NEITHER INDIVIDUAL, NOR GROUP: A FIRST YEAR DESIGN STUDIO EXPERIMENT

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INTRODUCTION: NEGOTIATION AS A TOOL FOR ARCHITECTURAL EDUCATION

Architectural schools, particularly design studios are institutions where conventions of professional practice are exercised and developed. Two modes of operating in the design studio; individual and group work happen to be the major modes of practicing architecture as well. The given design tasks are expected to be carried out either as individuals or as a group, which despite of its plurality, the final performance should be united in a single body. Clear lines between where one's project begins and others end, surpasses the questions of ownership, ease the assessment of design performance and evaluation of the work itself. The same tendency towards singularity and detachment can be observed in professional practice where bigger questions of ownership and responsibility get in the way for economic benefits and need to build a professional identity. This might be seen as a natural consequence of the market dynamics, however potentials in a more open and relational practice could bring in a richer design environment.

Consistency and unison are generally taken as merits of a singularity, whereas conflict, indeterminacy, changeability are fundamental aspect of any design process. There are numerous examples of collective design organizations both in practice and in education. However in most of these examples conflicts in negotiation processes are seen as matter to be put down, settled and absorbed in order to reach a final as soon and as seamlessly as possible. It is important to question what is at stake when modes of collectivity are rigidly formed into a determined singular path and what might have been triggered by more vigorous negotiations ongoing in every level of design process.

At this point, this paper uses a design experiment in architectural education in order to explore potentials beyond two conventional modes of operation; individual or group, and introduce a platform to promote other paths of coming together, negotiating and designing in a relational context.

Negotiation, which can be described as communicating in search of mutual agreement, is a fundamental aspect of design process in various forms and contexts. In a sense, the overall design process can be seen as a complex set of concurrent negotiations; within oneself, between multiple designers, between client and designer, design tool and its user, program and site, etc. It can be argued that negotiation among designers is one of the most challenging in the decision making process of design. The mode of negotiation is a factor which forms, directs and defines the character of a design process as well as the outcome of that process. By all means, negotiation is a critical concept to be explored in design as well as in design education.

However in architectural design education, in the conventional studio culture, negotiation in decision making process is mainly performed between the tutor and the student and is often not questioned. This could be schematized as a vertical form of negotiation (Figure1a,b) due to the hierarchical relation among them. The verticality of this negotiation biases and pre-determines the character and limits the possible creative outcomes of design. On the other
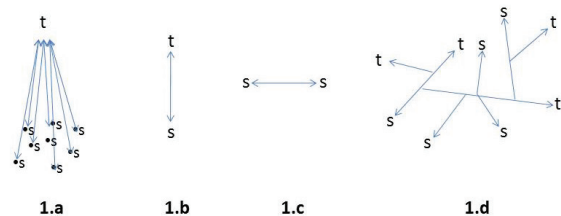

Figure 1a, b, c, d. Modes of negotiation in design studio

hand, it is also not possible to talk about a purely horizontal negotiation due to the nature of collective decision making (Figure 1c).

In this sense, this studio was designed to promote other paths of negotiation and observe the blending of horizontal and vertical negotiation models into a more complex network-like scheme (Figure 1d).

Students in the first year of their architectural education are provoked to search for their own modes of collaboration and enhance their co-existence with other students in a free manner. This is one of the central concerns for the educational motive of our studio.

Negotiation, in the context of this paper, is the object of tension between individuality and collectivity. Because the designer individuals both had to develop a personal stance in their given personal areas while acting on a common ground, dependent on others and create dependencies for them.

Today, as the world becomes more connected and modes of production get more relational, there is a need to go beyond the singular, heroic, genius myth of author/designer, which was heavily criticized by Barthes and Foucault in late 60's. In 90's Bourriaud in "Relational Aesthetics" (1998) talks about the possibility of an art, taking as its theoretical horizon the realm of human interactions and its social context, rather than the assertion of an independent and private symbolic space. This points to a radical shift in the aesthetic, cultural and political realms, also in architecture, where conventional modes of organization and roles of authorship fall into question.

In this sense we believed that design education should have more to offer than the conventional individual designer approach, or a team work suppressed in a singular form and the studio environment could be the platform to experiment for further modes of collectivity in design.

