

Special thanks to my parents, Iris, Nicolas
for their enduring support and advice

& to Jo, Thierry, Mira and Riet
for their guidance throughout the process.

The moments' gaze

Aaron Deric

Master studio: Critical Reflective Practice

Academic year: 2017-2018

Promotors: Jo Van Den Berghe, Thierry Lagrange

Mentor: Mira Sanders

KU Leuven, Master in de Architectuur, Ghent

Table of contents

<u>Legend</u>	10
<u>Introduction</u>	14
1. “ <i>The moments’ gaze</i> ”: the act of looking	16
2. Prologue: Maurice Merleau-Ponty – One hundred and sixty nine words	18
3. Preface	20
4. Between sight, look and the gaze: a hierarchy of sight-related nouns	24
5. Chasing <i>the moments’ gaze</i> : the act of drawing	26
<u>Chapter 1. The – unnaturally – stationary gaze</u>	28
1. Framework: <i>finding new space within old objects</i>	32
2. Construction of the gaze: <i>eye movements and vision</i>	36
2.1 Structure of the human eye	40
2.2 Binocular field of vision	40
2.3 Singleness of vision	44
2.4 Fixation and saccade	44
2.5 Con- and divergence	48
2.6 Vestibulo-ocular reflex	48
3. Method of deconstruction: <i>the virtual window</i>	52
3.1 Deficiency of the photo-camera	56
3.2 After-image	60
3.3 Superimposition and wiggle 3D	64
3.4 Temporary workspace	68
3.5 Tracing the obvious	72
4. Reflection through reconstruction: <i>intuition of the instant</i>	76
4.1 The line	80
4.2 Exercise of the gaze	84
4.3 Discontinuity of time	88
4.4 Discontinuity of the method	92
4.5 From parasite to alien	96
4.6 Model as extension of the drawing	100
5. Incarnation through intuition: <i>drawing uncertainty</i>	104
5.1 Reinstating the originating space	108
5.2 Architectural body, space and my body	115

<u>Chapter 2. The gaze in motion</u>	116
<u>Bibliography</u>	118
<u>Appendix: The digitized <i>moments' gaze</i></u>	120

Atlas of the World: seen through the juxtaposition of the left and right eye's image

Legend¹

Reflection²: seen through superimposition of the left and right eye's image

Fundamental thought(s)

Paraphrased and derived *terms* and *titles*

¹ Note on *titles*: Each phase of the dissertation (cfr. introduction + 1 through 5) is built around a principal reference, based on the following personal interests: 0. consciousness of the gaze, 1. architectural deconstruction, 2. physicality of the gaze, 3. the registration, 4. the instant, 5. the drawing

² Note: This document only makes sense in the folded tracing paper version, just as the drawings only expose themselves when viewed with the correct mindset

left eye's image
right eye's image

Introduction

1. “The moments’ gaze”: the act of looking

The title of my master’s dissertation is a deliberate wrongly translated Dutch phrase for which – in my opinion – there is no exact English translation. The word I am referring to is “ogenblik”, meaning “**a very short time space**”¹. The most accurate English translation in one word would have to be “moment”, meaning “an indefinitely short period of time”². For me, unlike “ogenblik” (which literally translates to “gaze of the eyes”), this translation lacks an indication of being sight-related. It requires a similar visual gesture through which the “moment” can also be understood as a most fundamental, bodily experience of space. **The instant when architecture reveals or conceals itself before our gazing eyes.** Hence “*The moments’ gaze*”.

1 Dutch definition of “ogenblik”. Retrieved from Van Dale dictionary: <http://www.vandale.nl/gratis-woordenboek/nederlands/betekenis/ogenblik#.WsN4TS5uaiQ>

2 English definition of “moment”. Retrieved from Oxford Dictionaries: <https://en.oxforddictionaries.com/definition/moment>

2. Prologue: Maurice Merleau-Ponty

“When through the water’s thickness I see the tiled bottom of the pool, I do not see it despite the water and the reflections; I see it through them and because of them. If there were not distortions, no ripples of sunlight, if it were without that flesh that I saw the geometry of the tiles, then I would cease to see it as it is and where it is – which is to say, beyond any identical, specific place. I cannot say that the water itself – the aqueous power, the syrupy and shimmering element – is in space; all this is not somewhere else either, but it is not in the pool. It inhabits it, is materialized there, yet it is not contained there; and if I lift my eyes towards the screen of cypresses where the web of reflections play, I must recognize that the water visits it as well, or at least sends out its active, living essence.”³

//One hundred and sixty-nine words

Will my drawings ever equal his writing? A continuous questioning of the gaze whilst seemingly simultaneously embodying his discourse in a most beautiful phrasing. This embodiment in “Eye and Mind”⁴ originates in Merleau-Ponty’s conscious attitude of looking at his surroundings. With almost a hundred and seventy words **he prolongs a moment that could only have taken a few seconds**. A moment that fades as instantly as the physical genesis in which it originated. It is this **method of stretching time** that I pursue throughout my drawings.

3 English translated paragraph, quoted from Merleau-Ponty, M. (2011). *Oog en geest*. Amsterdam: Parresia. p.49

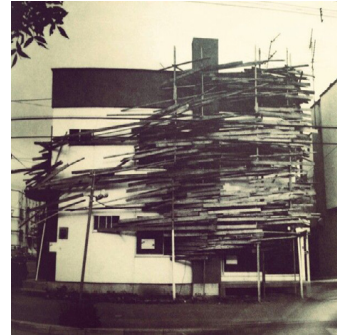
4 English translated title from Merleau-Ponty, M. (2011). *Oog en geest*. Amsterdam: Parresia.

3. Preface

After twenty-four years, I believe that everything is in motion. Not only obvious moving elements like cars, nature or data but also installations, buildings, architecture (in the preconception that they are not on the verge of collapsing). I suspect this belief originated in the idea that we – our bodies – are always in motion. Even when standing still, our eyes gaze at our surroundings. A most primal motion that might require an architect's attention.

With my master's dissertation, I want to contemplate my own gaze. **More specifically do I want to study the relation between analysing the gaze and the architectural drawing, assuming something must survive the constant motion of architecture's spectator. A most fleeting space that is crystalized in the drawing, capable of distorting, and thereby given the chance to morph its originating space.**

Although these being drawings analogue to the science of eye movements and vision, I want to stress that this is not about a particular certainty, it is about the potential of the uncertain, the collection of information this brings about, innovative ways of drawing new spaces, and – last but not least – the joy of drawing.



