

**Statement**

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## Position in relation to newer technologies

Before I started my study in graphic design, I studied photography. I've always liked to capture my surroundings and I enjoyed creating and working with images. At some point during my projects I realised that designing the photography books at the end of the project fascinated me more than the photos in them. I found that I'd rather create an image, than just capture it. That's why I decided to study graphic design. I didn't really know much about it, I thought it was all about print. I saw it as a very technical and 2D craft but had no idea what it all could be. I wanted to make posters, books and logos, the things everyone thinks a graphic designer makes. Inspired by the posters of parties I used to go to, I applied to this academy.

In the first year my view completely changed. Graphic design became a bit confusing, it seemed borderless. I was exposed to different types of techniques, tools and concepts. I started to doubt if I knew the definition of graphic design. I started asking a lot of people, my classmates and teachers, but also random people in my environment. Yet no one could really explain to me what I was doing. So I decided to create my own craft.

At this point I would not consider myself a *graphic designer* as I think the term does not really apply to what I do. Or what other graphic designers do for that matter. I try to explore the boundaries of design by either mixing the analog and the digital world, or trying out new media or technologies. By doing so, I've learned new possibilities in creating a design. When working with other (or new) media you are able to let data or chance influence your work, rather than your own concept or aesthetic view. I have always been inspired by such projects, commercial, artistic or informative. I began to understand that maybe this is actually what graphic design is.

The term *graphic design* was first used by William S. Dwiggins, to define those who combined different skills. Those who

used various methods to create a visual representation of ideas and messages. Making information understandable. But it's not just visual communication, it's always trying out and discovering new media, new methods to visualise those ideas. In that definition, graphic design seems more about exploring. A graphic designer might as well be a scientist. Discovering new ways to create and enjoy images.

The last biggest shift in the graphic design culture was the rise of computers. It enabled designers to instantly see the effects on a screen. Everything that once was manually executed could now be done very fast and easy. There's still some debate on whether computers enhance the creative process. The fact that it's made so easy and fast could also lead to not being able to isolate the best design or not seeing the bigger picture. But nevertheless it was a revolution. Designers then were very sceptical about it. Most of them thought it meant the end of the designer. When actually it opened up a new world with more possibilities and more jobs.

In the past ten years, the computer has thoroughly transformed the practice. The rise of new media makes people scared again. Everyone always tend to lose their minds when a new technology arises but the rise of computers didn't kill graphic design either, so won't the rise of new media. I personally rather embrace newer technologies in design, but I'll always stay wary of. History usually tells that changes in the art culture will lead to new possibilities. Only time will tell how great those changes will be. The thing I'm a bit skeptical about is the endless range of free templates and presets for laymen to, for example, build your own website. In the last years it's made very easy for them to design something. There's a lot of tutorials, presets, open-source programs and templates, there's no creativity needed anymore. You see that people become sceptical again, can anyone design nowadays and will this be the end of the need of professional designers? I was so let down after I finished writing almost all the code for my website, spending hours on it, and then seeing the new website of a friend of mine the week after, which was made in Tumblr in not even 5 minutes. And actually looked better than mine.

But then again, they'll never be able to create their own customised design.

On the other hand, you could also say that this will lead to a growing need of design of a higher quality. Because more and more people become aware of and interested in good design, clients will look for people who can exceed the sameness. Or maybe we are in a new revolution now, the second computer revolution. As some sort of reaction to this shifting design world. A revolution in which we, the designers, not only use the computer to visualise our designs. But also try to understand it, to hack it, to speak its language. We use electronics in a whole new way. This way of designing is no longer linear and 2D but flows in all directions. We use something that is not understood by the mass, maybe to save ourselves.

So, how newer technologies will influence the design culture, can have both a positive as a negative effect; either new shapes or jobs will appear, or the need for professional designers will decrease, because everyone can design. People think the future may be the end of the need of graphic designers because it's made very easy for laymen to DIY at home or give even more possibilities. I don't think the idea of the craft is realistic. Its definition, after all, is someone who combines a lot of disciplines. And those disciplines are being invented and shaped to our ideas every day.

### Tools of the trade

I started this project focussing on the incomprehensible amount of data we created. Big data is something that fascinates me a lot, yet I'm rather scared by it. The idea that we, human beings, created something that we cannot understand anymore is inconceivably. I saw a documentary once on wall street that I will never forget, it completely changed my view on our society and technology. It tells the story of the so called flash crash in 2008 on Wall Street, a financial meltdown from which markets amazingly recovered in only twenty minutes time. It investigates the relation between man and machine, how we humans wrote algorithms to replace people, how those algorithms rewrite themselves and what effects that has.

