it can be forgiving, letting me slide my toes against its cool face without letting go of me all together. Our dance is cumbersome. I do not always trust this partner, especially when so raw, so unpredictable.

## of contact improv<sup>2</sup>

"...if architectural design is based on the soma and aims to enhance the somatic experience, it should be critically attentive to the soma's multiplicity of senses...one of the most prominent of those senses is proprioception, which concerns the orientation of the body's parts relative to each other and the orientation of the body in space; and which therefore includes both our sense of balance and our kinesthetic sense of our bodily movement in space."

Shusterman, 226

The goal of this project is to try and start a dialogue with the embodied knowledge of the body.<sup>1</sup> The body is made of infinite worlds, each with their own history and future. Our reliance on visual knowledge<sup>2</sup> and communication has dismissed this galaxy<sup>3</sup> worth of conscious memory and experience. Through the use of contact<sup>4</sup> improvisation<sup>5</sup> as a critical discourse, we can begin to come into dialogue with the knowledge of the body and position those knowledges.<sup>6</sup> My hope is to explore a way of knowing the world,<sup>7</sup> not as a subject who sees objects, but as a subject who converses with, dances with, other subjects.<sup>8</sup>

1 "The soma is a living, perceptive, sentient, dynamic, intelligent corporeality that involves intentionality, mind, and the spiritual rather than being a brute material counterpart from which mind and spirit must be distinguished and opposed."

Shusterman, 227

"As the American feminist theorist Susan Bordo observes, Descartes conceptualized the body 'as the site of epistemological limitation, as that which fixes the knower in time and space and therefore situates and relativizes perception and thought' (1995:227) It is within this context of the body/space relations that subjectivity and subjects' relations to the world are understood"

Briginshaw, 9

2 "These ideas about space are bound up with the dominance of the visual as a way of knowing in Western culture, with what Lefebvre terms the 'logic of visualization'"

Briginshaw, 31

3 "I wish to translate the ideological dimensions of 'facticity' and 'the organic' into a cumbersome entity called a 'material-semiotic actor'. The unwieldy term is intended to portray the object of knowledge as an active, meaning-generating part of apparatus of bodily production, without ever implying the immediate presence of such an object..."

Haraway, 595

4 "Such contact is bodily; it is a touch that returns to the body, as the skin of the object 'impresses' the skin of the body"

Ahmed, 164

5 "...improvisatory approaches, as a way of going about things, can be seen to share a nexus of concerns, whatever the 'thingsness' of the practice may be. These improvisatory ways of going about things can be broadly said to coalesce under the following themes: convergence, irreversibility, receptivity, memory and processuality, and emergent-construction."

Midgellow, pg.7

6 "Situated knowledges are about communities not about isolated individual. The only way to find a larger vision is to be somewhere in particular. The science question in feminism is about objectivity as positioned rationality. Its images are not the products of escape and transcendence or limits but the joining of partial views and halting voices into a collective subject position that promises vision of the means of ongoing finite embodiment, of living within the limits and contradictions- of views from somewhere."

Haraway, 590

"Situated knowledges require that the object of knowledge be pictured as an actor and agent, not as a screen or a ground or a resource, never finally as slave to the master that closes off the dialectic in his unique agency and his authorship of 'object' knowledge."

Haraway, 592

7 "If objects are the extensions of bodies, just as bodies are the incorporations of objects, how can we locate the queer moments in one or the other?"

Ahmed, 162

8 "As the American feminist theorist Susan Bordo observes, Descartes conceptualized the body 'as the site of epistemological limitation, as that which fixes the knower in time and space and therefore situates and relativizes perception and thought' (1995:227) It is within this context of the body/space relations that subjectivity and subjects' relations to the world are understood"

Briginshaw, 9

This collage describes a series of relationships amongst subjects of the body and subjects of materials during a single moment of a contact improvisation<sup>1</sup> exercise. Though there is only one human body engaged in this improvisation, the narrative and visual describe an entire cast performing during a single frame. This strategy does two things; - each narrative locates<sup>2</sup> my understanding of my own subjectivity in direct dialogue with the embodied knowledge of the particular area of skin, muscle, bone etc... - the use of collage in tandem with these narratives disorient subject-object knowledge<sup>3</sup> and creates a new relationship.<sup>4</sup>

