

Intentional Entanglement: The Art of Living on a Dying Planet

Thesis

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By

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Abstract

World, world, world, world, world, world, world, world, world, world, world, world,
world, world. New, new, new, new, new, new, new, new, new, new, new, new, new,
new. Body, body, body, body, body, body, body, body, body, body, body, body. Human,
human, human, human, human, human, human, human, human, human, human,
human. Entanglement, entanglement, entanglement, entanglement, entanglement,
entanglement, entanglement, entanglement, entanglement, entanglement,
entanglement. How, how, how, how, how, how, how, how, how, how, how. Inside,
inside, inside, inside, inside, inside, inside, inside. When, when, when, when,
when, when, when, when, when. About, about, about, about, about, about, about,
about. Animals, animals, animals, animals, animals, animals, animals, animals.¹

¹ The abstract is a compilation of the top ten major keywords as they appear in the paper by density. I.e., world appears 14 times, new 14 times, body 12 times, entanglement 11, and so on and so forth.

My thesis is dedicated to a world where language is the long past ancestor of quantum matrimony.

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Chapter 1: To Punch the Clock You Pull the String

One way to begin a master's thesis is to ask the question, "what do I want here?" I want to enter into this question with a story:

Everything slowed way down, and you are just sitting there with nothing to do. Your guts start going, you feel your stomach turning. Something is coming up, a thread spits out of your mouth. Your throat tickles, the thread scratches. This sensation is simultaneously unhinging as it is relieving. To punch the clock you pull the string. It keeps coming. All of the sudden there is pressure on the back of your eyeballs. In just a wink your eyes travel backwards, somehow they got sucked into the back of your head. Next thing you know they are intertwined to the thread reported from your mouth. You are turning inside out. It is an unpleasant process, but your curiosity endures. You forge a new relationship with the room, as the thread travels up the walls your eyes go to... Looking back at your body, you miss your eyelids. You stay like this for awhile; the world inside your skin, your body outside your skin, it is a molecular pleasure.²

So, that's a start. That is, if you can go inside-out you can start to brush up against the world in ways no longer framed by harmful ideologies. For example, it is hard to hold

² You will be a moth soon.

onto humanism when your eyes are outside of your body, and your grey matter wrapped around a tree. But if you keep your body together the centuries old muscle memory of humanism keeps repeating its patterns across your neural networks. So you have to disorganize, you have to go inside out and take a chance on intentional entanglement; a new way of being a body in the world, one where your body gives way to living*, and “making sense” is not the be all-end all. No sense and nonsense is the new handshake. Science has no idea what I am talking about, though some scientists do.³

Intentional entanglement is how to join in with the vibrating substratum of the world. It is born from a metaphysics grounded in connection, challenging the delusions of separation responsible for ordering Western discourse.⁴ It gets going by molting ideologies of difference, such as mind and body, animal and human, organism and machine, public and private, nature and culture, men and women, primitive and civilized.⁵ It proceeds as a praxis in “multi-species becoming with”. BUT PLEASE - check yourself before you wreck yourself, this is far from utopia. Rather it is a recognition of the mess we find ourselves in, followed by a commitment to “stay with the trouble”.⁶ Intentional entanglement is the art of living on a dying planet. How to

³ Dr. Jerry Coyne is one such scientist, an evolutionary biologist who I heard give an account of his experience hosting a botfly in his scalp, via the RadioLab podcast episode, “Glad Somebody Likes Bugs...”.

⁴ Kate Wright, “Becoming-With,” in *Environmental Humanities* 5.1 (2014), 277-81.

⁵ Donna Haraway, *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 163.

⁶ Donna Haraway, “When Species Meet: Staying with the Trouble”, in *Environment and Planning D: Society and Space Environ. Plann. D* 28.1 (2010), 53-55.

live? No, becoming-with. You see, living is not the same as being-a-body. Stop thinking as though you are on, upon, about, acting, doing; rather you are all the time WITH. Your heart in your hands, infected and infecting.

