

Silvana Callegari
The Parallax
Summer Semester 2018- Bauhaus-Universität Weimar, Körper, Raum, Stadt Group.
vanacallegari@gmail.com

In this text, I will introduce a summary of the conceptual research that I have been carrying throughout my master studies. In my first semester's work "Talking to the Other Side" different concepts were targeted, starting from underlining the dichotomy of Reality and Hyperreality in our virtual era, revisiting the notion of the Screen as a peephole into other dimensions, the constant implementation of trompe l'oeil apparatus throughout history and its aim to create a connection with the spectator, to set a connection between Derrida's Hauntology and Merleau-Ponty's otherness, to finally arrive to the notion of being uncanny in a virtual world.

This second text is the continuation, and it's presented from the point of view of the Heidegger's Dasein figure. It will follow its almost alchemical journey in search for the gap that stands between Reality and Hyperreality and highlighting the reasons why it has to dive into concepts such as Lacan's desire, the Parallax effect, Endocolonization, Autoscopy, and *Doppelgänger*. The ultimate aim of the Dasein is to further understand the essence of being uncanny in the world. The last chapter exhibits an overview of the project Parallax, conceived to meet the presented conceptual interests.

The figure of the Dasein in Heidegger's "Being and Time" is the representation of the human being, its fundamental way of existence is "being-in-the-world", it is immersed in the quest of interpreting what it to be a human being, therefore it is full of angst which makes him be uncanny. The notion of being uncanny for the German philosopher approaches specifically the uncanny essence of existence from a particular ontological perspective. This state of uncanniness, which is more than mere fear or angst is its natural way of existing, which ultimately creates in it a power of will pushing the Dasein into movement and builds in its mind the dichotomy of two different, yet diachronic paths: one is the total and traumatic endorsement of raw reality, of the dissipation of the veils of fantasies and appearances. And the second path, a full immersion into Hyperreality, where the Das Man or the Other has his arms wide open ready to cast a spell of zombification so the Dasein would live in a state of inauthenticity.

The Dasein seems predisposed to take the second path because it appears easier yet amusing, falser yet painless. The Dasein leaves the Reality to immerse himself in the Hyperreality, but while being in the Simulation the consciousness will *call the Dasein*, it will be a call for authenticity and search for the reason of existence, what Heidegger calls the "ontical truth". This call of truth makes the Dasein understand that there is something missing, something false, he will understand that his nature of being thrown is in the past and that there is still the chance to project possibilities into the future.

The consciousness calls the Dasein to move forward and leave the Das Man behind. Spectrums ¹ of the past and of others will still be around but it should not fear them, instead, it should project new spectrums into its future. The Dasein does not inhabit time, it is its own time, and it has to project its possibilities like a constant process of realization, the future here is the Dasein's projection of himself as an external possibility of existence. The past is the memory of being thrown and the future is an ecstasy of it being projected, in other words of being outside of itself.

This call of consciousness is not telling the Dasein to forget about hyperreality and implant himself fully on reality, this call is instead inviting the Dasein to see things not only from its point of view but also from the viewpoint of others, and face the reality that is shown in that difference, a gap that we will call the Parallax view a new perception of realities, the Hyporreality. To go into Hyporreality the Dasein has to become a *doppelgänger* of itself, he has to become a specter, ultimately a spectator of itself. Some sort of ghost that has lost its ontological equilibrium, that has been displaced, all sorts of paranormal requirements in the quest for authenticity, and then come back to existence and be able to appreciate the otherness and feel alive while being uncanny.²

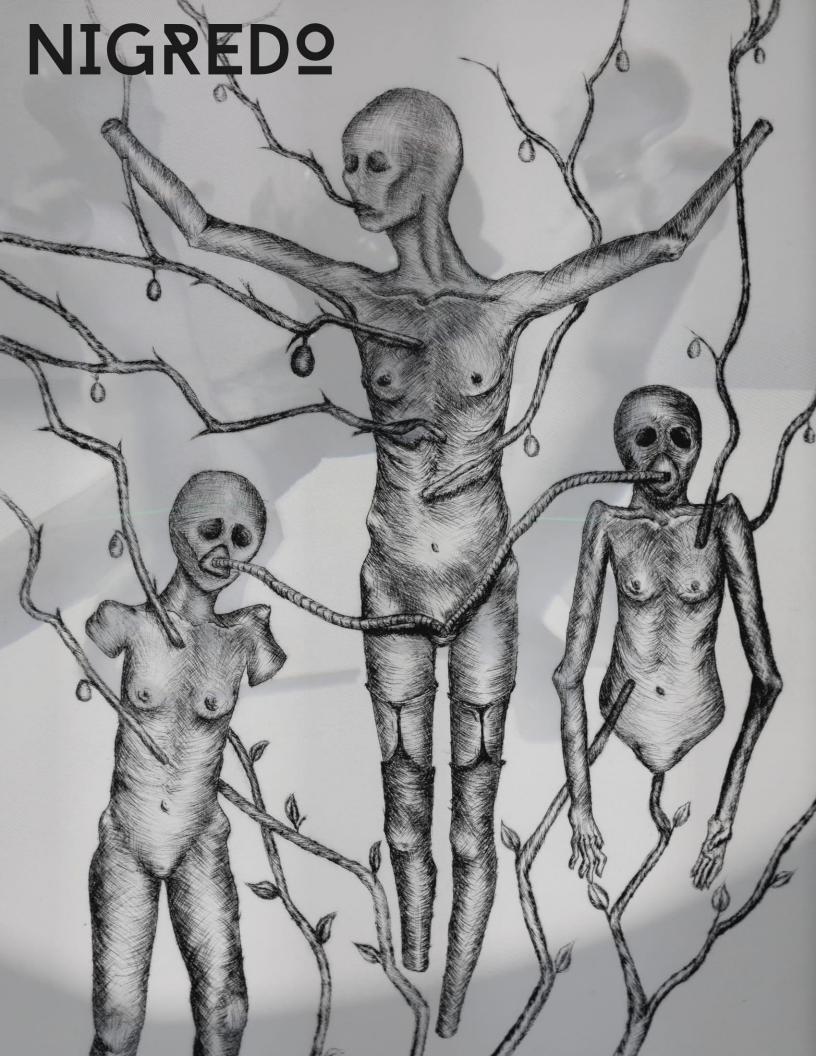
The Dasein will embark into an alchemical journey between reality and hyperreality in search of its Magnum Opus. It will follow three stages: Nigredo, Albedo, and Rubedo. These transmutations as Carl Jung stated, are the root of the unconscious and the essence of our existence in the world.

Nigredo (blackness) - The journey of the Dasein into Endocolonization.
Albedo (whiteness) - The unity of the opposites.
Rubedo (redness) - The comprehension of the Parallax.
Magnum Opus - Parallax Project.

Heidegger, M. Being and time. Blackwell Publishers Ltd. Oxford. 1962 - The concepts belong to Heidegger's work but the description of the concepts reflect my personal reading.

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Notion of spectre responds in part to the book from Jacques Derrida, Specters of Marx: The State of the Debt, the Work of Mourning, and the New International. Spanish version. Madrid, Trotta, 1995.



NIGREDO

"The world is... the natural setting of, and field for, all my thoughts and all my explicit perceptions. Truth does not inhabit only the inner man, or more accurately, there is no inner man, man is in the world, and only in the world does he know himself."

— Maurice Merleau-Ponty.

