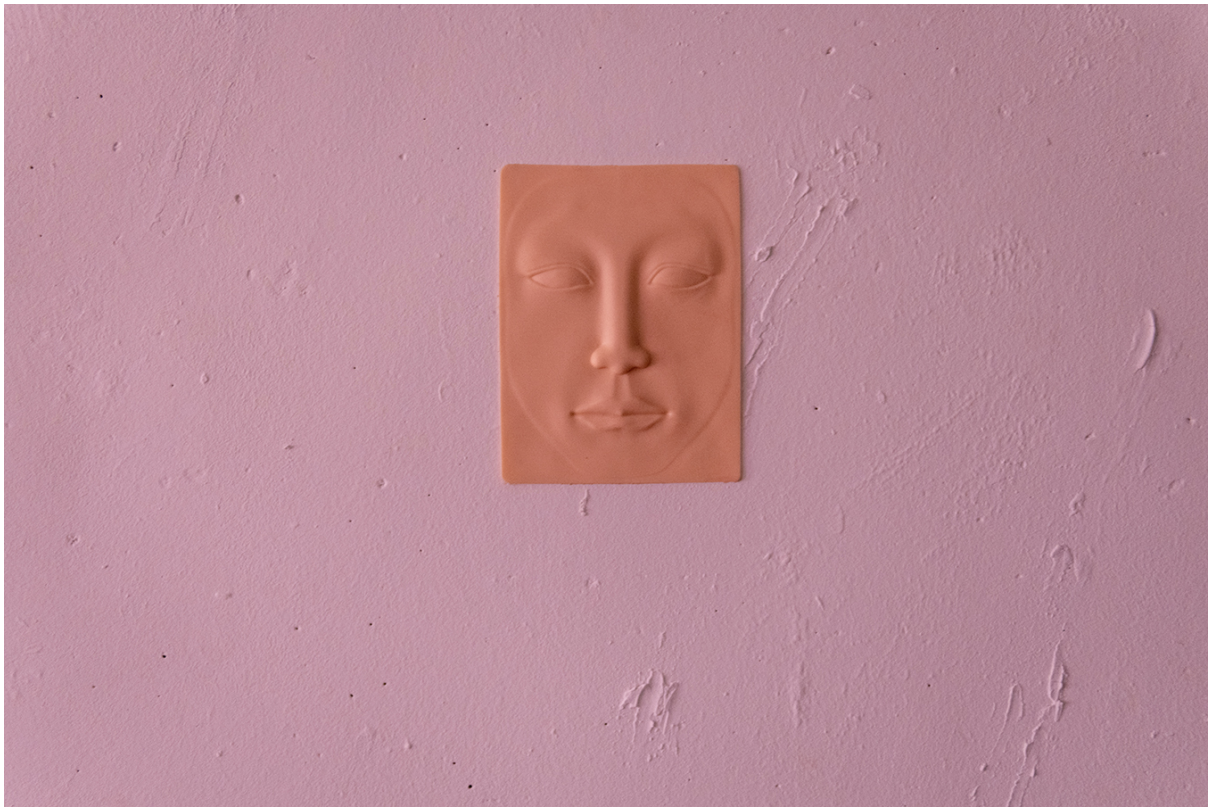
Interview with Sonia de Jager

Bearded women: redefining categories (and the concept hereof) in academia and beyond

All images in this article are installation views of de Jager's *Human, Representation, Machine, Human Representation-Machine, Human-Representation Machine, Human-Representation-Machine*, 2020-2021. Courtesy of *a Tale of a Tub*, Rotterdam and LNDW Studio.

I am someone who likes to work on different things all at once, as well as force the lines between these things. From the outside, often people question how all the different dots of my practice connect. I'm trying to understand yet-undefined limits of the mind from a variety of perspectives: philosophical, artistic, neurological, hormonal, technical. These things should not be separated when they all deal with the same thing. It is not to take away from the importance of specialisation, of course a very important aspect of research, it is to constantly pay attention to the bigger picture. To have one without the other makes little sense in the way I like to approach things.



