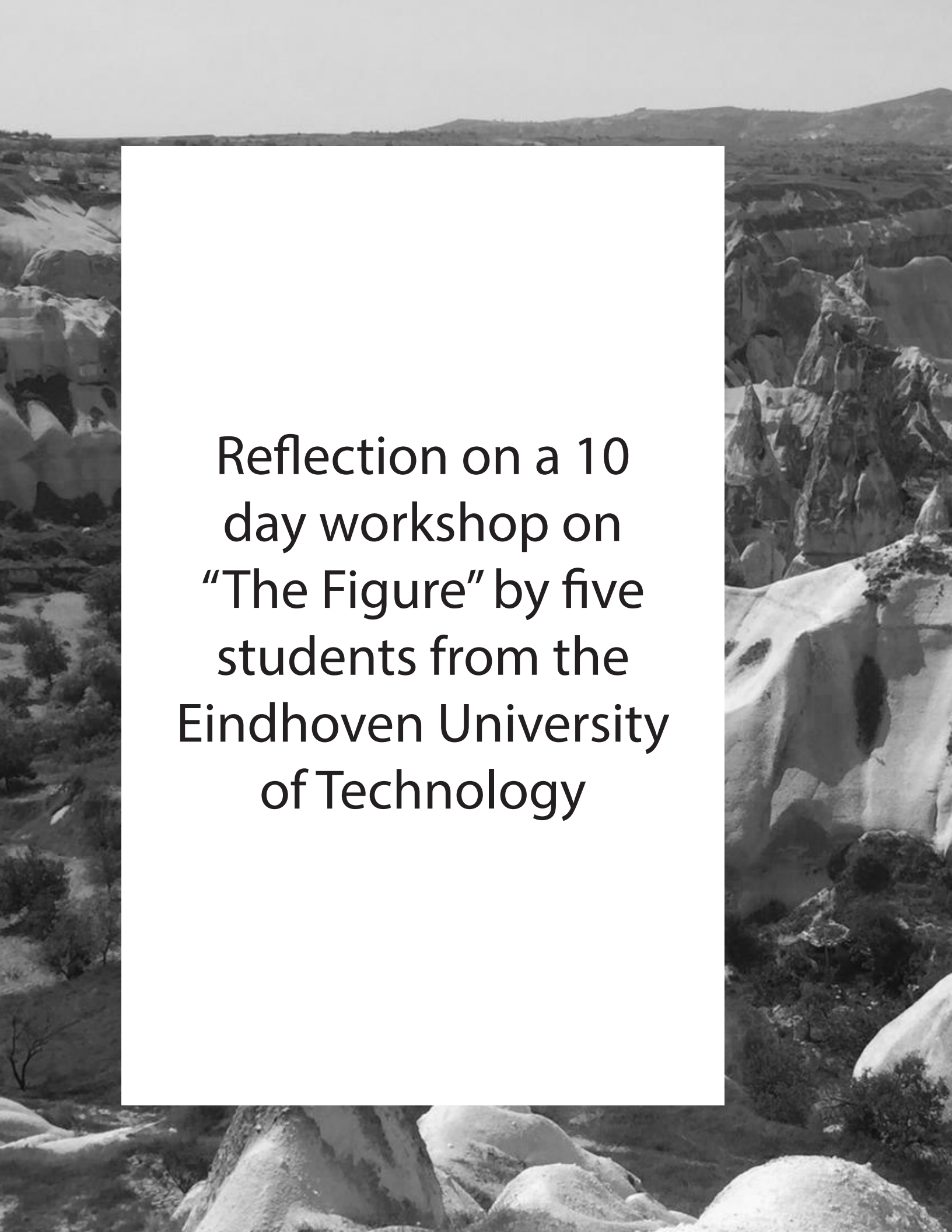


# M A T E R I A R T

Art and Science of Materiality in Architectural Design Education





Reflection on a 10  
day workshop on  
“The Figure” by five  
students from the  
Eindhoven University  
of Technology



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Cappadocia



## Who are you?

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## What was your first impression of Ankara?

**R** My first impression of Ankara confirmed my idea about Turkey as a very nationalistic country. However, this turned out to be only partially true. Very soon after our arrival we met several Turks people who changed our impressions. We were welcomed with open arms.

**R** The pride of their country and the grandeur of the city was immediately notable. The road from the airport to the centre was characterized by the Turkish flag that seemed to be displayed everywhere, and the grandeur of buildings did not really have a hierarchy, but remained throughout the route, which represented the city as a real business city and capital of the country. The Turkish people were very helpful and did everything to make our stay as pleasant as possible.

**D** When we left the airport by bus we drove along a big street, on every lamppost there was their national flag. That was very impressive, even in the city the amount of flags was extremely high, at least in comparison with The Netherlands. The city was very diverse, the old part was very nice and the mosque was beautiful. Usually my orientation is very good but in this city, it was pretty hard to understand.

**A** I approached Ankara on a train from Istanbul. After passing vast flat expanses with few scattered settlements, rows of monotone towers began to emerge. The lack of urban diversity creates a relatively bland experience with different neighborhoods all feeling the same throughout the city. It was a refreshing and fascinating experience to go to the historic settlement of Ankara. There the topography changed, the flat gave way to hills, the old neighborhood buildings wrapped around us creating a clearly defined space for people to inhabit. The winding streets had a clear character, individuality, distinction.

**A** Before I came to Ankara, I was thinking that we are traveling to a rather closed and conservative country, completely different to what I am used to in Europe. I was shocked how wrong I was. We were welcomed very warmly. People were very open and helpful which was really important considering the language barrier. And finally, Ankara is an interesting mix of a modern European city and conservative Turkish tradition. What I like the most about is the freedom of choice to which group people belong to. What was striking for me in Ankara was the chaos which was visible everywhere, in traffic, urban planning and architecture. Sometimes I have a feeling that the place is composed of loosely composed elements.

## Why did you participate in this workshop?

**A** I have been in Turkey many years ago just for a holiday, but I have no educational experience there. I took part in the workshop because I was curious how architectural education in the not European country looks like. Perspectives on working together with international students were the second reason why this workshop seemed particularly interesting.

**R** I had no international experience before Ankara. This opportunity to gain new experiences and perspectives in an international context was a unique possibility to enrich myself. The choice to participate was therefore almost immediately taken.

**A** I have always been fascinated with the exploration of the physical and metaphysical and how that inter-phases with people and communities. The pursuit of meaning in various scales and diverse perspectives further spurred my fascination with international collaborations. The Ankara workshop presented a fascinating opportunity to discuss the nature of figure in a highly abstract fashion with a collection of exceptional and diverse individuals.

**R** The idea about an international workshop triggered me right away, even though the content of the workshop was still unclear. Working together with architecture students from other countries and Universities had always been a part of my personal education perspective, which I did not get round to until then.

**D** My main reason was to have some experience in working at and with other universities from different countries. For me it was a great opportunity to earn ECTS and work in an international environment. Studying at another university and visiting a city at the same time was very nice!

## What was the meaning of the figure before you participated in this workshop (pattern of expectation)?

**A** The figure in my mind evoked shape, a foreground identifiable object, a primary. The figure was a very broad and abstract term, other more precise version took its place when dealing with silhouettes, or objects, or images. The idea of figure being extended to people was somehow impersonal. The idea of figure becoming an antagonist or protagonist infused consequence, actions, results, perhaps desires and outcomes intentional and otherwise.

**R** My interpretation of the figure before the workshop was very unilateral. The figure represented for me a person, the human body. A role in which only the architect could fit in. This perception acquired a much broader meaning for me during the workshop. The figure reminded me before the workshop of master builder ('bouwmeester'). A person or icon with a lot of respect from society. A position that is changing or already has changed and which forms the starting points for the workshop.

**D** To be honest, I have never thought about the figure and its meaning. My first thought was that the figure was just the architect. After reading the introduction of my studio my thought changed. This was mainly because I did not thought about it in another way. The figure does not have to be a person, in our case the figure was a screen in a room. How does the room reacts on a screen in case of sightlines.

**A** My interpretation of the figure was pretty vague before the workshop. It was hard for me to understand what is the framework of the workshop since I have never thought about the figure during my architectural education. At that moment the concept of the figure is still a bit vague for me since during the workshop we step aside from the main topic.

**R** During my study I was not very aware of the concept of the figure of the architect. In the Netherlands the exemplary role architect is not that important anymore, except for other architects and architecture students. During the workshop I also learned how the role of the architect had changed in other countries. Even though we all study the same profession, the ideas behind the meaning of the figure were quite different.

## How was the life at university for you?

**R** The life at a Turkish university was different from the Netherlands. The clear organisation and structures that are visible here were very contrasting with the more relaxing approach of the Turkish students. In the Netherlands we are really focussed on prestatation, while in Turkey the students are more focussed on taking pleasure in what they do.

**R** University life had many similarities with that in the Netherlands. Differences became clear in punctuality and lunch breaks. Tranquilo, that is the key word to optimally acclimatize yourself in the Turkish context. The calmness that this lifestyle brought was interspersed with long days. A long evening at the university was no exception. a 24/7 open faculty of architecture was therefore a welcome situation.

**A** The university layout seemed to suffer from a mini Ankara syndrome, the separate sections of the campus were compartmentalized behind enclosures, the circulation was not integrated with the functions and while some green places became vivacious, these were a lone oasis in the desert. The campus featured a pack of dogs that were absolutely delightful. The most pleasant and humanizing aspect of the trip in fact was the interaction between the dogs and the students relaxing together on the lawn under the sun.

**D** The university life was very nice! We are very used to starting work early in the morning and finishing around 6 o'clock. In Turkey that was not the standard. After a few days, we got in that rythm. Enjoying the sun during breakfast, taking breaks with a lot of tea, working till late and having late dinners with friends. It was a wonderful experience, if I could go back I would!

**A** University life is completely different than in the Netherlands. Maybe it seems a bit boring a cliché to say it again, but the punctuality and time schedule was really a serious issue. It is quite a contrast to Dutch style where everything is planned sometimes to the level of absurd. What I like was the fact that we have far more team spirit, pleasure and freedom during process instead of checklist approach.



