

Selvplejecenter

Graduation Memoir

Public Building / Graduation studio Public Condenser:
The Hague // Copenhagen

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Preface

This booklet is an additional product, in support of the P5 Public Building Graduation studio: Public condenser. In this studio, the students have to create a public condenser building, either in Den Haag or Copenhagen. This public condenser can have an additional overarching theme, which should be established due to research (and should preferably be relevant to the situation). Within this public condenser the theme of multiplicity should also be addressed. Furthermore, the design brief needed to be created individually by the students themselves, so that the brief could connect with the chosen overarching theme for the public condenser.

This booklet is an additional (and optional) product to the graduation presentation P5. It contains the design substantiation for many grand themes within this specific graduation project, such as research for the overarching theme as well as the graduation manual. Keep in mind, this booklet is created in order to give additional information on certain topics used in this public building graduation project. The booklet does not contain information on design variants that were tested in the process.

Even though this booklet is not necessary for the understanding of the design and the design presentation, it does offer some extra insight into important themes used to construct the design itself. It should therefore be seen as more of a backstory to the information told in the presentation.

Table of contents

II

I Preface	7
III - Design Manifesto	13
IV - Design Substantiation	31
I - Overarching Theme	35
II - Overarching Theme - Defined	39
III - On Typology	51
IV - On Measurement Systems	83
V - On Symbology	89
V - Epilogue	95

Design Manifesto

III

The Design Manifesto chapter includes the development of the design manifesto, as well as the latest manifesto to date. This development of the manifesto also showcases the manifestos created before the choice of a specific site was made.

Each manifesto will be showcased, along with a short description of the manifesto. This description will introduce the ideas behind the manifesto, as well as what the manifesto tries to showcase with the different parts.

The development of the manifesto-series is also discussed next to each individual design manifesto. Therefore it is possible to see how the manifesto developed, and what the key triggers were for the different developments and changes made in the manifesto.

The design manifesto with the black page is the final manifesto. On the black page there is also included a short explanation of the design manifesto itself.

Design manifesto Copenhagen

Untitled

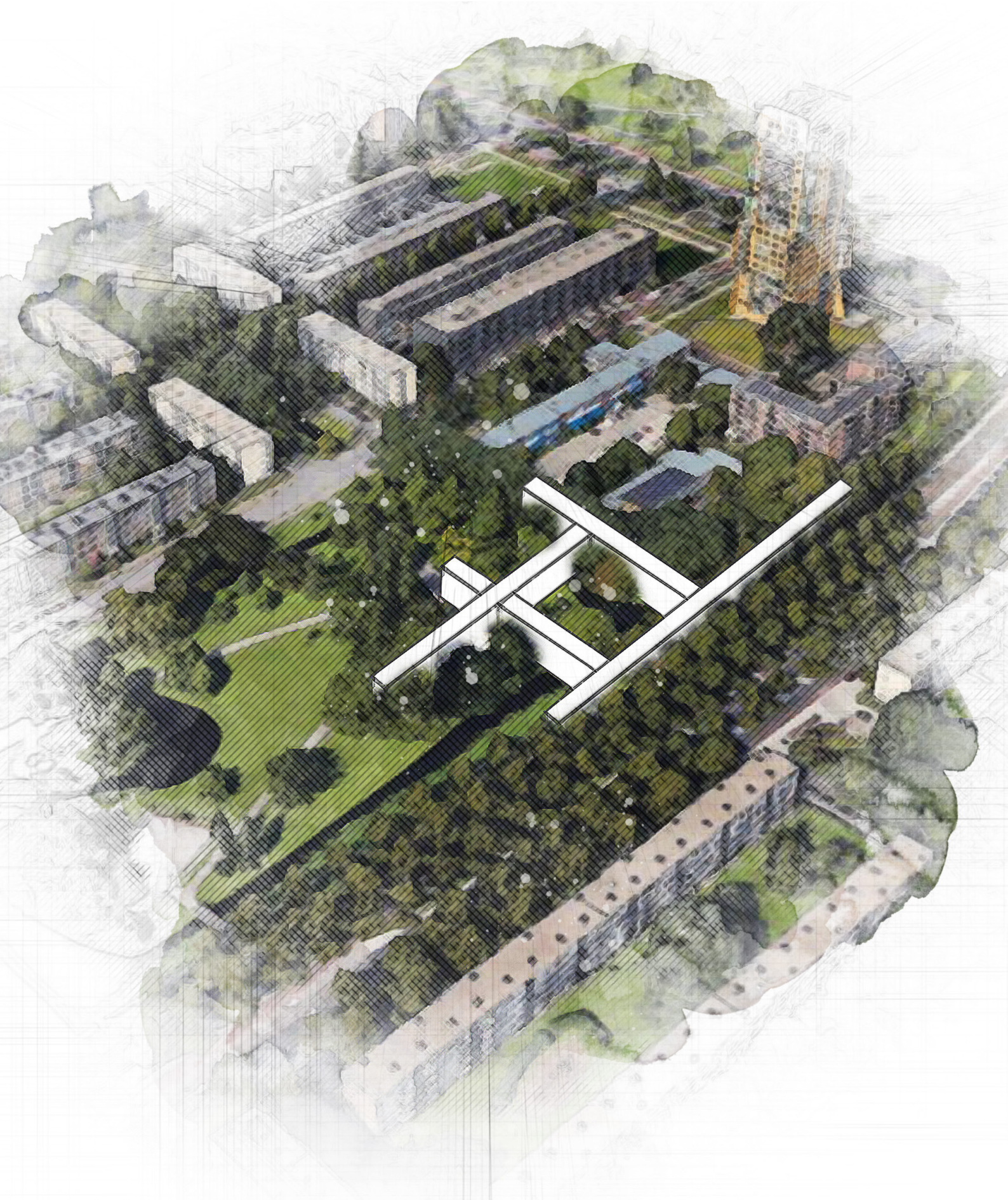


Please note that this manifesto was created as a groupmanifesto. Even though there was deliberation between the group members, this manifesto represents all of our communal ideas about the site in Copenhagen.

This initial design manifesto for the site in Copenhagen was triggered by the “designed” nature of the city. During the visit to Copenhagen, we found it quite outstanding that most of the entire city was designed into the smallest detail. On top of this, the site was currently mainly designed for a singular group of people: children.

This is also what is adressed in this design manifesto. The collage showcases the “designed” nature of the city, as well as the agegroup it is designed for. On top of this, the manifesto adresses some different innovations of the design of the city, as a meandering connection and a way to change the standard way of viewing a facade. These elements can also be part of the design of the site.

Design manifesto The Hague “Space Cather”



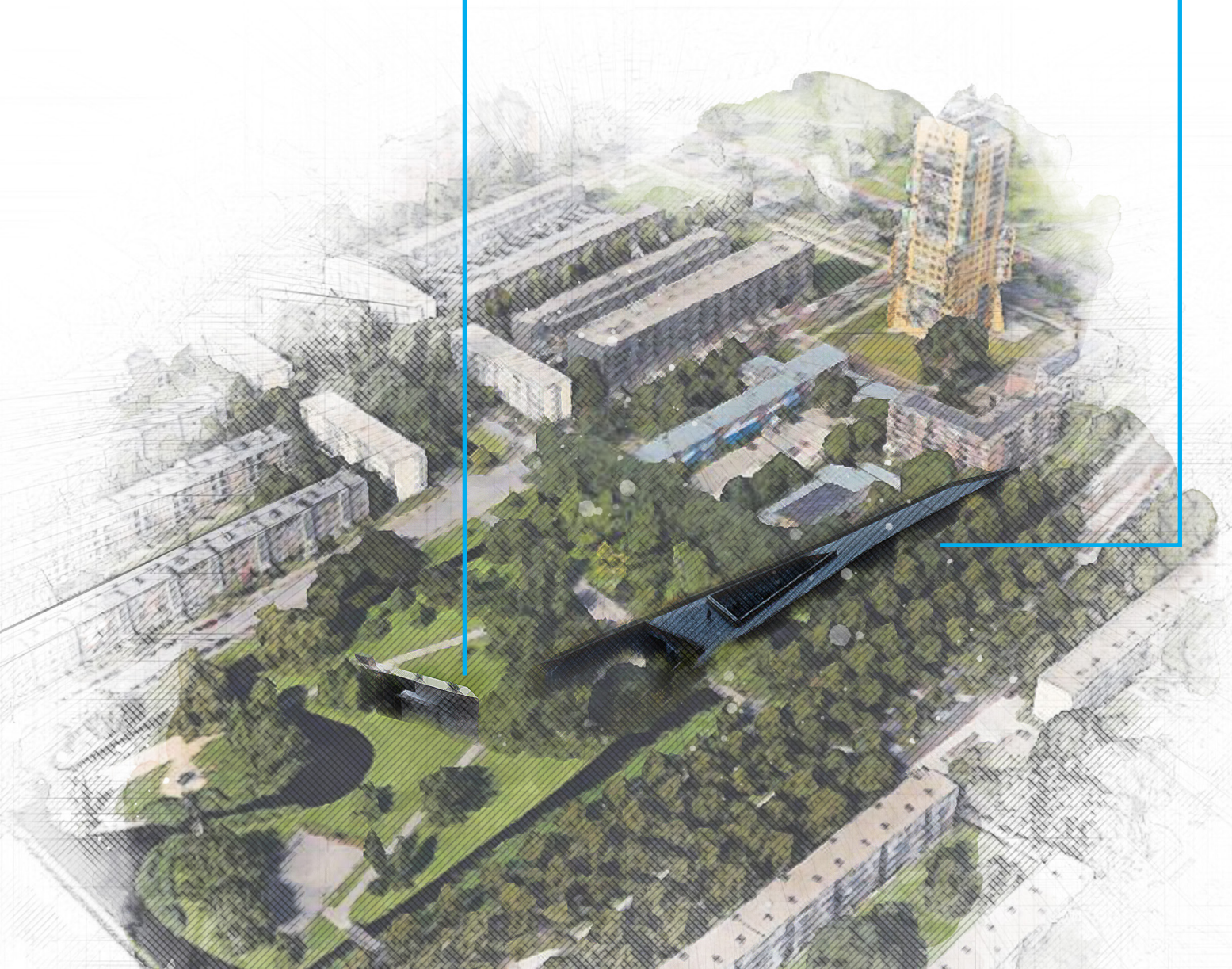
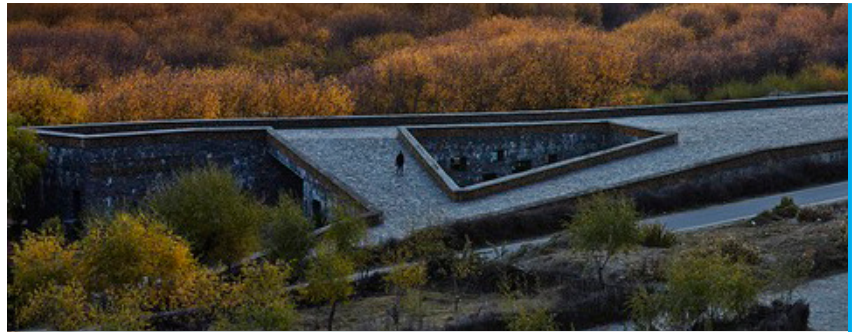
The initial Design manifesto for The Hague consisted of two parts. Both the Space Catcher, and Space Catchers manifesto should be seen separately from each other. They both showcase a very similar idea, expressed in a different way. The reason for the creation of two manifestos was to see how the impact of the manifesto would change, depending on the way it was showcased.

The Space Catcher manifesto was triggered by the relative “emptiness” of the site in The Hague. Upon visiting, the site felt like it had an overabundance of space which was not very well defined. There were merely 2 of 3 well defined spaces on the site, and the rest of the space simply felt like it was residual space.

The idea of the Space Catcher manifesto was to define this residual space with the use of the structure of the building. In this, the building could surround and divide the space of the site to allow a stronger programmatic division in order to further the usage of the space.

In this manifesto, the interaction between building and site is also very important and prevalent. In the case of the Space Catcher manifesto, the structure is superimposed on the site (in the style of the manifesto of Rem Koolhaas “Exodus”, London¹). This is done to further accentuate the act of superimposition.

Design manifesto The Hague “Space Catchers”



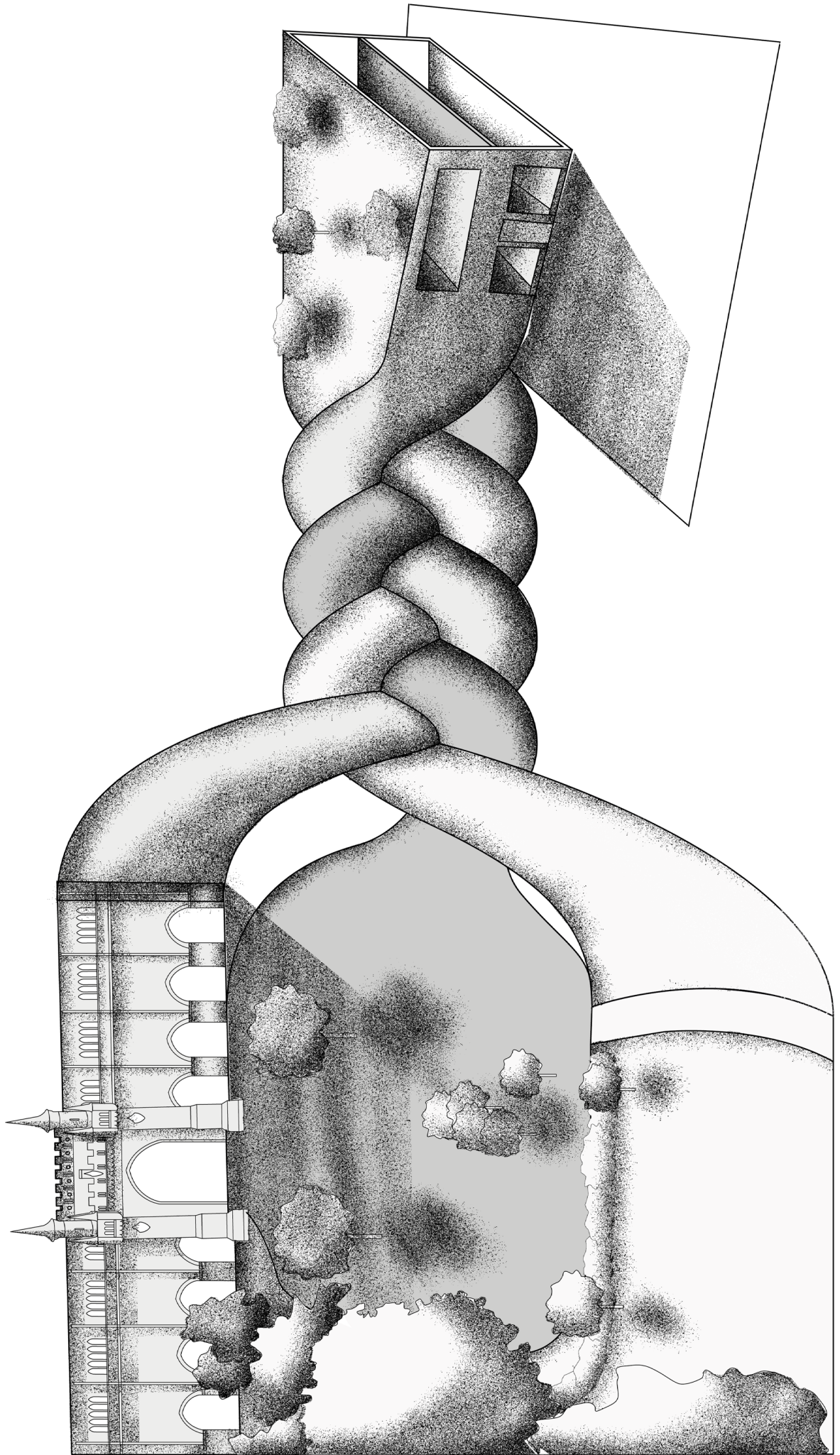
The Space Catchers manifesto is another way of visualising the ideas showcased in the Space Catcher manifesto. The basic principle of the manifesto is the same: the creation and defining of spaces using architecture.