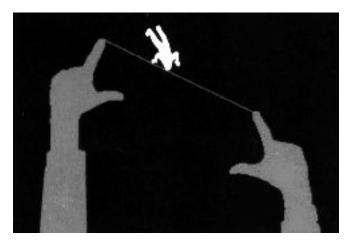
Following Merleau-Ponty's ontological view of the body as the center of everything, our Dasein exists because it has a body. It is its body from where it perceives the world that surrounds it, without it, it has no place from which it could perceive the world, therefore everything starts and ends from its own body. In such way the Dasein seems to be the one that perceives the world by using its extremities, elongating them with the aim of contacting the external world, collecting data out from it through its senses and making sense out such data.



Rebecca Horn. Body Extensions. 1972. Performance, Installation.

In the sixties and seventies, artists like Rebecca Horn reflected around the idea of the body, its extension, and its "machinization". The artist developed a series of bodily extension pieces from which "Finger Gloves" seems to be the epitome of her research. The work consists of two prostheses, each one built by five one meter long wooden rods, covered by black fabric that would ultimately be attached to the performer's wrists. The main concern in this performance is the relation between the body and its surrounding space, the gloves acted as a sort of enhancement of perception in her mind as it gave her the illusion of actually being touching the objects around. Nonetheless, prostheses like these ones, by trying to improve physical capabilities often backlash with the awareness of one's own body limitations.

So far we have seen a mild endocolonization (The technological colonization of our bodies), as it still relies on the perception of the immediate space that surrounds the body, a space that we can call the Real world as opposed to the Hyperreal. Particularly in the last decades, it seems that the Dasein feels the urge of perceiving more and further, an appetite that has coincided with the fast growth of technological discoveries and advances. We don't need to go too far to see this in action, as nowadays we are completely surrounded by screens, and we consent inadvertently to carry one with us, the whole time, our smartphones. The smartphones are no more than an elongation of our senses, we can see with them what is not actually surrounding us in our own nearest reality.



Myron Krueger. Videoplace. Mid-1070's.

Such interaction with screens has been investigated for decades, in fact, in the seventies, Myron Krueger developed a laboratory called Videoplace, an artificial reality portrayed as graphics interfaces on a screen, which responded accordingly to the interaction and movements of different users. Videoplace was a pioneer for human-computer interaction as it managed to create a full bodily interactive environment. In a long run by fostering the normalization of these screens, the capacity of the Dasein to distinguish between Reality and Hyperreality is spoiled, consequently, it is harder every day to differentiate the Real from the Simulation.

If outside the screen is the Reality, inside of it lays the Hyperreality. The Dasein bounces between these two realms repeatedly, to the point at which it can't no longer see the difference. "The Simulacrum is never that which conceals the truth—it is the truth which conceals that there is none. The Simulacrum is true "3. The Simulacrum has become so strong that it bumps out of its boundaries.

Even more up to date, we have devices like head-mounted displays (Virtual Reality or Augmented Reality glasses). Such gadgets were conceived as apparatuses that could be attached to ourselves in a prosthesis way, with the aim of changing our perception of the world.

³ Baudrillard, Jean. Simulacra and Simulations. Ann Arbor: University of Michigan Press. 1994.

The Dasein keeps asking itself why is it necessary to go through this endocolonization in order to further perceive, what else could be out there, is our own body no longer enough to be part of Videosphere⁴?

"VR separates outside from inside, jeopardized our most elementary perception of our own body... outside is always inside when we are directly immersed in VR, we lose contact with reality".

Paul Virilio, -who strangely enough has just passed away whilst I write this very paragraph, uncanny!- talked in his book "The Vision Machine" about the mechanization of the perception. He argued that not only the perception has been compromised by the new technologies, but also the process and interpretation of the world, nowadays it is not us humans who analyze the objective reality, but machines are the ones to do so. In this order of ideas in the virtual era with all sorts of machines of vision, our own perception is predisposed to be manipulated. These vision machines are ultimately generators of simulations fueling the hyperreality.

One of the meanings of the verb "to simulate" is to pretend to have what you do not have, these references an absence of something, a lack of authenticity, and in response to that, the simulation is a deception, an illusion. The trickery of simulation is helped by the gimmicks, paraphernalia and visual prostheses of the virtual era, Hyperreality shakes and punches us so violently in the senses that we would no longer feel our Reality, "after one night in the fight club everything in the real world gets the volume turned down"⁶.



Morton Heilig. Sensorama. 1962.

⁴ Age of virtuality or videosphere is the third mediasphere introduced by Regis Debray as the era of virtual gaze in Life and Death of the Image.

⁵ Zizek, Slavoj. The Plague of Fantasies. London. 1997. Page 172.

⁶ Palahniuk, Chuck. The Fight Club. New York: W.W. Norton & Company. 1996.

In 1962 Morton Heilig created an immersive, multi-sensory machine called Sensorama. The prototype was one of a kind simulation device, which with the use of wide vision displays, stereo-sound, aromas, wind and vibration, promised to transport users into another world. Fast-forward to the early nineties Carolina Cruz-Neira built an immersive simulation that came to be known as CAVE, the first Virtual Reality system. The environment consisted usually on rear projection screens that would create a cube shape inside of which the user would enter, put 3D glasses on and interact with the rendered graphics space. On both of these examples, the users are immersed in a virtual space, they are no longer perceiving a real space around them with their body as in Horn's model, what they perceive is solely a simulation, they are touching virtuality.

The Dasein has gone from trying to elongate its perception to isolate itself from its own reality. The endocolonization has arrived at a stance in which the Dasein has lost its identity, the head-mounted displays hide its face, and make everyone look the same, and when inside the hyperreality everyone is willing to change identity to choose an avatar. "Think about it this way: Wearing a VR headset is like wearing a paper bag over your head. A really exciting, immersive, interactive paper bag".

In 1967 two artists designed their very own head-mounted devices, by isolating the user from the outside a new perception of the inside would be sharpened. For them, the X-Files motto should have been "the truth is inside there" instead of "the truth is out there".



Lygia Clark. Sensorial Masks. 1967.

⁷ Quote fetchetd from

Lygia Clark researched the means of human perception with her work "Sensorial Masks". The users were invited to wear cloth hoods on their heads. The concept resided in reducing the various stimuli from the external world thus the senses of one's own inner world would by intensify. With an interest not particularly on consciousness as Clark, Walter Pichler made his whole head disappear by wearing a submarine-like white helmet. Such a device completely isolated the user's view and immersed him in a screen, at least that is what we assume by the title "TV Helmet". With these two last exemplars, the perception of the outside doesn't matter anymore, it is now what is happening inside what is important, these head-mounted devices are ultimately covering a head, as if the face, one's identity, highlights even more so, the importance of connecting to the outside world, not only through our bodies but our facial identity.

Maybe that was the real reason why Ekaterina Nenasheva was arrested this year, the Russian artist was walking around Moscow with a VR headset, soon police came and arrested her as she refused to take the device off. According to the artist, the officers kept asking her such pseudo-existential questions like: "You're in what reality? That one or this one?" and "Do you think it's okay to break social norms?". But maybe what was conflicting them was that she was hiding her identity behind the device.



Walter Pichler. TV Helmet. 1967.