## How did you experience the activities besides the workshop? (Cappadocia, nightlife etc.)

**R** The Turkish students were very enthusiastic to show us their city, so after work at the university they often took us to some nice places to eat. The food in Turkey was very good and it was nice to experience some of the Turkish culture after school. The trip to Cappadocia was very beautiful and gave us an opportunity to see some other aspects of the country.

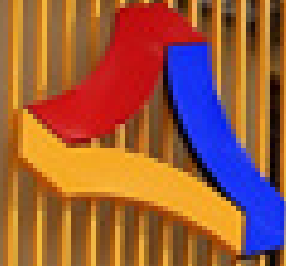
**R** The great enrichment of the workshop may be precisely in those unofficial moments besides the workshop. The moments when you come into contact with local cultures and people. In these moments the Turks have shown us their city and country and told us about their lives. And we about ours, an enrichment in itself. Cappadocia added a completely new perspective on lives and architecture to my vocabulary. Unforgettable impressions. With great respect and thanks to all who have made our stay to a fantastic experience.

**D** I really appreciate the way everybody helped us by showing the city, having meals together, sharing stories and the amazing trip to Cappadocia. It was an amazing experience and I would like to thank everybody for everything!

**A** I really enjoyed some evening dinners with Turkish and international students when we shared some food, cultural difference and experiencing the culture. It was really interesting and refreshing. And Cappadocia - was just amazingly beautiful. That is really a place to be proud of. It was also a really nice after closing a week of hard work during the workshop.

**A** It was very refreshing to visit the historic part of Ankara. I even found the rest of the city more pleasant than how I remembered it from my last trip there. It was great to observe the enthusiasm and curiosity of the group ensemble from all the various universities and the comradeship that formed.





TOBB ETÜ  
TEKNOLOJİ MERKEZİ



TOBB ETÜ



# 5 Personal expectations and findings in different studios by all different countries



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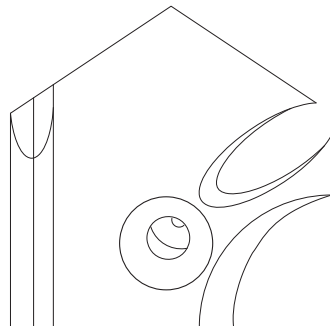
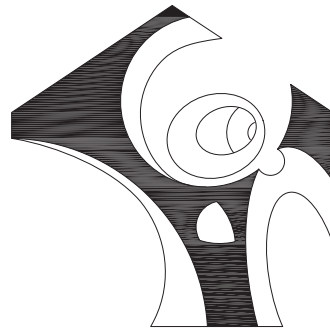
# THE FIGURE AS SPACE

A retrospective on the continuous intertwined relation between matter, art, space, scale and architecture



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Merleau-Ponty stated that a body inhabits space instead of being in space, claiming "je ne suis pas dans l'espace et dans le temps, [...] je suis à l'espace et au temps, mon corps s'applique à eux et les embrasse"



The reinterpretation and transformation of an archetype house

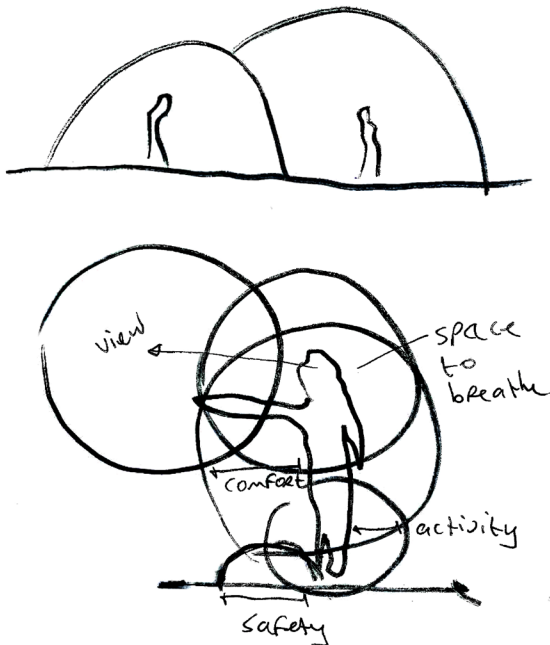
The figure represents a diverse pool of concepts and interpretations. The studio of the university of Lisbon (Portugal) takes the concept of space as a direct object. Merleau-Ponty stated that a body inhabits a space instead of being in space. We experience and recognize space through our bodies. Space can be defined using the

concepts subject and object. Merleau-Ponty introduces the concept of flesh. The skin, or the frame, that allows us to experience space.

The concept of space, and the experience of it, serves as a principle to understand and dissect the concept of the figure. For this purpose, a number of questions regarding the concept of space have been drawn up. What do we express exactly when creating architecture? What does a certain architecture reflect? Does it reflect how we consider space or how do we consider ourselves in the world? Architecture is the tool to make it possible for people to experience space. The objective of the work concerns this reflection in the continuous intertwined relation between matter, art, space, scale and architecture. This objective is supported by the analysis of some sculptures of Jorge Oteiza and Eduardo Chillida as an individual and thoughtful expression. Furthermore, erosion of the archetype house served as a starting point for spatial research. As programmatic guideline for the project, we use the search for architectural space through investigating Martin Heidegger's reflection in three levels (Die Kunst und der Raum, 1969):

- I. The space within which a plastic presence can be understood as an object
- II. The space that surrounds the volumes of forms
- III. The existing space as a void between volumes

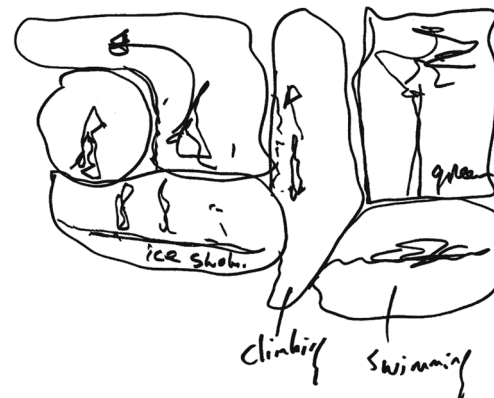
The assignment would be physically expressed in a concrete artefact. An object with a haptic and clear tectonic expression, defined by its strong material presence. Form is the result of the defined space. The developments towards a final model can be described as an iterative design process. When we assume that space and its experience are described and defined by the human body, it is possible to set parameters. These dimensions are the result of human measures and result in different spaces. For example, space to breath, space to view, comfort space, activity space and safety space. These spaces can be abstracted to different positions of the human body. For example lying down, relaxing, sitting and standing. It is then possible to combine the parameters



Dimensions of the human body as a guideline for spaces



combination



The abstraction and combination to different positions of the human body



RICK ABELN

The eroded tufa rock formations of Cappadocia as inspiration for carved spaces and caves





The intuitive preparation of the mold



A pink world is the result from the process of demolding

of spaces and positions. This combination results in different 'residential typologies'. Various specific and interlocking spaces are created, for example for a climber or a swimmer.

The definition and combination of spaces and positions has been translated into a design proposal with the help of the reflection on the work of Oteiza and Chillida. A design that, as a literal outer boundary, has the archetype house and thus reflects one of the most essential roles of architecture, providing shelter. The design proposal is made context specific by taking the rock formations of Cappadocia as inspiration. This UNESCO World Heritage is famous for its erratic, eroded tufa landscape. The formations present themselves through corridors and carved spaces in the caves. These characteristics

are clearly reflected in the final concrete artefact. The design attempts to question and reflect the relationship between space and form. The created spaces in the artefact form a tailor-made suit for its user. The connections between spaces result in complex corridors with various views through it. This typology and way of thinking forms a field of tension with the archetype house as the outer boundary of the concrete object. Where both meet and cut together, the most interesting areas arise.

The concrete volume is the first step in the research into shape, space and the figure. A next step has been found in the reinterpretation of the object. A number of basic projections within the architecture have been used to shape this reinterpretation, namely:

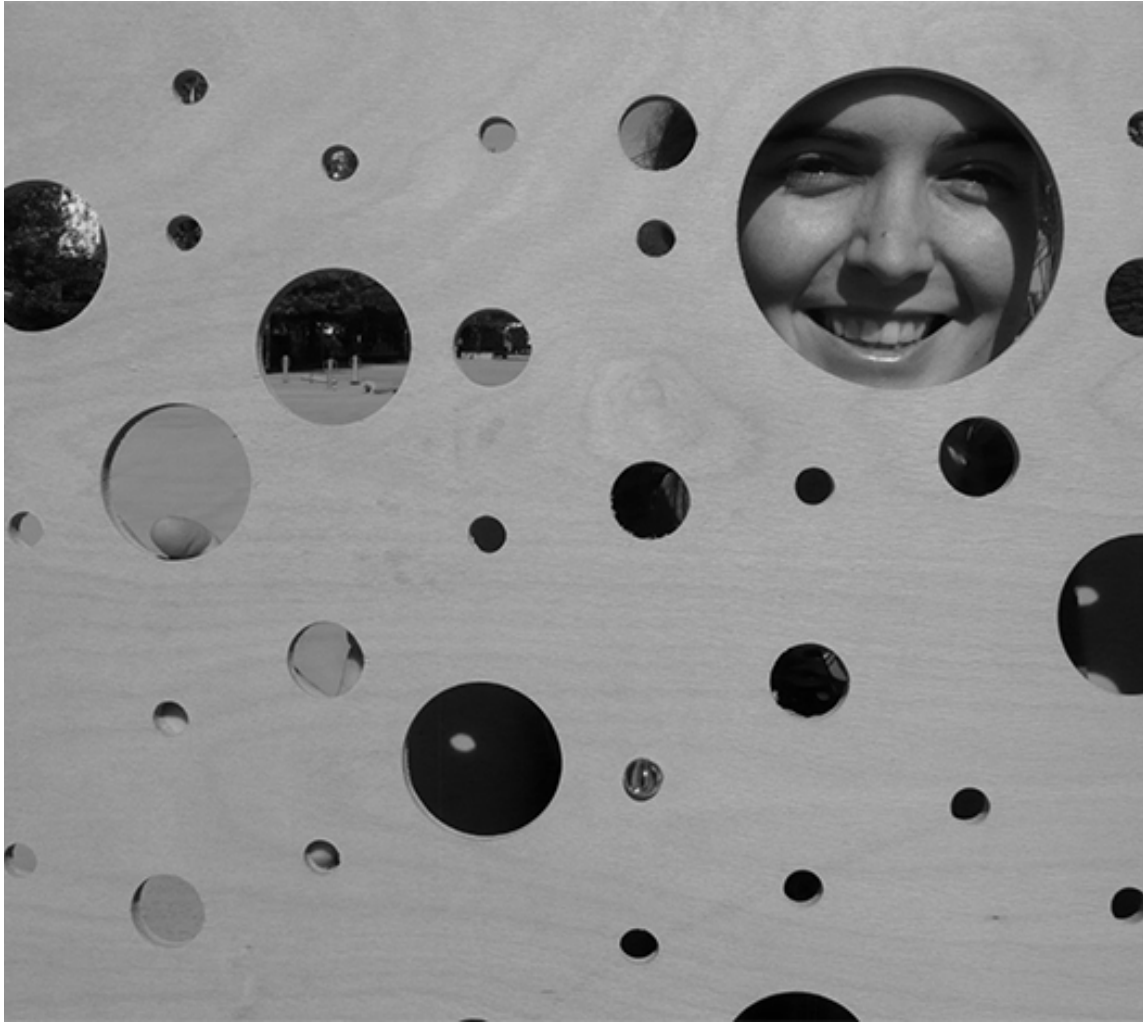
façade, section, plan and urban context.