Chapter 2: A (very) Little History

Zipzipzip. Do you remember the year 1983? Barbara Kruger was just starting to add language to her large-scale black and white images. Borrowing her form from the advertising industry, she was laying bare the misogynist power structures inherent to the imagery and language circulating capitalist society. Her work muddles subjectivity born of asymmetrical binaries; man and woman, self and other, nature and culture, active and passive, subject and object, reason and emotion, public and private. For example, in *Untitled (We Won't Play Nature to Your Culture)*, “Kruger implements the feminist rejection of the dichotomy of superior 'culture' and inferior 'nature' - the latter long associated with woman's physical, domestic, and emotional life.”

In the 80s, Kruger's visuals echoed an ongoing trans-disciplinary project concerned with mapping multiplicities, (See Figure 2). Thirty years later I finally catch wind of this conversation, and with delight I let it sink in, osmosis my new *modus operandi*, an abstract-sex of the atomized order:

In the skin, through the skin, the world and the body touch, defining their common border. Contingency means mutual touching: world and body meet and caress in the skin. I do not like to speak of the place where my body exists as a milieu, preferring rather to say that things mingle among themselves and that I am no exception to this, that I mingle with the world which mingles itself in me. The skin intervenes in the things of the world and brings about their mingling.⁷

⁷ Michel Serres, *The Five Senses: A Philosophy of Mingled Bodies (I)* (London: Continuum), 2009, 97.

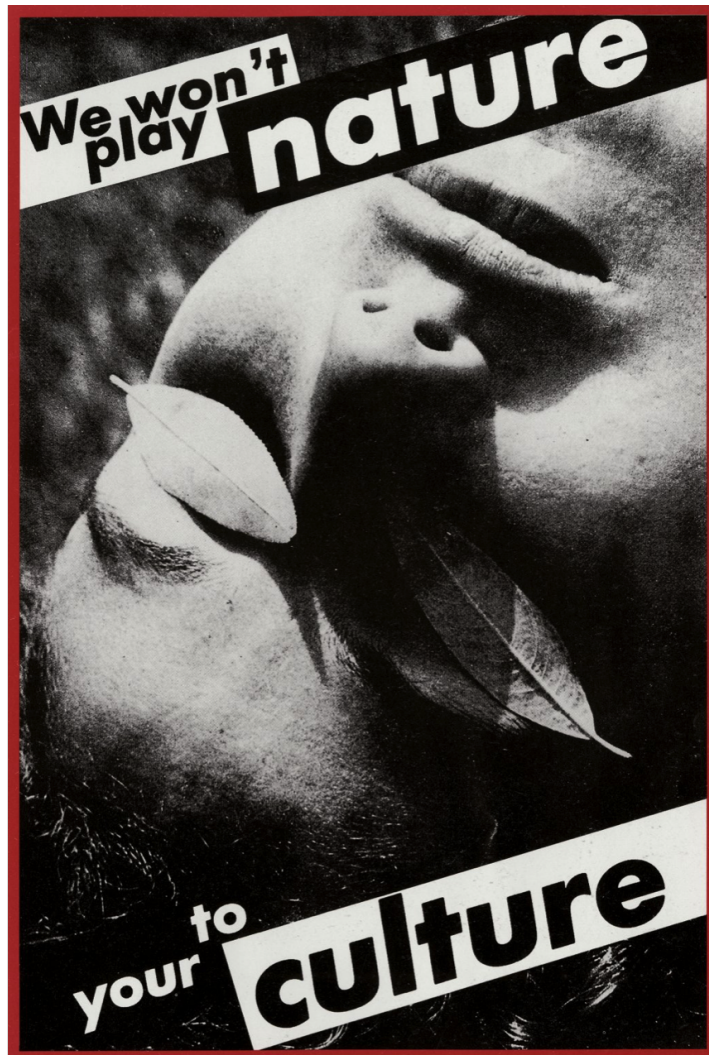


Figure 1: Barbara Kruger, *Untitled (We Won't Play Nature to Your Culture)*, 1983.