Our Dasein understands that these virtual tools are typically used to make the Reality more bearable. In some way, these gadgets assist us in beautifying and sieve the raw Reality. Now again, our Dasein comprehends it is a response to protect itself from the trauma, from what is lacking. But it wants to master such tools, immerse itself in Hyperreality and inside it, get rid of

⁸ Quotes fetchetd from https://vrscout.com/news/russian-artist-arrested-vr-headset/

the veils of fantasy, and find a Lacanian real "that which remains of reality after is deprived of its support in fantasy". The Dasein will use and manipulate these gadgets with the intention of finding its own essence.

Now, the Dasein has entered the first step of the alchemic journey to find the Magnum Opus or the wholeness, the Nigredo usually referred as to the blackness stage, a state of putrefaction. Blackness because the Dasein has closed its own eyes to let technology tell it what it is supposed to see. The Dasein is no longer the one to use its body to comprehend the outside, is the outside the one that delivers to the Dasein all sorts of data such as its location in space, and imposes to it how to comprehend such space. Therefore the Dasein has changed its nature of perception it is no longer centrifugal, from the body to the outside; it is now centripetal, from the outside to the body¹⁰.

In this case, it is not just prostheses that elongate our bodies but is the surrounding tools such as cameras, sensors and tracking systems that perceive us and give us the coordinates of what and where we are, what to fantasize. The phantasmatic frame of reference is based on what the Other determines, consequently how we should feel in the world, the perception now is controlled by the machines, by the virtual Other. As Professor Vollmer states in the opening scene of the German tv series Welt am Draht "You are only the image that others have of you". The Dasein now asks itself how it is perceived by the eyes of virtuality. It will go through a virtual autoscopy, change its point of view, be out of joint, out of itself. By manipulating the glitches of the virtuality, the Dasein will look at itself from the eyes of the Other, it will look at itself as a doppelgänger, here comes the Albedo...

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⁹ Zizek, Slavoj. Disparities. Bloomsbury Publishing. 2016. Page 14.

¹⁰ Centripetal and centrifugal forces of perception coined by Merleau-Ponty in Phenomenology of Perception. Routledge Oxon. 2004. Page 114.



ALBEDO

"Me, as a child, feared that the mirror would show me another face or a blind impersonal mask that could hide something without a doubt atrocious.

I feared also that the silent time of the mirror could deviate the daily path of the hours of the man and host in its vague imaginary limit beings and shapes and new colors.

(I didn't tell anyone; I was shy)

Now I fear that the mirror could lock up the real face of my soul, hurt by shadows and guilt, the one that God sees and perhaps also men."

-Jorge Luis Borges¹¹.

The connection of our bodies to the universal field whether it responds to the Real or Hyperreal sphere, is the root of our existence, Merleau-Ponty once introduced the notion of space not as a mere éter in which things suspend, but as the universal power of connections, where our consciousness and bodies are mutually imbricated. Following this line, the philosopher established the ground for his book Phenomenology of Perception. Where every object is a mirror of everything else. On this basis, our connection with space is what powers our perception of what surrounds us, an environment that is a mirror, a projection of our own spectrums. And the screens are the mirrors of our virtual existence, as stated by the creator of the British show Black Mirror, Charlie Brooker: "What I took it to mean was when a screen is off, it looks like a black mirror. Because any TV, any smartphone - any screen- if you just stare at it, it looks like a black mirror, and there's something cold and horrifying about that." 12

"I say that it is another, a second self, and this I know in the first place because this living body has the same structure as mine (...) it is precisely my body which perceives the body of another, and discovers in that other body a miraculous prolongation of my own intentions, a familiar way of deal- ing with the world. Henceforth, as the parts of my body together compromise a system, so my body and the other's are one whole, two sides of one and the same phenomenon, and the anonymous existence of which my body is the ever-renewed trace henceforth inhabits both bodies simultaneously." 13

¹¹ Poesía Completa. Debolsillo, 3rd edition, 2016, free translation. Page 504.

¹² Quote fetched from https://www.scoopwhoop.com/black-mirror-title/#.16w5yhpzw

¹³ Merleau-Ponty, M. Phenomenology of Perception fragment (411-12). New York: Routledge. 2005.

Being the Dasein inside this universal field, after undergoing the immersion of itself in the endocolonization, it sees everything around as it is depicted in the Hyperreal realm, thus what he perceives is what the Other wants it to perceive. Now the Dasein needs to undergo an autoscopy, a virtual one, and see itself from the outside, it will see itself as the Other sees it. The Dasein will peak into the realm of Hyperreality to see itself, it will find a *doppelgänger*-like figure, even if it looks like a double of itself it is not a repetition, it is, in fact, itself, its very own body that looks like it has been temporally and spatially dislocated. In fact is not its body the one that has been decentralized, rather it is its point of view the one that has adopted the Other's point of view.

By understanding the main communication protocol of the Hyperreal realm, the Dasein's body sends inputs by projecting itself into the space, and the Dasein as a perceiver receives the data as outputs, therefore the Dasein is the one in control of the feedback loop, it sends and receives the data. It is here where the data is manipulable, in the feedback, by playing with it, glitches can be created, and the time and space that the Dasein occupies can be controlled.



https://youtu.be/8z32JTnRrHc Richard Serra and Nancy Holt. Boomerang. 1974.

In 1974 Richard Serra along with Nancy Hold broadcasted a live video on TV called *Boomerang*, where Holt spoke and heard back her words with a second of delay through headphones. During the performance she kept describing the experience as "a world of double reflection and refraction", by hearing her voice as echoes that came back to her, she felt the "words become like things" that felt disconnected from their meaning. The delayed feedback created a sense of absence of a transmitter of the words. Holt projected words into virtuality just like the Dasein projects its image, both are delayed, they feel out of joint, and the projections seem to become its own self, something individual from its transmitter. Here the *doppelgänger* of the Dasein is again not a repetition, but an echo, as the delay indicates a distance between

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the Dasein and its sense of self. It is now an entity that is suspended in time and space as if it had its own identity.

Mike Cahill's film "Another Earth" from 2011, explores also the power of a voice as an individual entity, this voice plays an important role on a quest where people on earth are trying to contact an eerie planet that has appeared in the sky and looks just to our own planet.

This particular scene shows a news presenter trying to contact the other earth. In the beginning, nothing is happening, but as soon they start to hear noises and eventually another voice talking; the presenter thinks at this point that the voice is just feedback, as it seems to be her own voice. At the end of the scene, we come to realize that is not an error at all, that other voice is a *doppelgänger* of the news presenter that is mirroring her words and has always mirrored her life, in conclusion, that other earth is a *doppelgänger*.



Fotogram from Another Earth. Mike Cahill. 2011. https://www.youtube.com/watch?v=bk9cFb5OJmE Follow the link to watch the contact scene.

This scene is deeply uncanny, from the quotidian sense of the word, when something unfamiliar feels strangely familiar, over Freud's definition of the return of the repressed, where doubles and repetitions are the core of the uncanny phenomena, to Heidegger's *Being Uncanny*, not just a feeling but as the root of human existence. This voice is a double, its own entity, it lives detached from the news reporter of "this" world, yet it is strangely familiar because they have lived the same life and share the same identity. This uncanniness is ultimately more than a feeling, it is the essence of their very existence as their lives are intertwined by and because of a meaning of simply exciting as mirrors of each other.

We can nominate the *doppelgänger* as the archetype of the uncanny, as an anthropomorphization of our meaning of being in the world, the one that compulsively returns as a figure that is both familiar, as it is an image of us, and unfamiliar as it is its own entity.

