

Learning space of the 22nd century



P5 Reflection
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Complex Projects 2018-2019

Project description

It is the year 2100 and we are in Amsterdam, there have been a lot of socio-cultural/economic changes since 2019, all these changes have influenced the education given to new generations in 2100. Since 1900, education has developed itself from a private occupation into a highly regulated and controlled public affair in the Netherlands. This regulation in combination with developments in pedagogy have informed architects to create various types of learning spaces. The development of the learning space typology takes a central role in this graduation: How will the learning space type develop towards the future?

Studio and project topic

The topic of the Complex Projects graduation studio 2018-2019 is to formulate a group scenario for the city of Amsterdam in 2100. This group scenario would function as the basis for a scenario-based design assignment. The parameters set by us, based on demonstrable trends, statistics from diverging sources and personal subjective decisions would dictate the context of our design assignments. This has an impact on future urban configurations, relationships between people in society and the inner workings of regulation systems, which have reciprocal working on the appearance and functioning of the city as a whole.

The main conclusions of our group research were categorized into four categories: population growth, densification and occupation, technology advances and lack of resources, and mobility. The population of Amsterdam will grow to almost 1.6 million inhabitants in the year 2100. Almost 100% of Dutch society lives in the city and digital is more intertwined with the physical world. Most work will be automated, climate change and resource scarcity affect the city. We will transport ourselves more on-demand, in autonomous shared vehicles and goods deliver themselves. From these conclusions, we derive topics that function as the main subjects in our projects.

For my project automation of work would play an important role. Contemporary society is mainly occupied by working throughout the week. Already there are clear signs that automation of work -robotics taking over work from humans- is happening in 2019. What if most work done by humans is automated? This led me to question how buildings would function if construction was entirely automated, what functionality and aesthetics would we associate with that architecture? This question needed to be framed and a more socio-

economic topic, to be more manageable and less vague. Which led me to question what people will be occupied with, in a society where work is not their primary occupation anymore?

The primary occupation for the first two decades of children in western civilization is education. Education prepares you for life, learns you cognitive skills, learns you to communicate and work together with others and lets you experience things that might end up as your daily occupation in adulthood. The main focus of contemporary education is to prepare you for work. We can pose the same question here, what happens if most work is automated? Do we create new jobs, do we work less, stop working altogether, or could education develop into our primary occupation, e.g lifelong education? In either scenario, education has to adapt to a future where work is not the primary occupation in society anymore or has to focus on new occupations. If education has to develop towards a future where most work is automated, the learning space has to change as well. This graduation seeks to find an answer on what the learning space of the 22nd century is.

This has led to the research question:

How will education develop towards a future where most work is automated?

Which itself leads to the design assignment to create the learning space of the 22nd century.



P1 collage, the learning space of the 22nd century?

Relevance

Education is the main occupation for the first two decades of children in western civilization. Education prepares you for life, learns you cognitive skills, learns you to communicate and work together with others and lets you experience things that might end up as your daily occupation in adulthood. If education has to adapt to a future where work is not the primary occupation in society, how will our schools then need to develop?

The methodology to educate people has its scientific field in the form of pedagogy. The layout, configuration, and atmospheres of the physical embodiment (i.e. learning spaces) for good education plays an important role in this field. The realization of the physical embodiment of any pedagogical method relies on the ideals of the client, the regulations and financial restrictions of the government and the approach of the architect. A good understanding of all specifications plays an important role in creating “good” learning spaces.

After all, good education through good pedagogy and good learning spaces should be the main ambition for every generation. It is this education that lays the basis for all successive generations to prepare for adulthood. We can say that contemporary education in western countries reflects the needs of its society. When a society seems to be ever-changing the methods and spaces of education are subject to constant fluctuations.

Technological advancements, emancipative movements, governmental standardization, and globalization, in general, have a big impact on pedagogy, this affects the learning space type. In Dutch society, for example, this is visible through the immense variety of new schools that implement their method e.g. Vrije school. These new schools have their spatial requirements that cater to their pedagogy. This diversity of schools is based on the freedom for education act that gives everyone the right to found a school based on their ideals. Through this research, we can think about the future role education plays in our society and how our learning spaces may function in the future.



P3 collage, the learning space of the 22nd century?



Group scenario collage, Amsterdam central in 2100?