Born out of a curiosity, my 'practice' emerged when I was quite young. I read the short story "The Book of Sand" by Borges, where the protagonist is presented with a book of infinite pages. I was immediately struck with the following question(s): "how can the concept of

infinity actually be communicated in these few words? How does infinity 'fit' in such a limited container?" Of course, this was probably more clumsily phrased, or not phrased, just experienced. From then I became very interested in what fiction and philosophy can do together, and I was always trying to get at the big questions. Why is the alphabet the way it is? Why do we communicate visually and through sound? How is mathematics a language? Can we invent new languages? Pretty annoying, for the adults around me. My brothers and my father were essential pieces of the puzzle: my older brother taught me about the ‘mechanics’ of the universe, my father about linguistics and history, and my younger brother about music and mathematics. At the age of sixteen I had to decide how to proceed, academically speaking, and I wanted to study philosophy. I thought to myself: "How will I fit in a world full of bearded men?" Unknowingly, the dominant patriarchal ideology got to me, and I decided to study fine art as the next best alternative. Art was as creative as philosophy, and women could be artists (and not really philosophers) in my head. After four years at the Gerrit Rietveld Academie, having gained some confidence in my capacity to philosophise, I went on to do two theoretical Masters. This brought me closer to the world of bearded men. Now in my second year as a doctoral student at the Erasmus School of Philosophy, I explore the concept of 'limit' in the development of artificial intelligence, from a philosophical perspective. It does feel like I’m fulfilling my childhood dream of exploring the conceptual borders of infinity and their manifestations through language, which feels good. Bearded (and shaved) men do rule the halls of my faculty, but I no longer experience the inadequacy I did earlier in my life.

Right now, I am working on a few projects: one of them is an exhibition/collaboration with the gallery space ‘A Tale of A Tub’, in Rotterdam. We're trying to understand what "user experience" might mean, and how to define that from a group perspective which is neither a fragmented collection of individual voices nor a democratic agreement. From my perspective this is a crucial experiment in understanding the limits of sociality, of agreement, of

collective decision-making. Another project I have been running with, around music and philosophy, is titled ‘Regenerative Feedback’. It is a festival and/or conference that tries to offer something eclectic yet harmonious. We’ve been planning a conference in CDMX that has now come to a halt because of covid, of course. The whole idea is that it's basically a big mix of perspectives coming together, in actual, physical space, with all sorts of researchers-slash-practitioners involved, from pure philosophers to pure musicians, and everything in between and outside of those categories too.

Finally, my main project is of course my PhD. I'm currently writing a paper on the concept of intuition. Intuition is a word used so often, yet without a clear idea on what the concept entails. A lot of people use it to refer to something that is not 'consciously' thought out, a lot also use it to talk about something closer to 'common sense', another pretty undefined trope. In any case, it seems it's often something that is used to refer to the opposite of 'rationality' (whatever that may be, right?), as existing on the opposite side of the cognitive spectrum. In my paper I try to show that both reason and intuition rely on the same mechanisms, so they can in fact be said to be the same thing. The more aware we become of how reasoning schemas are "intuitive", the humbler and (and consequentially) more collective "rationality" can become.

As I mentioned, I struggle to understand how researchers, or artists, can **not** be interdisciplinary. Interdisciplinarity is a word that gets thrown around a lot, sometimes as 'transdisciplinarity' or 'cross-disciplinary collaboration'. For me, while I tend to avoid the word (it's starting to lack impulse), I appreciate the argument to forward more dialogue and consciousness-raising about 'the other' between separate disciplines. I was talking with someone else the other day and related this very question to an analogy with so-called 'home economics'. Maybe you're good at cooking and bad at keeping a good overview of the

ingredients in your fridge, you might end up having to throw things away that were perfectly edible a week ago. Or you might be bad at buying the right ingredients in time for your culinary plans. Maybe you have a housemate who's good at what you fail at, and things resolve themselves quite magically. I think, when it comes to highly specialized practices such as, say, Natural Language Processing, researchers need to put all their attention on how to get to the perfect omelette, and they forget that the point is to eat it, and they let a lot of eggs go to waste. A philosopher who knows a little about the history of linguistics might be able to help a technical researcher by selecting the right ingredients and not letting things rot. That's, for me, interdisciplinarity in a nutshell. At least, it's how I practice it.

