

## Introduction

My area of research revolves around touch(ing) bodies (animated and inanimated) in relation to (haptic) technology. While these are broad concepts I will try to frame them in order to get to my research question.

I regard Touch(ing), both the actual act of touching and getting touched, as opening up or narrowing down the 'space – in – between'. This can be seen as a metaphorical concept based on formal knowledge, while - as science has shown us - we are actually unable to really touch someone or something.

If we zoom in on microscopic level,  
SLIDE 1: an atom

SLIDE 2: repulsion  
atoms are not able to touch each other, there is no actual contact involved. What you sense is the electromagnetic repulsion between the electrons of the atoms that make up your fingers and of those that make up whatever you touch. All we ever feel is this electro-magnetic force; negatively charged particles pushing each other away.

SLIDE 3: "Repulsion at the core of attraction" (Barad, 2012).

In other words, touch(ing) is always space-in-between, a fluid, *queer* space that by nature can't be closed, formalised or fixed. This leads to my first hypothesis: when touch(ing) is forced into one solid and outlined meaning or purpose, it is a reduction of our perception and our individual modes of interaction with the world around.

However, in practice, while touching someone or something, I most of the time experience borders, not immediately open, fluid spaces. According to Certeau that is a matter of perception. He writes about the paradox of the frontier:

SLIDE 4 "the points of differentiation between two bodies are also their common points. Conjunction and disjunction are inseparable in them. Of two bodies in contact, which one possesses the frontier that distinguishes them?"

In other words, the moment I touch something or someone, the points of contact no longer belong to me nor to the 'other', these points of contact become a third element, an "in-between" or a "space between". Then it's the question if these points of contact are experienced as fluid, in-between or if this space gets colored, pushed in a certain direction, controlled.

SLIDE 5: Is this third space experienced as a border  
With one meaning that is solid, outlined and possessed.  
or as "a bridge" (Certeau, 1984)?  
That can be traveled over and by doing just that, it opens up new viewing points.

So in short I am interested in influencing the turning point, when touch(ing) reduced to one single purpose, meaning formalised for one goal can become an in-between space to be explored and where new things may happen.

I believe this is important while – getting to the second topic of my research - new technologies are conquering the terrain of touch, and the big industries behind these developments can't sell open and uncharted terrains. They want the experience/interaction to be formalised, fixed and repeatable. So lots of money is put in easy accessible one dimensional touching, like your trembling phone to inform you there is a message or the sliding of your finger over your ipad to turn a page. Other more sophisticated haptic devices are aiming for 'real and exact' technological *simulations* of touch, mostly to induce joyful and agreeable experiences.

SLIDES 6 - 9 There is for example the Tesla Suit, a full body suit that comes with haptic feedback, motion capture, climate control and biometric feedback systems, so far the missing link for 'complete immersion' in VR. Think of wearable devices that send touches, handshakes and even kisses over the internet (Kissenger), care robots that caress the patient or sex devices like Realtouch that combines a vibrator or masturbator with synchronized bodies executing sexual acts in online videos.

In this technological interaction it is clear that there is no possibility to respond to or explore the touch(ing) as free as one might prefer, while the device would stop to function properly or the created illusion is broken. So political and commercial parties influence and are dominant in what content these touches convey. As our body is disciplined and trained through repeated interactions with these haptic technologies, the question is

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if and how these devices are (re)shaping our sensation of touch. What normative models of bodily users are expressed and enacted in the space-in-between, that is induced by haptic interfacing?

Looking at society it seems as if people have become more comfortable to be touched by technological devices than 'the physical thing' - as facebook shows - many people share their intimate emotions via mediated manners, using an emoticon to give a kiss or share a hug. Especially after the MeToo discussions the inclination to physically touch seems to have diminished. As a result of changing morals and ethical voices, I experience fluid, natural physical interaction between people has become rare, stiff and awkward.

However I also believe that technology can help to raise our attention to Touch(ing) as a very important part of our perception that has long been dominated by sight or hearing.

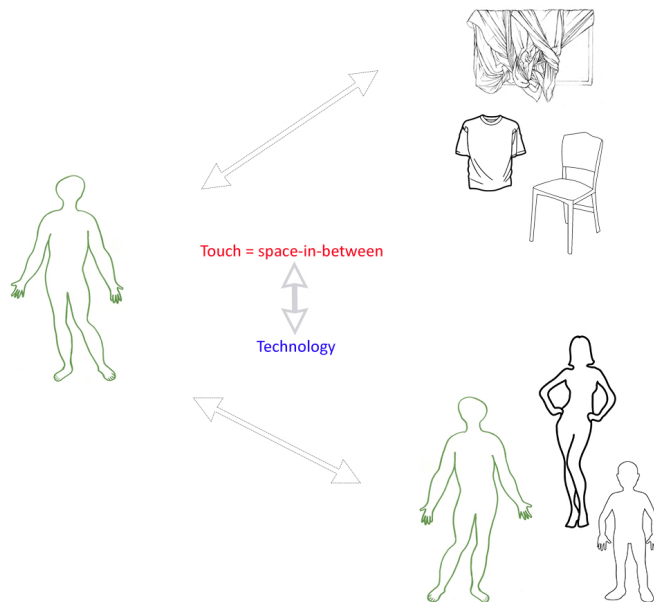
SLIDE 11 "Our tactile experience is our primary experience of our minds. We live by feel."(Keltner, 2016)

The question is what artistic strategies are usable to explore this?

Leading to my main research question:

SLIDE 11

What artistic strategies can be executed to explore the interaction between Touch(ing) and technology, regarding Touch(ing) as space-in-between that can open or close down its meaning. When (and why) are the points-of-contact between (in)animated bodies experienced as a border and when as a bridge, inviting to wander and explore new ideas?