The artifact is the result of a process, not the other way around. There is not worked towards a specific physical expression. The parameters were reinforced during the process by making specific processing techniques, such as chiseling, hammering and cutting, clearly visible in the corridors. This is in contrast with other team members who used a more systematic approach. The three levels that Heidegger distinguishes in *Die Kunst und der Raum* are perhaps the most difficult to interpret. The dividing line between categories is wafer-thin and crystal clear at the same time. The artefact is an inverse of the interpretation of the third category: the existing space as a void between volumes.

Finding an unambiguous answer to the question of who or what the figure is, is probably not possible. The shape and appearance of the figure depends on who interprets it. The shape is also influenced by the context and character in which the figure is considered. Sometimes it can be a person or identity, an icon. Sometimes it is an elementary discussion about the role of architecture, while other times it reflects on essential themes within architecture. In the latter category, the study of the studio of The University of Lisbon can be positioned. The relation between the space and the void, and the interpretation of it, is one of the most essential themes of architecture. Just think of all the major architectural works from the recent past, all characterized by a very spatially

The final concrete artefact represents an inverse of the existing space as a void between volumes





The panel with the size of Daniëlle face in it.

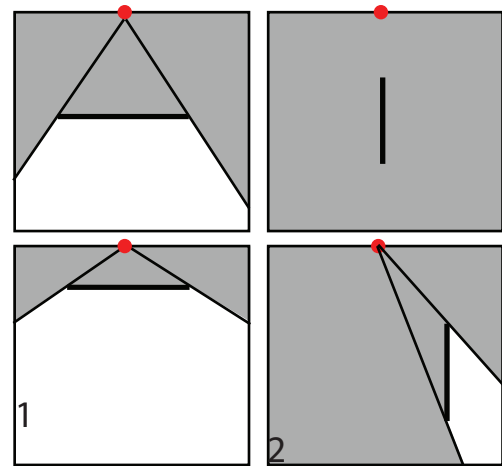
# THE WALL, THE SCREEN, THE ARCHITECT

## Negotiating Spatial limits



The main aim in the Thesalias studio was to design a screen. The introduction was about the position and function of a screen in a room. In these cases the screen was always the same size but positioned in a different way. With only this element in a room the visitor is able to see just a part, almost nothing or almost the entire room. The principle, researched by M. Benedikt(1979) is represented in the sketches below.

1. The screen horizontally positioned.
2. The screen vertically positioned.



The screen, M. Benedikt(1979)

The studio was divided in two parts, the first part was about the analysis of existing buildings or screens and how people experience these. The second part was about the design of a screen.



The MVRDV glass farm in Schijndel, The Netherlands

## The Analysis

After gathering these basic ideas about a screen and its function the analyses of a façade started. The variations in façade by using different materials provides a certain level of transparency. This transparency is important for the relation between the two sides of the façade or screen. The starting point was a typical Dutch façade which is fifty-fifty open versus closed, it has a strong relation between the inside and outside. In the end 5 different projects are shown, completely transparent facades versus very closed. The ones in-between are all different, for example the Glass Farm by MVRDV. This façade is completely made out of glass, the farm which use the be there is printed on the glass. On several spots the print is faded out and transparent.

The second analysis was about the position of the window, referred to the start of the studio whereby the screen was introduced. When the window is placed back it functions different then directly in line with the façade. The first situation concerns a high privacy level for people inside and outside. The window in line with the façade allows the users to have a total view of the window.

The second part of the studio was designing a screen yourself. The only requirement was that the screen should fit in the size of a wooden panel which will be milled by a CNC machine. Furthermore, there was a lot of design freedom. One of the aims was to design something which was out of context. It would not have a specific purpose and it should function in different environments. As a starting point, the human body is analyzed.

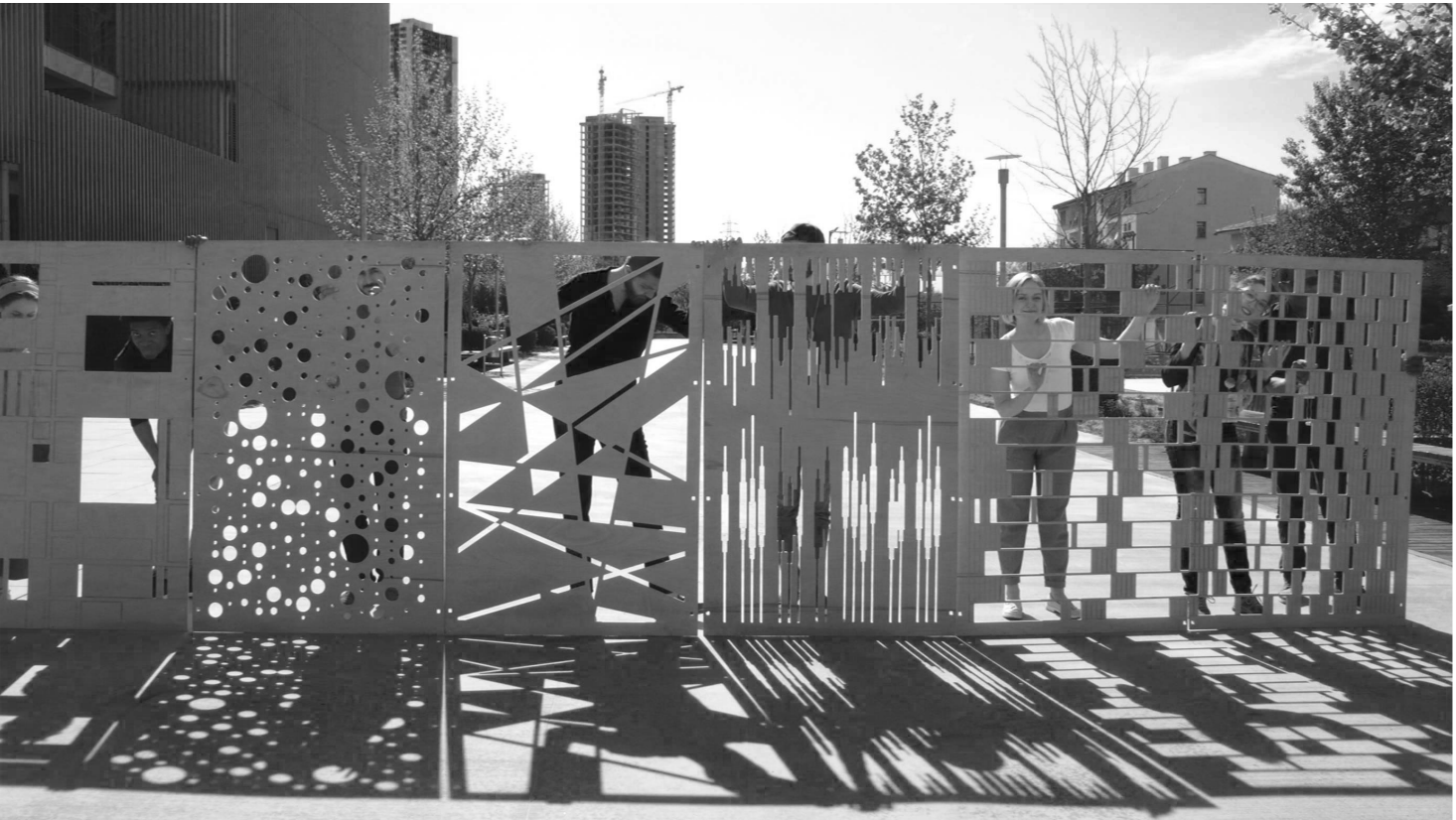
Within this Materiart workshop a lot of different nationalities were present. All the different people have different habits, different characteristics and different sizes. With this knowledge a study of averages of the length of people from different countries is done. The conclusion was that man and woman from Greece and Turkey represent the smallest average of 1.72 meter for the man and 1.62 meter for the woman. In comparison to these, the Dutch have the biggest average. Dutch males are around 1.80 meter and Dutch females represent the average of 1.68 meter.

The second step within the designing process was the size of the openings. Since the panels are made out of wood, holes are needed to create a relation between both sides. For this design the aim was to create different layers of transparency. A layer which allows light to float through the panel. The second layer was to show the movement behind the panel. The final layer was the see-through layer. This layer provides people to see what is happening on the other side of the panel.

To create a special atmosphere the small holes are based on the size of a marble. Marbles are available in all kinds of colors, their standard size is 16 mm. This size is the basis of the first layer holes in the panels. The other holes are based on multiplied times 16 millimeter. The big holes are 128 millimeter. This size is almost the size of the face. A study of the face was needed to position the holes on the right spots in the screen. Generally the head is 18 cm high and 14 cm wide. Within the 128 millimeter all the different functions of the face will fit.



The different families, the small ones filled with marbles.



The final results of the screens

In the end there are three different families. Each family has its own function. The family of the translucency will be represented in the small holes filled up with marbles. The second family is build up out of two different sizes, 32 and 64 millimeter. These holes represents the movement on the other side of the screen. The third one is about the see-through family. The holes makes it able for people to take a look to the other side of the screen. The people are only able to watch trough it in a very conscious way. By walking by you are able to see small part from the other side, unconsciousness you are not able to orientate yourself. This part makes it even more mysterious, you have to be conscious to experience the screen.