4. Between sight, look and the gaze: a hierarchy of sight-related nouns

To avoid confusion, I relate the gaze to two apparent synonyms. “Sight” is defined as “the ability or power of seeing”⁵. The “look”, on the other hand, describes the use of this ability. It is “the act of directing one’s gaze”⁶. Consequently **the gaze is in some extent a way of looking. It is a conscious action that requires a certain level of concentration. It is a focused look that develops intuitively and of which we have forgotten how we are capable of doing it. Let alone trying to remember when man started seeing that he saw?**⁷ Other sight-related nouns are less applicable because of various, slight connotations. Most of them are derivatives of Merleau-Ponty’s usage of the word “perception”, meaning “the way in which something is regarded, understood, or intended”⁸. This is a fourth principal category that I won’t fixate on whilst directing my gaze but will inevitably become a part of the dissertation and therefore will have to be addressed. My initial focus lies on physical lines in space, their emitted light rays refracting in my eyes and eventually processed by my brain. Because of these various connotations, most sight-related nouns can be put into multiple categories. I attempt to classify them as follows:

(eye)“Sight”: perception, view, vision

(“Look”)

“Gaze”: glance, regard, view, observation

“Perception”: regard, look on/at, view, observation

5 English definition of “sight”. Retrieved from Oxford Dictionaries: <https://en.oxforddictionaries.com/definition/sight>

6 English definition of “look”. Retrieved from Oxford Dictionaries: <https://en.oxforddictionaries.com/definition/look>

7 Paraphrased from Hertmans, S. (2017). *Van A tot Z: Stefan Hertmans, B - Beeld*. Retrieved February 2018, from VRT NU: <https://www.vrt.be/vrtnu/a-z/van-a-tot-z/2017/van-a-tot-z-d20171029-s2017a2/>

8 English definition of “perception”. Retrieved from Oxford Dictionaries: <https://en.oxforddictionaries.com/definition/perception>

5. Chasing *the moments' gaze*: the act of drawing

In an earlier studio⁹ I wrote the following five sentences as a mantra before any form of production:

“This is a registration.
I repeat.
This is a reconstruction of a walk.
A movement that preceded the act of drawing.¹⁰
I doubt whether this is the absolute truth.”

First of all, it is an acknowledgement that **it is impossible to reconstruct *the moments' gaze exactly***. The registration is no match for the gaze. It is too much of a fleeting moment. Or am I too slow? Analysing the gaze is always post factum, even if you simultaneously reflect on what you see. However, **it is possible to understand the movements that were made in order to see. The act of looking that precedes the act of drawing**. This is how I try to approximate *the moments' gaze* as close as possible.

Secondly, I admit that at all times, I am writing about my own gaze. This is partially subjective. There is no absolute truth in what I write or draw, nor is it my intention to proclaim it as “the Truth”. The book entitled “Eye Movements and Vision”¹¹ offers me an objective counter-offensive to analyse the gaze. This book constructs the foundation on which my research is drawn. Alfred L. Yarbus writes:

“It is intended for students and researchers in the fields of biophysics, physiology, medicine, psychology, and branches of technology such as television, motion pictures, and apparatus construction.”¹²

In my opinion, one might add “in the field of architecture”.

9 Studio *The Double Look* (2018)

10 Note: I would like to change this sentence to: “The act of drawing that preceded the drawing itself.”

11 Yarbus, A. L. (1967). *Eye Movements and Vision*. New York: Plenum Press.

12 Ibid. p. ix

Chapter 1. The – unnaturally – stationary gaze

1. Framework: *finding new space within old objects*¹³

Similar to deconstructivist architecture, *I attempt to get under the skin of the living tradition, irritating it from within*¹⁴. This means that my study requires a physical context, something to gaze at, a subject. Not a 2-dimensional screen or moving elements. **I want my gaze to be in motion, not my subject.**

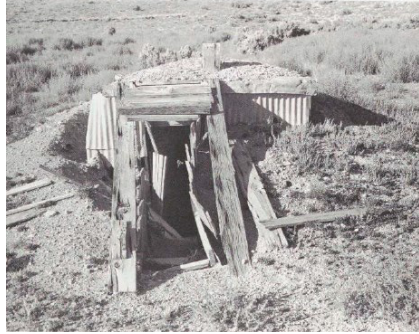
In order for the subject to be communicable, I need a space composed of fixed lines, planes and volumes that one could encounter in their everyday surroundings. I select a most ordinary yet familiar space: my campus. I end up in a classroom, stripped of any content and/ or symbols that would only serve as a means of distracting my gaze. I place myself in an upright position, my eyes fixated on a corner of the space and I ask myself: **Is there the possibility of a concealed space in how I attempt to experience *the moments' gaze during the act of drawing?* And if so, how do I compose this space? What are its parameters? And what could be its potential?** Shortly afterwards, I select a second, more complex corner in the same building. I develop both spaces simultaneously by implementing a similar method. First I immerse myself in the study of eye movements and vision (cfr.2). Secondly I attempt deconstructing my gaze by means of photography, projection and the traced drawing as a mediating process (cfr.3). Finally I reflect on my gaze by reconstructing the tracings in the architectural drawing (cfr.4). On the one hand, I develop potential new drawing strategies parallel to the construction of the gaze. On the other hand, I would be misguided in disregarding the intuitive aspect that occurs during the drawing process. I presume this is subconsciously linked to *the moments' gaze* and therefore very valuable in an attempt of understanding possible new insights.

Since I will try to decelerate myself to the point when production becomes valuable again, I will not pretend that I will be capable of understanding the gaze in its totality. That is why I end my dissertation as an ongoing project (cfr.5, chpt2, ...). When arriving at this point, **it might even be so that the drawings are ahead of its thought process.** This should not come as a surprising conclusion, *since it are the drawings that tell me how to compose them, giving me ideas of how I might theorize them later.*¹⁵

¹³ Paraphrased from Johnson, P. (1988). *Deconstructivist architecture*. New York: The Museum of Modern Art. p. 18

¹⁴ Ibid. p. 18

¹⁵ Paraphrased from Spiller, N. (2016, november 11). *Interview with Neil Spiller | Drawing as Communication Vessels*. Retrieved May 2018, from Vimeo: <https://vimeo.com/196279920>



left eye: *Spring house* (1860s)
right eye: *Rooftop Remodeling*, Coop Himmelb(l)au (1989)

2. Construction of the gaze: eye movements and vision¹⁶

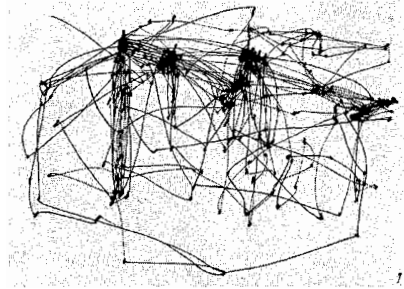
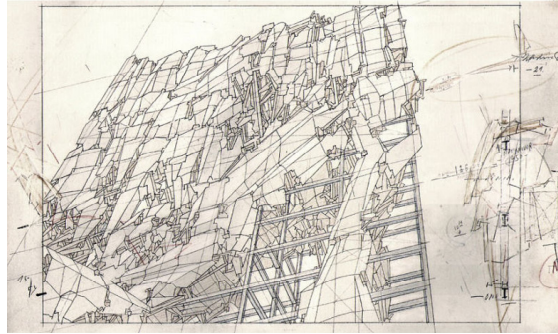
Before I can deconstruct my gaze, let alone reconstruct it in the architectural drawing, I need to understand how sight works, how it is constructed. According to Jacques Derrida:

“Any architectural deconstructivism requires the existence of a particular archetypal construction, a strongly-established conventional expectation to play flexible against.”¹⁷

Although sight is not an “archetypal” construction – and this not entirely being architectural deconstructivism – **it is a “conventional expectation to play flexible against” as sight is considered a given human ability.** We use it intuitively from the moment we wake up until we go back to sleep (and even then our eyes move at an incredible speed). So without completely falling into the world of biophysics, I am obliged to dissect the construction of the gaze before attempting a first drawing. In the following paragraphs I address the necessary knowledge of sight-related theory that is embodied in my architectural drawings of deconstructing and reconstructing *the moments’ gaze*.

