Context awareness

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“In its earliest uses (documented in the 15th century), context meant ‘the weaving together of words in language.’ This sense, now obsolete, developed logically from the word’s source in Latin, contexere ‘to weave or join together.’ Context now most commonly refers to the environment or setting in which something (whether words or events) exists. When we say that something is contextualized, we mean that it is placed in an appropriate setting, one in which it may be properly considered.”

(Merriam-Webster, 2016)
# Contents

1 Introduction ............................................................................. 4

1.1 Background ......................................................................... 4
    1.1.a Modernism vs. Its anti-forces ........................................ 4
    1.1.b The shift of identity ...................................................... 5

1.2 Previous work/ My first take on contextualization ............. 7
    1.2.a Civic awareness ......................................................... 7
    1.2.b Subtle spatial interventions ........................................... 8

1.3 Outline ............................................................................... 9

2 Method / Research ................................................................... 10

2.1 Contextualization .............................................................. 10

2.2 Intangible / Subtleness ......................................................... 12

2.3 Light lab ........................................................................... 15
    2.3.a Colors and reflectiveness ............................................. 16
    2.3.b Random objects ........................................................ 18
    2.3.c Curves ..................................................................... 19
    2.3.d Catenary ................................................................. 22

2.4 Complex light sources ......................................................... 25
    2.4.a In diffused light / cloudy days or in shades ................. 25
    2.4.b Optic effect ............................................................. 26

2.5 Light, Space & Time ........................................................... 28
    2.5.a Casting on existing surface ......................................... 28
    2.5.b Casting on added surface ........................................... 32
    2.5.c Tactility .................................................................. 34
    2.5.d Time and Space ......................................................... 35

3 Reflection .............................................................................. 39

Bibliography ............................................................................ 43
1. Introduction

1-1. Background

Modernism vs. Its anti-forces

Growing up in metropolitan Kaohsiung\(^1\), a concrete jungle city, I was not aware of the disconnection I had with the city I called home. This modernized city, just like many others, provides a perfect backdrop for those seeking for a new beginning. The process of urbanization and modernization sacrifices some qualities that makes the place special. That is

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\(^1\) The second largest city in Taiwan, with a population of 2.77 million.
why many architects have started to reevaluate the importance of traditions and cultural identity. And that is why we get to see so many projects, following cultural roots, fusing vernacular 2 techniques, and from regionalism evolving into critical regionalism3, from modernism to post-modernism4.

The shift of identity
In the past few years, the opinion on the identity of Taiwan has been shifting. This is demonstrated not only as political standpoints, but it has also been influencing pop culture, art, literature, architecture, design, and so on. A pan-Chinese, Confucian-oriented identity was strategically implemented through education in Taiwan from the middle of the 1940s, to promote the concept of a unified China (Chiang, 2013). By changing the language from Japanese, Hokkien and a dozen of aboriginal languages into Mandarin5, as well as with the help of political propaganda, the younger generation considered themselves as mostly (if not completely) Chinese. It was only with the abolition of dictatorship in the 90’s that things started to slowly change. Schools started to offer different mother tongues to learn and history classes focused more on the past of Taiwan rather than the history of China.

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2 One of the definitions of vernacular architecture by Ronald William Brunskill is “...a building designed by an amateur without any training in design; the individual will have been guided by a series of conventions built up in his locality, paying little attention to what may be fashionable... Local materials would be used as a matter of course, other materials being chosen and imported quite exceptionally (Brunskill, 2000).”

3 One of the well-known versions was brought up by architectural historian-theorist Kenneth Frampton, who argues that critical regionalism and modern architecture should be examined critically, and should not be mutually exclusive, and the emphasis should be more tectonic rather than scenography (Frampton, Towards a Critical Regionalism: Six points for an architecture of resistance, 1983).

4 Postmodernism started in the 1950s, with an ornamental way to reference cultural styles, as a response against modernism.

