#### Marloeke van der Vlugt

#### (author of the essay *Smart illution*)

# #1. We read your essays in the *Enter the Writers*, and we noticed you are interested in the Internet of Things. What was your first experience with Internet of Things?

It was about 8 years ago, when the concept got more attention in Holland. I read the *Internet of Things* booklet by Rob van Kranenburg, that really triggered me because it was the first time that I started to think about the physical environment collecting and communicating information about our behavior. Of course, we knew that the internet was seeing us but reading the booklet made me realize that the environment could actually follow our data - through and in between objects like clothing and phones - and also react to this data, which was really mind-blowing. So how can you implement this interaction, in a way that is constructive and not (only) commercial, that it becomes interesting and a kind of empowering?

To experience and research the capacity of RFID (also in your OV chipcard), I created the performance installation DUETS<sup>1</sup>. Every member of the audience received his or her personal RFID chipcard with video and audio data collected during the performance. The RFID card had to be put in a small case connected to the chairs on the tribune. A sensor measured the distance between the back of the chair and the back of the person sitting on that chair. As a result, by moving on the chair, the audience was able to influence his own video- and audio-files and put the lights on stage on or off (all connected to the RFID card), like this communicating with the live performer on stage.

My first daily life experience with the Internet of Things was the thermostat, which you can access through the internet, using your mobile phone. It is not much different from doing it on the machine itself, but one can access it from a distance and even connect it to other devices. This may lead to a lot of problems. What if the internet is offline and you want to change the temperature? Can other people hack your device? What data is collected and where is it stored?

At the moment, it is interesting to see what Waag Society<sup>2</sup> is trying to achieve by giving smart-citizens-lab, smart devices to citizens to measure their environment. So, as a participant you would have a little system hanging at your balcony that measures temperature, sound and pollution. The data is then communicated and interpreted via the internet enabling us to know much more – and in real-time – about our environment than before.

## #2. Which products in your house are not connected to the internet, but you would want them connected?

I have to admit that I am a bit scared of taking those devices into my house. I have probably read too many stories about modern houses heavily installed with smart devices that turn crazy, and become impossible to control, assembling data and putting it up for sale. There are stories about new tenants that found their rented houses difficult to maintain, while they were not able to reprogram or even

disconnect some basic gadgets. How to handle when the lights switch on at 7.00 AM every morning, the coffee machine makes coffee while you want to drink tea, or the heater is set to 28 degrees and you end up living in a sauna [laughs]. I am more interested in the functioning of the Internet of Things, and at the moment, research and try to formulate a future vision about it. For sure, it's not going to be done as it is now via the internet. Internet as it is, is not functioning and will have to change first (think in the direction of Blockchain<sup>3</sup>).

## #3. Have you ever had a negative experience with the Internet of Things?

As I said, I don't possess Internet of Things devices that one can buy at the store. I do find them fascinating and don't oppose to them. The devices I use for my interactive performances and installations, I design myself – in collaboration with Tim van Elferen. It is good to see though, that the discussion about how Internet of Things should be designed, is starting. I just read there is an organization called The Internet of Women Things<sup>4</sup> that is looking at the female perspective on home interior internet-of-things gadgets. Most probably, a female perspective on the Internet of Things in the house will differ from a male perspective.

### #4. Will the objects with Internet of Things technology take over or make us stronger?

We are growing towards a world in which everything becomes moldable and interactive. Things and objects will come to life and have their own behaviour (think of Siri). There will be no border anymore between our physical and the digital world. While there are so many possibilities, the question is, what to do? In what development do we want to invest? What are the ethical consequences? What kind of rules do we need? A lot of questions, but not so many answers yet. At the moment, I believe it is more about researching than giving it shape already. That's why, if we step in now, we can still have influence on how we want our environment to behave. If we leave all these decisions to the big companies, it becomes scary. For them it is about collecting our data and selling them, making money out of our digital daily (inter)actions and behaviour. We should rethink all the possibilities. We are now on the verge of re-designing a new society. On every level, things are breaking down and a lot of small anarchistic movements are set up. In one direction, there are people that take extreme steps by turning their backs to technology, by not being connected to the internet and doing everything in an a-technical manner. I chose another direction, as I believe technology will be developed further, no matter what. For me the question is: how to think about a sustainable and social environment incorporating technology and - as I mention in my essay - not just be seduced by the possibilities? Some functionalities can be outsourced to the machines, other things belong to human action: the Do-It-Yourself mentality of the Fablabs crossed with the knowledge of craftsmanship.