1 "Disorientation involves contact with things, but a contact in which 'things' slip as a proximity that does not hold things in place, thereby creating a feeling of distance"

Ahmed, 166

"...a disorientation in how things are arranged. The effects are indeed uncanny: what is familiar, what is passed over in the veil of its familiarity, becomes rather strange"

Ahmed, 162

2 "Positioning is, therefore, the key practice in grounding knowledge organized around the imagery of vision..."

Haraway, 587

"So location is about vulnerability; location resists the politics of closure, finality, or to borrow from Althusser, feminist objectivity resists 'simplification in the last instance'. Feminist embodiment resists fixation and is insatiably curious about the webs of differential positioning."

Haraway, 590

3 "Situated knowledges require that the object of knowledge be pictured as an actor and agent, not as a screen or a ground or a resource, never finally as slave to the master that closes off the dialectic in his unique agency and his authorship of 'object' knowledge."

Haraway, 592

4 "As a social construct space is not transparent and innocent, it is imbued with power of different kinds"

Briginshaw, 30

Barefoot:

It's complicated, my relationship with concrete, especially when it is poured in a smooth slab<sup>1</sup>. I understand its angst, pushing hard against me, shooting pain and resistance through me into my caves. But when left exposed it can be forgiving, letting me slide my toes against its cool face without letting go of me all together<sup>2</sup>. Our dance is cumbersome. I do not always trust this partner, especially when so raw, so unpredictable.<sup>3</sup>

Concrete:

I remember our first meeting, I was being poured along the edges of my much older counterpart. You were washing off the top layer of sediment from my face as I solidified into my position. Washing my face in this manner revealed the spontaneous structure of smooth, small pebbles that would float amongst the rigid mix. You loved to softly brush across them, they reminded us both of their long forgotten origin at the bottom of a small creek. As you sprayed the water over and over revealing more pebbles with every stroke we were swept back to your warm summer days rolling me over with that cool creek water. As a cast surface, our new dance disappointed you. We both preferred when that cool water joined in trio.

---

1 Only the men's sports had the privilege of using the gyms and fields for practice. Come basketball season, we would have rehearsal in the cafeteria. I hated the ritual of moving those giant folding, bench seating, tables. Almost as much as I hated dancing on that floor. Thin stickers of rubber masked the solid concrete foundation. That concrete screamed twice as hard into our caves, making sure it wasn't forgotten under that dreaded blue and white pattern. We were expected to jump as high as when dancing with the flexible, thin slats of wood in the main gym. It would toss us back into the air, rebounding from the tension in our feet and legs. But that concrete floor could not toss, it could hardly bother a wave. We smacked ourselves against it like a flat palm on still water. I missed the gym floor.

2 Polished concrete is as beautiful as it is mischievous. I could float along its surface when forgotten long enough to collect a fine layer of dust. Hovering me as a flawless trio, until I over extend my reach, breaking our balance and likely my tail bone. When polished concrete is wet, the smooth shimmer of its once liquid marbling tempts the touch, but move too quickly and it won't catch you. You'll slide right over its delicate support. To dance with concrete, you must know the speed of its reaction. Concrete is not limber, it does not shift its balance with ease.

3 I stop sliding backwards as my big toe reaches full extension, flexing into the surface of the floor. The skin between the pad of my foot and the pad of my toe is at its limit. I breathe into it hoping it doesn't tear against the floors pressure. But in the moment the floor yields, it holds my foot in position as my knees bob, redistributing the impact. Concrete and I exhale as my foot is released from the hold, the skin along my soul sighs as it touches back onto concrete's cool face. The soft dance of walking is when they know each other best.