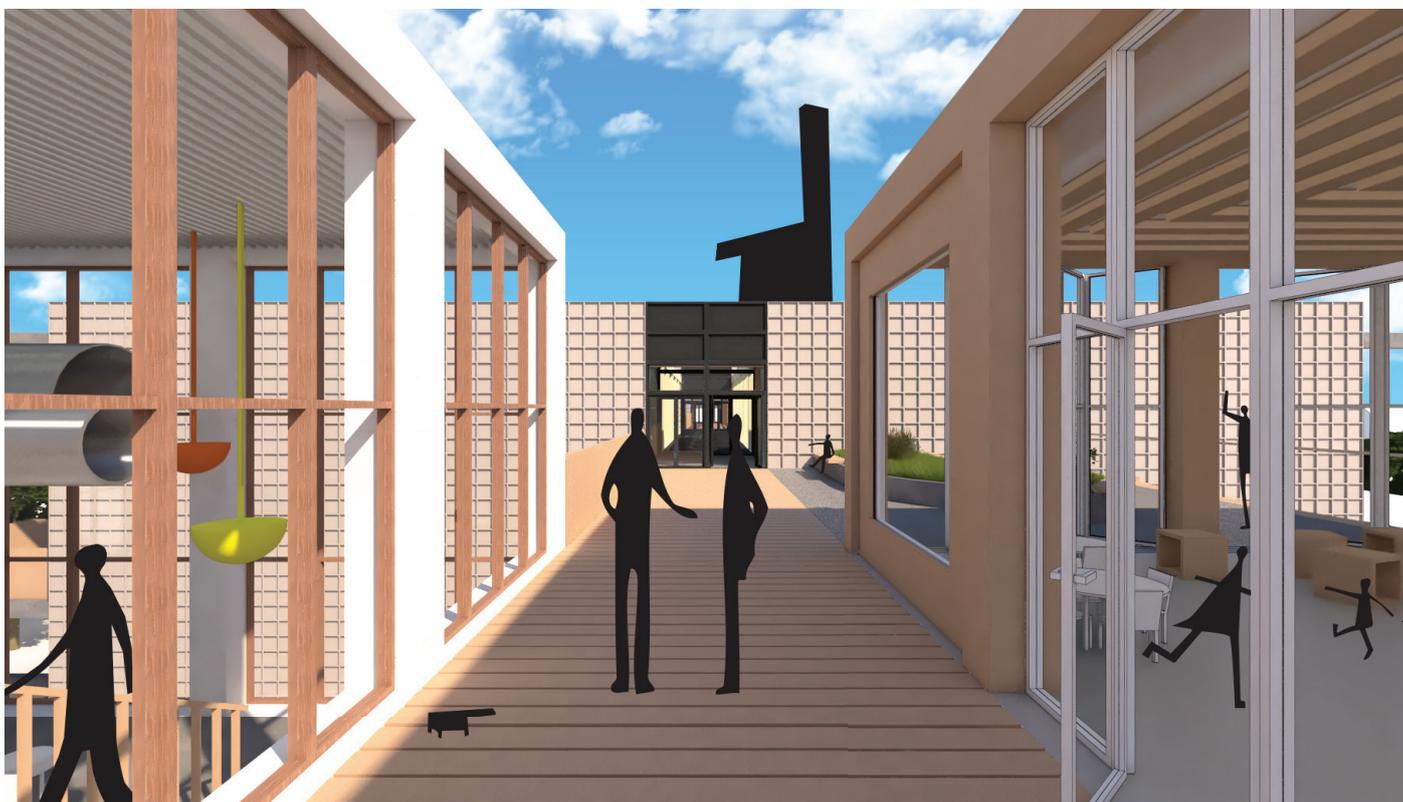
Process

In the Complex projects graduation studio we have researched in a twofold manner. We have begun with spatial research into the previous AMS group that had created a vision of Amsterdam in 2050. This was complemented with research into socio-cultural/economic trends. Our research has had a main focus on writing a hypothetical narrative for a scenario-based design assignment. This resulted in research in the past, the contemporary situation, the hypothetical 2050 situation of Amsterdam and extrapolate the results into our future scenario.

My personal research has been carried out into different fields concerning education. First off was research into automation of work and what effect this would have on society in a broad sense. Next was to research education through different layers: the precedents of the learning space type, pedagogy in the Netherlands, didactic methods. The results

of the research have led me to create spatial requirements for the learning space of the 22nd century.

The research into education on different layers informed me that there is an important reciprocal relationship between on the one hand pedagogy and the other hand the learning spaces and that these influence each other all the time. I concluded it was important for the project to create an education scenario with its own pedagogy, which will lead me to the functional requirements of the learning space. Combining this with the initial research into automation of work forms the basis for the design assignment. The initial research informed me that buildings in the future are more or less “undressed” and “smart”. Undressed in the fact that due to the automation of work peripheral functions, e.g. organization, cleaning, maintenance and even in some terms teaching has been automated and require a minimum of spaces to function.



Visualization of the learning space of the 22nd century

Ethics

Speculation on the future of space and time is always intertwined with ethical dilemmas and simultaneously it is not. It is not intertwined since it is all “fake” and hypothetical and can best be interpreted as an option on the future. Yet, it is intertwined since as a designer you are making decisions that have implications on the fake society you are narrating. It is drastic to state that almost all work is automated in the future and that this implies the need for big societal changes in this future scenario. I’ve tried to see these drastic changes we have proposed on the optimistic side, no more work does not necessarily mean a society that is in a loss, it might just as well be a society freed to do more according to their likings. That there is more space for leisure and that learning might not be a means to an end but an end goal in itself.

As education might be one of the primary occupations for your whole life it might become one of the most significant spaces in the future. Nowadays this is already true for young pupils since education is the primary occupation for the first two decades of children. The fact that learning spaces are so important is reflected through the opinions society implies onto it. Since every person in society has gone through education on its terms it can relate and voice opinion on it how it should be and

function. Therefore there must be a diverse range of different schools that offer education that cater to norms and ideals of different citizens.

“The school for which we are to find a form is one of less education and more learning. What is needed is an environment that stimulates and incites learning by asking questions, a climate that provokes exchange and confrontation, intellectually, culturally and politically.”

– Herman Hertzberger (p.70 Hertzberger, H., & Gieskes, V. (2008). *Ruimte en leren.*)

Hertzberger brings the reader of his theories on a journey that shows the challenges and opportunities found in the design of school buildings. School buildings could better be perceived as a microcity tells Hertzberger, not a literal analogy, but rather in the way as it works as a system. A system that relates the size of spaces, their relationships and the communal spaces in-between. This statement has been important for my design objective, I have tried to create a learning space that offers a diverging range of elements (i.e. spaces), on different scales that cater to the different needs of students.

Just as in a system, elements can be replaced with new/other elements, while keeping the entire system



Visualization of the learning space of the 22nd century

intact. Within the system these elements have been categorized according to their temporariness, i.e. a qualitative selection into how long certain elements would remain the same, or in which time these elements are to be replaced due to technical, functional or esthetical limitations, or elements that are almost always on the move and need to be able to be quickly (dis)-assembled. Since society is changing all the time I perceived the learning space of the future to be ever-changing as well, reacting on the changes. Using the narrative of automation of construction, the building would constantly “reinvent” itself by robotics.

The building would be learning itself, a nod towards the work of Steward Brand “How Buildings Learn: What Happens After They’re Built”. To strengthen this notion I have written the essay “Schools that learn” that advocates that school buildings should be designed to be altered throughout the time of use and how this would function in practice. This essay has formed the basis for the architectural principles that I have applied to the learning space of the 22nd century and the brief of how “it should be used”.

But the wish to dictate how a building should be used is merely an illusion, the notions surrounding the design are taking away by time. Automation can give a grip on the continuation of knowledge but the

robotics will always be operated and programmed by humans. There has become a need to inform the potential of the building without dictating instructions. I’ve tried to reveal the potential of the building by making it as transparent and readable as possible: the language of repetition on every scale, from the system of schools throughout the country and the small modular building parts of the building. And on the other hand through the visibility of structure making everyone to envision an alternate future of the building as an extension or contradiction of the existing.

Next 5 weeks

The final part of my graduation period will be filled in by focusing on the creation of the physical model that will represent the project in combination with the production of a graduation booklet that informs the reader about the overall project, including essays written during the graduation.



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Position paper
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The design of a building is seldom an individual activity. The architecture profession rather relies on group work. Clear codes on how to approach certain problems make the communication between the different individuals working on the same problem just that little bit easier. Understanding the underlying processes while doing research or reviewing research conducted by others makes it possible to understand an argument more quickly, which spares time which can be spend on improving the design, something Bernard Buchanan also points out in his paper on Wicked problems.¹

Predetermined research methods are the characteristic advertisement point for the Complex projects (CP) graduation studio. This predetermined methodic framework for how to conduct research and how to stylize your deliverables are accompanied with the total freedom to formulate your own design brief. This predetermination constructs an environment, where we can focus on the design instead of what methods to use. The goal of the graduation studio 2018-2019 is to research the future context of Amsterdam in 2100 by a group of six to nine students. This group work creates the context for formulating our individual design brief, which in turn forms the basis for our individual graduation projects.

Amsterdam in 2100

To complicate things a bit more, the starting point for our research is set in the future, in 2050. The 2050 starting point for our research is the finished result of the previous CP graduation studio group from last year, 2017-2018. All the urban interventions, final individual designed buildings and the overall view for Amsterdam in 2050 by the previous group is the context we have to start from.