ITU FIRST YEAR ARCHITECTURAL DESIGN STUDIO; ORTANCA3400

ITU School of Architecture's first year architectural design studio, is located in a large open space: studio no.3400, which usually houses two or three independent study groups, consisting of 220 students and accompanying tutor teams which renew every year.

In the academic year 2010-2011, our study group "Ortanca3400", as entitled by students, was constituted of four tutors and 67 students. The word "Ortanca" refers to the meanings both something in-between, and a famous garden flower.

Ortanca3400, aimed to create a participatory and exploratory design environment. As feminist educator bell hooks argues in her book "Teaching to Transgress: Education as the Practice of Freedom", a marginal place enables one to develop a language that forges a space for alternative cultural production and alternative epistemologies – different ways of thinking and knowing that were crucial to creating a counter-hegemonic worldview.

Ortanca3400 was structured as one big group accompanying four tutors present simultaneously. While the four tutors provided different perspectives to studio issues, the structure allowed students to interact freely with any tutor in random order.

This particularly free and integrated organizational model, urge from the need to break the didactic/hierarchic top down pedagogical model and encourage the students to develop a sense of self-consciousness and identity in relation to different tutors and fellow pupils.

The schedule enduring two semesters and weekly twelve hours of active studio participation was divided into numerous large and small projects. By this schedule, the students were intended to confront as many issues as possible such as context, scope, methodology and tools.

By the "Karaköyx2" project, the intention was to understand a dense urban context and to design in it concerning spatial, programmatic and structural possibilities. The organization of the process was designed to experiment different modes of collectivity, to monitor the development of the students' design approaches, and to examine the conventions of collaboration in architectural education.

Through this particular design studio experiment, its outcomes and evaluations, by challenging conventions of collaboration, we aim to discuss potentials for an alternative 1st year architectural education.

A DESIGN GAME: KARAKÖYX2

"Karaköyx2", was the final project of first semester of the first year design studio at Istanbul Technical University's Faculty of Architecture in 2010-2011. This six week long design project was aiming to deal with several important issues at the same time, alongside experimenting on studio culture in architectural design education. The project was designed as a puzzle-like collective game where each and every student was a key participant of the game and every individual wins collectively. The dynamics of the game allowed us to facilitate and monitor different modes of collective design, experiment on "negotiation" as an integral element of the act of designing and stimulate alternative modes of authorship in architectural design studio.

The area chosen for the project provided the students the opportunity to understand and intervene into a historic district of Istanbul, namely Karaköy, which is located below Galata, between two bridges of Golden Horn. Karaköy, being one of the oldest districts in the city, has historically been accommodating a mix of commercial and social programs and providing a lively diverse urban condition. Due to its location and its historic heritage, the area continued serving the rest of the city as a critical urban hub and preserved its heterogeneity in the history. However, now the district is at the verge of massive urban transformations due to new investment plans that aim to gentrify and replace the existing fabric with a new, generic program.

The main motivation of the design game was to "double" the physical space and social life in Karaköy by adding a layer of programmatic volumes and connecting structures, which eventually will form a network over the existing city. This would create an alternative to neglecting the existing fabric and replacing it with alienated programs. Students were asked to build a network that connects every square of the grid, meaning the whole area of Karaköy. At the end of the design process, the whole area would have been added a new layer of a network, which contains new programs, and functions that doubles the life in Karaköy.

The project brief and rules of the design game, was given in a leaflet as such:

- A continuous network structure will be designed to double the livable spaces in Karaköy by adding a layer of programs and uninterrupted access over the area. The design proposals will be done in one's individual square, but each square has to be connected to each of its surrounding squares and to the ground. To achieve this, design decisions will be given both individually and collectively. No square will be left outside the network.
- In each square social, cultural, economic, ethnographic dynamics, current day and night uses of spaces, movements of goods, vehicles and people, user profiles etc. will be *analyzed and visualize*d via maps and other documents. The program in each square will be proposed based on these analyses.
- Existing built fabric will be analyzed, calculated and the proposed volume will be planned to double the existing built fabric.

The study area was divided into grids composing of 67 squares of 50x50meter. Each student was given a 50x50m square randomly, in which they are asked to propose their architectural interventions individually (Image1). Simultaneously, they had to form a programmatic and physical network overrunning Karaköy, which forced them to negotiate with their neighbors in building connections. Due to multiplicity and complexity of negotiations, gatherings were constantly formed and reformed, concurrently. Neither as a group, nor as fully individualistic, an open platform facilitated collectivity as a fluid function guided by the choices of designers and requirements of design subject. Different from having to choose between individuality and collectivity, individuality was reinforced in a collective manner.

