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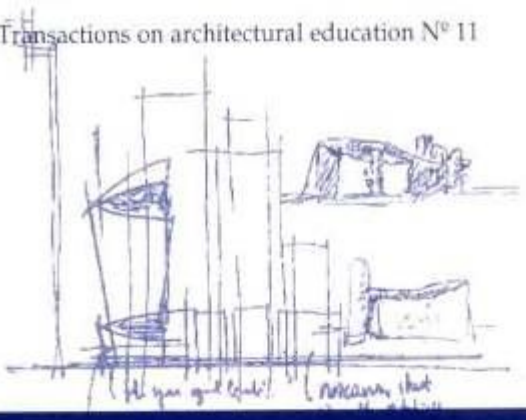

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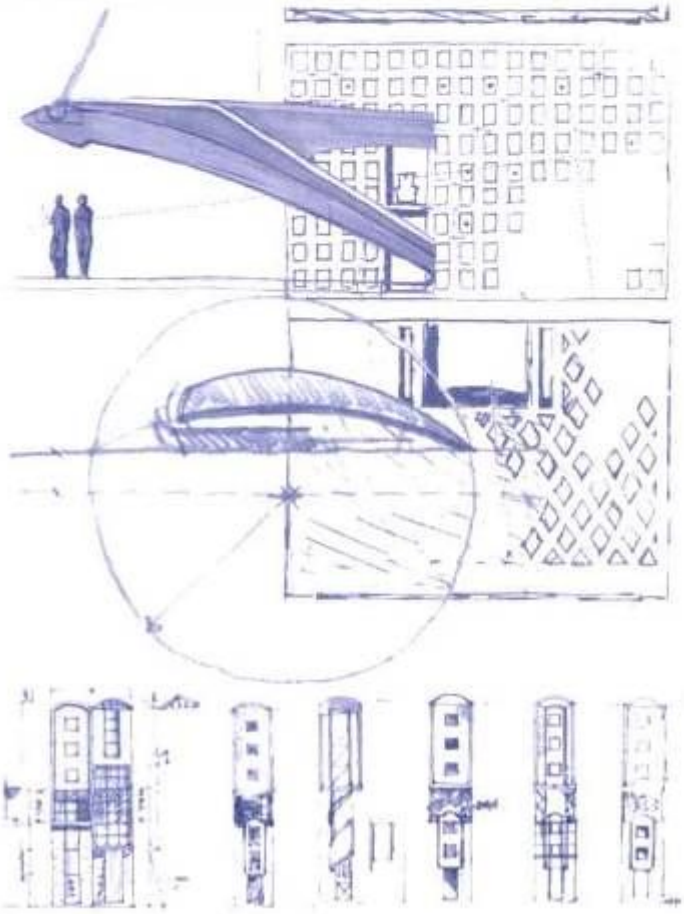
GAZI UNIVERSITY
FACULTY OF ENGINEERING
AND ARCHITECTURE
DEPARTMENT OF ARCHITECTURE

RE-INTEGRATING THEORY & DESIGN IN ARTHITECTURAL EDUCATION



Editor
Nur ÇAĞLAR
Éditeur

Table of Contents

A Proposal for a New System in Architectural Education

Faruk Yalçın UĞURLU
Department of Architecture, Faculty of Engineering and Architecture,
Çankaya University, Ankara, Turkey
fyalcinugurlu@hotmail.com

Introduction

As human beings, we were expecting too much from the new millenium. We hoped it to bring peace, better living standards, exact solutions for any type of diseaster or harmful occurances, each profession would create the best participation to this new era.

As architects, we were expecting a new perfect environmental quality, there would be extra designing standards influencing our spaces with multi-dimensional positive addings to human life.

We can argue that; in reality there is no difference. Each day everything goes beyond its minimum standards. How can we proove that this argument is true? There is the *Millenium Dome* in London, and other special architectural pieces are taking place all over the world. Utilisation of contemporary technologies, researches about new materials continue to develop.

At the first place, this may be seen as a great improvement. But according to us; all of these efforts are very limited and architects have choosen some considerably wrong strategies. There is always the possibility for the selected method to turn out as the unexpected, because of the lack of a strong and clearly defined goal. That is; our profession should serve to the **majority**, not the **minority**, as it is true for medical doctors. Nowadays, *Art For The Sake of Art* can be pronounced as; *Architecture For The Sake of Architecture*. If there are people without any shelter, then this type of an approach can not be defended. There should be difference between a painter, a sculptor and an architect.