Yet, the focus of this manifesto is slightly different from its counterpart. Where the Space Catcher manifesto focusses on the idea of the superimposition of architecture on the landscape, this manifesto focusses much more on the spaces that are created with this intervention. The Space Catchers manifesto focusses on the idea of framing and creating “unique” spaces that have an unexpected relation with the site.

In order to showcase this relation, the Space Catchers manifesto is created by superimposing existing buildings onto the site, instead of an anonymous volume. By using this technique, the unexpected spaces that are created in these projects can be focussed on, instead of the shape of the interventions themselves.

Interweaving of layers

Fabrice Meyer - 4431286



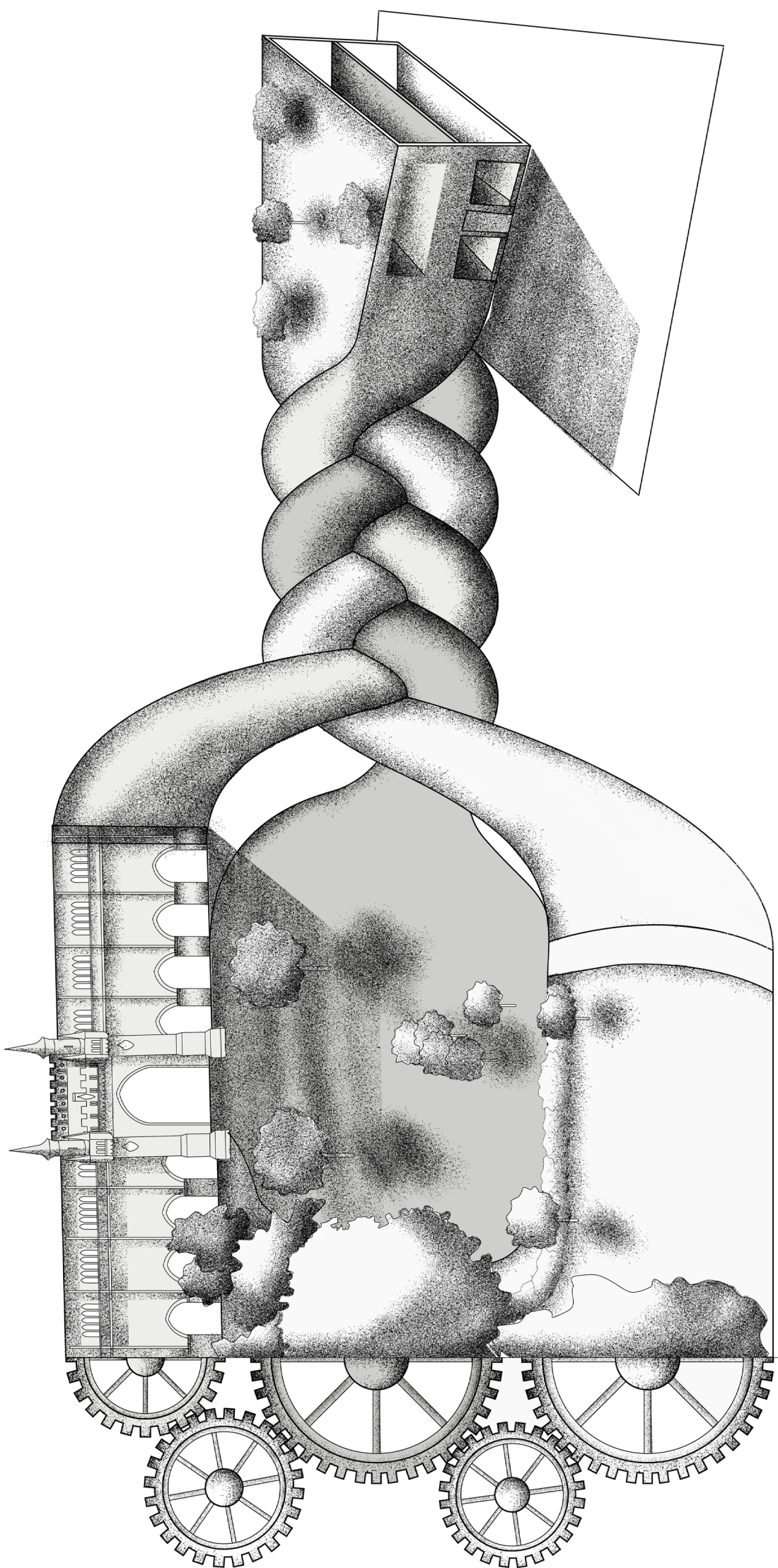
This design manifesto was triggered by the previously created design manifesto for Copenhagen. Especially the idea to change the usage of the facade, coupled with the functionality of the wall was inspiring for this manifesto. The main idea of this manifesto is the usage of different layers of the site, in order to create a building that is inseparably connected to the specific site.

Hereby, the final project that is created will be a project similar to projects like the APM building by BIG², or the Super Market Sanya Lake Park building by NL architects³, where the line between architecture and landscape architecture is blurred. The building hereby forms a sort of hybrid that influences both architecture, as well as landscape architecture (and a bit of urban design).

This Interweaving of layers manifesto is created by a self-made drawing. This drawing is in the style of a sort of pop-culture drawing, as was the case for the manifestos created by archigram like The Walking City⁴. The reason for this way of showcasing the manifesto is because the possibilities of a drawing are almost endless. There is no limitation of used pictures or found shapes. By self drawing this manifesto (rather than creating a collage), it was possible to showcase the principle of interweaving layers very clearly.

Interweaving of layers

Fabrice Meyer - 4431286



Continuing on the manifesto of interweaving of layers, the idea was to strengthen the message of the image, whilst adding another layer of meaning into the manifesto. The added cogs (on the left of the building) symbolise the interworkings between the different layers. They showcase that all layers work together in order to create the specific site (in this case of the Skydebanehaven).

Simultaneously, the cogs showcase the idea of the interconnectedness of the layers of the site. This sets the manifesto apart from idea's as used by BIG and NL architects. Both firms usually discriminate a couple of elements from the site. Then they add these elements up and change them, and eventually place them back into the site.

Yet, this design manifesto emphasizes the complexity of the site itself. If one were to take a layer out of its context and then change it, the entire site would not work together anymore. In a sense, the manifesto reaches back to a written manifesto by Robert Venturi⁵, in which he argues to embrace the complexity of the site. By embracing the complexity of the site, and therefore trying to change and interweave the layers without discriminating them from their other layers, the created project can also seamlessly embrace the complexity of the site.

Therefore, this design manifesto is much more a manifesto about a way of designing and treating the existing site, than a manifesto that focusses on which elements to use from the site.

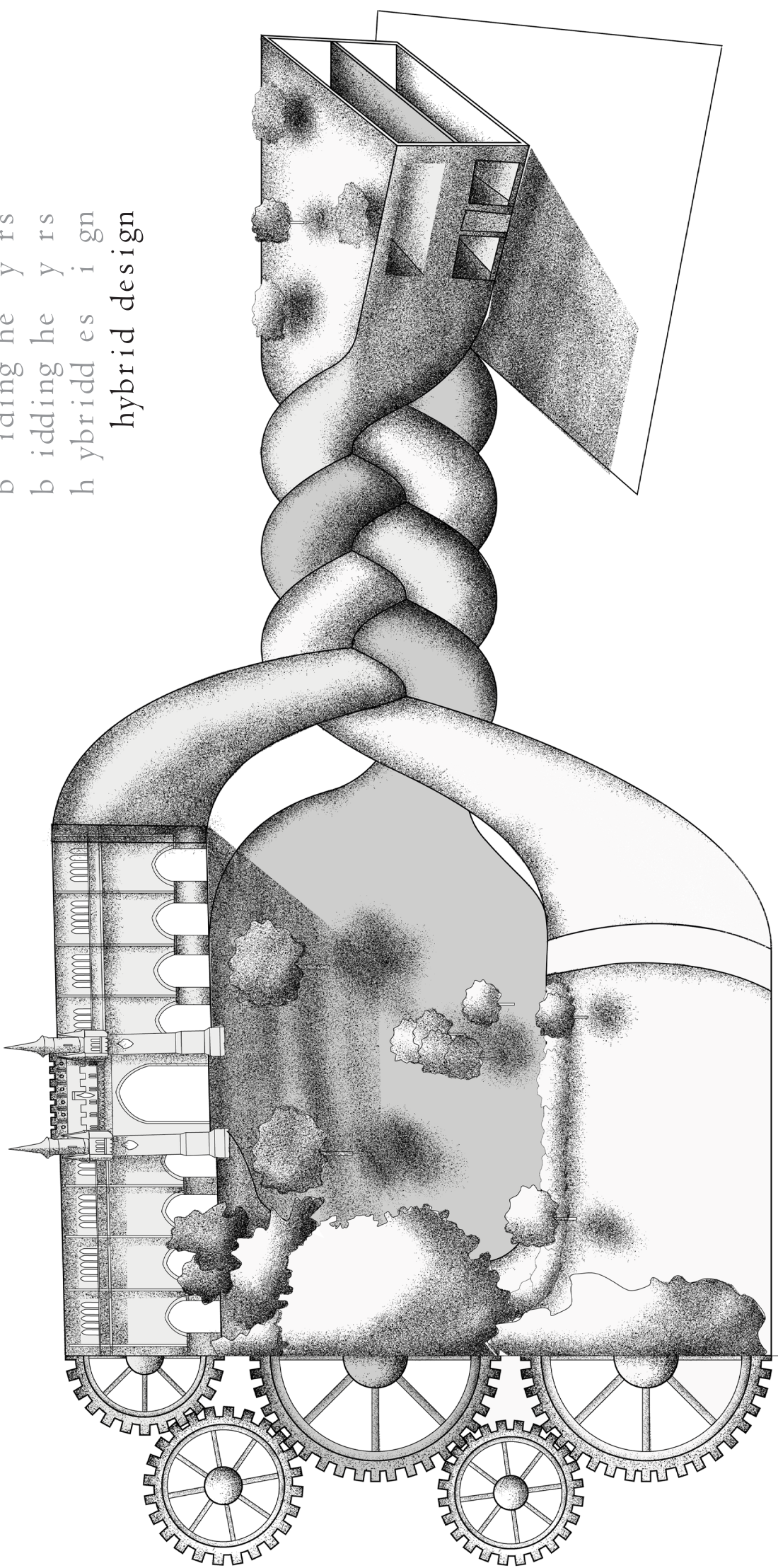
The last step, to strengthen the manifesto even further, was to work with the text and title of this manifesto. The typographic addition to the manifesto showcases three things.

Firstly, it states the title of the manifesto: braiding the layers. This title is a variation on the interweaving of the layers, but still refers to the same action of taking the present layers of the site and changing them into the design by “braiding” the existing layers.

The second thing the addition does is couple the design strategy to the creation of a hybrid design. In this case, the hybrid design refers to an intervention that is more than ‘just’ an architectural object. The hybrid design refers to an intervention that is in part architecture, yet also a landscape intervention. Simultaneously it can be an urban intervention and/or an infrastructural intervention. This aspect of the addition refers to the endproduct that is created by following the design strategy of this manifesto.

The last thing that the typographical addition showcases is the design process itself. Rather than naming the steps involved in the design that this manifesto defends, it showcases the steps in a typographical form. First, the entirety of the site is considered, where there is no special emphasis placed on any part. Then, these parts are evolved and a few components are simultaneously chosen to form the intervention. Then, the components are evolved, changed and interwoven to subvert the existing condition. Lastly, all the components fall together in order to create the final intervention (as discussed in the second point).

braiding the layers
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braiding the layers



This manifesto is about the interbraiding of the layers of a specific site. Rather than a manifesto which focusses on one or multiple specific aspects of a site, this manifesto focusses on a design strategy. This strategy can be used in multiple situations, and therefore also for multiple assignments even outside of this current studio.

The manifesto is about embracing the complexity of the specific site. The idea is that all of the different layers of a site work together in order to make the site tick. If one would discriminate some elements from this whole, it would not work properly anymore.

Therefore, by considering all layers of the site simultaneously, and then changing and interbraiding the layers into something new, an intervention can be created which reacts properly to the complexity of the site that it is placed in.

This design strategy yields a design result which is not unlike the designs of BIG or NL architects. An intervention which covers more than just the architectural aspect. An intervention that is part architecture, part landscape. An intervention that is part urban, part infrastructural. An intervention that is a hybrid design. This hybridity does not necessarily mean that the design needs to react to all of the layers, but it does mean that the design reacts to multiple layers simultaneously.

Design Substantiation

IV

As analysed by the Nordic Medico-Statistical Committee (2017), the death rates of Danish people are relatively higher than the death rate of people in other Nordic countries. The same analysis also showcases that people in Denmark smoke more, purchase more alcohol and have a shorter life expectancy than citizens of other Nordic countries.

That Denmark has had a lacking progress in longevity relative to other Nordic and western countries, has been the case for about 50 years. This has not gone unnoticed. As Vallgård (2001) notes, this has prompted the Danish government to actively intervene in order to try and increase the awareness for healthy living. The lifestyle of the Danish people is the most important factor for this healthy living, according to the Danish Ministry of Health (Sundheds Aeldreministeriet, 2002).

In the report of the Danish Ministry of Health (Sundheds Aeldreministeriet, 2002) the government address clear goals in order to promote, and with that change, the lifestyle of the Danish people. There is a focus in this on physical health. The Danish government also strongly focusses on the idea that this “healthy life” is something that has to be achieved together. With this, they refer not only to a relationship between the government and the people, but also to a communal effort of the citizens.

Because of this active intervention of the government, the health of the Danish people has strongly improved. The health of the Danish people, as indicated by the OECD Better Life index (2020), is currently rated at a 7,9. With this grade, which includes life expectancy as well as “self-reported health”, Denmark ranks at place 19. This is 7 places lower than the Netherlands, yet still a respectable grading.

Yet, the intervention of the government has lead to the fact that “healthy living” has become a part of the common lifestyle of the Danish people, as noted by the Research group 5 (2019).

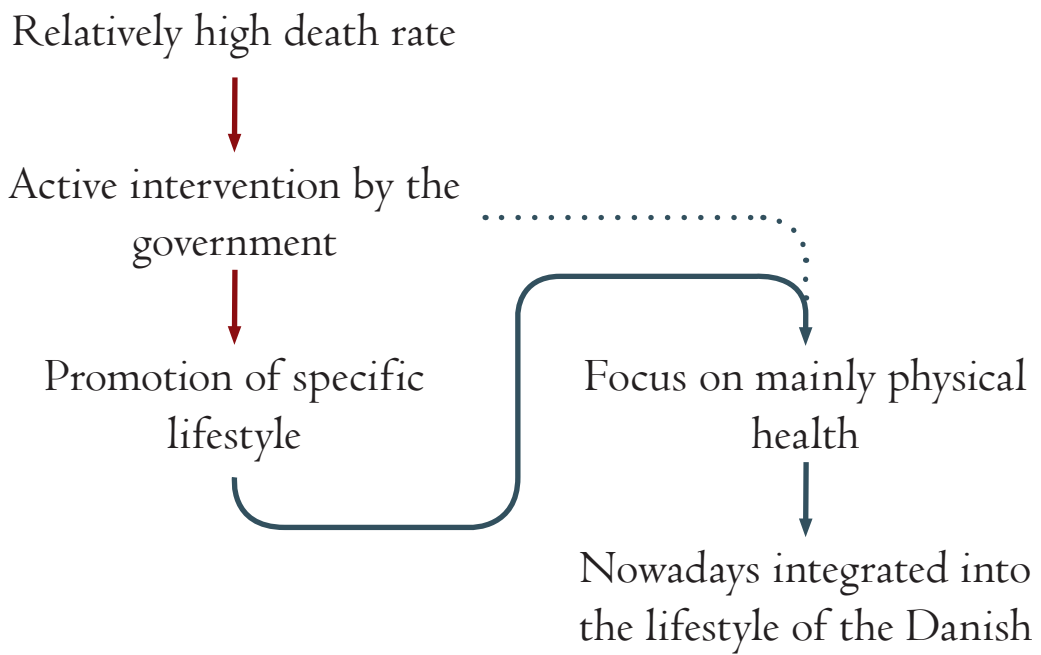
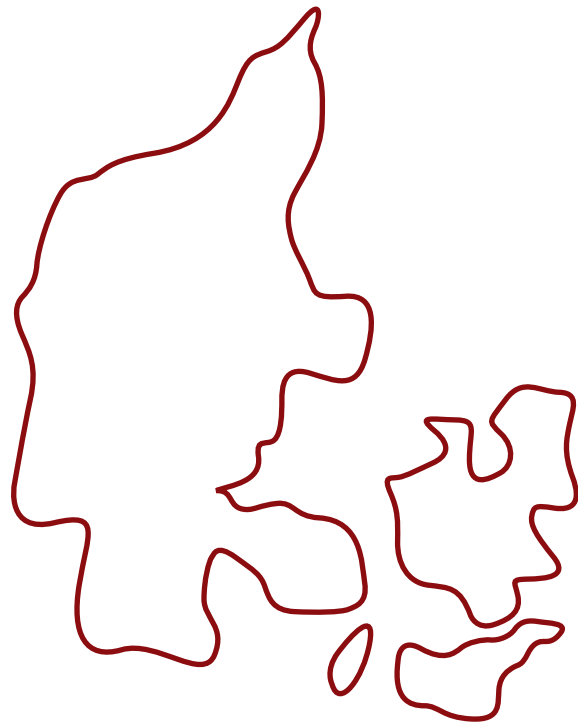
Oecdbetterlifeindex.org. (2020). OECD Better Life Index. Accessed on 03 January, 2020. From: <http://www.oecdbetterlifeindex.org/topics/health/>

Research group 5. (2019). *People*. Not officially published: part of the PI.