¹⁶ Derived from Yarbus, A. L. (1967). *Eye Movements and Vision*. New York: Plenum Press.

¹⁷ Quoted from Derrida, J. (1997). *Of Grammatology*. Baltimore: Johns Hopkins University Press.



left eye: from *War and Architecture*, Lebbeus Woods (1993)
right eye: *Record of eye movements*, Alfred L. Yarbus (1967)

2.1 Structure of the human eye¹⁸

The human eye is the sense organ that grants us vision. It captures light beams emitted and reflected from all objects in the field of vision. Each light beam passes through the cornea, enters the pupil, refracts in the lens and finally converges in the focal point, preferably on the retina. The cornea is a transparent, protective membrane. The pupil controls the amount of light entering the eye, its diameter modified by the surrounding, pigmented iris. The biconvex, transparent lens refracts the incoming, parallel light beams. Its curvature can be adjusted by means of accommodation. Accommodation permits the receiving image to be sharply focussed by converging the light beams precisely on the retina. The distance from lens to retina is called focal length. The retina is made up out of light-sensitive photoreceptors – cones and rods – that convert the converged light beams into electrical signals. These are then transmitted to the brain by the optic nerve and interpreted as sight.

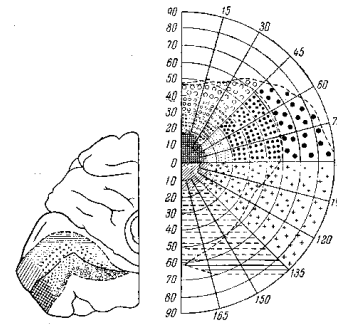
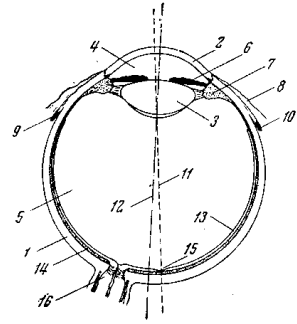
2.2 Binocular field of vision¹⁹

The binocular – using both eyes – field of vision is composed of two distinct segments: central and peripheral vision. Central vision coincides with light beams converging on the fovea. This is the part with the highest resolving power of the retina. It offers the point of clearest vision (~ 5°). Peripheral vision is the part that occurs in the side gaze. Commonly, it is subdivided in three more segments: far peripheral, mid- peripheral and near-peripheral. Far peripheral delineates the edges of the visual field (~ 110°). Mid-peripheral occurs in the middle of the field of vision (~ 60°). Near-peripheral exists adjacent to the centre of the gaze (~ 30°). **Along with the central vision, it forms the cone of visual attention (~ 55°)²⁰. Let us agree that, if we would have to make an attempt in delineating the scope of the gaze, this cone of visual attention is its closest approximation.**

¹⁸ Yarbus, A. L. (1967). *Eye Movements and Vision*. New York: Plenum Press.

¹⁹ Ibid.

²⁰ Note: their limits are determined by characteristics of visual performance



left eye: *Section of the human eye*, Alfred L. Yarbus (1967)
 right eye: *Visual field projected on cortex*, Gordon M. Holmes (1918)

2.3 Singleness of vision²¹

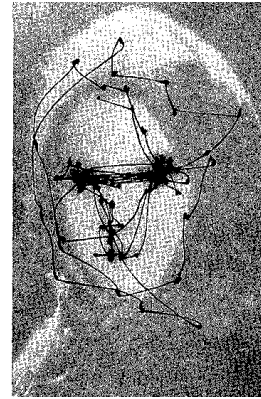
Binocular viewing of our surroundings creates two slightly different images in the two eyes due to the eye's different position in the head (~ 6,5 cm). These images overlap within the cone of visual attention. Once they overlap, there is a potential moment for confusion between the left and right eye's image of the same object. Our brain resolves the issue by fusing the two images. This process provides the impression of depth perception, also referred to as stereopsis.

2.4 Fixation and saccades²²

Opposed to how we experience the gaze as being a continuous motion, it is a discontinuous action. Studies of eye movements shows that the eyes do not move smoothly across the printed page during reading. Instead, our eyes make short and rapid movements called saccades. The state in between two consecutive saccades is called fixation. There's a double reason for this random movement, both characterized by a different type of saccade. First off, **it is our tendency to scan the largest possible area of the gaze with the high-resolution fovea. And since the fovea only covers 5° of our field of vision, we have to adjust our point of fixation constantly. This is referred to as a scanning saccade.** Secondly, it appears that a constant visual stimulus can make the photoreceptors of the retina become unresponsive, resulting in a so-called empty field (temporary state of loss of vision). To prevent this, the eyes make fast – in addition to blinking, one of the fastest movements of the human body – random jittering movements, even when fixated on one point. This is referred to as a reflexive saccade.

²¹ Yarbus, A. L. (1967). *Eye Movements and Vision*. New York: Plenum Press.

²² Ibid.



left eye: *Electronic context*, Nat Chard (2011)
right eye: *Record of eye movements*, Alfred L. Yarbus (1967)

2.5 Con- and divergence²³

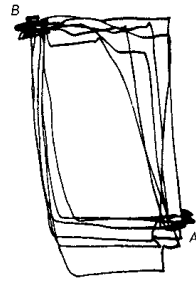
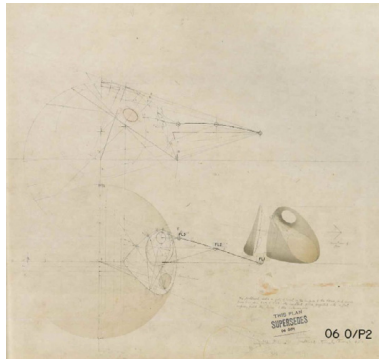
A vergence is the simultaneous movement of both eyes in opposite directions to obtain or maintain binocular vision. When changing the focus of the eyes to an object close by, the eyes rotate towards each other. When focussing on a point further in space, the eyes rotate away from each other. Vergence movements are closely connected to accommodation of the biconvex lens. **Compared to saccades, con- and divergence are slow movements, equal to the duration of a stationary point of fixation. However, both actions occur during a shift of focus.** When changing the point of fixation, a saccade is always preceded and followed by either a con- or divergent movement. In that way, the projection of the object of fixation is – for both eyes – in the fovea of the retina.

2.6 Vestibulo-ocular reflex²⁴

Because our brain would not be able to process the amount of signals caused by involuntary head movements, the vestibulo-ocular reflex functions to stabilize incoming images. Even when the head is seemingly stationary, it suffers from small tremors. As a way of compensating, the eyes rotate about the same axis, but in the opposite direction of the head movement.

²³ Yarbus, A. L. (1967). *Eye Movements and Vision*. New York: Plenum Press.

²⁴ Ibid.