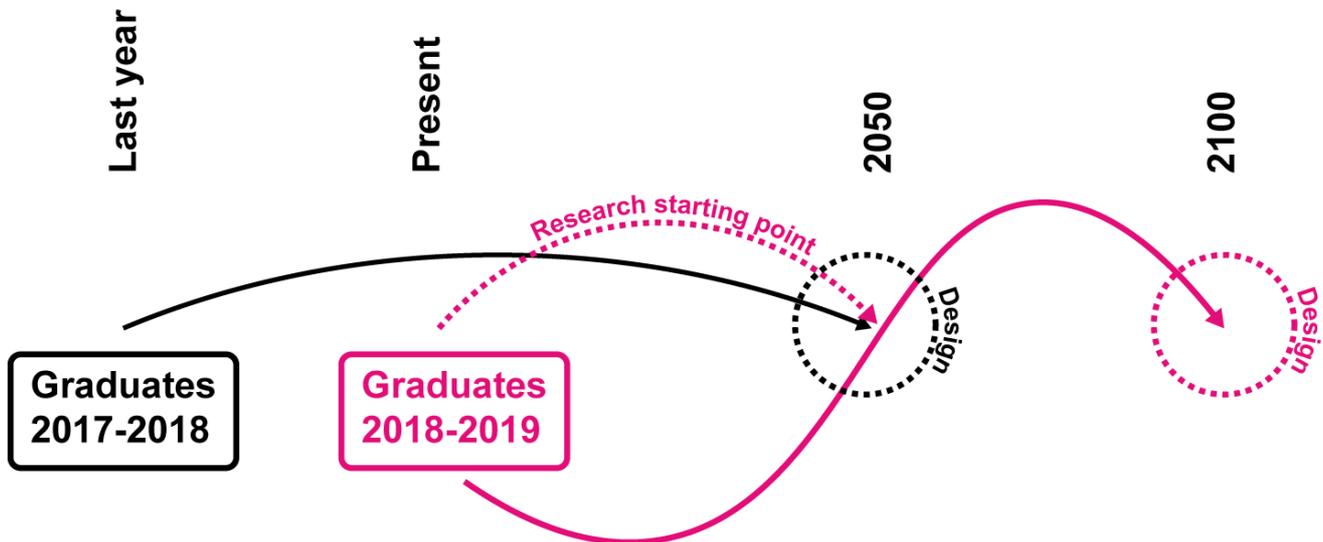


Figure 1 Overview of Complex projects graduation studio 2018-2019 made by Ingmar Klappe

For this paper I want to understand the role of speculative or futurologist architecture in the research methods for the CP graduation studio. Through encountering *wicked problems* in the lecture of Jorge Mejía Hernández I found resemblances with the CP graduation studio, especially the fact that there is no definitive truth in this fictional result. Thus, I will also give some attention to the phenomenon wicked problem in this writing. Yet, most focus will be on futuristic visions, since the graduation is set

¹ (Buchanan, 1992, pp. 14–15)

82 years in the future. One, only has to look back 82 years in the past, 1936, some years before the Second World War, to see what enormous changes have occurred. A war that has had so much impact on the world that it is almost impossible to envision a world without it. Yet, in the years following the war impetus positivism, combined with rapid technological advancement, countless visions on the future were created.

It is the work of these futurologists where our research starts. By analyzing the work of Robbert and Rudolf Das or the more speculative work by Superstudio, we try to understand what narratives or motives that lie behind the changes we see on paper. Since all these future visions are all caught up by their predictions we can discover where the discrepancies are between vision and reality. Heuristically we try to come to conclusions whether these predictions were realistic or too utopian or dystopian. The school of thought surrounding heuristics, as introduced by Jorge Mejía Hernández helps to quickly conclude about the outcomes.

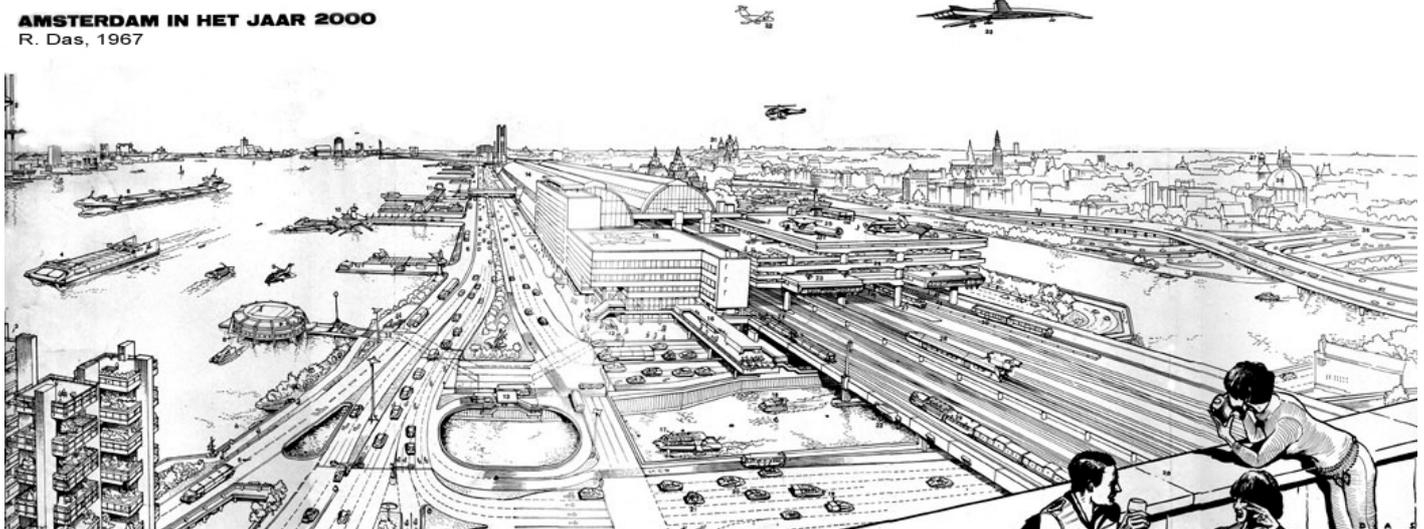


Figure 2 Amsterdam in 2000 – Robbert and Rudolf Das (Das & Das, 1967)

Our research approach

Our research commences by setting up our own context of Amsterdam in 2100, based on the starting point set in 2050. This is backed up by extrapolating statistical data from the municipality of Amsterdam: population figures, expansion and densification plans. This forms a preliminary problem and at this point we have formulated the starting point for our future scenario. For example, we have concluded that due to the world-wide trend of urbanization there is a need to densify the city. This conclusion has formed the basis for our group research question: how can the inner city of Amsterdam be densified in 2100?

The research for densification is focused on mapping and superimposing case studies on our location. What level of densification can we achieve in this hypothetical situation and what are the consequences for the existing built environment? The hypothetical outcomes are compared with the outcomes from historical and theoretical research in the opportunities, challenges and overall context of the site e.g. what consequences arise from reclaiming land from the IJ?



