



Teaching 'to dwell'  
via concepts  
ground, wall and  
canopy:  
A fragmented  
application in  
dwelling design

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OIKONET conference

Manchester/ September23, 2016

# A problem

The second year undergraduate design studio sought for new perspectives to a very classical design problem: single house design in the urban context. Due to the complex characteristics (intricate historical and new districts, diverse demography, traffic factors, the sea fronts, the view and transportation); Salacak/Uskudar district in Istanbul is selected as the *in-situ*.

Larrive addresses three practices that are essential for design teaching: making time for solitary re-action, becoming a perpetual problem solver and questioning the status quo. The methodology bases on ethnographical research where the teacher is also the observer of the process. Moreover the methodology detects the end products and the continuum of works following the design teaching approaches.

# Aim

The purpose of the study is to explore how students respond to abstract (possible scenario, household profile, demands and characteristics) and physical notions (forms, patterns and material) in terms of design solutions. Due to the *difficult to grasp* nature of notions that come along with ‘to dwell’ concept, students have certain challenges of handling ‘housing question’.

“Design is a sophisticated mental process in which different knowledge should be brought together.” (Lusofona, 2014)

*Habitation* or *immersion* in the practicum characterized as the most significant factor in the development of design knowledge. It involves commitment of an ‘...intensity and duration far beyond the normal requirements of a course.... Students do not so much attend ... as live in them.’ (Schön, 1983)

# teaching through abstract notions

According to Schön, in order to formulate a design problem to be solved, the designer must frame a problematic design situation; set its boundaries, select particular things and relations for attention and impose on the situation a coherence that guides sublime moves (Cross, 2007).

**“... the architect learns by making, learning by doing and thinking in acting” (Schön, 1987)**

“The intellectual atmosphere created in the studio where dialectics of learning and teaching have moved forward for discovering the knowledge, have encouraged the students to develop their mental faculties and designer skills in both their epistemic and emotional dimensions as a whole.” (Avci, 2010)

Especially during the workshops, the experimental and heuristic character of the design process made them to be curious about the problematique and helped them to explore the unseen and make the invisible visible.

The architectural design studio that contains experiment and inquiry on the basis; **other than learning commonly accepted knowledge**, it should target research of how this knowledge can be produced. The urge is not to share architectural knowledge by “narration” but to seek for a platform for **“probation and discussion”**. The distance between design studio teacher and architecture student is a problematic venue for design studio that originates from critique and experimental tendencies. Another distance aspect is to do with the “thing”. Architectural student **(designer) swings between these two distances**. Before covering these two **distances the-together-production-process** should be formulated for both the teacher and the design student. Thus; the constitution initial paradigms to do with the design process in another platform has been experienced. This experimental studio environment has enabled the attachment between the teacher and the student in a more efficient way.

**other than learning commonly accepted knowledge**

**“probation and discussion”.**

**two distances.  
production-process**

**(designer) swings between these  
distances the-together-**



“Metaphorical thinking, gives rise to awareness for discovering the new patterns and relations concerning design issues.” (Avci, 2010)

Design in architecture starts by understanding dynamics of a context and by decoding the knowledge of place where the space will be created. These are then transformed into spatial concepts and end with spatial formations.

# Methodology

Approach to the design problem / Programme: “Lonely man’s shelter”

Providing design programme through adjectives:

Keeping in mind that every person seeks for some interaction; a dwelling space will search for solutions for a single-living person trying to hold on to physical and social surroundings of Uskudar:

melancholic, romantic, flirtatious, epicurean with a religious faith, animal/guest friendly; mostly living at night, architect

The list of tools in relation to the enhancement of creativity included brainstorming, analogy and attribute lists to aid in “removing mental blocks” (Oxman, 1999)

week 1  
2

experimental teaching-  
parallel studios:  
space impact/episodes

week 5

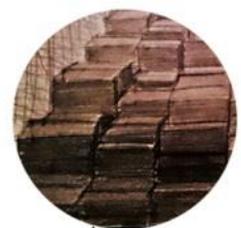
focus on "in-situ"-  
parallel visions /  
exercises on case studies

week 9

design interventions -  
micro scale  
design proposals

A semester of  
14 weeks

end product



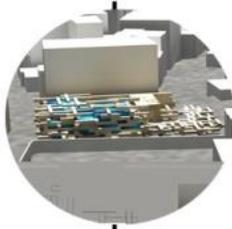
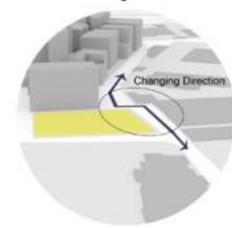
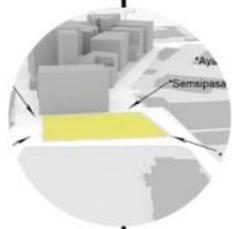
ground



wall



canopy



process  
design

short term experimental workshops; thus they have become aware of their embodied nature of thinking during the process of “learning by experience”

## **Experimental teaching – Parallel Studios: space impact / Episodes**

**Episode #1:** the ground /thresholds –

Exploration spatial definitions for ground continuity and the wall produced through the ground  
“The progress of parallel studios: space impact” – Lecture by I. Turkeri

**Episode #2:** the wall /thresholds

Exploration of spatial wall (surface) definition thrived from surface continuum  
Presentations (just on time discussions) – end of Session 1 / evaluations 1

**Episode #3:** the canopy /thresholds – public squares – Lecture by P. Özyılmaz

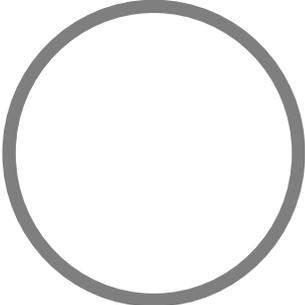
Seeks for spatial definition of ground-wall continuity with a canopy design

**Episode #4:** trans-edges/thresholds - space impact

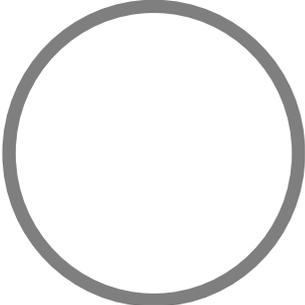
Presentations (just on time discussions)– end of Session 2 / evaluations 2

Formulation of ground/wall/canopy combinations in order to seek for spaces:  
feeling cold/soaked/dirty/thirsty/tired – how they refer to space

experimental  
teaching

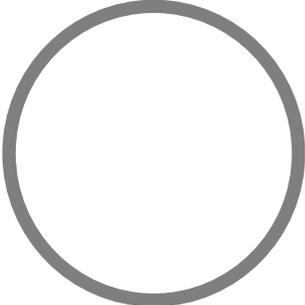


experimental  
teaching



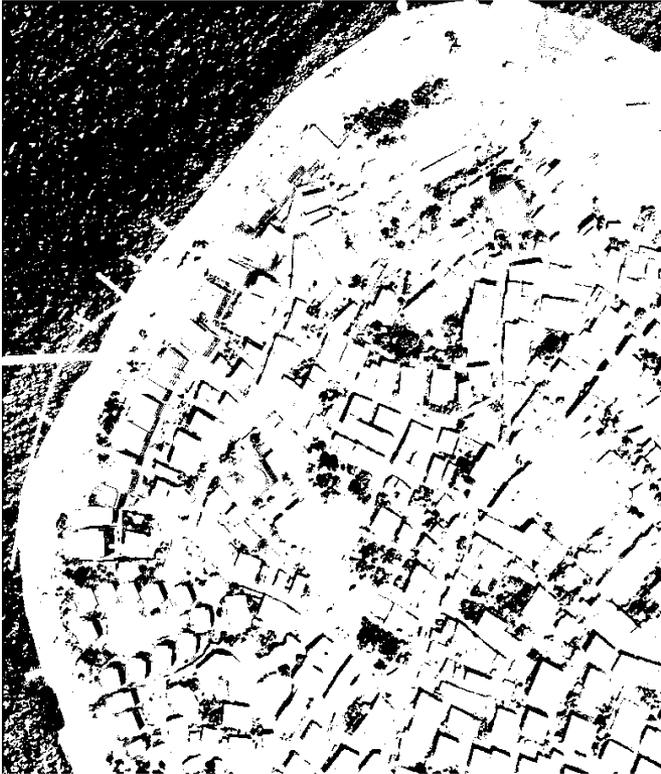
focus on 'in-situ'

experimental  
teaching



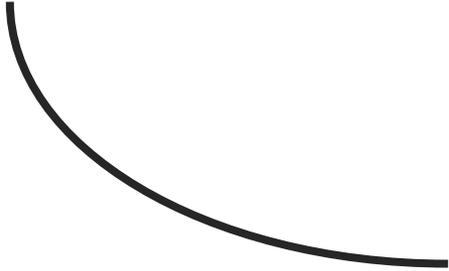
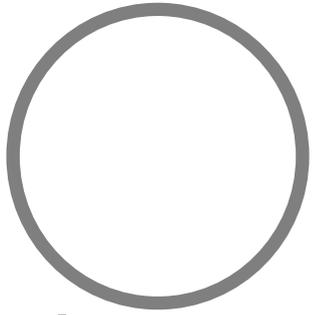
design  
interventions

focus on 'in-situ'



