



Housing Design Education: in between Urban Planning and Architecture

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1 ABSTRACT

Housing design exercises at Middle East Technical University (M.E.T.U.) department of architecture constitute a suitable ground to introduce to students issues of site planning and urban design. This study is intended to be a contribution to the research field of architectural education. It partially explores the educational system of the Faculty of Architecture at METU by focusing mostly on its core subject which is design studio. The aim of the research is to make an overview of the way housing design projects are conducted in the third year architectural design studio. The objectives and the learning outcomes expected from these studio exercises, the approaches and tendencies that determine the way the project exercise is given and lastly the teaching methods, strategies and tools will be studied through observation and interviews with the studio critics. The research will focus on the question related with the introduction of students with urban design in this context in particular.

2 A COMPARATIVE INQUIRY BY EUROPEAN ASSOCIATION FOR ARCHITECTURAL EDUCATION (EAAE)

This research focuses on the housing exercises developed in the architectural studio. Actually, the idea of questioning whether the students are or not introduced to the issues of urban design through the housing design exercises came up from a research conducted by European Association of Architectural Education (EAAE) under the title: "Monitoring Urban Design Education in European Schools of Architecture". This volume includes a series of texts that describe courses taught at schools of architecture in Europe and focused on the design of urban space. The central concern in the debates on architectural education today is the way each school will manage its reform process in order to be a valuable and influential part of the European environment. According to an inquiry carried in May-August 2003 in approximately 60 schools by the European Network of Heads of Schools of Architecture (ENHSA) Thematic Network it became clear that the subject area of urban design is positioned as fourth in order of importance after Architectural Design, Building Construction, and Theory-History. Urban Design is a special subject area and a platform for students to be acquainted with and compose knowledge related to social life in built environment, to the cultural dimensions of the form and the organization of urban space. There will be given an analysis of the engagement between architectural and urban design, if there is any, by evaluating the design approaches respectively. A short review of the methods followed by few schools in Europe is presented before explaining the teaching method of housing design in M.E.T.U. The volume is organized in three sections: beginnings, advancements and integrations, according to the criteria related to the teaching process.

2.1 Initiations

As it is mentioned in the preface of *Monitoring Urban Design Education in European Schools of Architecture*, the volume is "an attempt to elaborate the raw material that tackled issues related to urban design education."¹ The first part, entitled "Beginnings", includes contributions on introductory courses to urban design run in the third year of studies at the latest. The ten courses classified in this section belong to eight different countries (refer to Table 1). The average number of students per professor is 15 students, and the hours a week range from 4 to 20.² The courses in Spain and Greece are mentioned below as references showing two different approaches for Urban Design courses by using Housing design exercises as the best tool for it.

¹ EAAE, *Monitoring Urban Design Education in European Schools of Architecture*. Ed. by Constantin Spiridonidis. Thessaloniki, 2004

² Josep Muntanola Thornberg. " Architectural Design Education in Europe: Mind, Land and Society in a Global World." *Ideas and Reflections on Architectural and Urban Design Education: EAAE Transactions on Architectural Education no.28*. ed. Constantin Spiridonidis. Thessaloniki, GREECE: Art of Text S.A. 2005

2.1.1 Spain, Technical University of Catalonia.³

Within the framework of this school's programme in which design studios have a predominant role, different emphasis mark the content of each semester. In this context, what corresponds to the third year design studio is the theme "The urban project and the shaping of the city". The course takes an intermediate option, halfway between the pure urban planning and the mere design of a group of dwellings. The residential use is chosen as an exercise since it offers the best platform of learning.

Site selection: The course is developed by focusing on the motto "low-rise, high density" considered as the most environmentally correct principle. The sites are generally chosen on the fringes of existing cities. The selected sites have always been based on existing planning guidelines and often with contact and support by the local authorities. A surface of 5 and 10 hectares and a number of housing units ranging between 350 and 750, which means a total built floor area between 35.000 and 75.000 sq meters seem to be the limits that have given the best results considering the span of time of one semester.