The see-through holes are positioned at 5 points. The two on top which are the averages of a standing European male and female. The

two below represent the same people in a sitting position. The lowest can work for kids, they are still very flexible and there is no average for children since they will keep on growing till they receive the average of the male and female.

The end result of the panel is shown above. During the transfer from the computer toward the CNC milling machine the scale is a little bit changed. In this case the marbles will not fit in perfectly. The final result of this studio are five panels with different designs. Each panels has its own philosophy. One is based on the fluency between open and closed. One is specific designed to create different levels of privacy during working at the office. There is one based on the principles of "De Stijl". The one which is vertically orientated is based on the relation between adults and children. And the one with the dots, based on three kind of families.







# THE ARCHITECT AS FIGURE

The architect as a figure and his interventions on realities and the universe

Ankara is the capital of Turkey which is constantly changing and expanding due to different influences that interact with it. Within the workshop in Ankara an investigation about the architect as figure in this changing world has been done.



The conglomeration of Ankara

The subject of the Figure can be interpreted and represented with a wide variety of ideas and concepts. Begin April a workshop was organised by the Tobb University of Economics and Technology in Ankara. Being in a different culture and with students from different universities gave a wonderful

opportunity to meet new people and students with a different view on Architecture.

Besides working at the university there were also enough opportunities for meeting other students and getting to know the city. The whole workshop started with an excursion to

the castle of Ankara, one of the oldest parts of the city. Already from the beginning the Turkish students were enthusiastic to show us around and to tell us something about their life and culture in the city of Ankara. After a walk through some narrow streets with typical Turkish buildings we arrived at the top of the castle which gave us a wide overview of the city. We as students from Eindhoven were unfamiliar with this type of city. The one conglomeration of buildings followed up the other conglomeration which made the city look like an impressive and endless agglutination of big business buildings and parliament buildings.

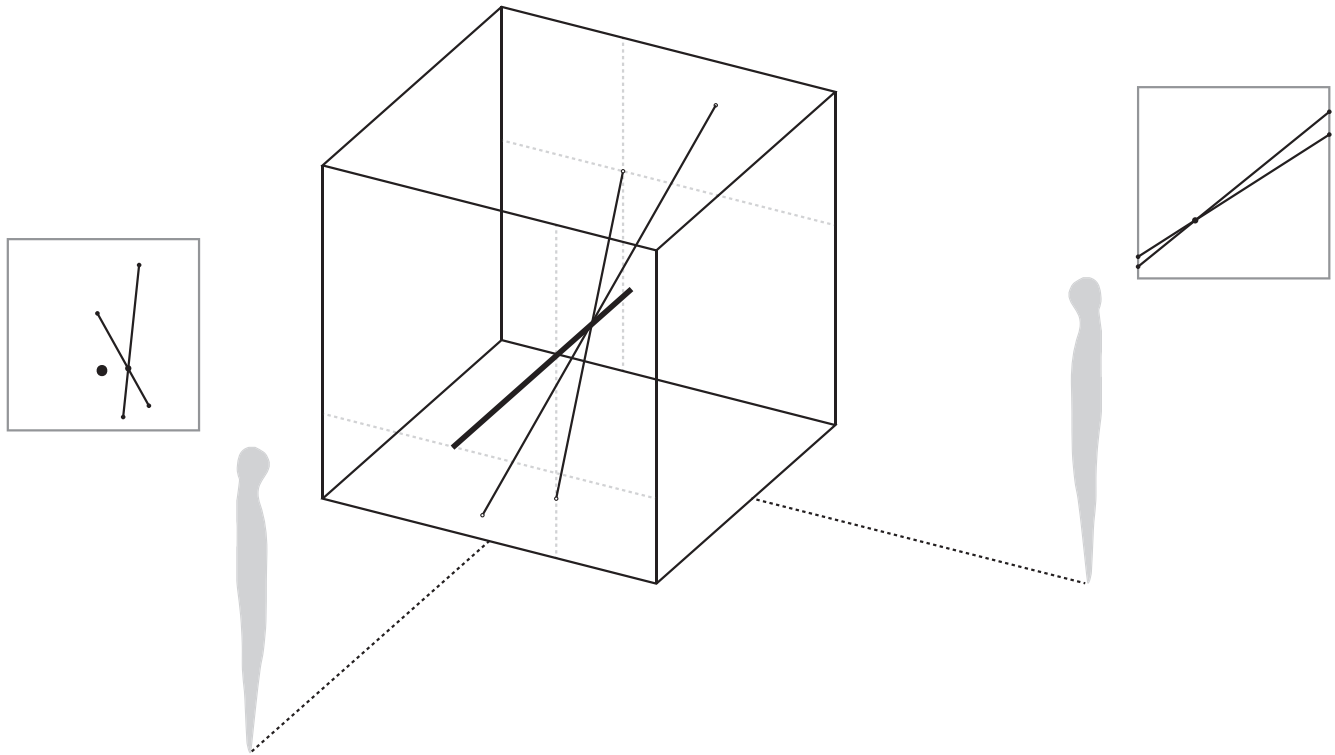
The feeling of grandeur and power of the city is clearly visible. In contrast to the Netherlands, the streets in Ankara have been set up large and are full of rushing and honking cars. In addition, there is a lot of security on the street. Everywhere there are cameras and on every corner of the street is a soldier with a gun. Although this is particularly

intended for safety, it exudes a certain sense of power. During the two weeks we felt more and more secure within the big city and we also went to discover some places by ourselves like some nice bars and restaurants.

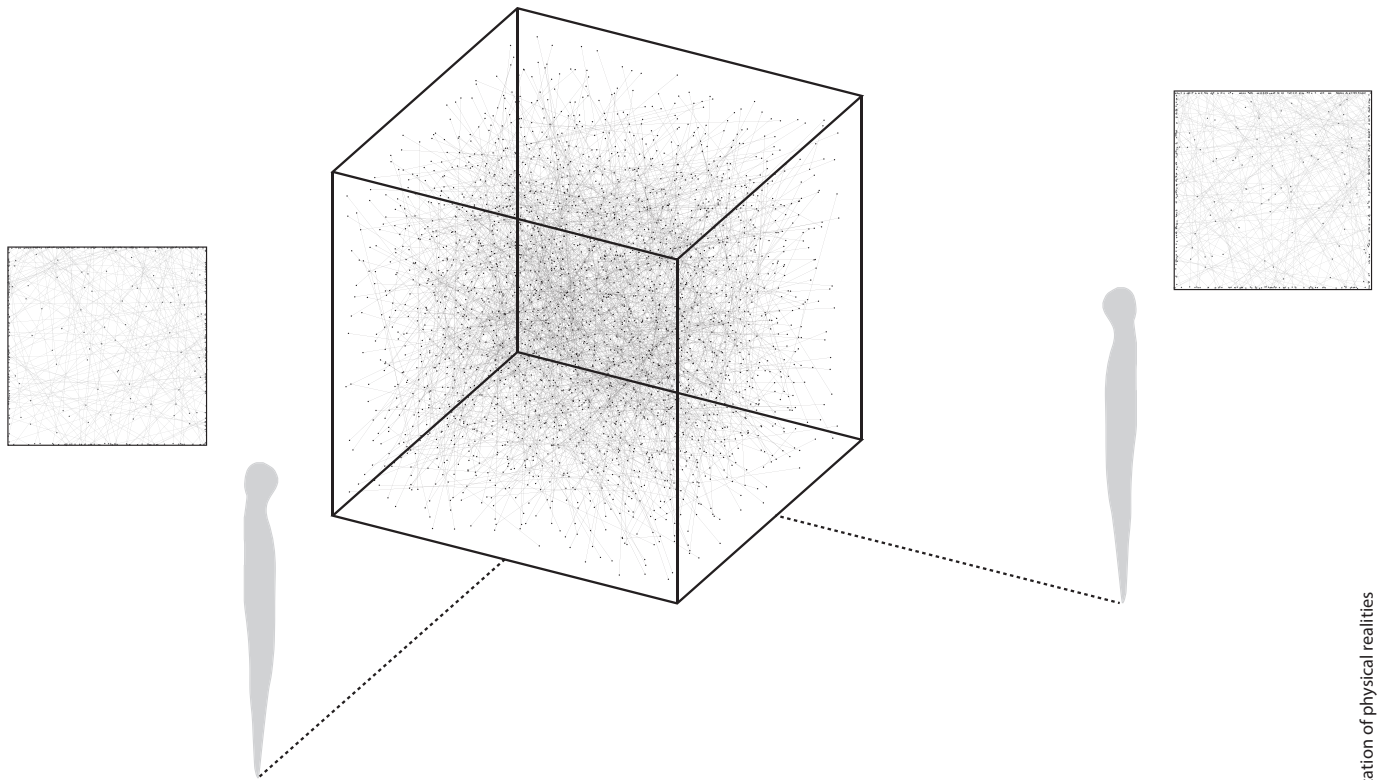
After the first day of the workshop in Ankara, all students who participated were mixed into different studios, each organized by another universities to get more answers on the question of the figure. Being with a group of students with diverse backgrounds brings together all these different opinions and gives enough opportunities for re-interpretation and discussion. In the studio which was organized by Tobb University of Economics and Technology, students from Turkey, one student from India, one student from Portugal, one from Greece and, myself, as a student from the Netherlands, were brought together. In order to get some more background information of the architect as a figure the text 'On architects, bees and species' was introduced to us. The philosophical approach



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The intervention and interaction of realities in the universe



Representation of physical realities

within the text gave some guidelines for the research towards our idea of the figure. Besides this text we were left with a lot of freedom of representing our interpretations of the figure.

At the beginning of the workshop the struggle in what direction we had to search was quite big. We started discussing as a group, but eventually everyone started figuring out the meaning of the text and the representation of the architect as a figure for themselves. This question seemed to be harder than expected and after two days already two of our Turkish students left the studio as they could not find their own path in responding to this question.

After two days of reading and discussion we eventually came with some ideas about interpretation and representation. Surprisingly, almost every one of the studio came with the same interpretation with a slightly different idea about representation.