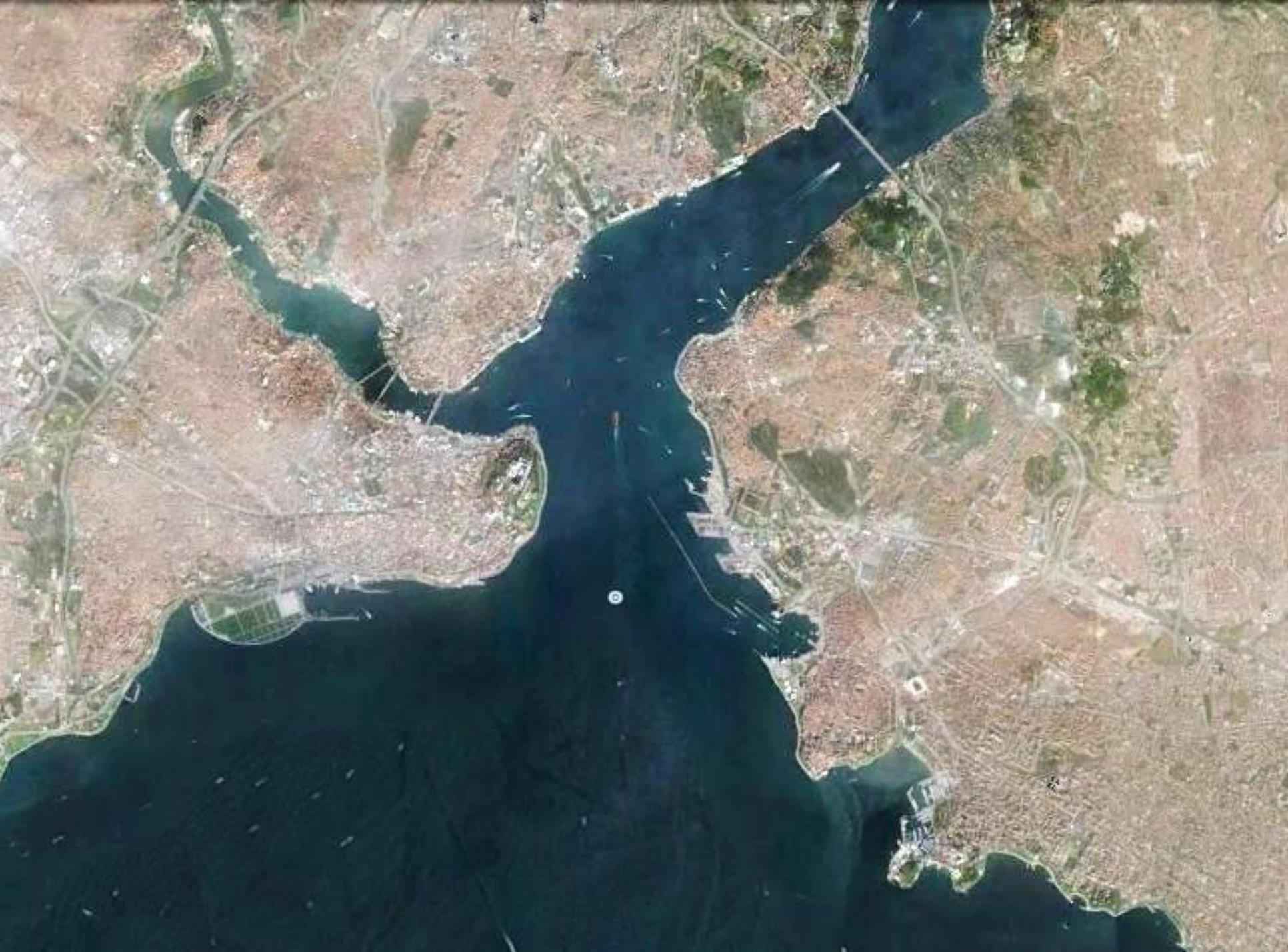


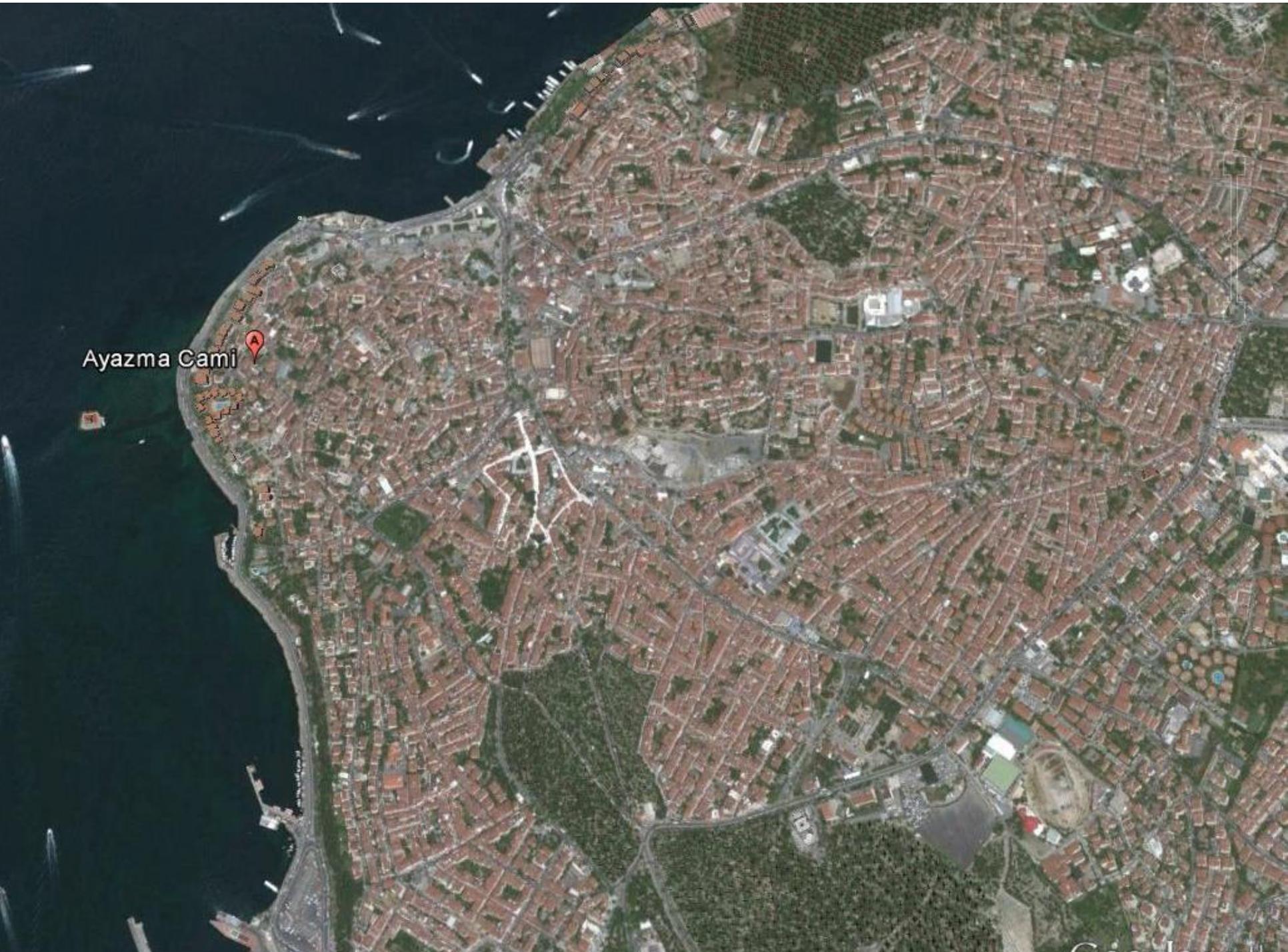




in-situ: Uskudar







Ayazma Cami

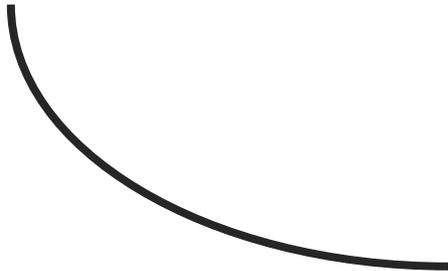
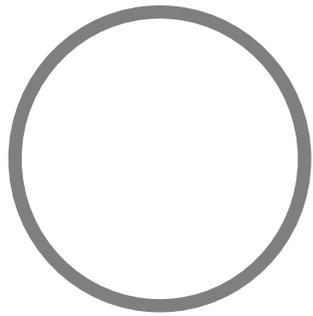




“...innovative architecture...should be supported by in-between reality of art and architecture.”

