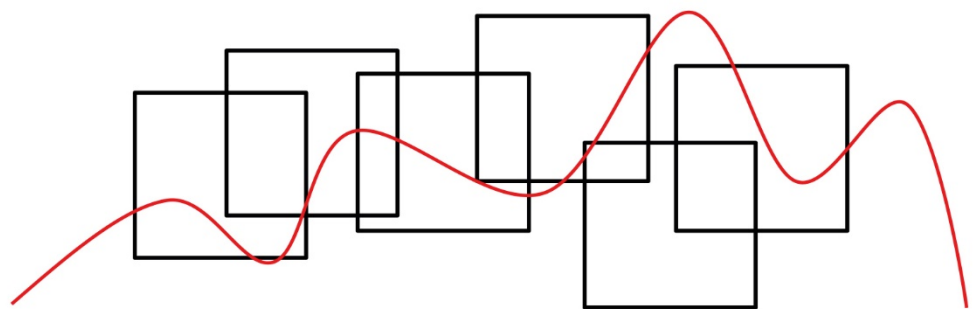


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## Editorial

International Journal of Education in Architecture and Design (IJEAD) begins its publication life with March 2020 issue.

Our journal is an international, peer-reviewed and scientific journal. It works with a double-blind referee system. The language of the journal, which will be published two times a year and published electronically, is English.

IJEAD aims to create a platform to collect and present different approaches, examples, experiments to architectural and design education. The journal's aim is to publish articles written on curriculum models, course syllabus models, formal and informal studies/works, experimental works, assessments / reviews on quality of education on the areas of architectural education, design education, urban planning education, interior architecture education, industrial design education, landscape design education and other related disciplines. IJEAD team encourages submissions from the field of art as well, that relates to learning, teaching, and creativity through architectural space. The journal welcomes submissions that theoretically and methodologically inquire and / or discuss the learning and teaching situations / aspects / conditions / experiences / steps within the mentioned disciplines. The journal includes research articles, discussion articles, and review articles on the above-mentioned topics.

We, as the editorial team, are very excited for IJEAD as we hope and believe that this journal will be a "glass-box" for works on architectural and design education.

I would like to thank IJEAD team, the assistant editors and technical editors, for their support and contributions to construct the journal. I would like to specially thank our international advisory board members for their sincere interest and support on this very "young" journal and its owner... I would like to thank our reviewers for their detailed examinations on the manuscripts which is very crucial for firstly the authors and then the readers of our journal. And I would like to thank the authors for their interest on our journal for the "first" issue...

Unfortunately, nowadays, the main agenda item and focus of the world is the Covid-19 pandemic. As the whole world fiercely fight against this epidemic, quite sudden and marginal transformations occurred in the lifestyles and ways of working with compulsory or voluntary quarantine. Educators already rolled up their sleeves to adapt quickly to remote teaching by using online media and tools, even if they have never experienced it before. Unlike the usual one, this has created a situation that requires physically, mentally, operationally and psychologically rapid adaptation to distance learning approaches and methods in emergencies and constraints. Besides, in this period of sudden change and imperative constraints, we witnessed the support coming from many institutions in various scales to facilitate the work of educators and students. On the other hand, some elements and features of architectural education, such as hands-on learning, learning by doing, learning by experiencing spaces, collaborative behavior in design studio, concrete tools in design processes, master-apprentice relationship, has become questionable or are faced with transformation.

All in all, this is a new era of living... A different era of learning and teaching... IJEAD makes a call for educators, learners and researchers, in this scope, to share their experiences, opinions and research for its second issue which will be published on September 2020.

Wishing a safe and healthy world for all.

On behalf of the Editorial Board,

Dr. Emine KÖSEOĞLU  
Editor-in-Chief of IJEAD  
March 30, 2020, Istanbul

## Learning by Doing in Architecture Education: Building Science Course

### Example

Seher GÜZELÇOBAN MAYUK<sup>1</sup> and Nilay COŞGUN<sup>2</sup>

1 Gebze Technical University, Turkey  
ORCID: 0000-0002-2676-4784  
sgmayuk@gtu.edu.tr (Corresponding author)

2 Gebze Technical University, Turkey  
ORCID: 0000-0001-5874-3331  
nilaycosgun@gtu.edu.tr

### Research Article

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### Abstract

With the development of technology, the living conditions and needs of individuals has also changed. These changes, which affect the personality traits, values, expectations and trends of the generations, require a revised and continuous review of architecture education. In architecture education studies carried out in this direction in recent years, it is seen that the concept of education of the architect is at the forefront. It is aimed to gain lifelong learning ability in the education of the architect who is not limited to the school and is expected to adapt to the developments by continuing after the education he / she has received. On the other hand, the features of the generation gain importance in the methods to be used in today's learning environment in which generation Z individuals take part as learners. Considering that increasing the integration of informal educational environments and formal education will contribute in mentioned point of views, learning by doing method is tried in building science compulsory courses at GTU Department of Architecture. This study, which aims to examine the results of this experimental method applied to the Z generation learners, is limited to the 2018-2019 spring semester building science I course. According to the study results of the wall workshop and the feedback form made afterward, it has been observed that new generation learners prefer to learn by doing, by experiencing rather than by listening or drawing.

**Keywords:** Architecture education, generation Z, workshops as an informal education, learning by doing method, building science courses at GTU architecture

## 1. Introduction

Changing living conditions with developing technology affects personality traits of individuals, concepts of value, expectations and their trends. These changes observed in individuals also affect the whole society. Education has an important role to form the society, too. Because of its location at the intersection of science and social disciplines to cover theory and practice, architecture education also needs to change or develop, too.

Architecture education includes techniques and also various notional concepts such as, imagination, intuition, flexibility and creativity. It is beneficial for architect candidates to start from their own design experience in learning abstract concepts that are self-learnable rather than taught (Tuğlu Karslı and Özker, 2014). In this respect, studios are used as learning environments instead of classical classroom education known in architectural education. Architect candidates are expected to integrate the skills acquired in formal-obligatory and elective courses while producing their own designs in studios. In this way, their ability to interpret can be improved by combining existing data with their ability to think abstractly.

Today, architecture education is often discussed in national and international environments. In such discussions, the concept of architectural education turns into the concept of 'education of the architect'; in the education of the architect, the concepts of 'sustainability in education' and 'flexibility' and gaining or redound 'lifelong learning' ability come into prominence (Aydınlı, 2009). In addition to formal education, the integration of informal education with the education of the architect is thought to contribute in these aspects. In learning abstract concepts that have the feature of being self-learnable rather than being taught, it is beneficial for individuals to start from their own experiences (Tuğlu Karslı and Özker, 2014). It is known that informal education has positive results in experiencing abstract design knowledge and developing design thinking skills, intuitive knowledge and creativity (Polatoğlu and Vural, 2012). It is thought that increasing informal education environments and integrating them with formal education will enable the architect to learn through experience in his / her education.

It is seen that today's learner of architecture education is generation Z. Individuals from generation Z have basic features related to technology. Technology or technological developments give them various advantages or disadvantages which change with their position in their whole life. For example, they are capable of performing multiple skills simultaneously. By this feature, they can save time at work. However, they can easily bore and cannot focus on their work easily. Because of these features, formal lessons such as building science in architecture education becomes more difficult to focus on.

Related to generation Z individuals features as above, it is suggested that today's learner generation Z individuals should learn by experience (Erden, 2017). Learning by experience or by doing method is seen that a method generally used in architecture education (Erbil, 2008; Gür and Yüncü, 2010; Şahin, 2013; Köse Doğan and Noraslı, 2019). Starting from this point of view, the learning by doing method is tested in building science compulsory courses at Department of Architecture of Gebze Technical University (GTU).

On the other hand, this study is limited to the 2018-2019 spring semester building science I course at the Department of Architecture of GTU. As an informal education way, a 'wall

workshop' with learning by doing method was arranged in the formal lesson in this semester. By this manuscript, discussing the results of the workshop and the method applied to generation Z learners in building science I lesson is aimed. It is thought that the findings from this study may be beneficial for the educators who are still trying to bring professional abilities to generation Z learners in architecture education. The educators may use similar methods including individual experiences, while studying with generation Z students.

## 2. Architecture Education and Learning by Doing Method

Architecture is the art of embodying the necessary spaces, aesthetic, functional requirements, technical and managerial obligations in order to facilitate people's lives and to carry on their activities such as housing, entertainment, working and resting (Hasol, 1998). Architecture solutions, designed and made mostly in response to a number of existing problems, may reflect functional, social, economic, political or symbolic intentions (Ching, 2007). In this respect, it is seen that the discipline of architecture is among the science and social disciplines, including theory and practice (Ciravoğlu, 2014).

Today, architecture education is widely discussed in various national and international architecture meetings (such as MOBBIG-Communication Group Meeting of Heads of Departments of Architecture Schools, Architecture and Education Congress, UIA-International Union of Architects Congress). In addition, organizations such as the National Accreditation Board for Architecture (MIAK), the National Architectural Accreditation Board (NAAB-America) and the Royal Institute of British Architects (RIBA-England) on an international scale carry out studies on architecture education.

It is observed that the concept of architecture education has evolved into the concept of 'architect's education' (Aydınlı, 2009). In the education of the architect, the concepts of 'sustainability in education' and 'flexibility' and gaining or redound 'lifelong learning' ability come into prominence. In this sense, it is considered as the most basic conditions of lifelong learning for graduates to be able to constantly update their architectural knowledge, to gain flexible thinking skills and to have a critical point of view for this purpose (Aydınlı, 2009). In addition to formal education, integration of informal education with the education of the architect is thought to be important in gaining and updating such knowledge, skills and competencies. Informal education means out-of-class education with no hierarchy between the learner and the teacher outside the existing system and rules (Yürekli and Yürekli, 2004). In this type of education, which is not restricted to the school, all environments can be used as a training and observation area for candidates of architects (Tuğlu Karslı and Özker, 2014). Informal education is recognized to have positive results in "experiencing abstract design knowledge and developing design thinking skills, intuitive knowledge and creativity" (Polatoğlu and Vural, 2012: 480). It is known that informal trainings such as workshop, seminar and conference have important gains for architect candidates in terms of developing thinking ability, providing learning by doing, motivating, acquiring intuitive knowledge and gaining self-confidence. This situation, which is directly related to the fact that informal education is away from successful and unsuccessful evaluation, is seen to involve flexibility. Such trainings are thought to be effective in ensuring sustainability in the education of the architect in order to facilitate access to current information.

On the other hand, a 'wall workshop' was integrated and applied in building science I course at GTU Architecture in 2018-19 spring semester as an informal education way. With this study, it is aimed to transfer the theoretical information in the course to professional practice. For this reason, learning by doing method is used in this workshop.

Learning by doing method is defined as a method that covers the learning activities and experiences of the students by living and feeling them (Erbil, 2008). By this way, it offers an educational environment that allows students to learn the building area, structure, material and material handling in practice (Şahin, 2013). For this reason, construction is a part of the design process. Learning by doing method is based on such topics as: Thinking and doing, cooperation (teamwork, unity of purpose, awareness of responsibility), service to the community and communication skills (Şahin, 2013). In this respect, it is thought that the method is suitable for the education of generation Z. Gür and Yüncü (2010) call 1: 1 learning for this method and they emphasized that 'the method is neither simulation of professional architecture nor the application of theoretical knowledge received directly in the field. 1: 1 learning is an architectural education environment with its unique tools and learning outcomes'. As it is seen that the method is generally used in 1/1 scale in architecture education (Köse Doğan and Noraslı, 2019), learning by doing method in the workshop applied in 1/10 scale and with appropriate mock-up materials, because of the limited duration and environment conditions of building science I course.

### 3. Generation Z and Its Features

The concept of generation is defined as "a group of people who were born in approximately the same years, shared the conditions of the same age, and therefore similar troubles, destinies, and were obliged to do similar tasks" (Turkish Language Society, 2019). The generations classified according to the years in which individuals were born are defined as 'Generation X' between 1965 and 1979, 'Generation Y' between 1980 and 1999, and 'Generation Z' after 2000 (Taş et al., 2017: 1035). As it is known that the generation Z is a learner of the current architecture education. For this reason, the features of generation Z individuals are summarized in this section of manuscript.

The generation Z individuals were born with technology. For this reason, this generation is also referred by various names such as 'internet generation, digital generation, millennium generation'. Z generation individuals are said to be individuals who integrate technology with their lives, have social network affiliations, have a fondness for virtual games, have an interest in global issues and have high adaptability. It is also mentioned that this generation is open to innovation, optimistic, talented, goal-oriented, well-educated, self-confident, easily bored and capable of performing multiple skills simultaneously (Erden, 2017). The individuals of this generation, also called learners of the digital age, are stated as individuals who learn knowledge fast, prefer graphic expression, prioritize winning and are competitive (Ardıç and Altun, 2017).

The passions of the members of the generation Z in the current higher education environment to the learning tools they can access whenever they want, means that the generation does not want to have difficulty in accessing information (Eğitimpedia, 2019). It is stated that their high self-confidence can cause them to be perceived as narcissistic, their quick withdrawal from work as lazy, and their desire for rapid rise and aggressive behavior



can cause them to clash with the generations before them (Erden, 2017). Generation Z individuals are also seen as individuals who enjoy activities that allow production, who have the ability to animate their long-term memories with games, storytelling and enabling them with dreams (Altunbay and Bıçak, 2018).

The following are examples of suggestions for people who will work with generation Z individuals and educators who will take part in the educational life of the individuals (Eğitimpedia, 2019; Erden, 2017).

- To reveal their entrepreneurship by giving them a free environment,
- Being motivated by rewards,
- Making them feel that they are important in solving problems or sharing information and establishing face-to-face communication instead of communication by message,
- Net sharing of the learning outcomes of the course with Z generation learners and their results,
- Taking suggestions for course content and course processing methods from them under possible circumstances,
- Giving them reading notes and encouraging them to take notes,
- Enrich the course with classroom activities, engaging visuals and team games that are directly related to the subject; in this way the student will be able to experience and learn,
- Giving simple and clear messages in ensuring their focus.

On the other hand, it is one of the important issues to consider in education today that the teacher tries to establish the balance of giving and receiving in a way that allows the learner to receive.

#### **4. An Example of Learning by Doing Used in Building Science I Course in the Department of Architecture of GTU**

As of the 2018-2019 academic year, three workshops consist of the method of learning by doing were conducted in the building science courses at the Department of Architecture in GTU. Due to the high number of students enrolled in the course and the physical environment impossibilities, arranged workshops do not include real life one-by-one. In this part of the manuscript, one of the workshops held in the building science courses was explained. The results of the 'wall workshop' from the 2018-2019 spring term of building science I course and its feedbacks are transferred.

MIM 142-coded building science (BS) I course, in the course plan of the undergraduate program of the Department of Architecture of GTU, is a compulsory course maintained at the 2nd semester of 1st year (spring) level. As of the 2017-2018 academic year, according to the updated course plan; BS I course is 4 hours with 2 (theory) + 2 (practice) + 0 (laboratory) and 5 ECTS credits. The attendance requirement of the course is 80%, which consists of theory and practice sections. BS I course includes the explanations and applications of the basic principles and their homework for the design of sub-systems such as components, parts and materials that form foundation, wall, floor building elements and also windows and doors. In addition to the theoretical explanations on reinforced concrete and masonry construction systems, wood and steel structural systems are included in the

last weeks of the BS I course. The courses are conducted with a group of faculty members, which varies with the semesters. In the lessons, theoretical information is conveyed mostly by the lecturer and the courses are completed with the applications carried out by the research assistants. The BS I course was conducted with one faculty member and four research assistants, which was opened in the spring semester of 2018-2019 academic year. A total of 130 students attended to this course in this semester. Most students were born in 2000 and later in the group as a generation Z member. In this respect, based on the suggestions of increasing the class activities mentioned for the generation Z individuals and enhancing them with team games directly related to the course subject, , a 'wall workshop' was organized in the 2018-19 spring semester's building science I course. It was also aimed to enable the student to learn through experience by the workshop.

The workshop was held in the last week of the semester (14th week) on the day and time of the lesson, which was taken four hours duration. The method of learning by doing was adopted to the workshop. Despite 130 students were seen on buildings science course, only 56 of them had taken part in the workshop. Groups of five students had worked as teams in the workshop and the students had chosen their team-mates by themselves.

The students worked on a 1/10 detail scale in the workshop. During the scale determination, previous workshop experiences, the number of existing students in the lesson and the duration of the workshop were taken into consideration. A section that contains the combination of ground floor and exterior wall elements in the air zone in a residential building was given to the students as a detail problem. This section was expected to be treated as close to the ground zone of building (Figure 1).



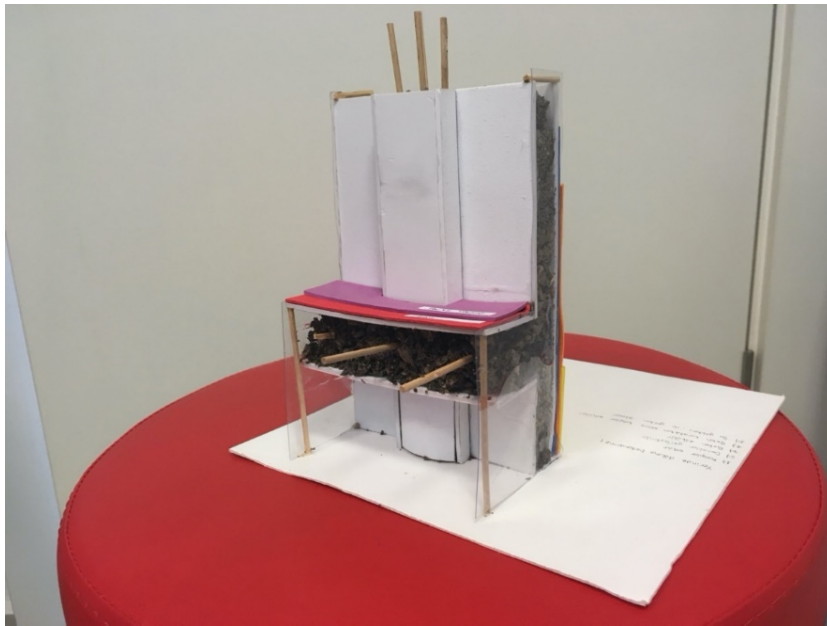
**Figure 1.** 1/10 scaled detail mockup - working area

Prior to the workshop, various preparations were carried out by the tutors of the course. In this sense, a total of 26 (130/5) research titles about wall materials were determined and given to the students as research subjects. In addition to traditional wall materials such as mudbrick and stone; such modern techniques as gabion, led screen, green wall, and moving wall were presented to the student groups in the 5th week of term, when the theoretical expression of the wall element had been explained (Figure 2; Figure 3). The teams, who chose what they wished from these research subjects, were asked to submit their

assignments digitally at the end of two weeks after the fifth week of term. By this way, after the theoretical explanation of the wall element, the students were provided to prepare the research items related to their detail section, which had been produced in the workshop.



**Figure 2.** 1/10 scaled detail mockup – led screen wall surface



**Figure 3.** 1/10 scaled detail mockup – concrete wall

In the 13th week of the course, in which the last theoretical lecture was finished, students were informed about the workshop which was held the following week. Students were asked to bring their wall research assignments and mock-up materials that they wanted to use in accordance with their research subjects in this lesson. They were also told to bring drawing tools and equipments for the workshop day. In the last week of the lesson, four hours were fully passed for the production of mock-ups in the workshop. Students used various materials that they thought which were suitable for their chosen subjects. The plan of the wall workshop and its pre-works are given in Table 1.

**Table 1.** The process plan of wall workshop, which was held in 2018-2019 spring semester

WEEK	4	5	7	13	14
PROCESS	Determination of student working groups	Giving students wall research homework topics	Digital submission of research papers	Latest theoretical explanation and informing about the workshop	WALL WORKSHOP Production

A flexible working and producing environment were provided by the workshop, where an informal education environment was intended to be integrated with formal education (Figure 4; Figure 5; Figure 6; Figure 7; Figure 8).



