INTUITION IN INTERIOR DESIGN

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Abstract
Intuition enables individuals to develop an understanding of the structure of complex systems. In interior design many decisions are reached intuitively even though the process of formulating solutions may be argued rationally. Intuition is intrinsically intertwined with our collateral experiences, memories, and implicit thought. Design intuition draws on our entire experience, not only on what we consciously isolate as relevant information. In education we prohibit students from relying on their intuition and require solutions based on pure reason. The author of this paper argues for bringing intuitive decision making back into interior design as a legitimate design tactic.

Keywords:
Intuition; interior design; pedagogy.

Introduction
Intuition in academia has always been a controversial topic. Mark Brienberg (http://www.icsid.org/education/education/articles183.htm?query_page=1) provides a good overview of the state of intuition in design education. Some people consider intuition the only way to create unique design, others, like Brienberg himself, are rather sceptical about usefulness of intuition. It is absolutely true that intuitive design can be bad. It is also true that all intuitive decisions are always subsequently tested analytically for set criteria. The author believes that intuition in interior design education is a good friend, not a frightening mystical creature. This paper attempts to extract intuition out of paranormal and look at it rationally to illustrate intuition to both sceptics and intuition devotees as a useful design tactic.

“Intuition is a difficult concept to define but one that most people recognize as an important factor in thought and judgment” (Officer, 2005:1). We tend to ignore intuition because it is “one of many unobservable mental entities scientists are ... unable to test” (ibid:1). Intuition
is hard to pinpoint and is usually avoided as a subject in academic discussions. Shunning the subject does not prevent intuition from being an important part of design. Interior design educators need to work together to address and willingly incorporate intuition into education as a tactic of facilitating student learning.

There are several theories and assumptions this paper will use to construct its argument. The following is a selective summary of those theories and assumptions.

1. There has been little research done on intuition, specifically in the field of interior design. This paper will rely on research conducted in anthropology, architecture, the cognitive sciences, and in other disciplines. The underlying premise is that when we talk about intuition as it relates to place, theories from different disciplines describe the same phenomenon. The only difference is one of perspective.

2. Intuition is embodied (Solovyova & Nanda, 2008). Embodiment is defined by Csordas as an "indeterminate methodological field defined by perceptual experience and mode of presence and engagement in the world" (Csordas, 1994:12).

3. Designers have predominantly intuitive personalities (MacKinnon, 1962; Dumling et al, 1996).

4. Even though intuition is a subconsciously automated process that is difficult to study, we know that together with logic it is essential to the learning process (Hogarth, 2001).

5. Interior design shares the studio model of education with architecture and other design disciplines. Many programs also share coursework. When discussing educational aspects, this paper will rely on studies within a broad realm of design disciplines.

### Understanding Intuition

According to Hogarth (2001), intuition is automatic information-processing that occurs outside our consciousness, working memory and most of the time, our attention. Intuition always depends upon a person’s unique experiences in their life history. Intuition is also closely connected with emotions (Hogarth, 2001; Dane and Pratt, 2006). Intuition is a part of tacit system, and thus not always conscious (Hogarth, 2007). When intuition takes the form of automatic thoughts, it cannot be ignored (Pedigio, 2005). Koriat gives intuition substantial credit for guiding human behaviour: “people are blind followers of their metacognitive judgments and intuitions. They take the validity of their feeling of knowing for granted and generally use that feeling as the basis for their behaviour” (Koriat, 2000:162).

Oficer (2005) presents a summary of possible sources of intuition (as follows):
1. Intuitive knowledge may be self explanatory, but inaccessible or unverifiable by external reference.

2. Intuition is thought of as a vehicle connecting creativity to practical results.

3. Intuition is “synonymous with tacit knowledge: the essential but unexpressed knowledge needed to execute intricate tasks or skills” (Officer, 2005:7).

4. Intuition is magic.

In order to immediately see the connection between intuition and interior design, it is helpful to list the skills identified by Hogarth [7] as demonstrated by the intuitively gifted:

1. The capacity for visualization (two-and three-dimensional visualization is a skill inherent to interior designers).

2. The ability to acknowledge emotions and learn from them (even though the level to which each interior designer acknowledges emotions is idiosyncratic, all designers develop sensitivity to place experience).

3. The willingness to speculate and consider alternatives (as we will state the obvious in the following section, interior designers approach design tasks by creating a range of alternative solutions, each of which is evaluated against a set of established criteria).

4. Continuous testing of perceptions, emotions and speculation (again, a part of what interior designers routinely do).

**Embodied Intuition and Learning**

“Architects do not primarily design buildings as physical objects but the images and the feelings of the people who live in them” (Pallasmaa, 2005:450). Unlike architecture, interior design has never been based on formal visual composition, but always on an understanding of experiential reality and meaning of form. Such experiential reality is emotion-based and embodied. If we see the goal of interior design as to strengthen our existential experience, then uncomfortable notions of intuition, feelings, self and culture that form human experience within space need to become equal players in design, together with formal knowledge of technical information.

Let us look at the various systems of learning. Epstein et al (1996) classifies intuition as one of the two main ways humans process information. There are two main systems involved in learning and doing: tacit and deliberate. The tacit system is composed of processes that occur automatically, which includes intuition, perception, and memory triggers. The deliberate system includes logic and analysis and gives us awareness. The two systems work together to produce learning (Hogarth, 2007).

In academia we study conscious learning; we always expect to see conscious learning. But learning is not time or place specific, and it doesn't happen only on demand. It is constant - every minute of our lives we learn, even when we don’t mean to. Educators generally prefer to pretend that learning only happens in the classroom and disregard the incredible repository of autobiographical experiences available to both teacher and student, those experiences often presenting themselves through intuition.