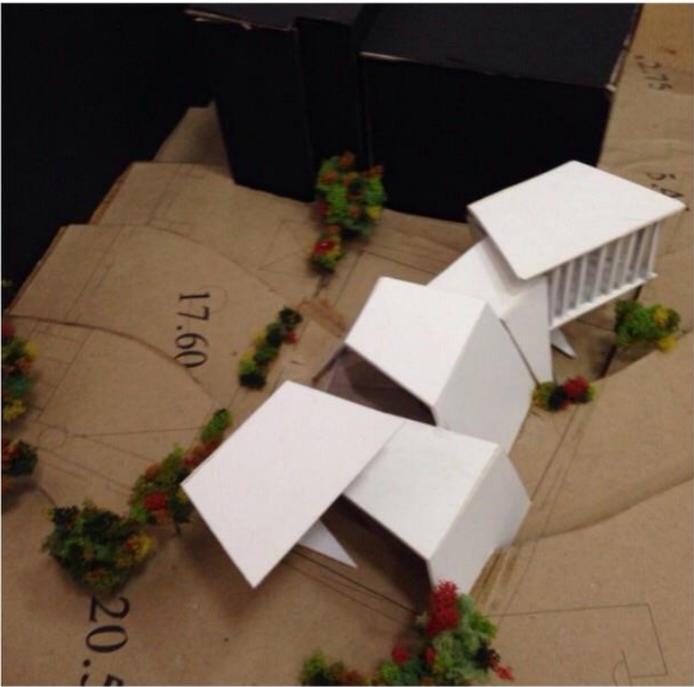
## **Design interventions – micro scale design proposals**

Seeks for design proposals and innovative solutions with respect to the housing design problem and notions studied

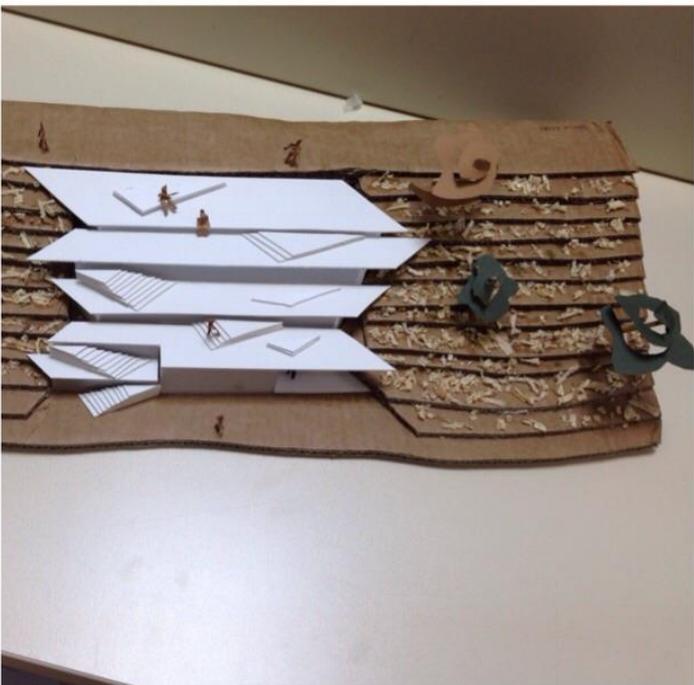




House Design 'architecturally'- a house design comes with functions as well as form









## ABSTRACT NOTIONS

- **User/function criteria** – using program whilst design proposal
  - User profile
  - Spatial formulations – connections between spaces
  - “Spaces” for functions – open plans, integrated functions
- **Master plan criteria / ABSTRACT**
  - Threshold notion
  - Integration
  - Congruity

## PHYSICAL NOTIONS

- **Form criteria** Ground – horizontal lines, perception of floors, topographical formulation
  - Wall – vertical lines, connection with the ground, the perception of scale
  - Canopy – the extension to form a shelter

DESIGN PARADIGMS		STUDENTS RESPONDED													
		 1	 2	 3	 4	 5	 6	 7	 8	 9	 10	 11	 12	 13	
USER/FUNCTION CRITERIA	user profile	●	●		●			●		●					●
	spatial formulations	●		●	●			●	●			●	●		●
	spaces for functions	●	●	●	●	●	●	●	●	●	●	●	●	●	●
FORM	ground	●	●			●	●	●		●	●	●	●	●	●
	wall		●	●	●			●	●	●	●	●			
	canopy	●	●	●	●	●	●	●		●	●	●	●	●	●
	ground + wall								●						
	wall + canopy			●											
	ground + canopy	●												●	●
	ground + wall + canopy		●							●	●				
MASTER PLAN CRITERIA	threshold notion	●	●		●			●		●		●			●
	integration	●	●	●		●	●			●		●			●
	congruity	●	●	●		●	●			●		●			●

- ‘User/function Criterion’;
  - architectural images and situations represent ‘the relations between the spatial form and everyday life’, form criterion refers to the dynamism in the design.
  - The strong bonds between the location and the object address the characteristics of that particular spot; transformation of a location into a place –texture, neighbourhood, social patterns, morphology in the urban context, position of building plot, climate and the unique proposal placed for that single design question.
  - Within the form criteria, the three main elements of a building are considered to formulate the entire form. Not only do these elements refer to single components; but to pairs such as ground/wall, wall/canopy or ground/canopy elements. These connections are considered to be the guidelines of design intensities. It is observed that the successful combinations of only two elements out of three might also lead to a competent design solution.

**\* Only one student did not continue with his ground-wall-canopy work in the house design but achieved requirements of the studio.**

- 'Form Criterion' stands for a 'learning by experience' approach. The critical and relational thinking is the most powerful instrument for new idea development; as well as the concept determination and architectural knowledge discovery. In this case 'Status Quos' are questioned.
- The combinations put forward as different points of views. This makes connections with project design phase to 'remove mental blocks' by brainstorming, analogy and attribute. The students are required to analyse Uskudar from the perspective of fragmented concept keys such as ground, wall, and canopy.
- As the design pieces are brought together within the theme of threshold. The metaphorical explorations were initially photographic and drawing-based studies parallel to Oxman, then model making considering the design themes.

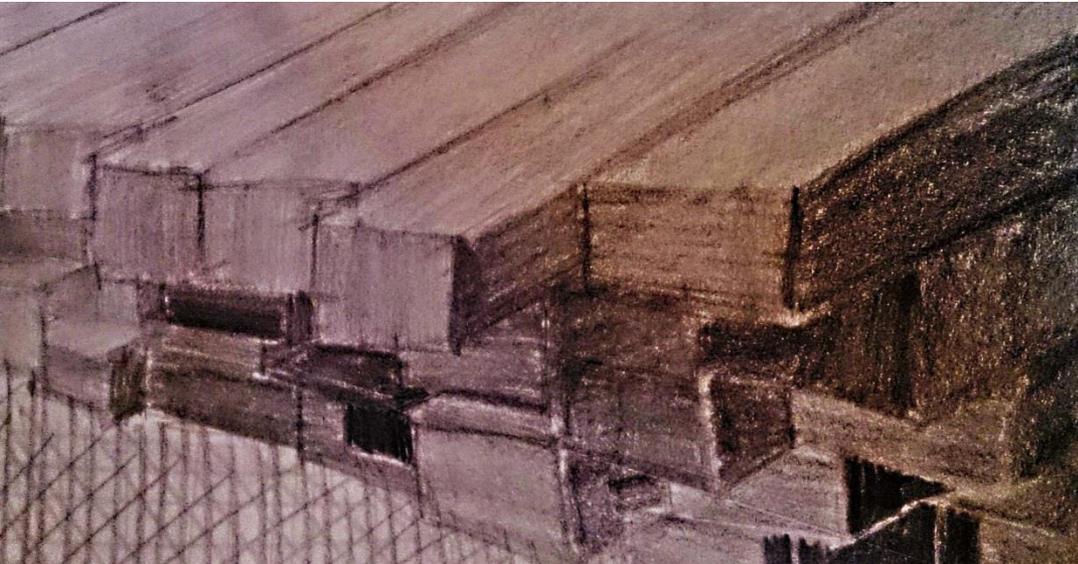
- In terms of 'Master-plan Criterion'; the abstract notions are addressed with the design itself. The design is seen to be an object, almost an architectural sculpture. Built environment is detached from the circular re-production with the user and the designed space as Habraken suggests.
- The object is tangible once it is designed; but the urban context is abstract and not familiar that is neglected in the entire formulation. Before the student contemplates on the structural and spatial rationality, the urge of tackling the question in the irrational area of his own mind is the basis of this studio. Thus the purpose is to initiate the area on the designer's mind that has not been surrendered by static elements related to the architecture discipline.
- Study by Weiss displays the findings through field and interview notes analyses using case-focused analysis. This approach attempts to understand 'phenomena by gathering a rich set of data for a limited number of instances to create a thick description' in order to frame the perceptions and organisations of participant activities. Schaffer refers to the analytic descriptions of key elements for the studio experience where the connections among main elements are categorised thematically.