Barefoot on Concrete. A Duet



The group of bones that make up the ensemble of my knee feel the rage of the concrete passing from the leg to pull on them. Bound together with the scar and tensions of their near death two years ago, supported by the titanium life who has re-imagined their future, a new prop to move with, a new dancer in a already whole company<sup>1</sup>. The concrete's rage is loud here, the knee ensemble feels it pulling them, colliding with their new titanium member<sup>2</sup>. The knee could once flow with this rage, absorb it, bounce back in forth with concrete's exposed frustration. But in the face of their own death, titanium's addition was welcomed. Titanium continues to grow agitated by the knee's lingering fondness for this rage (for it once motivated so much of their boundless, buoyant movement) ambivalently hearing the healing group's complaints. For titanium sacrificed a freedom to help revive the landscape of connection, knowledge and memory, fill the canyon whose sudden arrival threatened their entire sense of each other.

Concrete:

My movement is low, shallow and strong when I spread myself along earth. The stone dancers, of all sizes, roll across one another in a continuous throb. From such a collective energy, we release constant shocks of thrust up in response to every additional pressure. We are a challenging group to dance with, our motion is so constant, the lack of variation can be exhausting. But there is so much variety in how you can dance with us. You can slide across us when we settle into a close, soft cluster, water puddles into us with such grace when the smaller aggregate dancers arch their backs out of the pack, reaching to collect other dancers between them. In this moment, the knee ensemble who once enjoyed our partnership has grown tired of the constant throb. The newest member, too rigid to keep up.

---

1 The second quarter of graduate school, I broke my right femur in half skiing, very likely the pre-requisite to this project. There is nothing more disorienting than realizing your body is no longer assembled properly. I remember snapping into consciousness, face buried in the snow and noticing that I only had communication with the upper half of my right leg. Eight hours later, I would end up having emergency surgery. Thus, inserting into an otherwise unadulterated body a titanium augmentation that I would struggle to get to know for the next few years. We have yet to settle our differences.

2 The titanium rod that spans the whole length of my femur is held in place by a pair of dancers whose role is hidden in this performance. The pins aggressively hold the rod behind my knee cap, rudely dismissing the muscles whose position they compromised. The tired muscles for some months could not communicate with the pins, constantly colliding as they do their best to stretch and flex in response to the calf. But over time, they are growing. They are learning the shape of each other's bodies, and the paths they follow the most. They are learning each others strengths, the pins rigidity and the muscles soft malleability is learning to improvise. It becomes more and more rare that muscle cannot support the free weight of the pins, that pins fail in responding to muscles push.