At this point, it can be easily said that; it goes all the way back to the wrong education systems, starting from kindergarten, through universities and then the whole life.

In this study; we propose **a new university education system** combining theory with practice, superimpose society demand with architectural supply with a continious education approach for every one.

When we think and criticise scientifically, the whole existing system has somewhat erroneous bases, system considers the advantage of only very limited people. As an explanation, lets think about open and closed systems in

any prefabrication; we all know that in an open system there is no specific target. The market may or may not absorb these produced pieces. So there is the tremendous amount of waste in all means of resources. The opposite is the closed system, which is all of the charecteristics (number or the quality) of inputs-outputs are scientifically organized, so that there is no waste.

These insufficiently running existing economic systems, especially influence the developing or underdeveloped countries negatively. For instance; they inject private car systems instead of mass transportation, or they advertise huge housings instead of optimum space organizations. All of these negative factors demage the natural dynamism of these countries. According to our economic accumulation, at a saturation point, these distorted systems will automatically finish their fair way of lifes.

By the help of this study, we are expecting to open a new discussion about architecture-society relationship. As we all know; as an interesting profession, architecture should perform a real scientific bridge between economic side and social side of the system. The architects should have an active and healthy education background, so that they can direct political decisions in a humanistic standard, accordingly, rational utilisation of all natural resources, inputs of all of the environmental factors are able to run positively. That is; the people may obtain very economical solutions to their urgent needs, such as food and shelter. For instance; if the initial decision idea for a settlement is true, then the whole life can run in a better standard. As it is solved in London, instead of high-rise building solutions, the low-rise building will give answer to eartquake, sound insulation, privacy or pollution, or infrastructure problems.

To be able to present whole approach briefly; first part covers existing education system, second parts includes proposed education system, then advantages and application principles will take place. After these, a case study in interior architecture in Turkey will be covered in two parts. First will be about the strategy and results of two years application, second will cover future aims.

Existing Education System

In all over the world, from ancient periods to the new millenium, there is a classical education system. In spite of very limited advantages, it consumes huge amount of time and money.

In all university educations, students have courses which are all transferring pure knowledge, without concentration on the creation of methodologies. The center is not the students, but the tutors. As the famous psychologist Piage stated, "tutor shouldn't be in between object and it's knowledge". There is no continuity in teaching and training. No theory-practice, no abstraction or concrete findings. So, there are too many wastes in the system. Tutors, most commonly, repeat the 30 years old knowledge, they automatically transfer their accumulations without paying enough attention on renewing them. The teaching and research activities are not balanced and sometimes there is no

research activity at all.

The other important factor is that; nearly all of the research subjects are directed by multi-national firms for their own benefits. The goal of the researcher is very limited to find defined or asked results, after reaching these products, they are to conclude their contributions. Nor scientific, neither ethical standards are applicable. Limited freedom of choosing subjects, because of the commanding way the sponsoring groups act in those research opportunities.

In Turkey, each year, there is about 1.5 million students who are trying to be successful in the central acceptance exam for university education. Many of them want to be engineers or architects without having any consciousness about these professions. On the other hand; the background for a university education is also problematic. For instance; 18 years old student may have no self confidence. The other problem of existing system is the content and applied methodology. There is no curriculum planning. Each university copies the curriculum from others with all of its misfunctioning aspects. Universities produce similar students, like mass-produced robots, to fill positions physically without the function of a positive production. (Fig.1)