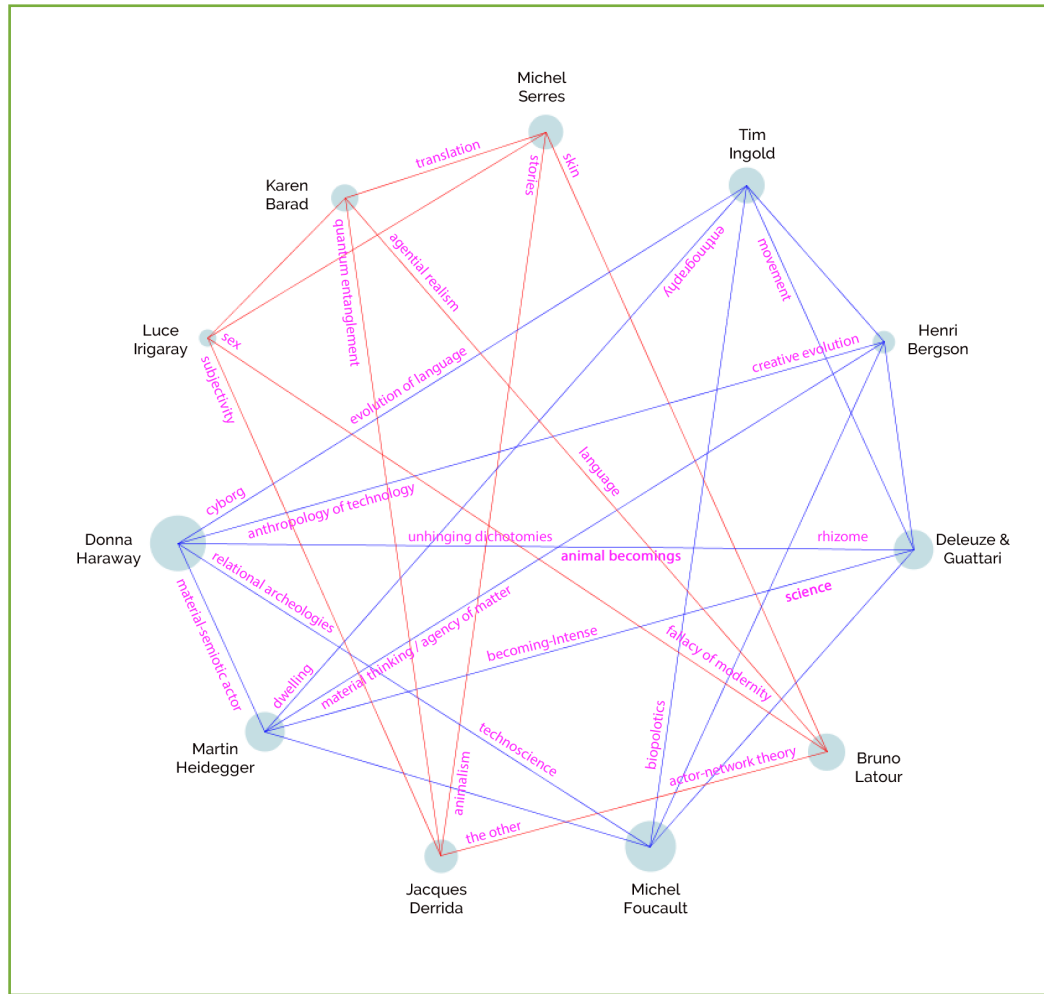


Figure 2. Constellation view of the authors, themes, and (short) circuits shaping my perspectives and subsequent studio practice.

One aspect of Kruger's prerogative was a deconstruction of sexist myths, in her present moment it had to be done. In fact, that work is still being done, but I want to take her project one step further: I want to unmask myself of the human and mask myself (again) with the knowledge of the bees.⁸ This is not a turn away from Kruger's feminism, but its evolution. Animalism is a dilated feminism preparing new figures for the end of the worlds formulated by "settler colonialism, industrial capitalism, and militarized technoscience".⁹

Historical narratives are in crisis now, across the political spectrum, around the world. These are the moments when something powerful and dangerous-is happening. Figuration is about resetting the stage for possible pasts and futures. Figuration is the mode of theory when the more "normal" rhetorics of systematic critical analysis seem only to repeat and sustain our entrapment in the stories of the established disorders. Humanity is a modernist figure; and this humanity has a generic face, a universal shape. Humanity's face has been the face of man. Feminist humanity must have another shape, other gestures; but, I believe, we must have feminist figures of humanity. They cannot be man or woman; they cannot be the human as historical narrative has staged that generic universal. Feminist figures cannot, finally, have a name; they cannot be native. Feminist humanity must, somehow, both resist representation, resist literal figuration, and still erupt in powerful new tropes, new figures of speech, new turns of historical possibility. For this process, at the inflection point of crisis, where all the tropes turn again, we need ecstatic speakers.¹⁰

