

On Beginnings in Design Studio Teaching, a Poetic Approach

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Introduction

"...I love beginnings" L. Kahn

What is it in the "beginning" that draws the attention of Kahn? What power does it possess over him? Kahn's words suggest a preference to the origin of "things", an urge toward purity and mystery that possibly reside in the point of departure.

'Beginning' can suggest the concept of 'origin', which is constant backward looking approach, looking back as means for progress. It also implies to the question of how and in what way to begin, assuming that the starting point will have considerable impact on the outcome. It represents a belief that a starting point can encompass within it all possible continuations and outcomes. Moreover, it shifts the focal point from the solution to the process. Following this line of thought draws our attention to beginnings in the design studio, to How a design problem is approached, presented, and specifically how to begin a design studio.

The first impression in the design studio; the teacher architect/designer walks in...presents the first exercise, the paradigm for the semester, the starting point for a period of learning, research, and design. Is it just a brief moment in which 'the ice' needs to be broken? An awkward situation that stands in the way of the 'deep involvement' long awaited for? Or is it a phase of great importance and consequence that can and should be acknowledged, understood, and take its proper position in the design studio educational process.

This paper explores the 'beginning phase' in the design studio from two angles. First, it defines and elaborates it as a period with specific goals and possibilities, which require deeper and further research. The second is a description of a specific case study, a starting method referred

to as the 'poetic approach'. The aim of this paper is to establish the beginning phase of the design studio as an explicit condition with related features discussed and evaluated in context. This is done alongside discussion, examples and exploration of theoretical material on the subject.



Fig. 1. Starting blocks¹

Theoretical Background

It is not surprising to find the tremendous amount of research and debate that exists around the beginning phase of architecture education and a well-known focus on first year as a condition all of its own. There exist a varied and large amount of research in the field of architecture education concerning issues such as, curriculum, relation to the profession, and institutions position toward education¹. Alongside abundant material on studio specific issues such as methodology, problem solving, learning styles, and more³. Yet there is somewhat less research on psychological and educational issues such as the role of the instructor, his skills, student-instructor relationship, etc. I assume that this lack is due to the fact that majority of instructors in the studio are professionals, not educators.

As great deal of attention directed toward such issues as problem solving and the relevance of the problem presented, but the question of How to begin a design studio remains rather neglected. An exception to this is Johannes Itten's approach and emphasis to the beginning time in the studio. Bauhaus teacher Itten was most influential in constructing the 'basic design' course⁴. As part of his unique approach to design and art education, he also emphasized the need to release a creative potential of the student through freedom. He also stressed the relation between the physical movement and creativity; a holistic relation of body and mind as

means to enhance creative freedom. Within his interest and experiment with the basic design course developed at the Bauhaus, Itten acknowledged the importance of the beginning time in the studio. As exemplified by this statement by Wick:

"As a rule, Itten began his course with gymnastics, in order to "enable the body to express itself, to experience things, to awaken these things in it.""⁵

Another issue relating to beginning can be found in the definition of the process of problem solving. Problem solving process is researched comprehensively its structure and its phases are widely discussed and elaborated on. The beginning part is referred to as "problem structuring", or as the "analysis phase"⁶. There exist a focused attention on methodology as a whole, different approaches to it, and many issues that are raised via it.

Many studio researchers present a creative and innovative approach to design studio teaching. Within this the beginning is well thought out and planned, but this does not mean that it is specifically treated as a unique situation that requires attention as such. There are many descriptions of studio work and exercises in which the beginning is crucial and interesting. It cannot be said that the significance of the beginning has gone unnoticed, on the contrary, as is exemplified in this statement by a typically enthusiastic studio instructor:

"our crazy laughter on the first day is one of the most important moments of the project."⁷

Among the many innovative approaches to the presentation of the problem in the design studio, the approach that evolved in the 'Cooper Union – School of Architecture' under the guidance of the late John Hedjuck is worth mentioning⁸. Ideas like the 'Analysis Problem' that took the "end product" as the starting point rather than the other way around, or the 'Cube Problem' in which the problem is to define a proposal to a given form (a cube). Both problems are relevant to this discussion in the sense that they assume to redefine and reposition the starting point of the architectural problem within the studio context⁹.

