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Supporting architectural design competences via theoretical courses

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Abstract

Today Architectural education is one of the most questioned area with respect to its content and form. The debate frame is mostly concentrating on teaching methods, processes of education, credit systems, competencies, and how those competencies are to be tested. The problem is the cohesiveness of architectural competencies of the graduates into global conditions. In this context, the design studios as the backbone of the architectural education have started to involve in their agenda all kinds of new methods and theories concerning contemporary architecture. Loaded with these concerns the teaching staffs of M 102 Design studio in Gazi University have initiated a course "The development of architectural space idea" which found its place in curriculum. The aim of this paper is discuss our elective course, offered for the 3rd year students of architecture, "The Development of Architectural Space Idea". It is a reaction to the degradation effect of that popular culture. The impact of that culture as a "contemporary approach" is getting stronger not only on architecture in practice but also the education. Under those circumstances, it was a necessity to manifest our perspective on Architecture, space and identity of the Architect. Briefly, our goal is to initiate awareness in students about the ruling – innate ideas and content behind styles, movements, and forms. It is our utmost concern to motivate them to consider the real but unseen, and sometimes ignored, content and components of architecture in their personal - professional – aesthetic judgments. By this way, it would be possible to construct an intellectual-individual competency base on which the professional – technical qualifications could be built upon.

Keywords: Theory of architecture, Design Studio, First year education

Architecture is one of the most questioned professions with respect to the models, processes, and context of the education. The frame / body of that inquisition cover

-what and how we teach,

-pedagogical and methodological approaches,

-duration,

-course contents,

-credits

-the professional competency of graduates

- and measuring and assessment.

The scope of that inquisition cannot be limited with the assessment of each school of architecture individually. Political, economic, social and cultural borders and relations have introduced new dimensions about the identity and qualifications of the architect not only locally but also in global scale. Thus, the comparison and evaluation of locally educated architects for the global market have become the primary issue of the profession and its education.

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The topic of comparison comes with an important issue, developing common criteria in/for training and educating architects all over the world. Then, new questions can be raised such as relevancy of universal criteria, conversion – translation the criteria according to the unique contexts and conditions of different countries, the adaptation/ reaction process of local institutions to the global impacts.*

In this context, architectural education has become an almost independent / autonomous research area next to the issues of profession itself. Every single topic and media of architecture culture has being introduced to architectural education as new fields of practice, theory, methodology, and research within the scope of theory courses and design studios particularly.

Considering that widening agenda of the profession and education, and the local criteria bonded to the international processes, the comparison the qualifications of the architect is of ultimate significance. It is a fact that, there are numerous national and international documents describing the qualifications of an eligible architect.† Although their contexts and scope are different, the competencies, skills and level of expectations they put forward are almost the same. In this respect, it possible to ask what makes an architect more qualified than the others. Why are some architects more successful and unique among the others despite the same agenda, goals and, mostly, methods of education?

It is a fact that, the technical aspects and professional competencies can be acquired by means of training. The individual competencies, however, are the unique composition of intuition, creativity, and ambitions. It is almost impossible to measure, compare, or even detect them quantitatively.

The intricate point in that situation is the assumption asserting that there are different competency areas. Because, the technical – professional competencies are accepted as quantitative, common and subjected to institutionalized education, and the individual competencies are qualitative, unique and intellectual. It is clear that technical proficiency is a tool for intellectual – artistic creativity and realisation. Then, the distinguishing competencies of an architect should be looked for in his/her individual – intellectual development.

Following that idea, the goal of the architectural education can be put as to help the students develop individual competencies, and make them acquire technical proficiency as a tool in realising those competencies.

The professional qualifications of the architect have been already defined, coded, categorized, translated into educational skills, goals and outcomes, and secured by laws and regulations internationally. These kinds of standardisations, however, conflicts with the flexibility and diversity of creative thinking. On the other hand, the individual competencies are, because of their qualitative nature, still mythological topics of psychology, phenomenology and philosophy.