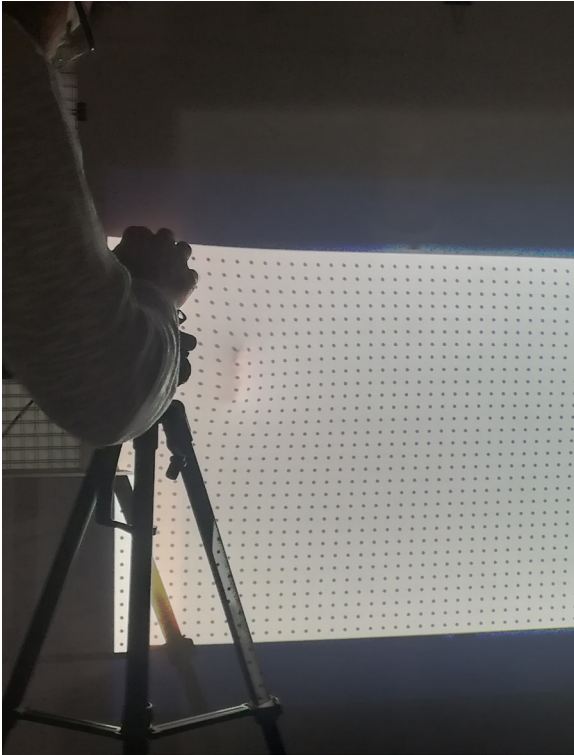
According to our interpretation, the entire physical universe consists of several physical realities. The reality is perceived by actors, or. However, the actor has a limited perspective and only one interpretation of the reality. The interpretations of the system will influence the actions of the actor. He/she designs his/her ideal model and intervenes with the universe. The intervention will interact with the existing state of the realities and it will shift their positions. The intervention exerts various complex forces to the universe which changes the realities in different ways. These changes are often difficult to predict by the actors due to their limited perspectives; however they still influence the interpretation of the reality. The interconnectivity of actor and universe is constantly changing. Minor changes can have enormous impacts.

In order to transfer this idea to our college students a way had to be found to represent



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this idea. With a group of four students we represented the universe by a 2D fabric, the actor by a real human and the realities and worldviews by projections. By pushing the fabric at one point, the whole projection changes, which represents the complex interaction between figure and universe. After thinking about some concepts to build this representation, eventually the installation had to be tested and built. In order to pick the right fabric for the installation, one day was spent in the downtown of Ankara looking for the fabric with the right colour, texture and elasticity. Finally, the installation could be built and tested. The first ideas about the installation turned out the work great and gave us even more inspiration for making representations for the final exhibition. Pushing one point within the projection on the fabric can change the whole image. After working about ten days the day had come that we could show our work to the other professors and students. The difficulty of the topic and the artistic way of representation have a lot of enthusiastic reactions, but also

enough space for thinking and discussion.

I went to this workshop with the idea to get some new insights in the practical and designing aspects of Architecture, however this way of conceptual thinking has opportunities to see architecture and the architect him selves in a different and surprising way I did not think of before. Besides meeting new people and cultures this whole workshop also shaped me and my way of thinking about the universe and the way I want to interact with it as an architect.







# THE FIGURE AS A PERSON

A tension between generic vs. specific in contemporary public space.



Photography - Eskişehir road - intervention location

The concept of the figure can be interpreted in various ways and as such, it seemed very vague. The assignment proposed by the Münster University was rather flexible and did not provide a clear definition of the figure. In some point, it was obvious that the studio even stepped out of the concept of a figure

to find it back at the end of the workshop. As a sort of conclusion, the figure can be equal to a unit, a person in a public space. The assignment was not determined in a very strict way and as a result, it was the only studio which had a chance to pick the topic of personal interest. At a very beginning, this flexibility

was both an opportunity and difficulty.

The workshop began with a vigorous discussion about personal interests, architecture, urbanism, social aspects, cultural identity and heritage in Ankara. International background of the group members led to various perspectives and perception. Despite all the differences, common interests were described such as identity, specific vs generic, heritage.

Comparative analysis was the first step into a research of 3 different districts of Ankara to investigate what is the essence of Ankara, its identity and what does it mean typical Turkish. In order to determine the characteristics of the city in all 3 districts typology of meeting places - tea houses and cafes were analyzed. Three chosen districts as follows:

1. Ulus - old city - as a traditional Turkish identity
2. Bahçelievler Ankara - generic district of Ankara
3. The neighborhood of Eskişehir road - the modern generic development

Further, in a process, the group was divided into 3 parts and each of the small groups analyzed one of the mentioned districts. All 3 location was visited, photographed and analyzed. After the visit, three videos were prepared. In a loop form characteristics of tea house and cafe were spotted and described. These videos were a starting point of a discussion what is typically Turkish, how the people tend to spend time and what are the identity problems.



1. Old city - Ulus







2. Bahçelievler - Source : googlemaps



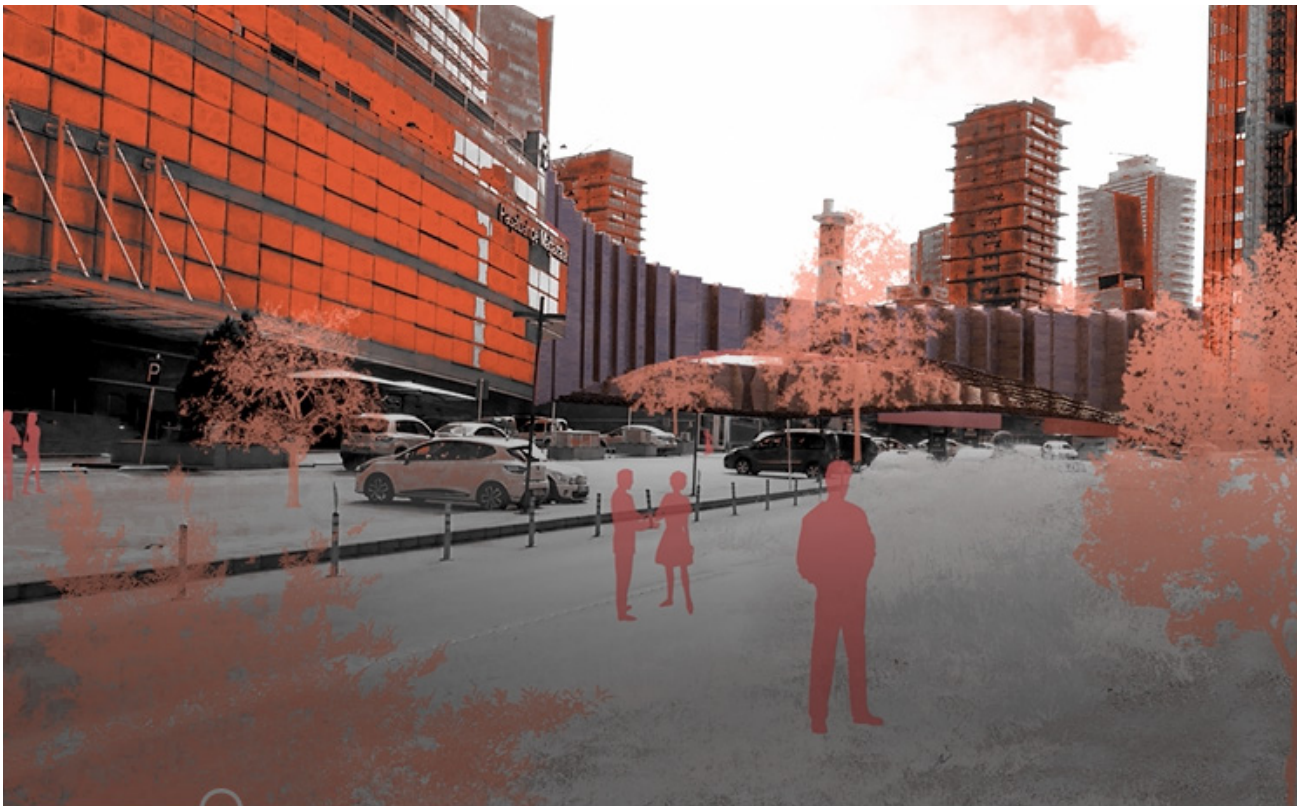
3. The neighborhood of Eskişehir road

After inventory loop videos one location for an intervention was chosen - Eskisehir road. The place was clearly generic, lacking traditional identity, with no specific genius loci. The intervention in this district was focused on a city for a people and character of the life between the buildings. At that very moment, the figure interpreted as a person or society became visible. As follows from this very moment the aim of the assignment was to deal with the lost Turkish identity and the tension between specific and generic in a public space.

Secondly, the problems of the Eskisehir were investigated and the solution using architectural tools and means was proposed. First of all the tunnel was designed in order to decrease negative influences of car dominance. In a second step, the space between the

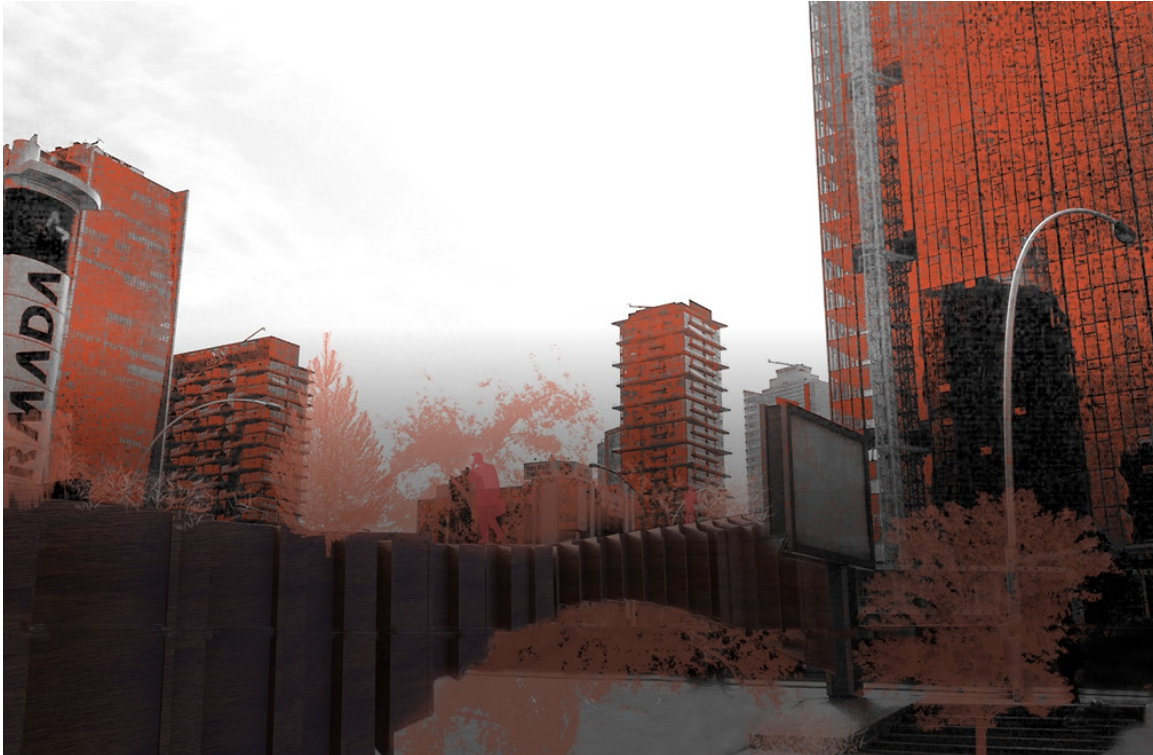
building was analyzed in order to design a public space characterized by human scale and character. The design attempt questions what should be the character of the city generic or rather specific. To answer this question the most generic location of Ankara was chosen. The concept of figure became an answer, what makes a place specific - are the relations and interactions of people in public space.