**Figure 4.** Wall workshop working medium – 1



**Figure 5.** Wall workshop working medium – 2





Figure 6. Wall workshop working medium – 3



Figure 7. Wall workshop working medium – 4

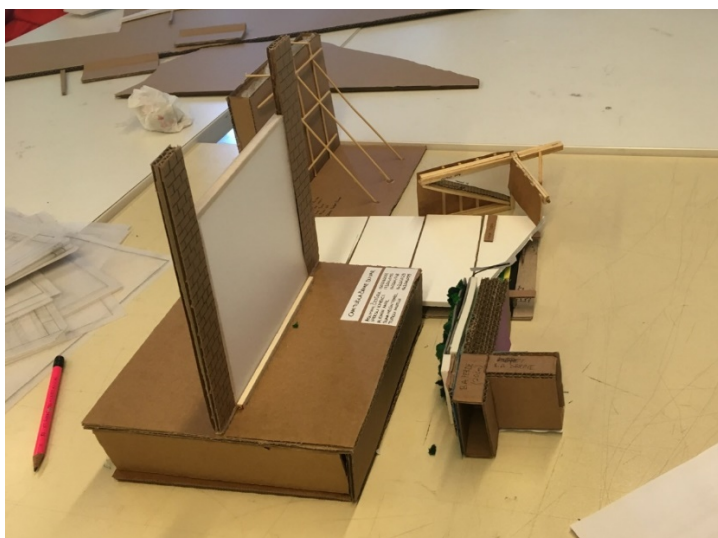


Figure 8. Wall workshop outcomes

At the end of the workshop, the participants were asked to answer the feedback form which consists of six questions for the evaluation of tried training method. The first four questions had the options as 'I absolutely disagree, I disagree, I'm precarious, I agree, and I absolutely agree', which are listed as below:

- I enjoyed producing in the workshop environment,
- I think I learned by doing in the workshop environment,
- I think the workshop environment is useful for improving my ability to work as a team,
- I think that the workshop is useful for me to reach up-to-date information and for my application.

The last two of the feedback form questions were arranged as open-ended questions, which were asked about the teaching method of building science course and suggestions about the wall workshop.

## 5. Findings and Discussion

Table 2. shows the outcomes of the 'wall workshop' feedback form answers as below which was applied in building science I course of 2018-2019 spring semester.

**Table 2.** Findings of wall workshop, which was held in 2018-2019 spring semester

QUESTIONS	I enjoyed producing in the workshop	I learned by doing in the workshop	the workshop is useful for working as a team	the workshop is useful for reaching up-to-date information and application	open-ended questions
	47% yes	48% yes	49% yes	38% yes	17% return
	41% no	31% no	33% no	44% no	
ANSWERS	12% precarious	14% precarious 7% no participation	18% precarious	18% precarious	

The following interpretations can be made based on the outcomes shown in Table 2: It is seen that the majority of students enjoy producing in the workshop environment, which was informally added to formal education. However, the feedback amount of student group who had not found the working environment enjoyable, reminds for the easily bored mentality of generation Z members. In this sense, it is thought that a four-hour workshop period may have been perceived long. This perception can be differentiated by creating an interactive working environment.

It was observed that the students agreed with the idea that they learned by doing. This result may be related to the fact that the generation Z members are individuals, who enjoy productivity activities. However, it is seen that a 7% student group never answered this question. It is thought that the reason may be related to the feature of the next generation not to want to have difficulty in accessing information.

Students stated that the workshop environment improved their ability to work as a team. It can be said that this result is important for the architectural profession that needs teamwork. In addition, it is ensured that individuals who have the feature of team building mostly in social networks can be gathered for a common purpose in real life.

It was concluded that the students thought that the workshop was not useful in terms of accessing and applying updated information. Regarding the solution of this situation, which is associated with being goal-oriented, the subject of study, purpose and result can be conveyed briefly and clearly.

The fact that very few of the students had returned to open-ended questions and the majority did not answer this question shows that the generation Z members respond to optional questions and prefer to report their suggestions orally rather than in writing. It is thought that this may be related to their pre-undergraduate educations. For this reason, searching about this education term should be useful for the educators.

As a conclusion of the workshop, some of the mock-up outputs were selected at the end of the workshop and exhibited as lecture outcomes at the 2019-2020 fall semester exhibition. This sharing studies with the students application can also be associated with the competitiveness features of the generation Z students. Lastly, students were asked to use the methods of thinking and producing by drawing in the workshop. However, it has been observed that students mostly had produced their solutions solely by doing so.

## 6. Conclusion

When the results of 'wall workshop' in building science I course at Department of Architecture of GTU and the data from feedback forms applied at the end of the workshop were discussed, it was observed that the new generation of architecture students preferred to learn by doing and experiencing rather than listening and/or drawing, under the impact of the digital environment in which they were born and grew up. It was also concluded that the tried method of learning by doing can be improved by integrating analog-to-digital tools. It is foreseen that this may also contribute to the issue of reaching up-to-date information.

In addition to this, it can also be said that the duration of workshop experience was not found enough by the generation Z membered students. As it was mentioned in section 3, they can be bored easily and not focused on their works easily, too. For this reason, future workshops should be arranged with long duration times. As an informal education, a summer school workshop by a 1/1 scaled learning by doing method may be more productive and instructive for generation Z learners. Al so, if an integrated informal education will be held in a formal lesson, the duration of the workshop should be taken in consideration. In this respect, acceptable participation numbers and physical environments should be provided.

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Unless otherwise stated, the figures used in the article belong to the first author.

### Declaration of Competing Interest

The authors have declared that no competing interest exists.

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## Biographies

### Seher GÜZELÇOBAN MAYUK

She received her Bachelor and Master degrees from Yıldız Technical University (YTU) in 2005 and in 2007. She completed her PhD at Mimar Sinan Fine Arts University (MSFAU) Building Science Programme in 2015. She worked as a research assistant at Gebze Technical University between 2012 – 2017. Since January 2017, she has been working as an assistant professor in the same department. Her research interests mainly lie in the fields of building elements, architectural

detailing, innovative facade technologies, building failures (water and thermal problems) and evaluation in architecture. She is also interested in architecture education in relation to generation Z.

#### **Nilay COŞGUN**

She received her Bachelor degree from İstanbul Technical University (ITU). She completed her Master and PhD thesis at Trakya University (TU). After she finished her educational processes, she worked in various universities and institutions at different academical and administrative positions. Since 2002, she has been working at Gebze Technical University (GTU) Department of Architecture. She has also been continuing her administrative duties as a Dean and a Vice Rector at the same department and GTU nowadays. Her research interests mainly lie in the fields of construction and demolition waste management, building production, building and construction quality and mass housing. She is also interested in architecture education in relation to generation Z

## The Plurality Caused by Formal and Informal Education in the Field of Interior Architecture: An Evaluation on Furniture Design

Armağan Seçil MELİKOĞLU EKE<sup>1</sup>

<sup>1</sup> İstanbul Kültür University, Turkey.  
ORCID: 0000-0002-7185-8480  
armagansecil@yahoo.com (Corresponding author)

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### Abstract

The changeable, multicomponent and ambiguous nature of design can also be observed in the field of education; therefore, the state of plurality caused by the coexistence of formal and informal education becomes a subject matter which should be often negotiated and emphasized. Competitions are a part of informal education and they are recitation-based activities. In terms of their relation to formal education, competitions influence the process of creating the necessary grounds for new production and sharing. When the discipline of interior design is concerned, furniture design competitions are informal experiences which students of interior architecture can take part in. This paper aims to examine the plurality caused by the relationship between formal education and informal activity as in furniture design competitions whose number increases rapidly. The analysis of informal education, being one of the two components forming the structure of this study, is based on the data gained through the results of quantitative and qualitative research on two furniture design competitions. The competitions are analyzed according to their categories, number participants per year, educational institutions and branches of the winners. The analysis of formal education is based on an investigation of furniture design courses belonging to academic curriculum of students who won prizes in competitions.

**Keywords:** Furniture design, interior architecture education, furniture design competition, formal education, informal education

## 1. Introduction

Space is a form of void where various actions by people take place and the needs of users are fulfilled (Melikoğlu Eke, 2014). It locates its users, molds them and adapts itself to them, to its environment and values surrounding it. Gür also defines space as void where humans, human relations and the outfit necessitated by these relations take place while its limits are designated by the structure and character of the organization which it contains (Gür, 1996). As one could infer from such definitions, space is a totality of correlations which are comprised of human relations to life and inanimate objects. In his study called Organic Architecture, Frank Lloyd Wright comments on the content of space and its relation to life as follows:

“It is quite impossible to consider the building as one thing, its furnishings another and its setting and environment still another. The spirit in which these buildings are conceived sees all these together at work as one thing. All are to be studiously foreseen and provided for in the nature of the structure. Incorporated (or excluded) are lighting, heating and ventilation. The very chairs and tables, cabinets and even musical instruments, where practicable, are of the building itself, never fixtures upon it” (Wright, 1910: 25).

Interior space in particular is the first periphery surrounding the individual and actions of him. In this regard, it is possible to describe interior design as an interdisciplinary field aiming to create spaces with different identity and atmosphere by interfering into special dimension, setting the furniture and treating the surfaces (Brooker and Stone, 2010).

Furniture is one of the components establishing the interior space and its atmosphere. The Turkish word ‘mobilya’ is a loan word from Italian ‘mobilia’ and Turkish Language Association (TDK) defines it as follows: A general term, möble, given to movables used for sitting, dining, studying and furnishing places where one sleeps (Turkish Language Society, 2019). Üst claims that the word mobilya has its roots in ‘mobilis’ meaning something that moves. It suggests any kind of property that is movable -in contrast to unmovable ‘immobilia’- and that is used to furnish a house (Üst, 2015)

Booth and Plunkett describe furniture as “any element that is functionally independent of the walls, floors and ceilings that enclose the space in which it sits” (Booth and Plunkett, 2014: 7). While walls, flooring, windows and doors are considered to be parts of the architectural design of a building, furniture that is chosen to arrange the interior spaces is a concern of interior architecture as a profession. According to Ching, furniture provides the transition between interior space and the individual at a level of form and scale while functioning as a mediator between space and its users and enhancing comfort and practicality to interior activities (Ching, 2012).

Furniture not only strengthens the function of the space but it also exists as an aesthetic value within interior space. As a result, furniture becomes as important as other design components in forming the identity of the space. An interior architect is supposed to ponder over furniture as it is connected to design criteria such as scale, material size and color, each playing a role in perceiving the space.

A glance at the histories of architecture and interior architecture would reveal that during the modern architecture period, modernist architects like Le Corbusier, Frank Lloyd Wright, and Mies Van der Rohe designed houses with architecture, interior space and furniture

design in their minds. As Figure 1 shows, architecture - interior architecture and furniture design are interrelated and they affect one another.



Figure 1. A le petit cabanon house and a robie house (Bougot, nd.; Caulfield, nd.)

As it could be seen in those examples, the physical and aesthetic features of a building affect how the interior space is organized. The furniture has an important role in the interaction between interior space and its users. As Booth and Plunkett suggest, architect Norman Foster thinks that “furniture is the architecture in microcosmos” (Booth & Plunkett, 2014: 6). While designing a new interior space, an interior architect should ensure the unity of already existing elements of the building and the furniture in different scales because architectural spaces are not just objects defined through mathematical and physical elements but rather living entities which need tools like furniture as they include social and cultural changes in addition to people’s life forms.

## 2. Formal and Informal Design Education

According to Turkish Language Institution, education is “directly or indirectly helping children and young people within schools or outside schools so that they can acquire certain skills and knowledge to find their places in the social life and develop their personalities” (Turkish Language Institution, 2019). Education is supposed to be based on planning and executed in every level. While formal education is based on the transfer of knowledge, informal education stands for acquisition of knowledge through experience and Yürekli and Yürekli (2004: 54) suggests that “it is established on a new reality and setting where hierarchies are destroyed and the existing system and its rules are disobeyed”.

Design education represents an educational field which has its own requirements, conditions and methods. Design studio is the basis of design education during which the instructor / teacher mentors the student / learner in his way to reach knowledge and to produce new ideas. As Ciravoğlu (2003: 43) indicates, “traditional formal education which is built on master-apprentice relationship ‘in which pre-defined knowledge is transferred to students’”. On the other hand, during informal education the facilitator and the participant experience the act of design together and produce together. Apart from following a certain curriculum, informal education creates its own dynamics. In this respect, informal education is a form of acquisition realized through ‘learning by doing’ as well as supporting imagination and being uncertain, limitless and creative.

Informal practices carry students to a different level of consciousness during design education. As Yürekli and Yürekli (1995: 66) suggest, such practices “provide the student with awareness towards himself and the world around him by developing him in intellectual and intuitional aspects”. The limits of informal education are very broad and it can be the source of experiences related to profession which one learns during formal education. Workshops, exhibitions, meetings, seminars are examples of activities that can be done within informal education.

It is possible to build a connection between informal activities in which students create their own way of learning and formal education. That is why formal design education of modern day has its varieties. Students can join informal education at schools as well. Students receive formal and informal education together and their participation to informal education is supported by workshops, talks, seminars, and competitions so that students can discover new insights and improve their networks. Accordingly, this study examines furniture design competitions which reveal the importance of informality in interior architecture education.

### 3. Furniture Design in Interior Architecture Education

Compared to traditional art and architecture education, interior architecture education is fairly new and it started to develop at the beginning of 20th century as an extension of specialization and privatization of design professions. Interior architecture is a recitation-based field of design in which the designer builds the user-space-function relations in accordance with a general thought-concept frame (Kaptan, 2003; Çelik and Melikoğlu, 2007). The first application of interior design at a professional level made in the USA where the notion of specialization developed and affected both professional and educational spheres during the first decades of 20th century (Kaptan, 1999). The USA is the country where theoretical and practical infrastructure of interior architecture design as a profession was established and interior architecture education became institutionalized.

Although interior architecture appeared as a new professional branch at the beginning of 20th century, it was only in 1970's that education and training professionals was managed. Interior architecture education in Turkey started in 1925 at Sanayi-i Nefise Mekteb-i Ali (İstanbul Devlet Güzel Sanatlar Akademisi - Istanbul State Academy of Fine Arts) and today several universities have interior architecture departments (Kaçar, 1998). It could be suggested that the Beaux-Arts was the first model adopted in Sanayi-i Nefise Mekteb-i Ali Demir, 2008). Especially the education given at Interior Architecture Department of Marmara University, which was founded in 1957, was genuine and independent of architectural discipline, its dominance and decisiveness (Işıkgör, 2007). The Bauhaus model which was influential on interior architecture education for a long time was later replaced by the American model at Bilkent University's Interior Architecture Department.

When the course plans of interior architecture education at Turkish universities are examined, it could be observed that there are compulsory and selective courses on project-based construction, architecture history, building survey, restoration and physical environment control. However, furniture design courses hold a special place in interior architecture educational programmes as they distinguish interior architecture from other educations of design disciplines. The courses are given as lecture or laboratory or both. When the Interior Architecture and Environmental Design departments of nearly 60



universities in Turkey and Turkish Republic of Northern Cyprus were examined, it was noticed that course like Furniture History was lecture based while recitation hours dominate Furniture Application Studio. Courses like Furniture Structure, Furniture Identity, Experimental Furniture, Furniture Studio, Furniture Construction, Furniture Design, Space and Furniture included both lecture and recitation hours. What is more, the investigation into courses showed that there are interior architecture departments which focus mainly on furniture design and production. In such departments, furniture courses are handheld as studios / projects while the programme is enriched by recitation / lecture practices. In addition, it was noticed that some departments expect their students to actually produce the furniture at the end of the semester which they designed earlier. Consequently, students experience not only the designing process of furniture but also the production of that significant element constituting the interior space. Briefly, it could be concluded that higher education institutions offering interior architecture courses do care about furniture design and include it in the compulsory and selective categories of their educational curriculums as well as focusing on design and production realized during recitation hours.

#### 4. Informal Education in Interior Architecture and Furniture Design Competitions in Turkey

Competitions provide equality of opportunity among professionals and different options in terms of design and production. Due to their conditions of contract, they are activities open to all groups and they work according to an election system. Design competitions are recognized as methods of design and production both in Turkey and in the world. According to the competition regulations of Architecture, Landscape Architecture, Engineering, Urban Design projects, Urban and Regional Planning and Fine Arts, a competition is defined as 'an organization arranged in order to choose an idea, a design, a project, a plan or a work produced in accordance with a designated field evaluated by a jury which is open to multiple participation' (Competition Regulation, 2002).

Competitions aim to yield the appropriate circumstances for improvement of cultural, artistic, scientific and environmental values through rivalry. They ease the way of choosing what is the most economic, functional and reformist among many options while identifying project owners. What is more, they promote fine arts, develop professions, strengthen ethic values and international competition potential. Disciplines in relation to designing in particular function as educational platforms where different forms of thought emerge while collaboration culture spreads and designers are led towards research. In addition to helping professionals better themselves, competitions offer informal experience to students outside school so that they can develop their own language and method of design.

Competitions are highly important for the informal education process in interior architecture just like it is for other disciplines such as architecture, graphics and product design. The number of competitions which help students improve their skills for questioning, discovery and finding solutions is not enough. In one of their studies concerning competitions organized for interior architecture students, Garip and Garip found out that out of 43 competitions, which were hold between 2007 and 2012, %40 focused on space, %49 focused on product and %11 focused on ideas (Garip and Garip, 2012). When furniture design competitions are concerned, it could be suggested that their number increased around 2000 and onwards. These competitions gained regularity and started to be supported by different institutions and organizations which fulfilled students' needs in

that field. The following Figure 2 shows the furniture design competitions organized between 2005 and 2020 in Turkey.

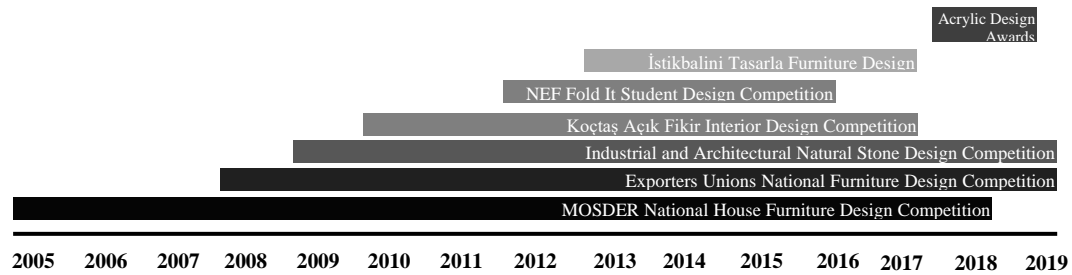


Figure 2. Furniture design competitions arranged in different years

According to the analysis, competitions which have been effective as a model in forming and maintaining furniture design competitions since 2005 are; MOSDER National House Furniture Design Competition (2005-2018), Exporters Unions National Furniture Design Competition (2008-2019), Industrial and Architectural Natural Stone Design Competition (2009-2019), KOÇTAŞ Açık Fikir Interior Design Competition (2010-2017), NEF Fold It Student Design Competition (2017), İstikbalini Tasarla Furniture Design Competition (2018), Acrylic Design Awards (2018-2019), While some of these stimulating competitions are not hold anymore, there have been other new ones added in those years which added variety. Therefore, this study focuses on MOSDER National House Furniture Design Competition and Exporters Unions National Furniture Design Competition as they have been organized continuously and have contributed to furniture design and design education. The first Exporters Unions National Furniture Design Competition was held in 2008 and the 11th was in 2019. The competition is organized with the support of state and private institutions such as Ministry of Economics Coordinatorship, Turkish Exporters Assembly, Central Anatolian Exporters Assembly, İstanbul Exporters Assembly, Aegean Exporters Assembly and Mediterranean Exporters Assembly.

The competition stands out with its wide perspective and it states that its primal target is producing solution in furniture exportation in favour of competition and function as a mediator for design which have the potential for exportation (Anonymous, 2019). Other aims of the competition are given as follows;

- To contribute to the development of the sector by producing solutions which would transform the opportunities and hardships of the sector into advantage,
- To emphasize the importance of design for the industry and to promote the idea of design,
- To promote industrial design activities and attract attention to them,
- To enable KOBİ's (SME, small and medium sized enterprises) meet design which is the only way for them to export,
- To bring young and dynamic designer candidates interested in the sector together with firms, professional designers and producers from the sector,
- To ensure that talented children with the potential to be designers in the future are directed to design,
- To be a pioneer in the development of products which may have a voice in the furniture market of the future,



- To introduce innovative, rational, authentic, aesthetic, functional, producible, applicable, safe, environment friendly furniture designs which are also strengthened with R&D projects, technological details, fit for environmental health, applicable to quality conditions, easy to use, transport, carry, store, mount and demount therefore saving energy and material during production and usage.