It is at this point, where Haraway calls for new tropes that I enter in. Echolocating these ideas via a techno-science art practice. I am approaching art as a modality to

⁸ Preciado, Paul Beatriz, "Le Féminisme N'est Pas Un Humanisme" in *Libération*, (2014).
http://www.liberation.fr/chroniques/2014/09/26/le-feminisme-n-est-pas-un-humanisme_1109309

⁹ Heather Davis, and Donna Haraway. "Anthropocene, Capitalocene, Chthulhocene Donna Haraway in Conversation with Martha Kenney", in *Art in the Anthropocene: Encounters among Aesthetics, Politics, Environments and Epistemologies*, (Online, Open Humanities), 2015, 255-70.

¹⁰ Donna Haraway, *The Haraway Reader*, (N.p., Psychology Press), 2004, 47.

explore the human and non-human factors in the production of knowledge. Via a confluence of art, technology, science, sci-fi, and self, I envision and enact fantasies that attempt to subvert ideologies and their subsequently sticky hierarchies. I want to perform a redoing of the frameworks shaping our perceptions and thus experiences. I want to make a new-nature and walk into it, this is the work.

Chapter 3: Technology's Dirty Roots Are Good For Braiding

For the past year, I have been experimenting with Open BCI, an open source bio-sensing micro-controller that allows me to sample electrical brain activity. The BCI in the name stands for brain-to-computer interface; using a combination of custom computer programs written in Processing, Python, and Max, the interface enabled me to connect my brain activity to a variety of interactive physical systems. Including camera focus, actuator speed and position, LED brightness, and live video feeds.



Figure 2: Gallery view of my brain-to-camera interface *Biofeedback Cinema*. A tool I developed that maps cognitive focus, (observed as alpha waves), to camera focus.

My experiments in entangling brain activity to objects and events outside of my body took a turn when I started to bring living systems into the picture. I wanted to imagine how a platform typically pointing to human possibility and control could instead operate as an interface for empathy and intentional entanglement towards the other. But what other? This question is such a sensitive one, how can I host a living system sans exploitation? Not an issue easily resolved when the organisms best suited for the project have already been “denatured” by the technoscience industrial complex.¹¹ But this is what I meant earlier when I said intentional entanglement is about “staying with the trouble”. The whole world is torn to shreds in the wake of late-stage capitalism, though I do not endorse the legacy of this empire I am involuntarily, (and sometimes voluntarily), bound to it. I embrace the nonsense, get inside of it when I can, to perceive and ultimately manipulate the narratives at stake. When new technological tools are introduced and the sciences take hold you will find a politics in the making. This is especially dramatic in the case of brain-to-computer interfaces, a biotechnology re-crafting our bodies and the way we intermingle with the world.

...When talking about cutting edge areas of research, scientists, the media, everyone really, imagines particular futures for these areas in order to make sense of them in the present. They draw on existing cultural tropes to do so, including those from the science fictional genre. Future-oriented discourses are not neutral. They may enable particular futures to come into being - in this

¹¹ An animal may be “denatured” by the process of its mass-rearing/manufacturing for the sole purpose of circulation as a laboratory tool in research settings.

way they are "performative". They can also be strategic, by shoring up the authority of particular groups, individuals, or types of intellectual inquiry.¹² I want my research to intersect at the place where the questions of "whom" and "how" get formulated. For whom is the technology put use to practically, and how is it framed by language? Inside of the trouble, I can rearrange the WHOM and the HOW, to point to possible worlds not yet envisioned by the capitalist-scope of the technoscience empire. In her essay *The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others*, Donna Haraway states the stakes, I want to eat it up and spit it back out inside of my studio practice.

I have high stakes in reclaiming vision from the technopornographers, those theorists of minds, bodies, and planets who insist that technology is the sense made to realize the fantasies of the phallocrats.