Three different scales are taken into account in the playing of the game:

- Individual scale: each one of 50x50 meter squares
- Neighborhood scale: 8 or less surrounding squares, depending on the location.
- Masterplan scale: overall platform including all squares

These three scales do not represent any hierarchical order; therefore design decisions do not have a top down relationship. Design decision taken in an individual scale might directly affect the masterplan or vice versa. Each student will make interventions in their own square, but they have the potential to affect the masterplan by empowering that decision in accordance with other individual squares.
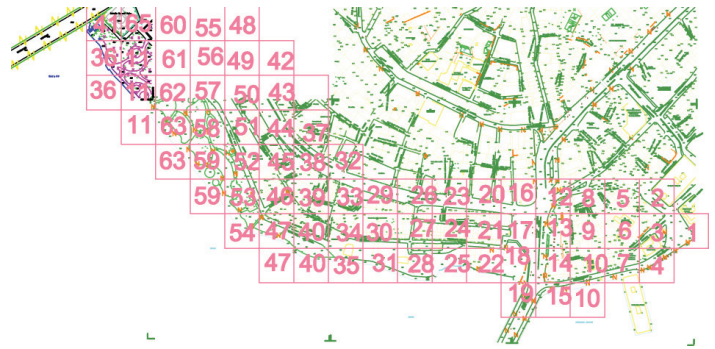

Image 1.The gridded platform over Karaköy, and squares with numbers
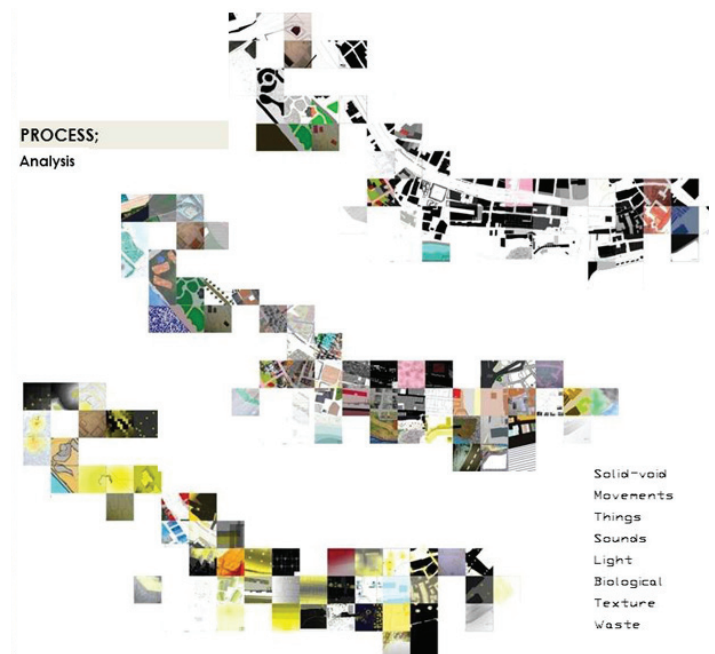
PROCESS: MAKING THE GRID, ANALYSIS AND INITIAL STUDIES

PROCESS;
Analysis

Solid-void
Movements
Things
Sounds
Light
Biological
Texture
Waste

Image 2. Solid-void analyses brought together in physical and digital media

The very first step of the overall process was implementing "the grid" of 67 squares on the ground of the studio space in 1/200 scale. Literally bringing the squares together on the physical ground provided a platform to have an overall view of the site, discuss, observe and initiate inter-square relations in varying scales. Besides being a practical solution, it promoted physical and social interaction, evoked dialogue, contention and reconciliation among students, which is the basis for this design project.

The design process began with analysis. The students were asked to make excursions on site to collect data and prepare visual analysis under seven titles; solid-void, movements, sounds, light, things, textures and bio-environment. Each student made their analysis in their own square but used common visual codes to be able to bring them together. The analysis squares were joined on the physical and digital platform and discussed collectively. (Image2)

Followingly, students built 1/200 scale models of existing states of their squares. After gathering all models on the platform, collective discussions and evaluations were carried on how to form a network and how to double the physical space.

