Methodology of deconstruction in architectural education

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Abstract

The challenges of modern times demand high levels of creativity from the architect. Creativity, with all its social and physical connotations and implications, should therefore be a guiding concept in the revision of architectural education. In addition to the basic design courses and studios in architectural education which some have deemed to be the sole mediums to elicit creativity, a history course which underscores and examines creative leaps in the past of architecture can be useful in that regard. This article proposes an architectural history course designed based on a deconstructionist view of history which highlights major creative leaps of the past. The study thus focuses on the philosophy of deconstruction and its interpretation through architecture as a creativity fostering agency of thought, corroborating this stance by means of renowned examples of the adoption, sometimes unknowingly, of deconstructionist philosophy.

Keywords: Creativity; Deconstruction; Architecture; Architectural Education; Design Education; Architectural History.

1. Introduction

Several dilemmas face architects today arising from the competition between humanitarian values and the universal language of money. The conflicts and conundrums of modern times demand high levels of creativity from architects, intensifying their responsibilities and rendering their tasks more difficult than ever by requiring a completely different logistics of architectural practice and education.

The success of architectural solutions rests in the quality of the metaphors by which these oppositional states are resolved as forms in the imagination of architect-designers. For this reason, the subject of creativity must be handled within the logic of an architecture course, and its semantic associations studied.

Some educational philosophers may argue that creativity is inborn, and that it cannot, therefore, be taught. While it may be true that talent, inclination, intention and determination help realise creativity at an early age, through conducive and evocative teaching methods anyone can be sensitised towards a rich variety of ideas, outside influences, knowledge and creativity at a later age (Bruner, 1962; Illich, 1970).

Medawar posits that “creativity is a rapid intuitive deduction, which owes its power to the infirmity of our powers of reasoning, an illumination, or a kind of awareness, or yet a generative act in architectural discovery, which obviates an image of a fragment of a possible world… That creativity is beyond analysis is a romantic illusion we must outgrow. It cannot be learned perhaps, but it can certainly be encouraged and abetted” (Medawar, 1969: 57).
Although the part played by tacit knowledge in the intuitive leaps that precede rigorous construction of knowledge in architecture is not fully understood, most design researchers agree with the assumption that designers arrive at brilliantly rewarding solutions by way of analysis through synthesis. Creative designers somehow know when an idea is the right one (Davies & Talbot, 1987). Elements of solutions emerge quite early in the design process (Agabani, 1980; Eastman, 1970; Lawson, 1997). The architect’s reasoning is based on synthetic and formative design ideas rather than on an analysis of the problem (Rowe, 1987). In short, these authors imply that architect-designers experiment with solutions as soon as they conceive of a design problem, rather than merely following concrete methods.

Derrida’s theory of deconstruction must be brought into the discussion at this point. Deconstruction, which can be considered a method to seek the new and question the existing (the current), includes a functioning logic similar to the concept of creativity. The strategy of deconstruction that can be applied to the problems of meaning and the possibility of meaning can be expressed via Derrida’s concepts. The dates of Derrida’s work notwithstanding, deconstruction - in other words, the questioning of conventional ideas and meanings – is an old model of behaviour within the evolution of architecture, having arisen throughout history (Gur, 2008). In fact, the rationale of Derrida and his philosophy of questioning facilitate a re-reading of traditional constructions and concepts of architecture at the same time. That is to say, the philosophy of deconstruction can be used as an instrumental and operational method in architecture (Durmus, 2009).

Throughout the course of history, creative breakthroughs have continually emerged, and their causes have always required an accounting as a dominant metaphor in history (Megill, 2008). In order to design the breakthroughs of history, it is essential to regard history as a movement and interpret the subject within this evolutionary process. History courses in architectural education can be redefined and composed from the standpoint of creativity just as design studios can. However, we need to first inquire further into the matter of creativity.

2. Creativity

In architecture the term *creativity* pertains equally to subheadings, such as design practice and design education, and to the apprehension of social issues with which architecture is entangled. Also, different phases of the architectural design process require a particular creativity, each in its own right (Gur, 1978). Therefore, one can definitively state that there are many aspects of creativity in the discipline of architecture. Hence, creativity bears significance in the theory, practice and criticism of architecture, and is the subject of many ongoing discussions in architectural education.