The biggest difference of National Furniture Design Competition from other examples is that it includes the whole furniture sector and it brings design into life by the producer and the designer together while participants can also get employment opportunities at producing- exporting firms and receive educational support of from the state to study in different places like Domus Academia Italy, ABD- CCS College, and NABA (Nuova Accademia di Belle Arti) Italy. The competition evaluated students from primary and secondary education in a separate category and in doing so, it makes a long-term investment which would promote future designers. The competition is open to academics, professionals, undergraduate students and participants from high school, primary and secondary school in four different themes which are; house, office, kitchen-bathroom and smart furniture.

National House Furniture Design Competition by Turkish Furniture Industrialists Society (MOSDER) was first organized in 2005 and the 14th one was in 2018. The competition aims to promote young designer candidates and to support a design and brand focused vision in furniture sector. The number of participants increases each year and competitors are mainly from departments of interior architecture and industrial design competing for prizes in different categories such as sitting, lounge, resting, storage, protection, organization, supplementary furniture- accessories and furniture for the disabled. Projects presented to the competition are evaluated by academics, professional designers and leaders from the sector. Since 2010, the prototypes of finalists' projects have been produced by members of MOSDER and project owners are given Industrial Design Registration Certificates approved by Turkish Patent Institute (Mosder, 2018).

Both of the competitions analyzed within the scope of this study provide students of furniture design with various opportunities. It is crucial that such competitions increase in number so that students can improve themselves outside the university, widen their perspectives and get engaged into a professional design activity as informal experience gained outside is crucial for the discipline they are in.

## 5. Findings

This paper is divided into two parts in terms of the method used. The first part is a literature research concerning interior architecture education, furniture design and furniture design competitions. The second part includes comprehensive statistical analysis of two furniture design competitions and interior architecture education curriculums of selected universities.

In the light of abovementioned information, this paper aims to focus on the relationship between formal education and informal activity as in furniture design competitions whose number increases rapidly. Informal education, being one of the two components forming the structure of this study, is based on the data analysis gained through the results of quantitative and qualitative research on MOSDER National House Furniture Design Competition and Exporters Unions National Furniture Design Competition. The

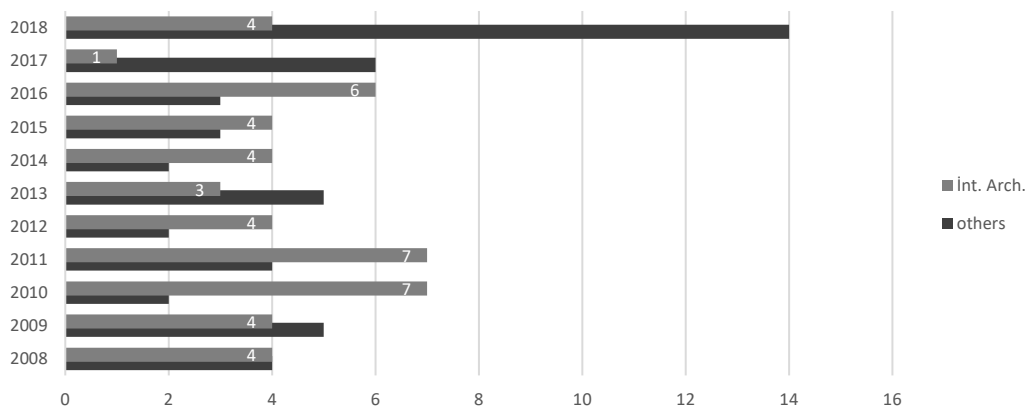
competitions are analysed according to their categories, number of participants per year, educational institutions and branches of the winners. The analysis of the second component of this study, which is formal education, is based on an investigation of furniture design courses belonging to academic curriculum of students who won prizes in competitions.

### 5.1. Analysis and Interpretation of Data Regarding Furniture Design Competitions

Furniture competitions are still being organized in Turkey. MOSDER National House Furniture Design Competition and Exporters Unions National Furniture Design Competition are open to every student studying design. Competitors are often from departments of interior architecture, interior architecture and environmental design and industrial design. Analysis of these competitions reveal that Mimar Sinan Fine Arts University has the highest number of winners so far. 98 winners of MOSDER National House Furniture Design Competition were students of interior architecture (48) and industrial design (50). When the fact that MOSDER National House Furniture Design Competition is one of the first competitions in Turkey is concerned, it is understandable why there is a high number of participation from students from both departments.

Students offering projects to MOSDER- National House Furniture Design Competition and winning are from the following universities.

1. Mimar Sinan Fine Arts University
2. Marmara University
3. İstanbul Technical University and Kocaeli University
4. Bilkent University
5. Hacettepe University, Karadeniz Technical University, Gedik University
6. Yeditepe University, Okan University, Bilgi University, TOBB University of Economics&Technology and Anadolu University

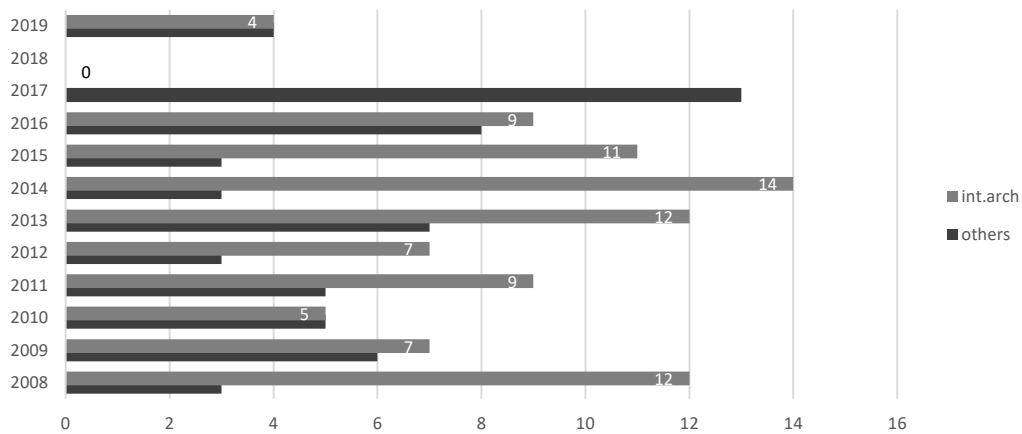


**Figure 3.** Distribution of students from interior architecture and other departments taking part in National House Furniture Design Competition (MOSDER)

148 students taking part in Exporters Unions National Furniture Design Competition (UIB) and winning between 2008 and 2019 were from interior architecture (89), industrial design and architecture departments (57) of 19 different universities. It was only interior architecture students winning from 13 universities out of 19 universities. It could be

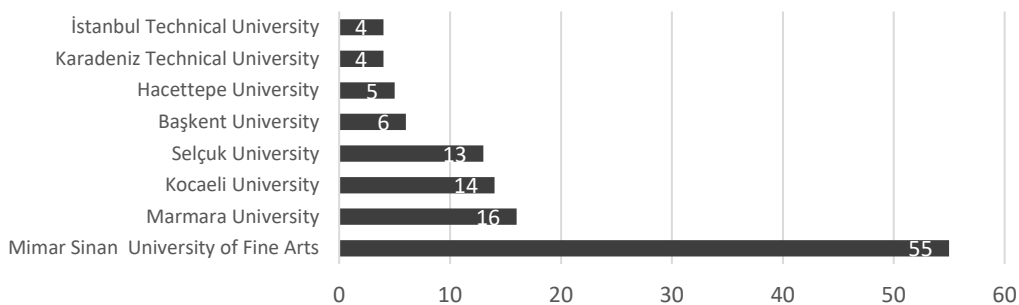
suggested that Exporters Unions National Furniture Design Competition has promoted interest towards furniture design and interior architecture students have turned that into advantage. Universities from which interior architecture students took part in Exporters Unions National Furniture Design Competition are given below and the quantitative data is given in Figure 4.

1. Mimar Sinan Fine Arts University
2. Selçuk University
3. Marmara University
4. Kocaeli University
5. Başkent University
6. Akdeniz University
7. Hacettepe University
8. Yaşar University, Karadeniz Technical University and İstanbul Kültür University
9. Anadolu University, Izmir University of Economics and Beykent University



**Figure 4.** Distribution of students from interior architecture and other departments taking part in Exporters Unions National Furniture Design Competition (UIB)

An analysis for both competitions and their winners from interior architecture departments gives us the data below;



**Figure 5.** Distribution of interior architecture students as winners of furniture design competitions

Such figures show that it was students from Mimar Sinan Fine Arts University, Department of interior architecture who won the highest number of prizes. What is more, Mimar Sinan

Fine Arts University received another prize from MOSDER National House Furniture Design Competition 2018 since they had the highest number of applications for the competition. Taking all these into account, one should ponder over the academic curriculum of interior architecture departments of those 8 universities.

## 5.2. Analysis and Interpretation of Interior Design Educational Curriculum

This study analyzed the academic curriculum of interior architecture departments and their compulsory-selective courses focusing on furniture with respect to the winners of MOSDER National House Furniture Design Competition and Exporters Unions National Furniture Design Competition. The curriculum details are taken from departmental academic packages of selected universities. In relation to the aims of this study, information is formulated by handling compulsory and selective courses separately. The data for which compulsory courses are analyzed are;

- The total amount of compulsory courses in the curriculum
- Lecture hours of the course
- Recitation hours of the course

The analysis made according to collected data is based on following information;

- Total number of compulsory course hours: C
- Total number of recitation hours within compulsory courses: CR
- Total number of lecture hours within compulsory courses: CL
- Total number of furniture-based course hours: F
- Total number of recitation hours within furniture-based courses: FR
- Total number of lecture hours within furniture-based courses: FL

Furniture-based compulsory courses of interior architecture curriculums are analyzed according to following ratios.

- The ratio of furniture-based course hours to the total number of compulsory course hours (F/C)
- The ratio of total recitation hours within furniture-based courses to the total number of recitation hours within compulsory courses. (FR/CR)
- The ratio of total lecture hours within furniture-based courses to the total number of lecture hours within compulsory courses. (FL/CL)
- The ratio of total recitation hours of furniture-based courses to total lecture hours of furniture-based courses (FR/FL)

Besides, the selective courses are analyzed and interpreted according to quantitative plurality and variety in furniture-based selective courses as students from other departments may as well choose such courses. The aim here is to identify how academic curriculums handle students' interest in furniture fields and their choice of selective courses. Table 1 and Table 2 show the analysis of interior architecture curriculums in relation to criteria designated by this study.

Table 1. The analysis of furniture-based compulsory courses offered in the curriculums of selected universities

	Course Title	Lecture	Recitation	Total number of compulsory course hours: C	Total number of lecture hours within compulsory courses: CL	Total number of recitation hours within compulsory	Total number of furniture-based course hours: F	Total number of recitation hours within furniture-based	Total number of lecture hours	F / C	FR / CR	FL / CL	FR / FL
Mimar Sinan Fine Arts University	Introduction To Furniture	1	2	146	73	73	16	12	4	0.10	0.16	0.05	3
	Structure In Furniture	1	2										
	Identity In Furniture	1	2										
	Experimental Furniture	1	2										
	Furniture Application Studio I	0	2										
	Furniture Application Studio II	0	2										
Marmara University	Furniture Studio I	4	2	195	113	82	24	12	12	0.12	0.14	0.10	1
	Furniture Studio II	4	2										
	Furniture Construction Systems I	1	2										
	Furniture Construction Systems II	1	2										
	Furniture Construction Systems III	1	2										
	Furniture Construction Systems IV	1	2										
Selçuk University	Furniture History	2	0	163	109	54	7	2	5	0.04	0.03	0.04	0.4
	Furniture Design	1	2										
	City Furniture	2	0										
Kocaeli University	Furniture Design and Construction Information I	2	2	176	130	46	8	4	4	0.04	0.08	0.03	1
	Furniture Design and Construction Information II	2	2										
Hacettepe University	History Of Furniture I	3	0	159	79	80	22	8	14	0.13	0.10	0.17	0.6
	History Of Furniture II	3	0										
	Furniture Construction Methods And Techniques I	2	2										
	Furniture Construction Methods And Techniques II	2	2										
	Furniture Design I	2	2										
Furniture Design II	2	2											
Başkent University	History Of Furniture	2	0	155	101	54	6	2	4	0.03	0.03	0.03	0.5
	Furniture Design	2	2										
Istanbul Technical University	Space And Furniture	2	2	162	69	93	4	2	2	0.02	0.02	0.02	1
Karadeniz Technical University	Furniture History	2	0	147	90	57	6	2	4	0.04	0.03	0.04	0.5
	Furniture Design	2	2										

Table 2. A comparative analysis of furniture-based compulsory – selective courses in the curriculums followed at selected universities

	Compulsory Courses			Selective Courses		
	Course Title	Lecture	Recitation	Course Title	Lecture	Recitation
Mimar Sinan Fine Arts University	Introduction To Furniture	1	2	Computer Aided Furniture Design	1	1
	Structure In Furniture	1	2			
	Identity In Furniture	1	2			
	Experimental Furniture	1	2			
	Furniture Application Studio I	0	2			
	Furniture Application Studio II	0	2			
Marmara University	Furniture Studio I	4	2	Concept Furniture Design	2	2
	Furniture Studio II	4	2	Furniture Studio III	6	2
	Furniture Construction Systems I	1	2	Furniture Studio IV	6	2
	Furniture Construction Systems II	1	2	Furniture Studio V	2	2
	Furniture Construction Systems III	1	2	Free Furniture Studio I	6	2
	Furniture Construction Systems IV	1	2	Free Furniture Studio II	6	2
Selçuk University	Furniture History	2	0	Free Furniture Studio III	2	2
	Furniture Design	1	2			
	City Furniture	2	0			
Kocaeli University	Furniture Design and Construction Information I	2	2	Furniture Construction Techniques	2	1
	Furniture Design and Construction Information II	2	2	Furniture Desing In The Context Of Social Life	3	0
Hacettepe University	History Of Furniture I	3	0	Contemporary Furniture Design	2	0
	History Of Furniture II	3	0	Construction Tech. And Materials In Furniture	2	0
	Furniture Construction Methods And Techniques I	2	2			
	Furniture Construction Methods And Techniques II	2	2			
	Furniture Design I	2	2			
	Furniture Design II	2	2			
Başkent University	History Of Furniture	2	0	Environmental Equipment Systems	2	2
	Furniture Design	2	2			
Istanbul Technical University	Space and Furniture	2	2	Comtemporary Furniture Design	2	2
				Materials and Finishings in Furniture Design	2	2
				Urban Furniture and Space	3	0
Karadeniz Technical University	Furniture History	2	0	Culture And Furniture	2	0
	Furniture Design	2	2	Contemporary Furniture	2	0
				Detail, Deco. And Materials Of Furniture	2	0
				Sitting Element	2	0
				Natural Wood Materials For Furniture	2	0
				Urban Furniture Design	2	0

## 6. Evaluation and Results

The data collected after the analysis of educational curriculum followed in the departments of interior architecture is given below:

The ratio of furniture- based courses to the total number of compulsory courses (F/C)

- Hacettepe University – 0.13
- Marmara University – 0.12
- Mimar Sinan Fine Arts University – 0.10
- Selçuk University / Kocaeli University / Karadeniz Technical University – 0.04
- Başkent University /– 0.03
- İstanbul Technical University – 0.02

The ratio of recitation hours of furniture-based courses to the total number of recitation hours within compulsory courses (FR/CR)

- Mimar Sinan Fine Arts University – 0.16
- Marmara University – 0.14
- Hacettepe University – 0.10
- Kocaeli University – 0.08
- Selçuk University / Başkent University / Karadeniz Technical University – 0.03
- İstanbul Technical University – 0.02

The ratio of lecture hours of furniture-based compulsory courses to total amount of lecture hours of compulsory courses (FL/CL)

- Hacettepe University – 0.17
- Marmara University – 0.10
- Mimar Sinan Fine Arts University – 0.05
- Selçuk University / Karadeniz Technical University – 0.04
- Kocaeli University / Başkent University – 0.03
- İstanbul Technical University – 0.02

The ratio of recitation hours of furniture – based courses to the number of lecture hours within furniture – based courses. (FR/FL)

- Mimar Sinan Fine Arts University - 3
- Marmara University / Kocaeli University / İstanbul Technical University - 1
- Hacettepe University – 0.6
- Başkent University / Karadeniz Technical University – 0.5
- Selçuk University – 0.4

According to evaluation data given above, the results could be presented as follows;

- Furniture courses constitute a significant part of compulsory courses at Hacettepe University, Marmara University and Mimar Sinan Fine Arts University. Consequently, it could be suggested that ‘furniture’ – as an important subject- is included within interior architecture education and curriculum. Students from Mimar Sinan Fine Arts University have won the highest number of awards, which suggests that formal and informal education triggers one another.
- Educational models such as architecture and interior architecture are based on space design. The inclusion of recitation hours is important as students learn by

doing and develop their knowledge through experience. Mimar Sinan Fine Arts University, Marmara University, Hacettepe University and Kocaeli University have the highest number of recitation hours for furniture within compulsory courses. It may be suggested that by doing so, they enable students see the modelling of the furniture they design and support their future studies. Likewise, competitions aim to reach realization of designs and that is why recitation hours are crucial.

- When recitation hours on furniture are concerned, Mimar Sinan Fine Arts University has the highest number, which is followed by Marmara University, Kocaeli University, and Istanbul Technical University in terms of their own education plans and number of lectures. Hacettepe University has the highest number of lecture hours for furniture. The reason for that is the intensity of courses called History of Furniture I and History of Furniture II.
- Hacettepe University, Marmara University and Mimar Sinan Fine Arts University stand out when the variety in furniture-based compulsory courses of the selected universities is concerned. Mimar Sinan Fine Arts University stands out especially with their recitation-based model while Hacettepe University offers a variety of recitation and lecture.
- There are two main points worth mentioning regarding selective courses. Marmara University and Karadeniz Technical University has the highest number of selective courses. In terms of variety, Karadeniz Technical University offers courses based on furniture depending on areas of interest. Although Hacettepe University and Mimar Sinan Fine Arts University offer a lot of compulsory courses, selective courses are relatively less. However, this could also maintain balance within the whole curriculum. In this respect, Kocaeli University stands out with the balance between selective and compulsory courses.
- Since Marmara University and Mimar Sinan Fine Arts University pay attention to making furniture a part of their education, more students apply to furniture design competitions compared to other universities. The formal and informal education they receive and their competition experiences result in a positive impact on their future professional practices and network building.
- The evaluation also draws attention to the potential of courses as motivating factors yielding interest in competitions. However, personal motivations should also take into account because Hacettepe University's curriculum has a high ratio of furniture courses but participation to competitions is still at a low level.

Instead of exposing the negative-positive sides of educational curriculums, this study aimed to discuss the state of plurality caused by the coexistence of formal and informal education. In doing so, it aimed to put forward the approach towards furniture that educational institutions-mostly winners of competitions- possess, the effects of competitions on the regulation of curriculums, whether furniture-based courses integrate themselves to competitions as well as the state of plurality. What is more, competitions have a crucial place in the context of design disciplines as a driving force in students' creativity, ways of thinking and developing design methods. Therefore, in addition to their role in education, it can be concluded that their contribution to the production processes should be understood and supported.



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### Declaration of Competing Interest

The author has declared that no competing interest exists.

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## Biography

### Armağan Seçil MELİKOĞLU EKE

She was born in 1982 in Izmir. She graduated from Karadeniz Technical University, Department of Interior Architecture in 2005. She completed her master's degree in Karadeniz Technical University, Department of Interior Architecture in 2008. And she completed her doctorate education at Mimar Sinan University of Fine Arts, Department of Interior Architecture in 2014. She worked as a research assistant in Istanbul Kültür University Department of Interior Architecture and Environmental Design between 2010-2014. She still continues her academic studies as an assistant professor at Istanbul Kültür University, Department of Interior Architecture and Environmental Design. She participated in architectural, furniture and product design competitions and won the Adyton special prize in the "Office Furniture" category in the 1st National Furniture Design Competition. She continues to specialize in interior design, design education, habitable spaces. At the same time, she continues her academic studies at national and international level.

## Narratives in Architecture- Dismantling the Structure of Architectural Discourse

Maria AKHTAR<sup>1</sup>

<sup>1</sup> Dayananda Sagar College of Architecture, India.  
ORCID: 0000-0003-3479-2272  
mariaarif128@gmail.com (Corresponding author)

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### Abstract

Education in architecture is a balanced synthesis of design and research. Research has become a fundamental and substantial part of education and curriculum. Available literary text and writings constitute major portion of research in the form literature study. Literature study in research involves selection, analysis and interpretation of written material. The paper attempts to dismantle the fabric of literary text in architecture and hence derive a matrix to read, understand, interpret and criticize architecture narratives. The matrix hence proposed shall serve as a constructive and systematic approach to understand architectural discourses resulting in sensitive and wholistic utilization of literary text. Versatility of the matrix renders it adaptable in the field of architecture theory and criticism, enriching the practices of architecture education.