5 1895-1945, Japan colonized Taiwan. Majority of Han-Taiwanese spoke Hokkien and Japanese, whereas others spoke Chinese dialects, especially Hakka. Aboriginals spoke a of dozen Formosan languages and Japanese. Mandarin was not commonly used in Taiwan until Chinese military retrieved from China after the loss of war against communist.
In architectural practice, there are architect like Huang Sheng-Yuan (Fieldoffice architects⁶) who dedicates himself for decades, contributing his works solely based in one city and developed a whole set of architectural language which is highly contextualized (see Figure 1, Diu Diu Dang Forest, (c) Fang-Yi Lin, CC BY-NC-SA 2.0). His inspiration comes from local materials, old-style craftsmanship, agriculture industry, indigenous vegetation, natural landscape, traditional architecture, and the relationship within the communities.

It was like a revolution, where people started to contemplate their past, examining their environment with heart, to slowly regain what they had lost along the way. As a member of a new generation Taiwanese, I recognize the importance of constantly being aware who we are. Respecting the context becomes something I would really like to explore.

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⁶ To see more information, see the link. http://www.fieldoffice-architects.com/
1-2. Previous work/ My first take on contextualization

*Civic awareness*

According to the American Psychological Association, civic engagement refers to “individual and collective actions designed to identify and address issues of public concern” (Carpini, 2016). The Sunflower Student Protest⁷ was a protest driven by student activists and civic groups on March 18 till April 10, 2014, which included an occupation of the Legislative Yuan, the parliament of Taiwan, and paralyzed the work for legislators (Sunflower Student Movement, 2016). It ignited a spark in the politically apathetic younger generation to participate in politics and encourage them to be more involved in making a difference. The spirit also spread to Hong Kong, where The Umbrella Revolution⁸ took over downtown Hong Kong and led to the second largest protest in Hong Kong history with estimated total participant up to 1.2 million people (2014 Hong Kong protests, 2016). With more people caring about their situation, collaborations which strengthen communities start to blossom.

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⁷ Activists protested the passing of the Cross-Strait Service Trade Agreement (CSSTA) at the legislature without clause-by-clause review. They wanted the execution in government to be much more open and transparent.

⁸ Among many other requests, one of the main goal is to fight for genuine universal suffrage. Even though the protest failed with all the requests refused by the government, local youth are inspired to participate into politics.
Subtle spatial interventions

The project “In between anarchist and authority” (see Figure 2) in which I performed several spatial interventions at Vinterviken by using exclusively local materials, was an investigation into neglected objects in our surrounding. By reinforcing them, I reintroduced a sense of stability and order, intended to strengthen the awareness of the context that we are in. Newman proposes that people care for and protect spaces they feel invested in, arguing that an area is eventually safer if the people feel a sense of ownership and responsibility towards the area (Oscar, 1972). I believe by retrieving the identity of a space which we lost over time or banal universality of modernism, we can still bring back the sense of context awareness, therefore revitalizing the connection of its environment.
1-3. Outline

From anti-modernism to the movement of regaining identity, in one way or another, we are all somehow looking for ways to find the harmony in this world. Respecting nature, be aware of the environment and co-exist with it, is worth further investigation. That is why I chose to examine the relationship of context and interior.
2. Method / Research

2-1. Contextualization

There are many ways to contextualize, to give consideration to the surrounding, theoretically and in practice. If we consider cultural aspects, by making use of the local materials, techniques, and styles, we can create a site-specific design. Take IBUKU\(^9\) for example, they utilize traditional Balinese craftsmanship and local bamboo. Not only is it very sustainable, but it fits the local landscape (see Figure 3, Green school, (c)Forgemind-archimedia, CC BY 2.0 ). There is also Vo Trong Nghia\(^{10}\), who re-imagines the vernacular of Vietnam with bamboo and the use of modern architecture techniques (see Figure 4, Human-Meditation-Nature, (c) Jean-Pierre Dalbé, CC BY 2.0 ).

Contextualization, in my opinion, can be simple as well as complex, just like the context that we bring into consideration. One can be inspired by urban fabric, culture background, or even specific to its nearest neighbor, the surrounding nature, etc. “There are also designs that transcend its immediate environment and rise beyond the realm of ‘existing contextually.’ Instead, they create their own context, becoming the identity of a region, and are most probably, famous icons. Empire State Building in New York City would be a good example.” (pianoman11686, 2005)

In my research on contextualization, I decided not to be culture-specific. My interest is not to present yet another anthropological or ethnical design, which, don’t get me wrong, can be very rich and fascinating. Rather, my aim would be to formulate and rethink a different kind of contextualization.

