

AN INTEGRATED PEDAGOGY FOR 1/1 LEARNING

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1. In the first semester of the studio education, through various exercises the students are expected to reflect on order, to develop strategies for organization, and to gain mental and manual skills, as well as awareness of the perceptual values of form, to structure compositions in 2 and 3-D media with various materials (Gür (ed.), 2009, 18). The second semester is devised to focus on the introduction of spatial aspects of architecture in order to associate basic design principles and architectural design.

2. The most well known example to 1/1 learning is the Rural Studio, established by Dennis K. Ruth and Samuel Mockbee at Auburn University School of Architecture in 1993. As a part of their education, architectural students of Auburn University design and build houses for the rural poor. The Rural Studio has some similarities with METU summer construction practices; they are projected to contribute to the education of an architect. For further information about architectural schools, which have hands-on building or 'design-build' program as a tool of learning in their curriculum in various forms like courses, workshops, and etc. see Carpenter (1997).

Summer Construction Practice (Arch 190) at the Middle East Technical University (METU) Department of Architecture, which is conducted at the end of the first year of the education, uses the act of building as an educational tool to explore processes that form architecture. It is a learning process connecting the idea to practice through the act of construction; students are expected to derive knowledge of architecture from their own experiences, and from the actions they perform in the construction process.

Following the footsteps of the Bauhaus pedagogy, the first year education in architecture at METU, which is formulated around basic design, aims to introduce the students to architectural culture and prepare them for the general traits of design (1). In the Bauhaus, beginning with the "basic course", the students are required to experiment with different materials besides their studies on form (Gropius, 1952, 22). In METU, the first year education is developed around abstract experimentation of form and distanced from the constructional aspects of building. Arch 190 aims to eliminate this distance (Zelef et al., 2001, 277), and acts as a bridge between the first year and second year education by introducing tangible aspects of architecture and providing an opportunity for experimentation with these aspects (2).

There are various buildings realized mainly in the rural areas of Turkey as a requirement of Arch 190 dating back to 1958 (Özkan, 1974). Each year, buildings are designed by different teaching members of the department, who are also responsible from the coordination of the course. Within two months, students construct a small size building. 1/1 full-scale construction is a continuation of architectural education in real site. Besides its educational dimensions in connecting an idea to practice through experimentation, working and living in the rural area, and communication with the inhabitants of the village underline the social significance of the summer construction practice. These practices help to develop awareness for social, cultural, local aspects of architecture in the student, and to teach

3. Computer Workshop is designed by the authors who are the teaching members of the department. It is nominated for prize in the 9th National Awards for Architecture organized by Turkish Chamber of Architects (Section of UIA in Turkey) in 2004. In the 9th National Awards, METU Summer Construction Practice Program (1958-2003) is entitled for a prize in the category of 'Contribution to Architecture'.

the traditional way of building with the available materials. Besides faculty members who design the building, and organize the construction process, local craftsmen are among the significant actors of the 1/1 learning process with their experience in traditional way of building. Students are expected to learn the local aspects by working with the constraints of the context, considering contextual forces and physical characteristics of the local environment, ways and processes of collaboration and team-work with client(s) and user(s).

This article dwells on the summer construction practice realized in 2003. In this practice, students constructed a Computer Workshop for the Primary School of Arılı Village, which is located in Rize in the Eastern Black Sea Region of Turkey (Gür and Yüncü, 2004) (3). The Workshop was constructed mainly out of timber as the local material, within two months from July 1st to August 31st, 2003. The work schedule was organized in a way that different work groups as teams could simultaneously act. Students were encouraged to participate in different work groups. Therefore, students have the opportunity of observing and experiencing different construction processes and materials.

This article particularly focuses on the pedagogical aspects of the design and construction process of the Computer Workshop in Arılı, which provides a ground for rethinking architectural education within the context of 1/1 learning. Here, we address not the product (i.e. the Computer Workshop) of 1/1 learning, but the integrated process of learning-design-construction itself, which evolves as the Workshop. Our challenge is to conceptualize 1/1 learning in Arılı by meaningfully integrating pedagogy with the process.

The summer construction program at METU is a hands-on building practice, in which students learn from their experiences and actions. Actions done in a construction process have a determining effect on what is to be produced. Then, process and form constitute each other; they are two major aspects of 1/1 learning. It is in this sense that rather than being preoccupied only with form or process, an approach that integrates process and form by maintaining their distinctive educational potentials is required.