Nordic Medico-Statistical Committee. (2017). *Helsestatistik for de nordiske lande*. København: NOMESCO.

Sundhedsministeriet. (2002). *Sund hele livet*. Sundhedsministeriet. Accessed on 22 November, 2019. From: <http://www.sum.dk/Aktuelt/Publikationer/~media/F7BABB17699E42B4A11623E137D73D0C.ashx>

Vallgård, S. (December 01, 2001). *Governing people's lives*. European Journal of Public Health, 11, 4, 386-392.



This focus on healthy living is also the focus of my personal public condenser. As seen before, it is a very relevant topic which is part of the lifestyle of the Danish people, which the government promotes and which Denmark thinks is important and still should/could be improved. It is also a subject that should be achieved together, and is therefore very well suited to a public condenser. On top of that, in a public condenser it is possible to let the people using the building/complex inspire others in order to make it a more effective building in terms of promoting the healthy lifestyle.

Even though the Danish government is very active in the promotion of this healthy lifestyle, the report of the Danish Ministry of Health (Sundheds Aeldreministeriet, 2002) showcases that there is a very strong focus on the physical health of the people. Mental health is only mentioned once in the entire report, and concerns only the absence or prevention of mental sickness.

Yet, there is scientific evidence that a good mental health in terms of capacity, and a good physical health can stimulate each other. For instance as showcased in the research of Esteban-Cornejo, et al. (2014), there is a scientific correlation between the cardiovascular capacity of children and their respective academical performance. Meaning, that children that were 'fitter' or more physically active were generally able to perform better in academical cognitive tasks.

Since this research is only one of many, an evenly divided focus on physical and mental health (in terms of a stimulated and active mind) is used in my personal public condenser project. Therefore, the chosen overarching theme for the public condenser is "A healthy mind in a healthy body".

Even though the "in" part in this theme is necessary for a grammatically structural sentence, I think it is also integral to the idea itself. It showcases a connection, which is important outside of grammatical terminology. It showcases the necessary connection in order to inspire other people using the public condenser project (as previously discussed). It also showcases the connection with the connection between the programs which can stimulate each other, as seen previously.

Lastly, it stands for the connection with the outdoors. This connection, as again noted by research group 5 (2019), is another crucial part of the way of living for Danish people.

Esteban-Cornejo, I., Tejero-González, C. M., Martínez-Gómez, D., del-Campo, J., González-Galo, A., Padilla-Moledo, C., Sallis, J. F., ... Veiga, O. L. (2014). Independent and Combined Influence of the Components of Physical Fitness on Academic Performance in Youth. *The Journal of Pediatrics*, 165, 2, 306.

Research group 5. (2019). *People*. Not officially published: part of the PI.

Sundhedsministeriet. (2002). *Sund hele livet*. Sundhedsministeriet. Accessed on 22 November, 2019. From: <http://www.sum.dk/Aktuelt/Publikationer/~media/F7BABBI7699E42B4A11623E137D73D0C.ashx>

A healthy mind In A healthy body

Overarching Theme - Defined

II - IV

Mens sana in corpore sano – in architectura

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AR3AP010 MSc. 3 PB Seminar Research Methods, Fall 2019

Abstract

Health of the body, and health of the mind are connected to one another. I believe that architecture can actively contribute to both areas, which is what I am trying to put into practice in my public condenser project (Public Building / Graduation studio Public Condenser: The Hague-Copenhagen). The idea of the connection between a healthy body and a healthy mind has existed since ancient Greek times, yet, the ideal of 'Mens sana in corpore sano' is often interpreted wrong. This paper defines what 'a healthy mind' and 'a healthy body' means. It also looks at two case studies which employ (components of) this 'a healthy mind in a healthy body' ideal, to see how the idea can be used in the built environment.

The paper concludes that 'a healthy mind' is composed of four aspects: a stimulated mind, a mind that is disorder free, a brain that is disease free and a brain that is able to go through different phases of vigilance. 'A healthy body' is composed of three aspects: a body that is physically active, a body that is disease free and a body that is healthily-nourished.

This paper also showcases that buildings can actively focus on improving the physical and mental health of people, by using identified components of both 'a healthy body' and 'a healthy mind'.

Keywords:

Mens sana in corpore sano, healthy mind, mental health, healthy body, physical health, architecture, built environment

Introduction

Good mental health and good physical health are interconnected. As research of Esteban-Cornejo et al. (2014) showcases, there is an association between the cardiovascular capacity of children and their respective academic performance. Children with more developed cardiovascular systems perform better in academic fields than children with less developed cardiovascular systems.

This relationship is not only visible in children. It extends throughout all age groups, even to the elderly as showcased by the research of Kramer et al. (2002). This research showcases a correlation between adults that performed aerobic exercises, and their ability to perform activities that required the frontal- and prefrontal part of the brain. The performance of the group of adults that did not practice aerobic exercises was significantly worse.

The idea of interconnected mental and physical health is not new. Nowadays it is often seen in the light of an ancient Greek ideal: 'Mens sana in corpore sano'. Literally translated, this means 'A healthy mind in a healthy body'. Yet, as noted by Agostoni and Lauritzen (2017), this translation falls short, since it is often taken too literally. The English translation does not encompass the full concept of the ancient Greek ideal.

In order to gain a better understanding of the actual meaning of the ancient Greek ideal, both concepts of 'A healthy mind' and 'A healthy body' are researched in this paper. I believe that architecture can actively contribute to both areas, which is what I am trying to put into practice in my public condenser project (Public Building / Graduation studio Public Condenser: The Hague-Copenhagen). In order to see if this belief is reflected in architecture, the paper also showcases if the new interpretation of the ancient Greek ideal can be seen in current building development.

Mental and physical health defined

A healthy body

The definition of physical health can vary from person to person. Yet, as showcased by the study of Høye et al. (2016), there are several underlying ideas about physical health that are universal, regardless of culture. Overall, there are three main universal aspects to physical health: absence of disease, physical activity and nutrition.

The first main aspect of physical health, the absence of disease, seems like something that is difficult to influence on purpose. Yet, this is not entirely true, since there are certain risk factors that greatly increase the chance of manifesting diseases and malfunctions within the body. As noted by Lee et al. (2012), there are different risk factors which are not classified equally important depending on culture and location. Yet, there are generally three main risk factors that are perceived important worldwide: smoking, (excessive) alcohol consumption and obesity (Lee et al., 2012; Manderbacka et al., 1999). All of these risk factors greatly increase the possibility of the manifestation of diseases, for example: cancer and cardiovascular diseases, two major causes of death in the Western world (WHO, 2018). As researched by Manderbacka et al. (1999), these risk factors are generally well known among the population and are also associated with their respective risk in self-reported health. By avoiding these risk factors, the chance of maintaining physical health can be actively increased.

The second main aspect to physical health is avoiding physical inactivity. As Lee et al. (2012) reported, physical inactivity can cause multiple diseases. In fact, 9.4% of all deaths from any cause can be attributed to physical inactivity. By avoiding physical inactivity, the chance of manifesting a disease is actively reduced. Therefore, physical activity is very closely related to the previously discussed point of avoiding diseases.

This same research (Lee et al., 2012) also concludes that the effects on the lifespan of people influenced by smoking and obesity are very similar to the effects on the lifespan of people influenced by physical inactivity. This makes physical activity equally important to the avoidance of risk factors in achieving physical health. Yet, despite this importance of physical activity, research by Hallal et al. (2012) showcases that more than 30% of all adults are physically inactive. In order to get more people to reach the recommended amount of physical activity of 30 minutes of 'moderate-intensity' activities five days a week (WHO, 2018), there is a lot of emphasis on the promotion of physical activity. This has gone so far that physical activity has become a worldwide health priority for many countries (WHO, 2018).

The third main aspect of physical health is nutrition. This aspect is again very closely interconnected with the first aspect, the absence of diseases. There is a strong link between dietary choices and the development of diseases. As stated in the report of Carr and Descheemaeker (2001), eating up to 5 portions of fruit a day could lead to a reduction of a fifth of all overall deaths from chronic diseases as heart disease, cancer and stroke. The report goes even further in stating that a healthy diet is the second most effective reduction of risk for cancer, after stopping to smoke.

Consuming this healthy diet, which includes the consumption of 5 recommended pieces of fruit a day and reduction of the amount of energy acquired from saturated and unsaturated fat (Brunner, Carr and Descheemaeker, 2001), is not the only aspect to nutrition. The avoidance of obesity (as mentioned in the first main aspect of physical health), is also very important nutrition wise. Especially since the late increase of population that suffers from obesity. As studies (Seidell, 1999) show, there is an estimated 7% of the world population that has obesity. This is especially worrying for physical health, since obesity can cause a risk of premature death to double (Calle et al., 1999).

The issue of obesity goes further than an increased possibility of the manifestation of cardiovascular diseases. Obesity also causes mechanical issues and disorders, breathlessness and sleeping disorders, as well as joint problems leading to continuous wear of the body (Jung, 1997).

In gaining and maintaining physical health nutrition plays an important role. By avoiding obesity whilst simultaneously eating a well-balanced diet, the chance of developing diseases can be significantly lowered whilst physical health can actively be increased.

A healthy mind

In order to define what can be considered a healthy mind, a distinction needs to be made between 'a healthy mind' and 'a healthy brain'. As Northoff (2016) explains, there is a categorical difference between both facets of mental health. This difference is created by the two different fields looking at mental health, and the way that both fields approach the subject. Where neuroscience looks at a healthy brain, philosophy focusses on a healthy mind. Despite not being interchangeable, Northoff (2016) places great emphasis on the fact that both parts of mental health work very closely together.

Since both aspects are crucial to mental health, yet are not interchangeable, they need to be discussed separately in order to define 'a healthy mind'.

When considering mental health from a neuroscientific point of view, one should see the brain as an organ. Since neuroscience focusses on observation of the brain from a third person perspective (Northoff, 2016), only observable and measurable phenomena can be considered. This means, in this perspective, the brain should be seen as described by Dubin (2013): an organ made out of cells like any other organ in the human body. This specific organ is made out of neurons, cells which are specialised in rapid intercommunication with other neurons. These neurons can use an electric signal in order to transmit a 'message' to other parts of the body, which result in a certain action. The transmission of this 'message' is possible through the connection of neurons in the nervous system, which connect all the different parts of the body.

Looking through a neuroscientific lens, the absence of neurological diseases is a main indication for a healthy brain. Neurological diseases, such as Alzheimer's disease and Parkinson's disease, can be attributed to damage to the nervous system (Heales et al., 1998). If enough damage has occurred to the neurons (anywhere in the nervous system), then neurological diseases can manifest. Avoidance of damage to the nervous system is usually not something that people can actively influence, yet absence of neurological diseases is an important indication for a healthy brain.

The second main indication for a healthy brain, is a brain that undergoes its three main stages of vigilance. As explained in the book by Frank (2012), there are multiple stages of activity in the brain which happen during different stages of vigilance. These stages are wake, slow-wave sleep, and REM sleep. Even if it is not yet completely understood what sleep does in and with the brain, the idea of the brain resting as the body during sleep is long debunked. The brain activity that happens during specific stages of vigilance changes, and some activity can be exclusive or amplified in different stages of vigilance. One of these activities in the brain is Neuronal synchronisation, as explained by Frank (2012). It is used by neurons in the nervous system in order to, among other uses, prevent synaptic transmission failures.

Signs of a healthy brain are absence of neurological diseases, and a brain which can undergo multiple stages of vigilance. The latter can, to a certain extent, be actively influenced by providing the body with enough sleep so that the brain can go through the necessary activity stages it needs to function properly.

When defining mental health from a philosophical point of view, the first question that needs to be answered is: what is the mind? Philosophers have asked that question for a very long time now. Even though there is no definitive answer to this question (yet), the general consensus is that ‘consciousness’ is one of the main features of the mind (Northoff, 2016). This means that having a healthy mind in a philosophical sense, means having a well-developed and functioning consciousness.

As Northoff (2016) explains in his book, there are two main parts to consciousness. The first part of consciousness is the ability to be able to identify places, beings and conditions. This perception and naming of external things is coupled with the second part of consciousness, which is the ability to be self-aware and recognise oneself: the self-consciousness.

The first part of consciousness, the ability to perceive and name external things, is not an ability that has a chance to be lost due to risk factors. It is an ability that continuously needs to be developed in order to persist. This is especially noticeable in older people, in a principle called the ‘multiple reserve hypotheses’. As Friedland (2014) explains, this hypothesis is based around the idea that the quality of life for older people is based on their ability to resist the loss of function. If people keep their cerebral capacity ‘up to date’ by continuing to stimulate it, their quality of life can also increase.

This is not only a trend seen in older people. As noted by Crowther and Sutherland (2006), the idea of ‘lifelong learning’ is gaining an increase in attention. Lifelong learning, as they explain, basically entails the idea that society and circumstances are continuously changing. In order to have the required knowledge, skills and habits to keep functioning properly in this changing society, people have to re-engage in a process of learning (whether being formal or informal). So, by actively stimulating and training cognitive ability, people keep a higher level of consciousness for a longer time.

The second part of consciousness, the self-consciousness, is about the avoidance of mental disorders. Even though this seems to be similar to the avoidance of neurological disease, the root cause for mental disorders is different. As Northoff (2016) notes, mental disorders as depression are caused by a problem of the self-consciousness. This self-consciousness reaches back to the famous line of Descartes “I think, therefore I am” (Descartes et al. , 2008). Even though not literally said, this line showcases a clear self-reflection. In this specific case, this self-reflection is about knowledge about oneself and the perception of existence within the context.

In the case of a mental disorder, this self-reflection is not accurate and showcases a distorted view of reality. With depression for instance, this self-reflection is overly or completely negative (Northoff, 2016). This causes part of the conscious not to function normally, which is therefore considered a sign of an unhealthy mind. In extreme cases, as can be the case with Schizophrenia, there can be a complete lack of self-reflection, or a self-reflection which is centred around a different person.

'Mens sana in corpore sano' applied

In order to see how this re-defined ideal of 'mens sana in corpore sano' can actually be stimulated by the built environment, two relevant projects are discussed as case studies. The cases are chosen because they both combine multiple aspects of the ideal as previously discussed. This is important since the combination between the body and mind is a very important factor for the ideal, as stressed in the introduction.