Systematic inquiry into creativity occurred from the 1950s onwards and aimed towards a more fundamental understanding of human creativity. Such research adopted psychometric, cognitive, psychodynamic and pragmatic approaches to defining creativity (Durling, 1996). Only the last category, that of the pragmatic, has dealt with design fields to any extent. In fact, very few researchers from a design background have undertaken studies on creativity and investigated underlying intellectual and social drivers of creativity (Durling, 2003).

Creativity is a broad and vague concept. The criteria of creativity vary from one discipline to another. Some kinds of creativity, for that matter, may constitute a systematic affair with serious implications for its success and failure, as opposed to creativity in artistic domains, which value the different, the eccentric, and sometimes even the frivolous. The role of creativity in the sciences, on the other hand, is best understood via Henri Poincaré: ‘It is by logic that we prove, but by intuition that we discover’ (Poincaré, 1908: 129).

Creativity has been defined in the past as ‘an illumination’, ‘a kind of awareness’ by Polanyi (1958: 123), as ‘effective surprise’ by Bruner (1962), and as ‘the unexpected’, ‘the extraordinary’ and ‘shock’ by Deconstructionist architects such as Tschumi (1991; 1996). In any case, creativity is the ability to produce work that is both novel and appropriate. Departing from these definitions, however, one can obviously argue that creativity has theoretical and practical aspects, and therefore can be easily brought into the agenda of a course on the history and theory of architecture. Students may benefit equally from design studios and from history and theoretical discourses in architectural education in enhancing their concept of creativity, provided that the course is revised at the outset.
2.1. Architectural History Course

For the very challenging purpose of enhancing the perceptiveness, imaginativeness, sensitivity and the capacity for judgment of students of architecture, some suggestions have heretofore been put forward with regard to architectural design studios, but the architectural history course inevitably still abides in the long-established mode of the review of styles. The course generally starts with the ancient architectures of Egypt, Greece and Rome, and proceeds thence to Early Christian, Romanesque and Gothic Architecture. Renaissance, Baroque-Rococo and 19th Century Eclecticism follow. Then come Early and Classical Modern Architecture and the International Style. In the meanwhile, swept away all the particulars of the developed and developing nations, thereby devaluing was their past architecture. This classical course relies heavily on history books in which the main metaphor is the organic, in which styles are born, ripen, rise to a peak, and then begin to get old and eventually die. The widespread intrusion of the memes of literary studies into various disciplines especially after the 1960s likewise had an immense effect on architectural history: analogies and metaphors proliferated.

Some valuable concepts, such as meaning, aesthetics, harmony, rhythm, balance, totality, pleasure, ethics, light, shadow, etc were also employed both literally and metaphorically in architectural history and criticism (i.e. Smith, 1979; Broadbent, 1990; Johnson, 1994; Nuttgens, 1988; Jencks 1997a; 1997b). Moreover, the subject of meaning was commonly handled by turning work into a metaphor and conceptualizing. But for today’s deconstructionist historians all writings of history are subjective in any case. Munslow (1997) declares that history, being neither an intellectual nor a linguistic entity, cannot be an objective endeavor either. There are traces left from the past, but these being mute by themselves, historians voice them. In the history of architecture, history writing and narration continue to operate on rules and canons instituted by the power structures of societies, hence the practice of history writing will continue to re-affirm ‘the established’ and expel or exclude new ideas, concepts and new meanings that could be derived from the same past.

A work of history is as much about the historian's own world view and ideological positions as it is about past events (White, 1973). This means that different historians will inevitably ascribe different meanings to the same historical events; this dynamic applies equally to architectural history. Architecture is a text, and it can be dealt with through a textual process in terms of both its evolutionary process and its historical narration. For precisely this reason, deconstruction can be a useful re-reading method in architecture.

Could the history of architecture not be more stimulating and enticing for students of architecture who do not necessarily resonate with facts and figures? In the education of architects, an alternative history of architecture and a history course based on re-readings from the stance of creativity may follow a variety of itineraries, and may emphasize a range of meanings and narratives to facilitate the ‘future’ we educators desire. If revitalized deliberately for a better purpose, the most challenging course would be the one which would emphasize creativity in a profession in which that quality is most desired. Moreover, that being the case, there needs to be consensus as to a concrete definition of creativity (a suggested ‘metaphor’).

A creative and stimulating architectural history course, to begin with, requires a reliable definition of creativity. It needs to identify the features and/or the criteria of creative thought and activity. It also needs to be able to distinguish the substantially creative from the purportedly so by itself being creative.