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\(^9\) A Balinese team led by architect Elora Hardy, the daughter of John Hardy, the founder of Green school in Bali.

\(^{10}\) Vo Trong Nghia Architects, founded in 2006. Nghia has developed sustainable architectural design by integrating inexpensive, local materials and traditional skills with contemporary aesthetics and modern methodologies. (Vo Trong Nghia, 2016)
2-2. Intangible / Subtleness

Besides on-site materials, there are many elements that can be used for contextualization. Spatial experience is the compilation of layers of information. “One has in mind a whole range of complementary sensory perceptions which are registered by the labile body: the intensity of light, darkness, heat and cold; the feeling of humidity, the aroma of material...” (Frampton, 1983, p. 28)

I reflect on my personal experiences, the journey moving from tropical to temperate, almost arctic. One of the significant differences that I became aware of after I move to Sweden, is the sunlight. It is subtle yet powerful. It dictates one’s feelings subconsciously. And it was not merely psychological, but physical as well. Our bodies have adapted to create awareness of space and time through observing colors of sunlight, angles of shadow and so on. “This kind of assessment of natural light is an innate human ability that allows us to make these kinds of judgements very quickly without even being aware that we are making them. We are constantly applying our knowledge and past experience of natural lighting conditions to make judgements about what we are seeing” (Innes, 2012).

Light plays an import role in our cognition. With the help of melanopsin, a type of light sensitive cell, which has been shown to relay light information to the non-visual parts of the brain, it regulates and synchronizes our biological clock to daily rhythm of Earth. Researchers from the Cyclotron Research Centre at the University of Liège “... argue for the use and design of lighting systems to optimize cognitive performance.” (University of Liège, 2014)
Architect Philippe Rahm\(^{11}\) challenges in his work “Diurnism” the notion of night during the day, by playing our perception physically. Light with shorter wavelength (blue light) has suppression on melatonin, a hormone which regulate sleeping and wakefulness. Therefore, a brightly lit room with orange-yellow light, “[the] wavelengths [of which], upper than 570 nanometers\(^{12}\), are perceived by the body through the melatonin rhythm as a true night. The room becomes a paradox between the visible and the invisible, the visual and the physiological: a night which looks like a bright day” (Rahm, 2007).

Sunlight, this element, universal as it is, can still be very site-specific. Every moment, anywhere, any location on earth, natural light is never the same. It constantly affects the atmosphere, constructing our experience of a place, arousing our emotions, and is imprinted in our memory. The information it can carry is more than just quality of space, but encoded with its context. With that in mind, I push the idea of contextualization through sunlight further in my project.

\(^{11}\) Philippe Rahm is a Swiss architect, principal in the office of Philippe Rahm architectes, based in Paris, France. For more information: [http://www.philipperahm.com/](http://www.philipperahm.com/)

\(^{12}\) He must mean “above 570 nanometers”. 
Figure 5, Diurnism, Architect Philippe Rahm, Centre Pompidou, 2007 (Rzepka, 2007)

Figure 6, Diurnism, Architect Philippe Rahm, Centre Pompidou, 2007 (Rzepka, 2007)
2-3. Light lab (see Figure 7, light lab with a reflective cylinder object)

To start the investigation of light, I create a small-scale controlled environment, named "light lab". The idea of my light lab is to systematically document and analyze light, shadow, and other intangible visual elements in my experiments. I intend to minimize and isolate the variables and focusing on one or only a few parameters. This light lab is a 50 by 50 by 50 cm box, with a removable front and back panel. All six surfaces are drilled with 10 mm Ø wooden dowel holes every 10 cm apart, forming a grid. These holes are used to place different objects in different position, and are sealed when not used. Using my box in the perception studio, objects can be tested in a controlled setting.