Ensemble of the Knee





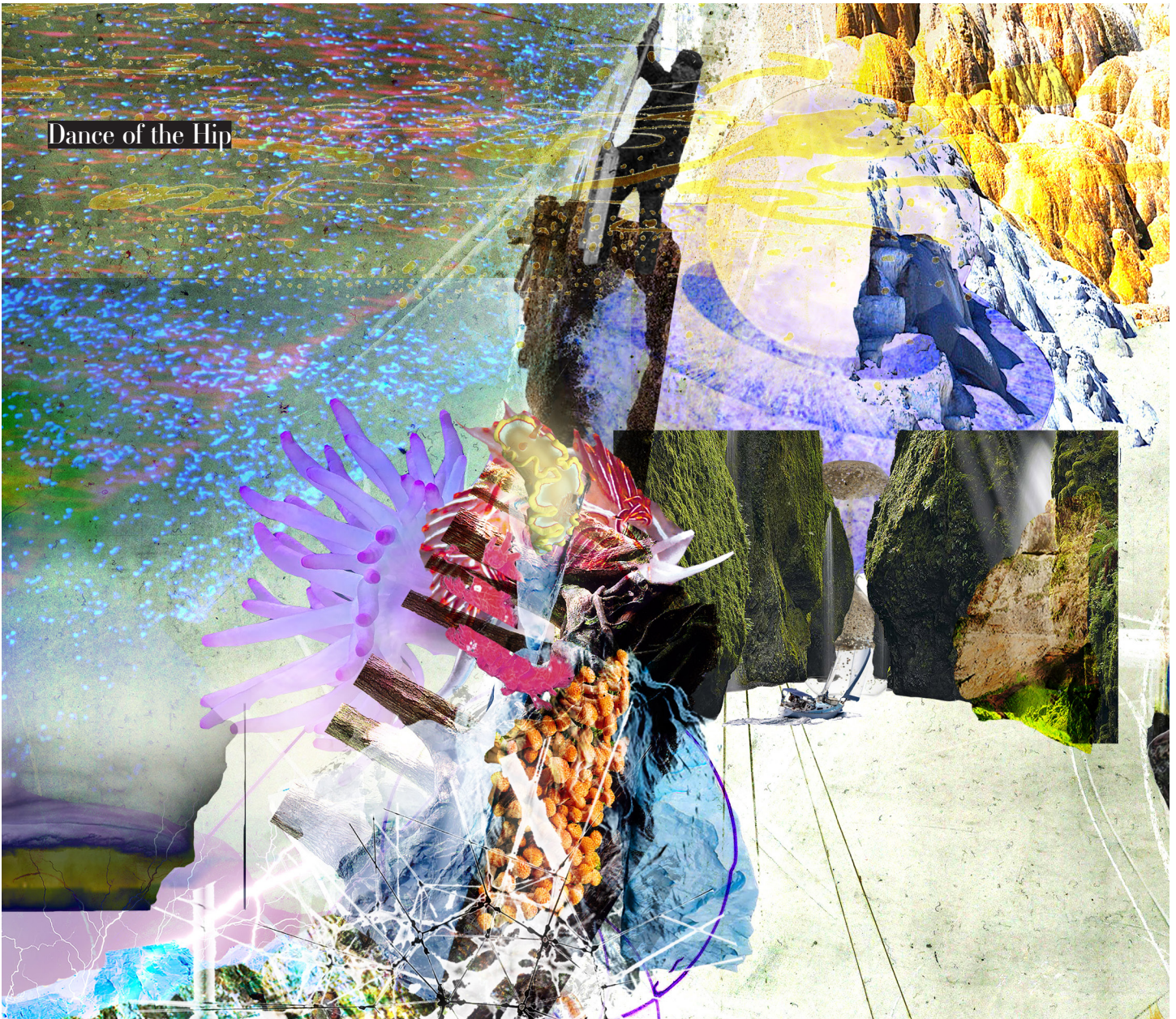
Bones, Flesh, Concrete

So much tension between flesh, concrete and I. The flesh along the bottom of me loves concrete, the coolness emanating from its face always bring this flesh relief as they roll across one another. But the city of small forgotten dancers just behind this flesh is aggressively turned and crushed against itself<sup>1</sup> trying to navigate the flesh's loving waltz with, what we understand to be, a rigid and cold soul. The group screams to escape being pulled along in this dance, for flesh to love another<sup>2</sup>.

---

1 The balance the bones of my feet know is different the balance the whole of my body has agreed upon. It seems to rest just in the center of the ball of the foot. But to call this the "ball of the foot" would be to ignore its hard edges, when pushed to an angle up against another dancing bone, they all seem to snap into an uncomfortable cluster. Like little bricks along a path, when turned up against their will, they scrape and crack at their fragile square edges.

2 The bones of my feet have always been cranky in response to the company the flesh of my feet keeps. The skin moderating contact amongst socks, shoes, floors and earth has lived a rugged life. I have my father's feet. All dry and cracked and irritable, worn and tender from years of playing on the splitting, pebbled concrete of my childhood driveway.



## Dance of the Hip

I am overly sympathetic. My proximity to my very hardworking, but occasionally self-conscious, ass keeps me gently swaying back and forth as it timidly dips back and forth with the gentle toss of air around it.<sup>1</sup> I feel the pressure of the muscles in the right thigh attempting to loosen the tension between the knee and titanium. Those muscles will forever slowly waltz and turn around the young new femur titanium has impregnated in the memory of the ensemble before. Titanium and the young femur know they will long outlive the waltz of those kind, but strong, muscles. Perhaps this is cause for such tension.<sup>2</sup>

---

1 Though my first love was dance, my first active discipline was softball. I play mid-field, second base, until I was a sophomore in high school. Something about the position, hovering across the ground as if to scan and survey that dirt field for future diffractions of the ball. For years it seems that my body had learned a balance through my core and pelvis, rarely managing to walk upright with any grace.