- Some proposals display competency in form and user/function criteria which are considered to be architectural formulations and configurations.
- With respect to the master plan criteria the project may be unsuitable. Such cases refer to a very common discussion on the esthetical and functional features of the projects do not always imply that the design is also congruent to the surrounding characteristics.
- Madanipour defines house as a social structure in which private and public realms interconnect. The integration of the design with the urban context, texture and scale create a space of interaction. The levels of interactions are organised by the designer at a certain level. Sommer addresses studied on the seating arrangements and scales of spaces that enhance communal lives.

- The students' perceptions towards abstract and tangible notions are explored in the research. Also the transition of abstract notion, ideas to forms, patterns and usage are reviewed. The difficulties for architectural concepts' comprehension for second year design students are found; as tangible aspects are easier to comprehend and react.
- The study shows that the three elements (ground/wall/canopy) are considered explicitly. The user/function and master plan criteria urge for further considerations on the complex urban setting.
- The practice of dialogue limited teacher-talk and encouraged the 'learner voice' during round table discussions. Teacher's role was only becoming a 'Perpetual Problem-solver'. Problems surface as natural resistance to taking action toward a new possibility. These criteria are taken as problems of the dwelling. Dursun et al. points out that 'not only the design solution but also the design process has a significant importance in architectural education' [6]. Such single tendencies lead to competency in the general design intervention.

- It has been observed that; even though the study takes place in a significant district as Uskudar, students prefer to focus on the ground-wall-canopy combinations; regardless of the surroundings.
- The biggest challenge is placed on encouraging students to force students consider the site as an input. It may be inferred that instead of dealing with the abstract significations in a huge world of urban context; students prefer to stay in the *comfort zone* of familiar elements of a building (ground, wall, canopy) without referring to the dwelling question.
- Only more than half of the students took the Episodes as a basis to their lonely man's house design and continued till the end with determination. On the other hand; some did not take this initiative work as the basic start point. However; the majority of the competent projects display the traces of participation in the *Episodes* and concrete data collected from *Focus on in-situ* fragments. Thus; this study implies that making meaning for the abstract notions urge for hands-on exercises such as model making or silhouette analysis.



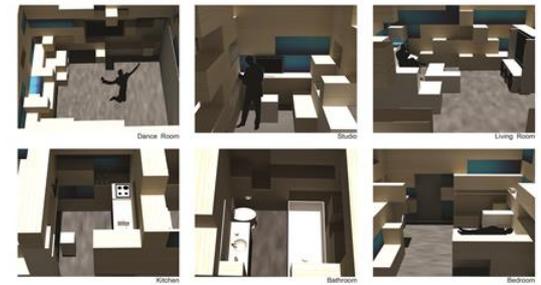
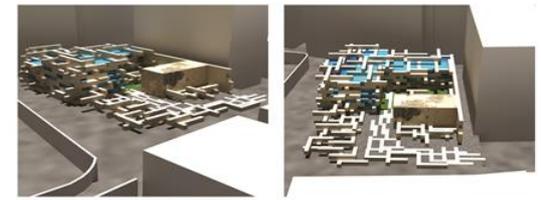
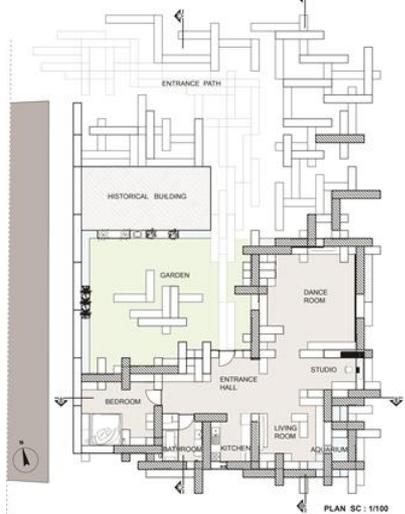




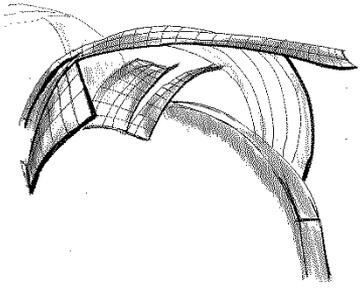
# SINGLE MAN

The project was carried out in the Üsküdar district Salacak. That's dancers. The location of the project and the relationship with environment has been influential in the formation of the form. The interaction between two streets and orientation has determined the location of the project. With the public domain in the project is intended to protect the neighborhood culture. A garden is thought that transferring to children of the dancer's dance experience. On the floor, canopy and wall workshops, created mobility is reflected to the structure and form is determined. As component favored wood units and in many parts of structure in the space formed need light was met by using glass. Thus, a structure has been constructed in relation with the sky and the outside world.

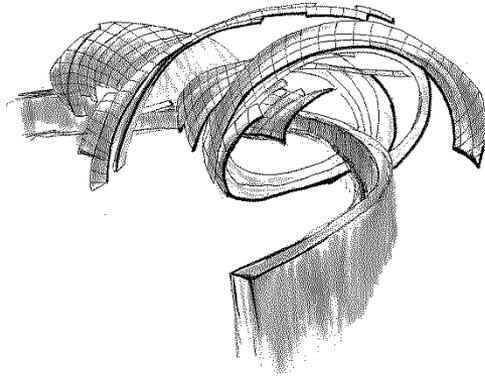
Proje Üsküdar'ın Salacak semtinde gerçekleştirilmiştir. Kullanıcının dansçı olması, projenin konumu ve çevreye olan ilişkisi formun oluşumunda etkili olmuştur. Projenin bulunduğu iki sokak arasındaki etkileşim ve yönelim konumunu belirlemiştir. Projede yer verilen kamusal alan ile mahalle kültürünün korunması amaçlanmıştır. Kullanıcının dans deneyimlerini çocuklara aktarabileceği bir bahçe düşünülmüştür. Zemin, saçak, duvar atolye çalışmalarında oluşturulan hareketlilik yapıya yansıtılarak formi belirlenmiştir. Yapı elemanı olarak ahşap birimler tercih edilmiş ve sık ihtiyacı yapılan birçok yerinde oluşturulan boşluklarda cam kullanılarak karşılanmıştır. Böylelikle gökyüzüyle ve dışarıya ilişki halinde bir yapı kurgulanmıştır.