Therefore, in 1/1 learning in Arılı, we developed and implemented an integrated pedagogical approach of 'processing the form', in which there is a mutual relationship between form and process instead of a hierarchy. At the core of this approach is the unification of the processes of design, construction and education so that students encounter various aspects of architecture simultaneously. In implementing the integrated pedagogy, a single operational strategy is proposed to unify the processes. The timber computer workshop is considered to be a sequence of sections that yields possibilities of different relations rather than a fixed relation between plan and architectural envelope. Sections are repeated in one direction in a way that repetition becomes not a limiting act yet an act that generates differences. In this strategy of 'repetition of section', the section is considered as an architectural form that defines spatial relations while repetition is an act that utilizes the section for the emergence of the Computer Workshop.

1/1 learning should not be considered as a simulation of professional practice in a real site, instead it is a particular form of learning that is to be defined through its own tools, methods and operations. In this context,

this study discusses the particular pedagogical approach of 'processing the form' and its implementation through the strategy of 'repetition of section' as a contribution to 1/1 learning.

An Integrated Pedagogical Approach

Robert Somol, in his article titled "Operation Architecture", discusses recent pedagogical developments in Swiss Federal Institute of Technology Zurich (ETH Zurich). The article is published in the book *Inchoate: an Experiment in Architectural Education*, which documents and explains the experimental design works in the first year studio at ETH conducted by Marc Angélil and his company. Somol contextualizes the pedagogy of the studio in relation to the influence of Bernhard Hoesli at ETH. Hoesli was one of the significant actors of a brief period of experimentation at the University of Texas at Austin in 1950s along with Colin Rowe and John Hejduk. Upon his resignation from Austin, he transferred the ideas that emerged at Texas to ETH, and developed a pedagogical approach for architecture based on these ideas. According to Somol, the pedagogy of Hoesli remains a challenging standard at ETH. He argues that Angélil and his colleagues attempt to propose an alternative to Hoesli's model. "Hoesli's universal preoccupation with space has been replaced by an intensive engagement with process. Hoesli's early seventies exercise 'form as means' has been reconfigured to 'process as form' " (Somol, 2003, 12).

As an extension of the Texas legacy on spatial fixation, Hoesli sees the creation of space as the essence of architecture. He defines his pedagogy as "New Vision", which identifies architecture with space, and characterizes itself with a conceptual framework uniting the masters of modern architecture, namely Le Corbusier, Frank Lloyd Wright, and Mies van der Rohe (Caragone, 1995, 382-3). The works of these masters constitute the conceptual basis of the exercises on space. "Form as means", which is also the title of an early seventies exercise, is at the core of Hoesli's pedagogical approach. In this context, the studio exercises such as "Spatial Extension" and "Space within Space" together with the actual "Form as Means" exercise aim at leading the students to discover the vital aspect of architecture by focusing on space among other issues such as function and structure. In these exercises, form appears as a major tool for creating space. Hoesli's pedagogy aims to teach how to 'form' architectural space.

For Angélil, architecture is to be considered as *praxis* that refers to different modes of production corresponding to technical, intellectual and intuitive. "The term 'practice', whether pertaining to technical, intellectual, or intuitive work, adheres to production in its broadest sense as a base-mechanism determining processes of flow" (Angélil, 2003, 30). In technical praxis, the emphasis is placed on operational tools of architecture, in other words the question of 'how'. While intellectual praxis considers architectural design as a form of discourse, intuitive praxis refers to creative aspects of design. These three practices involve processes that have a determining effect on the production of architectural space.

Therefore "rather than conceiving design in terms of predetermined ends", Angélil stresses "a process-oriented disposition of architecture" (Angélil, 2003, 29). He underlines the significance of process, which is not a means to a predetermined end, yet it is the process itself that 'forms' the architectural space. The process involves intuitive interpretation of conditions, development of ideas (architectural discourse), tools and methods, and actions for their employment that would yield the architectural product.

4. The articles *The Mathematics of the Ideal Villa* of 1947 by Rowe and *Transparency: Literal and Phenomenal* of 1955 by Rowe and Robert Slutzky are essential to the discussions on form as the basis of architecture.