Just as Lacan introduced the mirror stage as the fundamental moment in which the "I" is defined, the person who sees itself for the first time in the mirror draws an idea of its own identity and takes distance from the "other". Therefore the *doppelgänger* from the mirror is necessary to delimit one's own identity. And from that first mirror stage on, all confrontations with our *doppelgängers* throughout our lives are a confrontation with the uncanny.

The Dasein's notion of its own image resides in the *Heim* -in the familiar plane- as it lives inside its body, but becomes *unheimlich* -unfamiliar or uncanny- when we see it out of ourselves, as a *doppelgänger* as an autoscopy. In the Albedo the Dasein has being echoed, causing a sense of estrangement, typical of the Uncanny. But here the *doppelgänger* should not be seen as a threat, because both have the same role, finding the authenticity.

In the David Lynch's films, Lost Highway and Mulholland Drive both realms of Reality and Hyperreality are positioned side by side. There is a plane of Reality that gets disrupted when the protagonists live a traumatic moment, following such loss or castration the main characters travel, without them noticing it, into a Hyperreal world or what Zizek would call a fantasy space, the stories follow but as the films continue the veils of fantasies start to fall, and the protagonist starts to feel everytime more uncanny. What is happening here is that they are caught up in a Hyporreal gap, while the fantasy space, that was built for them to deal with the former trauma, is disintegrating and glitches show parts of the real plane that they have been trying to run away from, this intermediate space is neither fantasy nor reality it is ultimately a space of ontical confusion, reason why they feel uncanny. That moment of parallax effect is necessary for them to face what they have done, and finally be accountable for their acts, in order to understand that as Daseins they have to be authentic even if the Das Man or the Other keeps them levitating in a paramnesia* state, that compensates what reality cannot give them.



Fotogram from Lost Highway. David Lynch. 1997.

In psychology, the shadow is the part of the unconscious that swallows threatening information and experiences that a conscious mind cannot hold onto and, at the same time, remain functional. However, a periodic confrontation with the shadow is necessary for a healthy psyche.

In a Lynch film, it is often the job of some sort of rule-maker, interrogator, or detective to engineer just such a confrontation. These detective types set boundaries on a film's fantasy narrative and try to steer the main character back to the truth. — Adam C. Walker¹⁴

David Lynch, also throughout these two films introduced the archetype of the double, from the concept of producing his films as echoes of each other, or proliferate the idea of embedded world or films within films, all the way to the figures of *doppelgängers* that act as antagonists to the characters, both stories introduce a protagonist that struggles with reality but when immersed in hyperreality their identities change, their faces change too, but what remains is the uneasy feeling that pushes them to search for the ontical true, the uncanny feeling of being in the world that presents itself as glitches, as deja vus, as callings of consciousness.

In the Rubedo, the Dasein will maneuver such errors typical of the hyperreal realm, it will comprehend that with the glitches its point of view can be hacked, ultimately bringing it to an understanding of its uncanny meaning of existence, thus the Parallax...

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¹⁴ Quote fetched from http://gorelets.com/uncanny/film/david-lynchs-doppelgangers/



RUBEDO

In the Rubedo stage, the Dasein has already gone through the endocolonization process and has met its *doppelgänger*. And even though the glitches present themselves more often and become every time stronger, the Dasein has found a particular gap: the Parallax.

"A parallax can be defined as the apparent displacement of an object caused by change in observational position"- Slavoj Zizek. 15

The parallax effect gives the sense that an object is displaced in reference to its background when looked at from different perspectives, ultimately the object seems to changes position based on two different perceptions. The Dasein realizes that such effect does not only affect the mere position of an object, it can also vary the perception of a body, a person; transmuting its essence of being in the world.

The view allowed by the parallax effect is the in-between Reality and Hyperreality, it is the gap that we will call the Hyporreality, the realm of the transcendental, the third space between phenomenon and noumenon¹⁶ itself, where the uncanny is the norm, and the Dasein becomes conscious of what it really desires, as opposed to what the Other desires from it.

In the Real world, the Dasein is projecting into the world its fantasies and desires, whereas in the Hyperreal world the Das Man or the Other is the one projecting onto the Dasein what it desires and wants from it.

As introduced before in Merleau-Ponty's words the Dasein is the one who's projections are centrifugal, while the Das Man's are centripetal, these two different forces are portrayed in the movie "They Live" of John Carpenter from 1988.



Fotogram from They Live. John Carpenter. 1988.

 $^{^{\}rm 15}$ Zizek, Slavoj. Parallax View. MIT Press. London. 2009.

¹⁶ In Kant's philosophy noumenon stands for the thing-in-itself as opposed to phenomenon the thing as it appears to the observer.

John Nada, the protagonist, finds a pair of sunglasses, which make him see, what we have nominated in this text as, the Das Man. When Nada wears the glasses he discovers the Hyperreal world, all the images that surround him such as billboards and magazines show him a different reality. The glasses act like a portal that divides two worlds the Real and the Hyperreal and the glasses are able to displace the user between this two realms. On the Hyperreal world the desire of the Das Man is explicit (OBEY, BUY, CONSUME, CONFORM, etc).

The Hyporreal is the dimension in which the Dasein is wearing a particular set of glasses, a sort of mixed-reality spectacles, on one eye a lens from the "They Live", while nothing on the eye. This ultimate parallax view allows the Dasein to see simultaneously the object cause of desire from its own eye and the object of desire from the Das Man's eye.¹⁷

Lacan, in fact, argued that "desire perpetuates itself by always missing its official object of satisfaction" which is not to say that the object cause of desire is unattainable, but on the contrary, it becomes unattainable because we chase the wrong desire: what the Das Man declares. We can say the Das Man wants us to keep chasing our object cause of desire, but by keeping us in a paramnesic state, the Das Man gives us an illusory or simulated satisfaction with an object of desire, a small something that would keep us wanting and chasing our object cause of desire. The Dasein will never be completely satisfied or fulfilled with the Das Man's object of desire. Is just within the Hyporreality, where the Dasein understands that its target of desire has been wrong all along.



Bruce Nauman. Live-Taped Video Corridor. 1967-1968.

¹⁷ Concepts of desire are the core of the Lacanian philosophy.

¹⁸ Fisher, Mark. The Weird and the Eerie. Repeater Books, London. 2016. Page 31.

From 1967 to 1968 Bruce Nauman created a series of corridors, one of them called "Live-Taped Video Corridor". This work was built with two walls that created a ten meter long and 50 cm wide space, at the end of the corridor a monitor showed a closed-circuit recording from a camera positioned at the beginning of the corridor. Once someone enters the monitor shows the back of the subject's body, and by getting nearer to the monitor the subject witnesses itself from a different perspective, that of the surveillance camera. An interesting game starts to take place, as the nearer the subject is to the monitor, its body image gets smaller on the screen. Ultimately giving a sense of obscurity and alienation, due to the impossibility of fully grasping one's own captured image, a matter of distance results in a paradoxical point of view.

As in Bruce Nauman's work, the Dasein in the parallax space can monitor its own body as it is monitored by the Das Man. By acquiring another point of view, and chasing its *doppelänger*, a virtual body that is immersed in the screen and constantly projects light onto reality. The Dasein goes from being a spectator to be a *spectrum*¹⁹, where the ultimate act of the screen is the spectralization of the viewer. The last move of the parallax is the touché, a strike or *punctum*²⁰ that brings the Dasein face to face with its true image.

