

Reverse Reality Shock

Digital Craft: Tools & Trade

Abstract

Technology turned our society upside down. Its changed our environment and it changed the way we interacted with one and another. Smartphones, and the Internet changed how we shop, do financing, dating, gaming, sharing: videos, tweets, music, pictures and the news all instantly. The things we have accomplished in a few years were unimaginable 20 years ago.

Now imagine another change, which will redefine are experiences of such perception, that people need to upgrade their mental schemata to accommodate this experience. A technology that won't only change the way we interact, but gives rise to an alternative reality. An archetype spaces that we can construct with our minds.

It may sounds like science function but it's ultimately the goal virtual reality will bring us. It will take some time to be perfected. But big corporations like Facebook, Samsung, and Google will do everything in their power to make this become real. My question is how will this affect us? Do these corporations have the right intentions in mind? Will they make the tool for us to realize our full potential or is it radar a new way to enhance their sells and extract data from us? Technology is double edges sword. We leave in the digital age with an industrial age mentality.

For my research I have studied a possible outcome of virtual reality in our current society. How will it affect us on a personal level? I forged the term 'Reverse Reality Shock': It the process of re-adjusting, re-assimilating and re-aculturating to the real world. Meant for people that have become custom to the virtual world.

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Introduction

Briefing

How can you integrate Digital Craft into your personal practice?

The notion of a 'tool' in contemporary artistic practices is much wider than a simple hand-held implement. Tools can move material as well as ideas. Tools can fabricate as well as disseminate. Knowing one's tools (how they are defined, designed, and put in effect) not only gives one agency, but often becomes the crux of one's artistic practice. This holds particularly true for digital craftsmen.

The current range and access to new digital instruments — from dozens of desktop CNC technologies that can make almost anything to hundreds of sensors that can measure pretty much everything — have given rise to a new wave of artist-built machines. Moreover, recent critical practices that break away from the more commercial and industrial (affirmative) applications have brought a new spectrum of objects that instrumentalise design's potential as a discursive tool.

Whether milling-out matter or carving-out meaning, this project asks you to both envision and build new tools for your practice. In this quarter you will define, design, and put into effect a new tool or medium that will strive for two main aims: it will carry your traces and signature as maker, as well as apply/reflect on the technological possibilities of our time.

Background

As a kid I loved science fiction. The ideal that someday all of these imaginary things good be real compelled me. A lot of this visual imagery was possible with "Computer-generated imagery" (CGI). I studied "Interactive Design" at SintLucas and continued my studies at WDKA department of "Animation". Most of my studies I work with CGI, building 3D models, animation, rendering, compositing and so fort. In the years exploring these tools it surprised me how fast the technology was changing. Every week it felt like Christmas. So I was wonder what the future of CGI be like?

Fascination

My fascination with CGI is that it can be used for Live-action and animation. CGI can look realistic or very abstract. It's a very powerful to for storytelling. Often with storytelling, the viewer is following a 'narrative'. This means the story got a beginning, middle and an end. For example 'Lord of the Ring'. Frodo is asked to destroy the ring (beginning), walks all the way to Mount Doom (middle) and troughs the ring in to the fire (The End). But not all stories have a clear narrative. In Game of Thrones the story is scattered over multiple characters each following there on narrative. Sometimes they bump in to each other. It's not about reaching a particular goal at the end. It's about living in the moment, in the now. I believe this is a very powerful way of storytelling, because that's how it

suppose to works in real life. With Virtual Reality it's the same, only now the viewer can explore the space on its own. They're in controller of the narrative. In Brooklyn New York these a theater project called 'Then She Fell' a fully immersive, multi-sensory experience in which only 15 audience members per performance explore a dreamscape where every alcove, corner, and corridor has been transformed into a lushly designed world. Inspired by the life and writings of Lewes Carroll, it offers an Alice-like experience for audience members as they explore the rooms, often by themselves, in order to discover hidden scenes; encounter performers one-on-one; unearth clues that illuminate a shrouded history; use skeleton keys to gain access to guarded secrets; and imbibe elixirs custom designed by one of NYC's foremost mixologists.

In Douglas Rushkoff book: 'Present Shock' he talks about this type of narrative, in the real word and the digital. He called it Narrative-collapse. Digital technology helps us to live in the now. It was meant to give us more free time, but instead it became a 'always ON value & time extractive technologies'.