The second reason why the specific projects were chosen, is due to their very recent annunciation and opening. This is considered important in this paper, since architecture is a reflection of everyday experience (Ballantyne, 2005). Most buildings are an appropriate framework for the people of a society to live out the current habits. By choosing recent buildings, the case studies showcase examples of how the ideal can be applied in the current society.

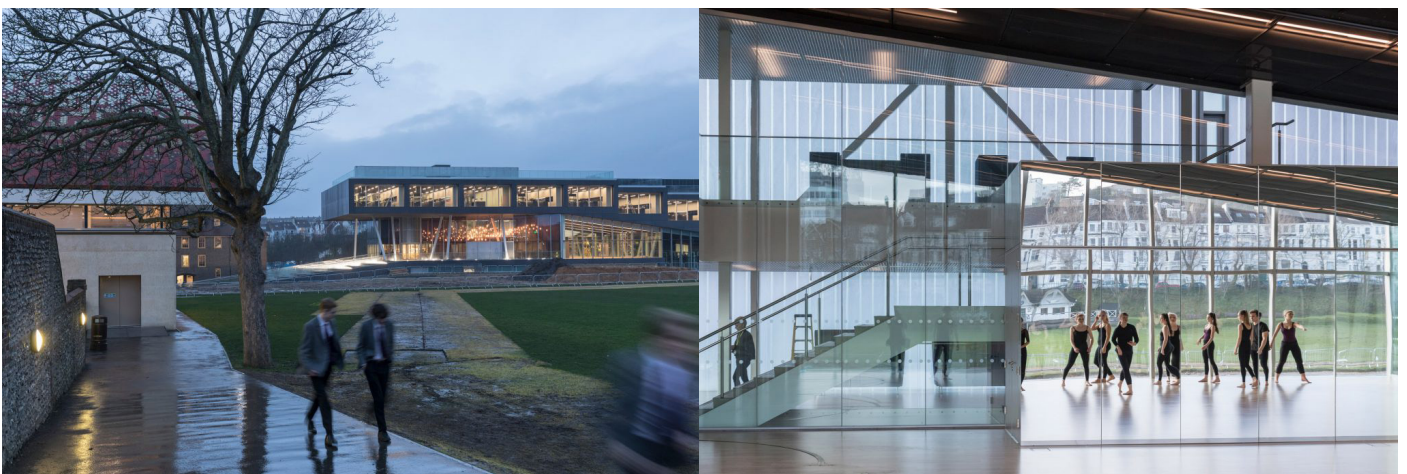
OMA

The first case study is the School of Science and Sports by OMA in Brighton. As the title of the building already clearly expresses, the main idea of this building is to combine program that focuses on academic development, with program that focuses on athletic development.

Whether it was intended or not, this building clearly combines the aspect of avoiding physical inactivity, with the aspect of stimulating cognitive ability. Both programs are also mixed within the building, further emphasizing the connection between the two aspects.

Even though the case study works on the healthy mind and healthy body aspects simultaneously, it focusses on the more well-known aspects of the concept. Aspects as prevention of disease, both mental and physical, are not addressed with this building.

However, not every building needs to address all of the presented aspects of the ideal in order to contribute to the health of the users. This building brings the aspects that it does focus together in a successful way, without the need to separate them. It is a well-received building that has a lot of visitors, which provides an active contribution to the mental and physical health of its users.



OMA - School of Science and Sports, Brighton (Ravencroft, 2020)

Steven Holl Architects

The second case study is the Shanghai Cultural complex by Steven Holl architects. It is unclear how much of the project is still due to change, since it has not been realized yet. However, the architects are combining a cultural centre, with a health care centre.

This building combines the aspect of avoiding disease (mental as well as physical), with the aspect of stimulating cognitive ability. The avoidance of disease is here embodied by the creation of a pharmacy and doctors' clinics. This has a preventive aspect to it, where people can come to the doctors' clinics to make sure they have not contracted a disease. Yet, there is also a curing element to this building which can help people to get rid of disease, increasing their mental and physical health again.

This case study focusses on the prevention of disease, with the stimulation of cognitive ability. Yet in this case study, physical activity is not a part of the overall concept. Even though a park design is planned with the building, this does not actively increase physical activity.

Again, not every building needs to address all of the presented aspects of the ideal in order to contribute to the health of the users. This building focusses on a rarer combination of functions in order to stimulate the health of its users. Even though it is not yet built, and therefore unknown how well it will be used as a building, it is well-received which points in the direction of a successful building.



Steven Holl Architects – Shanghai culture complex (Mairs, 2017)

Conclusions

The interpretation of ‘mens sana in corpore sano’ as ‘a healthy mind in a healthy body’ often falls short since it is not well enough defined. ‘A healthy body’ does not only comprise of a body which endures physical activity, but also of the avoidance of disease as well as a healthily nourished body. Similarly, ‘a healthy mind’ does not only mean a mind that is cognitively stimulated, but also a disease free brain, a disorder free mind, and a brain which is able to go through different phases of vigilance.

This paper showcases that ‘mens sana in corpore sano’ should be interpreted as ‘a stimulated and disease-free mind and brain that is able to go through all different activity stages, in an active, disease free and well-nourished body’. Even though this is not the literal translation of the ancient Greek, it encompasses the holistic meaning of the ideal much more clearly than ‘a healthy body in a healthy mind’.

When looking at architecture, it becomes apparent that architecture can indeed aid in the stimulation of health of its users. Buildings can programmatically aim in combining multiple of the identified aspects of health, in order to encompass the Greek ideal.

From the two analysed case studies, it also becomes clear that usually just a few of the aspects are tackled within the buildings. Whether these are the more well-known aspects, or lesser-known aspects of health as described in this paper, does not seem to matter.

Discussion

Even though this research goes relatively deep in uncovering the actual meaning of ‘a healthy body’ and ‘a healthy mind’, the subjects that are covered in these areas are very broad and complex. Because of the size of this paper, it is not possible to cover these areas of research completely. The paper only gives an overview of conclusions that have arisen in these fields. Yet, for instance neuroscience and psychology are much vaster than is possible to cover with this paper.

It should also be noted that the part about consciousness is subjective to a certain degree. Even though scientific research is used in order to write this part of the paper, consciousness is subjective by nature. It is not something that can be observed or analysed by a third person, which is also what makes it so difficult to describe within psychology.

Lastly, it is striking that the analysed research cases do never cover all of the found components of the definition of the ancient Greek ideal. Since it was only possible to cover two case studies in this paper, it is possible that this observation is not further visible in other buildings which use this ideal.

Another possibility is that the ideal is interpreted differently for these buildings. Since there was no source found in the process of writing this paper, detailing what ‘a healthy mind in a healthy body’ actually means, it is possible that the creators or clients of these buildings simply interpreted the ideal differently.

N.B. This paper is peer-reviewed by a medical professional in order to make sure that the information is medically accurate.

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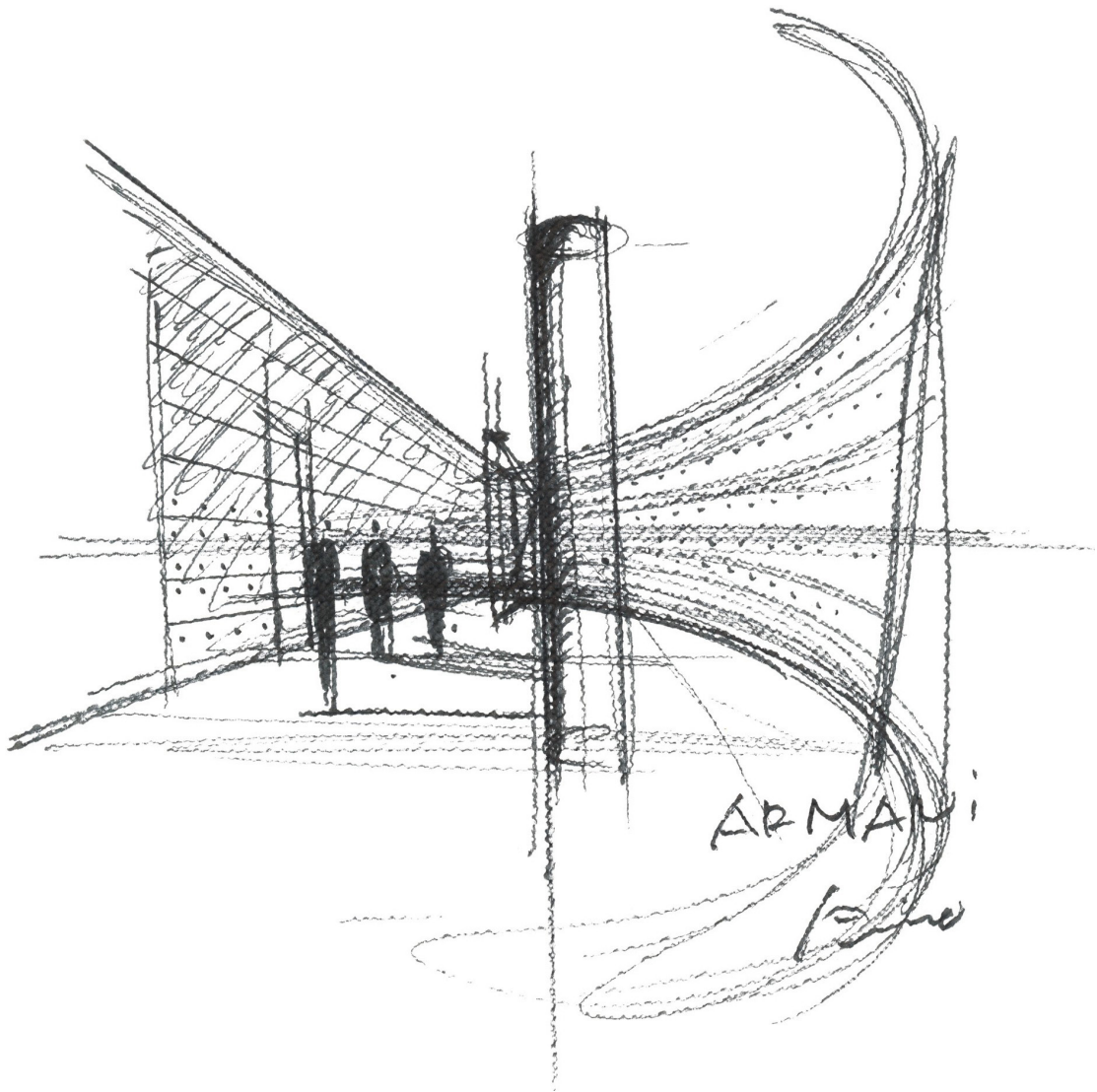
WHO (2018). *The top 10 causes of death*. Retrieved 20 Jan. 2020, from: <https://www.who.int/dietphysicalactivity/pa/en/>

In order to get a better grip on the own design project, as well as to understand how other architects use different typologies, I have done research about architecture typologies. In order to achieve this better understanding of typologies, different architects were analysed for this part of the research. From all of these architects, a couple of different projects were chosen, and analysed on their most iconic elements.

The architects were chosen due to personal interest in either the architects themselves, or interest in the projects of the architects. Also, some architects were chosen because of a similarity in design aspects, as created in my specific intervention.

All of this (additional) research has lead to a design typology for my own design. This typology is not a specific style of design, but much more an organisational idea that defines the project.

Tadao Ando
Reference / Inspirational

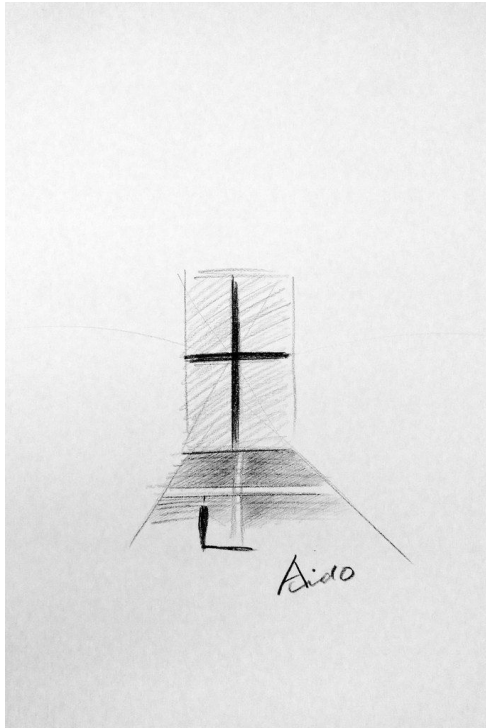


Minimalistic Modernism (rooted in contextualism)

Tadao Ando is a truly devoted modernist. He is also often complimented on his unwavering devotion to the style, by other contemporary architects. Tadao Ando's work is most well known for the creation of minimalistic spaces. He himself states that he enjoys the 'emptiness', since it creates the sense of wonder and makes people think what they can actually create in this emptiness. His works are also very well known for the use of daylight and water within the buildings. Using them as active tools to shape his spaces, he himself states that one should see light and water as people, and design accordingly.

On top of this, a lesser known aspect about Ando's architecture is the rootedness in their context. He creates his buildings based on the physical context that he finds, as well as the people he meets. This creates buildings that engage with nature. This close living engagement with nature is something Ando sees as typically Japanese.

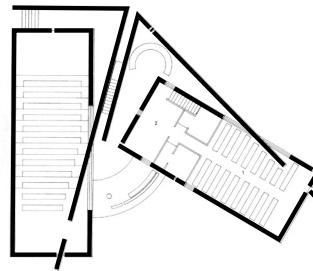
Even though Ando has a preference for reinforced concrete, he also builds in wood and very rarely in brick. This is due to the fact that he is searching for monolithic (looking) buildings. These buildings usually consist of geometrical forms, with a complicated circulation through them (a clear reference to Le Corbusier).



Church of Light
1989
Osaka, JP



Arguably one of Ando's most well known buildings, the Church of Light showcases the principle of using light as a design tool. Not only did Ando use the light symbolically (as a symbol for the Cross), but he also used the light to guide the eye within the building composition.



Simultaneously, the project showcases how Ando uses different 'simple' geometrical shapes as the startingpoint of his design. The shapes intersect with each other, creating the specific shape of the building.



The spaces created in the projects of Ando can sometimes seem quite empty. Yet, Ando creates these kind of spaces on purpose. This is best explained with the following quote of Ando: "I don't believe architecture has to speak too much. It should remain silent and let nature in the guise of sunlight and wind." The spaces Ando creates are about the beauty of the space itself.

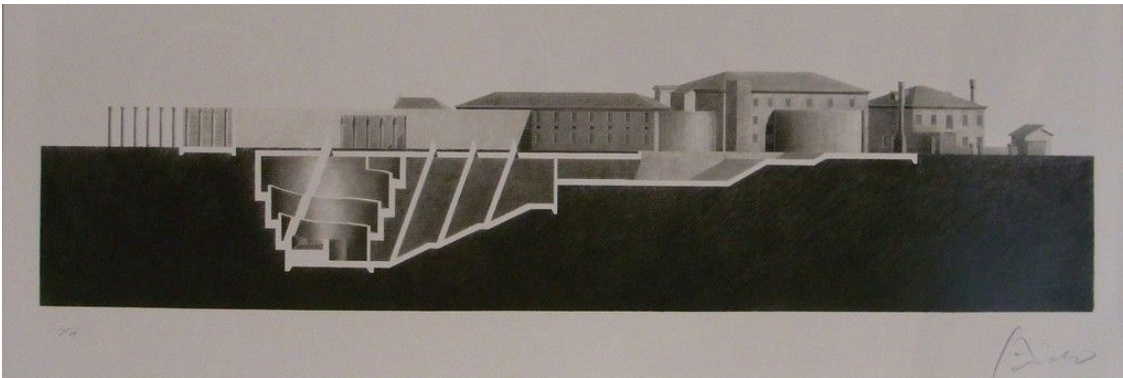
Fabrica Benetton
1992
Treviso, IT



With his first renovation project overseas, Ando 'respectfully' keeps the original's (red) value, whilst adding additional new (green) parts to the building which engage with the context.