2 Titanium is a rigid, monumental material. The soft, perpetually regenerating muscles surrounding it seem agitated by its stability, permanently interrupting the flow of the river. Will it slowly soften and erode as this dance continues, making more space for the changing moods of the thigh?



Each vertebra of my spine wobbles back and forth, a tower of clenching bodies, one over the other.<sup>1</sup> Muscles and skin whisper motivations and concerns to the tower as the volumes of air brush over and around, distracting skin with its caress. Muscle and skin fold under the drip of the tower as it leans into the soft touch of breeze. A restful moment of balance, suspension and release, a beautiful moment.<sup>2</sup>

---

1 It's a common habit of a dancer to carry too much tension in the neck. It can be hard to catch, but over time its effects start to manifest in the back, like all the bones of the vertebra managed to rub off that squishy coating in-between them. The result is a leaning tower, every dancer gripping on to the other for stability out of fear, forgetting the rigidity of their motion is the greatest threat. It's funny how we learn to react in such contradictory ways, as if we've confused one contact improvisation for another.

2 In the rare moments when all the dancers in the motion can relax, trust and be confident in themselves and one another, the movement feels more improvised, less rehearsed. As if the tension was only in the remembering of the movements and patterns.

## Arm and Shoulder



A sudden, exhilarating thought of the shoulder sends first elbows, then hands, gasping backward. The soft underbelly of each arm is lifted with the idea of feeling that touch again, the fleeting moment of perfect suspension in air's grasp. They feel the most beautiful then, their softness disappears in the arms of the air. In and out of the partnered leap, their ideal moment is often missed, but when each is on point, each listening to and anticipating the other, their magic happens, they float in that single instant forever. And forever after try desperately to feel this perfect breath together again.

**Sea Anemone, First Contact; a reflection.**

*The anticipated horror of poking a sea anemone. Our first dance was timid and unwieldy; so desperate to prove my bravery, I failed to consider how your soft caressing motion would retract to my ambitious jab.*

*We've learned much in our many years of rehearsal, to trust, to be patient, to be aware as we warm up to each other again.*





A POWERS WEST OF PRODUCTIONS

This is the improvisation I have been learning through architecture and dance. It has become a way of seeing the world and a way of going about in it. *Being* in an epistemology of beauty is work, it is a process of imagining a world just beyond your field of vision, the world that brings us moments of beauty. This is what I have to offer the movement of thinking surrounding new materialism, agential realism and the fearless facing of the world that is *Staying with the Trouble*<sup>1</sup>.

An epistemology of beauty offers a way of seeing the world that embraces its own incompleteness and understands its emergence out of difference and the space in-between. It also offers a way to begin accounting for how we move through and participate in shaping the world that recognizes the constructive nature of an affective body. Finally, an epistemology of beauty proposes that the world is full of possibility that we touch, push against, and respond to perpetually.

As I move out of academia and into the working world I want to enchant others as I have been enchanted in my pursuits. I want to try and crack open the subject/object world and invite people to look inside. Here my second and third interface finally emerge. As my interface into the built world and first experiment into engaging beauty in a shared experience, a sort of wormhole of diffraction<sup>2</sup> might ask a passerby<sup>3</sup> to stop and look, perhaps even wait for it to spit out some little moment of beauty.<sup>4</sup> But the wormhole is also a simple structure full of mirrors, a visible construction of the mundane, certainly incomplete.

As my third interface and final component of this project, the website, [epistemologyofbeauty.squarespace.com](http://epistemologyofbeauty.squarespace.com). The website houses much of the paper, the animations, the references, with room to grow in as many directions as it chooses. I think of the site as another wormhole, one more personal and customizable, one that is not bound by the realities of a built world. Here I hope for visitors to explore situating their own knowledge using the site as a database that begs for derive<sup>5</sup> over navigation. Here key ideas can be linked

---

1 Donna Haraway's most recent book from Duke University Press, 2016

2 A six inch grid elevated 7'8" inside a local storefront window creates a vague structural order for the hanging mirrors. Each hung from four corners using chain and eye hooks is both bound to and liberated by the grid. The sculpture interacts with other mirrors in the space and the reflective glass storefront windows, each reflection a cutting together apart that opens up the possibility for something new.