Figure 3 What if we reclaim all the land from the IJ? Made by the Complex projects graduation studio 2018-2019 AMS Centraal group

This group work is flanked by individual research into future phenomena. This is mainly focusing on theoretical, statistical and historical analysis into the chosen phenomena which is gathered in a research booklet. The initial conclusions from this research form the basis for *what-if* scenarios that we formulate. The what-if scenarios make it easier to break down the future, since what-if scenarios have the possibility to ignore the transition between present and the future. Every what-if scenario that we formulate is accompanied with a collage that visually represents that scenario.

My personal what-if scenario wonders about a future where work is automated. This what-if scenario has further developed in to the following research question: *how will learning environments develop towards a future where most work is automated?* Theoretical, statistical and historical research has been conducted on education concepts which has been accompanied by researching school typologies. The lecture from Robert Alexander Gorny came in useful to distinguish between types and models in this research.

This research in combination with the group work forms the basis for formulating our own design parameters and design brief. The following pages will be dedicated to outline the historical and theoretical context of the methods used within my CP graduation project.



Figure 4 Collage made for Complex projects graduation 2018-2019 by Ingmar Klappe

Speculative architecture, neither utopian or dystopian

The sci-fi writer Bruce Sterling is a great source of inspiration to get a grip on the concepts surrounding speculative architecture and design fiction.² He argues that speculation about design focusses on one particular object or service, to create diegetic prototypes.³ Diegetic, meaning to focus on one particular change instead of looking at the changes affecting the entire world, political trends or geopolitical strategies, according to Sterling.⁴ These prototypes are then used to suspend disbelief about change, to create an object of discussion and debate.⁵ The last decades technological advancements have played a central role in these future visions.⁶ Especially the rapid succession of technological advancements seem to have triggered a lot of utopian objects of discussion and debate.

For our own objects of discussion and debate we are a bit limited. Thus, we still incorporate a bit of political and geopolitical effects into our future visions. The future scenarios we come up with cannot be too utopian or dystopian, this limit is set by the studio itself. The definition of utopia as described by Erik Olin Wright in *Speculative Everything*:

“Fantasies, morally inspired designs for a humane world of peace and harmony unconstrained by realistic considerations of human psychology and social feasibility”.⁷

Wright’s definition is more extensive than the definition Ray Lucas gives in *Research Methods for Architecture*. Lucas sees utopia as “an ideal place” but adds that *utopian architecture* is bereft of any context and that it consequently often fails.⁸ Dystopia is the direct opposite of utopia. To illustrate this limit, I have two examples of future scenarios that cross the limit. A future scenario that is too utopian simplifies the design context e.g. if we can all fly in the future, why don’t all buildings fly then? And a dystopian future can remove the context e.g. if the sea level rises to such heights that Amsterdam sinks we do not need to design for Amsterdam, we need to design for water.

To stick to the context of Amsterdam in 2100 we have to stay inside the boundaries of a speculative reality that is neither utopian or dystopian, but which incorporates, what we can call, *light* versions of either scenario. Dunne and Raby see this as a *preferable* option on the future as can be seen in figure 2. This diagram is based on theories of futurologist Stuart Candy and is described in the book *Speculative Everything*.⁹ The diagram consists out of different cones which broadens the scope of future outcomes, in this diagram the cone of *possibilities* represents utopian/dystopian future scenarios.

Dunne and Raby argue that by exploring alternative future scenarios we will be able to make reality more *malleable* which can help the contemporary society to direct towards the most desirable future.¹⁰ For example, in my personal project automation of work plays an important role. On the dystopian side this causes enormous unemployment rates. However, on the utopian side this means that we have the opportunity to research what a world without work looks like.

² (Sterling, Gadanho, & Hammond, 2009)

³ (Bosch, 2012)

⁴ Ibid.

⁵ (Bruce Sterling cited in Dunne & Raby, 2013, p. 100)

⁶ (Schrijver & Avidar, n.d., pp. 92–93)

⁷ (Erik Olin Wright as cited in Dunne & Raby, 2013, p. 73)

⁸ (Lucas, 2016, p. 193)

⁹ (Dunne & Raby, 2013, pp. 4–6), Lucas does not elaborate on what he means with *fails*. I have assumed that he points towards the discrepancy between the envisioned utopian scenario and caught up future that does not match each other, thus has failed.

¹⁰ (Dunne & Raby, 2013, pp. 4–6)

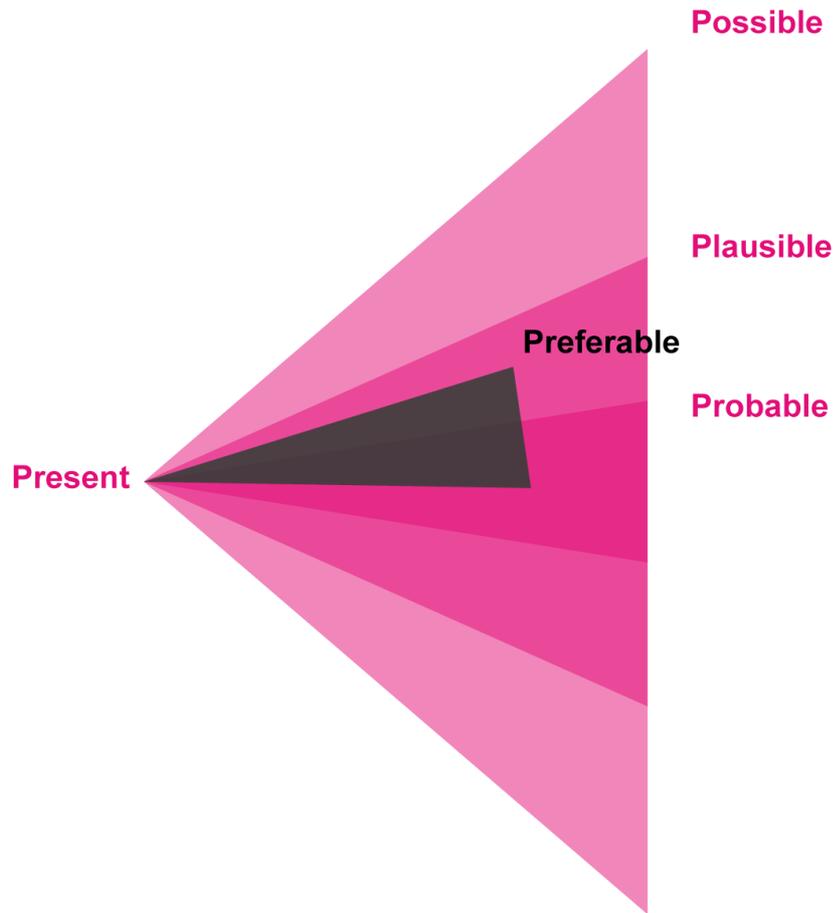


Figure 5 Based on the PPPP diagram by Dunne & Raby. (Dunne & Raby, 2013, p. 5)