3. Deconstruction: Creativity or Différance as Metaphor

Design in architecture is an act of transformation, and in that sense it is the highest form of our practical adaptation to our environment. We transform and adapt. It is also a form of communication in which constructs, concepts, and mental pictures of reality existing in the mind of the designer are transformed into visions of future realities via the language of architectural composition.

Based on this view of architecture, for any architectural work to be distinguished as creative it must transform, must cause a change in the environment, and perhaps a shift of views within the discipline as well. Styles and trends in architectural history emerge from episodes of consensus among architect designers on the established conventions and procedures of their times. But time is always in a state of flux. Movements and events change their character over time - the most creative impetus of all. This situation necessitates differences both in approaches and in the solutions thereof. In the long view, one sees that architecture perennially transforms itself to meet the changing
demands of the times. Thus the crucial concepts with respect to creativity in architecture can be established as transformation, time/space and ‘difference’ - an observation which immediately brings to mind Jacques Derrida and his philosophy of deconstruction.

The word *deconstruction*, used by Derrida for the first time in the book *De La Grammatologie*, refers to a process of exploring the grounds of Western thought in their essence (Durmus, 2009). Deconstruction as a strategy of questioning and an approach for critical thinking establishes meaning through mutually-functioning concepts and reversals of logic. It is necessary to return to the definition of *deconstruction* and also of *différance* in order to define the relationship between deconstruction and architecture.

### 3. Différance

Derrida employs the French word *différance* while endeavoring to demonstrate how speaking (saying) is no more significant than writing. The word is used as a pun, given that in spoken French the word *différance* can mean either to differ from something or to defer something. Culler (1982) defines *différance* as a universal system of dissociations, discriminations, distances and differences between things. It is the point where those concepts/words which exist in the same vocabulary start to differ and deviate in terms of meaning.

The fundamental theories of architecture - such as the classical, based on Plato’s Metaphysics and Pythagoras’s mathematics - as well as the Modern, based on scientific positivism - used to operate via canons (ideos) and gained their power from repetition. The identification of the mark in its repetition and its differential is what allows “them” to hop about from context to context (Culler, 1982). By introducing the word *différance* into philosophy Derrida proposed a powerful modification of the ordinary notions of identity and difference: ‘Any single meaning of a concept or text arises only by the effacement of other possible meanings, which are themselves only deferred, left over, for their possible activation in other contexts’ (Derrida, 1988). The implication is that when the deferred takes over, the text is no longer the same; a new identity, a new meaning, a new building style may have been achieved. In architecture the new entity betrays itself by the absence or reversal of hierarchies or the trivialization of past canons and conventions at the level of major taxonomies of architecture, such as nature/culture, plan/façade, interior/exterior, communal/private, and so on.

Derrida argues that ‘the creative is that which a différance is a priori’. Two elements of a system of signs or ideas, or an idea displaced from its original-historical context, facilitate the sensing of *différance*. One cannot conceive of ‘old’ without ‘young’, no ‘up’ without ‘down’, and no ‘day’ without ‘night’, no ‘happy’ without ‘sad’.

To better understand creativity in architecture, students can be trained in a more constructive way by analysing what creative structures have been deconstructed. For this reason, concrete examples of creative buildings belonging to the past can be deconstructed critically. The creative steps extrapolated via the terms of deconstruction make up the sub-questioning and investigation paradigms of the deconstruction method. By adopting this method one can analyze buildings as significant breakthroughs in the history of architecture.

### 4. Deconstruction as a Method

The identified concepts or pairs for deconstruction method in this study have been selected out of a number of concepts embodying Derrida’s *différance*. Architects can try the methods of analogies, myths, fictions, geometry or three-dimensional models as forms of expressing their creativity (Gur, 2008). The deconstructive method, however, is based upon analysis via deconstructionist concepts; it seeks to put forward the existing signs of creativity by following various traces (Gur, 2008). What are its features and properties and how can they be distinguished and/or traced? Below is a demonstration of how a building can be re-read by means of concepts considered within the scope of the philosophy of deconstruction.

#### 4.1. Presence/Absence

One major *différance* introduced by Derrida is the *presence/absence* opposition. Derrida eloquently shows how a major distinction of this polarity is the interdependence of its terms. It is impossible to imagine some kind of absence without reference to the principle of presence and vice versa. *Absence* is ‘the condition of being different of all possible differences’ says Derrida (1988), and this conception might be the
strongest case to begin with in this paper for the purposes of making a convincing argument. A mark of creativity might be the absence of certain conventions and/or the exclusion of some rules in architectural design (Table 1).