Douglas : *"We are told that we're living in an attention economy. Where web sources are infinite. But they're our just so many human eyeball hours a day. It's a real measurement to see how many people can spend time on your website"*.

I like to explore this ideal further, but for virtual reality. Find out what the possible outcome could be for people how are immersed in a virtual environment for to long. I'm interested in this because I think virtual reality will change the way I work as a CG-artist. Already I'm producing digital media and virtual reality can be very beneficial for CG-artists.

Research

UI design

At the start of the project I was interested in how user interact, mainly for virtual reality. An article called 'Immersive Design: learning to let go of the screen', Matt Sundstorm discusses how virtual reality has evolved in recent year. The resolution of the screen got better, head tracking, visual processing, ergonomics and frame rate. Bind this all of these technologies and research together and voilà a new industry is born. Corporations like Facebook, Sony, HTC, Samsung and Valve are realising their model in the coming year. Developer versions are already realised, but are hard to get. If you're looking for a cheap alternative, buy Google Cardboard for a few euros. Place your smartphone in the cardboard and you're got a very own virtual reality experience.

Of course this is not the best experience. Even the first consumer versions won't be that great, but we can expect in the coming years it get better and better.

But what about the software, how are we suppose to use it? How will we interact with it? This question bothered me. I found out that people are still figuring out how we will use these devices. It like when the Internet came out. Website used to be very user-unfriendly. It was just text with a few images and hyper links to other pages. Through out the years designers created a language, with rules based on research, for example tracking eyeball to see how people scans to pages.

"Two of the most important characteristics of good design are discoverability and understanding. Discoverability: Is it possible to even figure out what actions are possible and where and how to perform them?" (Don Norman)

Now a day the same thing is happening with VR. Virtual reality will redefine how people interact. In the article 'Immersive Design' Matt talks about three types of interaction we obtain as human.

The Savannah:

The oldest of interaction models. We can see everything, we are grounded. Content obeys the space. Objects in the present are close at hand. The future is on the horizon before us, the past is behind.

The Shop:

Like the savannah, the shop implies a space that you can move around in but with a higher level of density. Content can be locked to the walls or planes inside of a space.

The Abstract:

The last 40 years have seen the rise of the digital landscape; a two dimensional plane that abstracts familiar real-world concepts like writing, using a calendar, storing documents in folders into user interface elements (UI). This approach allows for a high level of information density and multitasking. The down-side is that new interaction models need to be learned and there is a higher cognitive load to decision making.

The most obvious way would be the first, that how we did it for century's. Are

biology is programmed to function in this type of environment. In VR you could simulate the environment like in the real world, but at the same time new possibilities are on the horizon. In a virtual space you're not bound to the rules of physics. For example you're not forced to stay on the ground, you could fly or even teleport. Interacting with objects can be different too, they can be grabbed from a distance, duplicated or put in a bag regardless of the size or weight. The way we interact in VR will be significantly different from the real world and so it will be more abstract like the digital devices we have right now. This can turn out to be very problematic.

Good & Bad Design

In an article from Don Norman “How Apple Is Giving Design A Bad Name”. Apple used to have very user-friendly design. Not because this was to be a gestural interface, but because Apple simultaneously made a radical move toward visual simplicity and elegance at the expense of learnability, usability, and productivity. Even your grandparent could understand it, but this is now longer they case. Throughout a series of updates Apple’s design changed drastically. It became more minimal. Icons have changed and lot of action still exist, but are hidden from the viewer. The text is so thin people with bad eyes have a hard time reading it. So instead of user-friendliness, Apple has striving for beauty. Recently I borrowed an Ipad to see for my self and even I could figure it out. I downloaded content from the web, but could not figure out where it was saved. I didn’t even know what app to use to show the downloaded content. I tried connecting it to my Macbook and had to update Itunes. What I didn’t want that, because they’re always changing the layout and why must I use a music application to view the content on a Ipad? Cal me stupid, but I was so frustrated with everything I never want use an Ipad ever again.

Don Norman explains in his book ‘The Design of Everyday Things’, people often blame themselves when they don’t know how to use a certain devise. Electric devises are often built & designed by engineers and programmers. These kinds of people think in a very logical way, almost machine like. This is very problematic. People aren’t logical beings, but emotional driven. When we try something out and we fail we get flustered or even mad. Engineers or programmers think they know humans, because they’re human to. Only there is more to it. Most of the actions we anticipate aren’t conscious. If you don’t consider this it’s very hard to understand how people will react.