Wicked complexity

Jorge Mejía Hernández has introduced the concept of *wicked problems* in his lecture about heuristics. After doing a bit of research into this concept I found it to be helpful to incorporate this into the research for my own graduation. Horst Rittel & Melvin Webber, the design theorists that coined the term say that *wicked problems* challenge the linear design process that relies on dividing the design process in two distinct phases: the problem definition and problem solution.¹¹ This linear method is not adequate enough to tackle the design problematic according to Rittel & Webber, since most design problems are *wicked problems*. According to Rittel & Webber *wicked problems* are:

“A class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision makers with conflicting values, and where the ramification in the whole system are thoroughly confusing.”¹²

Buchanan, who extends the theory of *wicked problems* is quick to point out the underlying relation that determinacy and indeterminacy have towards *wicked problems*.¹³ Design problems never only consist out universal or definitive conditions, but are always clouded with the subjectivity of the designer and the client. This indeterminacy is important in the definition of *wicked problems* because it is impossible to make such parameters determinate.¹⁴ It seems to me that the CP graduation studio is trying to make a determinate future but according to me it rather deals with a context that is filled with confusing information and conflicting values due to the fact we work in a group.

For the formulation of my own design brief I have to be aware not to take out the indeterminate and consequently reduce the complexity of the project.¹⁵ Therefore I find the third property set by Rittel & Webber for their definition of *wicked problems* useful to mention.

“Solutions to *wicked problems* are not true-or-false, but good-or-bad.”¹⁶

The answer I will find for my research question should be in accordance with this rule. This judgement is entirely personal and can lead to unknown territories. But, as Dunne and Raby point out in *Speculative Everything*, wicked problems are great to create space for discussion and debate about alternatives of being.¹⁷ Compared to the prototypes advocated by Sterling the similarities are obvious, we need to create objects for discussion and debate. It is exactly this that I want to achieve in my graduation project, to create a speculative project as object for discussion and debate.

¹¹ (Buchanan, 1992, p. 15)

¹² (Rittel, 1973 cited in Buchanan, 1992, pp. 15–16)

¹³ (Buchanan, 1992, p. 15)

¹⁴ (Buchanan, 1992, p. 17)

¹⁵ (Buchanan, 1992, p. 16)

¹⁶ (Rittel & Webber, 1973, pp. 162–163)

¹⁷ (Dunne & Raby, 2013, p. 2)

Indeterminacy as design principle

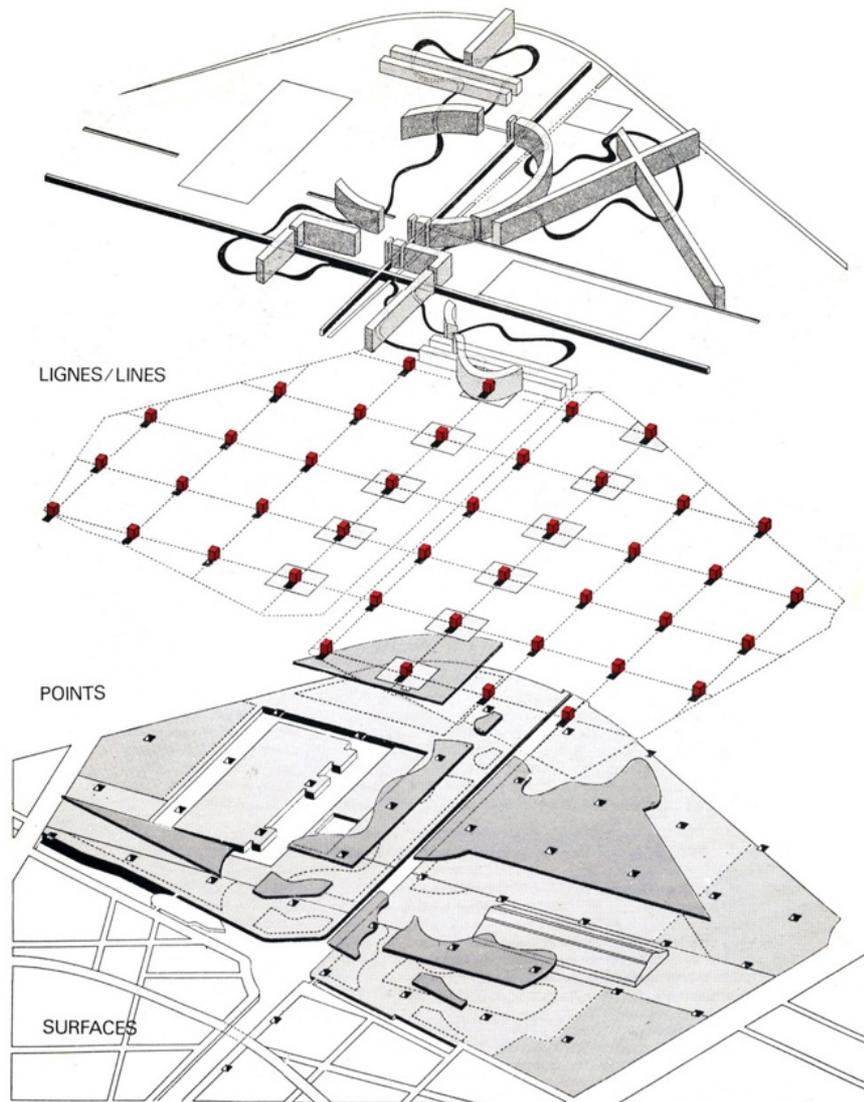


Figure 6 Parc de la Villette, the grid of folies and lines is superimposed over the urban layout of the park – Bernard Tschumi (“Bernard Tschumi Architects,” n.d.)

It seems a contradiction that the first example of a successful object of discussion and debate is something that is actually built. The project Parc de la Villette by Bernard Tschumi seem to cover the ground of these criteria. Programmatic instability is one of the most important design principles used within the design of Parc de la Villette, according to Avermaete, Klaske and Teerds.¹⁸ Tschumi argues for a park that is in continuous change:

“its meaning is never fixed but is always deferred, differed, rendered irresolute by the multiplicity of meanings it inscribes.”¹⁹

This is, to my understanding, the same indeterminacy which surrounds the *wicked problems* concept. If true, the Parc de la Villette is a good solution for a *wicked problem* and consequently a great

¹⁸ (Avermaete, Klaske, & Teerds, 2008, pp. 53–55)

¹⁹ (Avermaete et al., 2008, p. 54)

reference for a CP graduation studio. Tschumi's theories however do not only apply to an urban park. In *Manhattan Transcript* he argues that architecture must be considered as something that offers space for events. In the architectural journal *Oase 77#* this notion is broadened towards the entire city.