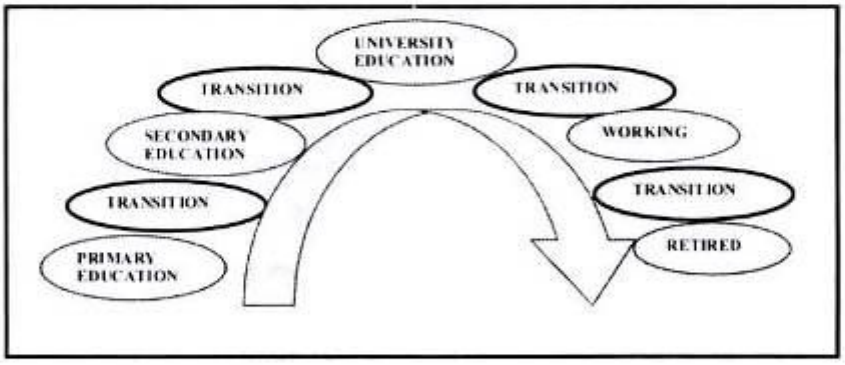


Figure 1

In this education system, not only the students, but families, university staffs, academic personnel, all of them seem unhappy. Non of them having the notion of future, the researh potential of the universities stay very limited.

Proposed Education System

Instead of the existing education system, we propose a new model to create a much more efficient potential. This system has two parts at macro and micro levels. For the practice-theory correlations in macro level, creation of an education system having direct roots in application stages is propesed. Each part of the whole system must athomatically influence the others with positive feed backs. (Fig.2)

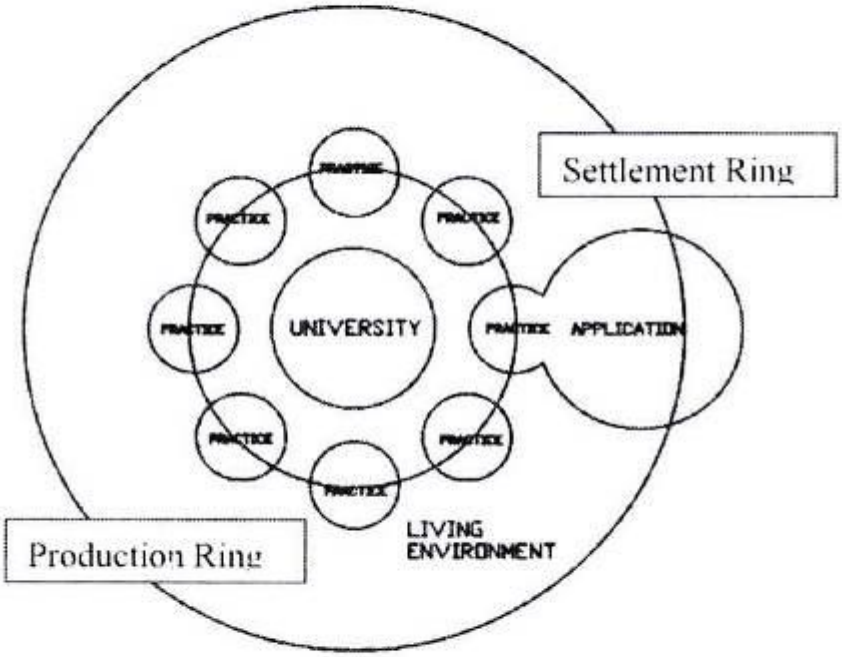


Figure 2 **LIVING ZONE** = Production Ring + Settlement Ring

The characteristics of the new macro-approach are:

- **Combines the theory with practice in two steps. One is being technical production units, atöliers, laboratories, etc. will function as closer practical experience units for the students, according to their study fields. After they improve their abilities, they move to other step, that are** living zones **with residential or working spaces planned and applied by the university. So that the students may have a total application medium for their researches, thesis, practical tests, etc. activities.**
- Prepare an atmosphere for transition from practice to theory or vice versa in the university education so that it directly contributes to scientific improvements.
- Provides occasions not only for the ones that are studying theoretically, but also to the ones having practical abilities in application.
- The situation of the university and the production units placed around university, accelerates the speed and the productivity of researches and scientific inventions. Also the choose of the research subjects, improve the functonality of the products.