The last step of the investigation and conclusion in one was a loop video which presented intervention location, main ideas of the transformations, a new network of connections and the results of the interventions. Closing element of the workshop was an exhibition presenting all the inventory steps, design attempts and conclusions.



Intervention - Design - Public square





Intervention - design for a public square in place of highway

### 3. Reflection

Finding one straight answer to the question what is better for a place - generic or specific is not an easy task, therefore it still stays without an answer. The investigation into the essence of the identity leads to quite straightforward characteristics of specific, Turkish identity and genius loci.

On the other hand, if a figure is interpreted as a person in public space it is not possible to give one simple answer that specific is better than generic. All these years in architectural school everyone is taught that generic is the 'bad' one, but honestly, no one can give one logical answer why is it this way. Therefore, one week workshop seems not sufficient to deal with such a complex topic. What is also typical is the fact that architectural student is taught to rely on their own intuition, which is built on personal experience, but intuition and experience of various people and the various

background is not the same. It is not easy to avoid the cliché of typical solutions which without proper analysis of the sense of space can lead to misunderstanding and failure as well as to a positive and stimulating solution. In that case, it is extremely hard to become objective and not based on my own experience.

This tension is visible in this research. At some point of our research, we made a statement that we are aiming into creating specific rather than generic. Specific was sought in Ulus - the character of the traditional, Turkish district, which enchanted us as internationals and which was in contrary entirely unappreciated by the local students. This simple example shows that it is almost impossible to give a black and white statement for the question what is better specific or generic.

On the other hand, systematic attempt starting with a thorough analysis of existing state gave the research what it required - clear and necessary borders



Even though the task was clear - bring back the lost identity - the results were not that obvious. In some point, everyone may ask how it is possible to bring the traditional identity, architectural typology to a place which is such generic and characterless. What sort of tools should be used to create a characteristic place with local identity in a place which looks like architectural 'copy-paste'? The other question is what is the genius loci of Ankara? Does specific still exist in Ankara? If it does not exist or if it is not appreciated by local inhabitants what is that the point of recreating something that is not understood and not desired. In contrary to that how to avoid the risk of

creating a fake - theme park like character by literally applying all the motives found in old, charming city. In some point, it is a pity that this concepts and tension between the generic and specific were not thoroughly It is a pity that we bordered ourselves with the specific vs generic framework in a typical architectural sense. The results of the interventions lack this discussion. The attempt was to create a specific space, in contrary to that the result presents rather generic the specific approach, which seems a bit of a missed opportunity.



Munster Group - During the final exhibition



Intervention - design for a public square in place of highway



Final exhibition



The jumping tower - physical model output of workshop

# THE FIGURE AS ACTUATOR

The protagonist-antagonist duality of figure as an interactive spatial agent.

Establishing the Framework:

The initial understanding of the figure was given a set of limiting parameters. To enable objective analysis, the figure needed a setting, a theme, an objective or purpose. Figure is a broad concept, so extensive that without a grounded context it becomes incomprehensible.



As the workshop commenced, this context was provided for us. The lecturing professors presented a brief classical overview of architecture and core design concepts. The emphasis on antagonist and protagonist introduced the moralistic lens to the conversation. A specific topic- overcoming gravity was presented as a challenge. This set of constraints enabled a more objective and coherent formulation of what the figure in this context becomes. The figure becomes an actionable, iconic form of consequence. This can vary from the object locked in entropy without external stimuli, or the stimuli itself- the person.



Assembly of first sketch model

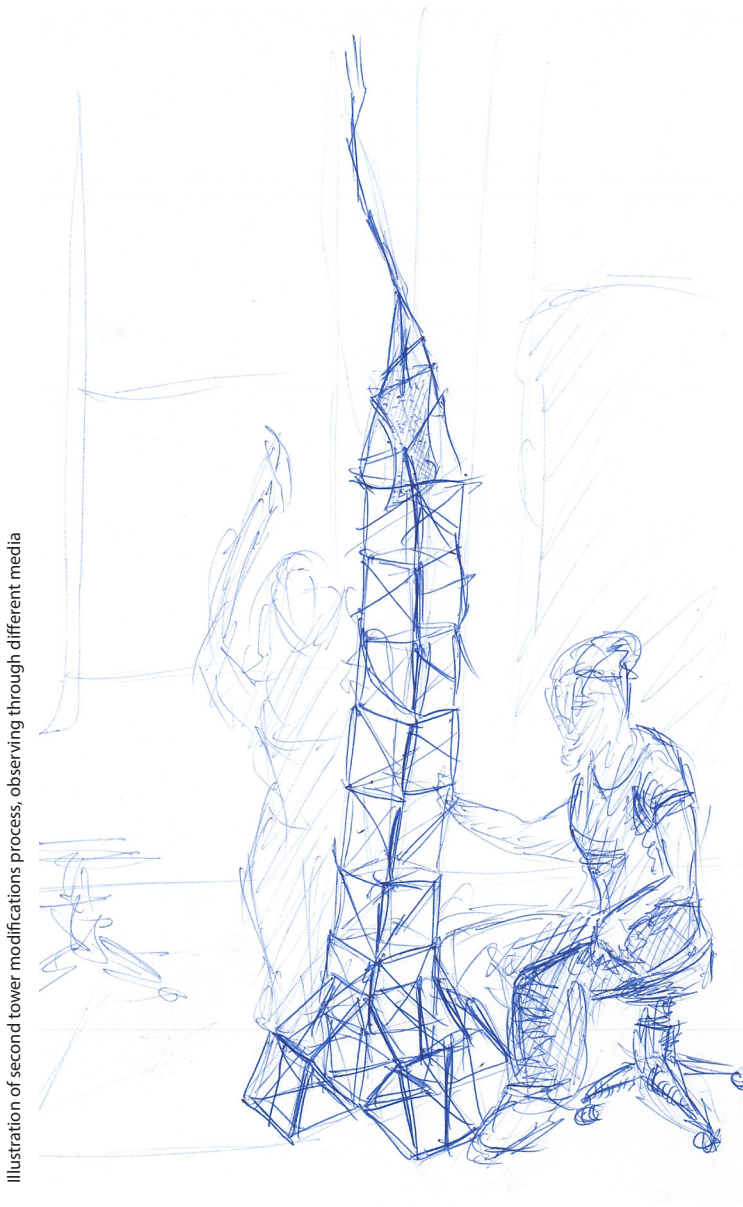


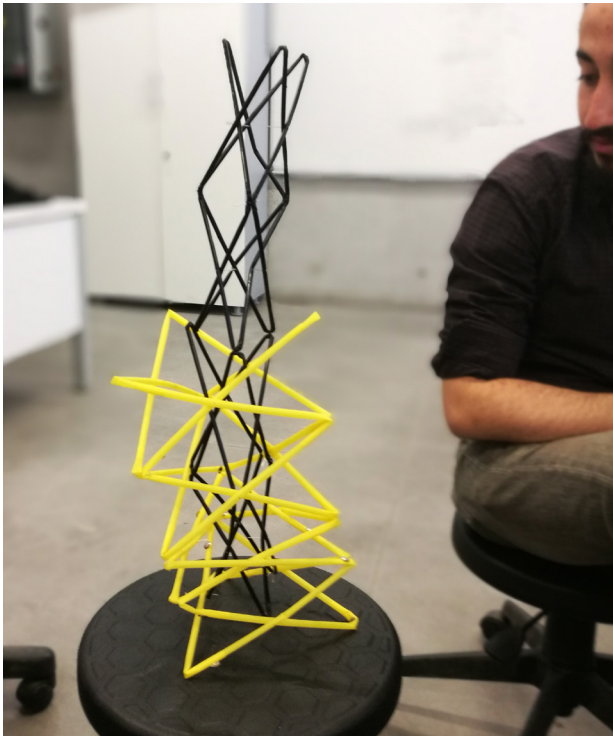
Illustration of second tower modifications process, observing through different media

## Result Defined

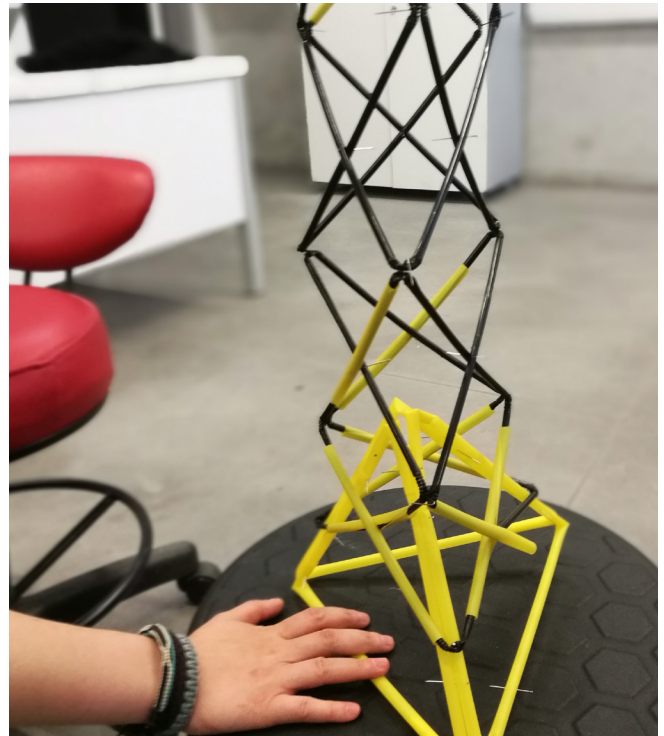
The expectation from the workshop was very different from its reality. What we produced became a very literal translation of the question. Various groups took on the same challenge in different ways, some maintaining a greater level of abstraction, however they all converged on the physical. The expectation was creating a manifesto, some philosophical framework, the output became a sculpture, a physical object containing abstract qualities. The historical analysis of the ziggurat transition to pyramid and the segmentation of the column was fueled with historical and contemporary examples ranging from antiquity to modernism. The classical design principles and Vitruvian conceptions of beauty were juxtaposed with geometric principles of proportion and repetition.