Figure 7, light lab with a reflective cylinder object
Colors and reflectiveness

My initial idea is to find a way to enhance the immersive experience of light. The selections of material become crucial since it is the medium with which light interacts in first hand. To optimize the reflection of light, the surface needs to be able to reflect as much visible light spectrum as possible. A mirror would be the best option in terms of reflectiveness. However, it will not create refractions. Something transparent on the other hand, allows the visual image to penetrate through. Mirrors and transparent objects are each other’s opposites. The more you reflect the less you can see through, and vice versa. The balance between a mirror coating\(^\text{13}\) and the property of transparency is a constant negotiation. Throughout the experiment, I have jumped between light-coating (see Figure 9, PETG with light-coating mirror paint 8 and 9) and non-coating PETG\(^\text{14}\) sheet. Both show interesting effects. As a medium to bridge interior and the external context, I must evaluate the quality of reflection, refraction, and direct visual contact. In the end, I decide to give up on the mirror coating, since the level of enhanced reflection, in my opinion, does not compensate the loss of vision. Even though a portion of reflectivity is sacrificed, the result of interaction between light and vision makes me believe it is a right decision.

\(^{13}\) I am using Krylon\(^\text{®}\) Looking Glass\(^\text{®}\) paint, which contains metal lead, creating mirror effect.

\(^{14}\) Vivak\(^\text{®}\) is a transparent copolyester PETG sheet.
Figure 9, PETG with light-coating mirror paint

Figure 8, PETG with light-coating mirror paint
Random objects (see Figure 10, random objects)

The investigation of shapes and light begins with the collection of random objects. To transfer shapes onto reflective sheet, I perform vacuum forming with PETG sheets. To be more manageable and test-friendly for my light-lab, I controlled all the objects within the scale of 25 by 25 cm, as a means to restrict variables. Among all the attempts, it is obvious that light can have a drastic effect on curvy surfaces. Even a small unintended dent by the process of making, can create an unexpected expression. The curvature captures movement of time through light, magnifying and fusing light into beams of reflection. From the surface, gradually extending, expending, and lingering across the space, until the light source no longer hits the surface. A sudden darkness takes over and then it goes back to nothing. The reflecting light beam is seemingly an embodiment of light, creating an illusion of tangibility out of this absolute intangible element.
Curves

In the realm of reflectors in lighting design, there are a couple of commonly used curves, especially within the conic section, namely, parabola, hyperbola, circle, and ellipse. I decided to test parabola and hyperbola with four different focal lengths (see Figure 11, the drawing of curves and focal points), because they are widely used for collecting waves, such as sound waves or radio, etc. These two curves might look similar, but they are mathematically distinct.

I placed these in various positions and directions in my light lab, in the perception studio, documenting how light is captured, shifting, and overlapping into a bright focus (see Figure 12, parabola and the focal points). It is rather disappointing, or interesting perhaps, that hyperbola and parabola show very similar result in this scale with observation of naked eye. Mathematically, only the parabola has a distinct focal point when it receives parallel light, while hyperbola theoretically should only contract into a bright region.
Figure 12, parabola and the focal points

Figure 13, the extension of light into the dark
The extension of the contracting light beam into the darkness is something unexpected (see Figure 13, the extension of light into the dark). There is a brief moment where the light source is not overlapping with the focused light beam, and suddenly this strangely bright point sticks out, contrasting the pitch-dark background. This ethereal effect further embodies the existence of light itself. The projection conveys information into the dark part, acting as a bridge between darkness and brightness. It reminds me of twilight, before the sun rises, and you can see the transitioning light leaking out from the edge of the eastern skyline, rendering this magical ephemeral moment, as if it is telling us what we should expect: that sun is about to rise!
Catenary

During the process of making vacuum forming, I noticed how softened plastic, which is framed and fixed on the machine, droops and formed into a perfect curved surface. This curvature is mathematically referred to as catenary. In physics and geometry, a catenary is the curve that a hanging cable assumes under its own weight when supported only at its ends. The curve is similar in appearance to a parabola; however, it is not a parabola, but a graph of the hyperbolic cosine (Catenary, 2017). It is also the same curve which Gaudí used to design his catenary arch, by hanging strings with attached small bags to simulate gravity and forces.

In two-dimensional conditions, a catenary is fixed at two ends. The variables are the distance of two ends and the depth of curves. However, in the three-dimensional state, I can shape different kinds of ends, and the result would be catenary dome.

I design various stencils with holes of different geometries, and let plastic melt through. The drooping process will occur within the stencil’s hole. Geometry works as the boundary of catenary dome. Therefore, I can create different kinds of catenaries with very simple tools (see Figure 14, Stencils & Figure 15, melted plastic through stencil).