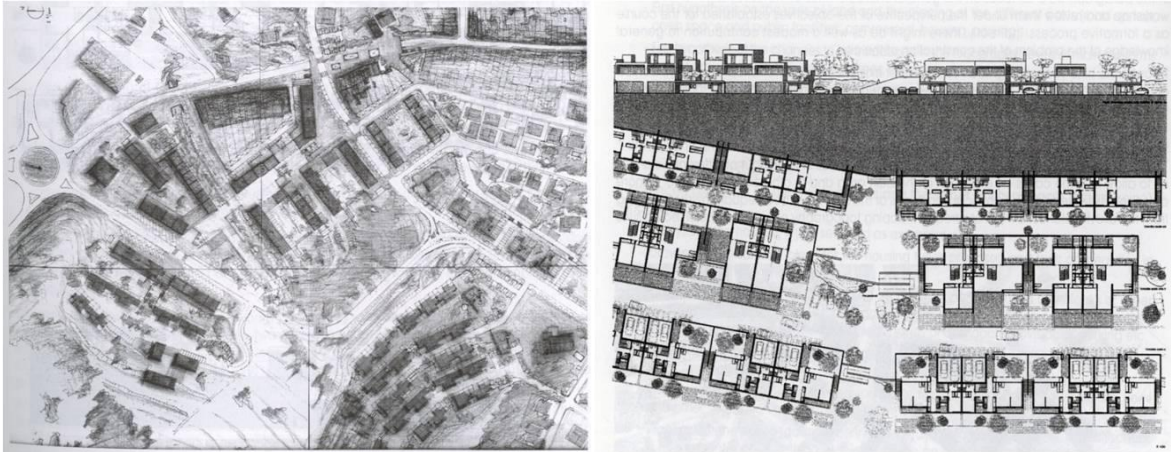


Fig. 1-2: Student Project, Arch 302 Urban Design Studio, Technical University of Catalonia, School of Architecture of the Valles, SPAIN; studio instructors: Antonio Font et.al.

Course objectives:

1. The problem of housing as the main support for the discussion of the urban project and the process of city growth.
2. The search for an "architecture of the neighbourhood" more than an architecture of individual buildings and of some stable features that would contrast with possible variety of solutions in the private parts of the settlement.
3. The necessity of flexibility to respond to the complexity of actual processes of city expansion in which there are many agents and where demands can change rapidly from the initial assumptions.

Method: a method is proposed for the progress of the work to be developed by individual students according to the above mentioned objectives. Most of the time is spent in proposals and reviews but there are also informative sessions offered to the students.

2.1.2 Greece, Aristotle University of Thessaloniki.⁴

Course objectives: there is an urgent need to create antibodies in students against the current planning in Greece consisting of parcelation, uncontrolled use of urban land, indiscriminate renewal and no guidelines about the form of new developments. The aim of the course is first to convince that other types of urban development can be allowed to emerge, then to demonstrate how this is being done elsewhere and finally to search for a concrete example of the appropriate form.

Site selection: the study area is a 10 hectare spot on the fringe of Thessaloniki along which light industry and wholesale trade have been established. It was a former district of illegitimate housing but recently has acquired a plan. The students are asked to redesign the selected area as if it was completely void of any

³ EAAE, Monitoring Urban Design Education in European Schools of Architecture. Ed. by Constantin Spiridonidis. Thessaloniki, 2004.

⁴ Ibid

building or road network on a scenario involving the same actual human and building density. The program requires housing for about 2100 people (700 families) in flats and single-family houses as well.

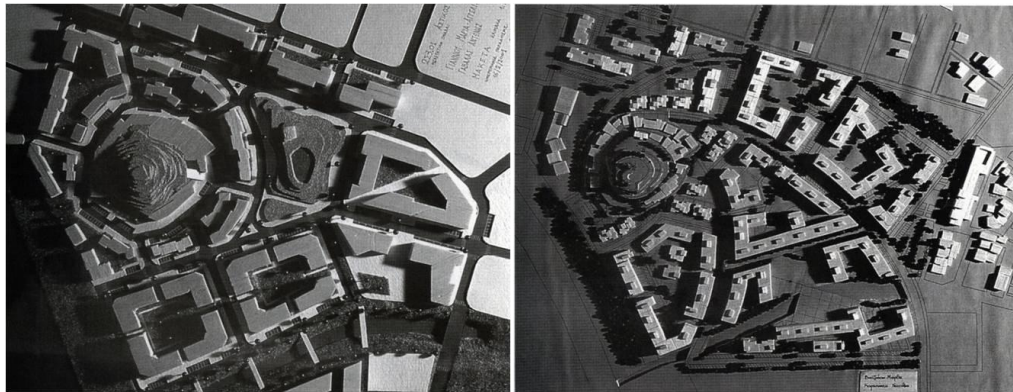


Fig. 3-4: M. A. Yianniou-A. Gavalas and M. Vaizidou-N.Karakosta-K.Katselou, Urban Design Studio, 2000-2001 and 2001-2002 academic years respectively, Aristotle University of Thessaloniki, School of Architecture, GREECE; instructors: Kiki Kafkoula and Alexandra Yerolympos.

Method: the course is a combination of studio and theoretical work. The studio centres on the design of a new housing area, whereas the theoretical work is a brief paper on a similar subject. Both are supported by a series of lectures oriented mainly on the progress of the design component. The stages of the work conducted in the studio are as follows:

Students come to a decision on the general layout at the end of the first month and present a working model of the future settlement. In the next month the proposals get properly worked out in terms of urban morphology. The course gives emphasis to the full elaboration of the space around the buildings in order to avoid a standardised approach. Besides 1/1000 and 1/200 scales, others can also be used if necessary. The students usually work in teams of two.