# EXPLORING THE VERTICAL

The reach upward as a quest for greater knowledge, a battle against our earthly limitations and a constructive challenge for every architect.



Flexing the study model and exploring joint structures.



The procedure of creation was made in a time stressed environment. Two separate groups were given a task of forming a tower as tall as possible in a short time span that was not specified. Our team took on the principle of repeating modular elements with an optimized triangulated structure. The initial attempt at the towers was only mildly stressful. A second round of analysis of the built forms lead to additional revisions and adjustments to structure this time conducted by the opposite teams. The detachment from the initial

designed enabled a more objective assessment of the created structure and the solutions for stability were more practical. The final step was a blind sketching exercise where the teammates gave instruction to a blindfolded member of the group to draw the tower. This was a group effort as the artist was switched after every few strokes. The result was a highly abstract graphic expression of the tower object.

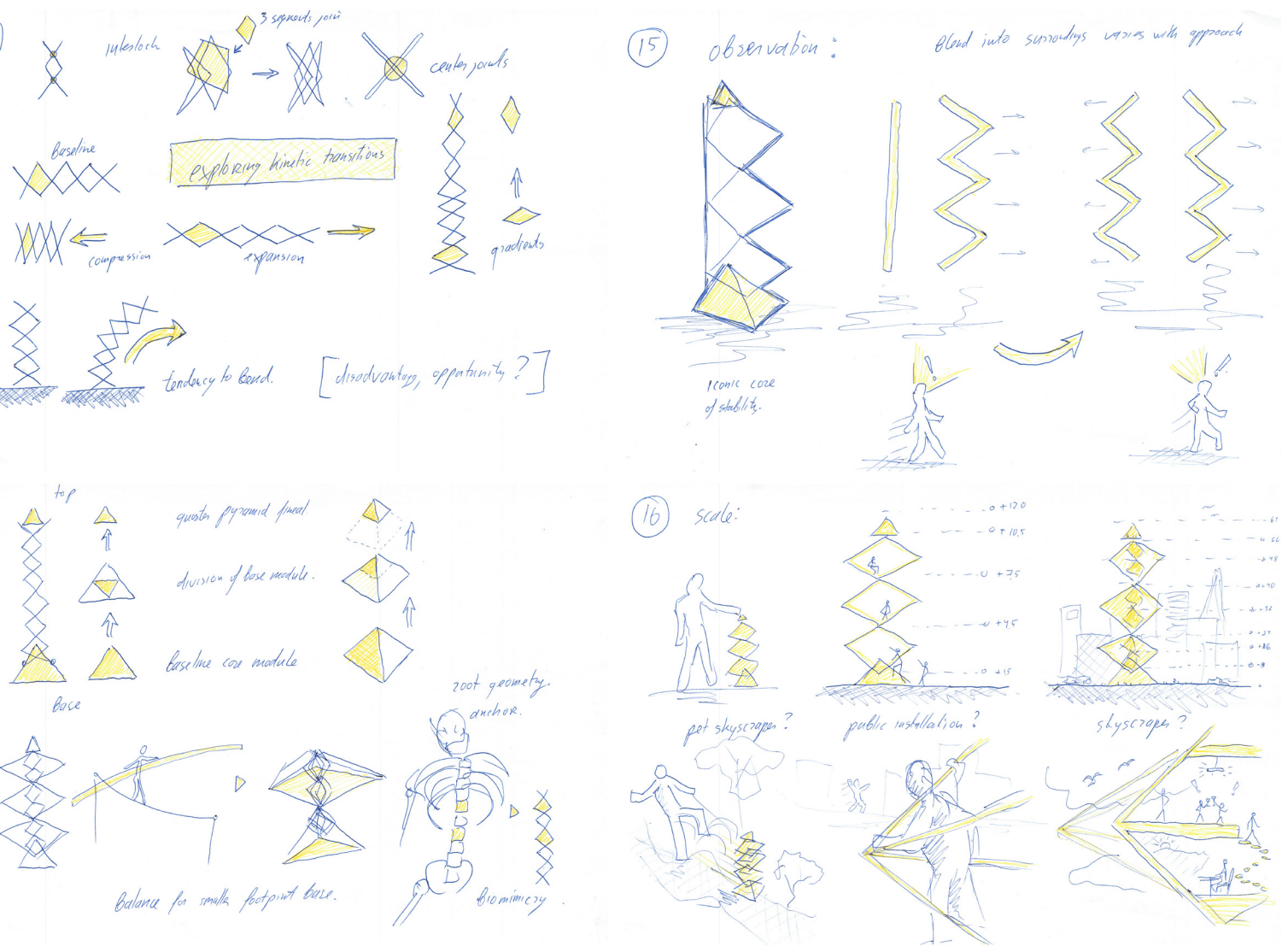
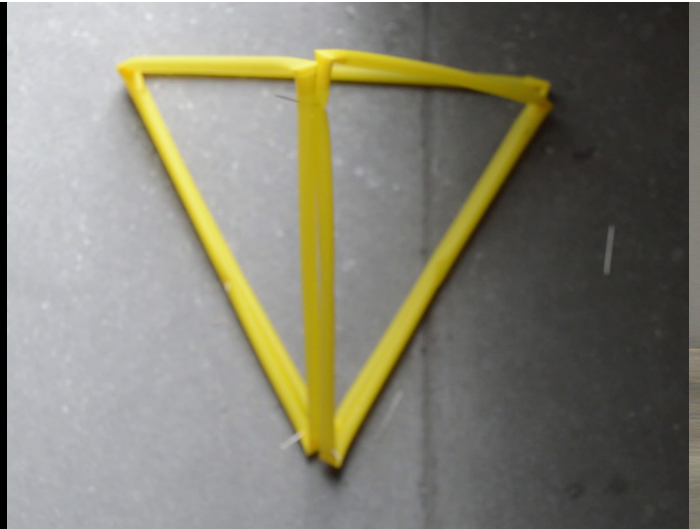


Diagram sequence, understanding the designs implications or origins.

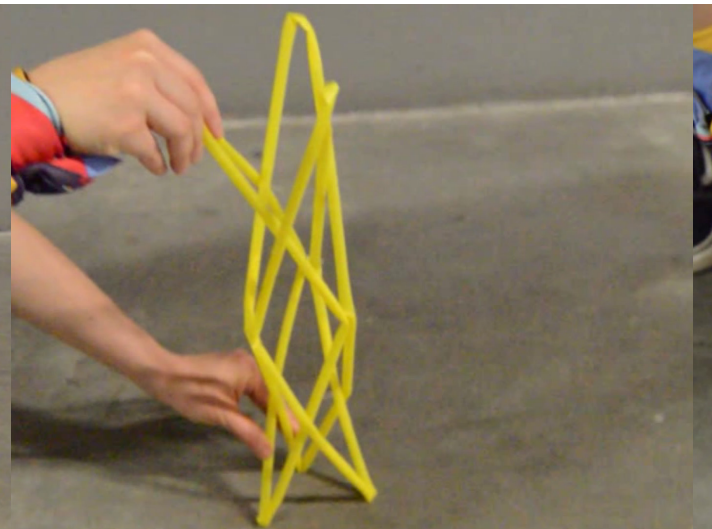
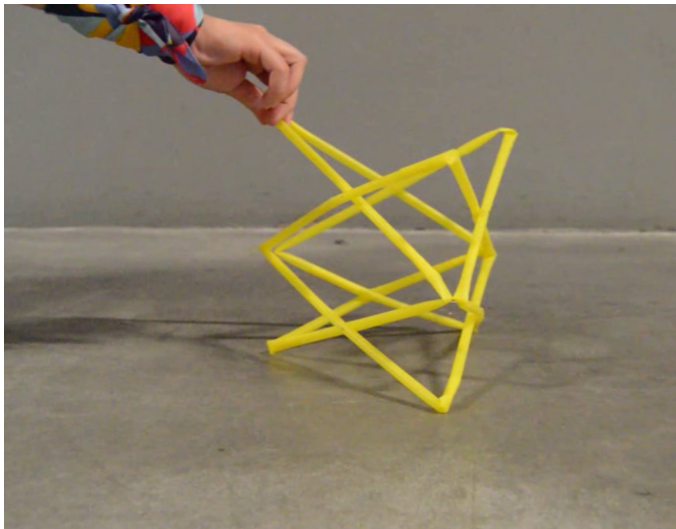
Using this exercise as a basis for a final design a new tower was built from scratch. The interlacing structure that the team developed as a module is that of an expanding cross brace. When folded over itself in three dimensions this created a structural element that had the property of stretching and compression while maintaining structural integrity. The figure of the tower became an opportunity, the consequences of this flexibility became the focus. The action potential of this object as adjustable, mobile, flexible, dynamic, even mobile. The potential of this figure to move became a transcendent element from

architectural static ideas to bio-mimicry and the interactive properties of people. The notion that the figure becomes a means to do... something. Dependant on the whims of the people, the figure becomes an actuator, a constrained means to do certain tasks. The goal of the tasks to be defined by the user. The user becoming the determining factor as to the nature of the action, weather it is fundamental positive, negative, creative, destructive or a mix. The role of antagonist and protagonist as such falls to the users, the figure of the tower becoming an enabling element.