**Keywords:** Architecture education, research, narratives, architecture theory, architecture criticism

## 1. Introduction

Architecture was always treated as a visual art, where the major objective of narration was oriented towards admiring the built environment for its aesthetic qualities. However contemporary architects like Rasmussen (1964) and Pallasmaa (2007) regard architecture as not merely a function of the eye, but product of multisensory experience of the space. This experience of the built is complex with layers of socio-cultural and technological settings influencing its design, construction, use and meaning. Architectural readings are subjected to these layers of complexity which renders it open for interpretation. Therefore, communication through writing and dialogue about the built plays a key role in just understanding of architecture. These writings enhance, modify and govern the readers perception. Good narration has the quality of virtually transporting the reader to the site. Role of narratives in architecture and architecture education therefore stands on the highest pedestal.

The objective of the paper is to explore various approaches, style and strategies of architectural narratives. The paper attempts to understand the variety and richness of description, analysis and interpretation in commenting on an architect's life, philosophy and works. For the purpose of research, the three pioneers of modern architecture i.e. Frank Lloyd Wright, Mies van der Rohe and Le Corbusier are selected. Established readings on the three architects are critically analysed to understand the *theme*, *grammar* and *voice* of narration.

## 2. Methodology

The paper aims to understand the style of narration that exist in documentation and analysis of an architect's life and work and hence understand the nature of architecture narratives in general. Different narratives on the architects (Frank Lloyd Wright, Mies van der Rohe and Le Corbusier) are selected for holistic understanding of their life and work.

Narratives in architecture varies depending upon the interest and expertise of the author. Traditional narratives deal with the documentation of architect's work, through design detailing and architectural drawings. The works could be further organised chronologically, alphabetically, or depending upon the typology of structure. Apart from them, narratives called Architectural Monograph tell the story of the architect chronologically, giving equal importance to the subject's life and career. There also exist narratives which are published by the architect's studio, aiming at sharing and displaying the studio's perspective and design process. Also, architectural critics have written about renowned architects, describing their philosophy, design ideas, and contribution towards architecture. Furthermore, first person narratives also exist in the form of autobiography and compilation of papers and articles which are written by the architect.

The readings on the selected architects are consciously chosen to cover a wide range of narrative styles, ranging from autobiography, bio-bibliography, monograph, conversations so on and so forth. These readings are analysed to understand the general structure and language in architectural writing. From these readings major influences shaping architectural discourses can be inferred as 'voice' of the narrator, 'objective' or 'theme' of narration, and 'grammar' or the 'thread' of narration. These influences are hence constituting the 'Determinants of Narration' for any architecture narrative in general.

### 3. Voice of Narration

Voice of narration refers to the context of the author or writer commenting upon the architect's work. A discourse cannot be isolated from the philosophical understanding of the author. Therefore, an architect's work though objective and measurable must be read through the lenses of socio cultural and architectural context of the writer. These architectural choices of the author not only shape the mood of narrative, but also designs the canvas to portray the subject. Voice of the author is analogous to 'person' in English language.

#### 3.1 First Person Narrative

*First person* narrative refers to the subject (architect) himself narrating the content. The architect is the writer and writes to describe his life, works, philosophy etc, in the text. Wright (1977) shares his journey of life through narrative called *an autobiography*. The discourse is divided into four chapters in the book, commencing with Frank's early learnings from childhood and family, followed by Fellowship, Work, philosophy of Organic architecture and Freedom (Thomson, 1999). Le Corbusier (2014) shares his philosophy of architecture in the book *Towards a new architecture*. *Corbusier* expresses the idea of mechanisation, utilitarian design, and standardisation of building elements through the writing. Also, in the book *The Modulor*, Le Corbusier (1961) further goes on to document the principles of standardisation, logic of measurement and proportions in all levels of design. Whereas in the book *When cathedrals were white*, Le Corbusier (1964) functions as a critic interpreting the built environment around. In first person narratives, the purpose, style and content of narration is the choice of the narrator (Subject architect) and therefore the content is objective owing to first-hand information from the source.

#### 3.2 Second Person Narrative

*Second person* narrative refers to documentation of conversations and dialogues of an architect. Nor is it the direct narration by the architect, nor an interpretation by a third party. *Talks with students* is a documentation of *Louis Kahn's* dialogues on architectural ideologies across three decades (Mohler and Papademetriou, 1969). On the same lines *Conversations with Mies van der Rohe* serves as a documentation of Mies's interviews, covering wide aspects of his life, philosophy, practice, and writings (Puente, 2008).

#### 3.3 Third Person Narrative

*Third person* narrative is the most traditional form of architectural discourse. In such discourses the writer usually an architectural critic, activist or historian comment upon an architect's work. One of the finest examples is the book *Mies van der Rohe, 1947* written by Philips Johnson. Accomplished architect and an extraordinary critic Johnson (1947) chronologically document the works of Mies, establishing his importance on the face of Modern architecture. Frampton (2001) narratives on Le Corbusier, Balkrishna Doshi by Curtis and Doshi (1988) are more such masterpieces. The level of subjectivity is maximum in third person narratives, as it expresses the writers view of the architect, which might not always be the true picture.

#### 4. Theme of Narration

Major objective or intention behind an author to write about an architect and his works serves as the theme of narration. It is the soul of narration and everything else like the tools, evidences and interpretation revolves around it. Such themes can range from description, scholarship, criticism, persuasion, and literature.

##### 4.1 Descriptive Narration

The objective of such discourses is to factually describe the subject in hand. Architect's work, life, philosophy is studied using primary sources like drawings, sketches and letters. The style and tools of such narration depend upon the objective of description. Johnson (1947) to spread the awareness of Mies's work pens down a book on the occasion of an exhibition at the museum of modern art. Johnson in the preface of the book states that "All the buildings and projects which Mies considers in any way important are illustrated in this volume, with the exception of a few buildings which were not executed according to his standards and some projects of the 1910-1914 period which were destroyed in the bombing of Berlin. In addition, all of Mies's writings, published or unpublished, are included with the exception of a few items considered repetitious or too topical to be of lasting interest" (Johnson, 1947: 7). He organises the works of Mies chronologically starting from 1886-1919, 1919-1925, 1925-1937 and so on. Although the narrative is intended as an overview of Mies's works and his contribution to architecture, Johnson also includes Writing by Mies in the end of the monograph, concluding it by brief chronology and listing of Mies built and unbuilt works. (Johnson, 1947). The narrative only aims to describe Mies work, objectively. The projects are described by architectural drawings, pictures supplemented by short description. However, Johnson's narrative is unbiased, and at no point does he attempt to interpret or evaluate Mies' works against his contemporaries. Unlike Johnson who utilises a combination of drawings and pictures, Iain Thompson in *Frank Lloyd Wright – A visual encyclopaedia, 2000* only uses pictures to describe the works of architect. Again, a case of unbiased description, his works are alphabetically arranged, and colour coded according to typology. The book offers a humble introduction by deriving Wright's basic principles of architecture as simplicity, multiple styles, sympathy with the environment, nature of materials etc. This introduction is followed by the visuals of the buildings arranged alphabetically. This coffee table book intended to only provide a glimpse of Wright's works, runs through the list of his projects with minimum details like typology, built up area, date and location of the project, and a two-line brief description. Highly objective, the narrative only states the facts, short and crisp. Samuel (2016) in *Le Corbusier in detail*, documents not the building as a whole but the smaller detail of parts designed by Le Corbusier, to trace the manifestation of his philosophy in the architectural details. The book covers how Le Corbusier minutely addressed the details of his buildings like structural frames, doors, windows, altar, dining room, stairs, columns in imparting character and conveying meanings. The book mainly sets to describe about the small details of the building so capable of adding up to the architectural experience. Therefore, although the objective of the all the above-mentioned narratives is to describe the work of an architect, but the content ranges from architectural projects to writings and details. Also, different tools of description are used ranging from drawings, pictures, letters, conversations, info

graphs etc. The advantage of such descriptive narratives is that it is unbiased and provides a wholistic information about the subject in hand.

#### 4.2 Scholarship

Such discourses are research-based narratives which not only aim at providing maximum information about the subject, but also bring out new perspective towards looking at the same. The objective is to bring out new, unidentified or undocumented information. Hence the validity of such discourses relies upon the newness in approach and knowledge. They sometimes also take a philosophical approach to interpret an architect work in a novel way. Curtis and Doshi (1988) in *Balkrishna Doshi: An Architecture for India*, first derives the eight design principles of Doshi and then interprets his major works through these design principles. The major contribution of Curtis is to establish a deeper understanding on Doshi, by deriving these design principles. These principles then become the theme of the book. A unique perspective to understand the philosophy of an architect is adopted by Neumeyer (1991) in *The Artless word*. The book attempts to explore the philosophy of Mies van der Rohe through his writings and articles. The narrative not only published previously unnoticed writings and articles, but also rendered successfully new ways of understanding and interpreting architect's philosophy. Le Corbusier (2014) in *Towards a New Architecture*, voices his opinion on the modern architecture, role of functionality, and purity of form in architecture. The writing still remains one of the critical sources for understanding architecture.

#### 4.3 Criticism

The objective of such narratives is to critically understand, analyse and interpret the subject (architect's work). The analysis is usually followed by subjective conclusions or opinions which are fashioned to judge the architect. Such narratives usually result in establishing new perspectives to understand the architect or shift existing perspectives. Since such narratives about the subject are written by a third person (critic), having liberal interpretations, and the subjectivity in opinions expressed in high. They supplement readers' understanding of the subject by posing new questions and inventive explorations. *The presence of Mies* edited by Detlef Mertins (2000) is a collection of essays by various architectural critics to explore Mies stand in practise and theory. "The Presence of Mies is an interdisciplinary collection of essays that take a fresh look at the work of this controversial architect on the occasion of the twenty-fifth anniversary of the Toronto-Dominion Centre. Unexpected perspectives have been brought to bear on Mies, opening up new ways of thinking about his work and new possibilities for extending it into contemporary architecture and cultural theory. The Presence of Mies is a timely re-evaluation of Mies's buildings, writings, and teaching in relation to issues of technology, image culture, philosophy, art, and education" (Mertins, 2000: 2). Birksted (2009) in *Le Corbusier and the Occult*, explores the inspirations behind Le Corbusier's work tracing back to early years of his life. He talks about how Corbusier's architecture drew inspiration from his childhood years at La- Chaux de fonds, early inspirations and theory of right angle. Although the narrative is descriptive on the whole, Birksted still manages to maintain ambiguity of facts and possibilities of further explorations, leaving interpretation to the visitor.



#### 4.4 Persuasion

More than description often discourses serve as platform to put forward opinion of the critic on the subject before the reader. Objective of persuasive narration is to convince or persuade the reader on believing an idea. Writers of such discourses could be activist critics, convincing the reader of the importance of certain historical monument, and hence the need for its preservation. Or it could be an account published by an architectural firm, advertising its works. Objectivity of such narratives should be carefully evaluated by the reader. Rattenbury (2000) in *A living architecture* starts of by describing Frank Lloyd Wright's architectural understanding, Taliesin and Taliesin fellowship. This brief introduction sets the background for remaining book emphasizing on the pioneering work of the studio, describing each and every project typology wise. The discourse is descriptive yet persuasive because Rattenbury succeeds in projecting Wright's work in bright light. Le Corbusier (2014) himself tries to persuade the readers and his peers in the profession about his architectural understanding through *Towards a new architecture*. Furthermore, Le Corbusier (1961) in *The Modulor*, attempts to establish a principle specific argument about the standards of measurement based on his 'modular man'. The narrative revolves around the details, use and value of the measuring system, and the beauty of resulting architectural compositions. Though not intentional, but Corbusier's affirmative tone develops bias amongst the readers towards his measurement system.

#### 4.5 Miscellaneous-

Apart from traditional objectives of narratives discussed above, there exist certain unique discourses which cannot be categorised. Writers have explored fictional narratives to talk about architecture and architects. (Rand, 1943) in *The Fountainhead*, explores the relationship between architecture and ornamentation, and purity of form by building up a story around the character Howard Roark. Architects often pen down their life journeys through autobiographies. Wright (1977) sets to describe the happening of his life in *Frank Lloyd Wright: An Autobiography*. He tours the reader on the journey of his life starting from family, fellowship, work and freedom. Doshi (2019) also narrates his life struggles and works through autobiography called *Paths Uncharted*. These narratives are unique in their kind, supplementing the traditional body of knowledge.

### 5. Grammar of narration

The objective (theme) of narration also decides the approach of discourse and material knowledges associated. The approach of narration is the thread which connects the objective to the voice, like grammar defines and rules language. Grammar of narration can be very broadly classified as –

#### 5.1 Factual –

The content mainly states the existing facts and figures. Material knowledges required is usually drawings, pictures, details and interviews. Highly objective and narration is weighed for the authenticity of information and source. In such cases the length and depth of information becomes primary important.



## 5.2 Narrative-

This discourse attempts to narrate a story and the piece of writing is intentionally fashioned in a particular style and sequence to create a storyline. Factual information is the key, but the analysis of these facts depends upon the plot and the skill of the writer.

## 5.3 Interpretative –

The voice of the narrator becomes the most important in argumentative or interpretative discourses. Set of material knowledges is used not only to state the fact but are also explored to support the hypothesis.

## 6. Conclusion

The paper critically analyses set of established narratives on architects and attempts at understanding the same through 'voice', 'theme' and 'grammar'. The primary objective of the paper is to understand the structure and nature of architecture narratives. This is done by analysing nature of the *narrative* and defining *structure* for the same. The paper analyses the narratives by establishing principles of categorisation namely voice, theme and grammar. It is the interplay of all the three that shape language of written discourse. All the three categories however co-exist and function together. Moreover, there exist no ideal combination of the three to establish an ideal argument. The use of grammar, theme and voice depends upon the intent and nature of argument. The matrix (Figure 1) hence proposed explores all the possible combinations that can be explored to establish an architectural discourse.

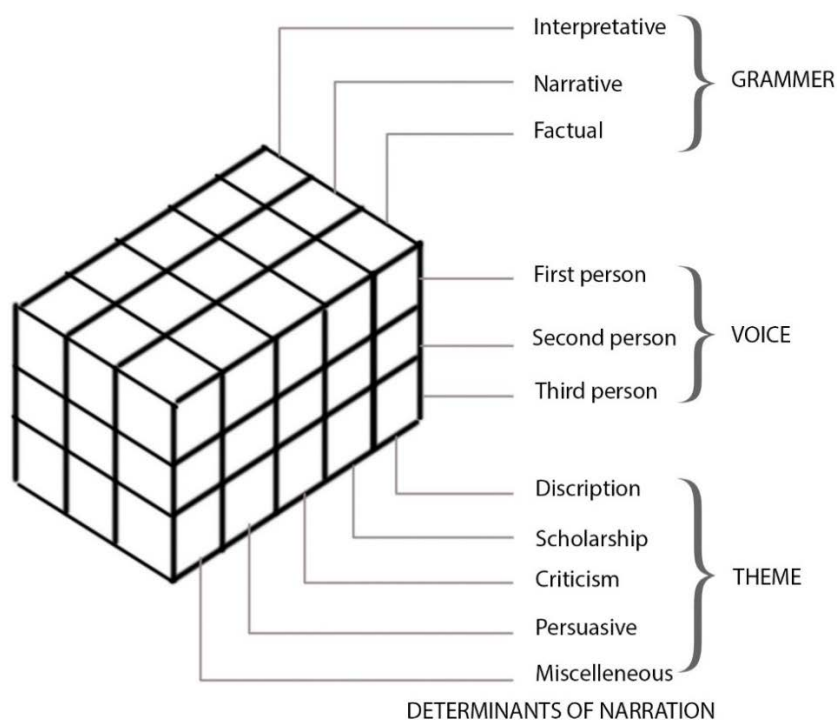


Figure 1. Determinants of architectural discourse

## 7. Use in research and education –

A few possible titles of research have been briefly projected to explore the possible combination of categories of grammar, theme and voice, in the same sequence to establish an appropriate narrative. Ar B V Doshi, Pritzker Prize winner 2018 is the test subject of case study, and various aspects of Doshi's works are stated as cases or problem statement. The cases help to explore one of the many possible ways to utilise the *determinants of narratives* proposed in the paper.

### *Aim – To understand cultural contextuality in Doshi's work*

#### *Case 1 – Scholarship – narrative – third person*

The objective is to understand the importance of cultural settings in Doshi's works. The research shall begin with an understanding of 'culture' and its transposition in architecture in general. The dismantling of culture would lead to deriving parameter to study manifestation of culture into built form. Selected projects can be studied and analysed against the derived parameters for to trace cultural manifestations in Doshi's work.

#### *Case 2 - Interpretative – Persuasion – third person*

The objective is to understand the need and importance of cultural settings in architecture, with reference to Doshi's work. The research shall begin with analysing, interpreting Doshi's work, in cultural context. Doshi's technique of addressing cultural values, would then be validated and defended to establish the same, holistically for the Indian context. The major theme of the narration is to persuade the reader about the importance of cultural interpretations in architecture, and hence to put forth standard strategies for the Indian cultural context.

#### *Case 3 - Descriptive – Factual – first person*

Doshi's research cell called VSF, decides to create awareness by bringing out in public the unique quality of cultural contextuality in Doshi's works. Such narrative will mostly be factual, describing Doshi's work through cultural lens. The discourse shall be highly objective, as it only aims to bring into public light Doshi's works and hence are devoid of any interpretations, arguments, or criticism.

Therefore, the same 'aim' of research can take different directions depending upon the combination of grammar, voice and theme selected. The selection of categories however purely depends upon the objective of narration. However, there is no one correct or ideal way to write about architects and architecture. In fact, all writers get it right their own way!

### **Acknowledgements**

I would like to thank my colleagues at Dayananda Sagar College of architecture, Bangalore and Innovature Research and design studio, Bangalore. I also extend heartfelt thanks to my family and friends for inspiring and motivating to pursue research.

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The authors have declared that no competing interest exists.

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## Biography

### Maria AKHTAR

Maria Akhtar is an architect, academician, researcher and a passionate artist. Her research interest lies in the study of meaning of form in historic buildings, oral history and man-environment interaction. She has presented papers at various national and international conferences. Maria has completed her Bachelor of Architecture from Visvesvaraya National Institute of Technology, Nagpur in 2014 and M-Arch in Architecture education from Smt Manoramabai Mundle College of Architecture, Nagpur in 2017. Currently she is working as an Assistant Professor at Dayananda Sagar College of Architecture, Bangalore and Research Consultant at Innovature Research and Design Studio (IRDS), Bangalore.

## Instructional Levity in the Architecture Studio

Neena VERMA<sup>1</sup>

<sup>1</sup> Hillier College of Architecture and Design, USA.  
ORCID: 0000-0003-0334-7125  
neenaverma1@gmail.com

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### Abstract

Architecture education is typically cast as trying and bleak, a simultaneous exercise in sleep deprivation and innovation. While practicing architects' hours and pay are rationalized with, 'You do it because you love it', students of architecture should too be situated to argue that their education is a similarly joyful pursuit. This work does not suggest revelry and jokes in studio, but rather that instructors adopt pedagogical methodologies that engender lively engagement, and ultimately joy. Two benefits of levity in the architecture pedagogy are of particular interest. First, the impact on student engagement and experimentation. Second, the impact on learning. Levity, appropriately incorporated in the studio curriculum, can improve the academic experience and quality of student work. This research is not 'soft' or 'fun' – to be written off as lacking in rigor and seriousness. Instead, it is an unapologetic suggestion that bringing *lightness* into the work of architecture studio instructors can elevate student output. In fact, this has been experienced this first hand; when asked for feedback on such pedagogical innovations, a student remarked, 'These unconventional ideas made me excited to design, it made the gruelling hours fun, and it made me proud to put out the work I did'. Introductory examples of such applications of levity in studio teaching at The New Jersey Institute of Technology and feedback gathered from students along the way support such success. Following this, a more in-depth survey the prevailing scholarship on humor in academic instruction (the Instructional Humor Processing Theory) substantiates its place in the architecture studio. This paper aims to provide narrative examples of such pedagogical methodologies, setting the groundwork for future study.