In this research I particularly want to look at the role of language? and aesthetics?

I quickly want to say something about the relation this research has to my Artistic Background

I see this research as the logical next step with regard to my artistic practice, that I describe in the book *Performance\_As\_Interface | Interface\_As\_Performance* (van der Vlugt, 2015, pp 13):

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“As an artist I have been creating performances and interactive installations that enable the participant to experience how technological interaction is built and subsequently impacts our communication. What does it mean when the body gets extended, hybridised and delimited through technology? The participants are invited to alternate the position of performer and spectator, which enables them to unveil, sense and discuss actual emerging body concepts.”

The artistic works in this book were created in the period 2006-2014 as such I have been inspired, influenced by and critically engaged with technological innovation for almost 15 years.

In my artistic works Touch has already been very present, as the need for a haptic interface to direct the participants attention to the body, has been one of the requirements to convey the themes of my work.

Slide 14 – 18 : series patchmaker; with the performer as interface, the audience had to touch the performer to start the communication and trigger the memory of the body  
Slide 19-22 PPI's physical non-wearables, this time objects to touch as an attempt to get these incorporated in the participant's body schema

Slide 22-25 Duets: performance with two dancers in which the performers were communicating via touch over distance, by touching their sensor suit they would communicate with each other in a mediated manner, unable to physically touch each other

However in this earlier research, I didn't focus on how exactly touch, as embodied sensation is influenced, is changed or supported by technology. Nor I explored what other (aesthetic) qualities and functions Touch(ing) may have, what novel tactile sensations can be created, how the moment we touch or are touched, can be opened, its semiotic and embodied meaning explored and the interaction with the device performed.

By reading new texts, reciting and adding on specific parts of my own texts, I hope to deepen and broaden the earlier acquired knowledge.

## Methodology

My research methodology is closely connected to Brad Haseman's concept of Performative Research, which manifests itself by doing artistic interventions, whereby makers, researchers and audience meet and exchange, and can experience new collaborative forms, share and experiment together."

For me A live experiential set up is necessary while my work is interactive and needs an audience to take action, to perform, to finish the work.

(With the term performative, I paraphrase Butler; who underlined the idea that we perform our bodies, in other words our bodies shape our perception<sup>30</sup> and as such need to be physically present in the set up; as a result each situation will not only represent society but will have the ability to build its own unknown reality.)

This experiential and performative set up facilitates the participant to overcome the sort of interaction in which body and technology are seen as two separate unities, but surrender to what Barad calls 'intra action'; where knowledge is fluid and constantly changing in the moment.

(Following this concept of Barad; knowledge can't be separated from doing, words can't be separated from objects etc.)

In short as I see it; assembling strategies for researching Touch(ing) in relation to technology, can only be done by putting people in 'direct intra-action' with other bodies while expressing (in words, gestures, mimicry, movement, choices etc) what they experience.

(The second methodological pillar is situated within the larger framework of artistic research.) As I research in and through my artistic practice the roles of Artist and Researcher are constantly merged. While designing the process, conceiving the workshops, co-design sessions and creating the interactive performative installations, I also observe the process and translate the outcomes to others through/by means of videos, texts, articles, website and documentation.

In doing this I use theories and methods from multimodality, sensory ethnography and the arts.

Practical, what does this mean for the following year?

I will engage with three parallel strands, create three trajectories that are looking at the topic from different angles.

The first is the development of my own artistic work. As a metaphorical translation of the space-in-between, I am currently working on large pieces of knitted electric wire that can be hanged in between bodies or a body and object.

Inspiration for this work was the first research on touch that was triggered by the discovery of electricity. It was clear that only the human skin was able to register the charges of electric generators and batteries; no other senses were able to achieve this as precise and accurate as the skin. This inspired me to my explore electric wire as an extra skin, a material balancing between fear and attraction as electric shocks are also used in medical treatments.

The interesting quality of the material is that it makes it possible to register when and where a person is touching. One can touch the wire but also to go through the holes and touch the other or an object, as such it becomes possible to follow the trajectory of the touch(ing). But more important the wire hanged in between makes one very aware of the act of touching. What unknown ideas, fears, longings (Kristiva) and fantasies are stimulated / evoked when we really interact with our surroundings through touching.

The intention is to collaborate with the researchers of In-Touch, Ucl in London and Falk Hubner as sound designer.

The second strand is connected to my collaboration with the research center of AvansAcademy St Joost.

Its starting point is research done by the military, who early understood that touching the skin was an endless and open arena of communication that could be manipulated in a very discreet manner, while the skin is always 'on', we look into a self made version of the navigation belt<sup>16</sup>

We are currently researching the tiny motors vibrating around ones waist.

Is it possible to slowly incorporate the belt in our body schema? By opening up the space-in-between and let the 'solid' border of our skin evaporate?

When this happens, does it become possible to incorporate other 'strange' objects as part of our bodies?

The space-in-between as playing ground not starting from the ancient ideal concept of the body, but opening up for new body images and schema's. What does this mean for our sense of self?

(What are the various (tactile) illusions that are induced by applying an device to different sites of ones' body? Can we explore anew what Touch can make us experience and what stories it can tell?)

The third strand is more a practical platform, as I see my teaching practice also as informing and exploring my research, a lab to test out concepts in practice and engage them in certain experiments.

I will tutor and give workshops and masterclasses to

November

4 x 3 hours students BA Interactive Performance Design, HKU Utrecht

4 x 3-4 hours Students BA Fine Art and Design in Education at Artez Zwolle

February

2x day Students MA Music Performance Artez Arnhem

workshops with students, engage them in certain experiments, practical platform , teaching practice is informing and exploring, lab to test out concepts in practice.

Ok that's it!