The Beginning Phase

As mentioned above there exist rather large amount of research and discussion relating to the studio as a whole, its relation to the curriculum, and also about first year design as a unique condition. The focus this paper is on the beginning of the design studio regardless of the year of study. Moreover, although my personal experience as a teacher comes mostly from undergraduate studio, the theoretical approach presented can apply to graduate design studio as well. The 'beginning phase' is not defined precisely via a time frame but rather on the issues raised and method of approach delivered during initial contact in the design studio. This is most generally relevant to the first and second meetings of the class, but not limited to, and can in some cases be prolonged.

In the beginning phase of the studio, as is common in every meeting, introductions are being made which also include some 'ground rules', such as: attendance, expectations, presentation of syllabus etc. The more significant portion of the beginning includes the presentation of a design problem sometimes presented as an exercise, project, or research parameter. The paper focuses on this part, defining the main issues that are of importance to this phase and such topics that have relevance throughout the studio but have unique or importance in the beginning.

Preliminary bias: It is well documented and widely researched that we tend to be biased on primary knowledge. We put more weight on earlier information, while later information is used positively only to reassure prior one. It is even more so with designers who tend to proceed to possible solutions prior to receiving full knowledge of the problem, or changing the problem parameters all together¹⁰.

Cognitive and social psychologists have accumulated formidable amount of research that points to issues of 'first impression', bias on bases of primacy of information, and bias based on prior knowledge. Research in those fields offers three major explanations for the 'primacy effect': a. the fatigue, boredom which causes decrease in attention b. the assumption that later information is of less value c. people tend to create first impressions and use later information in a biased way so it will strengthen earlier concepts and ideas. It is a human tendency to explain reality so it will confirm to initial impressions even to the point that it contradicts it

¹¹. This statements from Rabin and Schrag's research testifies for this:

"Psychological research indicates that people have a cognitive bias that leads them to misinterpret new information as supporting previously held hypotheses. (people) ... may come to believe with near certainty in a false hypothesis despite receiving an infinite amount of information." ¹²

Problem definition: The problems of design are problematic in their formulation and meaning, it can be said that in their educational format, in the studio, it is even more so ¹³. In that respect the issue of 'how' to state the problem or what problem to define in the design studio becomes very important. This is well stated by Cross:

"It is also now widely recognized that design problems are ill-defined, ill- structured, or 'wicked' ... They are not problems for which all the necessary information is, or ever can be, available to the problem-solver. They are therefore not susceptible to exhaustive analysis, and there can never be a guarantee that 'correct' solutions can be found for them." ¹⁴

It is important that an 'ill-defined' problem should be well thought about. Not only how it is solved, but also on how it is defined, and for that matter how it is presented. This will not make the problems less "ill" but it will educate the students toward this reality in the context of the studio environment.

Creativity: As the aim of design education, or at the least one of its main goals, is to teach and enhance creativity. The creative teaching process that takes place in the design studio is sometimes referred to as "reflection-in-action", a term used by Schön to explain the uniqueness of the way designers are educated¹⁵. Should it not be essential to begin with a creative way of presenting the problem? It is presumed that a design problem is given to students and then creativity emerges. It can be argued that creativity can reside not only in the outcome of students work but also in design educators actions and problem definitions, and for that matter right from the start. As is stated by Wiley:

"Altering the instruments, tools, and the process used during design increases the students' awareness of the influences exerted by their

method, and such awareness could further the expression of an idea." ¹⁶

Psychological \ educational: As design educators, we are first of all designers not educators. Most design teachers have no background, not to say knowledge of educational matters. For that, they depend on instinct and personal experience and rather less on theory and knowledge. This lack is acknowledged by Ochsner, who claims:

"Given the relative lack of any developed analysis of design studio instruction or instructor-student interaction within the architectural literature, this essay will look outside architecture to the literature of psychoanalysis for clues to understanding the studio process." ¹⁷

It is not my intention to revolutionize the system of education in the architectural studio but to point at the importance of psychological\educational issues. Acknowledging them refers to the fact that educational questions in the design studio should be raised also in the way the problem is presented not only by its content. In other words importance should be given to the How- in psychological\educational terms not only to the What- in professional architectural terms.