For instance, Benedikt (1992) points to the corner windows employed by F. L. Wright and Mies van der Rohe as examples of the absence of corners, which strongly and ironically point to the presence of the corners which they are meant to abolish (Table 1). In other words the absence of corners more declaratively pronounces their presence. They are gone but not gone.

<table>
<thead>
<tr>
<th>Presence, Traces</th>
<th>Absence, Zombies</th>
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<tr>
<td><strong>Frank L. Wright, Robie House, 1909 (Illinois)</strong></td>
<td><strong>Mies V.D. Rohe, Farnsworth House, 1950 (Illinois)</strong></td>
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</table>

Traces and zombies, thus labeled by Derrida, indicate a state of indeterminacy and point to absence and/but presence at the same time. In addition to such dichotomies as the intelligible/sensible and the mind/body, ‘playing over the limits’ is another realm of difference pointed out by Bernard Tschumi (1996).

4.2. In-between: Another interesting concept which bears mentioning here is the ‘in-between’ concept suggested by Eisenman, which can be employed in the displacement and dislocation of existing architectural theories, discourses and canons (Grosz and Eisenman, 2001). When the oppositions suggested by Derrida are interpreted in the discipline of architecture they become more manageable: structure/decoration, abstraction/figuration, figure/ground, form/function, interior/exterior and so on, and with these as a frame of reference, architecture can then start discovering the in-betweens by dissolving these oppositions through negotiation and compromise (Table 2).

| Guggenheim Museum, Bilbao, Frank Gehry |

4.3. Reversal of hierarchies: The canons of earlier periods in architecture were also based on certain dichotomies in which one side was valued over the other, as in Western metaphysics and literature: Egyptian architecture champions the columns, Roman, the wall. Gropius valorizes served spaces; Kahn, Eisenman and Hadid, servant spaces. This architect is socially responsible, that, merely formalist, and so on (Benedikt, 1992). Therefore reversal of hierarchies in design might be considered another trace of creativity. Valuable hierarchies in architecture might include: function/form, plan/volume (mass), intelligible/sensible, marginality/centrality, served/servant, fixed/flexible, stable/flowing, repetitive (iterable)/unique, fit/misfit, discovered/invented, concept (mind)/vision (body), material/transcendental, concept (referent)/sign, and so on.
Pioneering a preference for an architectural taxonomy over the complimentary or substitutive other(s) so as to precipitate an unprecedented change in the overall conception of a particular space's organisation can be considered a strong trace of creativity. For instance, Max Berg’s design of the roof of a sports facility as a lace-like concrete structure can be taken as a strong sign of creativity, given that traditionally roofs have been expected to elicit a feeling of closeness and protection, whereas Berg’s structure inflicts a feeling of limitlessness, of being 'open to the sky' (Table 3). And also Gehry dissolved the contradiction of rectangular and organic forms in the Bilbao Guggenheim, and Eric Owen Moss refuted the force of gravity in his Box House.

4.4. Margin/Centre: Deconstructionist architecture is an argument that identifies which terms of hierarchy (concepts or metaphors) are valued over which in the past, and for the purposes of reaching a ‘better truth’ looks for ways such hierarchies can be undone and overturned, or how some polarity can be reversed. One such polarity is marginality and centrality.

The word margin indicates nearness to limits and edges but carries an uncertainty and ambiguity as to its being in or out. Centre, on the other hand, implies depth and focus with regard to dense meanings. The centre is where programs and activities take off to the extent that they are demarcated by an edge. This polarity can be likened to the thing and its shadow, the mask and its mold, the earth and the horizon. For instance, Le Corbusier’s (1923) preference for centrality sets a good example for this polarity: his emphasis was on the plan rather than the façade. The decoration of rooms by F. L. Wright and Mies van der Rohe are contrasted by Benedikt in this respect. The former architect makes rich use of walls and thus emphasizes the periphery. The latter, by concentrating on the centre and leaving the periphery empty as a corridor, openly values the centre.