5. While Peter Eisenman's (who studied with Rowe at Cambridge and collaborated with Hejduk at Cooper Union) Ph.D. dissertation "The Formal Basis of Modern Architecture" (1963) focuses on the nature of form, in his later book "Diagram Diaries" (1999), he emphasizes the role of design acts and diagrams in the design process. Stan Allen (who studied at Cooper Union where Hejduk and Eisenman were teaching) in his book "Points + Lines: Diagrams and Projects for the City" (1999) discusses infrastructural urbanism with focus on performative aspect of architecture.

Then, for Angéllil, architecture is neither building nor space, but "[...it] is first and foremost a discursive practice" (Somol, 2003, 12). It is in this sense that Somol addresses Angéllil's approach as "process as form", and claims that it is developed as an alternative to Hoesli's pedagogy of "form as means".

The duality between 'form' and 'process', constitutes the core of discussions on space production in architecture. In these discussions, they appear as alternatives to each other, and contemporary explanations of architectural design rests on either form or process. The initiation of discussions on 'form' as a main aspect of architectural space is one of the major contributions of the Texas experience of Rowe, Hejduk, and Hoesli in 1950s (4). These discussions continued by the former members of the Texas faculty in 1950s and their students (Deamer, 2001). The students of this pedagogy (such as Peter Eisenman, Daniel Libeskind, Stan Allen, and Greg Lynn) have eventually produced a counter argument that focuses on 'process' of architectural design (5). Hoesli's pedagogy (form as means) and Angéllil's pedagogy (process as form) are situated in this context, and are extensions of the discussions on form and process in architectural production.

As similar to education in the studio context, 1/1 learning in situ in Arılı can not be thought apart from the discussions on form and process mentioned above. 1/1 learning is a process that involves experimentation through the act of construction. Therefore, in the case of Arılı, the construction process is devised to constitute a major part of the educational experience that forms the architectural space. In this way, the 'process of learning through construction' evolves into the architectural 'form'.

Consequently, 1/1 learning in Arılı requires an understanding that integrates the pedagogical approaches of "form as means" and "process as form". This integration could be achieved by reconsidering the relations between the processes of learning, design, and construction. The acts of design and construction may suggest different pedagogical approaches; yet, these acts operate simultaneously in 1/1 learning in real site. Therefore, an integrated pedagogy, 'processing the form' is developed. For the deployment of this pedagogy, a single strategy uniting the processes of learning, design and construction is introduced.

The pedagogy of 'processing the form' involves an understanding of architectural form in terms of its performance. It is not 'what' it looks like but 'how' it performs that becomes a formal tool. This formal tool is put into operation for generating an architectural space. This act is called 'processing the form'. Learning, design, and construction are unified through a single operation of processing the form.

Repetition of Section as an Integrative Strategy

The context, in which the timber Computer Workshop is built, has a long-established timber building tradition. In parallel to the learning outcomes of the summer construction practices, a benefit of 1/1 learning in rural areas is to develop awareness to the local aspects of architecture. Therefore, *Serender*, which is a significant product of this tradition, is taken as a model for this particular practice.

Serender is a kind of storage elevated from the ground (almost 2.00m-2.50m) for protecting food from humidity and animals (**Figure 1**). Although it is realized in response to a specific intent and function, *Serender* is a generic



Figure 1. A typical *Serender*.

space that has universal nature with its own inherent dynamics. How *Serender* works or performs can be understood from its section. Therefore, its *raison d'être* is its section. The typical section is formed of a deck that rests upon timber posts supporting a pitched roofed single enclosed space, and connected to the ground via a removable staircase.

This model is not used as a type to be copied. Rather, with a certain level of criticality, how *Serender* works is conceived of as a source for knowledge generation. Then, the performative qualities of *Serender's* form are exploited in the production of architectural space of the Computer Workshop. It is in this sense that the 'form' of *Serender* becomes a 'means' that operates the design process.

Within the framework of our integrated pedagogy, in the Computer Workshop, the section of *Serender* becomes a formal tool to be put into operation; it is the form to be processed. The section is a typical architectural solution to relate ground and building, building and sky, roof and interior space, and exterior and interior. With minimum intervention to nature, the storage is a box that is hovered between earth and sky. In this sense, it is adaptable to topographic conditions. The main determinant of space is the roof whose timber truss structure is exposed in the interior. Since the interior space is only framed by the roof structure, the space becomes flexible to accommodate diverse needs. The exterior of the *Serender*, that is the deck, performs as an interface between the ground and the enclosed storage area. The relations between ground and building, and exterior and interior form additional spaces to store such as the deck and the semi open space below the deck besides the enclosed space.