The amount of individuals is very diverse. Based on how a person is raised it can be very hard to find the right way to design a devise or application. So how can you design a devise or application that user-friendly for every user? It must follow the basic psychological principles that give rise to a feeling of understanding, of control, of pleasure. These include discoverability, feedback, proper mapping, appropriate use of constraints, and, of course, the power to undo one’s operations.

Course these are a few aspects of good design. There are other aspects you have to consider when building a good user experience.

“Good user experience can only flow from a system where marketing, graphic and industrial design, engineering, and usability all work together in a collaborative effort to make life better, more enjoyable, and more productive.” (Don Norman)

Here are all 10 principles of good design:

01. Innovative
02. Makes a product useful
03. Aesthetic
04. Makes a product understandable
05. Unobtrusive
06. Honest

07. Long-lasting
08. Thorough down to the last detail
09. Environmentally friendly
10. As little design as possible

Virtual Reality

My personal interest for VR started with the ideal of exploring a new space meant for designing whatever we want. Like Terence McKenna talks about us each moving into universes of our own construction, where Big Data is used to create engineers serendipities, where everything around us is custom to our tastes.

Or like Jason Silver says “*VR is a place where people can experience awe, which is defined as experiences of such perceptual expansion that people need to upgrade their mental schemata to accommodate the experience.*” I believe Virtual Reality could be a very powerful tool for changing our perspective.

Chris Milk is a movie producer hey talk about film is like looking through a window. But he wanted to go beyond that, he wanted to place to viewer in the movie. He uses a

camera rig that is pointed in every direction so create a spherical view that help to view to world in every perspective.

Chris and his crew made a film called 'Clouds over Sidra'. They went to a Syrian refugee camp in Jordan in December and shot the story of a 12-year-old girl there named Sidra. She and her family fled Syria through the desert into Jordan. She's been living in this camp for the last year and a half. As Chris describes it "*you feel her humanity in a deeper way. You empathize with her in a deeper way.*"

Chris believes that we can change minds with this machine. He took this film to the World Economic Forum in Davos in January. And they showed it to a group of people whose decisions affect the lives of millions of people. And these are people who might not otherwise be sitting in a tent in a refugee camp in Jordan. But in January, one afternoon in Switzerland, they suddenly all found themselves there. Chris Milk used virtual reality to create the ultimate empathy-machine.

Virtual reality can help us cope with reality, but on a opposite note, it also can help us to escape reality. Can virtual reality allow us to essentially live in that space all the time?

Television, gaming and even reading, helps us to reflect on the real world. We can experience different, thoughts, narratives and emotions in the comforts of our home. But it can also be used to escape reality; it gives us a guilt-free high, higher resolution, high fidelity. VR hacks perception, hacks experience and hacks consciousness. Your body is still in your living room, but your eyes are isolated from the real world. The experience is so much greater. It's like comparing marijuana with heroin. Personally I don't believe that virtual reality can replace the real world. The price will be leaving few billions people behind, to be in a non-mediated, wonderful, virtual world. For the most of us we don't have the drive to inhabit an alternative reality less there was something we were trying to get away from.

For my project I explore an alternative future scenario where we do have a reason to escape reality. What the reason is beside the point. I want to know what effects could be on a personal level.

Reverse Culture Shock

Virtual reality is like visiting a far away country. Every thing is different; the people, food, culture, believe, rules, mentality, weather, architecture and so fort. People visiting these countries experience a culture shock. If you're on vacation this won't affects you that much. But for people how stay in these countries it can be very live changing experience. After a while they adjust them self and learn to coexist with the people. At a certain point they retain to there home country and this is where the problem begins to arise. Returnees had a drastically live changing experience, ad home almost nothing had changed. This is called 'Reverse Culture Shock.'

Reverse culture shock received scientific attention as early as 1944 when [Scheutz \(1944\)](#) examined the difficulties of returning military veterans. [Austin and Jones \(1987\)](#) identified earlier sources that indirectly targeted return issues, dates back to 1935. Culture shock itself first gained critical attention in the late 1950 and early

1960, and for the most part was studied by means of qualitative research. [Lysgaard, 1955](#) and [Oberg, 1960](#) and [Gullahorn and Gullahorn \(1963\)](#) were to describe the initial culture shock and reverse culture shock qualitative and intercultural adaptation.