The educational aim is to build up understanding about how urban space works and how one can create meaningful and coherent environments. The course attempts to give students the tools to understand the properties of the place and then to construct an urban neighbourhood with an overall design idea.

| | Compulsory/ Elective | Level of Study | Students No. | Total Hours |
|---|------------------------------|----------------------|--------------|-------------|
| SPAIN: Technical University of Catalonia | Compulsory Studio course | 3 rd year | 80 students | 256 hours |
| SWEDEN: Royal Institute of Technology | Elective Studio Course | 3 rd year | - | 120 hours |
| GREECE: Aristotle University of Thessaloniki | Compulsory Studio course | 3 rd year | 100 students | 78 hours |
| POLAND: Warsaw University of Technology | Compulsory | 3 rd year | 120 students | 45 hours |
| SERBIA: University of Belgrade | Compulsory | 2 nd year | 250 students | 42 hours |
| U.K.: University of Portsmouth | Compulsory Studio/Seminar | 4 th year | 20 students | 180 hours |
| SLOVAKIA: Slovak University of Technology | Compulsory Studio course | 4 th year | 170 students | 91 hours |
| PORTUGAL: Modern University of Setubal | Compulsory | 5 th year | 30 students | 84 hours |

Table 1: Urban Design Courses in 8 different countries, with respective information on Levels of Study, Students No. and Total Hours per semester

3 HOUSING EXERCISES IN THIRD YEAR DESIGN STUDIO (2005-2010): APPROACHES AND TEACHING METHODS

In this part of the research, the approaches and teaching methods followed in the third year design studio when dealing with housing exercises are studied in depth. The period chosen, covers the last five years between 2005 and 2010 academic years, during which the housing exercises are given systematically each year. During this five year period, no major change is observed among the instructors of the studio groups, a factor which helps in giving a clear illustration of the approaches and teaching methods followed.

3.1 The Year Objectives of Arch 301/ Arch 302 Courses

Within the framework of the architectural education at M.E.T.U. in which design studios have a major role, Arch 301 “Architectural Design III” is a compulsory course that is taught in the third year of the undergraduate curriculum. Arch 301 course is one of the eight (8) successive studios which last for one semester each and offer different types of exercises in their content by avoiding repetition. The general catalogue of M.E.T.U. (2007-2009) describes the Arch 301-302 course as follows:

*Design of buildings in relation to their particular historical urban context is emphasised. Issues of settlement-dwelling relationships, buildings of functional complexity and spatial variety and architectonic interpretations of structural systems are analysed and designed.*⁵

The main project of the semester assigned in the third year studio is housing with particular emphasis on its relation with urban and historical context. Usually the housing project is assigned after a short term project – which can also be a structural design exercise- which lasts up to five weeks whereas the rest of the term is spent for the housing project. The third year is organized into four subgroups with a ratio of two instructors per 18 students corresponding to each group.

3.2 Housing Problem Definition at 3rd Year Studio

This part discusses the way the housing problem is defined and presented to students. It includes the handouts of several term projects given in the third year design studios at M.E.T.U. in consecutive academic years from 2005 to 2010. The structure of this part has been organized according to each group. The following list shows the housing projects assigned by Group 1 together with the instructors who have been present for each year as part of that group:

- 2005-2006: Candaş Bilse/ Semra Uygur/ Res.Asst. Günseli Filiz/ Res.Asst. Ece Kumkale: Neighbourhood Design in Dikmen Valley
- 2006-2007: Candaş Bilse/ Namık Erkal/ Res.Asst. Günseli Demirkol: Housing Neighbourhood in Eryaman 4
- 2007-2008: Namık Erkal/ Res.Asst. Nida Nayci/ Res.Asst. Günseli Demirkol: Hacettepe Campus Regeneration, Social Centre and Intern Housing
- 2008-2009: Candaş Bilse/ Namık Erkal/ St.Asst. Desantila Rrumbullaku: Housing at Southern Edge of Ankara
- 2009-2010: Candaş Bilse/ Namık Erkal/ Res.Asst. Sermin Cakici: Making the Centre of Çayyolu a Mixed-Use Housing Project

The series of projects and assignments of the 4th group under the instruction of Candaş Bilse and Namık Erkal have concentrated on specific sites in Ankara and are either an urban regeneration or large scale urban infill in character. The project sites are superblocks usually chosen in the new development areas at the periphery of Ankara. More specifically, the sites are chosen in planned new settlements, satellite settlements, like Eryaman which was implemented by TOKI in 1980's. Similarly, Or-An district is one of the project sites which was also the first satellite settlement of Ankara, planned in late 1960's and Çayyolu area which emerged as a new settlement which would house upper middle income groups.