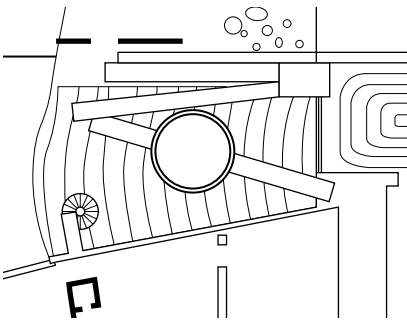
Water is used in the project as a design tool itself. It is placed in order to accentuate the old and new, via the reflection that it provides. On top of this, it showcases the idea of Ando to bring nature and living closely together.



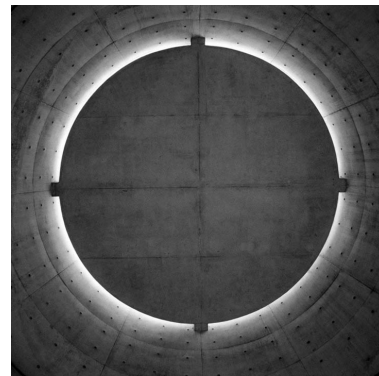
The new part of the building is comprised of a series of underground spaces. These spaces keep the original qualities of the surrounding landscape, whilst adding new functionality. The importance of light and space are also very important, as visible in this drawing.



Meditation Space
1994
Paris, FR



This project in particular showcases the focus of Ando on the interaction between space and circulation. The space is created through the use of a simple geometrical shape, and the circulation cuts through it, much more elaborately.

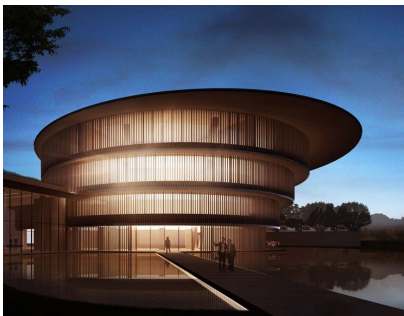


Even in such a 'simple' space, daylight is used as a design tool in order to shape how the space is experienced. This project also nicely showcases what Ando describes as the depth of minimalism. The care in the detailing is a key factor in creating the beauty of the space.



The Meditation Space project is also deliberately placed within its context, even though the space in itself is very introverted. The placement and height interact with its surroundings, showcasing Ando's contextualism to a certain degree.

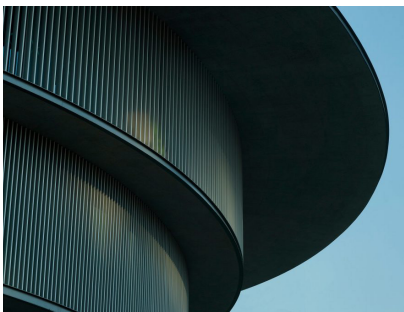
He Art Museum
2020
Shunde, CH



The Art Museum consists of multiple ovals stacked on top of each other. They are a reference to the Chinese philosophy, which imagines the heavens as round and the earth as square. The square is reflected in the pool which is on the ground floor of the building.

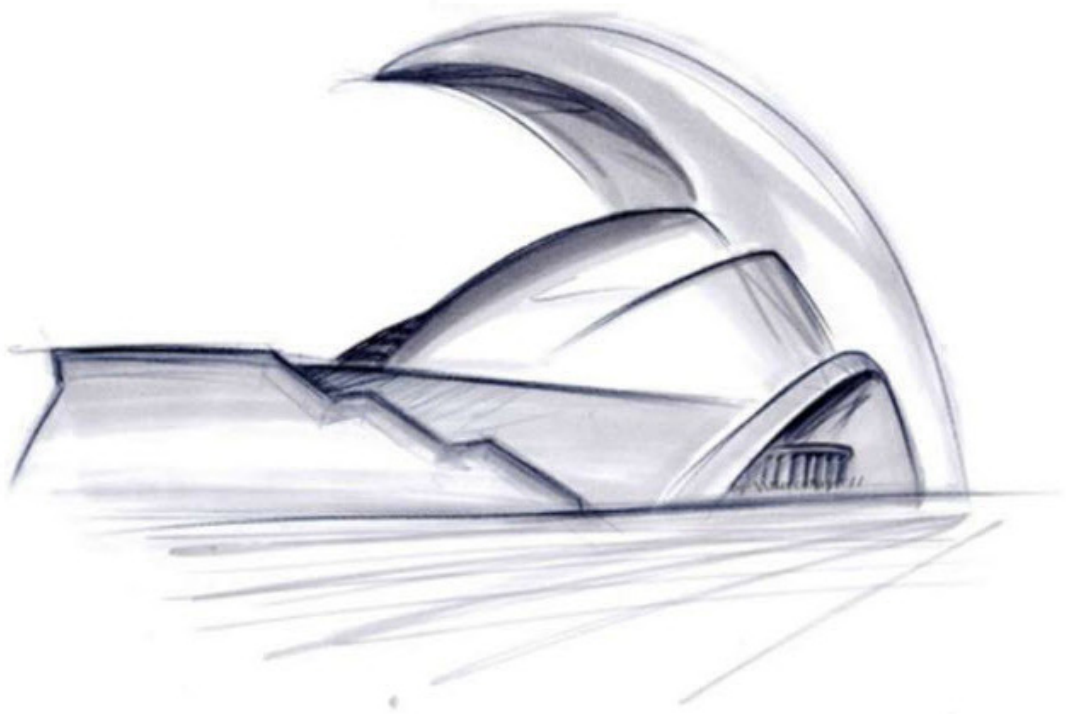


The building revolves around an indoor space, the circulation space. This focus around the circulation space is characterising as a reference to Le Corbusier. As a modernist, it is often the focus of the buildings of Tadao Ando.



Even though this building is not created with the familiar concrete walls that Ando usually prefers, it is still a monolithic project. This is due to the fact that the vertical panels have a certain depth, and are based on a center point. Therefore, the walls still appear solid (whilst being seethrough from the inside).

Santiago Calatrava
Reference / Inspirational

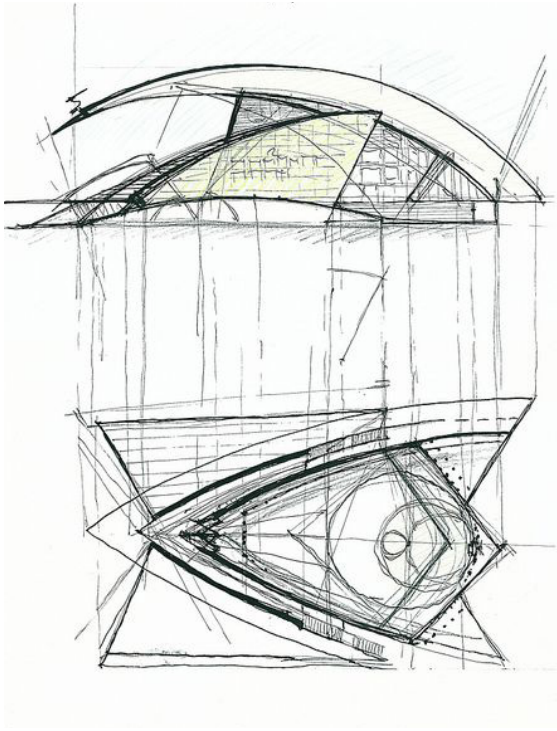


Sculptural Futurism (rooted in structural engineering)

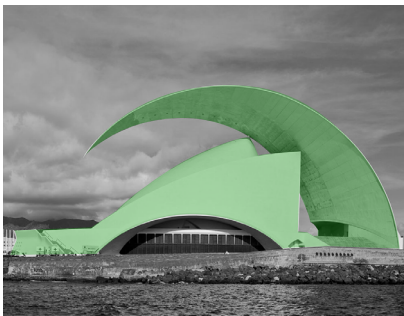
Being officially trained in architecture as well as engineering, Calatrava combines both disciplines in order to create his signature (neo-)futuristic buildings. By employing precisely engineered details and structures, he is able to create structures that are sometimes said to defy physical laws. In doing so, Calatrava often displays his buildings as (giant) sculptures within their urban context. He often seems to be able to capture a sense of motion in the projects.

A common theme in the work of Calatrava is the manipulation of a 'simple' shape in series. By manipulating or changing every iteration of the shape within the series, he creates larger shapes within his buildings.

Recently, Calatrava has been part of a couple of controversies (as over budget projects and poorly detailed buildings). Calatrava himself disputes these claims as out of his control. Regardless, he is a key figure in modern day architecture who continuously attempts to push the envelope by employing,



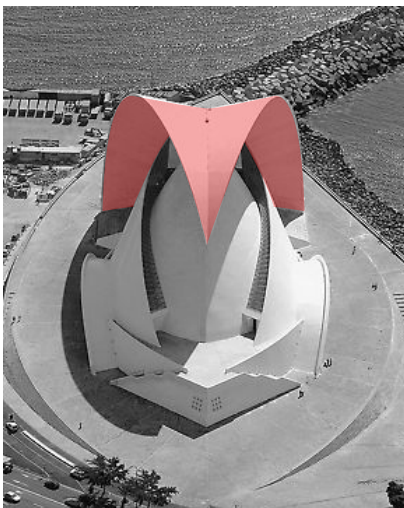
Auditorio de Tenerife
2003
Tenerife, SP



Even at first glance, it is clear that the building by Calatrava should be seen as a sculpture. The sculpture captures a certain sense of movement by the way the compositional elements are shaped and seem to flow over each other.



In order to achieve this sculptural appearance of the building, there are various impressive points from an engineering point of view. These include the completely hanging (very slender) leaf-like compositional element, as well as the very minimal points where different elements are connected.



Further emphasizing the idea of the sculptural in the building, Calatrava uses parts of the composition that have no programmatical function. There is neither program inside, under or on top of certain parts of the building.

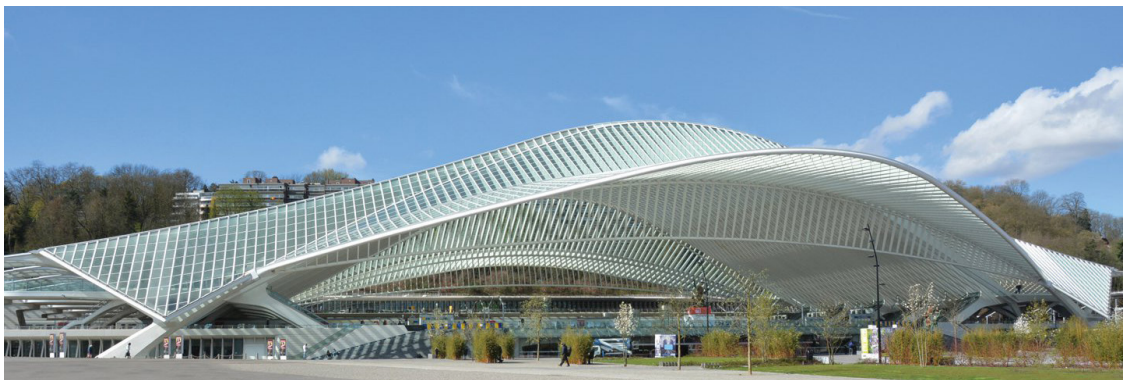
Station Liège-Guillemins
2009
Guillemins, BE



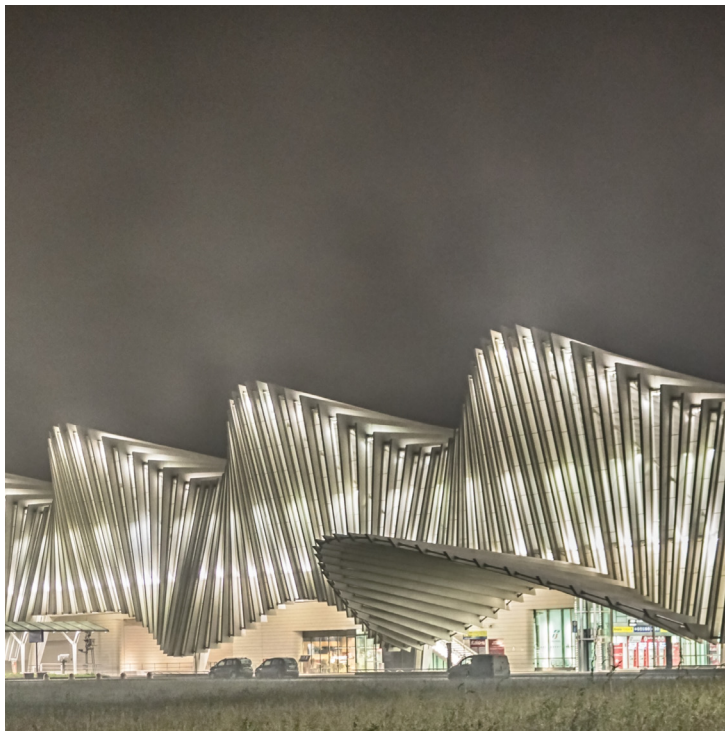
The sculptural building consists of two different ways of using the same system. There are two sets of repeated elements within the building. Both side sets extend into the public space, whilst the set of elements in the middle follows the direction of the tracks.



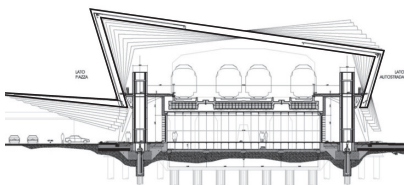
The elements spanning the railroads are in the direction of the railroads themselves. This accentuates the length of the elements, yet is structurally challenging, since the span of the elements is increased tremendously.



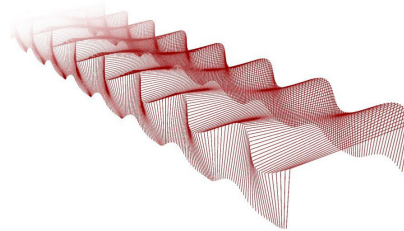
By changing the way that shapes within the sculpture are repeated, and by changing the individual shapes, it is possible for Calatrava to shape entrances within the created system of the overarching sculptural idea.



Stazione Reggio Emilia AV Mediopadana
2013
Reggio Emilia, IT



The Reggio Emilia station project showcases the idea of repeating a shape sequentially to create a larger sculptural shape. The actual shape that is repeated is relatively simple. On top of that, the sculptural quality of this building is bound much more to a “functional scale” than in other projects.

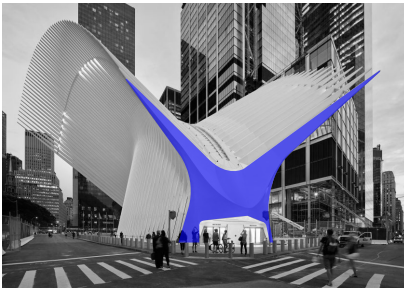


By repeating the ‘simple’ shape in a sequence, whilst keeping the actual shapes separate, it is possible to change every shape slightly in regards to the previous and next shape. This makes it possible to create a bigger “fluent” sculpture out of separate shapes.



In repeating this shape across the entire building, and by modifying the way that the shape changes, it is possible to let the bigger sculpture interact with its contextual or programmatic needs. The sculpture can cover a big part of the building, yet simultaneously open up to reveal an entrance.

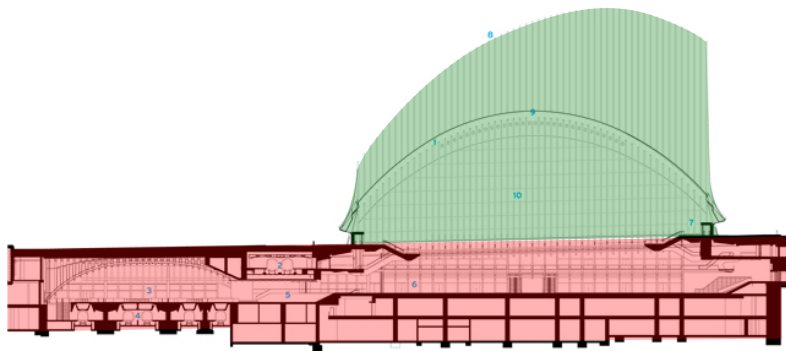
Oculus
2016
New York, USA



By repeating and changing a singular element, the entirety of the structure is formed. Again, because of the way that Calatrava designs, the building has an unmistakable sculptural quality, which captures a sense of movement.