This generic section evolves into a new section according to the specificities of the site where the Computer Workshop is built (Figure 2). The site is located in the schoolyard on the north of which is a creek. The creek is below the schoolyard level, and this causes a danger for the students. Therefore the building is thought to define an edge between the schoolyard and the creek, and the new section is developed in response to this specific purpose.

The section of the Workshop is composed of a timber truss placed reverse in a way to form single-slope, which is supported by two timber posts resting on a reinforced concrete wall (6). The single-slope is directed towards the schoolyard so as to strengthen the definition of edge. The section performs differently on two sides; its height decreases towards the schoolyard for human scale, whereas on the north its height increases to have larger view of the creek and the hill behind. In this way, the section generates different relations on two sides. The relation between the ground and the building is reformulated to connect two sides so that the section is elevated from the ground on a continuous reinforced concrete wall instead of timber posts. It is this new section that is put into a 'process' to define an edge on the north (Figure 3).

6. We would like to thank to Dr. Ercüment Erman, a member of the Department, for his criticism during the design of the timber truss.

Figure 2. Site for the Computer Workshop.



Figure 3. Diagrammatic section of the Computer Workshop derived from the section of *Serender*.

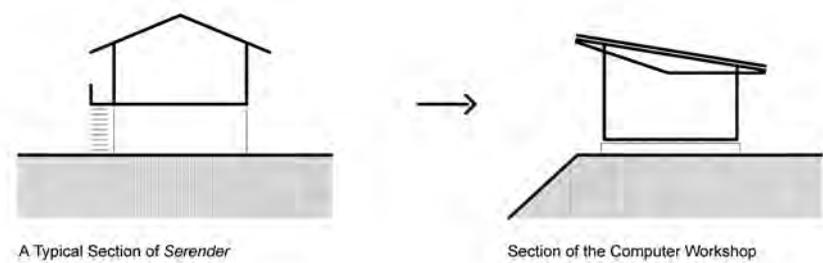
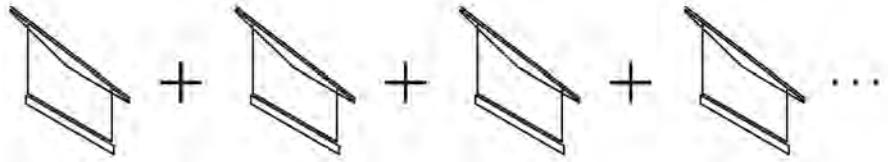


Figure 4. Repetition of Sections.



To form an edge, the section is repeated in one direction in parallel to the creek. The act of repetition of the section eventually crystallizes into the form of the Workshop. The act of repetition operates not only the design process but also the processes of both construction and learning. Therefore, repetition of section is introduced as an integrative strategy; learning, design, and construction are unified through a single operation of 'repeating the section' (that is 'processing the form'). This operational orientation in architecture integrates the pedagogies of "form as means" and "process as form".

Repetition is not a limiting act yet it outlines possibilities of difference in design with the same section. The act of repeating the section forms spatial bays in between the sections. The Workshop is formed by adding these bays, which are differently articulated. In other words, the Workshop is the 'addition' of different (volumetric) bays that are formed through the 'repetition' of the same (planar) section (Figure 4). Designing-and-constructing the Workshop by repeating the section introduces students, who build the building with their hands, to basic knowledge of making architecture. The section is no more a representation but it becomes an operative tool of the integrated process.

Compared to a discourse of architectural education that gives emphasis to plan (and the object as the architect's end product), an approach that gives emphasis to section (and process) has various advantages. Repetition of section manifests itself in spatial flexibility, which allows the introduction of how the same section can generate differences in design and construction process. Designing-and-constructing section by section provides flexibility in the process itself. The form of the Workshop emerges during the process, and it becomes adaptable to previously unforeseen conditions resulting from spatial, constructive and pedagogical factors.