⁵ Middle East Technical University General Catalogue 2007-2009. Ankara: M.E.T.U. Press, 2007. p.23

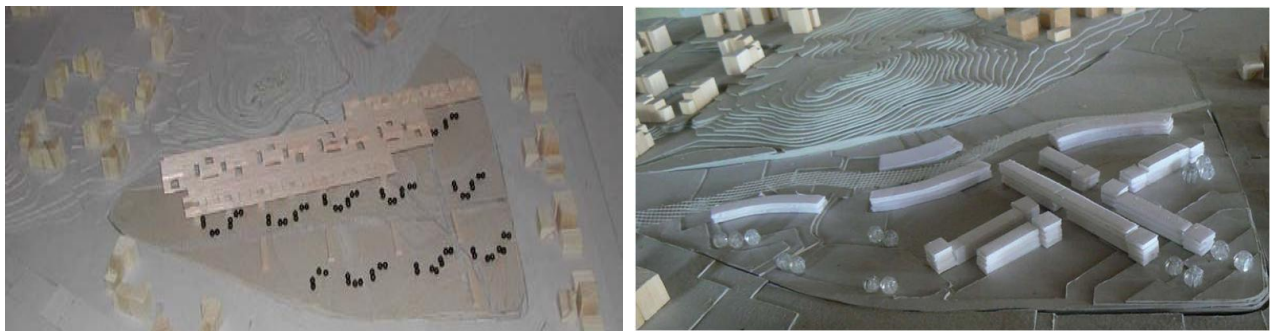


Fig. 5-6. Amina Rezoug and Sibel Odabasi, Arch 301 Architectural Design Studio, “Housing Neighbourhood in Eryaman 4”, student project, 2006-2007 academic year, and studio instructors: Candaş Bilsel/ Namık Erkal/ Res.Asst. Günseli Demirkol

The other projects are assigned in central districts of Ankara, like Dikmen Valley and the historical site of Hacettepe Campus. This group approaches to the housing exercises not by concentrating only on the subject of housing but declare explicitly that one of their objectives is to introduce students to the issues of urban design. The emphasis on this subject is noticed in the titles of the projects assigned, like Neighbourhood and Housing Design at Dikmen Valley in Ankara assigned during 2005-2006.

During the academic year of 2008-2009, students were expected to offer architectural solutions for creating a liveable built environment that provides the inhabitants the sense of place. The area chosen for this project was a superblock located at the southern edge of Ankara. The neighbourhood design that students were required to develop in this project had to take into account the fact that project area has been preferred by high and higher middle income groups for settlement. In order to work in more realistic grounds, this project used the building density assigned by the building regulation codes. The students were asked to rethink on the planning decisions regulations brought by the Urban Development Plan, such as strict zoning, land uses and height restrictions. They were required first to develop urban design proposals by reconsidering all these issues in their projects, while providing the required building density and green areas.

3.3 First Phases of the Study: Field Trips / Site Analyses / Case Studies/ Lectures / Readings

The beginning of the course is given over particularly to investigation of historic and contemporary housing typologies, which are carried out by the student groups by the preparation and presentation of case studies on cases from Turkey and the world. These case studies are supported by daily trips to suburban mass housing and urban housing areas in Ankara. In Group 4, the study phase consists of two parts which are given as two separate assignments: case studies on the project site which include site analysis as well, and case studies on urban neighbourhood and housing projects. After being introduced with the project, students are given a first assignment which consists of case studies on the project area.

The reason of paying such importance to the case study of the project site and its analyses is closely related with the fact that Group 4 chooses as project sites such areas which offer a learning platform with the physical environment produced and the implementation processes. At the same time, the site analyses phase helps students in generating their first ideas and concepts about the project. After this step, a second assignment of case studies is given on various urban neighbourhood projects either national or international.

A detailed site analysis was conducted by in fall 2008 when a studio workshop was organized in collaboration with the 3rd year studio group of the Architecture Department of Mersin University. The workshop was held during the fall semester (24-26 October) of 2008-2009 academic year in Ankara. Both of the teams from M.E.T.U. and Mersin University worked on the same site for the same project, “Housing at the Southern Edge of Ankara” but with slightly different project requirements. The workshop was a combination of both studio and theoretical work. After a series of lectures oriented mainly on the site analysis methods which were held the first day, the rest of the workshop consisted of daily trips to suburban mass housing and urban housing at Ankara and a trip to the project site as well.

Rather than a challenge between the two schools, the aim of the workshop was to enhance the social interaction between students and exchange ideas and working methods. In this context, students were arranged into mixed groups to carry out the site analysis phase which consisted of two other phases; the first one was observation, documentation through sketches and photographs, and measuring. The second phase of site analysis consisted of data collection and their synthesized study which were presented back at the studio. Whereas the research groups analyzed the following topics:

- Natural site conditions/climatic conditions/ human made objects in the site
- Location of the site within Ankara/ transportation and circulation in and around the site
- Functions and activities occurring in the site and its surroundings
- Morphological analyses of the surrounding context: building densities, solid-void relationship
- Visual values of the site
- Environmental images (analyses based on Kevin Lynch’s 5 city images)⁶

All of the data collected were expected to be used as a tool which would help students to perceive the site and develop their first design concepts.