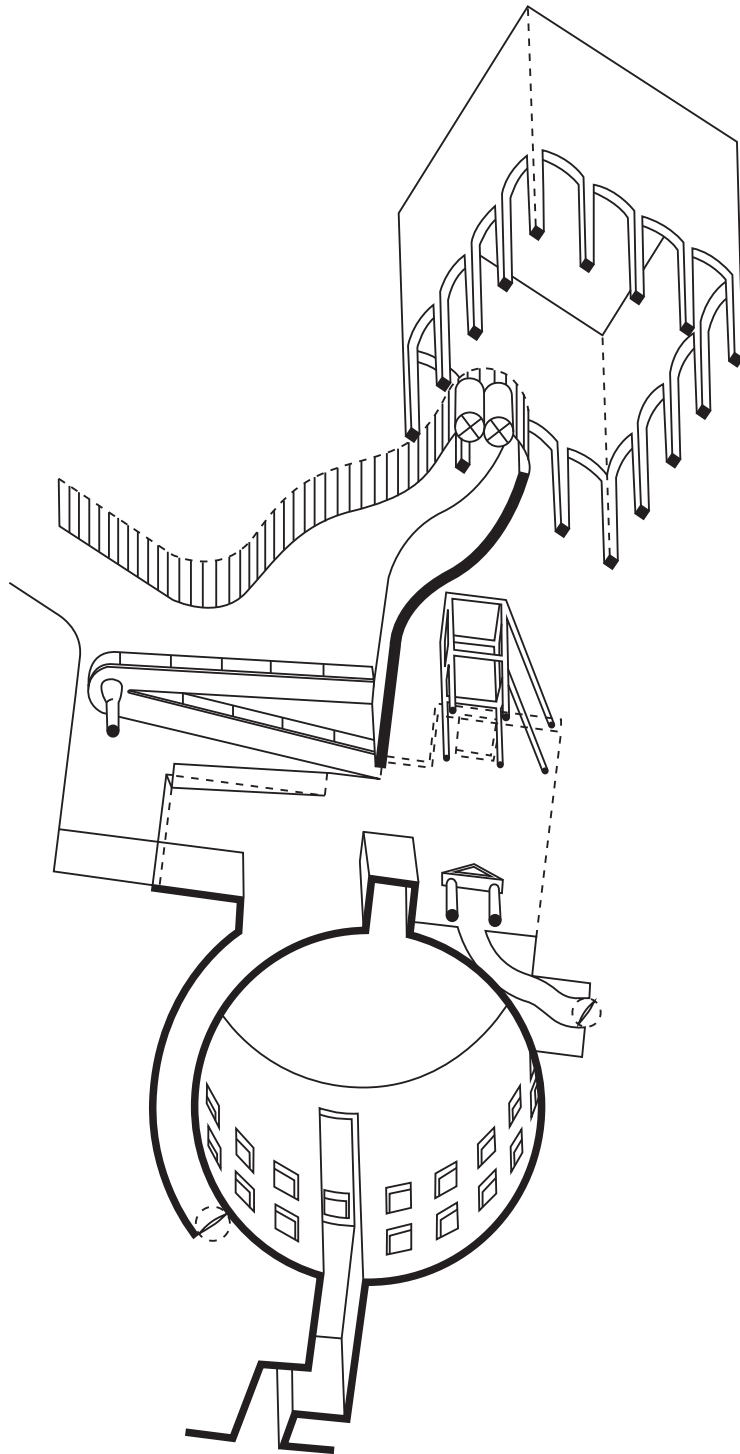


The repeated element that shapes the outside of the sculptural building, also shapes the actual indoor space. Because of the nature of leaving “gaps” between the elements, the structure is very light on the inside.



The Oculus structure is merely a part of a greater structure. This is due to the contextual situation of the structure. It is built on the (refurbished) ruins of a transportation hub that was destroyed in the 9/11 terrorist attack. The structural quality of the building is therefore also a monument to the people who lost their lives in the attack.

James Stirling
Reference / Inspirational

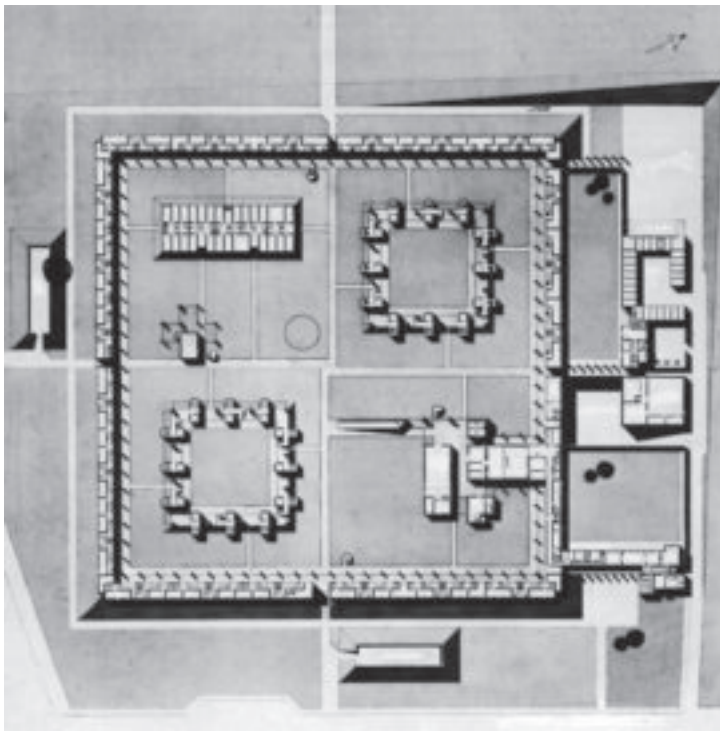


Expressive Functionalism (rooted in history)

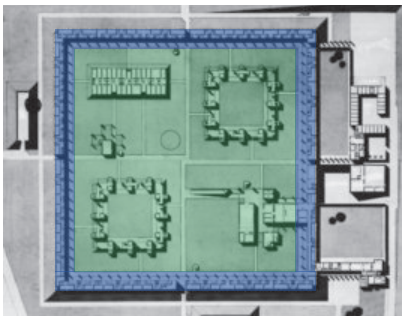
Seeing history as an essential part of Modernism, Stirling locates references throughout history. Rather than referencing these projects directly, he distills the underlying modernistic ideas from historical projects (with a personal preference for functionalism), to use them in his own architectural style. This results into a modernistic style which he himself references as “Expressive Functionalism”.

“In a 1963 article, “Seven keys to good architecture”, Stirling wrote that he considered himself a “routine functionalist” but that functionalism alone was “not enough”. “The building must also be expressive. You ought to look at it and recognize its various component parts where people are doing different things.” This expressive functionalism is not influenced by the “functionalistic aesthetic”, and takes on a more and more collage-like appearance as Stirling’s career proceeds.

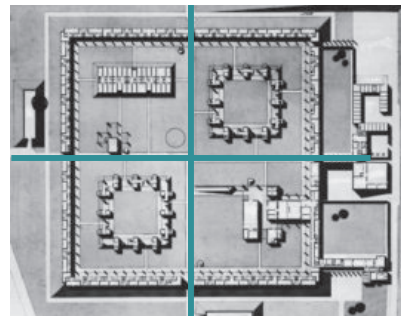
The showcased worms-eye perspective showcased on the page to the left is one of the favourite ways of Stirling to showcase his architecture. It emphasizes the importance of the ceiling. Furthermore, it presents his architecture as an object, more than as a building. This also prompted the reference to Stirling’s buildings as his “beautiful working toys” (as for instance referenced by Colin Rowe).



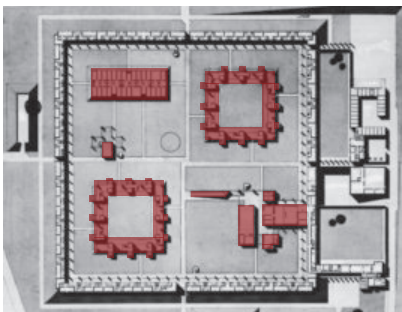
Churchill College
1959
Cambridge, UK



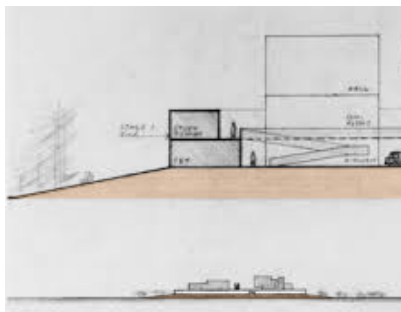
The entire project is a reference to the Cambridge courtyard model. Yet, it is reimagined by only using the idea behind it, and scaling the design up to emphasize monumentality.



The symmetry of the design is also rooted in history. It coincides with the contemporary Neo-Palladian interests. It is a reaction to the “asymmetry of Modern Architecture” as Stirling described it.

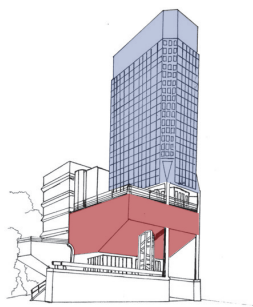
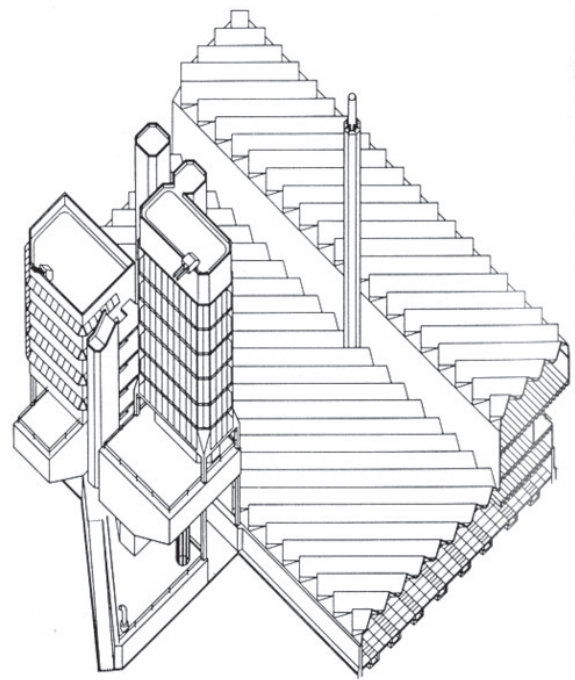


The buildings that are within this bigger courtyard are very atypical for Cambridge. They are a more functional answer to the programmatic differentiation of spaces within a traditional college

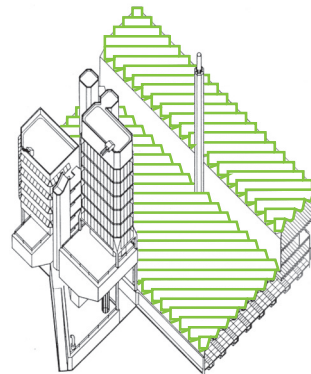


A reference to “monumentality” by raising the entire project on an “earth platform” (in orange). This also references to how Rowe described the Churchill college, where he references the building as a monument.

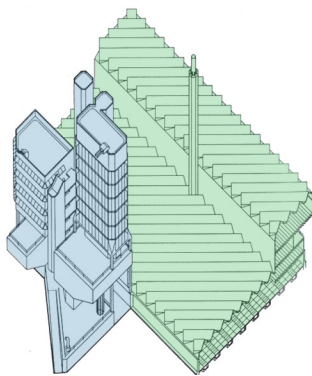
Leicester Engineering Building
 1963
 Leicester, UK



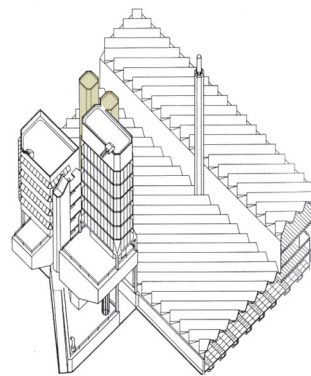
Different parts of Leicester express the “expressive functionalism” that Stirling was interested in. For instance, the lecture halls (red) have the exact shape they need with the slope for seating, whilst the office part (blue) is geometrically much different.



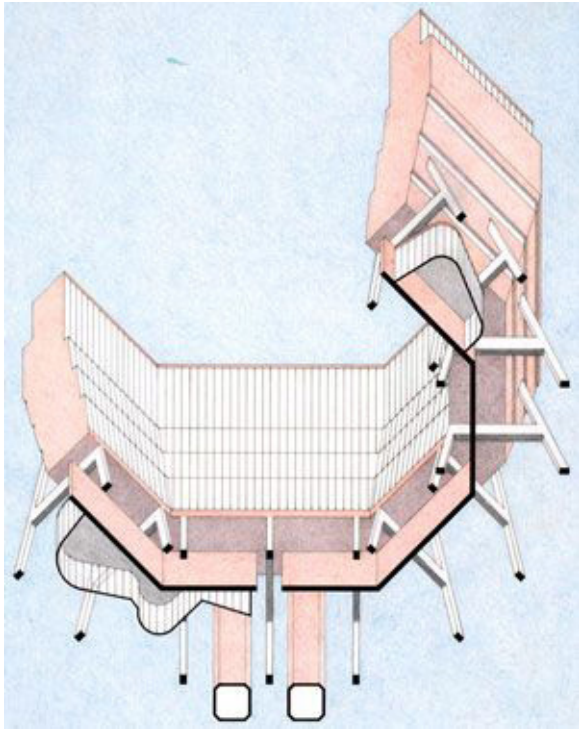
One of the most ‘iconic’ features of the building, the twisted roof lights of the workshop, are also part of a very functionalistic decision. The design brief stated northern light entrance as a prerequisite. In order to accomplish this, the roof was ‘simply’ twisted, instead of the building.



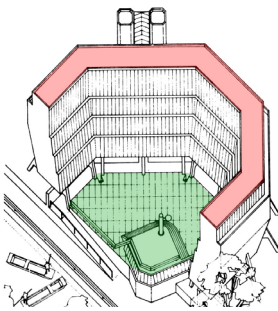
The building is also split into two (rough) sections. The ‘shed’ (green) is a functionalistic choice to accommodate the students which have to go from lecture to lecture and room to room, whilst the towers (blue) are created for more static purposes (administration, etc.).



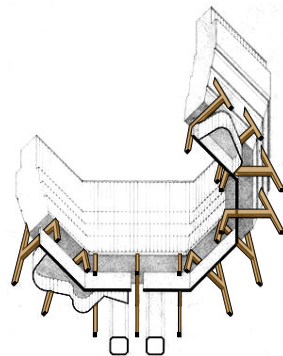
The (yellow) towers are again rooted in history. They are a nod to the idea of Le Corbusier’s “primal shapes”, from Towards a New Architecture. In this essay, he reminds architects that the most essential shapes of architecture are the sphere, cone and cylinder. Stirling clearly uses these shapes as primal shapes for this part of the design.



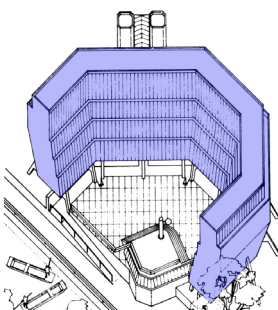
Florey Building
1971
Oxford, UK



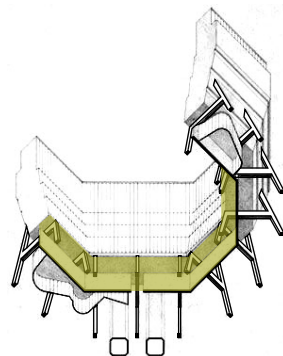
The Florey Building is again rooted in history. The entire project is a re-imagination of the classical college courtyard principle. The building is opened up to one side in order to provide sightlines to the river that flows directly besides the project.



The A-frames that hold up the entire building are a mixture between the functionalistic ideology of Stirling, and a sculptural nature. They also serve to separate the entire building of the ground, making the building itself more sculptural.