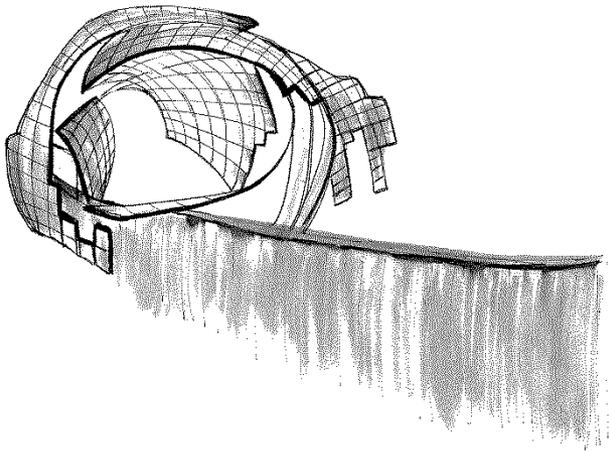




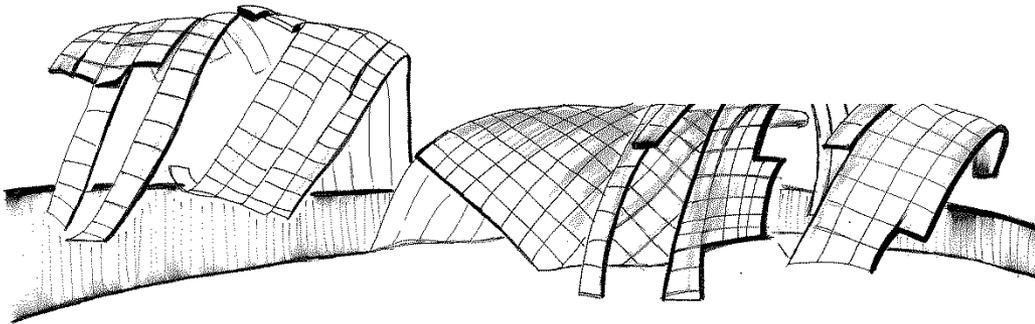
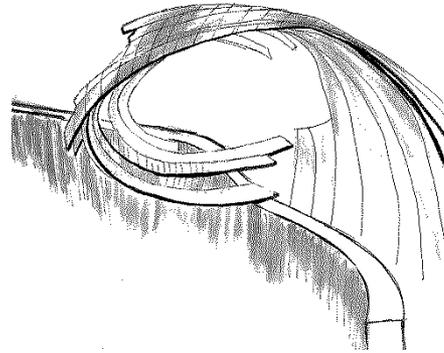
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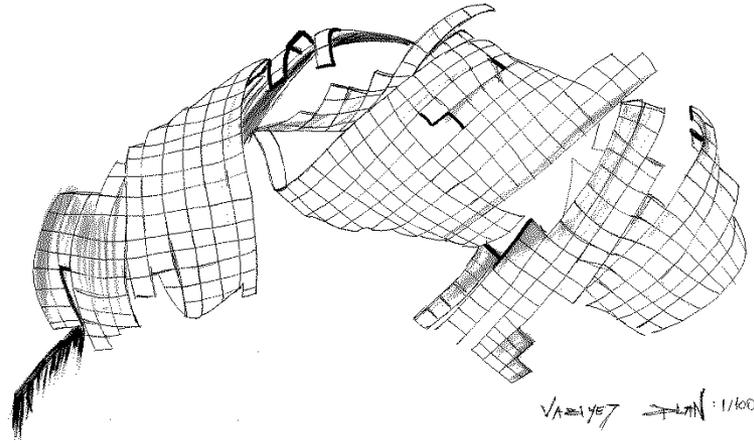
REST ÇİZİM 1/100



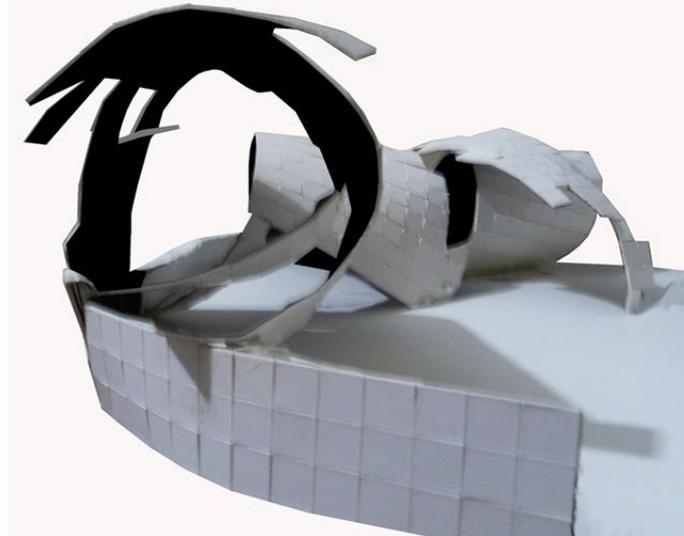
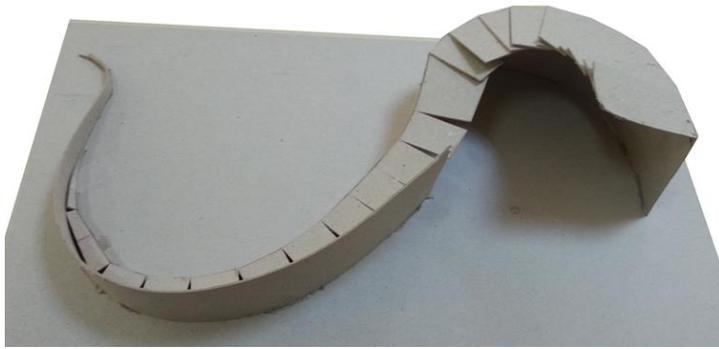
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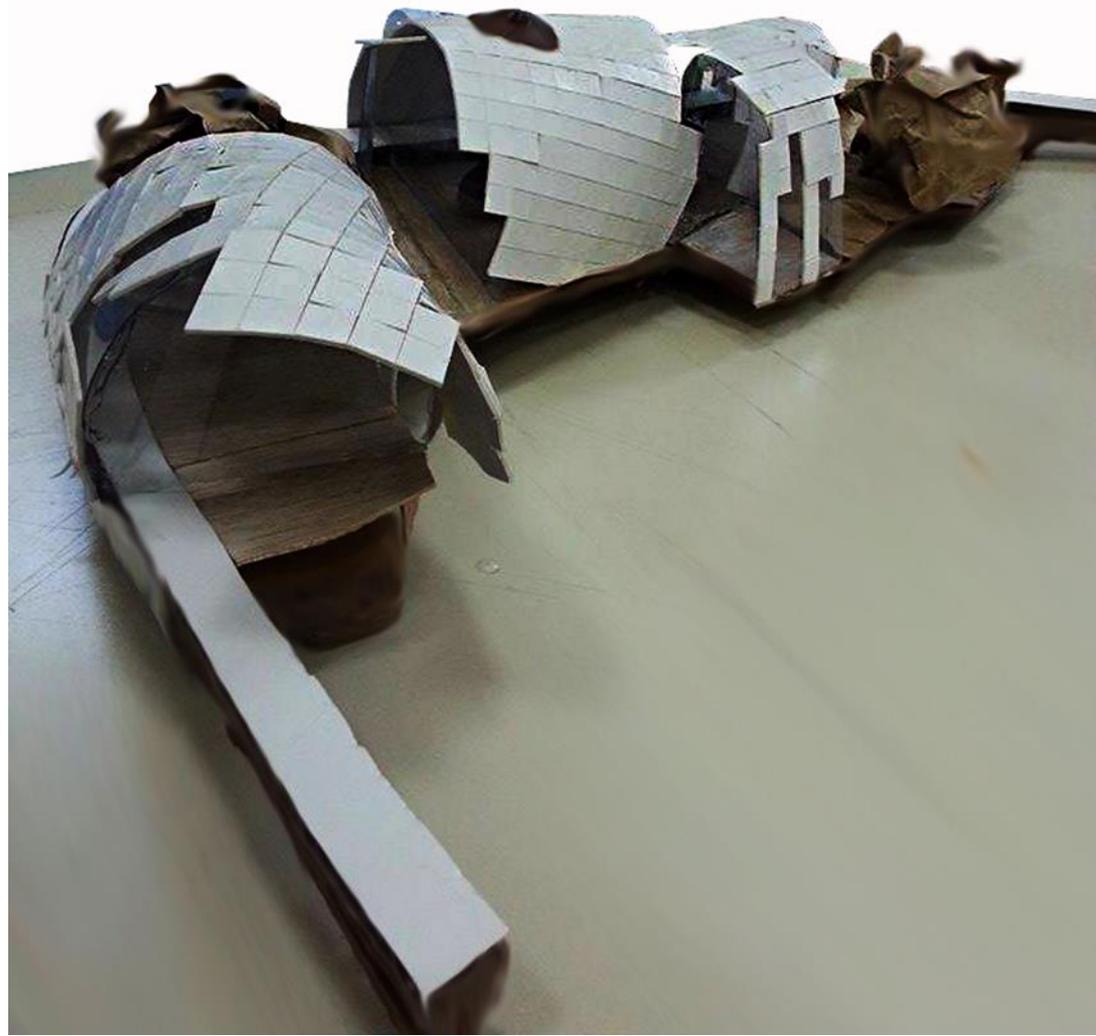


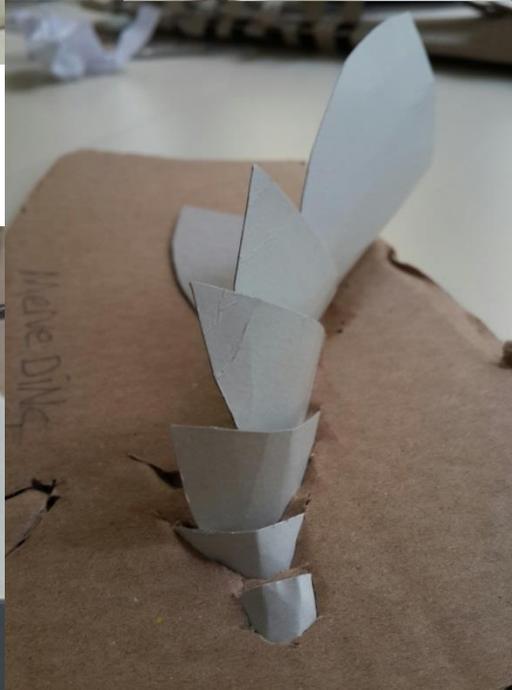
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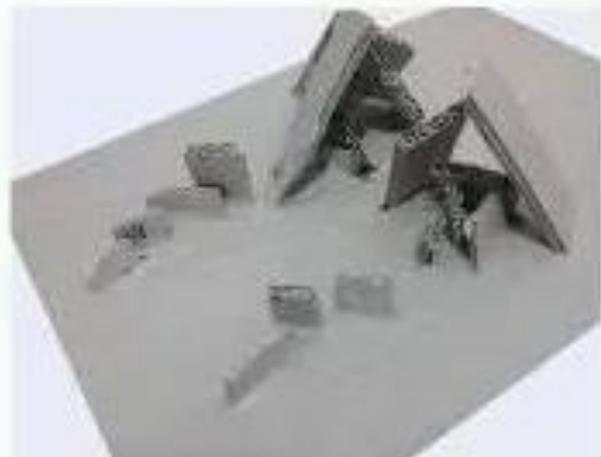
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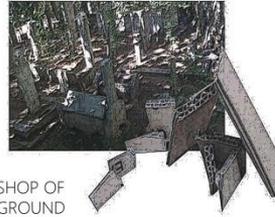