Plan oriented design results in a construction process that proceeds from foundation to roof. This process isolates the various aspects of construction, thus limits the students' learning experience. In contrast, an emphasis on section and the act of repetition provide an opportunity to construct in horizontal direction. In this approach, since the section relates every constructional element from foundation to roof in an integrated manner, students encounter every aspect of construction process simultaneously (Figure 5). Considering climatic conditions of the region, which is rainy in

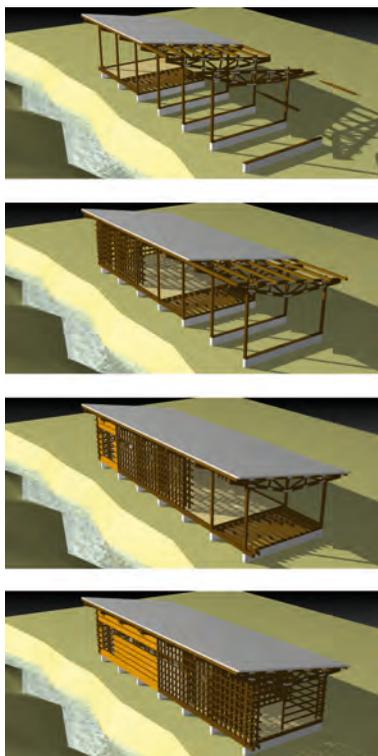


Figure 5. The process of learning-design-and-construction: repetition of section evolving into the Computer Workshop.

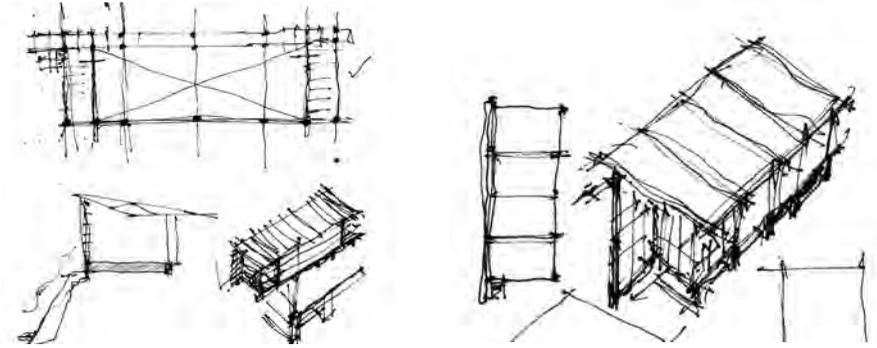


Figure 6. Preliminary Sketches.

Figure 7. Preliminary Sketches.

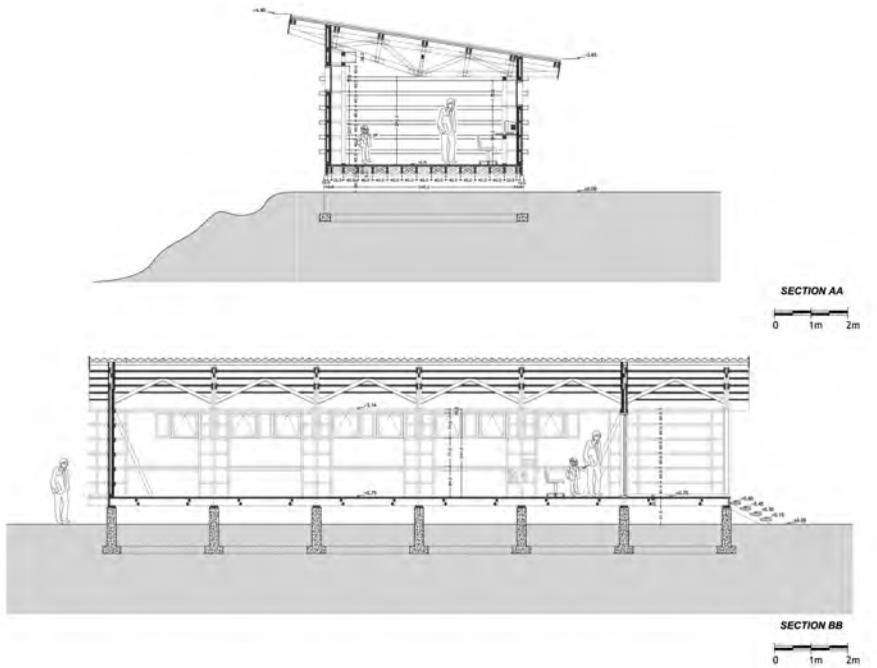


Figure 8. Sections.