### #5. When I mention Virtual Reality, what is the first thought that comes to your mind?

For a long time, I felt a bit opposed to the virtual reality devices while I missed a sense of "embodiment" in this experience. Let me explain this. At the beginning of my research into the relationship between body and technology, in order to connect to the digital world, one needed a keyboard, mouse and screen. I made a few projects that combined the virtual world *Second Life* and

the physical world on stage using laptops. The audience and the performers both had their own virtual avatars. They really identified with their virtual alter egos and were enabled to communicate with each other via these digital characters (performance installation *AKI ANNE*<sup>5</sup>). However the laptop and screen were needed to interact. As a reaction, Embodiment became an important topic in my work (and in society too). How to incorporate the whole body with all its senses instead of only eyes and hands, in the interaction with technology? The start of Kinects and balance boards; physical and haptic devices that enabled the participants to physically connect to the digital world. I created objects that had a variety of sensors embedded. These objects invited the audience to interact with them, in order to communicate and connect to the digital world and at the same time stimulated them to focus on their own body (see example *Cylinder\_RollingStairs\_Seesaw*<sup>6</sup>).

I missed this Embodiment in Virtual Reality, while the immersed experience, wearing the Oculus Rift was again restricted to the eyes and ears. Putting on VR goggles, it enabled me to only look around in the virtual world, not move around there. I felt nauseous after the experience. It was because my head was immersed in the digital world but my body was still at the same place. The feeling was similar to being carsick, where the body is not able to catch up with the speed and the surroundings. Mind and body become divided. After that, I stayed away from VR for a bit. As a reaction to this experience, I created an installation in which only parts of the body, like the arm or the head, were connected and expanded into the digital reality: by wearing an interactive glove it would give your arm an immersed virtual feeling (*PPI 1-3* <sup>7</sup>). However, things have developed and now you can actually walk around in digital space while wearing VR headsets, creating a more embodied experience. This way, the disconnection between mind and body doesn't happen anymore. The installation *Treehugger* is a good example for this, in which it is possible to see, listen and sense the digital environment with the hands and via the back (small motors in a backpack), among other bodily sensations. It gets more interesting for me now!

### #6. Can you share with us, some of your interesting finds at the Cinekid Medialab?

I experienced an interesting artwork at the Medialab called *Tafelgeheim*, a virtual reality installation, that features a drawn animated conversation between a father and a daughter. One needed to sit at a table opposite another participant. I had the role of the father and saw my daughter sitting in front of me. While the environment was drawn it became somehow easier to immerse oneself into the story, to have an embodied experience although it was impossible to move or influence the images. The two characters start to converse about owl pellets, but then get swallowed by memories of their deceased family member Lisa: her sister, and his daughter. At one point, when the father is talking, I felt myself sinking into water. A few drawn lines had so much effect! It was a powerful experience since the feeling of sinking into the water was a-like being drowned in your sorrows.

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#### Bio

**Marloeke van der Vlugt (1971)** is an artist and researcher. She studied Theatre Studiesat the University of Amsterdam, scenography at Goldsmith's Academy in London, and choreography at the Laban Centre in London. Since then she has developed interactive and performative installations. At DasArts she specialised in the relationship between technology and performance art. She is a tutor at the Utrecht School of the Arts. In 2015 she published her book, *Performance as Interface | Interface as Performance*.

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#### Colophon

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