Based on the verbal discussions, 67 students carried a collective study on a conceptual model of the network overrunning the site, using a continuous metal mesh material (Image3). After the evaluation and discussions on the initial model, a secondary but more detailed collective model was carried out by using more varied materials using only red color. In the beginning single material, single color was preferred for collective studies on masterplan, whereas later more independent use of materials represented the diversity of individual approaches.

After numerous experiments on the physical model and intensive discussions in a variety of scales simultaneously, a collective 3 dimensional masterplan was achieved.

In the following step students were asked to work in a more individualistic manner to develop their proposals in their own squares.

Each student shared their proposals in a collective session by presenting their proposals in four images only (drawing, render, sketch,

etc.). They received critics from the tutors and rest of the students and continued working on their proposals in the remaining 2 weeks, organizing themselves freely on how to continue their collaboration with others.

A ONE DAY EXPERIMENT: TRACING MODES OF COLLECTIVITY

At this stage of the project, we carried out a one day experiment in order to make visible and document a section of the ongoing negotiation processes and different patterns of relational organizations. This experiment was considered to be a condensed, more organized and fully documented simulation of the 6 week long project.

Students located in the studio according to their locations on the Karaköy map. This 5 hour experiment was consisted of 3 stages and started with placing students' individual proposals on the Karaköy map-grid.

The main questions that were asked to students were:
How is the "network" that connects the whole area formed in your neighborhood? How is the continuity of the "network" in your individual and neighboring squares? How does this "network" effect your design proposal?

In the first stage, each student was required to gather around the map-grid which was placed on the studio floor, analyze the relation/connection of his/her design proposal to the 8 neighboring grid unit and the whole "network" and document the active condition quickly with representation techniques such as sketches, drawings, and notes in 30 minutes. (Image4)

At the end of the first 30 minutes, he/she was asked to return to the table, and develop his/her design proposal according to the actual condition he/she recorded and develop the project in order to "strengthen" the current network connection. The improved conditions were asked to be represented by plans, sections, sketches or models in 45 minutes. In this stage, the students were intended to work individually but some communication among individuals was allowed.

This stage is repeated three times during the experiment and their A4 submissions for each stage were collected to be examined later.

Image 3. Progress of the project on the grid-platform

After the experiment, Karaköyx2 project continued for another 1,5 weeks in a less controlled manner. Meanwhile, the design proposals were developed by new representations, studio critiques in variable configurations. It was finalized with an exhibition open to the whole faculty.

OBSERVATIONS ON THE EXPERIMENT, REFLECTIONS ON DESIGN WORK

Image 4.From the one day experiment

This one day experiment was a significant manifestation of the 6 week long project in a condensed format, with more legible outcomes. The tendencies in formal expressions, negotiation paths in design decisions and collective organization models became more visible and traceable via architectural representations which allowed us to make clearer observations and speculate on several issues.

Before examining the outcomes, it is important to underline that despite of the rules and guidelines given both in the experiment and in the overall design game, the process had a student-initiated, self- driven character. Students were urged to integrate their designs and build a network, but they were free on how to do it and to what degree. Therefore the outcomes, both the projects themselves, and emerging organization models, can be considered as provisions to examine and understand potential modes of collective design.

Taylor and Walford(1972) states that the behavior and the interaction of players in a game can possibly involve competition co-operation, conflict or even collusion, but it is usually limited or partially prescribed. Some games nevertheless are still primarily concerned with the desire to 'understand the decision making process' as in role-play; others, however, may be moving towards a prime desire to 'understand the model' or which the game itself represents.

In this sense this experiment is a tool to understand several intertwining issues, but mainly two of them; negotiation paths in design decisions which lead to new collective organizational models beyond individual or group work, and its reflection on architectural design subject itself.

The major subject of negotiation in the design process was the question of how to provide the continuity of the network. It became a signifier of the strength of negotiation. Due do unique dynamics of each neighborhood, the network showed variety in strength and in continuity in parts of the grid. Some areas integrated thoroughly, whereas some remained unattached despite of the insistent integration demand of the experiment.

There appeared different designerly reactions to the request of integration among the squares.

Regarding the network, some squares took on the role of providing a structural and programmatic "connecting element" such as a roller-coaster, bridge-exhibition gallery, connected view terraces etc. (Image5).