Kahn’s placement of bookshelves, reading tables and personnel at the Exeter Library with respect to natural light obliterated the established rules of library design which had lasted for centuries and thereby contributed to a more efficient and productive understanding of library design (Table 4). The success of architectural solutions rests on the metaphor by which oppositional states are resolved as forms in the imagination of architect designers. And creativity is that quality which, while addressing the dichotomies, upsets pre-determined hierarchies and rules, and achieves a higher level of solution, as did Kahn. Creating such a situation indicates that the architect is concerned with this questioning logic and critical thinking. Actually, creativity lies in enacting these concerns consciously and reading from this consciousness.
4.5. Inside/Outside: Another important set of opposites in architectural design, both in discipline and practice, is the inside/outside polarity. These are interdependent oppositions. But unlike presence and absence, they are material entities, although the human conception of both might be quite relative. In disciplinary discourse the border between the two has been continuously debated. In recent architecture the inter-phase between inside and outside is ever more frequently made of glass, a practice which itself dissolves borders. Nevertheless the design of the partition between the inside and outside has always been a locus for creativity in architecture. An insignificant sign of creativeness might perhaps be an actual or virtual balance maintained between such conflicting and/or competing pairs of architectural concepts as these.

4.6. Signifier/Signified: Dislocating the ‘ideas’ per se through syntactic and semantic plays might also be a quite creative undertaking (Eisenman, 1988). As has been acknowledged by Saussure (1915), the signifier and the signified are inseparably tied together, although the relationship is contextually and arbitrarily conventionalized. Questioning, upsetting or distorting this interrelationship might yield baffling and interesting results. The signified becomes emancipated from the signifier, and this separation leads to shock, confusion and perhaps catharsis in the audience. As has been underscored above, the dominant meaning of architecture resides in the history of architecture. The significance of plan typologies, formal relations, decorative styles and so on owe their lasting value to repetition over the years. Repetition (iterability) warrants meaning (Table 5).

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<tr>
<th>Table 5. Analyses of Signifier/Signified concepts for two mosques designs</th>
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<tr>
<td>Iznik Yesil Mosque (Traditional), 1378-91, Iznik, Turkey</td>
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<tr>
<td>Mosque Type, Single-domed (Figuration, Repetitive)</td>
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</tbody>
</table>

To cause new meanings to be born is creativity in itself, and an architectural work which has the power to realize such an outcome is a creative product. Dissolution of relationships between the signifier and the signified might be illustrated through dislocated plans, sections or building elements in architecture. In other words, enabling the emergence of new meanings is creativity itself.

5. Conclusion

The concept of creativity bringing the new and the matter of the new into the agenda appear as the concept of every age or era which informs it’s most immanent and transcendental characteristics. Due to the interdisciplinary and even trans-disciplinary structure of architecture, creative works in all disciplines - and the concepts that inspire creativity, philosophies, and methods - can be adopted in architecture. The philosophy of deconstruction, dealt with as a method in the evolutionary history of architecture, evokes creativity via the différance it puts forward.

Given that Derrida’s strategy of deconstruction already exists in the evolutionary process of architecture, it is also possible to read it as a method. Re-reading the history of architecture is re-reading architecture and buildings as architectural products. Because of this interrelatedness, creativity – so to say, proposing this difference of reading as a method - must form the basis of theoretical studies in history and architecture education because architectural creativity is historically based on its questioning, critical and displacing attitude – its deconstructive philosophy.

Both architecture and history are complex systems of information. They require simplification in dealing with their own discourses. Architecture’s entanglements with all other systems above and below it, and history’s involvement with the entire universe and mankind as well as with the specific nature of at-hand issues, apply
pressure to their practice. The question of which issues one needs to leave out in approaching the theory is one thing; deciding upon privacy/communality in practice is another, for instance.

The proposed architectural history course, which is itself an interpretation of already interpreted stories of architecture, may run its course either chronically or ana-chronically, employing one important metaphor for architects – creativity - among many possible others, and may proceed with those selections from the creative past which the educator believes necessary. Some attempts made by the authors are rendered in tables below (Figure 1).

Figure 1. The relationship between creativity and architectural education (design studio and history course)

Perhaps it is time for the architectural history course to encroach upon the implications of deconstructive philosophy and concepts. If such were the preferences in deconstruction theory hitherto, why not turn the same guns on the established norms of architectural history and allow emotions to intrude on historical practice? Contingencies may, can and probably should intrude on historical practice. All this being the case, creativity must be a part of history education in architecture, as of all theoretical studies.

References


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Figure 1: Prepared by the authors.