- The settlement rings come after the production ring around the university creates a laboratory for scientific observation, control, measurement (such as physical, social, psychological, economical) *As an Education Hospital For Medical Doctors.*
- With the positive inputs of applied certificate programs, it presents continious cultural society system at environmental utilization spaces (living or working).
- The similar organization in Turkey was Education Institutes in Villages (Köy Enstitüleri) in abroad was Bauhouse.
- The changing contents of workshops are being brought to life by the help of the parallel courses. For instance; when environmental control or construction courses are combined together with workshops, the application subjects are choosen parallel to these contents.
- The other approach is perceiving dynamic inputs from the transfer of scientific knowledges gained by the experiences with clients, contructors relation. That is; the students may gain abilities by try and error methods for their future successes.
- The other factor is; the workshops at 7 and 8 semesters transfer an understanding to the students about the relationship between clients, contructors and the professionals by perceiving the scientific charecteristics, to be able to add dynamic structure of the education system. That is; the student may test and improve all of the behavioral aspects by try and error methods in these applications. (Appendix)

The charecteristics of the new understanding is to open education to every one, at any stage (for example; design process in architectural education should be perceived by clients or the users too) so that theory-practice relation can be realized in a much more rational standart. (Fig.3)

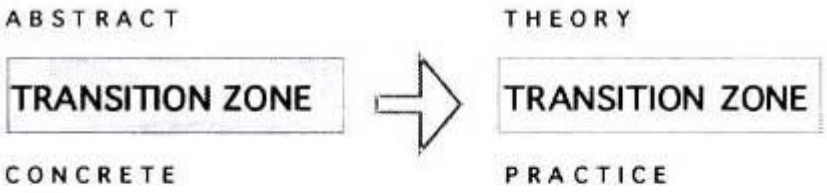


Figure 3

One of the peculiarity of this education system is to have rational correlations among the parts of the practice in application by transfering those factors stated as goals to the theoretical transitions in education and training process. (Fig.4)

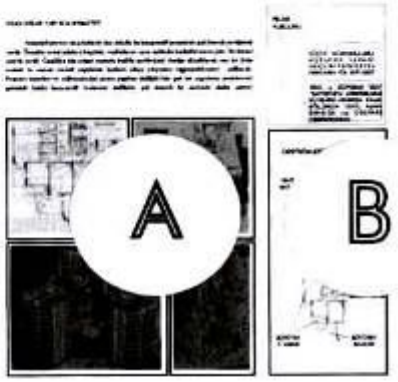


Figure 4

Advantages of The New System

The existing systems are organized in a way that the students should have a fairly defined amount of knowledge accumulation in the fields of their studies. But there is no understanding of training accumulations in existing system. Usually it is said that these types of abilities can be improved after the education. This approach will correct these types of problems for the students especially in applied sciences, engineering, architecture, interior architecture or industrial design, etc. If we go into the details, we perceive some important advantages too. Some of these are:

- This system improve the liquidity in the transfer of knowledge, which is always needed by any education system,
- Creates the abstraction-concrete relationship in the process,
- Self-feeding of each part (practice or theoretical parts) from each other can be realized,
- The creative approaches can be achieved and utilized easily,
- Knowledge gets old in a short period of time due to inventions, so that the diploma lost its original value in a very short period, that's why in this system, there is no concentration on knowledge accumulation, but methodologies to reach the knowledge are important,
- All of the assimilation of the inputs, analysis or synthesis stages can be realized in a harmonic progress,
- Different study fields will need different knowledge accumulation sets, so that the unlimited, endless specialization will be feasible,

- Self-confidence for a student can be achieved (in existing system, new graduate does not know how to start).

The other factor in a university education is the theory-practice relation in the system. If there is only a theoretical learning process, then at a time interval this may fail due to new feedback coming from the real life. All of these concrete inputs should be perceived very carefully and assimilated by abstractions, then these should create new theories by the help of new methodology creation. That is clear that, this process has a very dynamic and flexible characteristic to cope with. So the other advantage of the new system is to evaluate the progress by the utilization of all of these factors together. To be able to realize this proposal, as a practical example, in the field of architectural education, the inputs of the professional architects to the education system as experienced instructors is very important, especially if there is an organized design-workshop parallel studios system applied. This type of an approach has been successfully brought to life in Yükseliş and Konya Academies.

Application Principles

In this new proposed system, for each application stage, there should be different principles. The content and the charecteristics of each workshop will vary from each other. For instance; in the first year, the theoretical approach should cover all of the aspects of the profession in a very simple manner. The students should perceive whole system clearly with the parts, relations among them, and the connection systems to the whole body.

In the process the theoretical inputs generally should be given in first two years periods. Then in the second last two years, students, by the same system and theories, will be creative in achieving much more complex parts and superimpositions of the body.