**Keywords:** Levity, studio, instructional humor, incongruity resolution theory, disposition theory

“Levity is the result of spiritual and aesthetic poise. A person who is groping and struggling for such poise is worried and grave. All progress is towards levity through gravity. Weight then wings! But it is the wings which are the goal, not the weight. Not wings to fly solemnly with; wings to frivol with. You cannot worry them into existence. You may get them by acting as if you already have them and thinking you have them” (Marquis, 1951 cited in Powers, 2001: 55).

Architecture education is typically cast as trying and bleak, a simultaneous exercise in sleep deprivation and innovation. While practicing architects’ hours and pay are rationalized with, ‘You do it because you love it’, students of architecture should too be situated to argue that their education is a similarly joyful pursuit. This work does not suggest revelry and jokes in studio, but rather that instructors adopt pedagogical methodologies that engender lively engagement, and ultimately joy.

Two benefits of levity in the architecture pedagogy are of particular interest. First, the impact on student engagement and experimentation. Second, the impact on learning. Levity, appropriately incorporated in the studio curriculum, can improve the academic experience and quality of student work. This research is not ‘soft’ or ‘fun’ – to be written off as lacking in rigor and seriousness. Instead, it is an unapologetic suggestion that bringing *lightness* into the work of architecture instructors can elevate student output. In fact, this has been experienced this first hand; when asked for feedback on such pedagogical innovations, a student remarked, “These unconventional ideas made me excited to design, it made the gruelling hours fun, and it made me proud to put out the work I did” (Name Withheld 1, 2019). Introductory examples of such applications of levity in studio teaching at The New Jersey Institute of Technology and feedback gathered from students along the way support such success. Following this, a more in-depth survey the prevailing scholarship on humor in academic instruction substantiates its place in the architecture studio.

## 1. Levity Defined

Levity is “The treatment of a serious matter with humour or lack of due respect” (Oxford University, 2019). Oxford English Dictionary’s sample sentence directs a rather negative connotation: “as an attempt to introduce a note of levity, the words were a disastrous flop” (Oxford University, 2019). Two understandings of ‘levity’ follow. First, one may embrace a “lack of due respect” - the subject matter of our architecture studio should not be cast as superior or it will be unrelatable. Second, and the preferred path here, levity is ‘lightness’ - in fact, the root if levity is *levitas*, mid-16th century Latin for ‘light’ (Oxford University, 2019). Here, student joy and engagement are posited as consequences of lightness in instruction.

## 2. Exercises in Lightness

Before examining the prevailing literature on levity in the classroom and in-depth studio projects, studio exercises in lightness set the tone.

## 2.1. Poetry

Pablo Neruda proposed such lightness in his poem, *October Fullness*: let's be humble, let's query ourselves, let's ask "how insignificant this business is" (Eisner, 2004: 175). The author starts instruction in her first-year studios with hand drawing, typically providing prompts to teach students to 'see' without prejudice – for example, draw with eyes closed, do not lift the pencil for 5 minutes, draw your feelings in straight lines, and so on. It is fun, it is unexpected, it is incongruous with the formal curriculum. One month into the Fall 2018 term, the students grew attached to these exercises and asked that to participate in 'Inktober' – drawing in ink every day in the month of October – with a series of prompts from the professor. At this stage, the studio was working on understanding the poetics of design and so a poem was chosen with a line read each day. Neruda's *October Fullness* served as a start to each day's studio work.

To best communicate here the notion of levity chased, the reader is asked to engage as well. At this very moment, you are invited to experiment just as the first-year students did. Find a piece of paper and a drawing instrument and for 60 seconds, pause and just draw Neruda's stanza: "and how insignificant this business is" (Eisner, 2004: 175). Be interpretive, be experimental, be conceptual. Let it clear your mind, just be.

[60 second pause]

Evaluate your own sense of lightness after drawing.

And, the full poem (Eisner, 2004: 175-177):

OCTOBER FULLNESS

Little by little, and also in great leaps,  
life happened to me,  
and how insignificant this business is.  
These veins carried  
my blood, which I scarcely ever saw,  
I breathed the air of so many places  
without keeping a sample of any.  
In the end, everyone is aware of this:  
nobody keeps any of what he has,  
and life is only a borrowing of bones.  
The best thing was learning not to have too much  
either of sorrow or of joy,  
to hope for the chance of a last drop,  
to ask more from honey and from twilight.

Perhaps it was my punishment.  
Perhaps I was condemned to be happy.  
Let it be known that nobody  
crossed my path without sharing my being.  
I plunged up to the neck  
into adversities that were not mine,  
into all the sufferings of others.  
It wasn't a question of applause or profit.

Much less. It was not being able  
to live or breathe in this shadow,  
the shadow of others like towers,  
like bitter trees that bury you,  
like cobblestones on the knees.

Our own wounds heal with weeping,  
our own wounds heal with singing,  
but in our own doorway lie bleeding  
widows, Indians, poor men, fishermen.  
The miner's child doesn't know his father  
amidst all that suffering.

So be it, but my business  
was  
the fullness of the spirit:  
a cry of pleasure choking you,  
a sigh from an uprooted plant,  
the sum of all action.

It pleased me to grow with the morning,  
to bathe in the sun, in the great joy  
of sun, salt, sea-light and wave,  
and in that unwinding of the foam  
my heart began to move,  
growing in that essential spasm,  
and dying away as it seeped into the sand.

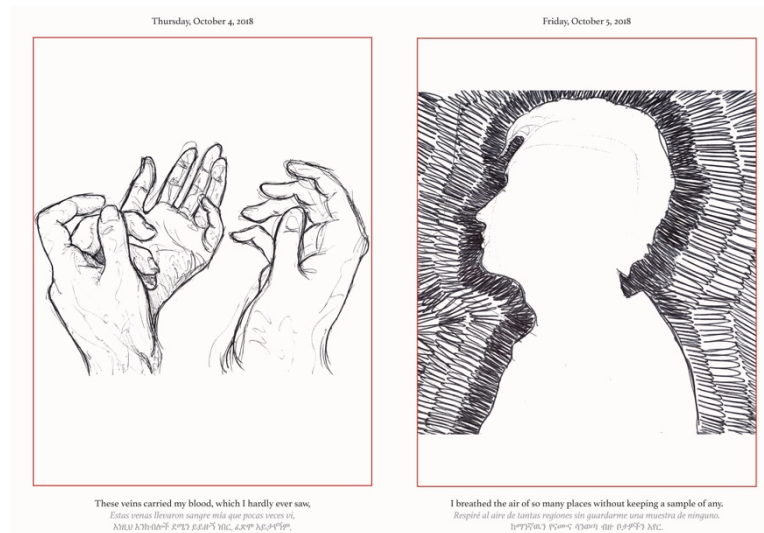


Figure 1. Student Neruda drawings (Liscano, 2018)

Student feedback on daily hand-drawing exercises ranged, but universally supported that the lightness it introduced translated to elevated architectural ideation. One student said of hand drawing, “Those exercises challenged me to think of my concepts as a foundation for my design, and to think beyond the surface about the way I was going to communicate and



represent my ideas” (Name Withheld 2, 2019). And another student remarked, “ ... drawing every day was honestly a challenge for me. Not because I didn’t love drawing, I’m an art enthusiast myself, but because of the way we were drawing. ... [it] changed the way I think, the way I perceive ...” (Name Withheld 1, 2019).

## 2.2. Music

A Spring first-year studio section continued its own experimentation with daily hand drawing. The students proposed the class draw to music, a proposal accepted on the condition of the music being connected to the work underway, which at that time was precedent evaluation of a practice. Students thus selected pieces aligned with an architecture practice -in idea, time, concept, theme- and before they started drawing, a student would summarize a practice’s work, explain the connection to the music and provide a related drawing prompt. They called it ‘JAM’ (Just Architecture and Music) and even made a poster for the studio advertising this wholly elective work. The ownership, engagement and experimentation were model behavior on a small scale that translated beautifully to larger ongoing studio projects. An added benefit, these exercises offered an opportunity to clear the mind and prepare for the focused studio work that would follow: “It was a constructive part of our studio time where we were able to detach from our work and express whatever it was we were going through that day” (Name Withheld 3, 2019).



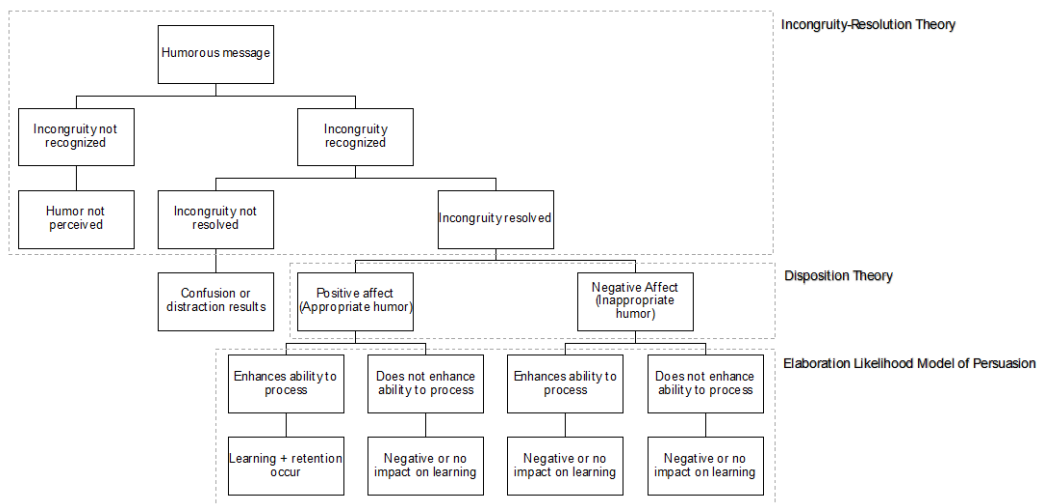
Figure 2. Student-generated class drawing schedule (Konradparisi, 2019)

### 3. Theoretical Framework

Short poetic and musical drawing exercises serve as gateways for levity in the studio pedagogy. The potential, however, is much broader. In order to further apply levity, the existing scholarship on levity in academic instruction warrants review. The most established scholarship on humor in education comes from work in the communications field. Communications scholars study humor as a tool in the classroom, generally finding that the incorporation of humor by an instructor is positive (Banas, Dunbar, Rodriguez and Liu, 2010; Benjelloun, 2009; Bolkan and Goodboy, 2015; Tews, Jackson, Ramsay and Michel, 2015). While these academics' hypotheses and methods (jokes in lecture halls, for example) do not perfectly translate to the architecture studio format, valuable parallels remain. *Caveat*: This paper and author in no way match the depth and breadth of these scholars' studies; the present work simply acknowledges and seeks comparison at a survey level, thus establishing the value of future study.

#### 3.1. Institutional Humor Processing Theory

In 2010, Communications scholars Wanzer, Frymier and Irwin (2009: 1) combined the "Incongruity-Resolution Theory, Disposition Theory, and the Elaboration Likelihood Model of Persuasion to establish Instructional Humor Processing Theory or IHPT". While relatively new to the literature and certainly open to debate, IHPT has become a popular method by which to evaluate the impact of instructor humor on student learning (Bolkan and Goodboy, 2015).



**Figure 3.** Institutional humor processing theory (Redrawn by author, based on Wanzer, Frymier and Irwin, 2009: 7)

First, Incongruity-Resolution Theory establishes whether students perceive a humorous message (La Fave, Haddad and Maesen, 1996). "This extended theory depicts humor as a two-phase process where the perceived incongruity or inconsistency in the stimuli must first be recognized and then accurately interpreted by the receiver for the joke or humorous content to be perceived as funny" (Wanzer, Frymier and Irwin, 2009: 3). This theory hinges on the gap or dissonance between expectation and reality. Simply put, the humor cannot be expected.

Second, Disposition Theory posits whether this humor is well-received. The subject of the humor is critical here; it must be welcome by the recipient, the students in our case (Wanzer, Frymier and Irwin, 2009).

Finally, the Elaboration Likelihood Model of Persuasion establishes whether this the humor enhances learning or actually produces learning (Wanzer, Frymier and Irwin, 2009). Several scholars have found that elaboration occurs when students are motivated and that this motivation is rooted in relevance yet again. At minimum, a positive affect is sought: “students acquire more positive attitudes towards education, which then increases their motivation to learn and results in improved academic performance” (Banas, Dunbar, Rodriguez and Liu, 2010: 120). Tests of Incongruity-Resolution Theory utilize ‘jokes’ ‘top ten lists’ ‘self-deprecation’ and other arguably trite forms of humor, correlated against student retention and learning. However, the architecture studio is a special place. And so emphasized here is lightness over jokes, acknowledging the goal as design thinking, decision-making, and honing a learned intuition.

#### 4. Institutional Humor Processing Theory in the Architecture Studio

To apply this scholarship to the architecture pedagogy, a first semester first-year studio project the author taught at NJIT is taken under consideration. Again, IHPT as applied here is not about jokes or top-ten lists. Instead, instructional methodologies that celebrate ‘lightness’ – a notion of levity that maintains the seriousness of studio production but uses unconventional tools to lead to deeper education are proposed.

This work, the first of its kind in the architecture studio context, is observational. It sets the groundwork for future largescale study. This paper does not assert itself to be a formal scientific research study, but rather an observational and reflective analysis. The instructional innovations described herein were organically developed in the studio context over a single year, without the traditional metrics and limits seen in largescale studies. Like the work’s observational methodology, its evaluation is similarly informal. Students provided written feedback at the conclusion of the year, asked specifically to comment on how they felt these untraditional methods impacted their learning. Finally, the student work primarily relied on here has been expressly discussed and approved for publication by those students.

##### 4.1. Narrative as Lightness

Students across the first year were called on to complete a very typical first year project – site manipulation and volume design. The program for both tasks was ‘relaxation’ and the default in previous years was for students to imagine what relaxation meant to them and proceed accordingly. However, an additional constraint was introduced: narrative. Students picked a client and reinterpreted the notion of relaxation for that client. Beyond ingenuity, this approach called for research. As an outside critic remarked after the final review, “Each and every presentation was outstanding” (Name Withheld 4, 2019). No rambling hills and hammocks here.

One student proposed a mundane office space for Louis Carrol’s Mad Hatter, the student’s research on madness supported his theory that his client would find order relaxing. Another student proposed a series of raft docks for rapper and producer Armando Christian

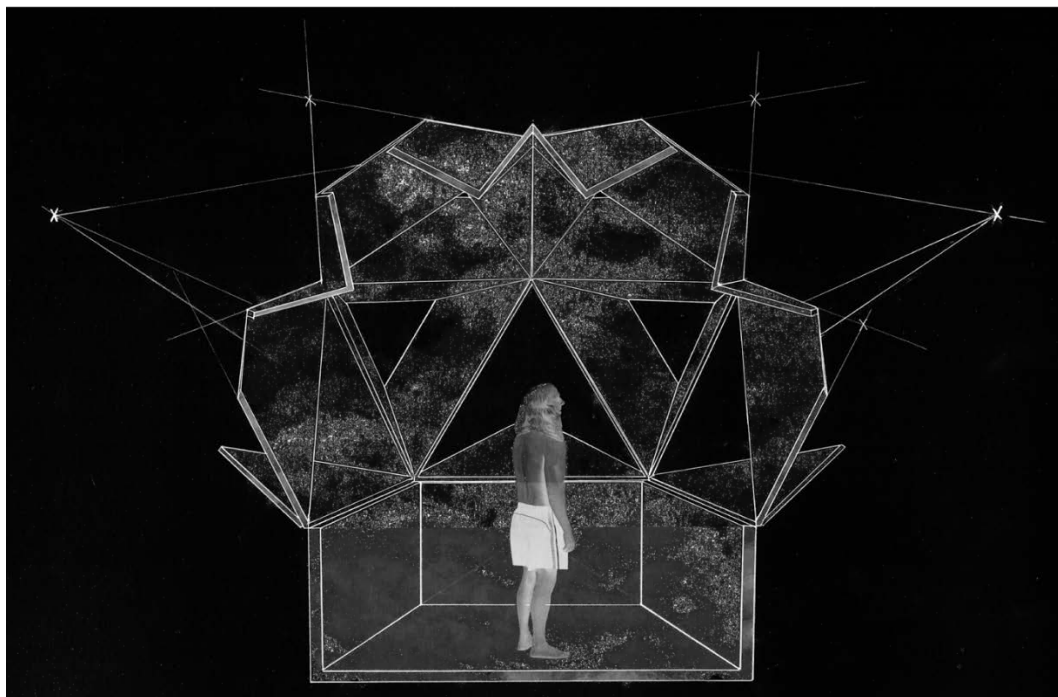
Pérez -stage name Pitbull- to escape his polished and arguably false performer persona, and simultaneously call to his Cuban expatriate heritage. A third student proposed a strict box for the Cat in the Hat to destroy – such destruction as the character’s ultimate respite.



**Figure 4.** Student-Generated client profiles (Liscano, Nicolas, Palamuthi And Sanchez, 2018)

The project and client considered in depth here is Benjamin Franklin. Through images from the students’ final presentation, the six points of the Instructional Humor Processing Theory are tracked.

First, humorous message. The humorous message in the instruction was that anybody can be a client – alive, historical, real, fictional, human, non-human. A wide cast of character resulted; the author encouraged this range and experimentation to show students how serious design production can follow unusual ideas; the two are not mutually exclusive. Students embraced this whole-heartedly. In choosing Benjamin Franklin, the project here investigated not the scholar-diplomat we know but instead a jovial swimming colonial.



**Figure 5.** Benjamin Franklin, swimmer. multi-perspective (Sanchez, 2018a)

Second, incongruity recognized. The student's project statement reads in part,

Humanizing a historical figure, this project exaggerates the little-known hobby of Benjamin Franklin: swimming. Since Benjamin Franklin spent most of his time helping found a country, being a diplomat, author, musician, printer, and more; he couldn't focus on his passion. Not a lot of people know that at the age of 11 this passion led him to inventing a pair of swim fins made out of wood and that he usually swam a distance of 3.5 miles a day. Therefore, my goal for this project is to design a space where he will reconnect with his lost passion (Sanchez, 2018b).

The student was researching Franklin for her history class and discovered, rather tangentially, that his true passion was swimming, something he had less and less time for as he grew in accomplishments. But, when contemplating relaxation, the student pushed and pulled at the notion of a mere swimming hole. She thus identified an incongruity in the project definition of relaxation.

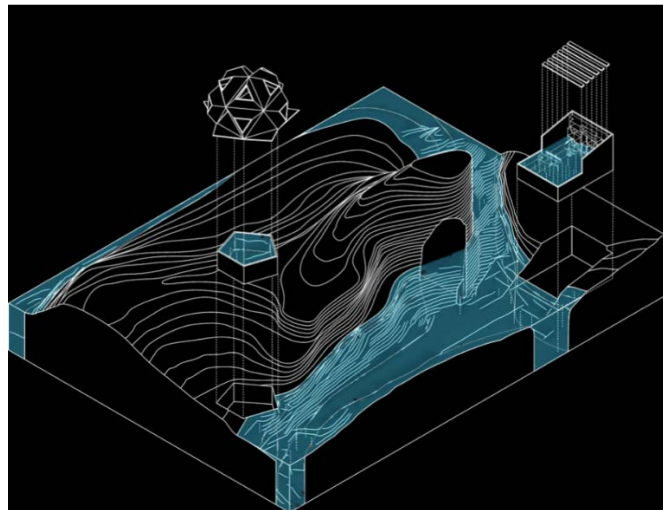


Figure 6. Benjamin Franklin, swimmer - site axonometric (Sanchez, 2018c)

Third, incongruity resolved. The student resolved this incongruity by redefining relaxation in her client's terms. A constant 'doer' - an inventor and philosopher - Benjamin Franklin's relaxation space would be a working space, an effective laboratory for swimming. The student manipulated the landscape to develop three diving platforms with exacting requirements.