3.4 Design Parameters: Location/ Size of the Site/ User Profile/ Scale of Study

Group 4 chooses urban superblocks as project sites which are located in the peripheral areas of Ankara city, located mostly within satellite settlements. The reason of giving the project site in such areas is because the instructors expect students to learn from the existing built-environment and to grasp the scale of open spaces together with the three-dimensional composition of the building masses. During 2008-2009 academic year, a superblock near Or-An district was chosen as the project site. The block had a total area of 45.000m² where 14.600 m² was left as green area as planning participation share. The total area to be constructed was estimated as 24.000m² with a total construction area of housing of 30.000m². The housing units to be designed by the students consisted of mainly three types of housing units which were proposed in consideration with the potential user profile of the particular area where the project was situated.

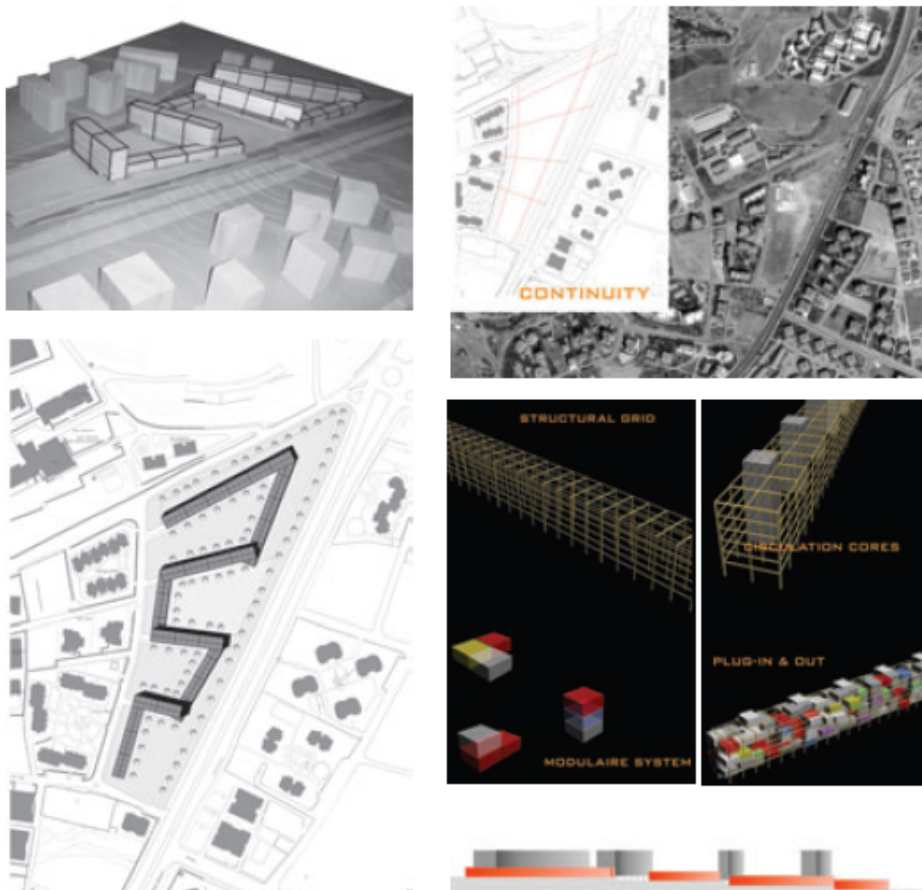


Fig. 7: Selver Ercan, Arch 301 Architectural Design Studio, “Housing at Southern Edge of Ankara”, student project, 2008-2009 academic year, studio instructors: Cãnâ Bilsel/ Namık Erkal/ St..Asst. Desantila Rrumbullaku

The impact of users in the design process was taken into account when students were asked to develop a social scenario for their projects. The kind of public facilities and house types corresponded to the social and

⁶ Cãnâ Bilsel, Evrim Demir Mishchenko, Fikret Zorlu., Housing at Southern Edge of Ankara, Fall 2008, project brief and site analysis

cultural profile of users. The emphasis was added in the project handout of Group 4 as the students were expected to take into account the fact that:

*The area of the project which is well served by the main traffic arteries and close to natural reserve areas has been preferred by high and higher middle income groups for settlement. **This trend has been accentuated with the recent housing estates projected in this area.***⁷

The examples of recent housing estates projected in the area were mentioned on purpose throughout the project brief because the recent urban transformation and growth occurring in Ankara and the end products of urban development plans widely applied in the city were taken as a point of departure of what to cover through the housing exercises. While solving the housing units, various solutions of housing units are to be considered, depending on the programs delivered by each of the studio groups and especially by the potential user profile corresponding to each of the project areas. When talking about the projects which are situated at the outskirts of Ankara, since the site context has no predetermined user profile, the student seems to be free to choose the social and cultural profile of users together with the corresponding house types and public facilities.

3.5 Phases of Design Process

The design process is the next step after the case-studies, site analysis and planning phases which were discussed before. The design process itself could be divided into other phases as well: first schematic proposals, developed proposals about open spaces layout and buildings and housing units and final presentation of the projects. These phases are valid for all of the groups.