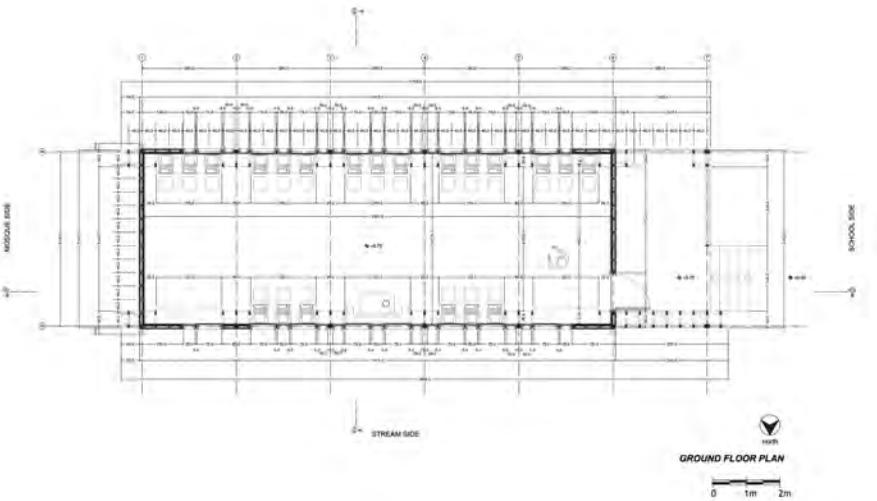


Figure 9. Plan.

Figure 10. West Elevation.

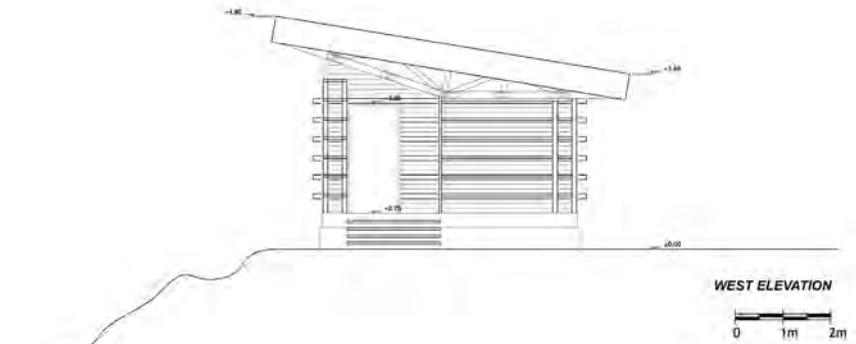
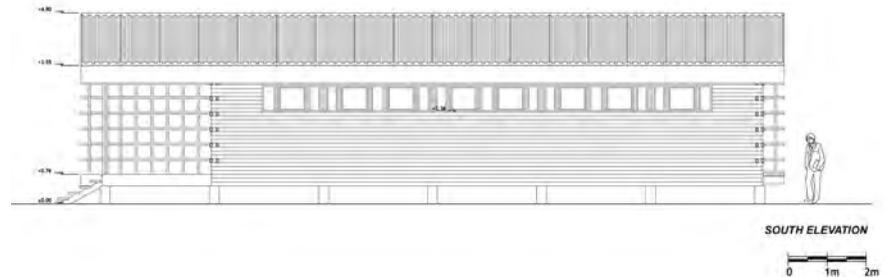


Figure 11. South Elevation.



most of the year, building section by section also provides a shelter under which students can work as the construction proceeds.

In discussing topology vs. typology, Somol suggests an alternative way to think about repetition (Somol, 1998, 23-26). In reference to Somol, the act of repetition is conceived as becoming other. In the context of 1/1 learning in Arılı, the same section repeats by generating different relationships. Therefore, repetition becomes an act-based tool for spatial differentiation. Repetition suggests an evolutionary process that does not describe a fixed set of relationships between content and structure, and a fixed set of actions within a fixed architectural envelope. Thus, the section is processed topologically rather than typologically. The typical section evolved from *Serender* is not repeated for its representational qualities but for its potentials of forming relations. Then, the relations between the sections become more important than the section itself.

Repeating the section in one-direction results in a linear building that forms an edge to the schoolyard (Figure 6, 7). The Workshop becomes an agent of a transparent relationship between the schoolyard and the background instead of creating a solid boundary. Elevating the building from the ground enhances the transparency of the Workshop. Moreover, different elaboration of the volumetric bays between the repeated planar sections gives way to varying levels of transparency. The elaboration of bays may manifest itself either in the form of eliminating the outer skin to generate an entrance deck in reference to *Serender* or articulating the outer skin in a way to provide various openings to respond to the physical context (Figure 8-11).