So, I am staying with the trouble ...

in the belly of the local/global monster in which I am gestating, (often called the postmodern world), where global technology appears to denature everything, to make everything a malleable matter of strategic decisions and mobile production and reproduction processes.

It is in this place I hope my work produces not *effects* of distance,

but *affects* of connection, of embodiment, and of responsibility for an imagined elsewhere that we may yet learn to see and build here.¹³

I consider my practice an imagined elsewhere, it is (w)here I meet Manduca Sexta,

(the Tobacco Hornworm moth), and it is (w)here I bring my audience into the folding

¹² Nicola Marks, "Science fiction, cultural knowledge and rationality: How stem cell researchers talk about reproductive cloning", in D. S. Ferber S. Wilde (eds), *The Body Divided; Human Beings and Human Material' in Modern Medical History*, (Ashgate, Surrey), 2011, 191-222.

¹³ Donna Haraway, "The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others", in *Cultural Studies*, (New York; Routledge), 1992, 295-337.

via an immersive art installation that creates the condition for an experience in “multi-species becoming with”.



Figure 3: Manduca Sexta moth pupa connected to Open BCI via metal electrodes.¹⁴

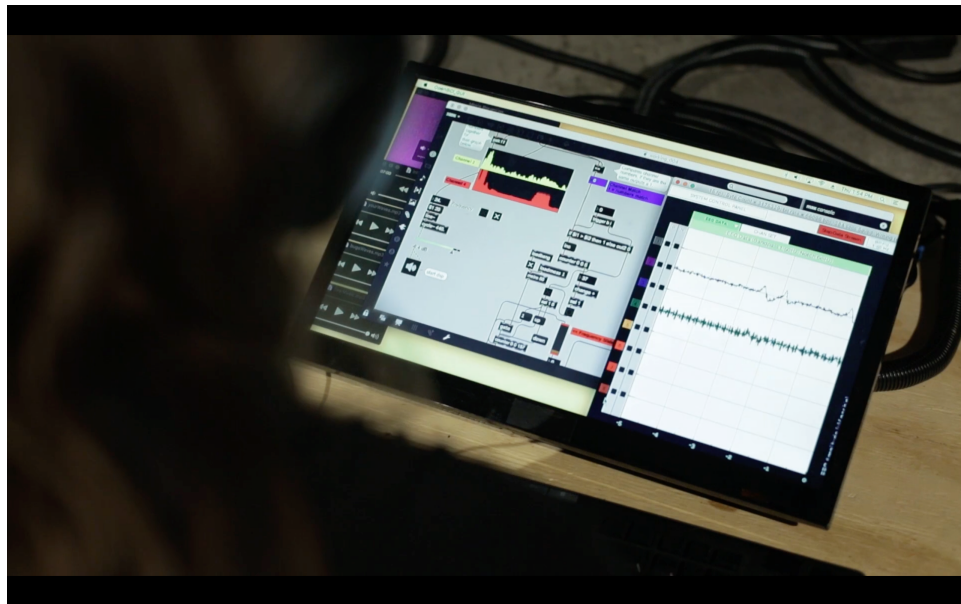


Figure 4: Custom computer software monitors and records the Manduca Sexta pupa's electrophysiology.

¹⁴ The first time I hooked up a living Manduca Sexta pupa to the system, I experimented with a strobing LED over the pupa's compound eye. I was amazed to see variations in the electrical activity of the pupa corresponding with the frequency of the strobing LED. I shared these results with entomologists at The Museum of Biological Diversity at The Ohio State University who said, "this is wonderful, a new form of inter-species communication." I consider myself in the early stages of uncovering what creative research is at stake here.

Chapter 4: Entanglement Is a Virtue

Entanglement Is a Virtue is an immersive, interactive installation I prepared for The Ohio State University Master of Fine Art (MFA) thesis exhibition *notitleanytitle*.¹⁵ It is a cognitive journey inside-out alongside a *Manduca Sexta* moth pupa. It is not a situation for thinking about animals, it is a practice in thinking-animals.