3. Method of deconstruction: *the virtual window*²⁵

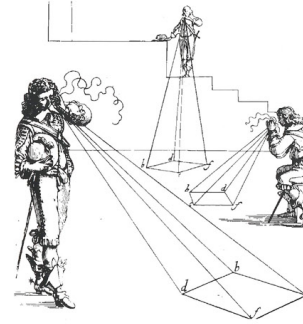
“When we have learned to walk we do not think which foot to move first, we simply walk. When we have learned to look we do not think about what order or what points of fixation to choose when looking at an object, we simply look. But both in walking and in looking at objects, the “simplicity” of the movements are really complex.”²⁶

Now that I have formulated an array of actions, characteristics and possible misconceptions concerning the construction of the gaze, I can attempt making a first registration. **I instantly acknowledge that neither the photograph or the drawing can imitate the movement of the gaze individually. They demand each other through the act of drawing.** Concluding on the seemingly most similar appearance, I select the photograph to be the first layer of data that engages the deconstruction of the gaze. Afterwards, the photographs are projected on a vertical drawing plane where they are submitted to the traced drawing. **During these actions, a conscious attitude towards the registration and its complementary frame is essential.** What follows is a descriptive and initial meditation of my deconstructive methods – based on “The Virtual Window”²⁷ – as a build-up to the reflection in the architectural drawing.

25 Derived from Friedberg, A. (2006). *The Virtual Window*. Cambridge: MIT Press.

26 Quoted from Yarbus, A. L. (1967). *Eye Movements and Vision*. New York: Plenum Press. p. 146

27 Friedberg, A. (2006). *The Virtual Window*. Cambridge: MIT Press.

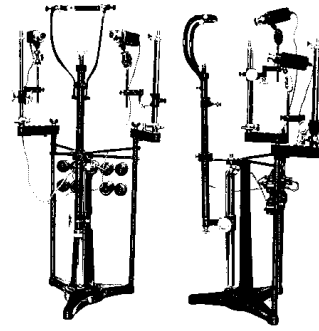


left eye: *The Burrow Laws*, Daniel Libeskind (1979)
right eye: *The Medium Is the Message*, Marshal McLuhan & Quentin Fiore (1967)

3.1 Deficiency of the photo-camera

Although the photo-camera seems like the obvious choice when attempting to capture the gaze, there are some distinct differences to be noted when comparing it with our eyes. A first notion is already embedded in the previous sentence: one photo-camera versus two eyes. The photo-camera is a monocular device while our eyes function binocularly. **This implies that I should always take a set of photos when making a registration. One through each eye.** The distinction between the stationary field of vision and the adaptable field of view marks a second difference between the eyes and photo-camera. The eyes have a focal length of approximately 20 mm whilst a standard photo-camera lens has a modifiable focal length of 18 to 55 mm. As mentioned before, the cone of visual attention – or scope of the gaze – occurs in 55° of the visual field. This corresponds with a 43 mm lens. Knowing this, **I exclusively take photos with my lens locked on 43 mm.** Another characterizing difference is encountered when comparing the sensor of the photo-camera with the retina of the eye. In size, they are almost identical. Aside that, almost everything is different. A first difference is rather obvious: a sensor is flat, not curved like the retina. The retina also has a lot more photoreceptors than a photo-camera has pixels. Especially near the fovea. Consequently, the central part of our visual field has a far more resolving ability than any camera. **However, unlike the photo-camera's ability to process all the information into an image, the optic nerve can only transport about 10% of the retina's data to the brain at any given instant. As compensation, this part of the brain is complemented by our ability of recognition.**

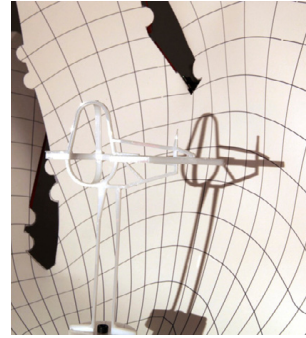
To sum things up, parallel with the notion of fixation and saccades, the eyes are sending the brain a constant feed of video which is processed into what we see. Subsequently, you could argue that a video-camera would be more applicable in attempting a first registration of the gaze. I disagree. Even a handheld video-camera would not be able to make an accurate registration of the discontinuity of the gaze. It would only serve as a misleading mock-up. **The photograph however is the closest equivalent to a point of fixation, expecting a saccadic eye movement. A frame ripped from its video, that only serves the idea of being a part of a whole.** A first layer of data on which *the moments' gaze* might be drawn.



3.2 After-image

Because of the enduring conflict between photograph and frame, I introduced the term “after-image”²⁸ to the vocabulary of the dissertation. Partly because it originated and is frequently used in sight-related studies. But mostly because of the way it is generated. An after-image refers to an image continuing to appear after exposure to the original image has ceased. It is a long established method, a somewhat forgotten technique that is – occasionally – still used in the study of eye movements. **It is a state in which the overstimulation of the eye’s photoreceptors result in a loss of sensitivity and a complementary decrease of transmitted signals to the brain.** This further reinforces the legitimacy of the term in the dissertation’s context. **It is the almost literal postponing of a saccadic eye movement without completely becoming unresponsive.** An after-image can easily be provoked by means of backlighting. This is a method where you install a light source directly behind the observed subject. After diverging the gaze to a dark area – or by closing the eyes –, the after-image appears. **This technique is unconditionally used and embodied in the process and presentation by means of camera flashes, (overhead)projection and illuminated drawing tables.**

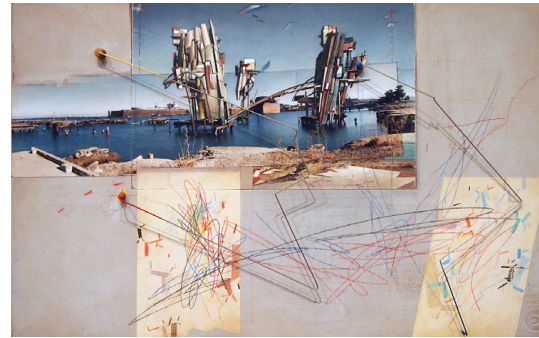
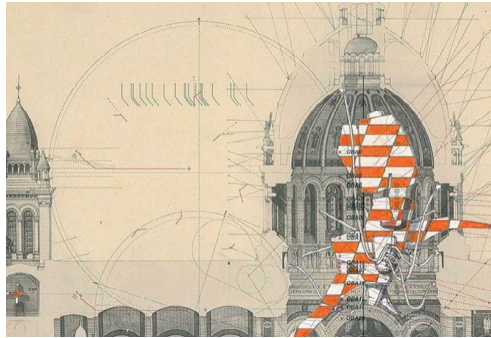
²⁸ Yarbus, A. L. (1967). *Eye Movements and Vision*. New York: Plenum Press. p. 11



left eye: *Shadow from Instrument Six (1)*, Nat Chard (2011)
right eye: *Shadow from Instrument Six (2)*, Nat Chard (2011)