Thus, big data fascinates me a lot, I want this to be the starting point of my project and I want to explore this. Can I maybe discover new data? Do plants carry data for example? Can I detect this to make them say or do something? To determine what kind of data I'd like to collect, I immediately thought of the nature-nurture debate; *the discussion on the origin of the characteristics of an individual*.

There are several viewpoints on this topic, ranging between two extremes:

nature: all the characteristics of an individual have been determined by genetics or;

nurture: all the characteristics of an individual are determined by its environment.

I'm going to proof my personal viewpoint, which is: nurture.

Somewhere between an inanimate object and an animal exists the plant. Plants live in a space beyond our consciousness. Plants are essential for our existence, they can feel pain and communicate with each other. They adjust to changes in their environment (acclimatisation). They behave in mysterious ways, can we think of them as having a form of intelligence of their own? I remember the writings of Roman poet Ovidius I had to read in high school:

*"The god of light no longer visited Clytie, nor found anything to love in her, even though love might have been an excuse for her pain, and her pain for her betrayal. She wasted away, deranged by her experience of love. Impatient of the nymphs, night and day, under the open sky, she sat dishevelled, bareheaded, on the bare earth. Without food or water, fasting, for nine days, she lived only on dew and tears, and did not stir from the ground. She only gazed at the god's aspect as he passed, and turned her face towards him. They say that her limbs clung to the soil, and that her ghastly pallor changed part of her appearance to that of a bloodless plant: but part was reddened, and a flower like a violet hid her face. She turns, always, towards the sun, though her roots hold her fast, and, altered, loves unaltered."*

Clytie was a water nymph in Greek mythology that had her heart broken and stripped naked to sit on a rock for nine days without food or

water. She stared into the sun and eventually transformed into a sunflower. According to folk wisdom the sunflower turns its head towards the sun. Of course these all are myths but I think they are a beautiful inspiration.

There are actually plants that do grow into the direction of the sun. The idea of planting having senses is not something we discovered recently. Darwin was already talking about it in his book 'The power of movement in plants', he says there are not many plants that do not bend towards light. Around World War II, scientist discovered that they could manipulate when plants flowered simply by turning the lights on and off. Which proved that plants do not measure the length of day but the length of light exposure. This technique is used by farmers for example to have enough chrysanthemums for mother's day.

I've found a lot of experiments done in the last ten years that explore plants potentials. Myth busters for example, set up seven small green houses. Four of them were set up with speakers playing endlessly looping recordings. Two of negative and two of positive speech. A fifth with classical music, a sixth with heavy metal and one for control. The two with speech grew better than the control (regardless of whether it was positive or negative). The plants with classical music grew even better but the ones with heavy metal grew the best of all. And in a Duke university laboratory, they discovered that plants actually communicate with each other through vibrations. Though they are too low or high for the human ear to hear, they send root-to-root signals. They can also 'hear' a bee's buzzing to release a pollen at the right moment. Also the environment in which a plant is raised, affects how well it copes when it's transplanted into another area. You could say that they have a memory.

*-overgang: voorbeeld plant / technologie?-*

With our constant urge to design the world around us, we achieved to combine the impossible. Two opposites: nature and technology. The human impact can not be missed; the climate is changing, we can manipulate genetics and even control some parts of the weather. We change, and nature changes with us. That does not necessarily

mean we are in control, but then, who is? Where nature used to be an unpredictable phenomenon, we are more and more in control.

Our technology on the other hand, is something we used to understand but is now having a nature of its own. It's unpredictable and complex. Did nature and technology trade places? Or did they merge? Nevertheless, our relationship has changed. We tend to think technology is something invented by humans. That evolution is as far as we can go. But maybe technology was the next step in nature and we're just a part of it. Maybe nature intended it to be like this.

*-meer informatie hierover-*

Fascinated by the idea of plants having senses, of them knowing what's going on around them and even adapting to that, I want to see how a plant reacts to its environment and give it the opportunity to communicate this. Looking at synthetic biology, plants become custom made organisms to which all sorts of characteristics can be added. I want to give plants extra senses to be able to digitalise their findings. I looked at two contradicting places that were of importance for me. One very quiet, the other extremely loud. I wanted to see how the plants I found there react to their environment. Therefore I recorded the sound of these places and played them to the plants, which I gave sensors to see how it experiences these sounds. These values become the input and source of my design. These plants draw what they experience.

*-laatste alinea langer-*