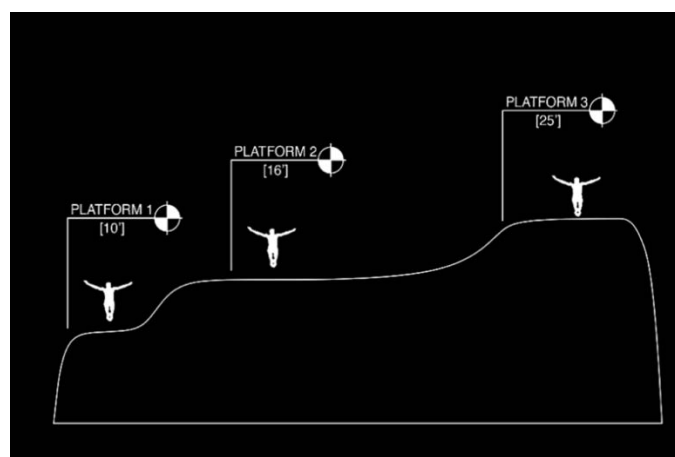
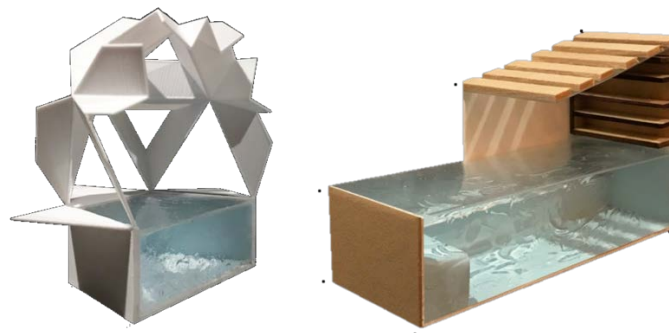


Figure 7. Benjamin Franklin, swimmer - platform analysis (Sanchez, 2018d)



She further introduced enclosed specialized pool destinations –a swim-up library and a scientific salt bath- reachable by swimming only. Finally, the circulation through these destinations equalled 3.5 miles, Franklin’s daily goal. The quality of this first-year, first-semester work skyrocketed with the students’ growing intrigue in her self-directed narrative.

Finally, positive affect. The agency of choice set students up well to resolve the ‘Disposition’ aspect of Instructional Humor Processing Theory. With the author’s support, this student added levity to her drawings, for example Benjamin Franklin in swimming trunks in her perspectives. This lightness was still fully appropriate for her learning. Here, she learned to make design decisions. While given a list of normative deliverables, significant questions, such as what models to build, what sections to cut, answered themselves. This student’s models here were fully self-directed – she built the swim up library and scientific salt bath in section and added a resin to emphasize the prominence of water.



**Figure 8.** Benjamin Franklin, swimmer. models - library pool and science pool (Sanchez, 2018e)

The theoretical framework – Institutional Humor Processing Theory – supports these observational experiments in the architecture studio. Levity *can be* productive. Drawing exercises and project narratives are just two approaches that create incongruities - the groundwork for instructional levity established by the Incongruity-Resolution Theory. These incongruities were recognized and resolved; students were receptive, as predicted by disposition theory. And, finally, elaboration, or learning, occurred per the Elaboration Likelihood Model of Persuasion.

There was a lightness through it all. Again, student feedback supported this success: One student remarked, “Technical skills and presentation skills are always learnable and improvable. But the way we think is hard to change unless we are taught that way from the beginning, and [these projects] somehow managed to make a change in my stubborn mindset. [They] changed the way I think, the way I perceive, and the way I design and it is something I will carry with me forever” (Name Withheld 10, 2019). Another said of this approach: “Including a narrative in my work gave me ownership and created a level of meaning, it presented me with the opportunity to connect and engage with the user. Having a story helped me resolve problems I encountered” (Name Withheld 11, 2019).

#### 4.2. Postscript, Self-Directed Lightness

Beyond the professor’s direction, students were observed adopting strategies for levity in their work independently. This has produced unexpected results, an extension of

architectural mediums in whole ways. Such extension became obvious in the project voted by her peers as the strongest in the first year. Another narrative approach, the student's client was Theodor Geisel's political figure, i.e., Dr. Seuss' Cat in the Hat. The resulting design work – centered around a rhyming children's storybook character – was sophisticated beyond its years. A perfect example of fully self-directed and rigorous lightness: the student decided to present before her final jury *in rhyme*. This was a design choice about the medium by which to verbally communicate the project – a decision by the student driven by the incongruity set up by the prompt. This paper began with a poem by Neruda, and so it ends with a rhyme by a student:

The deformation of pure land and volume symbolizes revolt against authority, the hallmark of The Cat in The Hat, a character of Dr. Seuss.

Rather than take a break from his crazy antics, He relaxes by letting his imagination run loose.

However, "when it is too wet to play, and the sun does not shine"

The Cat in The Hat must head inside.

A boring old cube? It looks too clean,

this is no fun sight to be seen!

He will jump and he will crawl,

and he will bounce off the wall,

and turn these blocks into a volume that isn't ordinary at all!! (Palamuthi, 2018a).

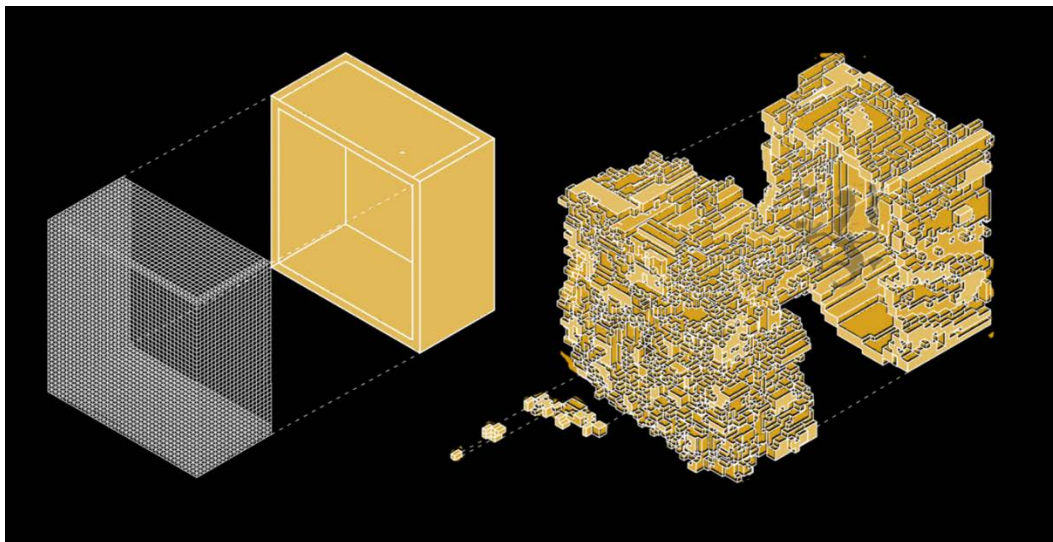


Figure 9. The cat in the hat - axonometric transformation (Palamuthi, 2018b)

## 5. Conclusion

The experiments discussed here suggest that lightness enhances learning in the architecture studio. Such enhancement of learning is the goal set forth by the IHPT, borrowed from Communications scholars. While this paper's methodology is observational as opposed to empirical, its observations are consistent: With lightness, students may engage more fully and eventually self-direct their own work. Such self-direction is the most



significant evidence of the enhancement of learning, leading to elevated output and increasingly sophisticated design thinking.

Lightness in studio instruction can take many forms. Poetry, music and narrative are just three examples. Instructors are here called to identify what brings lightness to their own architectural work and perhaps re-form that as an instructional tool in studio.

### Acknowledgments

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### Declaration of no Competing Interest

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## Biography

### Neena VERMA

Neena Verma is a practicing architect, teacher and theorist based in New York City. Her research and writing focus on the intersection of practice and society. She aims to challenge the norms of perception and beauty. A former attorney, her background adds a criticality to her architectural analyses. Neena's writing has appeared broadly, most recently in *Architectural Research Quarterly*; she is currently writing a book about immigrants finding place. Her collaborative work has been presented before the Venice Biennale and Buenos Aires Biennale. Her first built work was completed as an architecture graduate student with Tulane's UrbanBuild program. A recipient of the John William Lawrence Travel Fellowship, she has studied slum architecture in India. Neena was an invited participant to the American Institute of Architects Emerging Professionals Summit and the Practice Symposium at Harvard University Graduate School of Design. Neena holds degrees from the University of Pennsylvania, The Wharton School, Rutgers Law School and Tulane School of Architecture. She has worked in the architecture offices of Kieran Timberlake, Peter Marino, and Studio Mapos. She is currently Adjunct Faculty at NJIT Hillier College of Architecture and Design and The School of Constructed Environments at Parsons The New School, a Writing Associate and Fellow at The Cooper Union for the Advancement of Science, and principal of an eponymous practice that pursues small-scale, forward-thinking, ground-up architectural works. Her architecture office is a certified Minority and Women-Owned Business Enterprise in New York City.

## Embodied Cognition and Critique of Cartesian Dualism in Design Learning

Gizem YAZICI<sup>1</sup>

<sup>1</sup> İzmir Institute of Technology, Turkey.  
ORCID: 0000-0003-1230-6704  
gizemyazici@iyte.edu.tr (Corresponding author)

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### Abstract

This research explores the relationship between mind and body in the design learning environment. The research focuses on design learning, embodied cognition, mind-body relationship and Cartesian dualism. In the research, the role of embodied cognition in design learning process is drawn attention. The traditional mind-body dualism of Cartesian theory is criticized by embodied cognition in design learning. In the design learning process, it is pointed out that the mind-body dualism of the Cartesian theory becomes dysfunctional. In this research, the concept of reflection-in-action is considered as a type of design learning. It is explained how the epistemological origins of this concept reject Cartesian theory. In this research, mind-body-environment harmony and embodied cognition which are used in reflection-in-action, is explained as the solution of the design problem which has an 'ill-defined' problem type. As a result of the research, the importance of mind-body-environment harmony in design learning process is emphasized. Moreover, it is pointed out that the embodied cognition which occurs with this harmony is an important parameter in the design learning process. Finally, it is possible to conclude that in design learning process, embodied cognition rejects Cartesian dualism, and thus the distinction between theory and practice.

**Keywords:** Embodied cognition, design learning, cartesian dualism, mind-body relations, reflection-in-action

## 1. Introduction

In design learning, the mind-body relation is a highly important parameter. During the design learning process, the mind, the body, and the environment are inseparable, thus the learner shapes his/her design learning process through such interaction. The theory of embodied cognition provides a theoretical framework to explain this interactive system of learning. Unlike the Cartesian mind-body dualism in the history of philosophy, embodied cognition argues that mind and body are inseparable. This research presents a critique of the mind-body dualism of Cartesian theory in the design learning process through embodied cognition. The aim of this research is to discuss the mind-body and the environment relationship in the design learning process and the role of embodied cognition resulting from this relationship in this process.

Design problems are referred to in the design literature as 'ill-defined' problems (Rittel, 1987). Solving and defining this type of problem is a difficult process. The difficult definition and complex nature of the design process make it difficult to learn and teach the design process. One of the things that help the designer in this process is cognitive abilities. The human cognitive system offers abilities such as reasoning, learning, thinking, imagining, etc. to solve design problems. Designers solve these problems by using these abilities and also tools (environment) that support them. In other words, the design problem is solved by the interaction of mind, body, and environment. In problem solving process, alternative solutions are produced with tools of representations such as sketch, technical drawing, model, computer model, etc. The appropriate solution is chosen from these alternatives. The selected solution is developed and the resulting product (design) is created (Goldschmidt, 2007).

Design learning activity is based on learning-by-doing (Schön and Wiggins, 1992). In learning-by-doing, mind, body, and environment interact in a collective work. A cognitive process begins by mutual interaction of mind, body and environment. This cognitive process points out embodied cognition and design learning process. In embodied cognition, mind, body and environment interact; thereby embodied cognition allows the designer to acquire new knowledge (Lakoff, 2012). The embodied cognition states that perception and interpretation are inseparable activities (Boroditsky, 2000). The mind-body separation, which is the cornerstone of Cartesian theory and the role the body plays in perception, are questioned in embodied cognition (Lakoff, 2012). On the other hand, according to Descartes' dualistic approach in Cartesian theory, human being is a union consisting of physical substance (body) and mental substance (mind) (Kim, 1971). Two different substances in this theory have come together in human being (Alanen, 1989). Such way of thinking, consisting of two different ideas of substance, contrasts with the dynamics of the design learning process. Design learning is a process shaped by embodied cognition. The learning activity through embodied cognition can be explained with Schön's reflection-in-action concept (Schön, 1983). In contrast to Cartesian dualism, in reflection-in-action that Schön argues the mind and body are in unison (Kinsella, 2007) and that learning could not be separated into theory and practice.

In this research, concepts mentioned above, such as embodied cognition, reflection-in-action, and Cartesian dualism will be explained in subtitles to provide a framework for the research. The basic framework is shaped on the relationship between mind and body.

## 2. Mind-Body Relationship in Cartesian Theory

Mind-body problem has been discussed in many fields including philosophy and various arguments have been developed on the problem. The discussion still continues today and is included in the studies as the subject of further scientific research.

In this research, the mind-body problem is discussed through Descartes' Cartesian theory. The most lasting heritage of Descartes' philosophy is his doctrine that mind and body are distinct. He explains this doctrine with his famous philosophical position; "Cogito ergo sum" - "I think, therefore I exist". In Cartesian dualism, one first realizes his/her mind, and then the mind realizes the existence of the body (Alanen, 1989: 402). Descartes reaches this doctrine by arguing that the nature of the mind is different from that of the body, and so, he claims that it is possible for one to exist without the other (Broadie, 2001). According to Descartes' dualistic approach, a human being is a union consisting of both physical substance (body) and mental substance (mind) (Kim, 1971). Two different substances in this theory have come together in human being (Alanen, 1989). Descartes interprets mind as a substance different from body and he states that the source of all real knowledge can be formed by concepts that arise with the direct perception of the mind (Alanen, 1989).

Cartesian dualism claims mental substance (mind) is independent of physical substance (body) (Bates, 2013). According to Cartesian theory, human nature has abilities such as doubt, understanding, acceptance, denial, imagination, and perception and also human as an objectless mind can do these abilities (Alanen, 1989). In addition to this, in Cartesian theory, it is claimed that the concept obtained with the mind comes before it is acquired from the body, and therefore the separation between mind and body manifests itself at this point as the superiority of the mind over the body (Alanen, 1989). According to Descartes' dualism, there is no concept that people can know more easily than in their minds (Alanen, 1989).

In Descartes' theory, even if the mind is united with the body, it differs from the body in function (Kim, 1971). Furthermore, according to this theory, the fact that these two are together does not mean that they can coexist (Kim, 1971). Descartes' mind view is the difference between the thinking substance and the emotional substance (Alanen, 1989). The 'thinking' thing is called 'I' is separated from the body and can exist independently from it (Bates, 2013). Descartes describes the mind and the body as a substance against each other in his philosophy (Alanen, 1989). The reason is that according to Descartes, mind, and body are not only different as a structure but also as proportion they contrast each other (Alanen, 1989). On the other hand, the most important challenge of Cartesian dualism lies in explaining the relationship between mind and body, which are completely disconnected from each other (Bates, 2013).

There are both supporters and critics of Descartes' approach. One of the philosophers who reject the Cartesian dualism of Descartes is Gilbert Ryle, the pioneer of the approach that formed the epistemological basis of Schön's learning concept (reflection-in-action) in this study (Kinsella, 2007). Ryle rejects the mind-body dualism of Cartesian theory and he argues that the reason Descartes' dualism is due to misunderstanding the activities of the mind (Banciu, 2013). According to Ryle, seeing the mind as an embedded 'non-bodily being' in the body is to argue that there are two separate substances, one is abstract and the other one is concrete (Banciu, 2013). With this argument, Ryle's dogma 'ghost in the machine',

which represents the separation of mind and body, emerges (Kinsella, 2007). The ghost that Ryle defined in this dogma is mind, and the machine is body (Kinsella, 2007). According to Ryle, if the human body is an entity which is arranged in a complex structure, the human mind is another entity which is arranged in a complex structure, and they are created only from different kinds of substance and different structures (Banciu, 2013). Although Cartesian theory argues that it has only a spatial quality by reducing matter to a single substance, Ryle argues that it has both a spatial quality and a mental quality based on the activity of matter (Banciu, 2013). With this argument, the mind is defined not as a separate or spiritual substance, but as a type of substance (Kinsella, 2007).

### 3. Mind-Body Relationship in Embodied Cognition

Embodied cognition is a theory in cognitive science that describes the effects of the body and the physical environment on cognition, mind, and behavior (Lakoff, 2012). The embodied cognition is a response to Descartes' Cartesian Dualism and it rejects the basic principles of the mind-body dualism (Kinsella, 2007). Contrary to the view that Cartesian dualism defends, embodied cognition asserts that body and mind are not separable (Lakoff, 2012).

According to embodied cognition, cognitive activity is not only something that happens internally but also involves a continuous interaction between mind, body and environment (Pouw, van Gog and Pass, 2014). The embodied cognition theory argues that all the concepts that humans have are based on bodily experiences (Thelen et al., 2001). According to Lakoff (2012), concepts which people use to think and express their thoughts are shaped by the gestural features of the body. For example, when we talk about understanding something in all aspects, we use the verb 'grasp' which also means holding it tightly (Rosch, 1975). Further, examples such as can be listed. According to Lakoff (2012), abstract thinking and reasoning abilities are shaped by the abilities of the body and the physical environment.

Gibson (1987) argued that the mind can never be separated from the body and physical environment and also he argued that perception is a success of the mind-body-environment system. The main view underlying this argument is that perception is not a passive process, but an active action (Gibson, 1987). According to Gibson (1987), no one passively expects visual knowledge to reach the eyes and then the brain and turn into perception. On the contrary, people are on the move at any time they perceive (Thelen et al., 2001). It is this state of motion that creates the visual knowledge and enables to perceive the world (Mallgrave, 2014).

According to Thelen et al. (2001), sensory and motor abilities are inseparably linked and what is called cognition is shaped by the experiences acquired through these sensory and motor abilities. The body is not a puppet of the mind; on the contrary, it plays an active role in the emergence of cognitive processes (Lakoff, 2012).

### 4. Mind-Body Relationship and Embodied Cognition in Design Learning

Designing and learning are closely related to styles of interrogation. Learning is an activity based on the acquiring, understanding, assimilating and using of knowledge. In the learning process, previously acquired knowledge and acquired knowledge in the process are used



together. When looking for a solution to a design problem, designers transform their knowledge and experience they have learned and continue to learn by combining it with other interactions in the process.

In design, there is various kind of knowledge in different domains. Knowledge that is structured according to knowledge accumulation is called 'knowledge structure' (Galambos, Abelson and Black, 1986). The knowledge about the design is not limited to the knowledge previously acquired. Each process and experience restructure this knowledge. Knowledge structures inform about understanding, archiving, recalling, and implementation of knowledge (Galambos, Abelson and Black, 1986).

According to Goldschmidt (2005), the design process, after determining the problem, is shaped by the designers through interpreting the problem. However, the designer is not objective in this interpretation process. The reason for this is that any field-specific knowledge and skills are based on 'background knowledge' that people have had in their previous education and life experiences. Moreover, each person has his or her 'own knowledge' with their own cognitive and personal characteristics. When faced with a design task, the designer thinks through the process together with the 'background knowledge' and 'own knowledge' (Goldschmidt, 2005). These two types of knowledge are obtained by mind-body-environment interaction.

At the beginning of a new design, the first solution proposal that the designer can produce for the design problem is produced with knowledge from designer's mind (Goldschmidt, 2007). It is possible to express this knowledge as internal representation. Designers often express their representations in their minds either verbally or visually. These representations are called 'mental model' in literature. Mental model is defined as an internal representation that provides to identify and predict objects, conditions, phenomenon, and people (Goldshmidt and Surasky, 2011).

Design learning activity is based on learning-by-doing (Schön and Wiggins, 1992). In learning-by-doing, mind, body, and environment interact in a collective work. A cognitive process begins by the interactions of mind, body, and environment. This cognitive process points out embodied cognition and design learning process. According to embodied cognition, effective learning depends on abilities which learners conduct their cognitive activity in accordance with bodily and environmental resources (Pouw, van Gog and Pass, 2014). In embodied cognition, mind, body and environment interact; thereby embodied cognition allows the designer to acquire new knowledge (Lakoff, 2012).