3.3 Superimposition and wiggle 3D

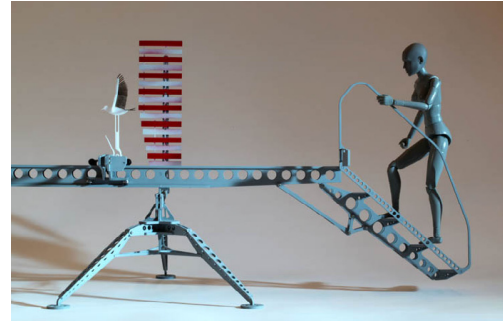
As stated before, I always take two photographs when making a registration. One image for each eye. Before tracing them, I overlap the images according to my initial point of fixation. This generally corresponds with the framing's centre. **By cancelling out our habit of fusing the two images, an expected distortion is affirmed: the further lines are removed from the centre of the overlapping images, the more they diverge from one another.** What seemed to be two almost identical images suddenly could not be more contrasting. Once seen on top of each other, it is difficult to ignore their difference. However, when you animate the images, they seem complementary. As if both images are necessary to see the space accurately. Both are equally true. Wiggling images is an established method for simulating depth when looking at a virtual image. This acquired depth is what makes the registration – and thus the complementary images – more realistic to the observers' eyes. **Though it is the ability of understanding the impact of the after-image that seems most interesting to me. What happens when I slow down the animation to the point that it becomes motionless again? Does the after-image still have an impact aside of depth perception?** Arriving at this point, I start up two stacks of tracing paper drawings. One for each submitted space. Every new piece of paper is – just as the initial two photographs – treated as an after-image.



left eye: *Palimpsestuous Relationships*, Bryan Cantley (2016)
right eye: *Shard House*, Lebbeus Woods (1995)

3.4 Temporary workspace

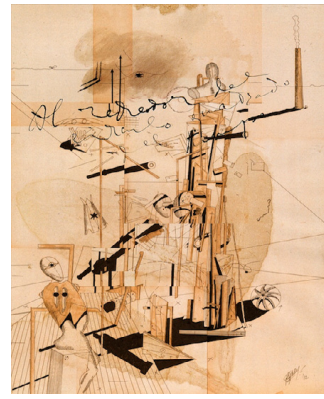
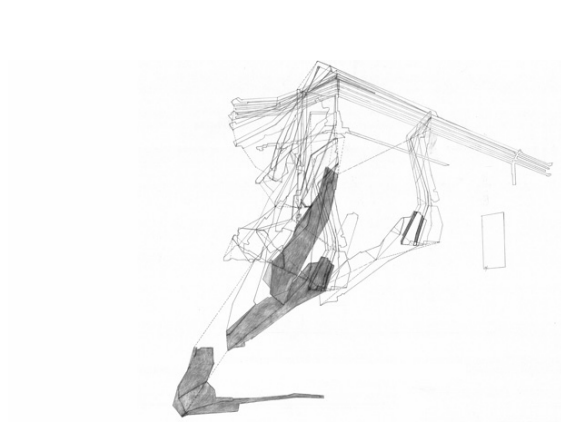
My workspace has – analogue to *the moments' gaze* – no physical permanence. Since I draw on irregular time intervals, it is impossible to work on one location. I change location as I see fit. This is used as an advantage. Each time having to recreate the subject, depending on what, how or for how long I wish to draw. First, I consider the correct scale of the projection. **As a rule, I stop enlarging the image the instant I see details I didn't notice on site. Hence, the scale of the drawing is the result of a sight-related action.** Afterwards, I simulate the original horizon. Analogue to my photography, I draw in an upright position, facing my initial eye height. **Due to the mechanism of projecting, I can isolate the drawing at any given moment by stepping in front of the projection. Aside from being practical, it is also my first attempt of reintroducing the drawer's body into the space.** For the untrained eye, the photographic registration too often neglects the body of the author. Personally, whether it is video, photography or any other medium of registration, I am equally interested in the (work)space surrounding the drawer and in which possible ways it can relate to the subject. It is at these moments' of pure insight where the imaginative part of my brain takes control. **Were my drawings never meant to alter the subjected space? Is it possible that my designed space is predetermined by either observed or workspace? Or is it the combination that unfolds a third, new architectural space?** Whatever the case, I can conclude that, through my act of drawing, **the body is revived as the principal component of *the moments' gaze*. Because without the body, there would be no *moments' gaze*.**



left eye: *Failing to Levitate in the Studio*, Bruce Nauman (1966)
right eye: *Bird Automata Test Track*, Nat Chard (2011)

3.5 Tracing the obvious

After superimposing the two photographs, I subject them to the traced drawing. Every spatial perceived body and their earlier mentioned diverging lines are delineated. Some bodies are intrinsic to the space (i.e. a column), others are mobile (i.e. a table and chairs). Some bodies will always inhabit my gaze, others left it weeks ago. **Aside to the possibility of physically revisiting my initial gaze, the act of superimposing photographs with traced drawings is already a second analyzation of the same space. A drawn observation through the registration.** Here, it is important to note that there is a different sequence of fixation when gazing at a space or when analysing its flat registration. This due to the absence of con- and divergence eye movements. **In other words, although looking at an identical composition, it is definitely not the same gaze as before. Which does not prevent me from believing it might be.** This is an issue – or rather exercise – that I will have to confront several times throughout the production. **Repeatedly having to acknowledge that my original gaze is constantly morphing, obliging me to work with different parameters of viewing and therefore different conditions of drawing. In addition, it automatically renders the importance of drawing and redrawing as a tool to contest this insurmountable problem. Nonetheless, I cannot imagine that this second analyzation is not affected by my original gaze, just as much as the assumption that I would have utilized the space differently if I had never physically entered it. Therefore, I can imply that aside of a remaining physicality in between two consecutive points of fixation, there is also the possibility of a mental, discontinue space of thought that might influence and – instead of being reproduced – live through the upcoming gaze.**



4. Reflection through reconstruction: *intuition of the instant*²⁹

Although it is impossible to infer specific cognitive processes directly from the study of eye movements, it is accurate to say that eye movements reflect the human thought process and vice versa:

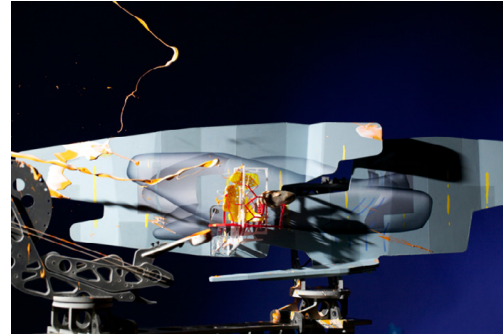
“The order and duration of the fixations on elements of an object are determined by the thought process accompanying the analysis of the information obtained. Hence people who think differently also, to some extent, see differently.”³⁰

This again stresses the importance of the individual gaze. Meaning that, if there was a chance that another would have issued a similar subject, it would probably have had a completely different focus. This simultaneously confirms the richness, instantaneity and discontinuity of the issue. Furthermore is it this conception of discontinuity – based on “Intuition of the Instant”³¹ – that will attempt to connect the dissertations’ protagonists: i.e. the gaze and the architectural drawing.