Problem structuring: In research concerning the issues of problem solving the beginning phase is defined and is given importance. In this phase, the structuring of the problem takes place. Given the ill nature of design problem and the unique process taking place during the beginning of the dialog with the problem, it becomes essential to relate to the time frame in which this occurs. As is declared by Restrepo:

"Problem structuring occurs mainly in the beginning of design process...we called the representation of these first interpretations "early representations". These early representation have a great influence on how the process continues." ¹⁸

Directness and Indirectness: Some issues should be approached "indirectly" and prolonged. This concept, presented by the educator John Dewey is rather of a philosophical and psychological nature. The reason and consequences of this approach, although widely discussed by philosophers such as Merleau-Ponty, and Walter Benjamin, and writers like

Milan Kundera, to name a few; remains essentially of personal preference. Yet, whatever approach selected it presumes that the starting point should be considered an essential part of the process and of a definitive position toward setting the pace of the design process.

Case-study: The Poetic Approach

For the past 15 years, I have taught a design studio class, the case study methodology described is based on this experience. In this methodology, there is emphasis on the process. As such, the architectural problem is not the main protagonist of the 'story'. It is usually reached at by the students and instructor via a discussion based on the students work and premises. This leads to a necessity of isolating the beginning as unique and defined. The full methodology done in the studio, and for that matter final students' work produced, are less relevant for the current discussion.

Poetic approach: The design studio class starts with a presentation of a 'starting object' rather than a direct design problem¹⁹. The design problem is not ignored but is not presented directly at the start; it is 'arrived at' later in the process. Essential concept in this methodology is to approach the problem in an 'indirect' way, a postponement of the problem. This is one way of tackling the uncertainty of the 'ill-defined' nature of design problems²⁰.

This 'start object' is a cultural object, such as a short story, piece of music etc. After its presentation, the students are requested to: "react to 'it' in a visual way". So, this cultural 'start object' is coupled with an ambiguous, undefined, improper request to 'react visually'. These are the components of the 'poetic approach' to the beginning phase. Some general discussion takes place around the issues presented by the 'start object'; this is all. Defined as a 'trigger' or a 'starter', a point is made not to elaborate or explain further. The visual reaction that the students are required to produce is left for their own interpretation, and it is not considered research neither a solution. This starting trigger aims at generating and facilitating a thought process and curiosity that leads in a non-linear path, a path that not necessarily results in a solution or conclusion. The approach focuses on thinking through drawing rather than an attempt to resolve or structure a problem.

Following two examples are presented for such triggers given in past design classes. The first example is the artwork: "The Bride Stripped Bare By Her Bachelors, Even" known as the "Large Glass" (1915-1923), M. Duchamp

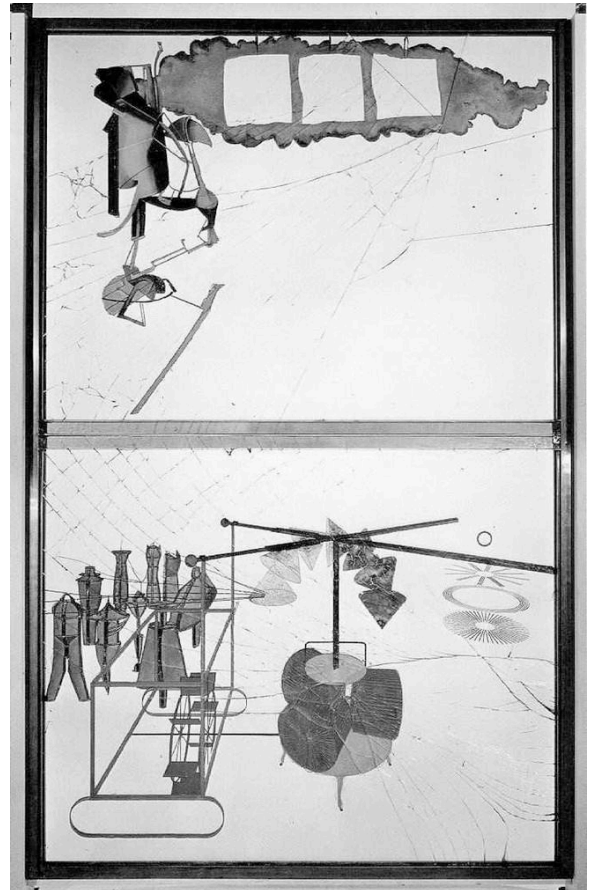


Fig. 2 "The Bride Stripped Bare By Her Bachelors, Even" known as the "Large Glass" (1915-1923), M. Duchamp

This is a seminal work of art; there exist plenty of writings about it. It has forms; it contains ideas both conceptual and material, and it establishes a premise of uncertainty. All of these can be referred to and be used as foundations for the students' 'visual reactions'.