Another observation was the reflection of integration level on the formal attributes of design proposal. It was clear to read that the team
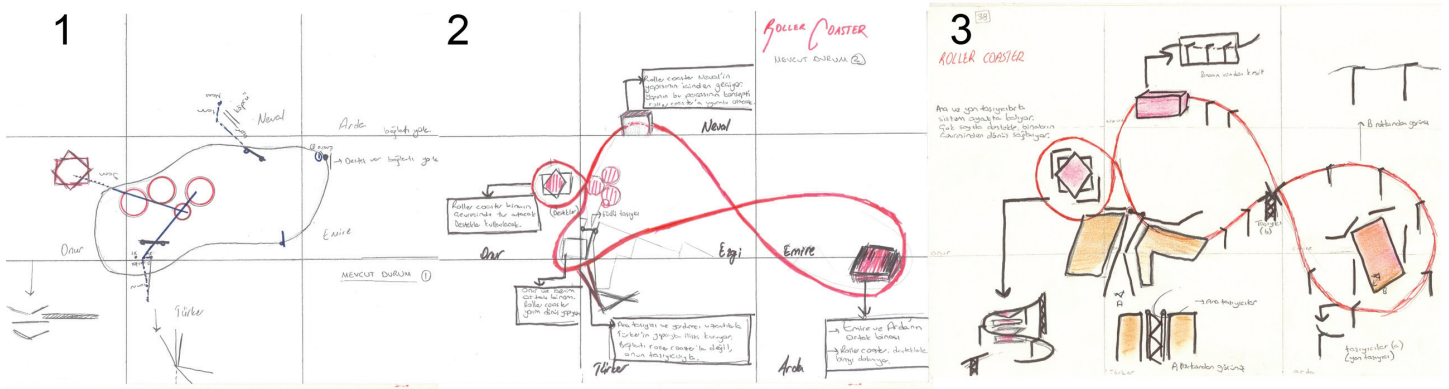

Image 5. Ezgi Kızıl, 1st, 2nd and 3rd step schematic drawings (Example of the Roller Coaster functioning as a "connecting element")

character became more evident, the more formal similarities were visible in the neighboring squares. Some neighboring squares took on a team behavior and performed in full cooperation from the beginning to the end. They developed a common formal language in order to express the team character and applied it to the structural or tectonic aspects of the buildings they proposed. (Image6)

Also in squares performing individuality together with strong relativity with neighbors, it is possible to trace the spreading of formal attributes from square to square (triangular forms, squares, cubes, etc.). (Image 7)

Squares which represent a very strong individuality together with a high awareness of the surrounding context also advanced their proposals in accordance with the progress of network. (Image 8)

In those squares where the students worked more independently and didn't have much awareness of potential relations with their neighbors, solved the requirement of integration to network by adding foreign bridge structures between neighbor buildings. (Image9)

There were also examples of neighborhoods where integration was explored not only physically but also programmatically, such as; Institute of architecture and its sub-units, a union of a variety of ateliers-workshops. During the process, such groups were simultaneously formed and reformed with overlapping and transitory borders all over the area.

Another behavioral grouping was observed in buildings relationships with ground level. The idea of elevating the buildings on pillars and making them a part of the network itself spread over the squares and resulted in a neighborhood consisting of elevated buildings. The influence area of such design decisions could be read as the borders of informal groups formed around a design approach.

In this experiment the students were asked to study and document all of adjacent squares in each step of the experiment. However it was observed that some students represented less than the surrounding 8 squares and some represented more. It was clearly seen that some students took notice of even the neighbor's neighbor and had a high level of relational awareness, whereas some only had interaction with one or two squares only. This showed the variety in degrees of interaction and scales of group-like organizations.

Different modes of collectivity and organizational forms didn't only become traceable but also greatly influent on design outcomes.