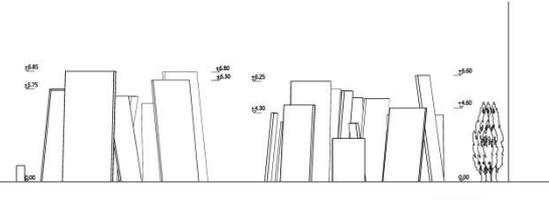
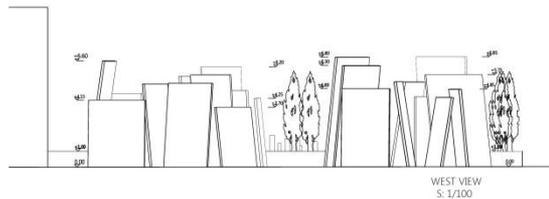
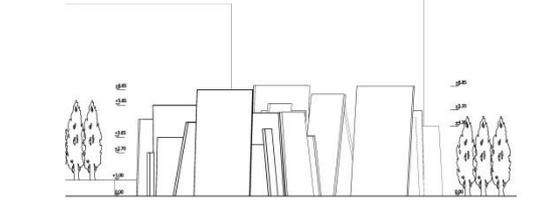
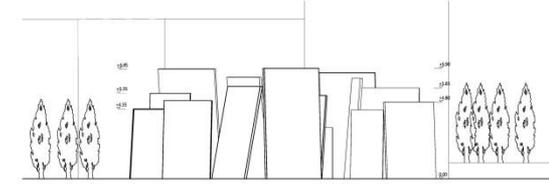
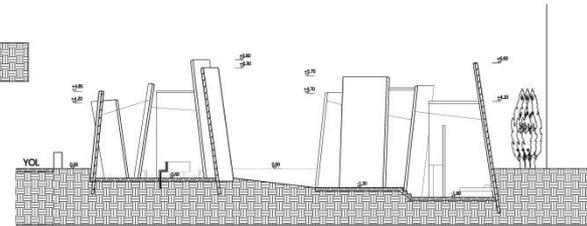
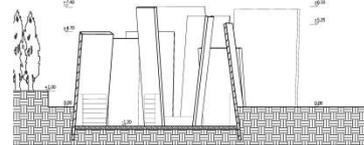
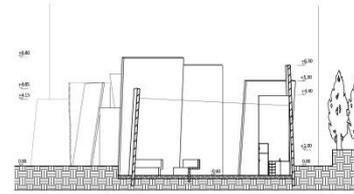
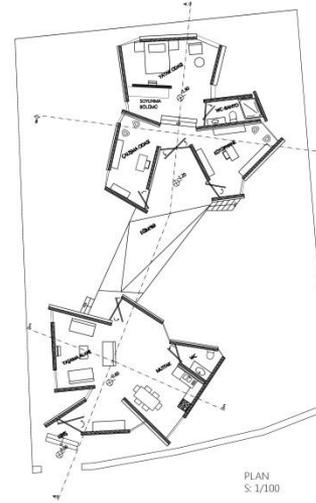
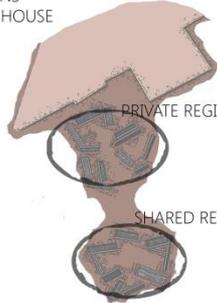
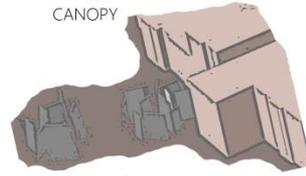




## LONELY MAN HOUSE

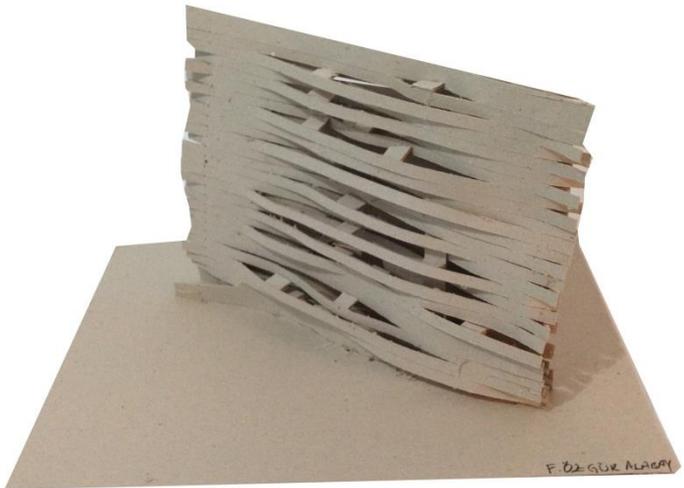
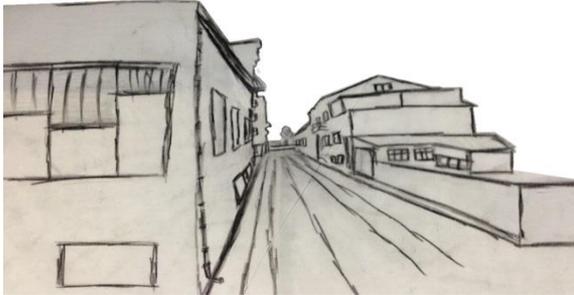
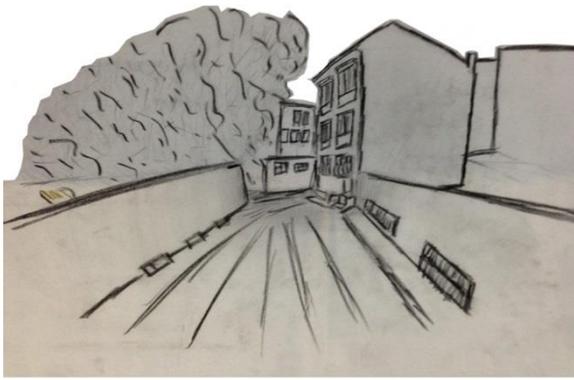