After this journey, the Dasein acknowledges that the stage of the parallax view is primordial, for it to understand the necessity of two different perceptions. It was fundamental to see the in-between where the glitches, in essence, created a punctum that poked the Dasein, brought back memories to it, from a repressed past, from a repressed authenticity. Such glitches created a sense of being uncanny, flashes during which, in the Dasein arose a glimpse of understanding that it was bouncing between realities.

The uncanny essence of Being is, ultimately, the state that will keep reminding us who we are, a sort of Parity Checker or error detection technology embedded in our minds that when detects a glitch, reboots us with the purpose of reminding us who and where we are, keeping us awake, pushing us to be ourselves and follow what we desire. But at least on one eye, the Das Man's sunglasses are still necessary, with its simulated reality, virtual formations and veils of fantasies; as they dim the lights of Reality, which are too intense to confront directly because it can be too traumatic, raw and violently to take.

¹⁹ Notion of spectre or spectrum respond in part to the book from Jacques Derrida, Specters of Marx: The State of the Debt, the Work of Mourning, and the New International . Spanish version. Madrid, Trotta, 1995.

²⁰ Definition coined by Barthes, R. Camera lucida: Reflections on photography. New York: Hill and Wang. 1981.

PARALLAX



PARALLAX PROJECT

The Parallax Project is a Virtual Reality work, in which the user adopts the role of the Dasein, character described on the theoretical chapters as an archetype of a human being, that undergoes a journey to hyperreality in search for its authenticity. The Dasein immerses itself in the endocolonization, the Nigredo stage, where tools such as the tracking system, the VR platform, and an Arduino lead the Dasein into a full immersion on virtuality and it, by inspecting and manipulating its surrounding virtual space, finds its *doppelgänger*, a mirror of itself, an autoscopy of its bodily existence on the hyperreal realm. Such experience will disjoint the user from its usual point of view and will make it adopt the perspective of the Other, the user will end by looking at itself as the Other looks and perceives it, but not forgetting about its former point of view from reality. The notion of the agreement of these two points of view brings meaning to the name Parallax, "An effect by which the position of an object seems to change when is looked at from different positions" - Cambridge Dictionary-

For the technical aspect, various components on the DBL -Performance Platform Lab- have to be set up: One computer runs "Captury Live", a tracking system software that is connected to 10 cameras that track the user's position on the space. Such data is sent to a second computer through an OSC protocol, this second computer is running simultaneously, Unity 3D, the software used to create the VR space and the one that allows the connection to the HTC VIVE system (headset and tracking sensors).

The connection between the two computers is necessary as the user will see itself in real time inside the rendered space, the Dasein model will be placed exactly onto its very own body, therefore the user's moves and position will trigger the animation of the Dasein model accordingly.

Here the notion of being perceived by the Other takes protagonism, the perception that the users receive about their own body doesn't come from themselves, it comes in a centripetal way, from the tracking system to the users, that Other is the one that tells the users where they are and ultimately where they exist, throughout data.

As soon as the user enters the VR space, it sees itself mapped onto its own body, soon it realizes there is another body wandering around the same room, the dancing man, a body that is an independent entity but one that tries to confront the user, a representation of the others, the people that we are surrounded by on our daily lives. In the same room, one wall is a mirror, where the user can properly see and understand that it has a body, in the opposed wall, there is a white circle, a portal. Mark Fisher on his latest book "The Weird and the Eerie" discusses that

"the centrality of the doors, thresholds, and portals means that the notion of the between is crucial in the weird". ²¹

And that is why this portal is there, as a threshold to the Albedo stage. On the other side of the portal, the user will find its *doppelgänger*, the body of the user will not be mapped on top of its real body anymore, it will be decentralized. The point of view of the Dasein has been disjointed. Now the Dasein sees itself as an autoscopy, its movements are mimicked, but not as it happens in a mirror, if the user tries to chase its *doppelgänger* it will run away, but if the user is the one that runs away the *doppelgänger* will follow it, the axis are inverted. It's a confrontation of the Dasein with its own image, the one that is perceived by the Other, an image that from time to time glitches and stops imitating the Dasein, a body without identity thus the absence of a head.

The users not only wears the VR headset as an input device, but an Arduino also plays an important role as it both receives and sends data to the computer. The Arduino is connected to the second computer inside the Unity 3D. In the first instance, an asset called Ardunity is installed on Unity, such asset renders possible a communication between the Arduino and Unity as it gives the possibility to export compatible codes from the Arduino IDE to C-Sharp (the programming language of Unity). After exporting multiple codes, the job was to condense them into one and create a single sketch that would activate three main pins on the microcontroller: Photoresistor, Potentiometer, and Buzzer. The first two acting as inputs and the third one as the output of the built system.

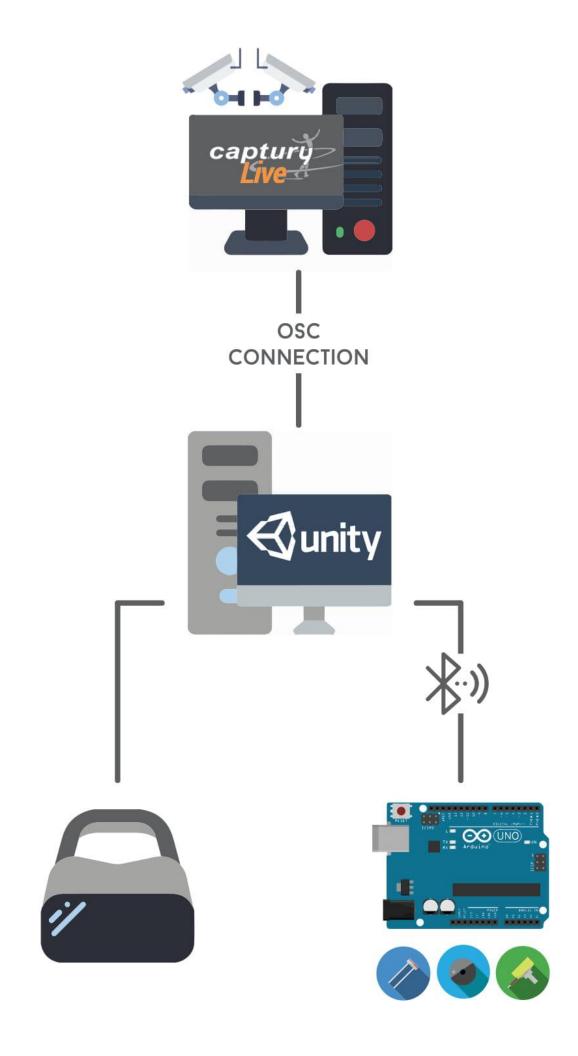
After uploading such codes to the Arduino, different controllers were attached to their pertinent prefabs. The Photoresistor controls the light of the environment, the Potentiometer tilts the whole space to a certain degree and the Buzzer emits different tonalities when the user, in the VR space, collides with its *doppelgänger* and the dancing man. Lastly, an HC-05 Bluetooth module was adjoined to the Arduino, in order to make possible a wireless interaction.

By interacting with the Arduino, the user or Dasein finds that the data of the hyperreal space is controllable, between the sending and receiving of data the user has the power to create glitches and control its surrounding space. By manipulating with its own hands the voltage on an apparatus such as an Arduino, a real energy can travel from reality to virtual reality, in a sense a high or low of voltage becomes a glitch inside hyperreality, controlled by the Dasein.