“Please to regard the essence of the city as the complex confrontation of spaces with different movements and events.”²⁰

Avermaete, Klaske and Teerds continue to argue that this concept of the city has similarities with the perspective Richard Sennett holds:

“An essential component of public space: the overlay of function in a single territory which creates complexities of experience on that turf.”²¹

Rem Koolhaas also had an entry for the Parc de la Villette, yet his design goes more in depth in the notion of open-endedness, where the program could constantly change and due to the juxtaposition to different programs constantly transform.²² Tschumi states that Parc de la Villette can be considered as “one of the largest buildings ever constructed, a discontinuous building but a single structure nevertheless”.²³ It is this notion of megastructures that might give direction towards the methods for creating objects of discussion and debate.

²⁰ (Avermaete et al., 2008, p. 49)

²¹ (Richard Sennett as cited in Avermaete et al., 2008, pp. 51–52)

²² (Waldheim, 2016, p. 17)

²³ (“Bernard Tschumi Architects,” n.d.)

Photo essay of megastructures



Figure 7 Dome over New York City by Buckminster Fuller (ArchDaily, 2017)

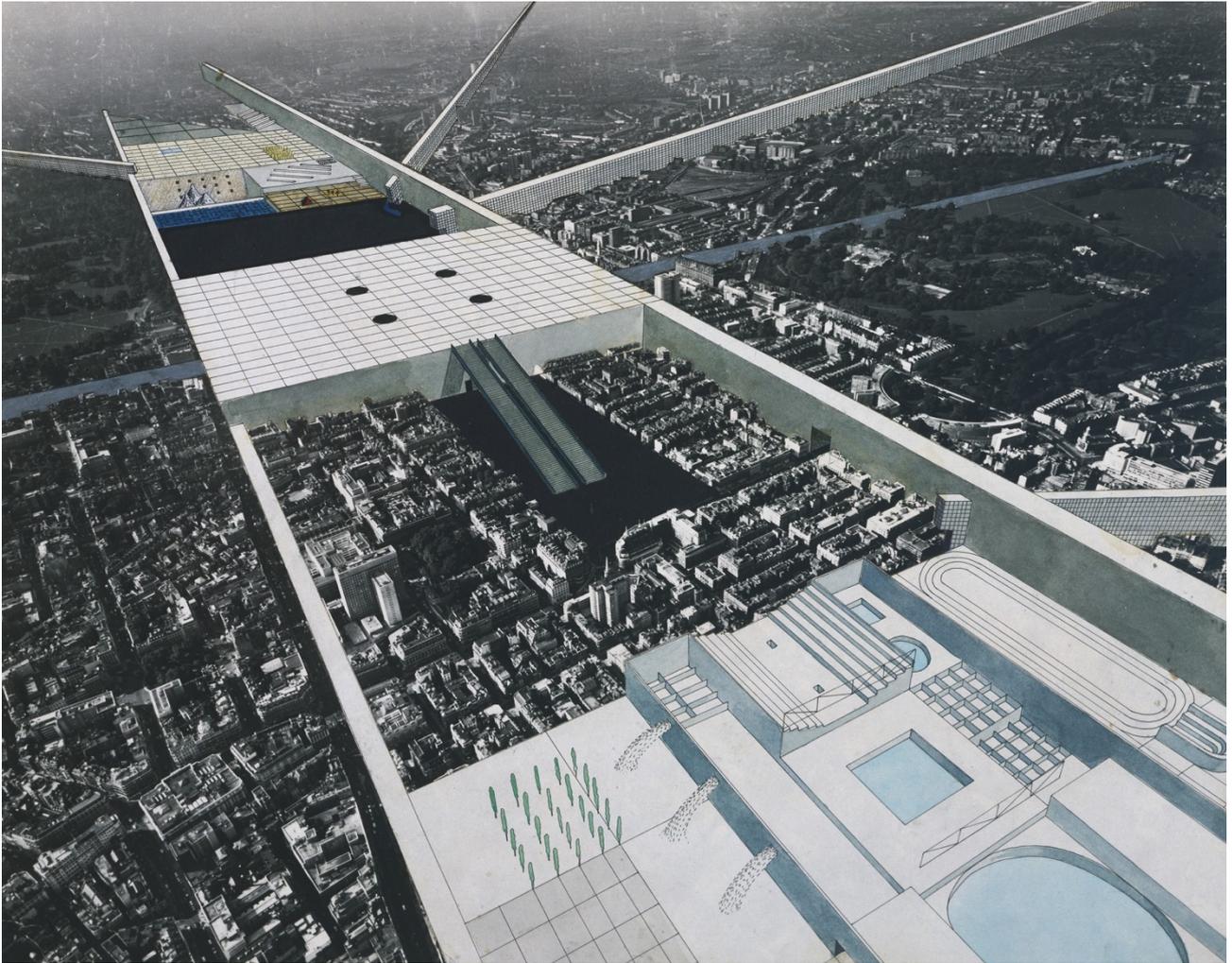


Figure 8 Exodus project by OMA (Koolhaas, Zenghelis, Vriesendorp, & Zenghelis, 1972)