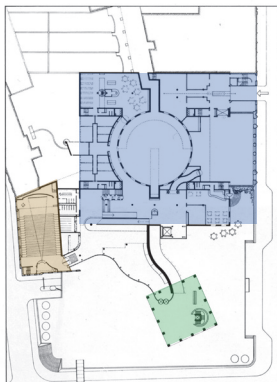
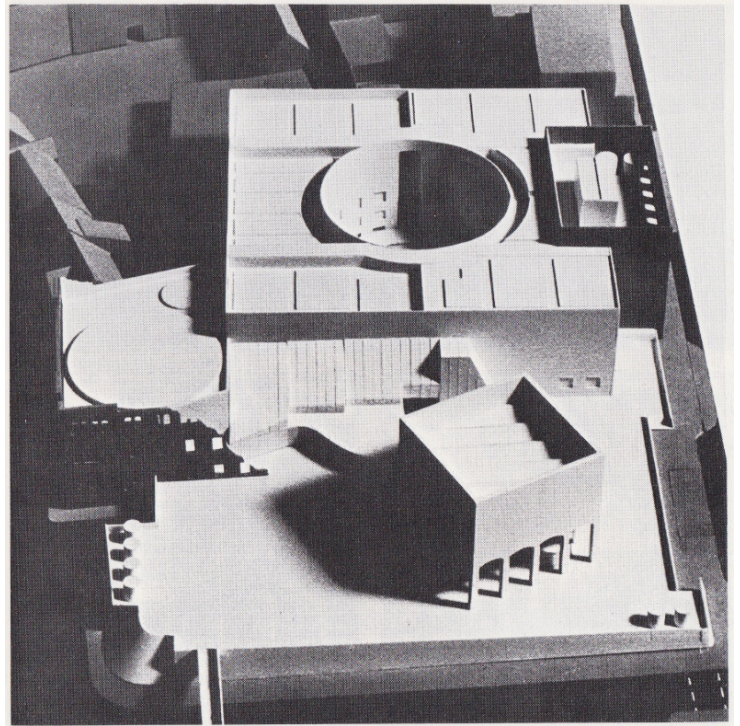


On first glance, this building seems different from Stirling's other buildings. This building does only express a single functionality, where his other buildings have a much more collage quality. Yet, Stirling sees this building as expressing one single functionality and idea.

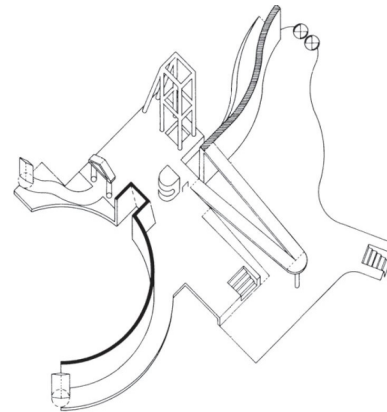


On top of that, this project is also rooted in history. The building references the idea of the historical church courtyard. This courtyard was usually surrounded by a colonnade, which was used to be able to walk around the courtyard. This principle is re-imagined in the Florey building.

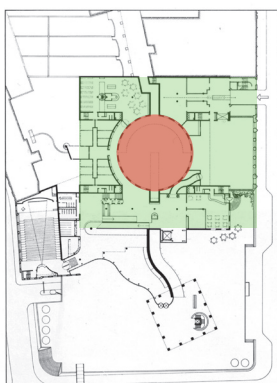
Düsseldorf Museum of Art
 1980
 Düsseldorf, DE



In the Düsseldorf building, the previously discussed collage quality of Stirling truly starts coming up. Rather than showcasing a singular totalized object, as was the case with Florey, this project consists of different elements which each have their own part in the composition.

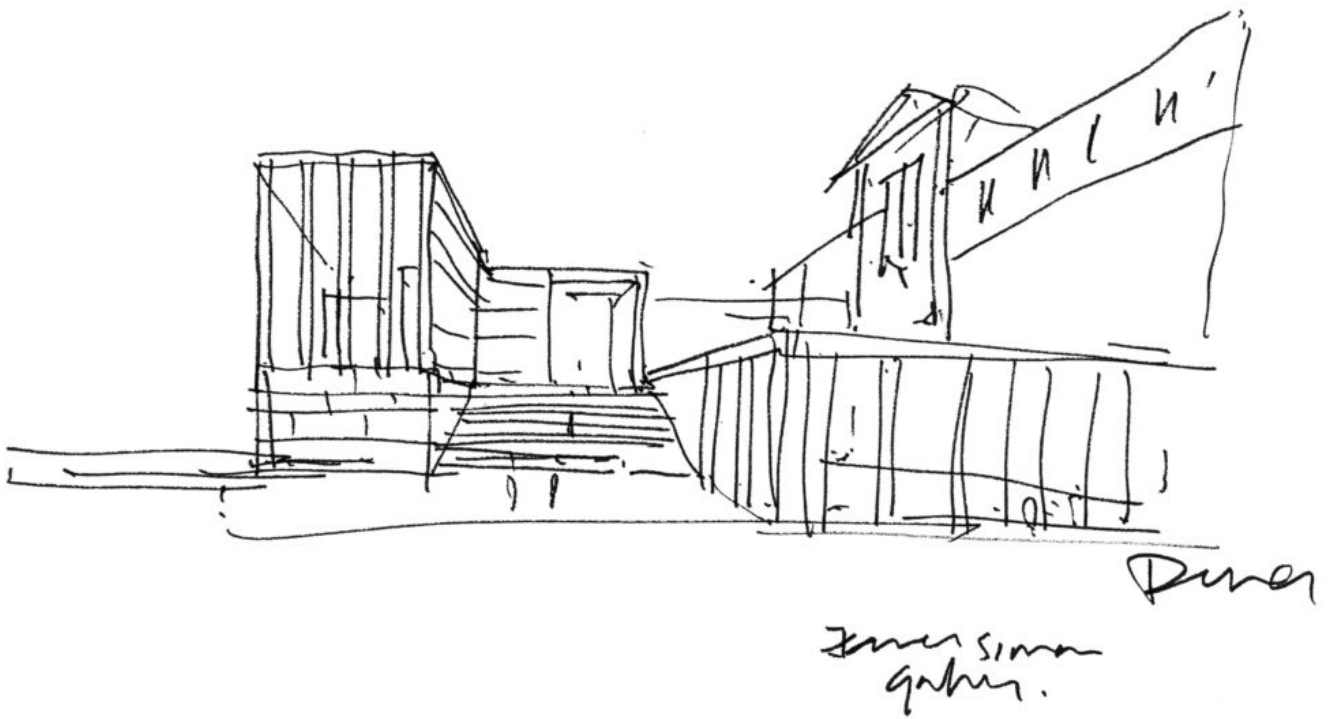


This collage quality is not just showcased in the exterior of the building, or the components that make up the composition. Even within the different components, elements are reinterpreted.



Some aspects of the building are also difficult to pinpoint to a singular inspiration. The idea of the circle-in-the-square has a long history in architecture for instance. There are clear references to the Altes Museum, by Schinkel, yet also to a mausoleum at West Wycombe, as well as certain cylindrical drums at the Liverpool docks.

David Chipperfield
Reference / Inspirational



Neoclassical and Modern hybrid (rooted in history)

The work of Chipperfield has been characterised by a tendency to use abstract vernacular forms, such as pitched roofs and courtyards in his Japanese projects. Even though he does not always use a vernacular form, it does showcase the way that he uses and considers history in his designs. He reinterprets historical aspects like roof shapes (or parts of the style of other historical buildings), and then applies them in his own designs. His buildings are therefore a sort of homage to the historical character of the place, whilst still having their own completely distinguishable style.

The way that Chipperfield places his buildings in relation to the (often) historical context is therefore also interesting to note. He places the buildings directly in their context, relying on his interpretation of the historical patterns and ideals to create a 'sensitive' relationship between the old and the new.

Chipperfield himself claims that he consciously tries to not create icons with his designs. He feels that architecture should encompass an idea or stimulate the connection between cultures and people, rather than be led by a financial overarching goal. The creation of the icon is just a by-product that either happens, or doesn't happen, yet should never be the initial thought.



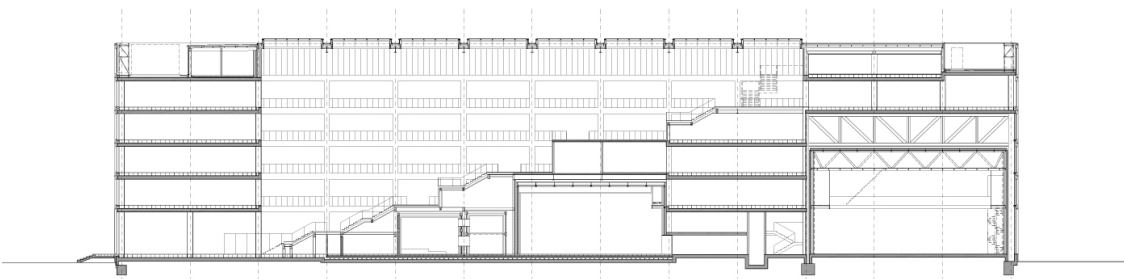
BBC Scotland headquarters
2007
Glasgow, UK



In places where there is no historical context present that Chipperfield reacts to, he seems to use the contrasting aspects of materials that many of his works have, in order to underline his overarching idea. In this case, the circulation route (with spaces to be) was part of this overarching concept.

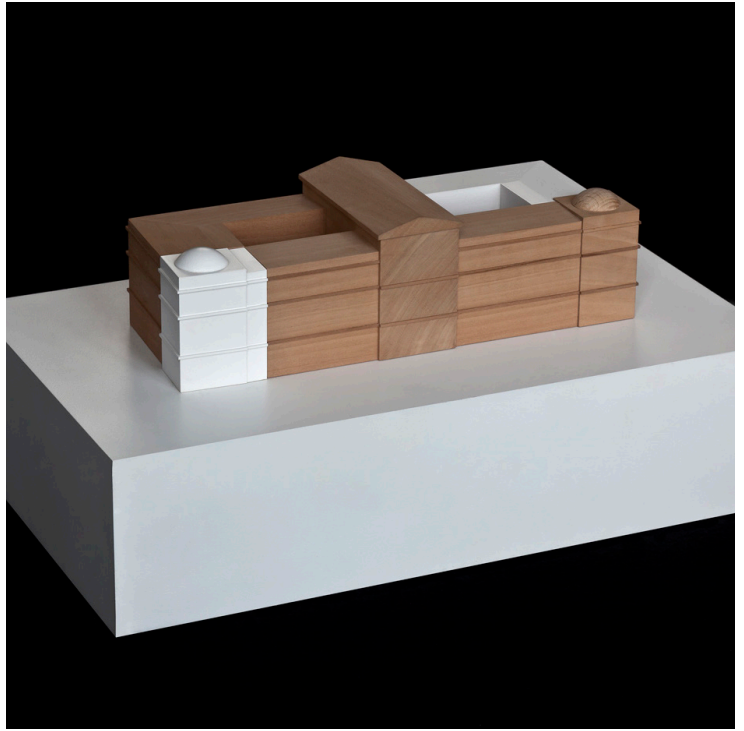


This juxtaposition in components is formed and accentuated by the use of different materials, which seem to be contrasting each other. On top of this, the component is separated from the rest by the way that it is formed within the grid of the building.

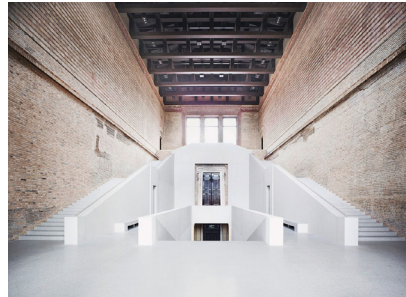


In order to make the gesture that Chipperfield intended, he uses a very big part of the building in order to realise the gesture. Whilst it is clearly visible that this gesture still follows the grid of the rest of the building, it is an integral part to the workings of the building itself.

Neues Museum
2009
Museum Island Berlin, DE



The two damaged parts of the Museum that needed to be rebuilt are created in a shape-language that (re) completes the historical building. Even the material is reminiscent of the original materials used. The only reinterpretation is the way in which the spaces are shaped.



The interior however, showcases a clear juxtaposition between the old and the new. In this way, Chipperfield 'keeps the original parts in their glory', whilst adding new design with the ruleset of the historical context.



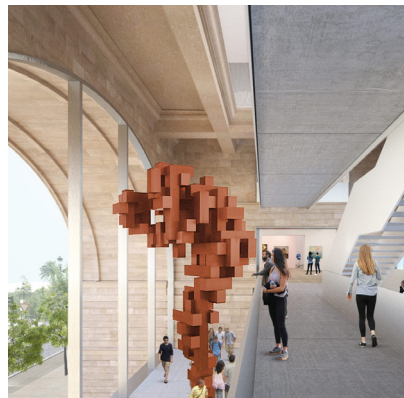
The reinterpretation of the old spaces is best showcased within this section of the building. On the left is a completely newly built corner piece, and on the right is the original one. The reinterpretation of the spaces is clearly visible, where spaces have the same 'architypical form', yet are recognisably different.



Banco Santander
2017
Santander, SP



The new addition in this project by Chipperfield is fitted into the opening of the historical context. Like in his other works, he is not afraid to place the 'old and new' directly next to each other. In this case, this concept goes even further since the new penetrates the old to a certain extent.



This fitting of the new into the old is especially visible in this render, where the new window seal is shaped to fit into the old archway. The old archway seems to be unmodified in this render.

It is also noteworthy that the main part of this addition focusses on circulation space, which hangs over the original (outdoor) circulation space.



Opposed to other projects that Chipperfield has designed, this design keeps the attention to the original building and its qualities. The addition does not seem to stand in contrast to the historical context, but almost fades away in it.

James Simon Gallery
2018
Berlin, DE



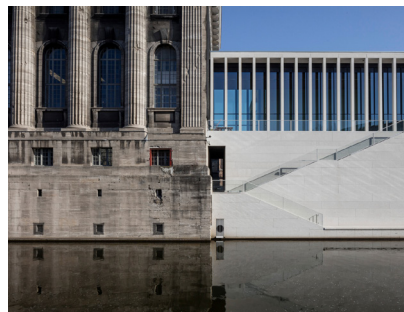
The colonnade of the historical context is continued in the design of Chipperfield. Yet, since it is reinterpreted, the rhythm of the columns is changed to a rhythm that suits the building of Chipperfield better, same as the style.



Even though the design of Chipperfield and the historical context are almost two opposites in stylistic choice, they are placed completely juxtapositioned to each other. Chipperfield trusts in the relationship of both due to the reinterpretation of the common rulesets behind it.

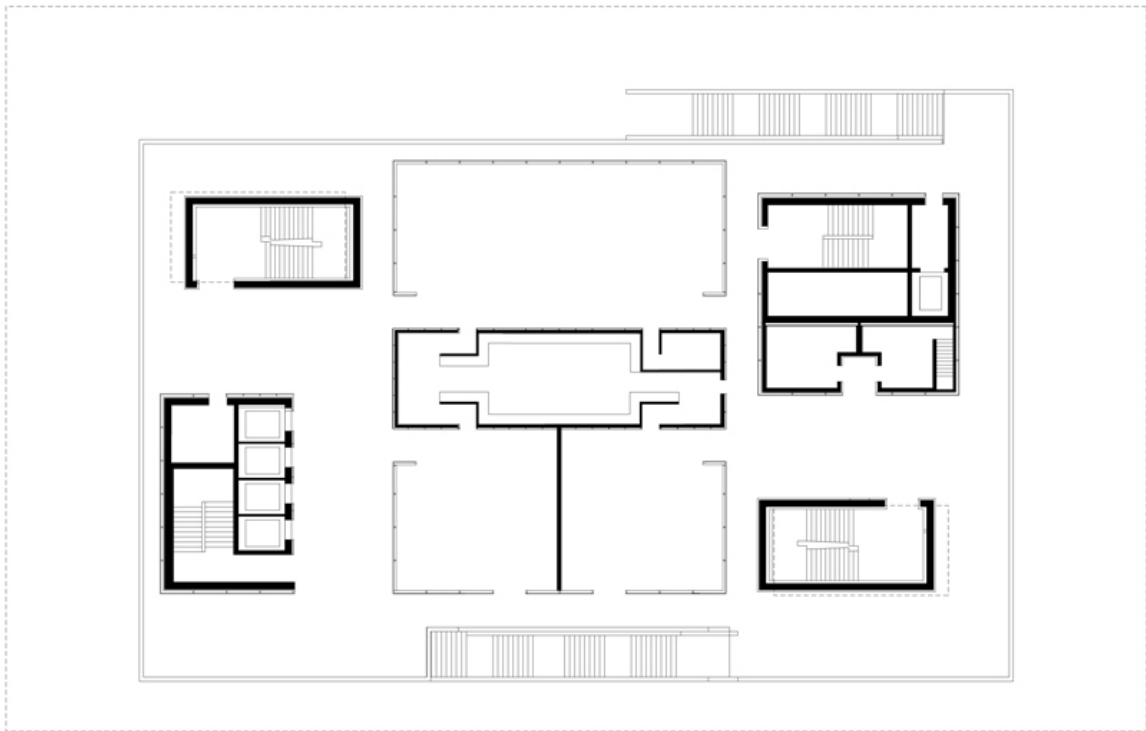


The use of the historical principles in Chipperfield is continued further than 'just' the stylistic parts of the typology. He also uses the new and old in combination to create a courtyard. Again, a modern reinterpretation of the historical principles of the context.