The last stage, the Rubedo, is not depicted in the VR work, it is a conclusion that is up to each user that has gone through the process of the two first alchemical stages. After stripping the Dasein's skin, each user might find its own Parallax view, a glimpse of authenticity and an ecstasy of being uncanny in the world.

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²¹ Fisher, Mark. The Weird and the Eerie. Repeater Books, London. 2016. Page 28.





Parallax Project - POVs

POVs Parallax Project



Click image to open video https://youtu.be/fjwcHRv1YqQ

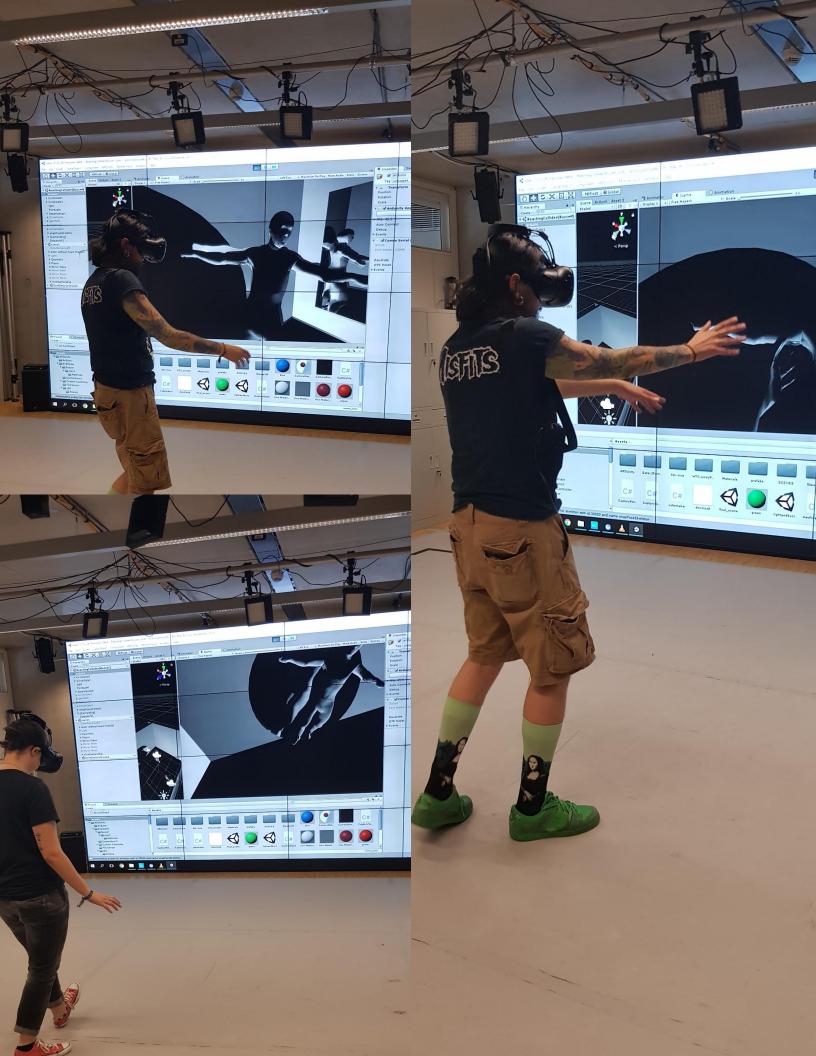
Different videos shot directly from the VR headset, it shows some of the first attempts of the VR experience and former designs of the space and its characters.

Parallax Project - Before Arduino

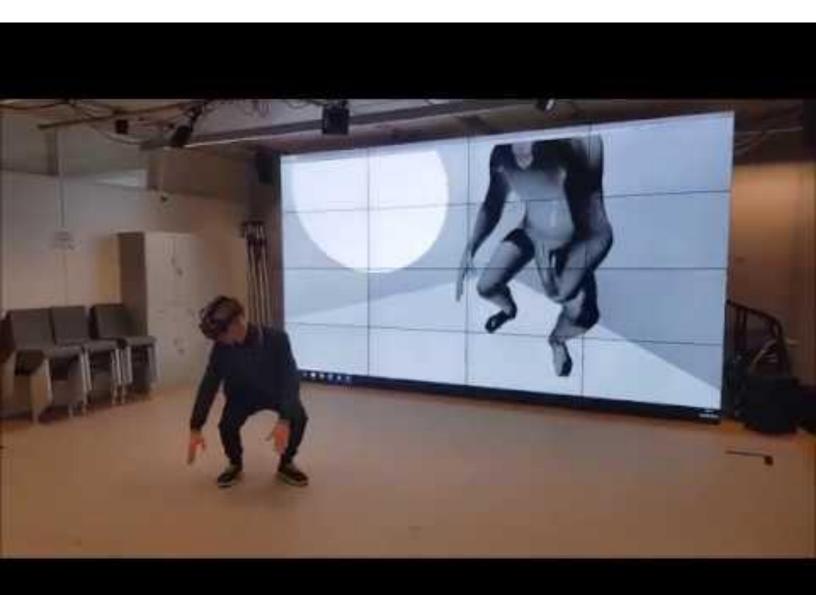


Click image to open video https://youtu.be/X0i5bl0bW8Y

Various tests of the VR experience before the implementation of Arduino.



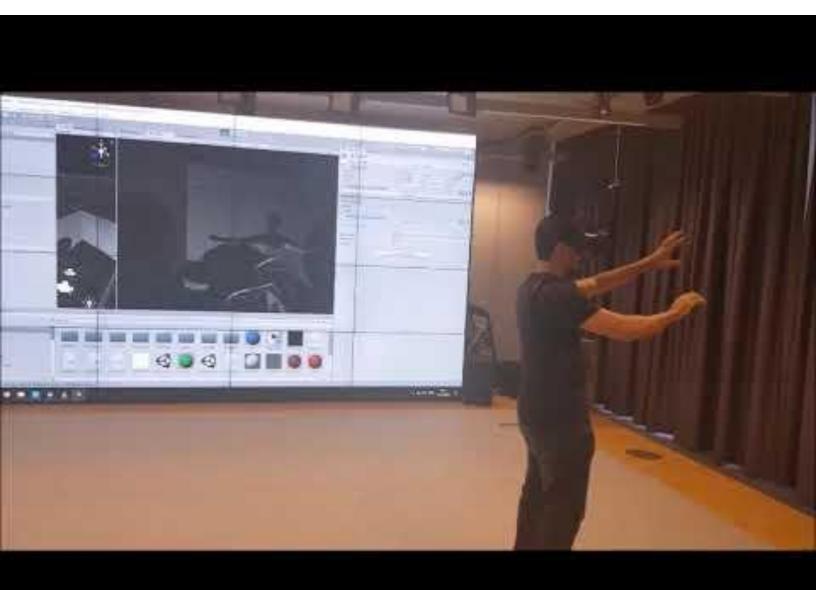
Parallax Project - Video Compilation



Click image to open video https://youtu.be/UBJf7DWQGF4

Compilation of videos of different users experimenting with the space prior to the Arduino implementation, on the screen it is possible to see what the user is perceiving.