I think the question of creativity is also the question of intelligence which is also the question of empathy and the question of politics and even microphysics, etc. I tend to display the annoying quality that whenever I am working in a specific field, I try to get outside of it. When I was in the world of visual art I was doing philosophy and collaborating with the Leiden Astronomy Observatory, the Nanolab people and CERN on questions of visibility and objectivity in their visualization practices. This was great and yet for some reason the discoveries I was making did not interest my tutors at the Rietveld. Except for one, Nickel van Duijvenboden, who took an interest in my writing and helped me develop it further. In light of this, I graduated with a book, inspired by my lifelong interest in Borges, and went on to do media theory at Leiden. During both my masters, I challenged the academic limits presented there, by generating papers that were kind of unusual, experimental in nature, one might even say 'artistic'. Luckily, in this new context, the professors judging the quality of my words were more receptive to this.

In my new context, which is philosophy, I am 'cheating' all the time and taking stuff from other fields, such as ornithology or neuroendocrinology. That's the advantage of philosophy, it's a highly speculative enterprise which explores the stuff of limits. Sometimes, this annoys

my supervisors. I can't get rid of the urge to transcend--forgive this for sounding like it does, haha--it's too late for me now. It's the reason I chose philosophy in the first place: it transcends disciplines. Maybe this, my intuition, is best explained with a quote from Martin Luther King, Jr.: "In a real sense all life is interrelated. All men are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly. I can never be what I ought to be until you are what you ought to be, and you can never be what you ought to be until I am what I ought to be… This is the interrelated structure of reality." ("Letter from Birmingham Jail"). Ignoring the word "men" gives priority to the larger message. To focus on that word is to miss the point, though it's an important point: what and how to read? That's the type of interrelated awareness needed for talking about interdisciplinarity, the fact that every discipline, every age, every person reads differently. Communication is much more than the simple idea of information transfer, I don't understand why so much emphasis is put on that (in school tests, in political discourse, in big science, for example).

Collaborations with physicists, in particular, have been great. We would feedback philosophically, technically and artistically about all sorts of matters pertaining to visualisations in high-energy physics. To speak to what I just said, it was in the moments we together each assumed something else about the other one and were confronted with it that we found new knowledge emerging.

The question of, or the quest for, pure objectivity is a big trap. But unfortunately it's present everywhere. That idea was how my academic investigation got started: how do sciences which cannot interact visually, 'directly realistically', with their objects actually visualise them, and why? How does astronomy look at things it cannot touch? Is mechanic visualisation a kind of touch, perhaps? When I was finishing my first Master thesis I got into predictive processing as a possible elucidation on these questions. Predictive processing, as a

theory merging inputs from cognitive science, computation and physics, deals with a few simple yet challenging premises, first and foremost: action and perception are intimately bound, they're not different things but are actually pretty much the same thing. Following from this, perception is nothing but controlled hallucination. So, with respect to scientific visualisations, not only can we consider them hallucinations of sorts, but more importantly, we can consider them a strange kind of hallucination which determines what consensus looks like on the basis of the *predictions it wishes to make*. As many critical theorists have emphasised: representations reveal the agendas of their makers, predictive processing experiments with this in novel ways, philosophically and practically. This is very fertile ground. Among many other things, a lot of the intuitions of major philosophers like Kant and Hegel were actually right. Not to give bearded (or in this case shaved) men another pat on the back, but yeah, maybe a friendly slap on the ass. On the other hand, it generates a myriad more questions, which is what philosophy needs to keep growing.

In general, speaking of growth, the concept of limit is fascinating. It's something a lot of my research revolves around. It encapsulates an elemental philosophical drive. In a way, it's been a major question and complication for philosophy and science from the start, and pretty much all philosophers have recognised its importance (either by referring to the literal limits of concepts, or by framing the concept of limit under the guises of category, definition, substance, infinity, dialectics, difference and repetition, etc.). Right now it allows me to pose and shape questions in my research such as: what limits the bounds of intelligence (whatever intelligence is, right?) in the context of artificial intelligence? What are the limits of concepts such as 'bias' or 'evolution' or 'rationality'? What are the limits between different specialisations and how did they come about? Between neuroscience and psychoanalysis, between high-energy physics and computation? How does it help thought to be able to define these limits, and why? Is actually positing limits even possible or desirable? There are many more specific questions I could give as examples, these are the more general ones.