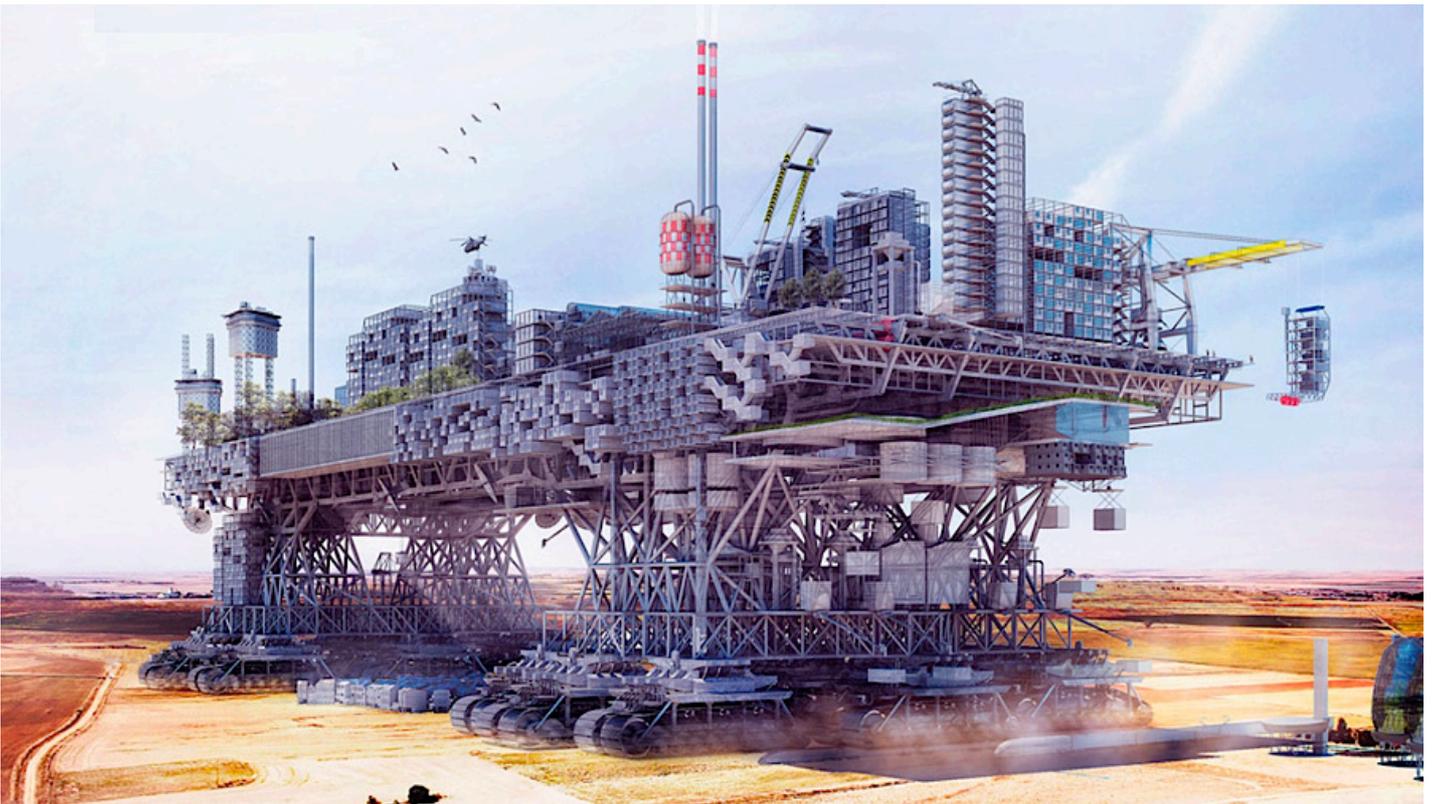


Figure 9 Very large structure by Manuel Dominguez (ArchDaily, 2013)



Figure 10 The Continuous Monument by Superstudio 1969. (Bergen, 2004)

Speculation through drawing and collage

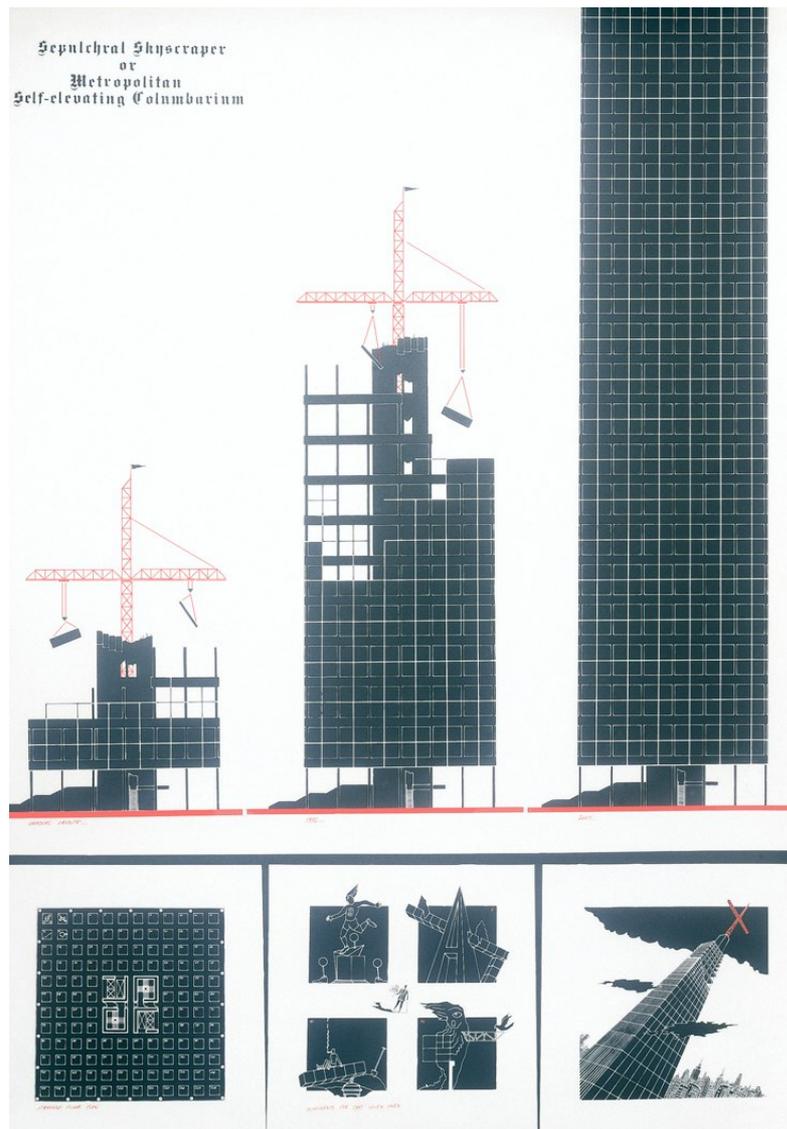


Figure 11 *Sepulchral skyscraper* by Yuri Avvakumov and Mikhail Belov (Avvakumov & Belov, 1983)

Megastructures take an important place in the phenomenon *Paper Architecture*, a term coined by some Russian architects, like Yuri Avvakumov and Mikhail Belov in the 1980s. *Paper Architecture* was meant to cover all the architecture that was thought of, constructed virtually but never intended to see the light of day.²⁴ This makes sense when put in the context of 1980s Russia where architecture has fallen into a standardized practice, sober Plattenbau.²⁵ The Russian architects got inspiration from the work of Ledoux, Boullée, Piranesi and Sant'Elia, who all had created visions for an alternative world.²⁶

From a western architectural and historical standpoint, we have to look at the work of Archigram. Fascinated by consumer culture the Archigram group started to challenge the conventional way of architectural representation of their time.²⁷ Archigram found their own inspiration in the early work of

²⁴ ("Visionary architecture," 2018)

²⁵ Ibid.