29 Derived from Bachelard, G. (2013). *Intuition of the Instant*. Evanston: Northwestern University Press.

30 Quoted from Yarbus, A. L. (1967). *Eye Movements and Vision*. New York: Plenum Press. p. 211

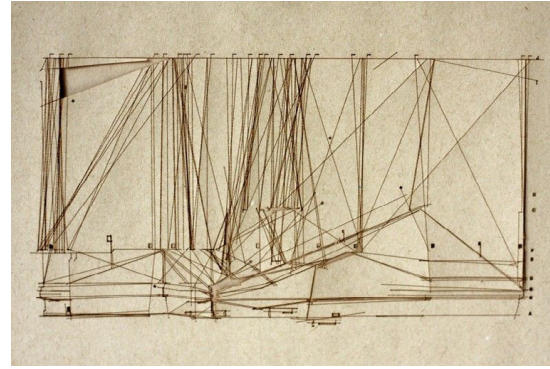
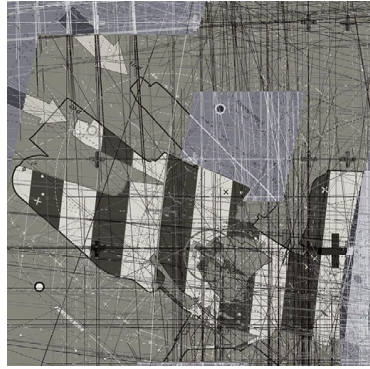
31 Bachelard, G. (2013). *Intuition of the Instant*. Evanston: Northwestern University Press.



left eye: *Fathoming the Unfathomable*, Perry Kulper (2013)
right eye: *Fathoming the Unfathomable*, Nat Chard (2013)

4.1 The line

Due to its recurring appearance throughout the entire production, I feel the necessity of addressing the lines individually. Opposed to other drawing techniques, the line seems to have a particular straight forwardness. It often has the tendency of becoming an easily – or rather quickly – comprehensible, and therefore indisputable entity. **This conception is reversed when the amount of lines escalates. The observer then becomes incapable of processing the drawing instantly due to the many lines that demand attention simultaneously.** Consequently, this abundance of lines might – in a first regard – question the origin of the dissertation: is the line a consequence of a way of looking or is the gaze the outcome of a fascination for lines? **Although obviously being fascinated by lines and its performance in practice, it is more accurate to say that the line is the result of directing one's gaze. The line as a residue of the act of looking, given its distinct shape through the act of drawing.** In addition, it also resembles the illustration of eye tracking registrations, which was developed in the preconception that reading does not involve a smooth sweeping of the eyes along the text, but the succession of fixations and saccadic eye movements. **In other words: scientific research depicts eye movements as a sequence of lines that begin and end – or are they merely pausing and resuming, without ever ending nor feeling the need of beginning anew –, leaving behind a trace of *the moments' gaze*. This notion of the endless line can be extended to the drawing itself. Just as the sequence of lines is infinite, the series of drawings – understood as the synthesis of lines at a certain moment – are inexhaustible, possibly to the extent of ending up with a black canvas.** To prevent this, I exclusively use tracing paper. This enables me to displace or extract fragments out of its series. However, one could argue that this also brings with it a sense of – accidental – hierarchy between lines. Personally, I interpret this hierarchy as the chronology in which the lines were drawn. A chronology which can easily be tinkered with. Though, I doubt whether – at this moment – the difference between hierarchy and chronology could be of any importance other than being a hint of uncertainty concerning the temporal experience of the architectural drawing. Whatever the case, when presented as a superimposition, hierarchy and chronology again make way for the seemingly simultaneity of another's gaze.

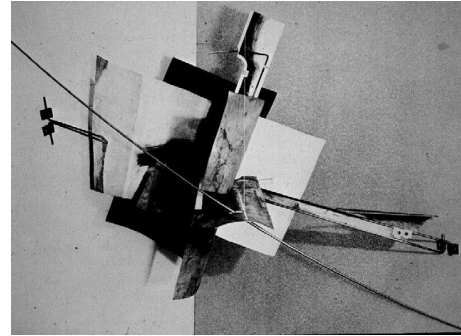
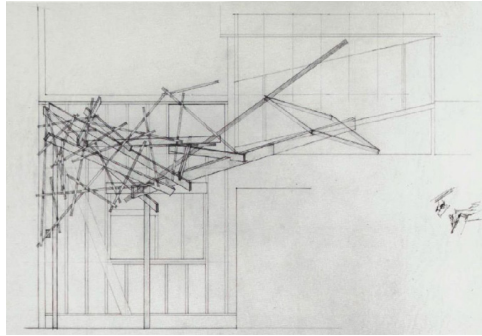


left eye:
right eye:

Line Politics, Bryan Cantley (2018)
Line.Scape Topologies, Bradley Sliva (2008)

4.2 Exercise of the gaze

However obvious the suggestion of analysing the gaze may sound at first, there is a discrepancy between its theory and practice. **The instant you become aware of your consciousness towards the gaze as a result of looking at your surroundings, it becomes extremely difficult to continue.** You could compare this moment to keeping a consistent respiration after suddenly realising that you are breathing. **Nevertheless, I consider the most fruitful moment to be the instant of directing the gaze itself. This is what I identify as the act of looking. A decision that produces the originality of what follows: the action. And just as it is possible to learn to regulate our breathing, the act of looking might be an exercise that requires practice in order to discover its true potential. Not only as an attempt of approximating *the moments' gaze*, but also to give oneself the possibility of surpassing it.** As such, the drawing presents itself the most suitable tool in creating and terminating this recurring stream of thought. Naturally, this instant strongly connects – and consequently interferes – with our ability of recognition. Take for example the observer of my drawings. Without the necessary background, the drawings establish a certain autonomy. An autonomy that is free for interpretation. But once a significance is given – whether it is or isn't the correct one – and a shape is identified, it becomes difficult to alter your individual projection. The same mechanism applies to me when directing my gaze. But instead of simply accepting, I attempt transgressing these visual boundaries throughout the architectural drawing.



left eye: *Gehry House*, Frank O. Gehry (1978-1988)
right eye: *Corner Counter-Relief*, Vladimir Tatlin (1914-1915)

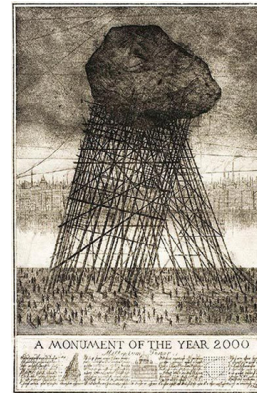
4.3 Discontinuity of time

“What persists is always what regenerates itself.”³²

As I am drawing, I start to perceive an unmistakable parallel between analysing the gaze and its temporal characteristics. **Both gaze and time are experienced as continuous, whilst in reality both are discontinuous of nature. Just as the gaze is a sequence of fixations, so is time solely noticed through a series of instants instead of the artificial sense of duration.** What does not mean that I undervalue the existing hypothesis of duration. Especially not since **it resembles my initial strategy of stretching the moments' gaze by giving a sense of prolongation to what is actually a fixed, transitory point in time. Analogue to the persuasion of duration, feeling the need to stretch the moments' gaze might be an undeveloped human reflex – embodied as a drawing apparatus – to understand and possibly transgress a seemingly intangible reality. In both gaze and time, it is repetition that causes the experience of continuity. A rhythm of the discontinuous. A rhythm of acts of looking that contributes to the habit of drawing by reproducing what should endure through time.** And *time*, on its turn, *endures only through invention*.³³

³² Quoted from Bachelard, G. (2013). *Intuition of the Instant*. Evanston: Northwestern University Press. p.47