Indeed, it would be better to define the frame of the competence areas for a qualified architect as an intellectual instead of translating those competencies, which are in a continuous expansion and specialisation, into classroom skills. It is possible to mention those competency areas under 4 different categories.‡

1. Generic competences on the level of intellectual capacities philosophical reasoning and behavioural attitudes

2. Personal competences related to the individual his physical psychological and emotional condition

3. Disciplinary based competences covering a wide range of sometimes contradictory character they relate to design competence esthetical tastes technical knowledge and the ability to apply that knowledge communicational and managerial skills and a research attitude

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* The Bologna Process cannot be interpreted as a matter of accreditation only. See http://www.ehea.info/

† http://www.uia-architectes.org/image/PDF/Systeme_eng.pdf, http://www.naab.org/accreditation/2004_Conditions_2.aspx

‡ For details see.Foque, Richard, mimarlık eğitiminde yetkinliklere dayalı müfredat programı tasarımı için bir strateji.TBMMOB Mimarlar odası ankra şb. Dosya no.15.p.11-14

4. Context based competences in relation to ethical conduct societal and cultural understanding historical perspective environmental awareness economical knowledge and political understanding

This approach is a consequence of an idea asserting that the idea of the contemporary university should be reviewed. Basically, the university needs to be a knowledge-based institution promoting multidisciplinary studies in strong relations with practice in order to support the improvement of those competencies.

This is a general picture of issues and problems of institutional architectural education, whereas the practice in the classrooms and studios has another agenda with its particular problems. The most ostensible problem of the studio practice is the fashion-like approaches to architectural design. There is a growing false consciousness in students about architecture and space. The architecture is now perceived as show business. The architect is appreciated as the creator of unknown forms. The students run after a kind of formal acrobacy, as a common of hyper-media-tic culture, to be "different", to do like their favourite famous star architects, even to get better grades without any content or basic idea. Simple, but original ideas do not have any chance to be realised as architectural space any more. Minimal is disgraced.

It is a common opinion among architects that the society has a bias in favour of "never-seen" forms in buildings. Students of architecture, without questioning, are following their role models and endeavouring to correspond to that "expectation" of the society by unprecedented formal experiments. In brief, the Architecture concerning idea, essence, context, time-space bond, whole-part relationships, genius-logy and meaning has been replaced by a "spectacle" design business and visual culture. There are continuous image attacks of that hyper-media-tic culture deluding especially architecture students to believe that "building" is ready-made" product. The design of architectural space has been reduced to stylish façade arrangements.

In this process, the phenomena of "Star Architects" and the way their designs are presented and discussed are of importance. The priority of the most superficial but easy-to-grasp layer of architecture, the image, unfortunately, before the intellectual and social content is the consequence of that phenomenon. Today, images are circulating on the web 10 times faster than the ideas. The fastest images are photo-realistic visuals representing the "products" of star architects. Those products are becoming context-less brands as themselves without anything but their visualise. The students' path to architecture is not paved by art and philosophy, or even the experiences and know-how of ordinary people living on the next street. It is the heyday of image culture.

That culture raised its prima donnas. The students are more familiar those figures' works, such as Zaha Hadid, Frank Gehry, or Greg Lynn, than the squatter houses / slams on the back street. More than 50% of the building stock of Turkey, nevertheless, is the result of such an informal – illegal construction practice.

Basically, architecture is perceived as a fast food, or haute-couture product, which are the same in the essence. While the building is being reduced to a visual show, the architect's rendering virtuosity is celebrated, and the professional competencies are disgraced. The individual skills, however, has become the tools of professional competition.

This is context of our elective course, offered for the 3rd year students of architecture, "The Development of Architectural Space Idea". It is a reaction to the degradation effect of that popular hyper-media-tic culture. The impact of that culture as a "contemporary approach" is getting stronger not only on architecture in practice but also the education. Under those circumstances, it was a necessity to manifest out perspective on the Architecture, space and identity of the Architect.