'Processing the Form' through 'Repetition of Section'

1/1 learning in real site is performed by actions that manifest itself as an architectural form. It is an operational process, in which students



Figure 12. Elements of the Section.



Figure 13. Construction Process.

Figure 14. Construction Process.

Figure 15. Construction Process.

simultaneously experiment various aspects of design and construction in an integrated manner. As the integrated process of learning-design-and-construction crystallizes into an architectural form, it becomes inevitable to propose an approach to associate different pedagogical approaches that intensively engage whether with form or process. Our approach, namely 'processing the form', which is applied in the particular case of the Computer Workshop, relates these different pedagogies so that each of them contributes to 1/1 learning process according to their potentials in architectural education. In this approach, a preoccupation with space and an emphasis on process giving form to this space constitute each other. Thus, none of them is taken as a priori. The major contribution of 'processing the form' as a pedagogical approach is that it prepares a ground for the co-existence of pedagogies of "form as means" and "process as form".

'Processing the form' suggests a process of putting form into operation in a way to generate potential differences. Here, form becomes the vehicle that makes the exploration of spatial potentialities possible in the process of learning-design-and-construction. In the particular case of the Computer Workshop in Arlı, form to be used as means and to be put into process is the section evolved from the section of *Serender*, which is a generic section outlining spatial relations between ground and building, roof and space, and etc. (Figure 3). In the new section, these relations are reconsidered, and then modified according to the specificities of the site. The section of *Serender* is conceived not as a static entity but as a series of relations. Therefore, rather than the static repetition of the proper original or the type (i.e. *Serender*), the type is conceived with its performative potentials, and reproduced by generative actions.

Considering our pedagogical concerns and the site conditions (that necessitate providing an edge between the schoolyard and the creek), the Workshop is formed by the act of repetition of the section, which has a potential of generating differences. Then, the operation of repeating the section forms the substance, and controls the processes of design, construction and learning. Repeating the section by generating differences opens up the way for the students to experiment various aspects of construction in an integrated way, and to explore how process itself forms space and organizes the potential relations (for example between interior and exterior, the site and the program) (Figure 12-15). Instead of a finished architectural envelope defined by fixed relations and actions in plan, the act of repeating the section shifts the students' perspectives from an object with its visual presence towards the process that constantly transforms the initial object.

The section as the generator evolves into a variety of spatial bays. The section is repeated by overcoming its materiality, function and meaning and by exploring its performance so that each spatial bay becomes different. The process of design-construction-and-learning is itself a summation of these bays. Each bay denotes a successive stage of the process, and each stage is related with each other. Then, the Workshop emerges by the addition of the stages. Yet, it is more than the summation of these stages. Actually, the building is the relations between different stages. This is then not an issue of typology but of topology.

Each spatial bay and in turn each stage constantly changes in the process in terms of the relations with each other and the site. What is atypical that is a bay or a stage emerges by the repetition of typical that is the section



Figure 16. Interior View.



Figure 17. Exterior View.



Figure 18. Exterior View.

itself. In a similar way, *Serender* as a typical architectural solution in the vernacular tradition evolves into atypical in the case of the Computer Workshop. This is a result of an evolutionary process that considers *Serender* not by its visual presence but by its performative potentials. With the emergence of unexpected situations in this process from typical to atypical, students encounter various aspects of design and construction. It is in this sense that 1/1 learning in architecture becomes open to improvisations.

1/1 learning prepares a stimulating medium for the students to become active participants of the integrated process of design-construction-and-learning. They become the main actors of our pedagogy of 'processing the form' by collaboratively acting in the process of giving form to the Computer Workshop (Figure 16-18). Due to the evolutionary nature of the integrated process possibilities arise where students have to use their creative skills to improvise both in terms of design and construction. 1/1 learning is organized around a section and the processing of this section. Therefore, students have the chance to investigate the formal potentials of the section while actively participating in the process of form making. In this sense, it becomes possible to benefit from the different pedagogical approaches of "form as means" and "process as form". 1/1 learning in Arılı in 2003 is the experimentation of the integrated pedagogy of 'processing the form' in terms of its conceptual and material potentials.