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15 The process starts with preparing a mold and a sheet of PETG. There is a huge ceramic plate, hovering above the PETG, which will heat up and melt the plastic. At some point, the platform where mold is placed will rise and press against the soften plastic and then vacuumed.
Figure 14, Stencils

Figure 15, melted plastic through stencil
The complex reflection and refraction creating numerous effect. Take triangle catenary for example. The focused light beam twisted with a peculiar manner. Almost as if it is alive, flowing, twirling, and folding with expressive choregraph. The angle and direction of light dictate the pattern which shall be generate. The beauty in this ethereal quality can be used to draw attention to outer context (see Figure 16, triangle catenary).
2-4. Complex light sources
The condition of natural light can be complex and ever-changing. Ranging from the geological position, its direct environment, weather, season, time of the day etc., it all can make a difference. Multiple light sources and diffused light occurs commonly. After my investigation in a well-controlled environment, I felt the need to bring my test subjects out of the perception studio.

*In diffused light / cloudy days or in shades* (see Figure 17, objects in complex light)
Outside the perception studio is where all the controls set free. Observing how the objects react to diffused light, one can easily notice the intensity of reflection, refraction and shadow is much softer and subtle. The opening, where the diffused light comes through (typically a window for instance), functions as the surface of the light source, and consequently affects how shadow and light are casted. The relationship between objects and the opening becomes much more important than the relationship between the objects and the sun, whereas shadow and lights does not change so much in relation to the opening in direct sunlight, due to the property of parallel light. And based on the specific moment, two or more shadows and distorted light might be observed. This is due to other possible reflected light sources, such as the reflected light from the neighbors’ windows or other shiny object. Sometimes within the multiple shadows, some parts are softer, some parts are sharper, and even in different nuances. A complex light condition is possible to contain partially diffused and partially direct light, and that always makes the effect unpredictable.
Optic effect

When studying intangible elements, one should not miss the power of direct vision. How do we see the outside world? This is indeed the most common method to relate ourselves to the context. The distortion of the image is a trigger, arousing curiosity among the observers. Perhaps we are too familiar with the context that we are in to feel anything. Therefore, the sensation of uncertainty can be a means of invitation, to bring awareness to the surface. Through my objects, there are two ways of visual manipulation. The first one is to see through the object towards the context itself. The image is directly distorted. Depending on how complex the curves are, the image can be dislocated, compressed, or expanded. (see Figure 18, the distorted image of context)

The other way is to capture the image of the outside context. The image is distorted and possibly reversed as well. The reflective image is then superimposing with interior, composing another layer of information. (see Figure 19, reflective image superimposing in the interior)
Figure 18, the distorted image of context

Figure 19, reflective image superimposing in the interior
2-5. Light, Space & Time
In order to research how light functions in space and link it to a specific context, I inspect the information that can be carried by light. By observing the ordinary everyday light and shadow, we can already create a speculation based on their sharpness or softness. They represent the distance from the objects to the surface. This kind of subtle hints are very spatial to me. Piece by piece, and collectively, one can put together an imaginary image. I am intrigued by these fictional narratives and the messages they compose. I can’t help but wonder, what kind of atmospheric quality can it deliver to the interior? Is it possible to bridge the interior to outer context with such an intangible approach?

Casting on existing surface
Light and shadow need a surface to be cast on in order to be seen. Therefore, I try several types of surfaces and distances to see the different effects. I create a frame (see Figure 20, the frame with grid of objects as well as the casting process), and a grid with wires in the frame Figure 20, the frame with grid of objects as well as the casting process
to position my objects. This becomes a tool for me to play with the composition and interaction between objects. I attached this structure on to walls to test it. There are two major factors that are revealed through this testing. One is shadow, and the other one is contracted light. Shadows can be cast in a much longer distance, across the room. It is less light-demanding. Shadows show an obvious variation of sharp versus blurry depending on the casting distance and this itself shows the spatial quality. Semi-transparent shadows can superimpose onto each other, making them visually very complex. One can play with layers of shadows casting on different levels of surfaces. The distance of objects to the surface becomes very important. (see Figure 21, superimposed shadows)