FINDINGS AND EVALUATION

In the six week long working period, students have performed different modes of organization in their collaborative design processes. This was mainly due to differing personal reactions to the necessity of collaborating and negotiating, imposed by the setting of the game. Some students from the beginning performed in a more individualistic manner, some alternated on different levels and modes of collaboration. In this sense this experiment on negotiation has provided several findings.
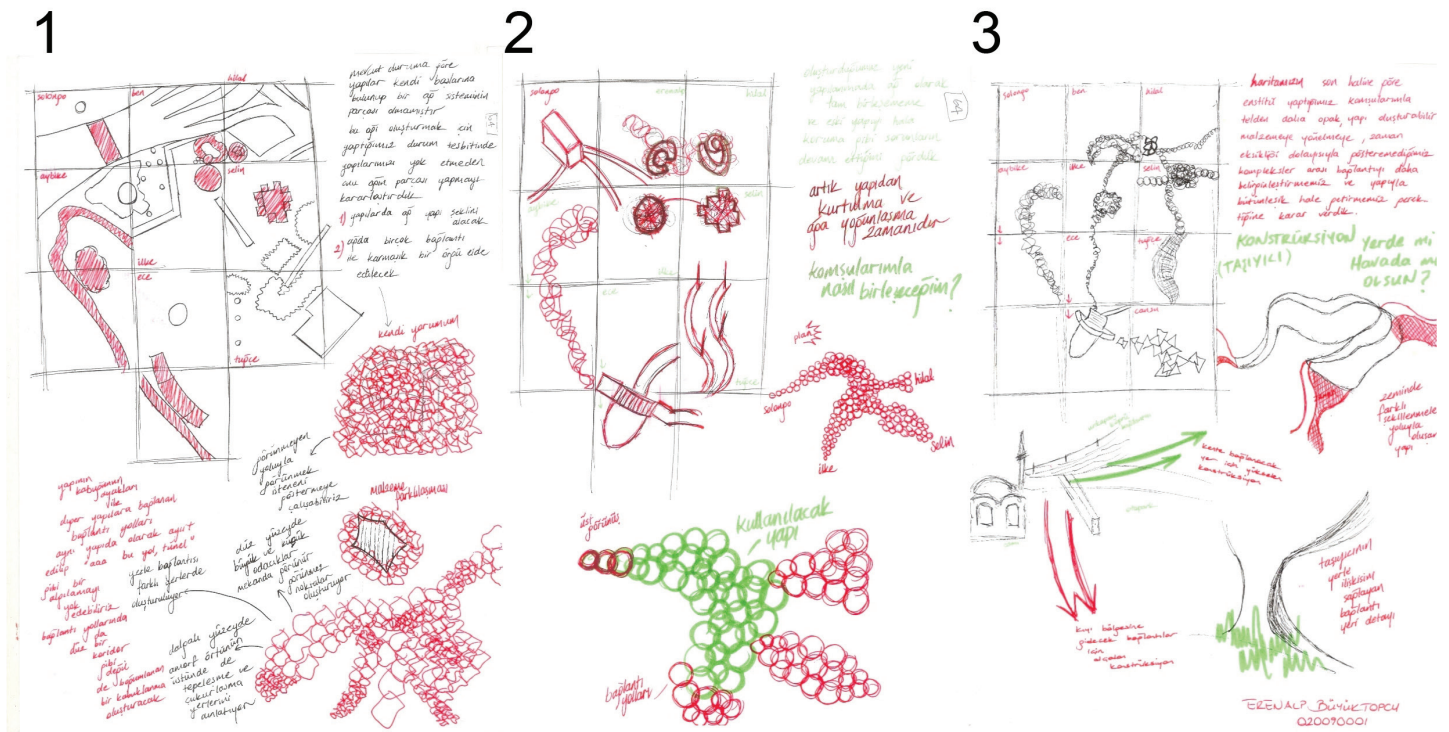