During the design process, there are stimuli that evoke visual image or conceptual knowledge from memory and make them active in memory. Generally, analogical sources can provide external stimuli that are searched by designer in design activity (Casakin and Timmeren 2015). The stimuli are considered to be an appropriate source of inspiration as they can support the development and change of the design idea (Cardoso and Badke-Schaub 2011). According to Goldschmidt (1995), designer remembers the forms found in memory with the help of stimuli, which is called recall. Most of the recall activity is initially done mentally. In addition to that, recalling is done synchronously with an intuitive search for matching the problem in hand and stored images (Goldschmidt 1995). Knowledge stored in memory can be accessed with the help of stimuli. These stimuli can be external analogical sources. The knowledge obtained through these sources can be used to

generate new ideas (Goldschmidt 1994). In other words, new knowledge in design process is created through interaction of mind-body-environment as embodied cognition.

Embodied cognition argues that knowledge is based on sensory and motor abilities and also experiences (Pouw, van Gog and Pass, 2014). Schön defines the type of learning based on learning-by-doing as reflection-in-action in his study (Schön, 1983). Schön also refers to some views about the mind-body, which form the epistemological basis of this learning concept in his study (Schön, 1983). Schön's views are based on Gilbert Ryle's anti-dualistic approach. Further, Schön with this anti-dualistic approach put forwards the positivistic learning theories of the time by way of criticizing the separation between theory and practice especially in fields such as design learning.

In this part of the research, Schön's view about the concept of reflection-in-action and mind-body, which plays an important role in the design learning process, will be presented.

#### 4.1. 'Reflection-in-action' as Design Learning

According to Schön (1983), every profession has a body of esoteric knowledge. This knowledge is used during the practice of the profession. This specific esoteric knowledge can be verbal or practical (Schön, 1983). Esoteric knowledge is learned in the operational process and it is also called tacit knowledge. Such knowledge is called 'procedural knowledge' in the literature (Crowder, 1993). According to Eastman (2001), studio instructors generally present this procedural knowledge in design studios.

At the beginning of the design learning process, design students are 'novices'. Therefore, they do not have any conceptual or procedural knowledge about design (Schön, 1983). Novice designers do not know esoteric knowledge because they are inexperienced in practice (Schön and Wiggins, 1992). The knowledge is used in design context relates to design movements in which it is involved (Schön, 1983). According to Schön (1983), the importance of design movements depends on the knowledge used to reflect upon them. For this reason, esoteric knowledge is an important part of the reflection-in-action process (Schön, 1983).

According to Schön (1983), there is a certain way to obtain procedural knowledge in design learning and that way is reflection-in-action. According to Schön (1983), this knowledge is obtained in the context of the virtual world (design studios) by the collaboration of the novice and coach (student-instructor). In this process, the coach (instructor) carries out the teaching action with the esoteric knowledge (procedural knowledge) which he/she transfers to the novice (student) through representations. According to Schön (1983), this learning style is defined as the reflection-in-action process. The novice learns procedural knowledge in this process. Experiences in this process are reflective practices (Schön, 1983).

This learning process is a result of the embodied cognitive process. In reflection-in-action, students (novice) learn procedural knowledge with the embodied cognitive process by way of undertaking the specific tasks in interaction with the mind, body, and environment (instructor, paper, sketch ... etc.). Embodied cognition provides students the opportunity to learn complex concepts with a practical and meaningful way, thus concepts (procedural knowledge) are learned through experience (Kinsella, 2007). Each student shapes his/her knowledge with his/her own experience and so, they realize their learning process. The

mind-body and environment trio provide learning by combining senses, perceptions and previous experiences (Matlock, 2004). Students learn in a social context in which they interact with materials, experts, and novices to create his/her own knowledge (Kinsella, 2007).

The fact that the mind, body, and environment form 'embodied cognition' and the realization of learning activity with this cognition explains Schön's reflection-in-action concept (Schön, 1983). Different from Cartesian Dualism, reflection-in-action in Schön's study argues the mind-body union (Kinsella, 2007).

#### 4.2. Mind-Body Relationship in 'Reflection-in-action'

The general definition of Schön's reflective practice and his action understanding critique the Cartesian dualism of Descartes (Kinsella, 2007). Schön defines reflective practice (union of the mind-body activities) in a different way, in contrast to the dualistic perspective (Kinsella, 2007). According to Schön, doing and thinking are complementary activities (Kinsella, 2007). In experimental action, doing extends feedbacks that reflect on doing, thinking and its results (Kinsella, 2007). Each of these actions feeds each other (Kinsella 2007). According to Schön (1983), what triggers reflection is the result of the action and also what ends the reflection is the production of a satisfactory action. Schön argues that in reflective practice, individual does not escape from action to think; rather, continuity in practice occurs through the interaction of thinking and doing (Schön, 1983). Therefore, Schön argues that there is continuity between thinking and doing, as opposed to interpreting the mind-body as dualistic concepts (Kinsella, 2007). It is possible to define this continuity in the sketching process, which is one of the most common actions of the design process.

According to Goldschmidt (1991), sketch as a representation tool externalizes either an abstract thought or an object. Further, the interaction between a student and a design instructor occurs through constant sketching (Goldschmidt, 1991). A sketch is a tool for discussion, thinking, and exploring. Hence, the designer has the possibility of finding something different and interpreting it differently on each line drawn. Each line can invoke a different idea and object (Suwa and Tversky, 1997). In other words, sketches provide 'feedback' to the designer. In this way, sketch establishes a dialectical link between the abstract and the mental, and the concrete and the bodily (Goldschmidt, 1991). Therefore, sketch, unlike other external representation tools, epistemologically eliminates Descartes' mind-body dualism in the sketching process (Dogan, 2009). The use of sketches in the design process indicates a representational sphere where the mental and the non-mental are in constant communication and change each other constantly (Dogan, 2009). Sketching is always open to reinterpretation as a representation of an idea or an object (Goldschmidt, 1991). Sketch as a memory tool is both a remembering and a forgetting tool (Goldschmidt and Porter, 1999). With a sketch, the designer creates a mind that can nurture or change his/her own thinking. Sketching in the design process emphasizes the distortion of the distinction between mind and perception is imposed by rationalism and empiricism since the sketch process includes both interactively perceptual and mental activities (Dogan, 2009).

## 5. Conclusion

In this research, Cartesian dualism is criticized by embodied cognition and reflection-in-action concept in design learning. The aim of the research is to emphasize the mind-body union in the design learning process and also to present the union of mind-body and cognitive activities, unlike Cartesian dualism.

Within the scope of this research, it is presented that the structure of the design problem and the solution process are solved by the union of mind and body. It is explained that the design learning process requires mind-body union and this process is defined as reflection-in-action in Schön's study (Schön, 1983). Procedural knowledge that novice designers need to learn in the design learning process can only be obtained through an interaction of mind-body-environment (Schön, 1983). Therefore, mind-body cannot be considered separately from each other in this learning process. The reflection-in-action, Schön mentioned in his study is one of the ways to get this procedural knowledge (Schön, 1983).

In contrast to the Cartesian theory, embodied cognition argues that mind, body, and environment are an inseparable (Lakoff, 2012). The mind-body separation, which is the cornerstone of Cartesian theory and the role of the body plays in perception, are questioned in embodied cognition (Lakoff, 2012). It is presented in the research that embodied cognition and design learning process are closely related.

In the design process, knowledge creation or knowledge recalling plays an important role. During the design process, there are stimuli that evoke visual images or conceptual knowledge from memory and make them active in memory. Stimuli which help creating new knowledge, new form, and new concept, can be recalled from long term memory. Stimuli serve as a source of inspiration for a new image. Stimuli can be an image, a word, or a sense. However, designers prefer to use visual sources because of its compatibility with visual simulation (Hanington, 2003). These stimuli affect the mental models of people. Mental model is defined as an internal representation that provides to identify and predict objects, conditions, phenomenon, and people (Goldshmidt and Surasky, 2011). Goldschmidt (2017) argues that people acts on the basis of mental models that guide behavior and thought. In the design environment, the mental models owned by each designer are transferred to each other by externalizations. The interaction of representations and shared mental models brings new knowledge and creative results (Rouse and Morris, 1986).

In the design process, the type of representation that has the most interaction with the designer is sketching. Hence, sketching, which is frequently used in the design process, is the most common example of design learning and design process. The sketch which is used in the design process, occurs by repeating actions of doing and thinking due to its nature (Goldschmidt, 1991). A line is drawn and this line evokes something to the designer. During the sketch process, this event continues in a loop. Therefore, mind-body-environment (line, pencil, paper...etc.) are the main parameters of the process.

In short, the transformation of the design problem from the ill-defined problems to well-defined problems occurs through an embodied cognitive process shaped by the union of mind-body-environment. This is because of the nature of the design process and design learning; this process continues with reflection-in-action. Reflection-in-action is a way to obtain procedural knowledge that is necessary for problem-solving in the design process.

Taking into account all of these, embodied cognition rejects Cartesian dualism, and therefore the separation between theory and practice, in the design learning process.

#### Declaration of Competing Interest

The author has declared that no competing interest exists.

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## Biography

### Gizem YAZICI

She is PhD student in architecture at Izmir Institute of Technology (IYTE). She graduated from IYTE with a Bachelor of Architecture degree in 2015, as second-degree student of The Faculty of Architecture. She completed the minor program of City and Regional Planning in 2015. She began the master program of IYTE in 2016, and graduated with a Master of Science degree in Architecture in 2019. Her areas of research include architectural design, design cognition, and design learning.



## Interview with Philosopher Simon Critchley

Kimberly CONNERTON<sup>1</sup>

<sup>1</sup> Parsons School of Design, USA  
ORCID: 0000-0002-4843-1040  
kimberly.connerton@gmail.com

### Interview

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#### About the Series

Open Space is an ongoing series of interviews (recorded & written) that will focus on the diversity of space to be uplifting, provocative and focus on interdependence for the benefit of architecture, art and beyond.

#### Simon Critchley's Biography

*Open Space's* first guest is, continental philosopher, Simon Critchley. Critchley is the Hans Jonas Professor of Philosophy at the New School for Social Research in New York and a series moderator of "The Stone," a philosophy column in The New York Times, Critchley asks philosophers to weigh in on contemporary issues in art, literature, politics, and popular culture. His most recent books include *Tragedy, the Greeks, and Us* and *The Problem with Levinas*. He has written on topics as diverse as David Bowie, religion, and suicide. Recently, he taught a master class, introducing his philosophy to architecture students at Sci-Arc.

#### Summary of the Interview

I conducted this interview with, Simon Critchley, at the New School in New York on February 10, 2020. Initially, Critchley reflected on imaginal space, which is so important to architecture. We continue and focus on tragedy, the city and democracy, Judith Butler, Mystical Anarchism, the free spirit, female mystics, utopia, poetry and a provocation by Critchley, he stated, "What if we had a social and political structures based on grief? That would mean we begin from interdependence." His provocation is so relevant given we are faced with Corona Virus around the globe. Recognizing and shifting towards Interdependence is imperative for our future.

February 10, 2020 at The New School in New York.

Open Space's first guest is, continental philosopher, Simon Critchley. Critchley is the Hans Jonas Professor of Philosophy at the New School for Social Research in New York and a series moderator of "The Stone," a philosophy column in The New York Times, Critchley asks philosophers to weigh in on contemporary issues in art, literature, politics, and popular culture. His most recent books include *Tragedy, the Greeks, and Us* and *The Problem with Levinas*. He has written on topics as diverse as David Bowie, religion, and suicide. Recently, he taught a master class, on his philosophy, to architecture students at SCI-Arc in LA.

It is so great to have the privilege of interviewing Simon Critchley. Thank you so much Simon for coming today to do this interview.

Today I want to talk about imaginal space with you, and various kinds of space. One space in particular, I wanted to address with you is the imaginal space because I think it is important to artist and architects and well everyone. And also think it is deeply under threat and harder to experience and necessary for humanity.

The fact that you teach and recently said you want to, "save souls" "disaffected weirdoes", in an interview at Sci-Arc. I felt is important because of your impact on young minds and the specifics of your perspective in possibility offering people solace in life now. You've helped me understand philosophy in a deeper way so I can appreciate and engage with it more. Particularly when you described philosophy as communication with one with one's own soul.

## Imagination

**KC** Sartre said in his book, *The Imaginary: A Phenomenological Psychology of the Imagination* discussed what the imagination showed about the nature of human consciousness. What does the imagination or the imaginal mean to you?

**SC** Different things. I suppose the first thing that comes to mind is the distinction in Coleridge's *Biographia Literaria* between imagination and fancy. Imagination and fancy this is a kind of classical distinction you find all over literature in the last couple of hundred years. In particular, the word fancy would be the same root as fantasy in the sense of making things up. So there is fantasy as making things up which someone like Coleridge thinks is inferior to imagination properly conceived. Imagination is the imagination, it's a conjuring. Some conjuring of things an attempt to shift the aspect under which we see things but it has to be rooted in a reality. So that imagination. This is a formulation you get in Wallace Stevens' poetry but it is kind of fairly common. Is that imagination without a foothold in reality becomes fancy. It just becomes making things up. So that whatever imagination is it needs to come out of, have a foothold in and have a reference back to reality. Is the first thing I'd say.

So imagination isn't just anything.

It isn't just making up stories or something like that. It has to be rooted in something. And that is the first thing I think of imagination as being rooted in reality and then it becomes a question of, I guess for me, thinking about imagination in relationship to world. And how

world appears to us. I think or at least a dominant view I've been influenced by is that, everything that is, **all the things in the world are not person independent. There are all related to us.** They are not things in themselves. They are not metaphysical entities or physical entities in their raw material character. They are things which show up in so far as they are things for us. And therefore they are dependent on the operation of the imagination which Kant called the transcendental imagination. Which is the idea that a really real world is something that we only get to organize through our activity. The activity of the subject in Kant. And so that faculty is the faculty of the transcendental imagination. On one level the imagination is the core of everything that is.

The second level the primary imagination. The secondary imagination would be what an artist's makes or a poet makes. There can be a poem which gives us a sense of how we are in the world and how that relationship to the world can be described, deepened, elevated, shifted in a poem or work of art. Going back to the distinction with fancy that secondary imagination can't just be something we make up. It has to be linked to something that is felt in a shared way and is real in a common way. So imagination for me is that. Maybe it's the core of everything that we are, what makes a world show up to a self, is a kind of primary imagination and the secondary imagination is the way that gets presented in art works. And that way that gets presented can't be arbitrary or fantasy like. It has to be the work of imagination both pushing back against reality but also having a referent in reality. That'd be a first set of things.

### The City and Soul are Mirrors, Tragedy and Imagination

**KC** Let's jump to Tragedy and the imagination. In your book, *Tragedy, The Greeks, and Us*. You wrote, "The city and soul are mirrors for each other." Based on Plato's intended analogy of the psychic and political. Can you elaborate on that?

**SC** Plato's view on that. Plato kind of invents philosophy ways of finessing that claim but he did kind of invent philosophy (laughs) and he invented in *The Republic* the idea of what a just city be. A just city would be one where the structure of the soul, which is tripartite for Plato its based on appetite, desire, based on spirit, spiritedness and reason that tripartite structure of the soul is mirrored in the tripartite structure in the city. And Plato imagines three orders of people in the city. It is that analogy which he kicks things off with is at the center of *The Republic*. I think that leads to a kind of appalling, authoritarian nightmare in Plato. Plato is. These are extraordinary literary or fictional devices, *The Platonic Dialogues*. I am fascinated by them.

I detest the figure of Socrates and what he represents and what he is against. He is against these characters called the Sophists who are selling knowledge and there is a lot more to be said about the sophists. What he is really against are the theatre people. The tragedians notably. He wants them out of the just city. So what I am trying to do in the *Tragedy* book is to defend tragedy against philosophy and try and show how philosophy emerges in this war with theatre. I want to defend tragedy.

The strangest thing about tragedy is it an art form that appears in the 6c. BC lets say but takes shape in early 5<sup>th</sup> century BC along side another invention which is called democracy. So these two things tragedy and democracy kind of also mirror each other. 1:05:10 And I try and tell that story with the book. And philosophy is opposed to tragedy. And it is also

opposed to democracy. It doesn't like that. You are hard pressed to find a philosopher who supports democracy until John Dewey about a century ago. For me tragedy is about the experience of moral ambiguity, conflict and so is democracy.

### Judith Butler & Tragic Thinking

KC Also from the book, *Tragedy*. When you ask, "What if we took seriously the form of thinking we find in tragedy and the experience of partial agency, limited autonomy, deep traumatic affect, agonistic conflict, gender confusion, political complexity and moral ambiguity that it presents. How might we change the way we think? And the way we think about thinking?" What would that look like? Could the imagination live in that space freely?

SC Yeah I think to go back to Judith Butler. I think that Judith Butler is doing tragic thinking precisely. Each of those terms could be used to describe operations in her thought. To understand that you have to understand what we are pushing against. There is a great passage in the first book of Nietzsche, *Beyond Good and Evil*, is called, *The Prejudices of Philosophers*.

*The Prejudices of Philosophers.*

The real prejudices of the philosophers of Nietzsche is diagnosing, and Nietzsche is at his brilliant best when he is tearing something to pieces. His negative capacities are wonderful. His own views on things I've got different views about. He says that the philosophical prejudice is with the use of Reason we can look through at the world and identify what is the case. Identify the nature of substance, being. The mind can discriminate that which is understood. Whether it is nature of God or whatever it might be and on the basis of that ontological prejudice that *reason* can give us access to Being. You can then derive a certain moral set of imperatives.

**The main prejudice of the philosopher is that the philosopher alone can peer through the veil of appearance into the structure of reality. And then come back with certain moral pronouncements to give to the poor, unwashed stupid masses that are waiting for their wisdom. And I think that is a catastrophic error that thinking is much more like what I was describing in that passage. So in tragedy it's not clear what the nature of things is. It's kind of skeptical about the nature of things.**

We see families often back projected into an area of myth, which itself is important. The stories that we're telling the stories that the Greeks told themselves were stories of the deep past, Bronze age, the Trojan war, back, back, back in the day. Those stories they are myths were often rooted in family structure, in kinship structure and how families are defined. How families tear each other apart. How conflicts arise. **So tragedy in many ways is a family drama. But that family drama is also the structure of political power.**

What you find in a lot of the plays - the most obvious examples is, *Oedipus the King*. Oedipus has a weird family history to say the least but he's the king he is the tyrant. And so it is that mirroring between family structure and political structure that is being played out in tragedy. In a way that implies us. We are drawn in by that. **To go back to Judith (Butler)says in, "In the Force of Non-Violence", we're given over we're always given over. So what it means to be human for whatever reason is to be given over somewhere. We find ourselves**

kind of in the midst of stuff that we didn't really choose. Our family structure, our culture, our language or languages or whatever it might be.

We find ourselves in the midst and with these kinds of Titans of the psyche, father, mother, siblings and we are shaped by them and we struggle for a whole lifetime to kind of understand that, challenge it through it off. In a way its never free of ambivalence. Its never free of hostility. But its also full of love and affection. Two things at once and I find that richness. You've got an existential density of human life for me is much more powerfully displayed in theatre in tragedy than it is in philosophy. That's one of the reasons I like it so much.

### Mystical Anarchism

KC After listening to Mystical Anarchism

SC Yes that was strange how that turned up.

KC So is that not recent because the date on it

SC No

KC ok the date on it is 2020.

I thought that might be kind of the answer. Or some way forward because I thought this is so relevant. I was so touched by that.

SC It does feel relevant. But it is actually quite old.

KC I thought it was really relevant in terms of #metoo and on many levels.

SC Yes.

KC In your defense of Mystical Anarchism, you said that we can "recover the garden of Eden – recover paradise, in paradise there will be no private property. And the mystical anarchism heresy is the idea that we can recover a state of primary perfection and edemic communist state and that move beyond the limitations of the needing the RC Pope of a king to do so." This is a beautiful idea. The Garden of Eden it is an imaginal space so many say they believe it yet it is hard find. **This would seem to liberate people. How could people allow themselves to take this on to be liberated?**

SC Well good question. I mean. How would I answer that? The idea of Mystical Anarchism I take from this historian called Norman Cohen. Norman Cohen he taught at The University of Sussex and the most famous book he wrote is called the pursuit of *The Pursuit of the Millennium*. *The Pursuit of the Millennium* and I read that with huge interest years ago and Cohen identifies a recurring heresy, a recurring temptation historically which is that we can not recover the Garden of Eden but we can - we can live together.

We can live together in our freedom of the spirit. Cohen sees that as a very dangerous thing. He thinks this is a delusion which is behind all sorts of forms of political and moral purity. He's writing in the late 50s and the book is then reissued after the 60s and he is very suspicious and hats going on in the student movements in the 1960s and movements of political and sexual liberation.