When comes to Group 4, the instructors emphasizes in the project handouts that “to create a liveable built environment that provides the future inhabitants with a sense of place will be the main focus of the neighbourhood design”⁸ that students are required to develop in the project. As a consequence, the course follows an in-between alternative; it is a combination of urban planning and the design of a neighbourhood. Thus, it becomes a project responsible for the total architecture of the settlement rather than narrowing down the scope to the architectural solution of single buildings, which, in fact, students are familiar with from their previous architectural design studios. Since the housing project is seen through the lenses of urban design, it is expected from students to conceive the area in its relations with the city as well as with its immediate surroundings. Other than being a housing settlement, students are expected to offer in their designs a well structured net of open public and semi public spaces, pedestrian pathways in connection with the public parks within the urban block itself and those located nearby.

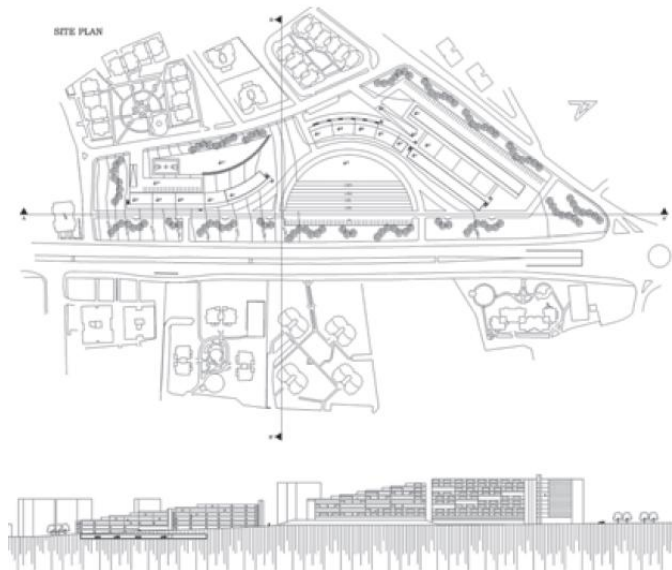


Fig. 8: Melike Atici, Arch 301 Architectural Design Studio, “Housing at Southern Edge of Ankara”, student project: Site Plan and Site Section, 2008-2009 academic year, studio instructors: Candaş Bilse/ Namik Erkal/ St.Asst. Desantila Rrumbullaku

⁷ Candaş Bilse, and Namik Erkal. «Housing at the Southern Edge of Ankara.» Project Brief, Ankara, Fall 2008.

⁸ Candaş Bilse, and Namik Erkal. «Neighbourhood Design at Dikmen Valley.» Project Brief, Ankara, Fall 2005.

As it is a typical exercise of “urban design”, the design of a legible urban structure with a well designed vehicular and pedestrian circulation system in combination with the above mentioned network of spaces have a structuring role in the project for the whole settlement. Apart from the residential uses, a well balanced mix of functions is expected to be included in the project layout like public and social facilities, commercial facilities that will serve to the whole neighbourhood, not only for the residents of the compound, but also those located nearby. Students are also expected to provide a good balance between building blocks and open spaces in between in consideration with sunlight and other microclimatic conditions, the definition of open spaces in relation with the building blocks and lastly the relation of building blocks with each other.⁹

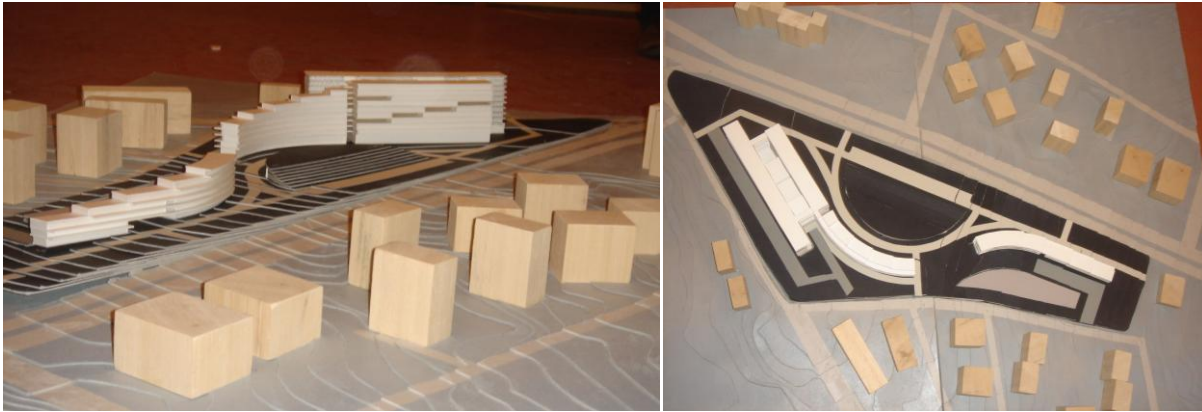


Fig. 9-10: Melike Atici, Arch 301 Architectural Design Studio, “Housing at Southern Edge of Ankara”, student project: Site Model with Housing Blocks Proposal, 2008-2009 academic year, studio instructors: C n  Bilsel/ Namik Erkal/ St..Asst. Desantila Rrumbullaku

After all the technical skills mentioned up to now that are expected to be acquired by students during the design process, the main aim is an arrangement of the entire residential settlement, well positioned in the characteristics of the site and compatible with the project requirements. So the housing exercises first call for site planning, as Lynch defines it: “site planning is the art of arranging structures on the land and shaping the spaces between”¹⁰; and then for the design of the dwelling units. This point is also mentioned among the requirements of the project brief as the students’ designs are expected to offer “three dimensional volumetric qualities in the massing of housing blocks considering the surrounding masses of the existing housing blocks”.