It is important for me to offer a hyphen between the words looking and animals, in lieu of a preposition for example. If I were to say “thinking about animals” my language would then dictate a particular proximity between the agential “thinking human animals” and the non-agential “non-human animals”. The term thinking-animals offers some kind of alternative terminology for framing my relationship to the organisms I am in close proximity to. I want to recognize, with my work, but first with my language, 1) the agency of other organisms, 2) the effects of looking, and 3) how other organisms and myself actually meet in the middle somewhere, looking at and affecting each other. With my research I hope to help (re)configure a world where the line between animals and humans can be replaced with something more interesting, and more helpful for us both.

¹⁵ *notitleanytitle* refers to a title generator I created for The Ohio State University MFA 2016 Thesis exhibition. On view at www.notitleanytitle.com, the website generates a new title every 28.26666666666667 seconds (the average of the 2016 MFA candidate’s collective ages).

Entanglement Is a Virtue creates the condition for a perceived multi-species becoming with by inviting the public to desire closeness to a *Manduca Sexta* pupa. The project requires its visitors engage by actively blurring the surreptitious line between their skin and the pupa. This work is accomplished by connecting a human participant and a *Manduca Sexta* pupa to a system that looks for synchronicity in the electrical activity of both. If synchronicity is achieved, haptic feedback informs the human that she is getting closer to "thinking inside of another creature." Below is the text accompanying the project in the gallery:

After entering the installation your cerebral cortex is physically connected to an electroencephalography (EEG) monitoring system via extracranial electrodes. It is not so bad, just a disc made of precious metal on your forehead. Nearby you can see a small living thing, it is a *Manduca Sexta* (Tobacco Hornworm) moth pupa. She is attached to the same system alongside you. Though she receives no input or feedback from the system, it monitors and records her electrophysiology in real time. Aural instructions coming to you via headphones step you through some ideas on how to reorganize yourself during the experience. You are trying to synchronize your brainwaves to match in frequency to the resonating rhythms of the moth pupa. You are trying to think inside of another creature. Will you feel empathy, excitement, nausea, disbelief, uncertainty, quantum matrimony? Feel something tingle?

Participants make their way through the installation with me as their guide, both in person and aurally via headphones, as pre-recorded instructions are transmitted at specific intervals of the experience. I imagine my role here as the archetypal trickster:

A boundary-crosser violating principles of social and natural order, playfully disrupting normal life and then re-establishing it on a new basis.¹⁶

In the case of *Entanglement is A Virtue*, I am physically shifting between the physical space of the installation and the digital architecture I developed to create the participant's experience of the work. I want my audience to follow, to oscillate back and forth across the perceived boundaries of technology and flesh, ultimately crossing paths with *Manduca Sexta*. I want their encounter with *Manduca Sexta* to open up the possibility that they may pass through yet another boundary, from the cognitive space of their thinking-human-body-experience to that of another creature. Will they follow, can they follow? As the trickster I create the condition for an alternative "natural order", I want to disrupt normal conventions. I want to go inside-out with my audience, to find the pain and the joy in the atomized order at the end of the world. This way of thinking requires all new frameworks for imagining who and what holds agency and power. Are you changing that rock or is that rock changing you?

If winds, currents, glaciers, volcanoes, etc., carry subtle messages that are so difficult to read that it takes us absolutely ages trying to decipher them, wouldn't it be appropriate to call them intelligent? How would it be if it

¹⁶ Paul Mattick, "Hotfoots of the Gods", in *New York Times*, 1998.

turned out that we were only the slowest and least intelligent beings in the world?¹⁷

How can I approach unintelligible knowledge with my practice? I am not looking for language to do the talking, I am looking for experiential madness. Not drugs, not religion, but moments of quantum matrimony: a phrase I am using to describe the physicality of intentional entanglement. In the words of Clarice Lispector,

When I suddenly see myself in the depths of the mirror, I take fright. I can scarcely believe that I have limits, that I am outlined and defined. I feel myself to be dispersed in the atmosphere, thinking inside other creatures, living inside things beyond myself. When I suddenly see myself in the mirror, I am not startled because I find myself ugly or beautiful. I discover, in fact, that I possess another quality. When I haven't looked at myself for some time, I almost forget that I am human, I tend to forget my past, and I find myself with the same deliverance from purpose and conscience as something that is barely alive. I am also surprised to find as I gaze into the pale mirror with open eyes that there is so much in me beyond what is known, so much that remains ever silent.¹⁸

Can my work be a space for an audience to see themselves suddenly, possessed by other qualities? Forgetful of their past, delivered from purpose or conscience, perhaps barely alive. Perhaps oscillating between the wildest and least understood boundary of all, life and death. Can they lose their edges to such a degree that life inside a computer, life inside a bug, is not related to life at all? What else is there besides life that we might hold dear? Perhaps a million years ago the *Manduca Sexta* caterpillar asked the same question, in its death it reorganized, and a moth emerged.