At the freshman level, tutors may concentrate on attractive points of the profession. But during last year, they may pay attention for the critical problems of the profession, and direct them to find original solutions to these serious problems. So that the students will be proud of their profession without eliminating professional risc factors, learn the importance of tolerance limits in each case.

One important factor is the relationship of the discipline with other professionals. The programming, acting according to governmental laws, standards, restirictions or rules. As a principle, one should pay attention to prepare each documantation or any presentation in a concrete, written way.

Scientifically measurable, comparable factors, values must be studied very carefully. Choose of material, technology, detail, cost control and design relations are all very concrete factors, so the perceivable charts, matrixes, interim reports should be presented.

A student should differentiate and evoluate all of the the private or group study potentials. Creation of team understanding, discussion sessions, decision making processes all are the important startegies for a student in achieving positive results.

Students might understand that, in this profession, sharing a risc, creating new practical ideas, working together, all are imporatant factors, leading to success. Being creative, having continious co-operation, being open minded in every step is very important.

A Case Study For Interior Architecture

A sample study that has been gathered from the outputs of this study is being used at the Interior Architecture Department of the Cankaya University. The system has been adopted to the stages from student election to curriculum planning, and applied the spatial organization studies for the university itself (i.e. masters studio studies).

In addition, starting from the first year to the 4th year, the application studies have been planned in different context, helped the student in their production parrallel to their accumulations and peculiarities.

For freshmen students, in spite of limited theoretical accumulation, directing them to application studies has been made on purpose, because, it was expected that they will be conscious about their profession so that they will be able to perceive the negative and missing points. At the same time, this process would create self confidence for each and every student. The priorities of theoretical and practical occurances are flexible to switch positions because the importance is variable according to the circumstances.

In accordance, each student is expected to gain communicational and behavioral skills within social structure especially with their clients. The closest example to this system is the Ahi-Brotherhood system in Turkey. The ones that agree on this system should improve their attitude as a professional and as a human being.

Also, the periodical assignments have a great deal of importance in improving the productivity of this system.

There is also a payment procedure for the student as an encouraging factor which may naturally prepare the students for the real life working conditions.

The final projects seem to have proven that the applied system is being successful. The freshmen students have reached an education point that they are aware of how to get involved with the problems, how to approach them, how to gather information, treat the information (analysis-synthesis process), how to prepare written documents, and how to present them. They are now able to achieve an ability of transferring their position from theory to practical stages.

Conclusion

In a country, the whole education system influences on the overall economy directed in two ways. The first one is so obvious; if a student's standard in education is high, then the revenue, that is the plus-value can be automatically positive. The second one has two parallel paths, influencing each others. The standard and the characteristics of the education system may improve the student efficiency. But we should consider another important criteria too. If an education system covers the inputs coming directly from life itself, then the practice and application transfer new theoretical additions, so the student can be much more successful and finish his&her education in a shorter period.

In this study we tried to propose a new system, discusses all aspects in education to have a creative approach, create methods to combine practice with theory, also presents dynamic charecteristic of the education, whole education can be revised by transition steps to cover input=outcome mechanisms. After this proposal, all of the students, academicians, administraters or decision makers will be able to argue the advantages and application principles of this new system.

We should say that this approach presents a starting point model applied and tested for two years. But it is hoped that there will be some other addings by the criticism of the proposal, so that we may revise certain parts for future applications. Because our profession has an open and flexible scientific understanding. For the better models, each one of us should share all of the findings.

After 2 years term, we may exactly prepare authucriticism about our proposal. During this process, we are hoping to present internal findings at each year. We are also open for any type of inputs from other researchers. When we can run this system alltogether, the outcome will bring a better environmental quality constructed with all scientific findings, with the new design potentials or ecological preservations too.

References

1. Doxiadis, C.A., Architecture In Transition, London, 1968
2. Droste M., Bauhaus, Berlin, 1990
3. Erpi, F., Mimari Üzerine Söyleşiler, Ankara, 1999
4. Wolfe, T., From Bauhaus to Our House, New York ,1982
5. Uğurlu, F.Y., Introduction To Architecture, Konya, 1979
6. Zevi, B., The Modern Language of Architecture, New York, 1994