²⁶ ("Building Castles in the Sky," 2016)

²⁷ (Shields, 2014, p. 101)

Russian constructivists²⁸ and Bauhaus.²⁹ Their collages were representing the multiplicity of activities, or as shields describes it:

“A dynamic urban scene results from the composition of line drawing, architectural photographic fragments, and human figures of varying scales. The dialogue between these components within the collage-drawing captures the sense of indeterminacy”³⁰

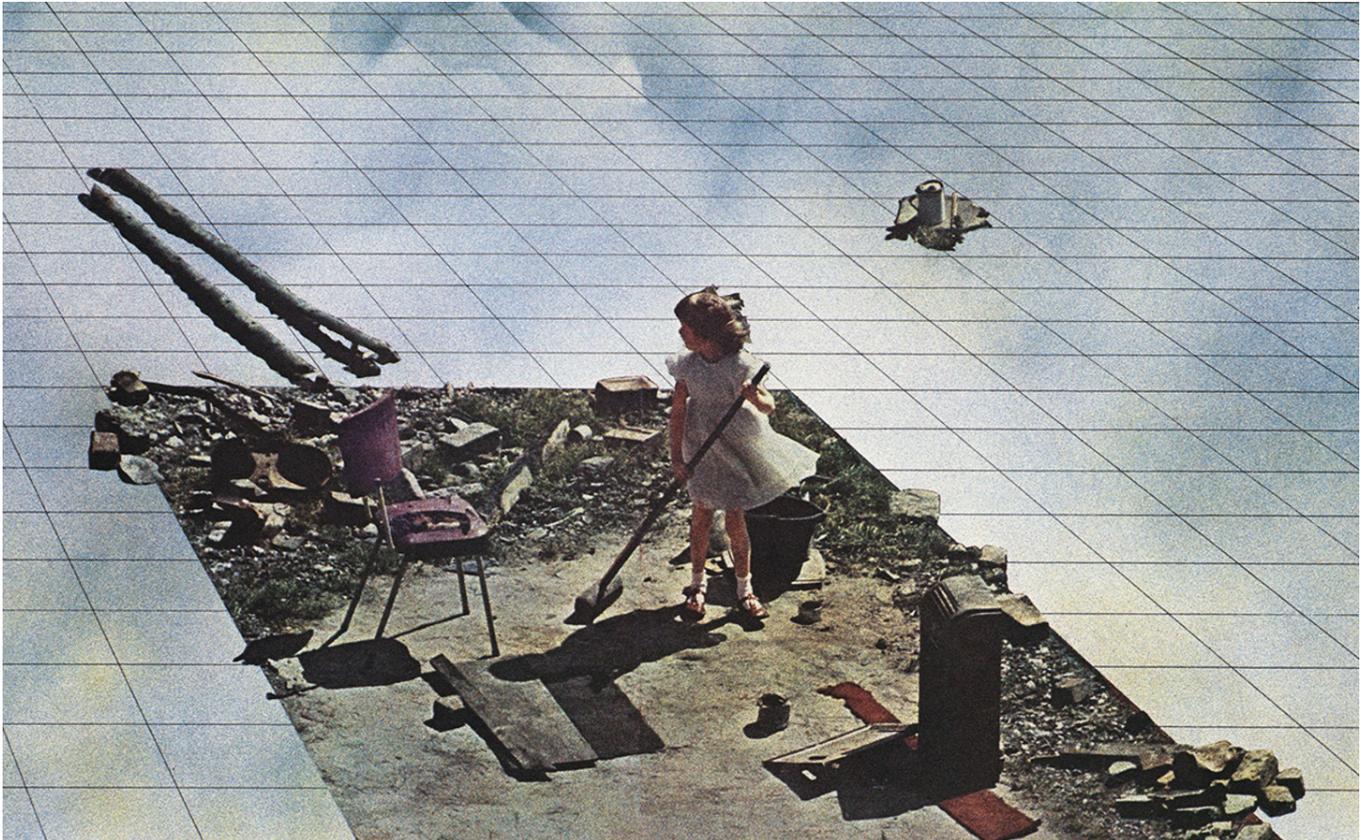


Figure 12 *New Domestic Landscape* by Superstudio (Shields, 2014, p. 105)

Superstudio has been directly influenced by Archigram as Shield mentions in *Collage and Architecture*, sharing the same believe that indeterminacy and ambiguity should be mandates in architecture.³¹ The work of Superstudio embraces the “program and event-driven architecture” advocated by Rem Koolhaas and Bernard Tschumi.³² In *Collage and Architecture* Shields cites Adolfo Natalini arguing about the the collage making of Superstudio: collage-making is the consideration of “potential relationships and juxtapositions” in a “series of ideas, intuitions, events, information and the reciprocal connections between them”.³³ This matches the description from van Gerrewey and Patteeuw in OASE 94# about the collages made by OMA.³⁴

“a tool that comprises collecting, gathering, piling up, selecting, cutting and assembling layers of heterogeneous elements, figures and objects ... to achieve an intended spatiality.”³⁵

²⁸ Not to be confused with the *Paper Architecture*, Russian constructivists from the beginning of the 20th century.

²⁹ (Shields, 2014, p. 101)

³⁰ (Shields, 2014, p. 102)

³¹ (Shields, 2014, p. 106)

³² (Shields, 2014, p. 109)

³³ (Shields, 2014, p. 108)

³⁴ (Van Gerrewey & Patteeuw, 2015)

³⁵ (Van Gerrewey & Patteeuw, 2015, p. 73)

Within the CP studio we mainly use the photomontage and digital methods –and post-digital drawings- as described by Shields in *Collage and Architecture*.³⁶ The collages are a method for showing a future scenario or alternative narrative that is filled with indeterminacy and ambiguity. The collage does in itself transform in an object of discussion and debate.

Contemporary speculation

Within the contemporary architectural practice it seems that the deadline is more important than ideology or values.³⁷ However, it seems the opposite is true, if you know where to look. With our field trip we went to Copenhagen and had the opportunity to visit SPACE10. A company that explores future ways of living, they are precisely doing the sort of speculative design to create objects of discussion and debate. For example, their autonomous vehicles that are mixed with architecture to create rooms that drive through the city. By creating these diegetic prototypes, they start the discussion and debate. Another example of speculative architecture is the winner of the Prix de Rome of 2018, Alessandra Covini. She created a design proposal named Amsterdam Allegories.³⁸ In the proposal of Covini indeterminacy and ambiguity of activities play a central role. This with the fact that Prix de Rome projects will never be built, automatically creates an object of discussion and debate.³⁹

Incorporating the awareness of different methodological approaches for researching architectural knowledge into the design, will lift the graduation project to another level. Especially within the context of the CP graduation studio, where we work with predetermined methods that do not always come with their specific historical or theoretical explanation. Accessing the different systems of knowledge through the lens of methodology seems so apparent that I wonder why the course cannot be given earlier in my education.

This graduation project seems to create an environment where we can create objects of discussion and debate. The methods used by precedents in the field of architectural futurology seem to match with the methods that the CP graduation studio uses. With my graduation project set in the distant year of 2100 it is reassuring to know that so many before me have thought about this problem, be it in a different time. I will set out to create a preferable option for the future, a bit diegetic to create disbelief, maybe on a large scale, but absolutely indeterminate and filled with ambiguities that result in a contingent array of possibilities. Keeping in mind that there is no true-or-false answer but only good-or-bad in the sense that the object of discussion and debate, can trigger discussion and debate.

³⁶ (Shields, 2014)

³⁷ (Dunne & Raby, 2013, p. 9)

³⁸ ("Prix de Rome," n.d.)

³⁹ Not even mentioning that the Prix de Rome of 2018 is located in the same site as my graduation project, which makes the correspondence and relevance even more apparent.

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