Image 6. Erenalp Büyütopçu, 1st, 2nd and 3rd step schematic drawings (Team behaviour expressed in a common formal tectonic language)
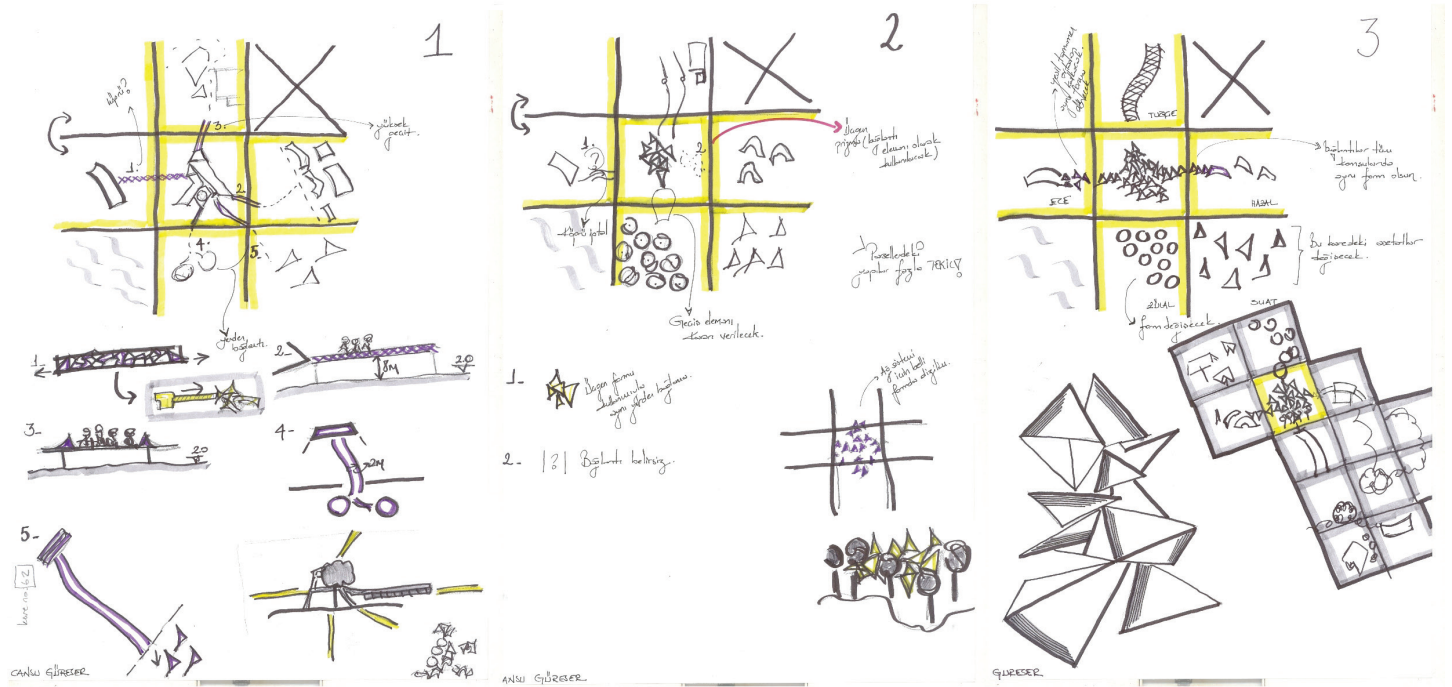
Image 7. Cansu Güreser, 1st, 2nd and 3rd step schematic drawings (Example of formal similarities and spreading of formal attributes)
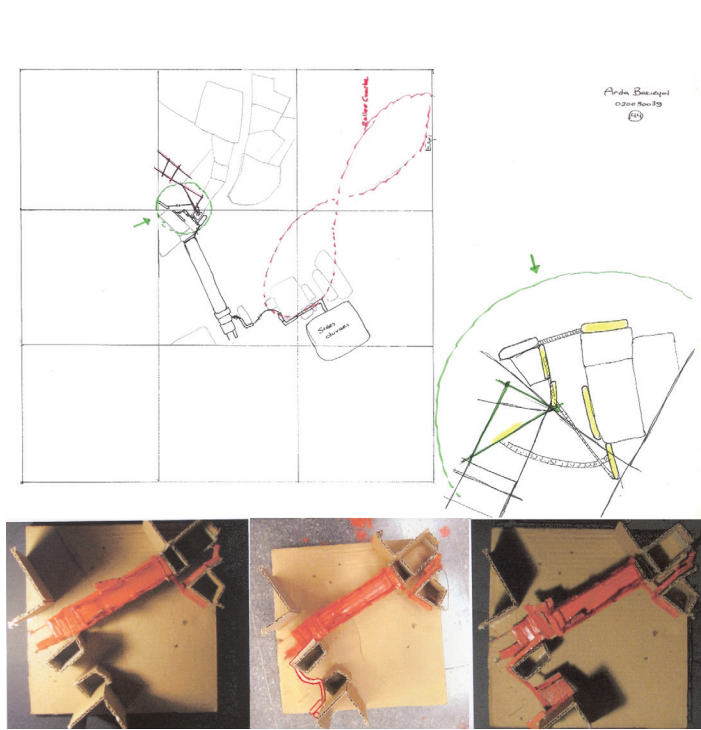