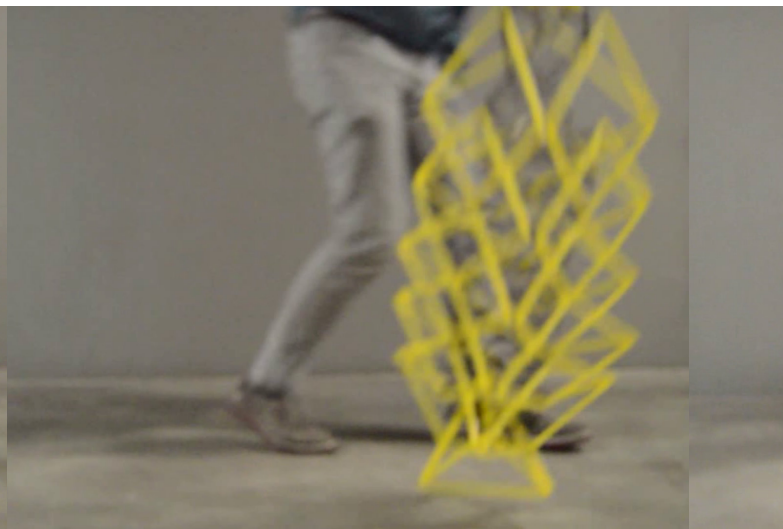




Still frames from narrative presentation video: Intro to concept.

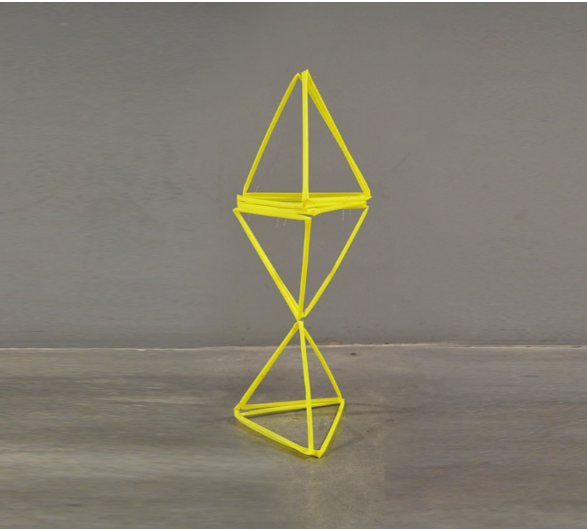


Exploring the flexible geometry.



The figure as animated, curious entity.

# NARRATION:



The triangle-  
The simplest stable geometry.

Four triangles combined create the triangular tetrahedron, a pyramid with an angular base.

The horizontal stacking of these tetrahedrons begins to form a tower, every two mirrored pyramids create a rhomboid tetrahedron - a form distributing forces from the upper point to the base through its wider cross section, removing the Horizontals frees up the rhomboid to become flexible.

Combining three such forms creates a self sustaining structure capable of expansion and contraction.

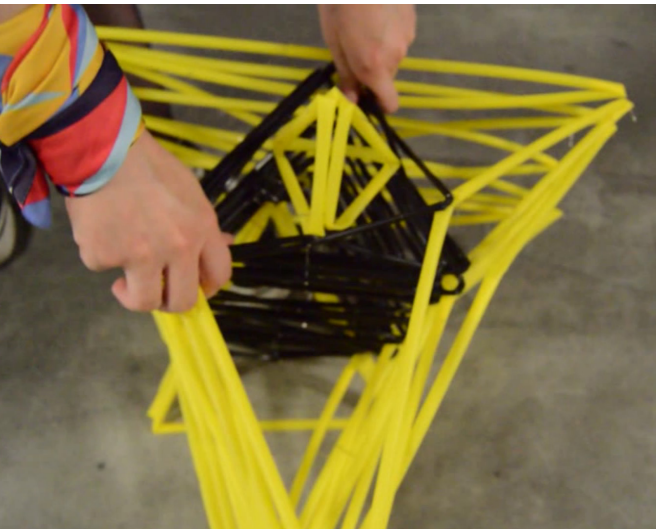
This form is flexible, and slender requiring a stabilizing element.

A superstructure is added around the core based on the same principles of an expanding lattice.

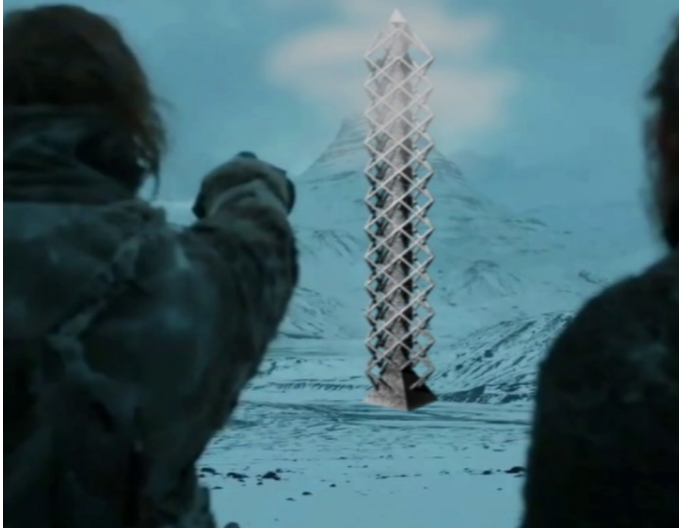
The overhangs act as a balancing force for the tower in a similar way as trapeze artist walking a tight rope.

The base of the form is contained by a pure triangular pyramid - being the origin of the tower and its roots.

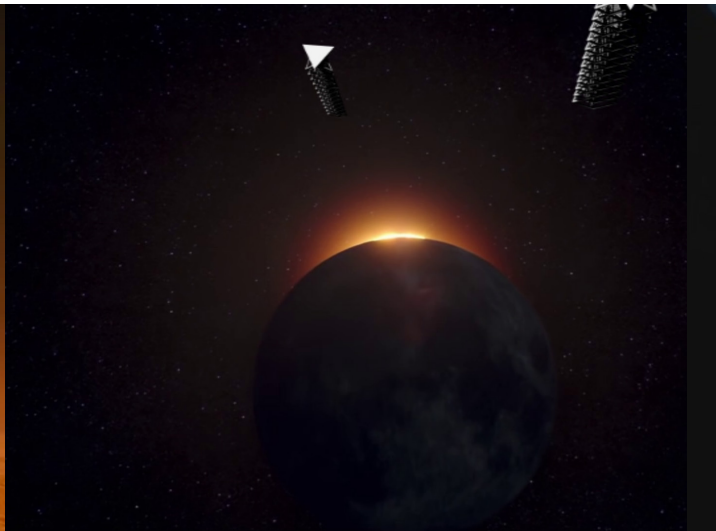
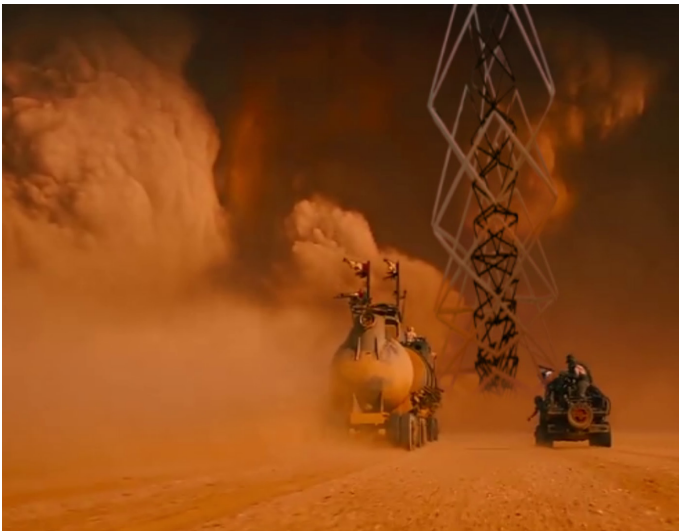
The final of the tower exposes the pyramid in a scalar displacement proportional to the contact points of the tower torso.







Diverse setting exploration.

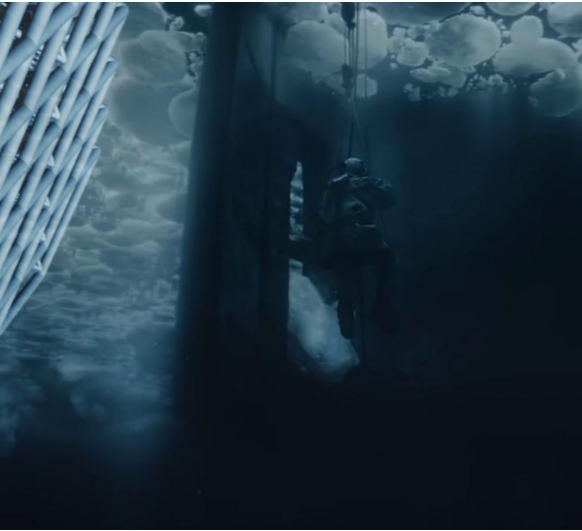


Harsh climate adaptation, extraterrestrial applications.



Chronological and climatologic spatial adaptation possibilities.





The anchor in the sky and the anchor on earth frame the dynamic path inside the tower. The elastic midsection enables movement.

The jumping tower becomes a traveler, an explorer, acting as an agent of change and dynamism. The jumping tower enables nomadic exploration and terraforming of extreme or inhospitable environments from deserts, tundras and oceans of earth to outer space.

The tower is able to capitalize on shading strategies with its expanding branches, able to form an oasis in the desert or reach out to become a vertical greenhouse, able to assist resource acquisition efforts, borrowing into earth, expanding under water or reaching out into space.



The jumping tower becomes a bridge to the stars, a retractable elevator into space, an interstellar explorer and colonizer, a vessel of civilization to discover the depth of the universe, able to adjust to changing conditions . Supporting chronological cycles on multitudes of time scales, changing over the course of a day, or a week. Morphing with the seasons, adjusting to the sunlight, temperature or surface exposure. The jumping tower becomes an enabler for the users.

The people become the protagonist or antagonist.

Their desires become the motivator of the towers movement.

The tower changes with their whims, evolving with humankind, becoming an adaptive tool for the future.