The previously mentioned juxtaposition of old and new are done on all sides of the building, where Chipperfield is not afraid to put the new directly next to the old, signaling a continuation of the two.





Fabrice Meyer
Own Design



Connector typology (rooted in contextualism)

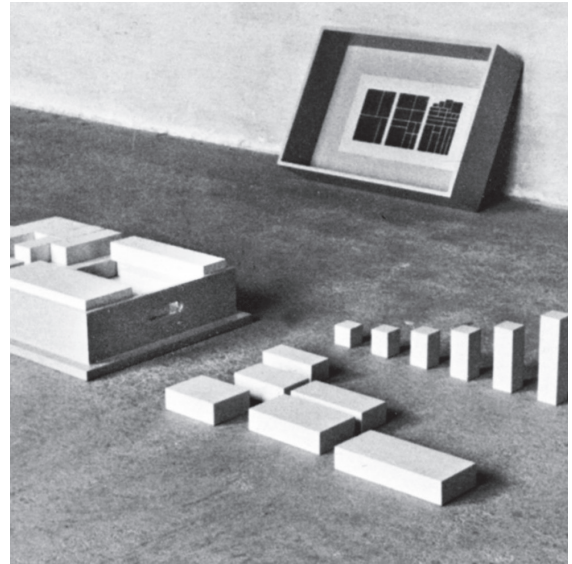
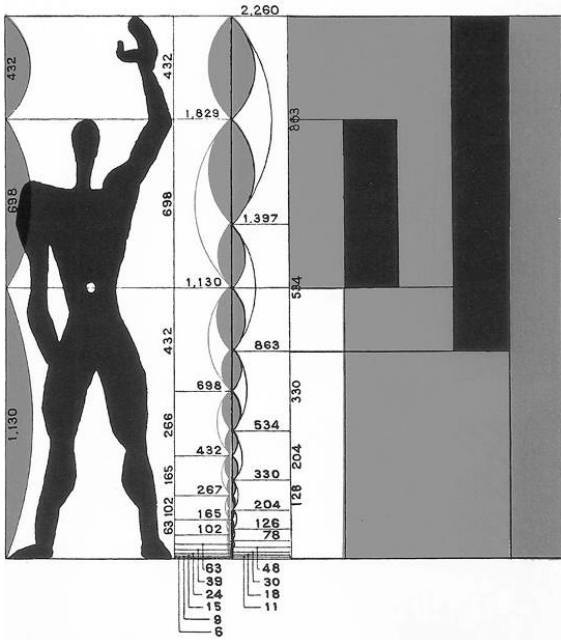
Defined by a single connector element as an organisational concept for the design, as well as the connector forming and shaping the outdoor space and its perception, this project is truly an example of a “connector typology”.

This own typology falls into the footsteps of the seen typologies of David Chipperfield, James Sterling and Tadao Ando.

The added colonnade to this project is a very important part of the architecture for the building. In order to make sure that this colonnade feels right, is precise and consistent, and is able to span all the different situations of the project, it was very important to establish a measurement system.

By creating this measurement system, it is possible to not only create a very consistent addition to the building, but to also relate the different part of the project to eachother, as well as relate these parts to the bigger scale of the context.

As research of this specific aspect, different measurement systems were researched and evaluated. Yet, in the end the system of Dom Hans van der Laan was chosen.



Modulor
vs
Het Plastische Getal

There have been many measurement systems created throughout time. A lot of architects have utilised them in order to make their projects consistent and to create a systemised relation between different parts of the building. Probably one of the most well-known measurement systems is the Modulor, by Le Corbusier.

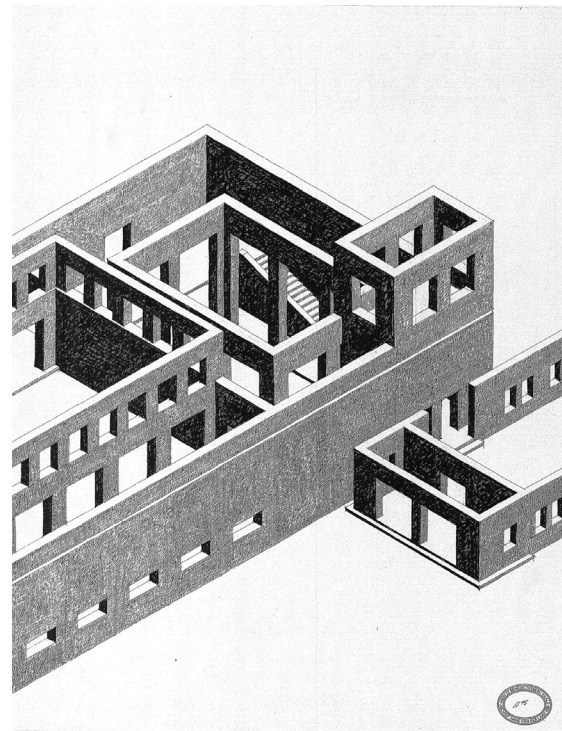
Most of these measurement systems are based on a base measurement, which is then related to other variations on this measurement in a systematic way. For instance, the Golden Ratio and the Gulden Snede are often used in order to create these relationships.

The problem with most of these measurement systems however, is that they have this base measurement as an actual distance defined. This makes the situations in which it is possible to use the systems more limited, and makes the systems themselves less versatile.

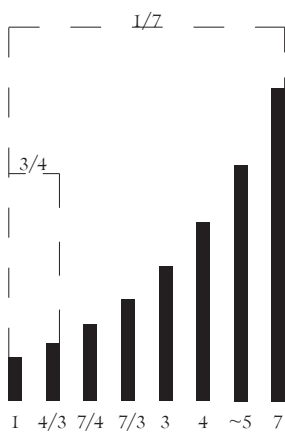
For this reason, I have chosen the system of Hans Dom van der Laan: “Het Plastische getal”. This system is created differently from systems as the Modulor. Instead of having a set base measurement on which it is based, Het Plastische Getal is based on a set relationship between a measurements.

This not only makes the system more versatile and better applicable to more situations, it also means that the system can span much more scales than other systems which are based on a set base measurement.

“If we look, we count.”

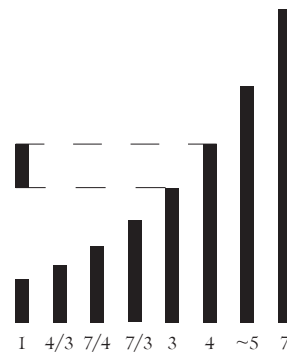


Het Plastische Getal, is based on the idea that the minimal difference of aspects in which you would group them as different, is $4/3$. Meaning, that if the difference were to be smaller, it would be seen as a variation rather than a separate measurement.



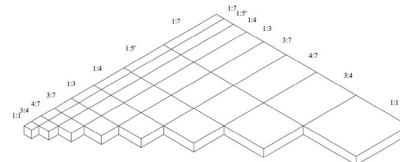
Simultaneous, van der Laan found that the biggest difference that can be seen between two relating measurements, is $1/7$. This means that if the difference were bigger, the relation between the elements would be lost.

Combining both, het Plastisch getal is a system af 8 measurements.



When these different relationships of $3/4$ and $1/7$ are put together, it becomes visible why van der Laan found that they are related.

It is possible to take multiple different measurements, add and subtract them, and get to a different measurement within the system.



This means that all of the measurements are an interconnected part of a whole (and therefore always relating to eachother). This is best displayed with the “morfotheek” that van der Laan created, showcasing these relationships.

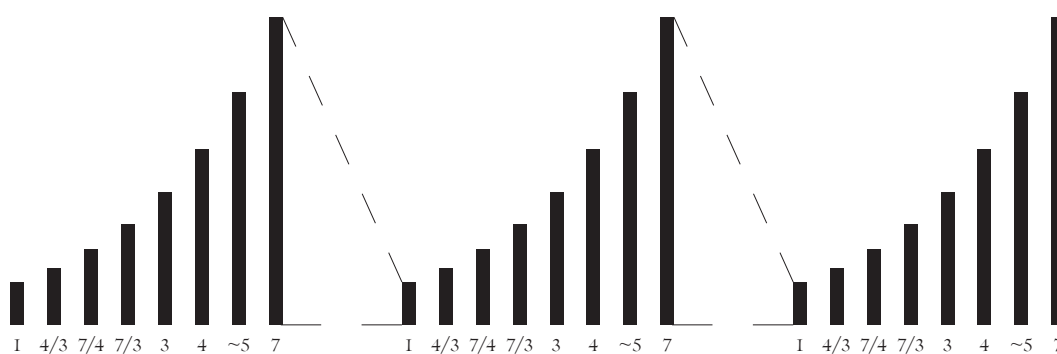


Three scales

On top of this relationship system introduced by van der Laan, he used the versatility that his system offers, by extending it over multiple scales.

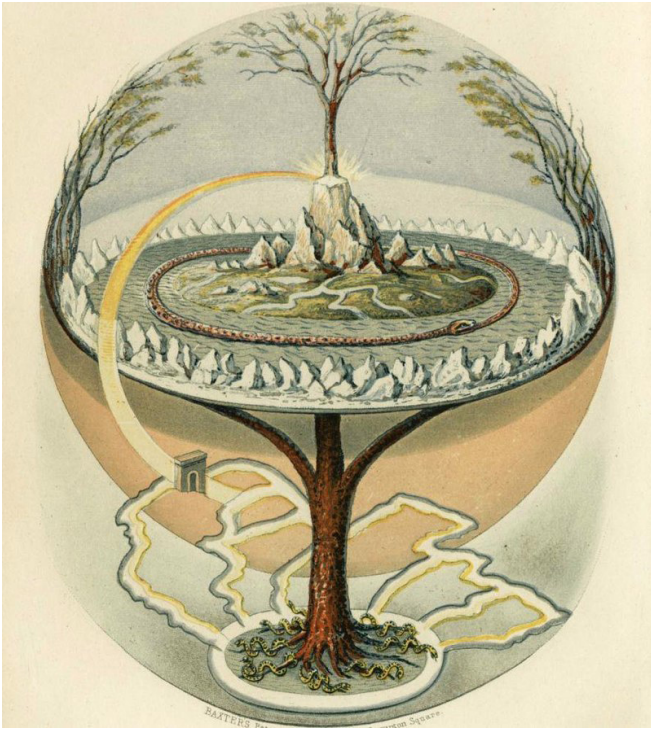
Like he states within the singular system itself, the biggest difference of relational measurements is $1/7$. He used this observation in order to be able to add two additional scales to the relational system. The differences between these different scales is, again, $1/7$ in order to relate the scales to each other.

By utilising these consistent relationships on different scales, as well as relating the different scales with the same relationships to each other, he created a consistent system in which all measurements are related to each other.

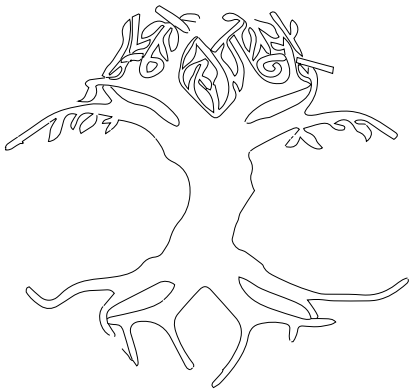


Since there is a specific symbol chosen for this project as representation, it is also interesting to briefly explain this symbol, since it is not randomly chosen. The symbol does not only relate to, and represent, the intervention quite accurately, but is also tied to the context in a much broader way: through Norse mythology.



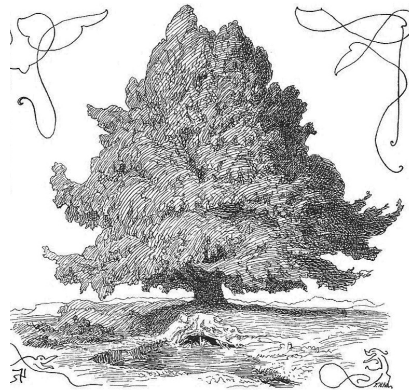


Norse Mythology



The symbol is based on a symbol in Norse mythology: Yggdrasil. This tree in Norse mythology stands at the centre of everything, and connects different worlds.

It is also connected to the father of the Gods, Odin.



Yggdrasil is not only the “world tree”, but it also is referenced as the tree of knowledge and the tree of life.

It is a symbol of improvement, and is even rumored to showcase the route to ascension, to showcase a way to the gods

Being a symbol for improvement (ascension), as well as being inherently linked to Denmark (via their mythology), the choice to use Yggdrasil as a symbol for the intervention seems very fitting not only to the geographical context of the intervention, but also to the purpose that it attempts to achieve (healthy mind in a healthy body).

On top of this, the symbology of a tree is also relevant with the lifestyle of the Danish people, since nature and connection with the outdoors is very important for the way of living in Denmark. This is also something that is promoted by the government.

Selvplejecenter



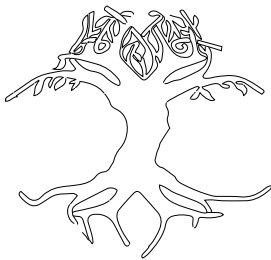
On top of this, the tree elements that the symbol splits into, also represents the intervention.



The most outer embellishment of the symbol represents the cores that are created with the intervention. Showcasing their similarities and separated positions



The framing of the tree itself represents the framework of the intervention. Much like in the symbol, this framework not only connects the actual landscape (the tree), but also connects the different cores to each other.



Lastly, the tree represents the landscape in the project. This landscape is framed in both the intervention, as well as in the symbol by the framework and the cores.

On top of this, this landscape plays a key part in both interpretations.

Epilogue

IV

I would like to take this opportunity to thank all of those who have helped me design the intervention. Due to the continuous feedback, as well as possibilities to discuss design possibilities and have a second opinion on the design, I was able to keep cultivating the qualities of the proposal.

Special thanks go out to my mentors, tutors and advisers, who have continuously guided me in the development of this design to the very end. So, a special thank you to:

- Henk Bultstra, my architectural mentor who has consistently inspired and helped me to keep pushing forward and improve the design.
- Jelke Fokkinga, my building technology mentor who has offered a lot of insight into the workings of the building and helped me make my ideas possible in the design.
- Nathalie de Vries, my architectural consultant who has helped me in the creation and elaboration of a consistent and interesting intervention.
- David Wesdorp, my climate consultant who has further aided with the elaboration of the design on a climate level.
- Nicola Marzot, my general creativity mentor who has offered great insight in the creating of an overall design theme, as well as a design manifesto.
- Sang Lee, my theoretical framework mentor who has offered a lot of aid with the creation of an overarching design theme.

Since these brief praises of appreciation cannot start to fully capture my gratitude towards these people, I hope to capture this with the fact that I am beyond grateful to all of these people, and hope to shortly work with all of them on a professional level very soon.