In one of the project briefs¹¹, Group 4 touches to the “gentrification” issue by giving so an adequate pedagogical answer to the faults of the actual processes of construction in the country. As it is described in the urban design project requirements for most of the cases, the urban renewal projects result in the “gentrification” of the area – which means the exclusion of the “urban poor” from the settlement area where they used to live before the operation. Students are also expected to search for solution to house these people preferably on place. According to the above mentioned skills to be acquired and the following pedagogical objectives like:

- treating the housing exercise as the best platform to introduce students to issues of urban design
- considering the housing exercise as a project of the total architecture of the settlement and not that of its individual buildings
- developing in students the ability to think in terms of urban components
- instilling in students the ability to work flexibly between architectural and site planning scales

A method is proposed for the housing project development divided into two phases: in the first phase, students are expected to develop a neighbourhood design with the three dimensional massing of building blocks. In the first stage of “Housing at the Southern Edge of Ankara” project, the students were asked to work with 1/2000 to 1/500 scale drawings and working models. In the second phase of the project, students

⁹ C n  Bilsel, and Namik Erkal. «Housing at the Southern Edge of Ankara.» Project Brief, Ankara, Fall 2008.

¹⁰ Kevin Lynch. Site Planning. Cambridge: MIT Press, 1984. p.1

¹¹ C n  Bilsel, and Namik Erkal. «Neighbourhood Design at Dikmen Valley.» Project Brief, Ankara, Fall 2005.

were asked to focus on the three dimensional quality of housing blocks, the design of housing units and common facilities of the compound which were worked at the scales of 1/200 and 1/100.¹²

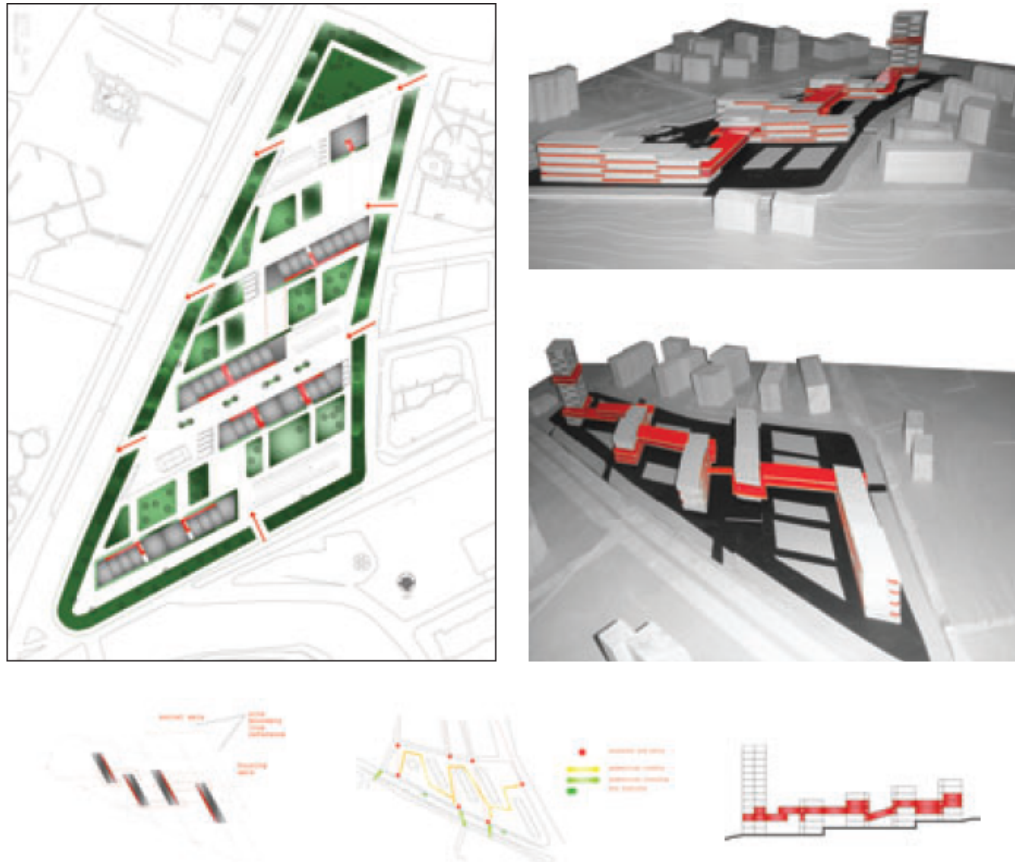


Fig. 11: Cigdem Coban, Arch 301 Architectural Design Studio, “Housing at Southern Edge of Ankara”, student project: Site Plan and Site Section, 2008-2009 academic year, studio instructors: Cãnâ Bilsel/ Namık Erkal/ St..Asst. Desantila Rrumbullaku

It should be noted that the design process of housing exercises develops in a cyclical rather than in a linear way because different new inputs may arrive during the design process. This is relevant for the cases when the design process starts with the above mentioned phases; first a general layout of the future settlement is planned and then the objective is narrowed down to the arrangement of housing units and their solutions.