I see musicality for example, as a place where limits take on a role that is remarkably different than in most other realms, if to conceive of it (naively perhaps), as something separate; *delimited,* if you will, from other things. To frame it in literal terms: there's no limit to how many times a human animal can listen to something and enjoy it. What is more: every time they listen to it, it remains the same and yet takes on a new dimension. We discover new things yet also forget things about it, it changes them as they change it. It's so simple yet so baffling. There are records I've listened to hundreds and hundreds of times. To an extent, all art functions similarly. Personally, I find music achieves this immanent, repeatable, transforming eternity more than other forms of art. In other ways, speaking to the limits of oneself and the other, I think music is one of the only things that achieves collective intentionality at the snap of a finger, quite literally. The museum or the cinema doesn't necessarily exist so others can go to watch others watching stuff, at least that's not what I do. A live music show, however, exists to experience something collectively. It is an altogether different experience to listen to music alone, and even then accompanied by the musician/source of the sound, the 'physicality' of which makes it something far beyond a voyeuristic experience, which I associate more with film or visual art. It's different for everyone though, I'm only referring to what I experience and not to some sort of universal law, obviously.

To stay on the topic of musical amazement: anyone who's made music with other people, in a choir, in a band, or even aligned themselves rhythmically with others in sports or similar activities can attest to the fact that it triggers some elemental gut response that is hard to pinpoint but easy to recognise. A lot of people have talked about how, perhaps, music gave way to things like sociality, language, tool-making, etc. Perhaps in these experiences, tapping into that, into a basic synchronisation that has a long history, shows an ancestral memory stored deep within the human animal.

The concept of listening is challenging. The conference I run, Regenerative Feedback, had as the first iteration's subtitle "On the emancipatory potential of listening". Meaning, while I believe there's potential, I'm not sure it is (or should be) obvious that human animals are *capable* of actually listening. Critique of the scopic regime underlines how vision can be dominating, clinical, detached, sovereign. Listening definitely offers an alternative. It requires **one shuts up**. Colloquially, it is associated with lending an ear, with helping, giving space to others. These things are fundamental nowadays, where the basic common denominators and strategies in a lot of human activity seem to be 'move fast and break things' and 'shout as loud as possible'. It may sound idealistic yet possible, or potentially possible!

To be honest, the biggest challenge is, on most days, the depressive abyss of disappointment that has always consumed my optimism. Why is the environment going to shit? Why does exploitation exist? Why does advertising eat brains? Why do politics revolve around animosity, suffering and negativity? The list goes on and on. It's paralyzing.

At the same time, I owe it to the ones who broke their backs throughout history to achieve a lot of the things I enjoy and mostly even blind to: to keep on keeping. The challenge is to recognise these things, protect them, and evolve them.

The easy answer would be to say that, since philosophy deals with the development and refinement of concepts, all other disciplines can benefit from querying philosophy when they need to advance their conceptual research (which is, to say the least, very often). Just like querying mathematics when in need of numerical refinement. Since concepts develop historically, I think the biggest trap technology can (and does) fall into, mostly, has to do with forgetting. Perhaps forgetting is the wrong word, but it’s not ignorance either. Take the philosophy of Heraclitus: someone who didn't live in his time and/or was exposed to his

thinking cannot be blamed for forgetting him. The biggest danger is the inability to open up to history, to develop a conversation with others about history and its concepts. What philosophy does, and no other discipline does is, is being critically, conceptually attuned to everything that came before. Perhaps I'm painting too good or too conscious a picture of philosophy. I do believe it has the potential to generate crucial conversations, especially in the technological realm. But whatever we do: let’s keep a mathematical checks and balances of beards and butt-slaps.

Born in Buenos Aires in 1988, Sonia de Jager is currently a doctoral researcher at Erasmus University, writing a thesis about the philosophy of artificial intelligence. De Jager also works at the Willem de Kooning Academie as an art theory tutor and runs the yearly music and philosophy conference *Regenerative Feedback.*