Here I use a third of triangle catenary dome. I cut a triangle catenary dome into three pieces.
On the other hand, there is the contracted light, which is very light-demanding. The effect can change drastically depending on the light source. The distance that contracted light can travel across a room also very much rely on how strong the source is. Generally speaking, contracted light can be cast a much shorter distance than shadows, 0-10 cm in weak light, and 1 meter in stronger light (or 2-3 meters in very bright sunny daylight). The quality of contracted light is harder to grasp. The sharpness of the light depends on the quality of the light source (sunny day light, cloudy light, multiple light sources, etc.), and the distance as well. But unlike shadows, it is harder to create sharp light. It requires that either the light source be very strong or the surface onto which the light is cast be very close. Either of these criteria, or both, are required. (see Figure 23, different intensity of lights, scale of reflectors, distances.)
The frame is deliberately made to be exactly the same size as the window, partly as a reference to the existing dimension, but also because this allows me to attach it to the window. In the window test (see Figure 24, Frame in the window with casting shadow and refracted light), I attach the frame directly onto the window. My objects are seemingly disappearing. Since my objects are transparent, it is not so easy to notice the difference directly. But the image of the ghostly shadows is cast on the wall across the room. The traces of odd shadows are like a trail of bread crumbs in *Hänsel und Gretel*\(^\text{17}\), fragile, unstable and could vanish in any minute depending on the weather or condition of the context. If you manage to trace back and find what is casting this shadow, all you can see is the distortion of view and image, floating in the middle of air.

\(^{17}\) A well-known fairy tale by Brothers Grimm, published in 1812, also known as “Little Brother and Little Sister”.

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Figure 24, Frame in the window with casting shadow and refracted light
**Casting on added surface**

If the casting process is not on the wall but in the space, then another medium is necessary. I started to test different kinds of materials working as a casting surface. This surface should be semitransparent, allowing light not only to be cast onto it, but also to go through it. The surface should be dense, which means there are not too many gap or holes, in order to be able to capture the light and shadows in shape. It should allow the light to penetrate, without losing the visual ability, so it should be transparent rather than translucent. I found that among my test objects, a densely-knitted mesh works the best (see Figure 25, casting process on the fabric surface and continue to the wall.). By attaching the fabric onto the frame and place it anywhere in the space, light and shadows can be cast on it. By doing so, it also allows the casting process further beyond the fabric, onto the next surface or wall. This additional material liberates the casting method. The complexity of the light and shadows is no longer heavily depending on the current structure.
There is a fundamental difference between the two approaches: using the existing surface or adding a new surface to work with. One is more passive, subtle. The gesture of attaching on the existing elements is passive, while casting on an additional surface is more of an active act. The idea of passiveness and activeness of my practices, echoes the current built environment, the act of actively seeking for balance between context or architecture, or passively adjusting to fit into the site. Should we actively intervene or passively integrate?
Tactility

By vernacular architectures, critical regionalism, and many other practices, architects seek many new ways to create architectural experience. The sense of touch and feel is one of the important method. In my light experiment, on many occasions, intangible elements show some quality of tactility.

The contracted light beam, twirling into a light spot, interacts with the object, that are placed between the light source and the light spot. The twisted light unfolds bit by bit by moving shadow. The process of unwinding light is seemingly very physical. As if we can actually touch the light. The play of intangibility and the act of touching contradicts our common intuition. Of course, we are not actually touching the light. The intangible remains intangible. What we can understand more, is the act of touch. The eye is not the only organ that reacts to light. There are photoreceptors in our skin too, just like in the eye. It reacts to UV rays, telling the skin to produce melanin, a pigment that protects our DNA from the dangerous UVB rays (Zukerman, 2011). The scale of my light is most probably not reach the level of creating an obvious haptic sensation. However, we should be more open to our sensory, allowing our imagination to flow. The interactive value of folding light is, in one way, very kinesthetic. To feel light with the mind. (see Figure 26, Touching the light)
Time and Space

Time is an essential element for understanding natural light. The movement of light through time encrypts information of the geological position as well as the nearest surroundings. It is not only a daily event but seasonal, annual, epochal, ever-changing. By examining sunlight traveling through a room, we can gain an understanding of the relationship between a room and its context.