³³ Paraphrased from Bachelard, G. (2013). *Intuition of the Instant*. Evanston: Northwestern University Press. p.49



left eye: from *Vedute di Roma*, Giovanni Battista Piranesi (1766)
right eye: *A Monument of the Year 2000*, Brodsky & Utkin (1997)

4.4 Discontinuity of the method

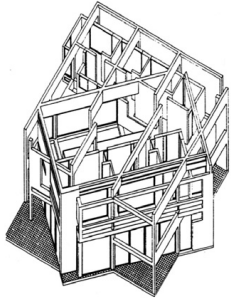
As I am drawing, I start to perceive an unmistakable shift between numerous acts and their complementary lines, supported by the notion of discontinuous time. For example, **what started as two physically detached spaces – meant as a possibility for variety during the drawing process – unintentionally began to influence one another in the architectural drawing.** Thoughts that originated in one were gradually implemented in the other and vice versa. A connection – other from the obvious fact that both reside in the same building – started to surface. Not (yet) as a material assemblage, but as a drawn train of thought throughout two reversible series of drawings.

This simultaneously illustrates a second insight. **Instead of experiencing drawing as going only forward, I noticed the possibility of going back into the series.** It assured the flexibility of revisiting previous decisions. As if I have a record for the origin of every doubtful line, waiting to be altered and afterwards continue its existence aside of its correction.

Maybe the most important shift occurs in the overthrow of the presumed sequence of acts. In an attempt of drawing the intersection of two sets of registrations, I abruptly noticed the decision of directing my gaze according to the drawing I had just made. **The act of looking that originally preceded the act of drawing had reversed.** Although I had intuitively adjusted my photo camera's framing, I believe it was the drawing that had influenced me to do it as such. **If the acts indeed switched positions, I wonder whether there is a turning point. A critical instant where the terms “before” and “after” become a simultaneity. Where the act of looking and drawing become interchangeable. Where what is actually seen is incarnated³⁴ through the drawing. Not as a representation, but as an attempt of making it real³⁵. Or do they never convene – as they pursue a circle instead of a line – and is there only the possibility of understanding – as an addition to chasing – the surpassing of *the moments' gaze*. The drawings that were made in order to see. The act of drawing that precedes the act of looking.**

34 Paraphrased from Corbo, S. (2017, March 17). *Peter Eisenman*. Retrieved April 2018, from Drawing Matter: <https://www.drawingmatter.org/sets/drawing-week/corbo-peter-eisenman/>

35 Ibid.



left eye:
right eye:

House III, Peter Eisenman (1969-1971)
temporarily blind

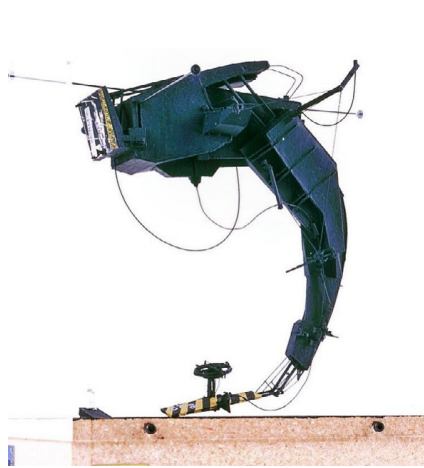
4.5 From *parasite* to *alien*³⁶

As I start producing, I see the classroom evolve into the host of my early drawings. Entangled by my thoughts, a rapid growth of lines latches onto the space. A presence similar to a parasite growing on its host. **The forms themselves – through which the space is constructed – infiltrated by lines, distorting the traditional condition of the architectural body to the point where the distortion itself might become intrinsic to the space. Perhaps the initial bodies were even produced by it. Maybe the host was invented only to satisfy the parasite.** However, as I continue drawing, the classroom starts to disappear into the background. The drawing slowly loses its parasitical characteristic and starts to maintain itself. It gains a certain autonomy – the autonomy of the reconstructed body – causing the feeling of wanting to physically detach itself from its originating space. **After inserting my artificial stretching of the moments' gaze, the parasite grew into an alien of its own host. An alien composed for the observer, to whom its superior knowledge might be of most importance.**

“It seems to have always been latent there until released by the architect: the alien emerging out of the stairs, the walls, and the roof plane – not from some fissure or dark corner – is given shape by the very elements that define the basic volume of the attic. The alien is an outgrowth of the very form it violates.”³⁷

³⁶ Derived from Johnson, P. (1988). *Deconstructivist architecture*. New York: The Museum of Modern Art.

³⁷ Quoted from Johnson, P. (1988). *Deconstructivist architecture*. New York: The Museum of Modern Art. p. 17

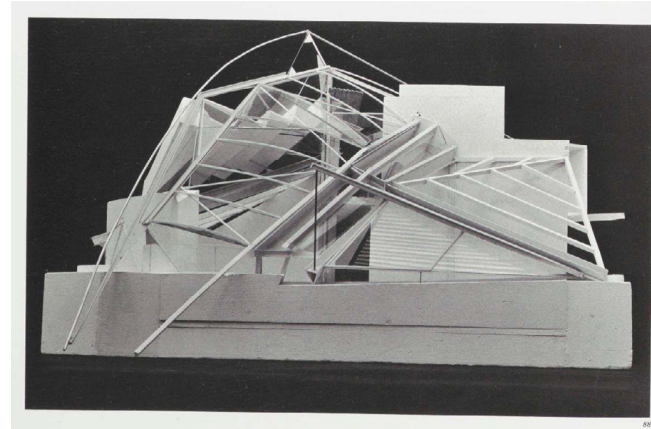
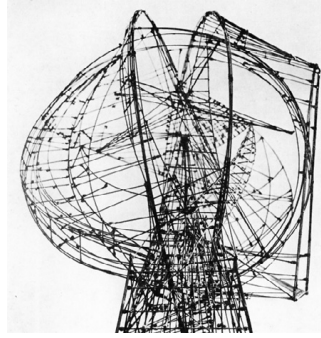


left eye:
right eye:

Batman Model 3, Bryan Cantley (2000)
Play Sculpture, Morphosis Architects (1987)

4.6 Model as extension of the drawing

As a way of exaggerating the alien's autonomy and giving him the opportunity of emerging out of its creator's table, I start producing a solder model. Not only to explore its potential depth, but also to acquire an additional method of dealing with the line drawing. A method that fixates on the convergence and intersections of lines in the three-dimensional space. As a consequence, the abundance of singularly drawn lines makes way for the design of junctions. On their turn, these junctions generate the limited depth of a model. **As it develops, it gives shape to how I imagine *the moments' gaze* could be dimensioned: a fragile configuration of connections, just thin enough to slip in between the initial two photographs. But even though the solder model adds a more comprehensible depth, I still feel the tendency of addressing the model as a drawing.** I presume this is due to the initial scale, passed on through the act of drawing. When these drawings started to detach itself from its originating space, so did its scale. The initial drawings transformed into what is now a scaleless extension of those same drawings. **An extension that, when backlighted, produces 359 degrees of new drawings. Each one of them influenced by that same *moments' gaze*.**



5. Incarnation through intuition: *drawing uncertainty*³⁸

When it comes to – my humble activity in – architectural research, I am rather sceptical towards the idea of theorizing through the isolated production of a – frequently estheticized – representation. Which does not mean I don't like beautiful things. **It means that I use the act of drawing not merely as a representation of what is already inside my head, but primarily as an experimental tool for developing new thoughts. As a search for that so called threshold moment.** The moment you grasp control over more complex things that seem to appear, things with new emergent properties that request our attention. **As far as my gaze is concerned, it seems like – through the architectural drawing - there is a connection between how I compose a space as a discontinuous sequence of architectural bodies and the enduring of these spatial relationships after my body has moved.** For this – or any other – idea to solidify in architectural practice, I think repetition is crucial. That is why – since I feel to have lost the relation between architectural space, body and my own body – I reintroduce the alien to its originating space.