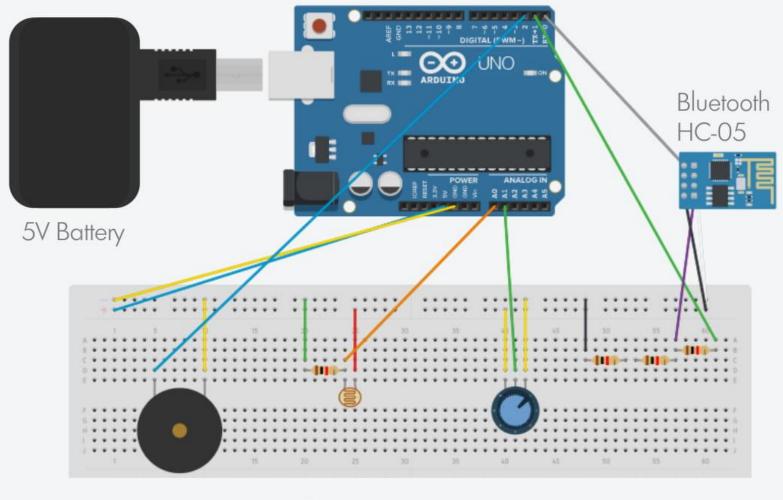
Parallax Project - Summaery



Click image to open video https://youtu.be/kVYJdSYchUU

Experience of users during Summaery - This video shows the reaction of three users in the uncanny space. At this stage the VR space was designed differently, there was no second room, and the Arduino was not yet implemented.

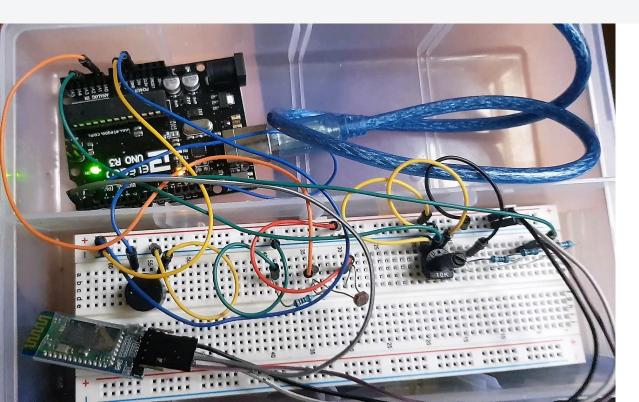
Arduino Circuits and Components Parallax Project



Piezo Buzzer

Photoresistor LDR

Potentiometer



The Buzzer goes to digital pin2, the Photoresistor to analog pin1 and the Potentiometer to analog pin2.

Notice the TX and RX connection with the Bluetooth module needs to be inverted, as this HC-05 allows a voltage of 3.3v while the Arduino works with 5v.

First Arduino-Unity communication

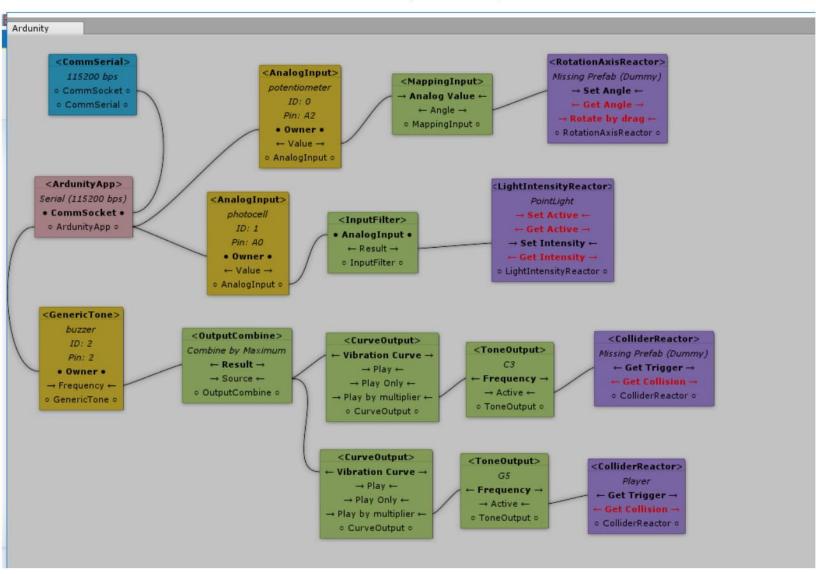
When the user interacts with the potentiometer and the photoresistor, objects on the scene rotate, and light intensity changes.



Click image to open video https://youtu.be/0cEKuEaOpSI

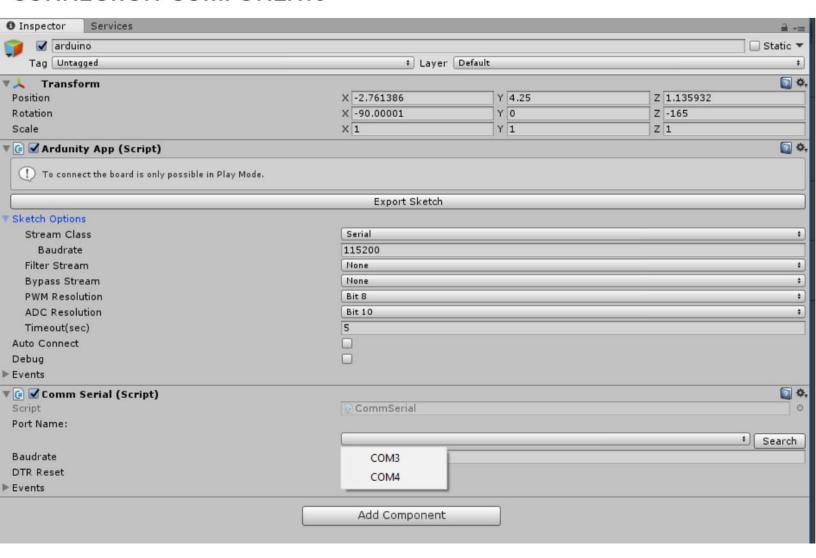
Quick look into one of the first attempts of communication between Arduino and Unity, the Buzzer is triggered by the collision of two bodies, and by manipulating the Potentiometer and the Photoresistor, objects on the space rotate and the light intensity of the VR space changes.

ARDUNITY - MAP OF CONNECTIONS, INPUTS, OUTPUTS AND PREFABS.



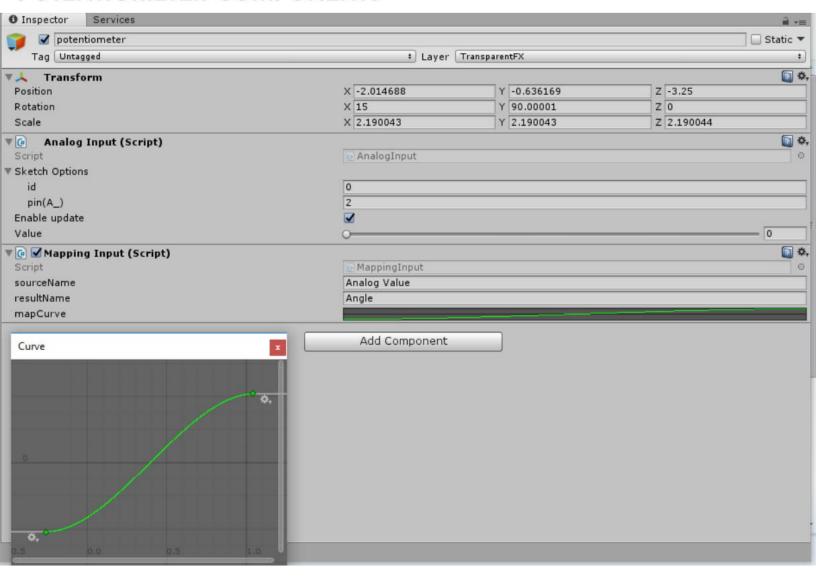
Map of the connection inside of Unity, with Ardunity. The blue and pink boxes responds to the connection protocol with the Arduino, the yellow ones set the pins and nature of input or output for the three different components, potentiometer, photoresistor and buzzer; the green ones give in general the characteristics such as curves, tones that will end up controlling the prefabs attached to them in purple boxes, space tilting, light intensity, doppelgänger collision sound,