Image 8. Arda Bakıryol, 1st, 2nd and 3rd step schematic drawings (Example of strong individuality together with a high awareness of the surrounding context)
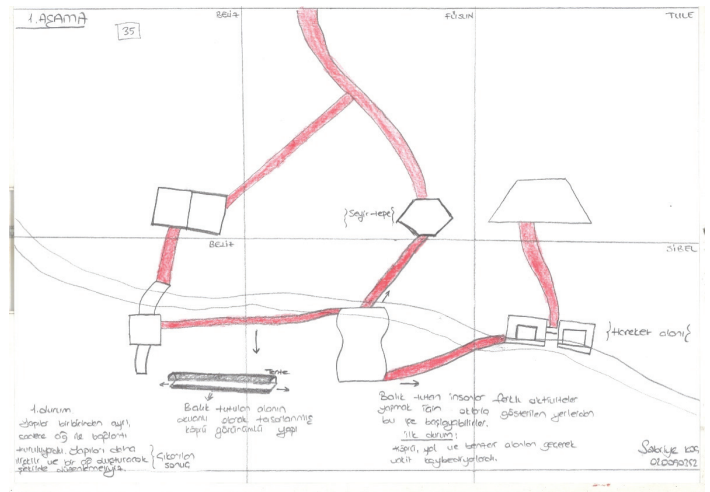

Image 9. Sabriye Koç, 1st step schematic drawings (Example of non-integrated design outcome due to working independently, problem solved by bridges)

As mentioned before important to underline that despite of the rules and motivations given both in the experiment and in the overall design game, the process had a student-initiated, self-driven character. Students were urged to integrate their designs and build a network, but they were free on how to do it to what degree. Therefore the outcomes, both the projects themselves, and emerging organization models, can be considered as provisions to examine and understand new potential modes of collective design.

Figure 2. Emerging modes of collective organizations, between individuality and group work

First finding from the overall studio experience is that there exists a spectrum of collective design modes that range between conventions of individual and team work. Transitory and simultaneous layers of interactions provide dynamics beyond conventional modes of collaboration. Richness of this spectrum varies according to the density and multiplicity of negotiations. In this sense an increased level of negotiation can be used as a design method to open ways for new collective modes of designing.

Among many of the transient and dynamic forms of collectivity, we were able to trace and document 5 types that were more outstanding;

a. The Team: Full collectivity, working as a single body
b. Individual-Conversational: Maintaining individuality besides being in conversation with neighbors
c. Group with a leader: One student taking the lead, others following his/her decisions
d. Weakening collectivity: Starts with a strong collectivity, then fading into individuality
e. The independents: Minimum collectivity. Almost independent from the beginning to the end, very low conversation with others

Another finding is the direct relationship between the collaboration level and the architectural outcome of the squares. It is possible to trace the level of relationality reflected on the formal or programmatic attributes of design proposal. In a comparison between different behavior groups, it is clear to see that modes of collaboration have a significant visibility through the architectural outcomes. One can almost read the interrelations between the squares just by looking at the final results, without knowing the process. This shows the importance of questioning the impacts of negotiation and collectivity in design and its education.

Third finding was about the way "grid-platform" functioned in the studio. A tool as such, increased the level of relationality in the process, facilitated conversation among students, and obligated a collective awareness of the context without having to disregard individuality. The platform functioned as a self-contained feed-back mechanism, allowed objective evaluation of the works in a network-like setting among students themselves. In the process, this platform performed such an important role, to the degree of replacing the role of tutors, substituting the usual hierarchic relation between the tutors and students with a more horizontal one.

According to Lawson (2005) design cannot be practiced in a social vacuum. Indeed it is the very existence of the other players such as clients, users and legislators which makes design so challenging. The act of designing alone, like a self-expressionist artist, is not applicable to the dynamics of performing architectural design. Lawson continues by stating that design itself must be seen to include the whole gamut of social skills that enable us either to negotiate a consensus, or to give a lead.

"Karaköyx2" was searching for possibilities beyond the conventional modes of organization in architectural studio culture, through the enforcement of negotiation as a design tool. A more inter-relational and collective environment was aimed, for a more sophisticated yet integrated design outcome.

This study shows that social design skills are inherent aspects of creativity and nature of architectural production is based on relationality. Therefore we believe that design education should reinforce individuality with a collective consciousness, promote experimental ways of interacting with wider range of people and develop the architectural means to do it. Such an architectural education has the potential to transform the practice into a fruitful interaction with society and provide richer architectural outcomes.

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