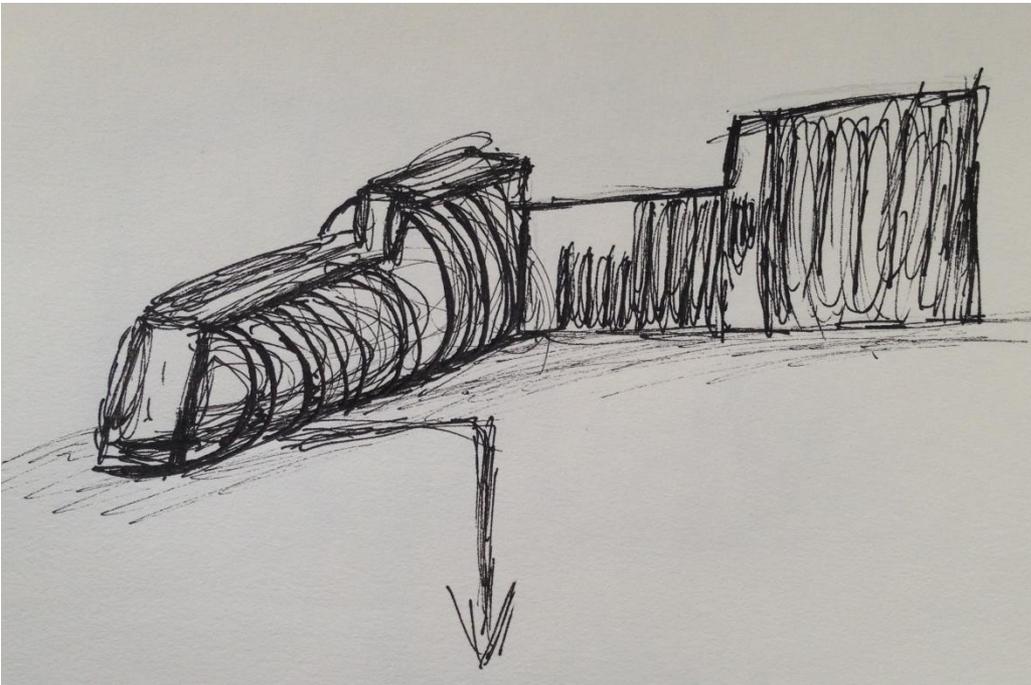
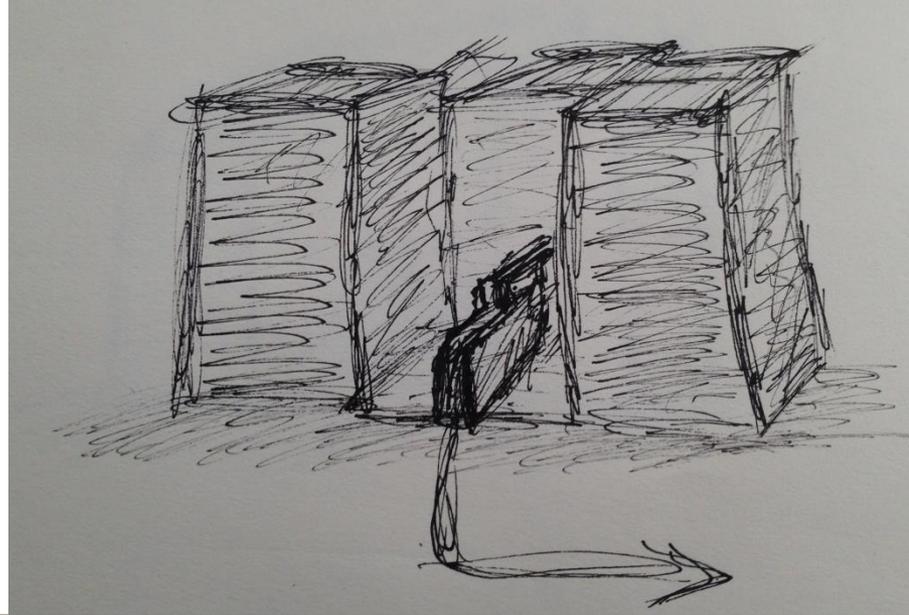
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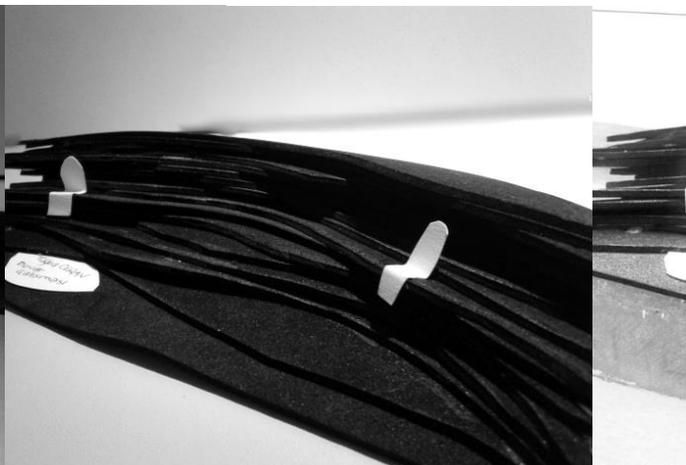
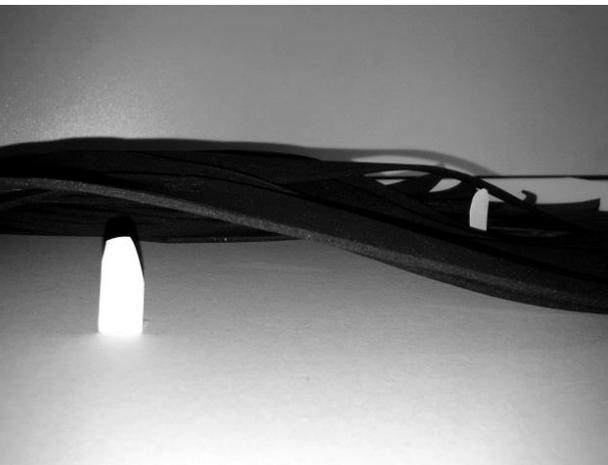
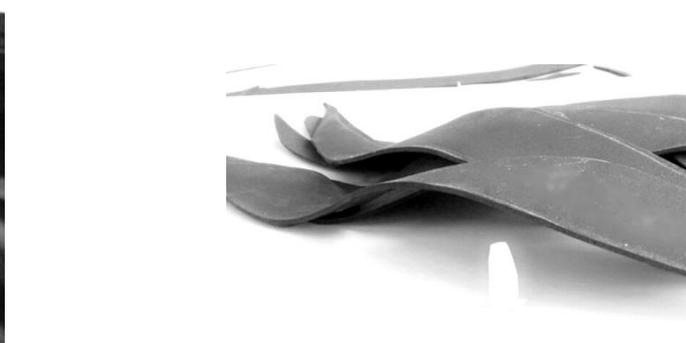
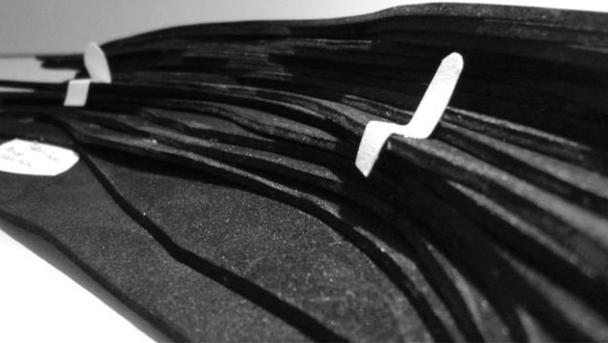
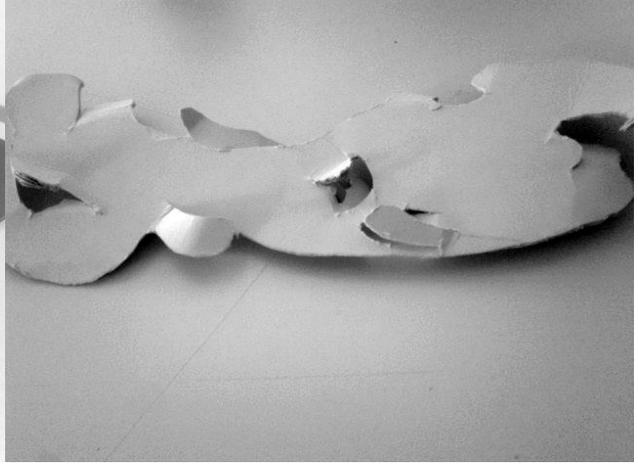
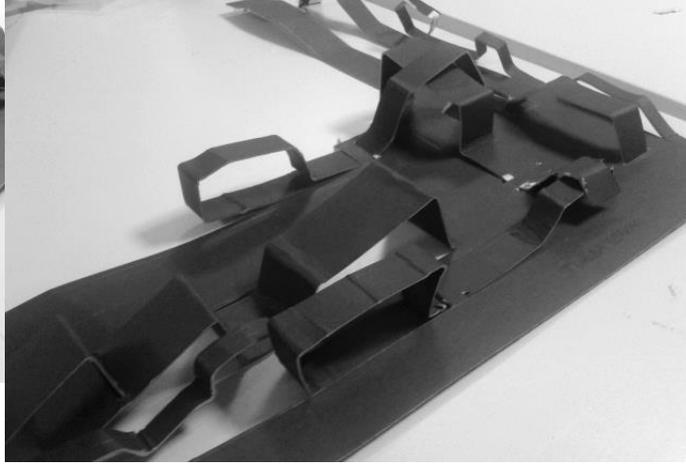
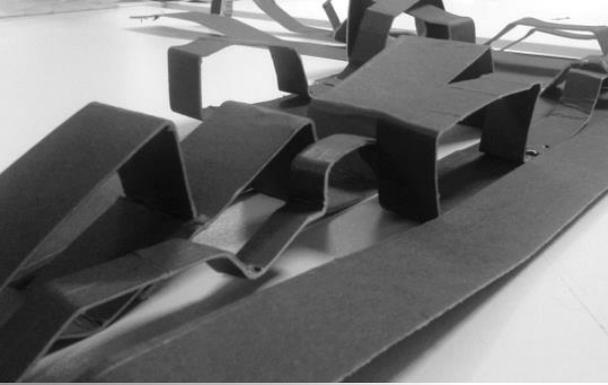
WORKSHOP OF  
GROUND  
WALL  
CANOPYTO  
LONELY MANS'  
CEMETERY HOUSE