CONNECTION COMPONENTS

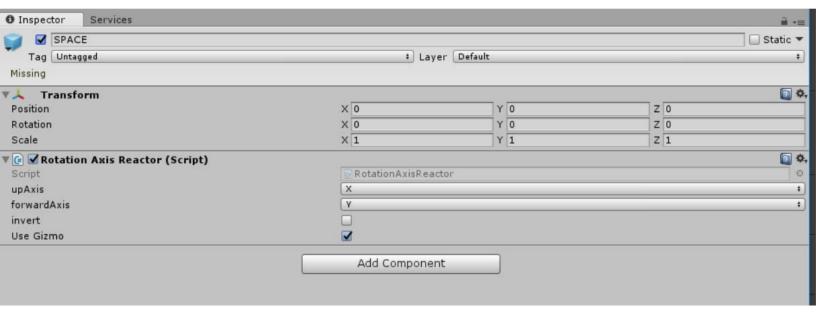


To finalize the connection on the Communication serial component the right "COM#" had to be chosen, to connect to the Arduino via Bluetooth. Ardunity works with a Baudrate of 115200, reason why the default configuration of the Bluetooth module had to be changed from 9600 to 115200.

POTENTIOMETER COMPONENTS

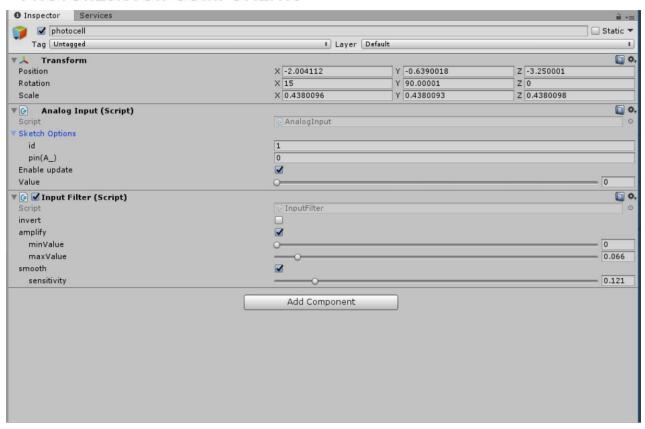


SPACE PREFAB CONNECTION TO ARDUNITY

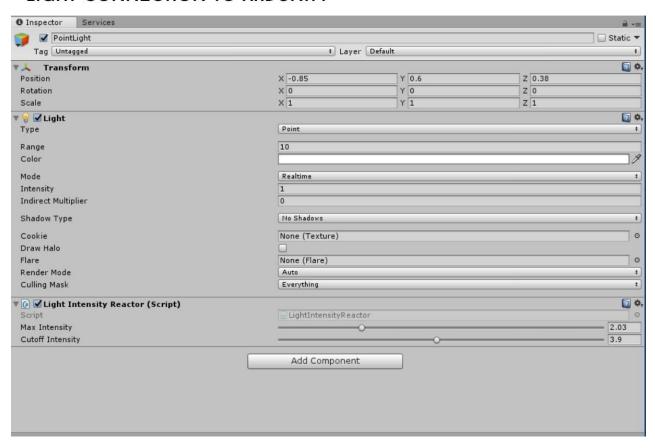


The potentiometer is connected to pin A2, and the analog value was mapped with the curves here depicted. The Space prefab is the one attached to the potentiometer with a Rotation axis reactor script, as a result when the potentiometer is turned the space changes angle accordingly.

PHOTORESISTOR COMPONENTS

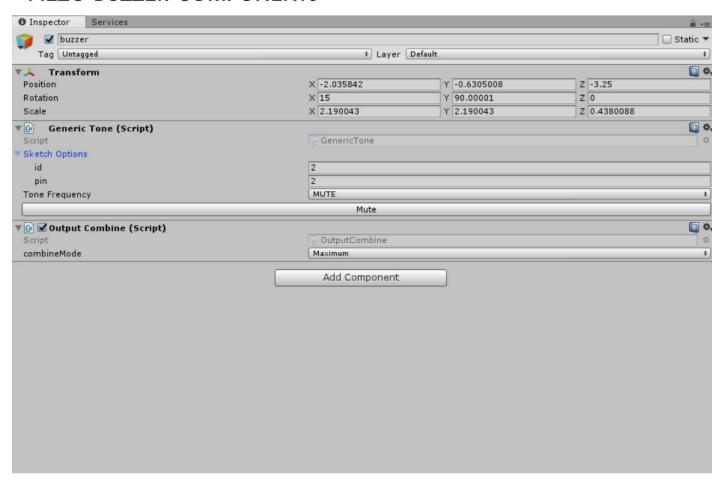


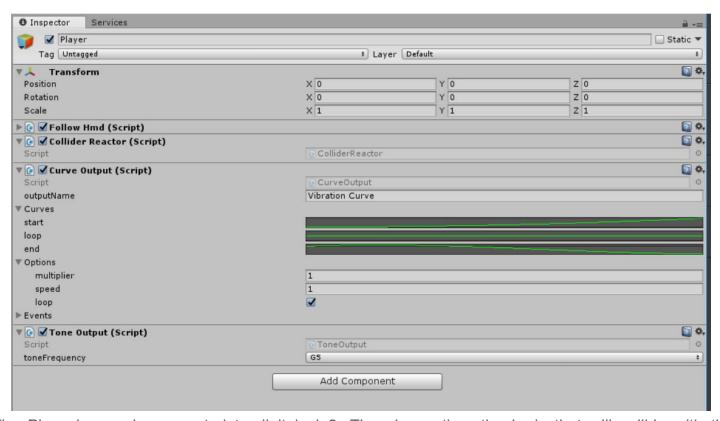
LIGHT CONNECTION TO ARDUNITY



The photoresistor is connected to pin A1, and the analog value was mapped with the slider and smoothed. The PointLight prefab is the one attached to the photoresistor with a Light intensity reactor script, as a result when the photoresistor is covered with the hand the light intensity of the VR space goes down.

PIEZO BUZZER COMPONENTS





The Piezo buzzer is connected to digital pin2, The player, thus the body that will collide with the doppelgänger and the dancing man needs to be attached to a Collider reactor script and a Tone Output, the tone for in case is G5, curves can be mapped to control the length of the sound of the buzzer

Parallax Project - Dasein I



Click image to open video https://youtu.be/6xMfvF92DL8

Final Documentation of the project. - Video with first user- The first part shows the user in the Performance Platform, its interaction with the Arduino (turn on sound to hear the buzzer) and the process of tracking. The second part in its beginning shows the connection process to the Arduino inside of Unity, after that is visible what the user is seeing inside the rendered space

Parallax Project - Dasein II



Click image to open video https://youtu.be/Rt0OSb6O6Lo

Final Documentation of the project. - Video with second user- The first part shows the user in the Performance Platform interacting with the Arduino (turn on sound to hear the buzzer). The second part in its beginning shows the connection process to the Arduino inside of Unity, after that is visible what the user is seeing inside the rendered space

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