The objective of the course is to imply that architectural space, and building, are the consequences of an IDEA and content. These idea and content are not things limited to the knowledge of architecture, and cannot be "explored" moving back from "FORM". On the contrary, form is a result of a process starting from idea.

The prevailing understanding on architecture, and its jargon tend to compare the changes in architectural styles and periods with the trends and temporality of fashion. Those architectural styles and movements, however, were not independent from the paradigms they belonged to. The transition from one theory to another cannot be explained with the replacing tastes for "form" or the "order" of the façade". In this respect, the transformations and transitions

of the styles, or movements, are strictly conditioned by their intellectual and physical context, which are crucial to explain and comprehend their inner nature.

Following that idea, it was intended to define the corner stones, touch points in the development of the idea of architectural space throughout the course of history. It was also aimed to pick particular figures, who had noticed, indicate, and even created that historical breakups. The original texts written by those figures have been found.

It is og significance to mention the distinguishing characteristic of the course, among the similar theory or history courses. In general, architectural movements are examined and evaluated through the treatises, and reviews written long after, usually by our contemporaries, that period. It is an appreciated way of looking at and assessing the history. We, however, prefer to provide first hand material developed at that time. By this way, students are introduced with the concepts, understanding, and even the terms of those periods. It is intended to derive the original context, content, and meaning of the work by studying on even a single term or concept cited in the text.

During the semester, students are asked to read the given texts for each class. And then, the texts are reviewed and discussed. For each text – author, certain architectural works are selected, if possible from the works of the author itself, and presented. For sure, the textual part is predominant. As Peter Eisanman mentioned, architecture is a serious business, and should not be diluted with a bombardment of visual material.

Generally speaking, the expected conclusions from each text, or the frame of the course's perspective can be summarised as follows:

Plato, in his great Dialogues, puts endless efforts to learn what art, artist, beauty and truth are. Although so called Aesthetics and its concepts are under the heavy pressure of formal and visual expression of the "artistic instruments", his ideas and questions are still in the very core of aesthetic production and judgement based on intellectual content. Within the context of the course, the students are not expected to master his philosophy. The main objective is to help them to develop an awareness about the content of the contemporary western thought and its reflections on aesthetic production. The examples are chosen from daily life experience, such as Matrix the movie, "I, Robot" stories of Isaac Asimov, etc.

Vitruvius, in "The Ten Books of Architecture", defines the holy "trio-logy" of architecture and draws the boldest outline of architecture. He also makes the best description of the architect as an intellectual, artist, and professional. It is possible to say that Classical Greek tradition was a school of pure thinking and philosophy to acquire the truth and beauty as enlightenment, whereas the Romans were after the technological advancement to acquire achievements to get closer to the Divine. The achievements of Romans were mostly developed within war experiment and technology, and embodied with enormous cityscapes and structures. The technical and functional perfection of the Roman structures, as explained by Vitruvius, were based on knowledge and experience. The education of the architect should acquire him the essential skills to understand the universe as the source of his knowledge. What the universe tells us is "utilitas-firmitas-venustas" is one and all. They complete each other.

Abbot Suger, in his "The Book of Suger, Abbot of Saint-Denis*on What Was Done During his Administration*", the cosmology, paradigm, idea and realisation of that idea by means of architecture can be explored. He was an outstanding figure. His talent in seeing the opportunity to realize an idea through a particular treatment of a certain material (stone masonry in order to represent the universe in the form of a cathedral through which the dull minds would reach the light - God) is still an important lesson on the capacity of architecture as an art.

Thomas Aquinas, in his "Summa Theologica", reveals the nature and structure of that cosmos and idea behind that, so we can follow the construction of the universe and architecture, and its theory based on the same idea. St. Thomas introduced "reason" to the theology on the basis of Aristotle's philosophy. His method of reasoning and the holistic universe understanding constitute a guide to the Gothic Architecture as the model of Scholastic Universe.