The second example, is of different type, it is more elaborate and presents a 'concept'. In this case the 'trigger' is made up of 3 different 'objects' that relate in different ways to the selected concept which is stated as: Order\Chaos\Meaning. The 'triggers' are:

1. Music: "Musical Offering – Crab Canon" (1747), J.S Bach

2. Visual: Pioneer – Gold Plaque (launch date 1972)²¹
3. Literature: "The Analytical Language of John Wilkins" (1937-52) J.L Borges

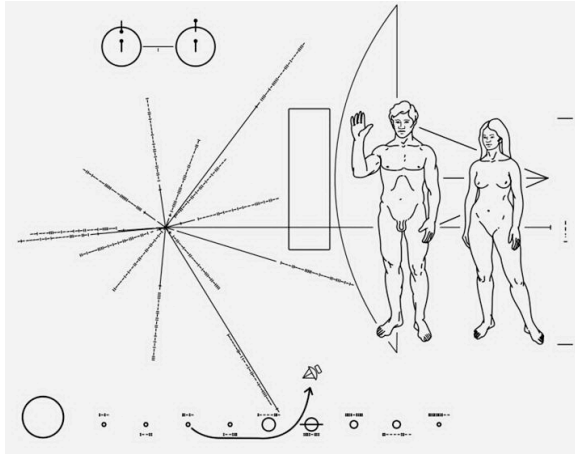


Fig. 3 Pioneer Gold plaque

The students are requested to 'react visually' for the three of them separately, and after a while to join their reactions. The most common response of students that participated in this studio is "surprise". They are not ready for such a stipulation to be presented in that point of time, they expect a design problem to be given. They do not go off balance, but they do mention that they find themselves having to "think". This "thinking" about what is before them has a lasting effect, which they take with them further into their learning experience.

As a whole, the 'poetic approach' responds to the relevant issues raised in the starting phase of the studio, as explained earlier in the paper.

Preliminary bias: Presenting 'none-relevant' information in the preliminary stage questions the importance and relevance of all following data, this methodology is not presuming to be good or right design methodology but it aims at being good education of design methodology.

Problem definition: The poetic approach presented attempts to reconcile with the difficulties that exist in the definition of design problems and attempts to 'go around it'. This method does not make the design problem less 'ill-defined', but it rather puts emphasis on this condition and forces students to respond to it and deal with it.

Creativity: this starting method requires the student to make connections, find options, and make his or her own judgment about what is relevant and what is not, about how to begin and to respond creatively. It does not start from 'research' or even from analysis; it demands a creative response. It puts the creative before the analytical.

Psychological \ educational issues: The 'poetic approach' does not tackle this topic directly, but it acknowledges the issues and attempts to clarify them early on in the studio. In a way since the 'design problem' is "not there yet" it liberates space for other concerns.

Problem structuring and Indirectness: As Dewey mentions, some issues should be approached 'indirectly'. The 'poetic approach' stems from the assumption that education in design should be such an issue. It should be presented in an indirect way, we as educators should proceed toward the design problems not in a direct manner, we should take caution in presenting them, and not as if we have solutions, as if we know the answer, or as if we know the method to solve them. If we wish our students to be inquisitive, curious, and creative – then we should present them this path; and we should do this right from the beginning rather than expect them to be so in the end.

Discussion

This paper defined the starting phase in the design studio and described a case study that responds to it. Yet, it left room for further research of the issue and plenty of questions to be explored. What are the effects of such a methodology? In what other ways can the 'starting phase' be acknowledged and be given importance? What is the relation between early presentation of a 'problem' in the studio and its effect on the results, if any? Either way I believe that acknowledging the starting phase of the studio, understanding its unique position within the process of the semester, and giving it its proper response, in whatever way relevant to our individual teaching style, will benefit ourselves as educators and our students as future architects. As reality, which the design studio assumes to mimic, becomes ever more conflicting and ambiguous, the 'poetic approach' attempts to offer means that can both reconcile and resist it. Reality constantly has proven our inadequacy or inability to control a world full of contradictions,

flaws and errors; a world that is paradoxically full of hope and infinite optimism.