So he thinks that the recovery of the Garden of Eden is a very dangerous and beautiful project. I see it more as a recurrent temptation which I try to follow in this line of thought. I'm not defending it I am describing it. I'm describing its features. I'm very attracted to it. So I had in the early 2000s a much more practical realistic analysis of ethics and politics which ended up in a defense of what I called for a period of time neo-anarchism. And at that time I was much more closely linked to radical groups, activist groups, particularly in New York in the first years I was here. I think I can defend that anarchist's proclivity in political thought. But the *Mystical Anarchism* was, well how could you defend this? This is really wild. So let's describe this and see where that goes. So it was a kind of thought experiment on my part to try to lay this out. **The idea of a sinless union with others is powerful.**

It's been functional or operative in all sorts of revolutionary situations. Most notably the English revolution or the Civil War as its called when groups like the Levelers and Diggers were making arguments for autonomy. The Diggers wanted to get rid of property relations and they did this by going off to field outside of London, digging up the ground and growing their own vegetables until Cromwell the new model army slaughtered them (laughs). One of the mottos they had when *Adam delved and Eve span who was then a gentleman? So when Adam delved Adam was digging and Eve was weaving (laughing) gendered division of labor there.*

Who was actually in control? So this idea that there is an equality in paradise is very suggestive on the one hand. On the other hand, one of the things I did last summer is re-read Milton's *Paradise Lost* for the I don't know how many time I love that poem so much. **We left paradise and wandered East of Eden wandered down melancholy way into into the world and paradise remains a memory. But it is a place right? It is southern Iraq, which is kind of ironic. It is in the area which was invaded in the first Gulf war. The probable location of the Garden of Eden.** Anyway I find it fascinating, compelling, I am drawn to certain ideas of utopia you know I am drawn to that without being fully committal. And that played out in different ways over the years.

**KC** If you broke down anarchism, to me, it is alluding to the fact if we were all high enough spiritually or if enough people were evolved enough as human beings, you wouldn't need government, you wouldn't need churches, you wouldn't need police, you wouldn't need any of that. You wouldn't need to own property because people would just coexist and work it out.

**SC** That is the classical anarchist position. Yeah.

**KC** Do you think that could ever happen?

**SC** Well it has happened. But for brief periods it's usually been crushed by whoever is in power. So anarchism is on one level a beautiful dream. You begin from the idea that human beings are not sinful and corrupt selfish and hostile. But human beings are actually decent and well disposed and can get along. And the corruption and hostility and selfishness kicks in once government, police, state and capital begin to do their work.

**No I choose to believe that I don't think it is an argument that can be resolved by argument.** I choose to believe that human beings are fundamentally decent. That is my faith as it were. I think it is a faith because there is lots of evidence to the contrary. It is much easier to believe human beings are wicked and life is nasty brutish and short as Hobbes said. And

therefore we need the state and the police and the military to protect human beings from themselves that's the standard view.

I am very attracted to that classical version of anarchism. You can point to examples going back to antiquity but certainly English revolution, different experiments with forms of low level communal living without the state structure without the police. Anthropologists like David Graeber have done work on societies like Madagascar where there never was really a properly organized state for long periods of time.

When we think about maybe forms of tribal society which have functioned in that way. I mean there are all sorts of ways of criticizing or qualifying that but its happened. Its usually not happened for long because someone else is going to come along and crush it. A good example is the Spanish Civil War what was happening in Barcelona between 36-38 was a commune experiment. Fantastic experiment and it survived for a couple of years and eventually they the forces of Franco forces of reaction had bigger guns and sticks and they took control. Most people were either expelled or killed. And that's often the way anarchists' experiments die. So does that mean anarchism is wrong? No. It means its often short lived. Still worthy.

Another side of my thinking which is maybe a more practical side of my thinking is a kind of political realism which I've always been attracted to. Forgetting the anarchism and all that for a second. If you're actually interested in politics, then that means your got to think and act in a certain way. A concrete way. So for example I was in the Labor Party for about 12 years and was active in a low level crappy way in the labor Party in Corchester. But I was in the party and I was really engaged. I did what I could.

The imperative at that point or the issue at the point was how is the conservative government of Margaret Thatcher to be removed from power. This was after the Falklands War, resurgence of nationalism, a kind of on the one hand a nostalgia for family values on the way things had been, on the other hand a kind of rampant what we now call neo-liberalism economically. And ordinary people will suffer the consequences of that as they always do. But Thatcher was popular.

So how do you, how could Thatcher be defeated? The only vehicle was the Labour Party. Therefore, the Labour Party had to be turned into a party that could win an election. And that meant a whole series of pragmatic decisions that were taken over for a quite long period of time. A real struggle a real fight in the Labour Party and some people would say that the socialist traditions of the Labor Party were betrayed, which indeed they were. Eventually the Labour Party won. And it won big with Tony Blair in 97. Something I've never been able to quite understand. I am pleased I was really happy when labor won. It was like my team won.

On the other hand, at what cost. The point of the story if you are actually interested in politics. To which most people who say there are interested in politics are not. Then it does mean forging alliances, forming common fronts with groups which are really at odds and defined by contradiction. **And the political skill maybe even political genius, is defined by the ability to put something together in a contradictory and ambivalent field.** In a way that is going to win an election if you happen to be in a parliamentary democracy. And that's what would have to happen in the United States if Donald Trump was to be defeated. I wonder whether that might happen or not. I don't know. But it means the left has to actually

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engage in politics which is what people actually think and feel, living where they are and how take that and shape that into a potent political force. Dirty hands all the way.

## Social Media

The other extreme of Mystical Anarchism I am actually very interested in. Always have been very interested in is the actual the practical business of politics. We are in a pickle. **Facebook is fucking the world. Social media is fucking the world. Everything has become divided and polarized. These are clichés** obviously. All opposition, everything is being inflamed and torn apart. And this is a way of maintaining power maintaining an order for the state.

SC Politics is a blood sport. Its always been about for me the key concept in politics is hegemony. Gramsci's idea of hegemony which is often misunderstood. hegemony and power. Hegemony is the way in which you articulate together diverse elements form different groups into a common front. Its never going to last forever but for a certain period of time it can be an effective unified front. What Gramsci called a historical block. That's what you want. So diversity is no opposition to that. It's a precondition for that. I think its always about diversity.

SC Funny the idea of Muchishona Zuboff's work on **Surveillance Capital** is kind of apropos that **what's happened in the last twenty years is an extraordinary kind of new colonialism** where what's been colonized is human experience. And we've gone along with that we are. Yeah you said we didn't realize what was happening. Our experience has been sold and then sold back to us in the form of advertising. Where do things go after that? I mean colonizing like the Americas is one long bloody history there's that.

Its like that process but with human experience. What we actually think and feel in our most intimate intimate forums that really is alarming. I don't know short of retreat, withdrawing, switching off, disconnecting. I mean there is regulation. The European Union is regulating big Data but there is no interest here because who is in power and how they got in power. So in the United States I am not terrible interested and in China you've got a twisting of this in a form of surveillance state capitalism or communism.

KC they are even more extreme with facial recognition

SC yeah that is really taking shape. At that point I am not quite throwing my hands up in the air. I try and read about these things and learn more. I have no particular pronouncements to make. If the p r disasters didn't really effect Facebook bottom line, which it hasn't Facebook is doing just fine. Then people are hypocrites we say we don't want this but we are still on there updating things and checking things, spying on people looking up old partners. The use of social media in this kind of sad masochistic way is really alarming. Comparison. We use social media to make ourselves feel bad. We kind of like feeling bad because we can't live up to that image of perfection we are meant to project on profiles short of switching off and running away, which is an option. I don't know what I am going to do. We will find out as Fred Larkin would say would have said. Anyway.

KC You also mention in this same talk that conservatism is deeply pessimistic. I think of Georges Bataille and how he thought we lived in terms of the economy, in scarcity and fear rather than abundance. Which is not dissimilar to what you are talking about and Deleuze and Guattari brought this up –refuting original sin. You are born operating at a loss. In terms

of the extreme right wing, I can't say leaders because I don't think they are leading us to tackle the most challenging issues in life now, like climate change in Australia with the devastating fires and certainly in the United States and throughout the world. **Do you think as stated in your talk with Judith Butler in the talk on her book, The Force of Non-Violence thinking or acting on the notion of "grievability" is a way forward?**

SC Yes I think it is a start. *Grievability* as I understand it. I mean Judith's (Butler) argument here is singular which is that the politics of equality she is defending is the equality of *grievability* is that every life is should be *grievable*. We live in conditions where that *grievability* is not permitted. Certain lives are mourned and certain lives are not. The lives of certain people are mourned and marked and other people get shot at funerals. Whatever it might be.

It would be a start that mourning and grief are so important. So incredibly important. But important in the sense that **mourning is something that opens the subject up it opens us up with vulnerable, porous, dependent, broken and if we started out with political thinking from mourning rather than our political thinking that we are individuals that can make choices.** I think that would be a start. If you begin from *grievability* you begin from an idea of interdependency. Whereas the liberal the lower L individualist societies we live in are based upon the basic atom the basic building block is the individual and their freedom. And that becomes more complicated in relationship to grief.

So I think mourning would be. I think an example Judith gives way back a text of hers what's it called in not Infinite Mourning it was in Precarious Life it was after 9-11. After 9-11 I think 10 days after 9-11 George W Bush said the period of mourning has to come to an end and now we got to go back and shop and were going to kick some ass in Afghanistan. He didn't quite put it like that its kind of what happened. So this was very sad 9-11. **We mourn for a bit then we go back to work. Go back to normal. What if that wasn't the case?**

**What if we had political and social structures that were based on grief as the basic fact as to what it means to be human? That would be really interesting. That would mean we begin from interdependency. And the human self is essentially undone and open and porous rather than this closed heroic carapace of a self that makes choices. That would be something.**

KC I'd like to see that.

## Utopia

KC You mentioned The Shakers as a beautiful example of radical communism and utopianism so relevant to mystical anarchism. They made such beautiful furniture and yet are dying out because of being celibate. Are there any examples of what a utopian community would be like today now?

SC Not like the Shakers. I mean the circle that has to be squared were great. Ann Lee founded the Shakers she forms herself into the female compliment of God. There's Christ and there is Ann Lee. A man and a woman and they're equal. So the Shakers believe in gender equality. Their communities were egalitarian communities with both men and women which is often difficult. So places where we have those egalitarian communities are

often separately sexed. Monasteries, convents but what do you do with human desire, human sexual desire?

Well for the Shakers chastity is the answer so these are communities of gender equality which are chaste and the problem with chastity you then have to keep recruiting people. You are not going to reproduce. This is where the Mormons win and the Shakers lose. And so the Shakers died out because they could reproduce. I find the idea of chastity really interesting. And historically which is important and really important historically. One that we find odd.

Why would anyone be chaste? They must be weird in some way. But there is this real issue that human desire is a bundle of pretty nasty contradictions. The virtue of Christianity was that it recognized that and had to work with that and abstain from the sexual act through chastity. You so maybe a return to chastity that would be great population management. That would be my answer to the climate crisis – stop reproducing. I don't know. But I do worry about people endlessly reproducing themselves. They have a right to do that. Peter Singer raised that question.

**KC** You have a son. (laughing)

**SC** I have a son. And I'm dictating it. (laughing) Yeah so for the Shakers the utopian was tied to chastity and that led to them dying out.

**KC** It seems somehow that works sometimes and in the Roman Catholic church it goes horribly wrong. Maybe it is how people view sexuality. In Eastern cultures it is generally just your vitality so when you go for more traditional Chinese medicine they ask you certain question and you are given certain treatments so that you have your sexual drive and libido. Its seen as health and if you are not feeling that desire you don't feel that vitality you are kind of missing out on the vitality of life but I think in western medicine its more like well you will just take these drug so you can do these things. Its not a holistic approach.

**SC** Yeah well like the three great monotheisms of the west a billion or so people such as Moslems and Christianity or Judaism are all based upon sexual desires are very dangerous and need to be constrained and prohibited. Yeah its part of vitality that we really one we have to worry about. Quite em down. Yeah so. That's messed up. (laughing)

**KC** Laughing.

### **Free Spirits, Situationist, University**

**KC** This was my favorite part about the free spirit.

When you discussed in mystical anarchism, how threatening the free spirit is because the lords spirit is within - in this sense a person becomes God. The pervasive notion of original sin would have us believe the spirit is outside oneself. I grew up with Irish Roman Catholic and I found it so hard to free myself of that. Maybe I am still freeing myself of that. I also think anyone or especially artists, architects and creative people would find your concepts about the free spirit liberating. Do you think minds are shifting towards the free spirit?

**SC** No. No way not at all. A very legislated spirit, I think the free spirit is in very short supply. And shorter and shorter all the time. The opposite. There is a book by Raoul Vaneigem, called *The Movement of the Free Spirit*. He was Situationist number two to Guy Debord and

he writes a book called *The Movement to the Free Spirit* one of his later books and clearly there is an echo or an analogy of the liberation movements of the 60s and the movement of the Free Spirit

There was something of that and that was good. It was uncomplicated. It wasn't always great for women. It was great for women some of the time. But I think that whole space of experiences is being closed down. And you see a microcosm of that in higher education. **Rather than a freedom of the spirit in the classroom in the university we have a disciplinary regime of law which frightening and constraining and it is not what students want actually. Maybe that will change but at the moment it is a kind of slightly oppressive structure. A weird way in which university structures have this disciplinary framework there is often good reasons for that because bad things have sometimes happened that is for sure.**

But its led to the idea of universities as really really free exploratory places is in shorter and shorter supply I think. My feelings is that students want something of that and their tired of being told what to think. To criticize the New School which is eminently criticizable I find the way in which the university in so far as it is a university is clothed itself in this jargon of social justice and that's become a kind of official ideology of the institution in both hypocritical in a sense since it is not true and it is also pernicious it doesn't allow for freedom of thought in terms of diversity of opinion.

**KC** Someone sent an emails that said to decolonize your syllabus it was a dean or something. I thought well why don't you decolonize the work force?

**SC** Yeah right.

**KC** Why don't you decolonize this hierarchy and pay scale with adjunct professors but if you voice that concern you will be sanctioned.

**SC** And the administrators because they are making the big bucks.

### **Female Mystics, Feminism, Ann Carson's Poetry**

**KC** You refer to Marguerite Porete's book, *The Mirror of Simple*

*And Annihilated Souls and Those Who Only Remain in Will and Desire of Love*

**SC** Those Who Only Remain in Will and Desire of Love

**KC** You repeated in the interview and I felt as many as possible should hear this title. And you also discussed it in Ann Carson's poems. Why did you find it important to discuss these two women as it relates to *Mystical Anarchism* and the *free spirit*? I think it is great that you did.

**SC** Yeah I've always wanted tot be. Oh gosh this is far to confessional. I co-wrote a book with Jamieson Webster, *The Hamlet Doctrine of Stay: Illusion!* As it was called here. And part of what that was about was to try and write with another voice. I don' believe in fixed gender differences and all that stuff but I do think there are different voices and different modalities of voice which are distributed along lines of gender as someone who's a man been trained to do philosophy a certain way. **I find it liberating to read say the works of medieval female mystical writers. Fascinating and its something I wouldn't say. I wouldn't to be able to put**

it that way. That linking of intellectual vigor with a sense of spiritual revelation combined with a personal dimension of experience it something which I find incredibly suggestive

One way I'd put it in a provocative way would be, I've been trying to kind of hysteratize myself over the years. The problem with people like me is the tendency towards obsessionality. Towards rational control or an argumentative control or a control of writing. Whatever it might be which leads to an internal deadness. So I am always looking for something that is alive. I find that in people like Marguerite Porete and also people like Ann Carson or indeed people like Judith Butler. I find a different of what's possible as a voice. I am not going to imitate that or occupy that but I can try and learn something from that and try and find a similar inflection for what I am trying to do.

So my suspicion about philosophy boil down to Philosophy disguises its gender privilege which is male under the guise of a certain neutrality, neutrality of reason, clarity, rigor. I've never bought that. A first step is recognizing that there is a whole range of different voices and you can learn from them and try and write in a slightly different way. One of the things is that I am going to try and write next in the next couple of years will be on Ann Carson using some poems by Ann Carson and some text and try and engage in a reading by Julien of Norwich and Julian of Norwich is my favorite medieval mystic. I want to try something on her mystical vision.

**KC** Why is she your favorite?

**SC** Because she is the most sober in a way. The best theologian. The problem with some of the mystics is that they're kind of attention seekers. Noisy attention seekers like Marguerite Kemp or Angela Foligno they're constantly erupting in physical symptoms or throwing themselves they're destroying themselves. Its very attractive.

Julien is an anchoress she withdrew from the world before that she had this experience where she was dying. Actually, she was being given last rites. She began to have a series of revelations in relationship to a crucifix and it lasted for 20 hours. Then she spent years of her lifetime trying to figure that out in a very honest and a humble way. She is a voice which is often not adequately heard. So I want to try to write something on her. Which might or might not be called the Abdication of Ecstasy. I just like that title.

**KC** It is a nice title. I like it.

**SC** Sounds like an album doesn't it?

**KC** It does.

**SC** *Abdication of Ecstasy* (laughing)

**KC** One final question, Is poetry really important to you?

**SC** Ok. Yeah. Pop music was the way things first opened up. I kind of refined that through poetry. I used to go to any number of libraries and back then there were LPs of recorded poetry and I'd record them on cassette. And then I put them on my early version of a Sony Walkman and I'd walk around listening to them and memorize them and this became a way of possessing language for me. Still is. I find it beautiful. I find it a comfort. I find it solace. I find it funny as well but there is something about the voice of poetry.

For me its kind of is secular scripture. It's poetry of the largely of the English language over the last 100 years is kind of where all of our deep spiritual stuff has gone. And very often there is a kind of numb dogmatic character to poetry. In a sense in which I admire the formal brilliance of great poets the ability they have to master form meter rhyme or non rhyme or whatever. I find that fascinating there is something about the economy of language the attention to language in poetry which grips me and also the fact that poetry is **always the stuff that gets me is framed by a question mark about the ultimate nature of things. Poetry is what we have in the absence of religion for me. Poetry is about as close we get.** It doesn't give us answers. It indicates a route that could be followed. But mostly an attention to language.

And languages capacity to observe the world that gets me. How about that?

KC That's great thank you so much Simon I really appreciate it. It has been wonderful

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The type of the text (research article, discussion article and review articles) will be proposed by the author; it will be negotiated with the author and decided by the editorial board. The first page of the manuscript should include the title of the manuscript, the names, surnames, titles, affiliation, ORCID numbers, and email addresses of the authors. In addition, only the corresponding author's mailing address and a contact number should be noted. If the submitted manuscript is produced from an article presented at a scientific meeting, it has to be indicated together with the name of the meeting, the date, title of the work and the city where it was organized. Likewise, if the article is produced from a master's thesis or PhD dissertation, it has to be indicated with the name of the author, title of the thesis, the year of the thesis, the university, and the supervisor's name. In addition to the information mentioned above, on the first-page, abstract and 5 keywords should be given and the following pages should contain full text. The abstract should preferably be 200 words. The last page of the manuscript should include the statement of "Acknowledgments" indicating any individual and / or institutional sponsorship and / or support, and whether the submitted manuscript is produced from an article presented at a scientific meeting (it has to be indicated together with the name of the meeting, the date, title of the work and the city where it was organized). Likewise, if the article is produced from a master's thesis or PhD dissertation, it has to be indicated with the name of the author, title of the thesis, the year of the thesis, the university, and the supervisor's name. Additionally, it should include the statement of "Declaration of Competing Interest". Authors also should add their short biographies not longer than 200 words. "Copyright Transfer Form" should be completed and sent together with the manuscript. Images should be both placed into the manuscript and saved separately. See "Author Guidelines" and "Submission Checklist".

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One Author	GARDNER, H., 2011. <i>Frames of mind: the theory of multiple intelligences</i> . 3rd ed. New York: Basic Books.
Two Authors	BATTY, M. and LONGLEY, P., 1994. <i>Fractal cities: a geometry of form and function</i> . London: Academic Press.
More Than Three	SARTAIN, A. Q., NORTH, A. J., STRANGE, J. R. and CHAPMAN, H. M., 1967. <i>Psychology: understanding human behavior</i> . New York: McGraw-Hill Book Company.
The Author's Different Books which are Published in the Same Year	HARVEY, D., 1985a. <i>Consciousness and the urban experience</i> . USA: The John Hopkins University Press. HARVEY, D., 1985b. <i>The urbanization of capital</i> . USA: The John Hopkins University Press.
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