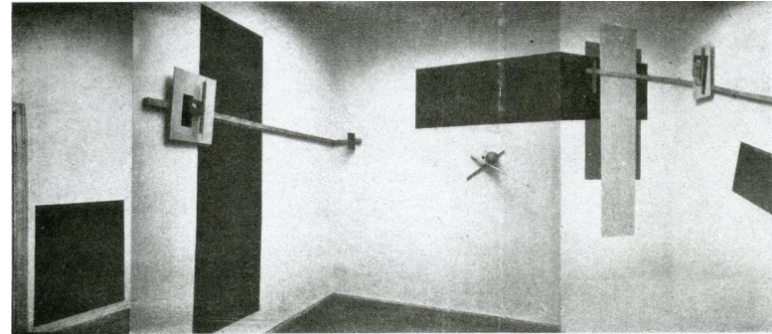
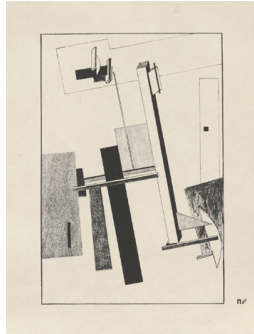
³⁸ Derived from Chard, N. (2013, October 24). *Drawing Uncertainty* - inaugural lecture from Nat Chard. Retrieved May 2018, from Youtube: https://www.youtube.com/watch?v=IR_FKX_1-Fs



left eye: *Van Hoogstraten's peepshow test*, Nat Chard (2012)
right eye: *Peepshow*, Nat Chard (2012)

5.1 Reinstating the originating space

Accompanied by an overhead projector, I returned to my campus. First, I beamed the solder model all around the building, letting the scale of this newly composed after image interact with the existing architectural bodies. Rather quickly I was tempted to alter its original rotation, scale and – as a consequence – its interpretation. Although being a fascinating experiment that I should later revisit, **I was most interested in reintroducing the model to its originating space.** Especially when installed in the exact same position I was standing in when first directing my gaze. **As I looked at the projection, I realised that this was a first actual superimposition of my – through the drawing process – morphed gaze on top of its original. And to my surprise, they felt rather complementary. Or maybe it is more accurate to imply that because of the projection, I looked at the space in a similar manner as I did before. Only now, it was possible to walk around the room whilst keeping my eyes fixed on that initial, – unnaturally – stationary gaze.**



left eye:
right eye:

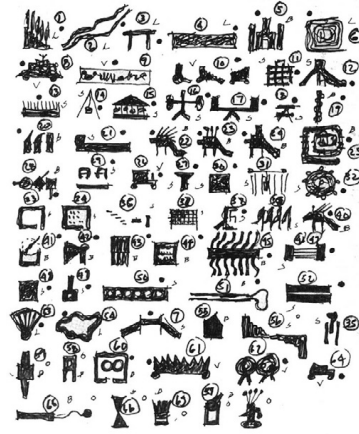
Proun 2 C, El Lissitzky (1920)
Proun Room, El Lissitzky (1923)

5.2 Architectural body, space and my body

Because of the 1:1 scale projection, the slender solder model lines acquired a distinct, interpretable thickness depending on the angle and depth of the folded projection plane. The same could be said of the model's junctions. They too immediately related differently to the originating body than when looked at as an autonomous object. Aside these changing interpretations of the solder model's characteristics, **I had acquired the possibility of – almost physically – *stepping in and out*³⁹ of my previous drawings. This brought my body in a more challenging, up-close relation to the architectural space and body itself.** Constantly having to adjust the posture according to the drawing and – as a consequence – only experiencing a small part of its totality at a time. The entire visual field continuously flooded with newly drawn lines. **When inside the drawing, the detail became paramount. When stepping out of the drawing, the importance of the detail evolved into its impact on the surrounding space and vice versa.**

Finally, through the discontinuity of both the act of looking and drawing, an enduring interaction is developed between architectural body, space and my body. A united and – from now on – inseparable architectural act through which it is possible, not only to chase, but to surpass *the moments' gaze* into hidden spaces and their complexities.

³⁹ Paraphrased from Eeckhout, R. (2014, November). *PhD examination, Process Drawing*. Retrieved March 2018, from Vimeo: <https://vimeo.com/123810533>



left eye:
right eye:

Merzbau, Kurt Schwitters (1933)
Victims, John Hejduk (1986)

Chapter 2. The gaze in motion

Bibliography

Bachelard, G. (2013). *Intuition of the Instant*. Evanston: Northwestern University Press.

Betsky, A. (1990). *Violated perfection: Fragmentation in modern architecture*. New York: Rizzoli International Publications, Inc.

Chard, N. (2013, October 24). *Drawing Uncertainty - inaugural lecture from Nat Chard*. Retrieved May 2018, from Youtube: https://www.youtube.com/watch?v=IR_FKX_1-Fs

Corbo, S. (2017, March 17). *Peter Eisenman*. Retrieved April 2018, from Drawing Matter: <https://www.drawingmatter.org/sets/drawing-week/corbo-peter-eisenman/>

Derrida, J. (1997). *Of Grammatology*. Baltimore: Johns Hopkins University Press.

Eeckhout, R. (2014, November). *PhD examination, Process Drawing*. Retrieved March 2018, from Vimeo: <https://vimeo.com/123810533>

Friedberg, A. (2006). *The Virtual Window*. Cambridge: MIT Press.

Hertmans, S. (2017). *Van A tot Z: Stefan Hertmans, B - Beeld*. Retrieved February 2018, from VRT NU: <https://www.vrt.be/vrtnu/a-z/van-a-tot-z/2017/van-a-tot-z-d20171029-s2017a2/>

Johnson, P. (1988). *Deconstructivist architecture*. New York: The Museum of Modern Art.

Marjanović, I., & Howard, J. (2017). *Drawing Ambience: Alvin Boyarsky and the Architectural Association*. St. Louis: Mildred Lane Kemper Art MUuseum.

Merleau-Ponty, M. (2011). *Oog en geest*. Amsterdam: Parresia.

Spiller, N. (2016, november 11). *Interview with Neil Spiller | Drawing as Communication Vessels*. Retrieved May 2018, from Vimeo: <https://vimeo.com/196279920>

Wigley, M. (1993). *The architecture of deconstruction: Derrida's haunt*. Cambridge: MIT Press.

Yarbus, A. L. (1967). *Eye Movements and Vision*. New York: Plenum Press.

Appendix: The digitized *moments'* gaze