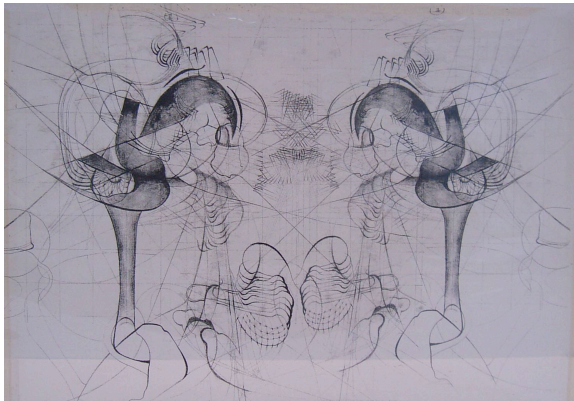


Fig. 4 Student 'reaction'

Notes

¹ Starting blocks are a device used in the sport of track and field by sprint athletes to hold their feet at the start of a race so they don't slip as they push out at the sound of the gun. The first starting blocks are credited to being invented by Australian Charlie Booth and his father in 1929.

² For example: N. Teymur, *Architectural Education*, (London, Ruston Press, 1992)

³ For example: I. Marjanovic & C. Robinson, eds., *Intersections*, Conference Proceedings, Iowa State University, 2006

⁴ R. Wick, *Teaching at the Bauhaus*, (Germany, Hatje Cantz Publishers, 2000)

⁵ Ibid. p. 103

⁶ J. Restrepo & H. Christiaans, 'Problem Structuring and Information Access in Design'. *Journal of Design Research*, (2004)

⁷ K. Bermann, 'Pre-Architecture Studio: The Pattern Project'. *Journal of Architecture Education* (May 2002) pp. 268-272, p.268

⁸ Hedjuck presided as dean for 25 consecutive years; in a small and prestigious institute, he was able to have innovative and well documented impact.

⁹ B. Horn in *Intersections* proceedings, 2006:151

¹⁰ J. Restrepo & H. Christiaans, 2004

¹¹ P. Tetlock, 'Accountability and the Perseverance of First Impressions'. *Social Psychology Quarterly*, V. 46, No. 4, (1983) pp.285-292

¹² M. Rabin & L. Schrag, 'First Impressions Matter', *Quarterly Journal of Economics*. (1999) p.37

¹³ R. Buchanan, 'Wicked Problems in Design Thinking'. *Design Issues*, Vol. 8, No. 2, (Spring 1992) pp. 5-21

¹⁴ N. Cross, 'Designerly ways of knowing'. *Design Studies*, Vol. 3, Issue 4, (October 1982), pp. 221-227

¹⁵ D. Schön, 'The Architectural Studio as an Exemplar of Education for Reflection-in-Action'. *Journal of Architectural Education*, Vol. 38, No. 1, (1984) pp. 2-9

¹⁶ K. Wiley in *Intersections* 2006:350

¹⁷ J. Ochsner, 'Behind the Mask: A Psychoanalytic Perspective on Interaction in the Design Studio'. *Journal of Architectural Education* Vol. 53, Issue 4, (May 2000) pp.194-206, p.194

¹⁸ J. Restrepo & H. Christiaans, 2004

¹⁹ Other methodologies can serve as precedents for such a methodology such as the "Hermeneutic-Phenomenological Approach" presented by Hisarligil for instance which utilizes Kafka's writings or Bermann's studio mentioned earlier among many others. The issue here, of course, is the focus on the beginning phase and its implications.

²⁰ J. Restrepo & H. Christiaans, 2004

²¹ Pioneer Gold plaques are a pair of gold-anodized aluminum plaques which were placed on board the 1972 Pioneer 10 and 1973 Pioneer 11 spacecraft, featuring a pictorial message, in case either Pioneer 10 or 11 are intercepted by extraterrestrial life

²² 3rd year student M. Assif work done as a 'visual reaction' to Mozart's piano concerto No. 23 in A major K. 488