Leon Battista Alberti, in his "The Ten Books of Architecture", presents architecture as an intellectual work and introduces the concept of "design". Since Vitruvius, it was the first time, a comprehensive text was produced on architecture. The conjuncture was characterized by the overseas discoveries, trade, and the formation of a new social-economic structure –bourgeois of the future. Alberti might be the first one who foresaw the emergence of a

new area of specialization, a new profession demanding an intellectual practice. According to him, design belongs to the realm of mind. The stone mason is just a tool in the hands of architect to realize what he thought.

Andrea Palladio, in his "Four Books of Architecture, invented the Architect as an independent practitioner and intellectual. The context was shaped by the struggle of emerging bourgeois for recognition and legislation by means of art and patronage against the divine and from birth rights of the aristocracy. The new professional Architect was an important figure in that battle on the former's side. It was not a coincidence that the birth of individual artist had come along with Renaissance.

Claude Nicolas Ledoux, in his "Architecture Considered in Relation to Art, Morals, and Legislation", underlined the position of the architect as a Master, and introduced the "social responsibility" to his professional identity. He introduced the problem of accommodation caused by demographic movements and urbanization as a result of new economic and technological era. His designs for public accommodation were the first examples promoting hygiene, and the conditions of communal life.

Eugene Emmanuel Viollet-Le-Duc, in his "Discourses on Architecture", sets up the "ground theory of modern architecture. He gives a voice to the architect's conscience as a part of common sense, professional and intellectual identity. He was one of the founders of Morality of Modern Architecture and Modern Restoration. As a critic and architect, Viollet Le-Duc stated that Gothic Architecture is outstanding and a possible representative of "National Identity", as for the other emerging nation-states, not because of its enormous scale and formal beauty. It was appreciated and glorified since it was the result of an understanding of universe and its realization through a social organization and construction technique. He claimed that the restoration of Gothic structures should follow the talent of Middle Age builders: Master your age's material and technology. Since the new and contemporary material was iron, in his age, the missing parts of the cathedrals should have been completed with iron, treated with respect to its nature. Therefore, iron looks like behave as iron, stone looks like and behave as stone.

John Ruskin, in "Seven Lamps of Architecture", makes one of the harshest critic of "emerging" modernist society, and warns about the dishonest and heartless machine production. He mentions the alienation of the labour to his work since he even does not which part of the machine he is producing or assembling. The hand work of the labour is the guarantee of the beauty and the spirit given to the production.

William Morris, in "The Worker's Share of Art", takes the flag of Violette-le-duc and introduces "design" as an intellectual tool of processing an idea to architecture, which ends up with an unprecedented form. He compromises the uniqueness of design work with mass production, which changed the economical and social structure of the 19th Century world completely.

Briefly, our goal is to initiate awareness in students about the ruling – innate ideas and content behind styles, movements, and forms. It is our utmost concern to motivate them to consider the real but unseen, and sometime ignored, content and components of architecture in their personal - professional – aesthetic judgements. By this way, it would be possible to construct an intellectual-individual competency base on which the professional – technical qualifications could be built upon.

At this point, another question can be raised. We have already mentioned about the impossibility of measuring and assessing those individual qualities with traditional methods and instruments. Then, how could we evaluate the students? Do we expect them to transfer their learning's and development to a kind of performance?

We do not use any test material. A written or oral exam aiming at the textual content is not considered in the scope of the course. The main idea is that the aesthetic and professional judgement and production should be based on intellectual background. Therefore, it was expected the students first to explore and construct their own background, and then to develop their on judgements. Although it was Ana-chronic and seems contradictory with the essence of the course, students were asked to review a building according to the architectural space idea they would distil from a text they chose. For the final evaluation, students were asked to derive and criticize each author's idea of Architecture and space.

We believe that the expected awareness and development of the student about architectural space, theory and history, and the individual competencies after completing "The Development of Architectural Space Idea" course would be observed best in their architectural design studio works. Considering this, we think that this course is just a beginning, not an end in-itself.

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