CONCLUSION

Being an indispensable part of the architectural education, 1/1 learning is neither a simulation of professional practice nor an application of theoretical knowledge in real site. Rather than bridging the gap between theory and practice, it is a specific medium of architectural education on its own. 1/1 learning conveys the potentials of knowledge generation through the nature of inherent processes. The pedagogy of 'processing the form' emerges from an appreciation of the specific nature of 1/1 learning. By rejecting the duality of process and form that is based on a hierarchical relation, this particular pedagogy promotes a reconsideration of architectural education. It suggests an approach in which process and form are consequences of each other.

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1/1 ÖĞRENME İÇİN BÜTÜNLEŞİK BİR PEDAGOJİ

Bu makale, mimarlık eğitiminde "birebir yaparak öğrenme" (*1/1 learning*) konusunu, "Yaz Yapı Stajı (Arch 190)" kapsamında 2003 yılında ODTÜ Mimarlık Bölümü öğrencilerinin inşa ettiği Arılı Köyü Bilgisayar İşliğı deneyimi üzerinden tartışmaktadır. Bilgisayar İşliğı, mimarlık bilgisinin 1/1 yaparak öğrenilmesi, üretilmesi ve paylaşılması süreçlerini kavrasallaştırmak ve tartışmak için bu yazının ana odağını oluşturmaktadır. Burada, Bilgisayar İşliğı bir sonuç ürün olarak değil, bir süreç olarak değerlendirilmektedir.

Arılı Bilgisayar İşliğı özelinde, 1/1 yaparak öğrenme ‘biçimi işlemek’ (*processing the form*) olarak tanımladığımız bütünleşik pedagojinin deneyimlenmesidir. ‘Biçimi işlemek’, Bernhard Hoelsli’nin “araç olarak biçim” ve Marc Angéllil’in “biçim olarak süreç” olarak tanımladığı iki farklı pedagojiyi bütünleştiren bir yaklaşımdır. Bu yaklaşımda, biçim neye benzediğı (fiziksel/ görsel özellikleri) ile değil, mekanı kurgularken nasıl davrandığı başka bir deyişle performansı ile değerlendirilir. Bir tasarım eylemini de ifade eden ‘biçimi işlemek’, öğrenme, tasarım ve inşa etme süreçleri arasındaki ilişkinin bütünleştirici bir şekilde yeniden tanımlanması gerektiğini savunur. Öğrenme, 1/1 yapma eyleminin biçime dönüşmesi ve Bilgisayar İşliğı olarak somutlaşması sürecinde gerçekleşmektedir.

Bilgisayar İşliğı’nde tasarım, inşa etme ve öğrenme süreçlerini ilişkilendirip bütünleştirmek için ortak tek bir strateji geliştirilmiştir: ‘kesitin tekrarlanması’. Kesitin (mekan kurgulama) performansı biçimsel bir araç olarak ele alınmakta; tasarım eylemi olarak ‘tekrar etmek’ ise kesiti her tekrarda farklı bir işleme sokarak mekansal farklılıkların üretilmesine imkan verecek şekilde bütünleşik süreci örgütlemeştir. Farklılaşarak tekrar eden kesit, işliğin inşa edildiğı Doğu Karadeniz Bölgesi’nde yer’e ait sınırlı yapı yapma bilgisinin, yerel malzeme (ahşap) ile ürettiğı en temel mimari yapı olan Serender kesiti referans alınarak üretilmiştir. ‘Kesitin tekrarlanması’ stratejisi, alternatif bir yaklaşım sunarak yapının temelden çatıya değil, farklılaşarak tekrar eden kesitlerin yan yana getirilmesi ile inşa edilme sürecini düzenlerken öğrencinin öğrenim sürecine aktif katılımını da örgütlemekte; eş zamanlı olarak sürecin farklı aşamalarını (örneğin, çatının ve cephelerin birlikte inşa edilmesi) deneyimlemelerini sağlamaktadır.

1/1 öğrenme kendine özgü araçları ve öğrenim çıktıları olan bir mimarlık eğitimi ortamıdır. Profesyonel mimarlığın bir simülasyonu ve/veya okulda alınan teorik bilginin birebir sahada uygulandığı bir ortam olarak ele alınmamalıdır. ‘Biçimi işlemek’ olarak önerdiğimiz bütünleşik pedagoji 1/1 yaparak öğrenmenin kendine özgü doğasına uygun olarak, süreç ve biçim arasındaki hiyerarşik ayrımı ortadan kaldırıp eş zamanlı olarak tasarım ve inşa etme süreçlerinin farklı aşamalarını birebir deneyimleyerek öğrenmeyi sağlamaktadır.

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