I use the aquarium room\textsuperscript{18} as the context of my example study. Light travels in the room from around noon till the early evening. If I trace out the space which is filled with light hour by hour, we can visualize the embodiment of light. The light void is the reservoir of information, which my tool can interact with (see Figure 27, the light void throughout a period).

\textsuperscript{18} The aquarium room is a room in Konstfack, located in between interior architecture studio and industrial design studio. It has window facing west-southwest direction.
Figure 27, the light void throughout a period.

Figure 28, the construction of surface via vector guidelines from sunlight.
I started to imagine the structure of this continuous void. It is not only moving from one side to another, but each moment also has its specific direction, the direction towards the sun. With this in mind, I construct a surface which represents this continuity of time. I work on the period of time from 13:00 till 17:00, which is the time when sun interact most intensively in this room. The vectors of light between these two times in space can therefore be physicalized into a surface (see Figure 28, the construction of surface via vector guidelines from sunlight.). This surface, which contains all the vectors in between this period, is a curved paraboloid surface, a doubly ruled surface.

This three-dimensional surface, which is encoded with time in relation to space, is an opportunity to insert the independent surface, a surface that stands alone in the space, actively capturing light.

Figure 29, my first composition of light
The grid on this twisted surface become very helpful in making a composition. Since any position on this surface reacts differently to the light in any moment. It works as a tool to compose a message, a new type of spatial narrative. It is like a sheet of music, but with light, a visual type of music, so to say. My first piece is the flow of time (see Figure 29, my first composition of light). I want it to flow downwards, and from left to right. The process of folding light is a gradual movement, starting from V-shape of the light region, folding towards the center of the focal point. The ribbon-like light beam then slowly reverses towards the opposite direction, and eventually expands into a fan-shape area. With time, this expanding will reach to a limit where light steadily vanishes into the dark. (see Figure 30, the folding of light on 3-dimentional surface.)
3. Reflection

From the searching of identity, to the exploration of contextualization, my research has forced myself to see the intangible elements in a different way.

The spring exhibition is a physical and spatial realization of my experiments. In the exhibition point of view, it is very successful, in terms of communicating my works with audiences and representing my experiments in a one-to-one scale. I present three different kinds of tools to interact with light. One is on a movable wall, simulating the light in different times with different angles. Another one is on a window, distorting the view and casting the ghostly shadows. The last one is hanging in the air with the framed fabric, capturing the light in different times as well as casting light and shadow on the fabric and wall. I also include my light experiment at light-lab stage, showing visitors how I shape light and inviting them to experiment with my tools.

Figure 31, visitor
Figure 33, visitor

Figure 32, visitors
However, the attempt of contextualization of this exhibition space is not very satisfactory. The basic rule of contextualization is to work on the site and the given context. The placement of my objects and tools should have been completely based on this specific space, in order to capture the sunlight or to work on the specific view. This is especially difficult in my case, because I do not have access into the site until one week before exhibition, whereas I need at least two weeks to make my tools from scratch. I end up designing my tool and space without knowing how my space is and where it is located. In the end, an additional spotlight is needed to simulate sunlight, instead of using natural light. And I need to seal part of the window to fit my model, instead of my model fitting the window.

Figure 34, before the construction
Figure 35, exhibition
In contradiction to my thesis, the representation of my final work is everything but contextualized. I have to “fix the context” to make my models work. The restriction of reality inhibits me to do what I want to do. It makes me wonder, how many architectures of placelessness are the result of our current reality. And how much effort does it take to make a difference? I do not have an answer just yet.

The Australian architect Glenn Murcutt (1996) once said, “I’m very interested in buildings that adapt to changes in climatic conditions according to the seasons, buildings capable of responding to our physical and psychological needs in the way that clothing does. We don’t turn on the air-conditioning as we walk through the streets in high summer. Instead, we change the character of the clothing by which we are protected.” (Frampton, 2002) This is a funny comparison between architecture and the way we dress. But it sadly doesn’t reflect in architectural practice. We too easily rely on technology, on artificial lighting, and air-conditioning system to compensate for the negligence of our design decision, which we could have avoided if we had just paid attention to our surroundings. When the placement of a window has no reason to its context, we once again fail the chance of building a bridge to the context of the building. My research is an active intervention, a tool for understanding light, a respond to an existing apathetic space, a shoutout to the world outside all the modular, industrial square white windows.
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