3 The shape and formation of the mirrors relative to the city street outside, the interior space and the entrance allows circulation around the piece to unfold more possibilities, as each orientation of approach presents new diffractions and emergent spaces.

4 Referencing the animations and drawings elsewhere in the project, a piece of animation of just acrylic brush strokes, moving over and around one another, transforming, mixing and producing new colors and textures, dances within the sculpture. The nature of the projection overlaying the brush strokes into the mirrors makes space for imagining how those dancing bodies of color might be part of a rolling mist of production.

5 Derive is an idea borrowed from the Situationists, it describes a way of occupying and moving through a space that is lead, not by signs and directions intended by designers and legislation, but of intuition and atmosphere. Unlike the derive however, I do not believe the website is better explored under the influence of opioids.

by larger notions of thoughts, definitions, interventions and dances, to be connected in any way one sees fit. The website becomes another collage, like the installation, the paper, the drawings, the process. As it is cut apart and pasted back together by each wondering body, I know it will change. As I continue to build the website, integrating more of the paper and animations, it will also be open for comment, perhaps it will be a forum for notions and encounters with beauty. It will certainly be the space of flow in which these ideas live on and grow as I continue in my quest to get to know this beauty. I feel I have barely scratched the surface.

Beauty is of all the earth's production, a fleeting glimpse transcending the knowing, knower and knowledge. Perhaps the next time you encounter a moment of beauty, rather than try and capture it, you look into it with curiosity and try to imagine the tumultuous landscape that brought that encounter to you.

Wormhole of Diffraction

@ Common Area Maintenance

Seattle, WA





## Bibliography

Ahmed, Sarah: *Queer Phenomenology*, Duke University Press, 2006

Alexander, Christopher, Silverstein, Murray, Ishikawa, Sara: *A Pattern Language*, Oxford University Press, 1977

Barad, Karen. Interview: "Matter feels, converses, suffers, desires, yearns and remembers", *New Materialism: Interviews & Cartographies*

Barad, Karen: *Meeting the Universe Halfway: quantum physics and the entanglement of matter and meaning*, Duke University Press, 2007

Briginshaw, Valerie A.: *Dance, Space and Subjectivity*, Palgrave Macmillan, 2001

Gregg, Melissa, Seigworth, Gregory: *The Affect Theory Reader*, Duke University Press, 2009

Haraway, Donna: *Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective*, *Feminist Studies Journal*: Vo. 14, No. 3. Autumn 1988, pp. 575-599

Haraway, Donna: *Cyborg Manifesto*, *The Socialist Review*, 1984

Horton Fraleigh, Sondra: *Dance and The Lived Body*, University of Pittsburgh Press, 1996

Kalkavage, Peter (Translation): *Plato's Timaeus*, Hackett Publishing, 2016

Lorde, Audre: *The Erotic as Power*, Kore Publisher, 2000

Midgellow, Vida: *Improvising Dance, A Way of Going about Things*, *The Oxford University Handbook of Improvisation in Dance*

Novak, Cynthia: *Sharing the Dance*, University of Wisconsin Press, 1990

Prakash, Vikram: *The Interests of Desire*, *Architecture + Design*, New Delhi, March-April 1992, pp89-95

Prakash, Vikram: Architecture Talk (podcast): Episode 13. "Life is a River, A Conversation with 2018 Pritzker Prize Winner BV Doshi", [architecturetalk.org](http://architecturetalk.org), Feb. 01, 2018

Prakash, Vikram: Architecture Talk (podcast): Episode 24. "My Dinner with Warren Etheredge: Film, Architecture and Storytelling", [architecturetalk.org](http://architecturetalk.org), July 05, 2018

Ruskin, John: *The Seven Lamps of Architecture*, Smith, Elder & Co. 1849

Shusterman, Richard: *Thinking Through the Body*, Cambridge University Press, 2012

\*\*All illustrations by Sami Prouty