Since it is a studio based course, the panel criticism and the individual tutorial is the main teaching method adopted. In its simplest definition, the design studio is based on a dialogue between a design critic and the student. We observe that a deductive design method from upper scales to lower scales is conducted consciously by studio critics, not in the sense “accepting and rejecting, and never informing” but rather in the sense of developing skills necessary for the practice of the profession in a systematic way, and enabling the students “to develop [their] powers of selection by the process of [their] own judgment”.¹³

The process of the development of an architectural proposal to a certain design problem is achieved by the dialogue between the critic and the student through different dialogue forms like the desk critique, panel critique and group interaction which is called “the jury”. These kinds of interactions help in providing different perspectives and feedbacks on the same problem situation.

¹² Cãnâ Bilsel, and Namık Erkal. «Housing at the Southern Edge of Ankara» Project Brief, Ankara, Fall 2008.

¹³ As quoted by Onur Yüncü from Colin Rowe in his Ph.D. theses: Research by Design in Architectural Design Education. Ankara : METU ; 2008.



Fig.11-12: Cigdem Coban, Arch 301 Architectural Design Studio, "Housing at Southern Edge of Ankara", student project: Site Model, 2008-2009 academic year, studio instructors: Cânâ Bilsel/ Namık Erkal/ St..Asst. Desantila Rrumbullaku

At the end of the course, it is expected that students will develop a clear progress in comparison to the starting point and with reference to the expected learning outcomes which can be listed as follows:

- Acquisition of knowledge and ability to undertake the design of complex settlements, structures and mixed use buildings of moderate size
- Building up of culture and repertoire for the analysis and design of contemporary housing, innovative structures and public buildings
- Awareness development for the cultural heritage and sites of natural and historical significance; acquaintance with legal and ethical aspects of designing in such contexts.
- Ability to work out coherent transitions between various scales (from 1/5000 to 1/20), with expressive ability in making full use of each scale.¹⁴

These objectives are given in the project brief of 2008-2009 by the group of Aydan Balamir along with Arch 301-302 course description catalogue. Similar learning outcomes were also discussed in a number of meetings held by the faculty staff for the reorganisation of the curriculum.¹⁵

4 CONCLUSION

The aim of this article was to share an experience of the author when she was a graduate student at M.E.T.U. and assisted in the Architectural Design Studio course, mentioned in the text. During the whole paper, only the raw material has been introduced in order to make the reader derive some conclusions by his/her-self. However the scope was to point out that Housing design exercises at M.E.T.U. department of architecture constitute a suitable ground to introduce to students issues of site planning and urban design. This is quite important to break down the belief that urban design is the task of city planners rather than of architects. Housing exercises may be considered as a good tool which provide the overlapping in between physical planning and architecture.

5 REFERENCES

- Balamir, Aydan, Kadri Atabaş, and Çağrı Çakır. "Counter Projects: Anti-TOKI/Anti-Market Project Brief." Ankara, 2008.
- Bilsel, Cânâ, and Namık Erkal. "Housing at the Southern Edge of Ankara." Project Brief, Ankara, Fall 2008.
- Bilsel, Cânâ, and Namık Erkal. "Making the Centre of Çayyolu New Settlement." Project Brief, Ankara, Fall 2009.
- Lynch, Kevin. Site Planning. Cambridge: MIT Press, 1984.
- Middle East Technical University General Catalogue 2007-2009. Ankara: M.E.T.U. Press, 2007.
- Thornberg, Josep Muntanola. " Architectural Design Education in Europe: Mind, Land and Society in a Global World." Ideas and Reflections on Architectural and Urban Design Education: EAAE Transactions on Architectural Education no.28. ed. Constantin Spiridonidis. Thessaloniki, GREECE: Art of Text S.A. 2005
- Spiridonidis, Constantin, ed. EAAE Monitoring Urban Design Education in European Schools of Architecture. Thessaloniki, 2004.
- Yüncü, Onur. Research by Design in Architectural Design Education. Ankara : METU ; 2008.

¹⁴ Aydan Balamir, Kadri Atabaş, and Çağrı Çakır. "Counter Projects: Anti-TOKI/Anti-Market Project Brief." Ankara, 2008.

¹⁵ An example is a draft work of the faculty staff done under the title "Tasarim ve Iletisim" of July 2006.