Defining reverse culture shock begins with the recognition of reverse culture shock's "parent" to build culture shock. [Oberg's \(1960\)](#) was early definition: "Culture shock is down beaten by the anxiety that results from losing all our familiar signs and symbols social interaction "(p 177).. [P. Adler \(1975\)](#) definition of culture shock is psychological more descriptive and explanatory:

Culture shock is primarily a collection of emotional responses to the loss of perceptual reinforcements from their own culture, new cultural stimuli that have little or no meaning, and the misunderstanding of new and different experiences. It can include feelings of helplessness, irritability, and fear for cheated, defiled, hurt or ignored.

Critical Design

Often when we talk about design we see in everyday live is about giving shape to the future. Design invasions a utopia we like to live in. It's about how the world shut look like. Design is meant to make our lives easier, but it's not the case? The smartphone for example was meant to connect us with each other, despite wherever you our. The only problem is that 94% of human communication happens nonverbally. A typed message won't tell you how someone feels. Being connected all the time distracts us from the stuff you exactly shut doing.

From a business perspective products are build as cheap as possible. This causes products to break very fast so we need to by its again. Advertising makes us believe the newest gadget is better in every way with more functions and better design. We

became passive consumers.

My fear is that something will happen with VR. Just another way for us to be sedated. Corporation's developing virtual reality, like Facebook, Samsung and Google all have the same history. They rather want to enhance their sells, or extract data from us?

As 'Douglas Rushkoff' quoted *"My concern is, when we just go headlong for the high, there's a ton of powers that are happy to serve you that high. As long as they get the Big Data they need in order to predict or influence our upcoming behaviours."*

This Industrial way of thinking about design is not the way design needs be. I reader want design to be like 'Anthony Dunne' describes in his book *'Hertzian Tales'*. *"Explores the way critical responses to the ideological nature of design can inform the development of aesthetic possibilities for electronic products. Looking beyond the quality of our relationship with objects themselves to the aesthetics of the social, psychological, and cultural experiences they mediate"*.

It's not about making up some utopic future, but instead modeling different realistic or alternative future. Generating ideas and thoughts about how it could be. When making these types of design you want to make discussion or debates, especially for exports in different fields.

It can be used to explore economics-, ethics-, social-, cultural- and scientific realistic. By thinking of bold ideas, what will people think of your project? In the process of making it's important to do abstract research. Make connections between different aspects of your theme and to validate your arguments.

For example, Dunne & Raby *UMK* (United micro kingdoms) was commissioned by the Design Museum in London. It depicts United Kingdom split in four self-contained futuristic countries. There like 'live laboratories', each free to experiment with governance, economy and lifestyle.

One is a 'Digitalians Society', it depends on digital technology and all its implicit totalitarianism: tagging, metrics, total surveillance, tracking, data logging and 100% transparency. Their society is organized entirely by market forces; citizen and consumer are the same. The funny thing about this scenario is that it sounds a lot like the one we are living in.

The digitalians have future cars that are fully automated. You don't need to have you

own car. These cars can pick you up where ever you are, like Uber without a chauffeur. This is the same future scenario corporations like Google or Tesla imagine. Personally it think this is great because it means lesser cars and more safety in traffic. But Dunne & Raby pointed out that the type of car you have excise to will be determine by class.

For example, if you're a middle class citizen, you have to share you car with others. This means it will take you longer to get to your dentation. Or higher-class citizens can cut through traffic. The system will justice whom cars need to stop and which can drive straight though traffic.

The Communo-nuclearist society is a no-growth, limited population experiment. Using nuclear power to deliver near limitless energy, the state provides everything needed for their continued survival. Although they are energy rich it comes at a price — no one wants to live near them. Under constant threat of attack or accident, they live on a continually moving, 3 kilometre, nuclear-powered mobile landscape.

The Anarcho-evolutionists abandon most technologies, or at least stop developing them, and concentrate on using science to maximise their own physical capabilities through training, DIY biohacking and self-experimentation. They believe that humans should modify themselves to exist within the limits of the planet rather than modifying the planet to meet their ever growing needs.

Bioliberals fully embrace biotechnology and the new values that this entails. Biology is at the centre of their world-view, leading to a radically different technological landscape to our own. Each person produces their own energy according to their needs. Bioliberals are essentially farmers, cooks and gardeners. Not just of plants and food, but of products too. Gardens, kitchens and farms replace factories and workshop.