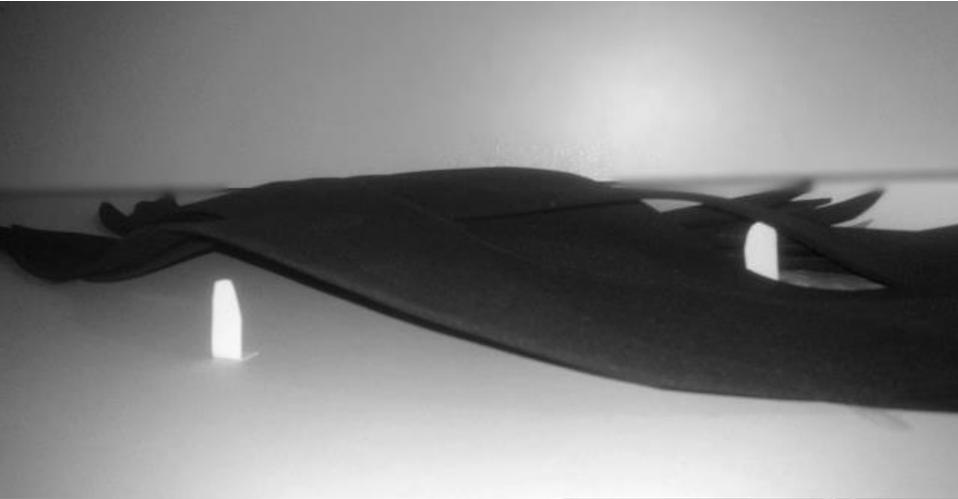
His analizi yapılarak oluşturulmuş olan kullanıcı profiline uygun konut yeri belirlendi. Mezar taşlarından oluşan zemin-duvar-şaçak çalışmasından sonra, bu taşlardan oluşan konut çalışmasına geçildi. Konut kullanıcının özel alanı ve misafirlerini kabul ettiği alandan oluşturuldu. Bu iki alan bir rampa ile birbirine bağlandı. Tüm yapı özel alana doğru gidildikçe bir mezar gibi yerin altına indirildi. Her iki bölüme ihtiyaç duyulan odalar yerleştirildi.

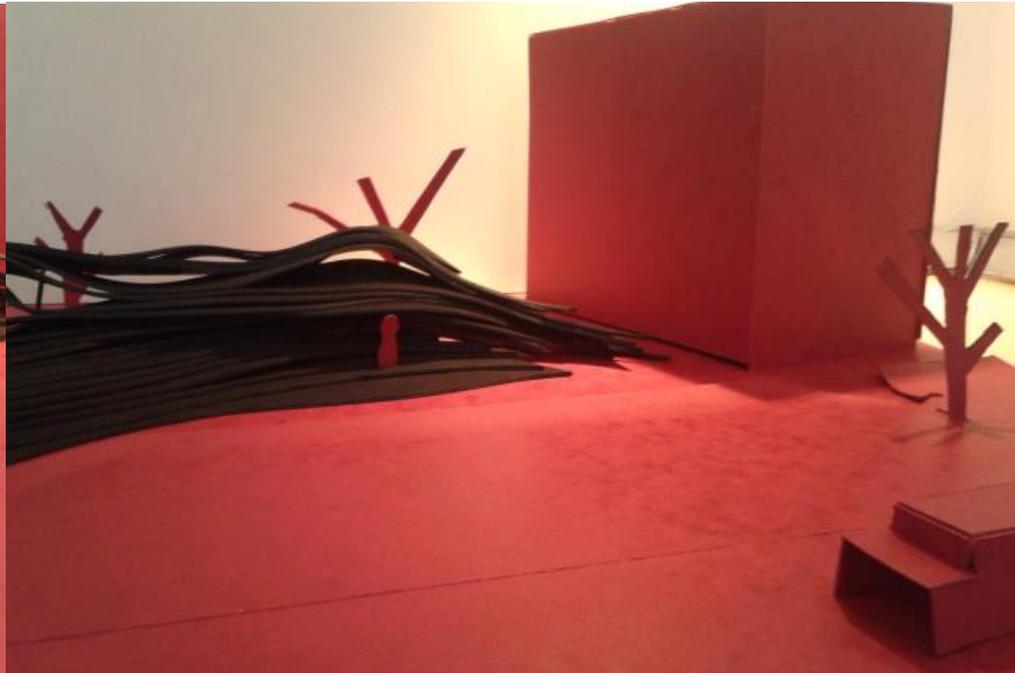
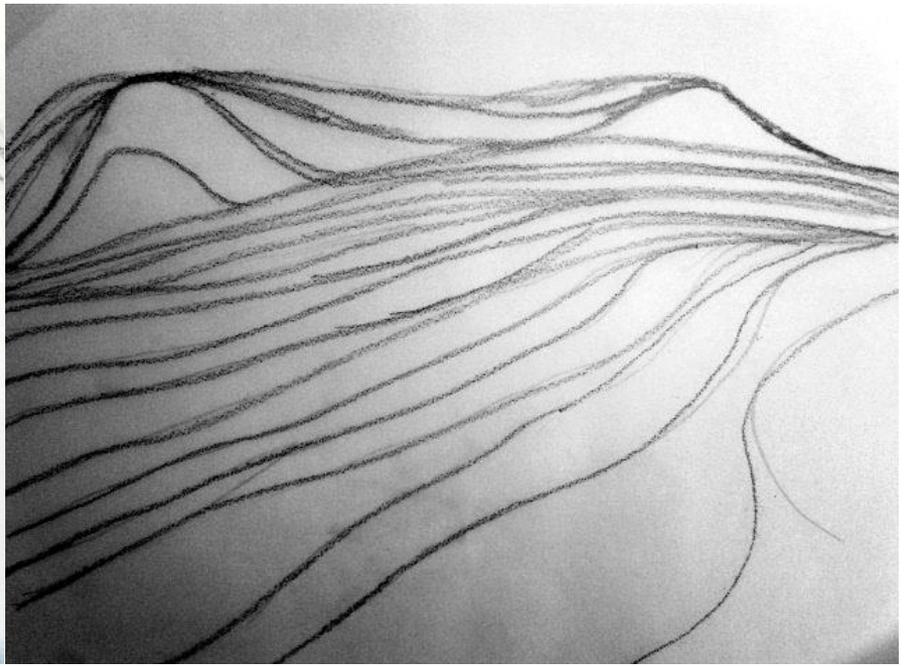
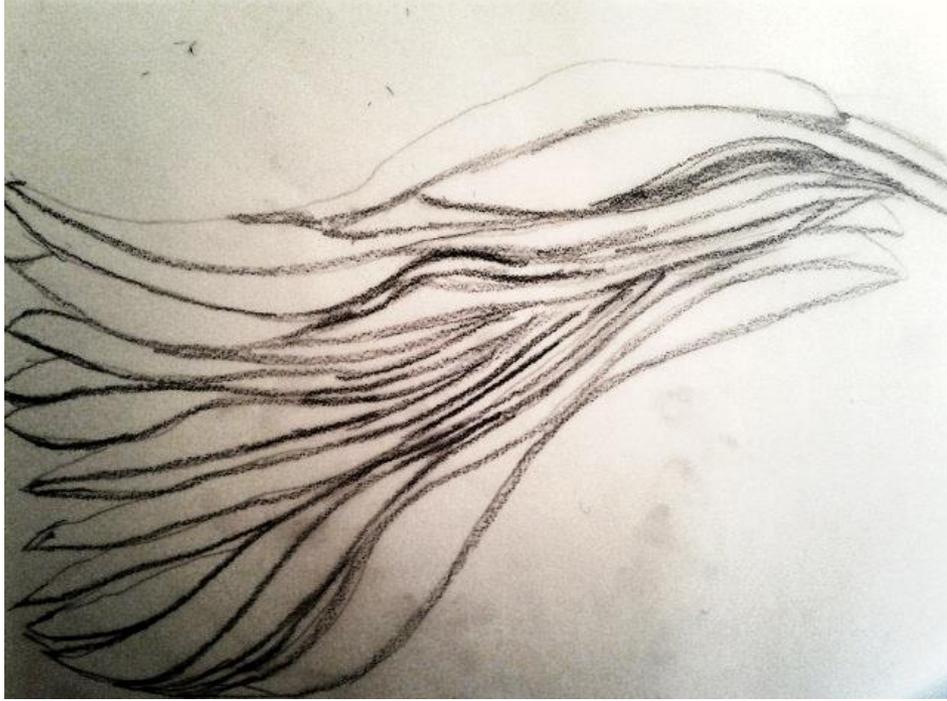
After analysis of sense, according to user profile, place of the house is fixed. After workshop of ground-wall-canopy which being form gravestone, working of house is began. The house is formed user' private region and region of his guests being hosted. This regions are connected a ramp each other. Towards to private region all structure is came down to underground like a grave. Necessary rooms are put in each regions.











## Concluding remarks

- First the ground-wall-canopy question is given then the specifics of the in-situ is discussed; could have been the other way around.
- Physical notions are comprehended easier.
- Abstract notions are hard to cope with.
- Design studio tends to be a platform for discussions on both physical and abstract concepts.
- Introduction lectures on abstract notions are not always helpful.
- Fragmented method enables more experimental design proposals.
- Crit-desk are more helpful to make full meaning of abstract perceptions as well as physical ones.
- Design studio teacher should be open and supportive on the design tendencies of the students.



THANK YOU