¹⁷ Michel Serres, and Bruno Latour. *Conversations on Science, Culture, and Time*, (Ann Arbor: U of Michigan), 1995, 30.

¹⁸ Clarice Lispector, *Near to the Wild Heart*, (New York: New Directions), 1990, 62.

Scientists are a little confused about bugs who go through metamorphosis. You may or may not know, a *Manduca Sexta* egg has two sets of DNA. One just for the caterpillar, and one just for the moth body. The body a *Manduca Sexta* occupies between caterpillar and moth is nonsensical. The caterpillar sheds its final skin, what is left is an outer shell resembling a non recognizable form, a monster. Inside of the shell the caterpillar DNA is falling apart, the moth DNA reproducing. The caterpillar literally disorganizes, the moth appears two week later. If we start to think about this process in evolutionary terms, it is hard to imagine an organism, (the caterpillar, or the whatever), evolving towards a deconstruction to make way for the development of a completely different animal, the moth. How did this happen? With this strange evolution in mind I want to imagine something absurd, a door of the strangest shape. If we pass through we come apart...

We are at the end of our world, as we can live it. Thinking in terms of evolution, how must we disorganize, to make a space for the development of a completely different animal? Does technology play a part? Our eyes have already gone have they not? I look into screens now, and there I find worlds. What's next, my spleen? Intentional entanglement is a virtue, the art of living on a dying planet begs you to deliver your guts to an imagined elsewhere where vibration not domination is the new natural order.



Figure 5: Installation view of *Entanglement Is A Virtue*.



Figure 6: Installation view of me operating *Entanglement Is A Virtue*.



Figure 7: View inside of the installation.



Figure 8: Manduca Sexta moth pupa as seen inside of the installation.

Bibliography

Haraway, Donna. "Anthropocene, Capitalocene, Chthulhocene Donna Haraway in Conversation with Martha Kenney." Interview by Martha Kenney. *Art in the Anthropocene: Encounters among Aesthetics, Politics, Environments and Epistemologies*. Open Humanities, 2015. Web.

Haraway, Donna. *The Haraway Reader*. N.p.: Psychology, 2004. Print.

Haraway, Donna Jeanne. *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge, 1991. 163. Print.

Haraway, Donna. "The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others." *Cultural Studies* (1992): 295-337. Print.

Haraway, Donna. "When Species Meet: Staying with the Trouble." *Environment and Planning D: Society and Space Environ. Plann. D* 28.1 (2010): 53-55. Web.

Lispector, Clarice, and Giovanni Pontiero. *Near to the Wild Heart*. New York: New Directions, 1990. Print.

Marks, Nicola. "Science Fiction, Cultural Knowledge and Rationality: How Stem Cell Researchers Talk about Reproductive Cloning." D. S. Ferber S. Wilde (eds), *The Body Divided; Human Beings and Human 'Material' in Modern Medical History* (2011): 191-222. Web.

Mattick, Paul. "Hotfoots of the Gods." *New York Times* (1998): n. pag. Web.

Nicholson, Linda J. *Feminism - Postmodernism*. New York U.a.: Routledge, 1990. Print.

Preciado, Paul Beatriz. "Le Féminisme N'est Pas Un Humanisme." *Libération.fr*. Liberation, 26 Sept. 2014. Web. 18 Apr. 2016.

Serres, Michel, and Bruno Latour. *Conversations on Science, Culture, and Time*. Ann Arbor: U of Michigan, 1995. Print.

Serres, Michel. *The Five Senses: A Philosophy of Mingled Bodies (I)*. London: Continuum, 2009. Print.

Wright, Kate. "Becoming-With." *Environmental Humanities* 5.1 (2014): 277-81. Web.