Momentary experiencing and the memory of past experiences are essential for the construction of meaning in general (Gedlin,
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1980; Norberg-Schultz, 1980), and of the meaning of “a place as a qualitative totality of complex nature” (Norberg-Schultz, 1980). Or as Myers (2004) points out, “unconscious, intuitive inclinations detect and reflect the regularities of our personal history.” Anthropologist Low, in her theory of embodied spaces, states: “space is occupied by the body, and the perception and experience of that space contracts and expands in relationship to a person’s emotions and state of mind, sense of self, social relations, and cultural predispositions. In Western culture we perceive the self as ‘naturally’ placed in the body, as a kind of precutlural given” (Low, 2003:10).

Through living our lives and actively interacting with places that house our being, we unintentionally collect a great arsenal of experiences. The essential point is that during the process of designing interiors, intuition draws on our entire experience and not only on what we consciously isolate as relevant information (Solovyova & Nanda, 2008). Studies in neuroscience show that to understand any new situation, people capitalize on existing mental representations that reflect the entire stream of previous experiences associated with that event (Lakoff and Johnson, 1999). In other words, experiences we have shape us as selves, and intuition is an inherent part of the self, most useful in its assistance in shaping future actions.

**Design Process**

The design process is often referred to as a problem-solving process. Do interior designers really solve problems? Poverty is a problem, war is a problem, but creating better places enhances the quality of life. Also, as noticed by Hamad (1990), “problem solving involves applying a known rule or ‘algorithm’ in order to solve problems of an overall type that varies in a minor or predictable way.” Even though there are certain steps necessary to the completion of a project, in interior design there are no exact algorithms to apply or rules to follow in creating better spaces.

Deliberate thought is most valid when a well-defined and accepted model exists – but this is not the case with interior design. In complex decisions, analytic models will not capture all the nuances of the situation. Dane and Pratt (2007:10) claim that “intuition, as a holistically associative process, may actually help to integrate the disparate elements of an ill-defined problem into a coherent perception of how to proceed.” When we make choices or decisions, we base them first on preferences shaped by prior experiences and intuition (Hogarth, 2001; Pedigio, 2005); “one goal of education should be to teach when people should use specific forms of deliberate thought” (Pedigio, 2005:16).

In interior design, when students do not yet have sufficient professional knowledge, the familiarity with the deliberate models of thought or understanding that tell professionals when to apply certain models, they have nothing else to fall back on but intuition and personal preferences. As educators, by not dealing with students’ intuitions, we simply ignore their reality. It is common knowledge that both architecture and interior design briefs are ill-defined. “When a scenario is ambiguous or multifarious, human intuition is as good as it gets” (Pfiffer, 2005:4).

**Personality and Learning Style**

Durling, Cross and Johnson (1996:1) wrote that “designers’ strategies for problem-solving are
different from many other professionals, and an intuitive way of working is preferred strongly”. In a 1996 study, they once again proved what MacKinnon discovered in 1962: designers are intuitive.

Psychological studies of American architects and designers in Royal Designers for Industry showed that all designers prefer using their intuition, and rely on intuition when the right idea presents itself (Csordas, 1994).

The results described by Durling and colleagues (Durling et al, 1996) are astounding: over three quarters of architects tested prefer using their intuition. Even more - ninety one percent - of artists prefer to use intuition. These results are quite different from the general population. In Durling, Cross and Johnson’s investigation, seventy one students of design, including product design, interior design, graphic design, furniture design and design marketing were assessed. In that second study, seventy nine percent of students preferred to use their intuition, and a majority also preferred to use their personal perceptions.

“Designers’ creativity seems inextricably bound up with their particular personality types. Intuition seems to be at the core of the designers’ special brand of creativity” (Durling et al, 1996:6). In most situations this means that designers will naturally give intuition the right of way and subordinate rational thinking to it. They enjoy, use and trust intuition the most.

With such overwhelming evidence of intuitive personalities and intuitive preference by designers, ignoring the role of intuition in interior design education is simply negligent, and doesn’t benefit either student learning or instructor pedagogy.

Design Education

“Though much attention has been paid to formal methods of problem-solving, these have not gained much currency in design studios. Perhaps these rigid methodologies are a poor cognitive fit with the designers’ loose and more playful way of working” (Durling et al, 1996:6). In this section, this paper will delve into a discussion of interior design education, and provide some ideas regarding how intuition can be better incorporated into the education of interior design students.

Current Pedagogies

Officer (2005) compares intuition to twilight: it is experienced routinely but is difficult to describe in terms of time and quality. We use intuition and accept that it is a part of our judgment process. As required in interior design education, whenever students make intuitive decisions based on beliefs, personal preferences and other implicit factors, they always justify them with strong reasons. Intuition cannot and should not be a replacement for analytical thinking; it is an aid to it. Coming up with explicit factors and crisp reasons for intuitive decisions can help one reflect on one’s design process, if that’s the intent. In all other cases, such retroactive justification only promotes students’ mastery of following tutors’ tasks and not the actual learning.

Newstetter and McCracken (2001) published a fascinating paper on design “knowing” and “learning.” Once again they confirmed that learning is filtered and interpreted through the learner’s previous experiences. “Our hunch is
that students of design have well-developed prior conceptions and theories about the nature of design that conflict with understandings held by expert designers,” write Newstetter and McCracken (2001:63). They acknowledge that even though theories that students bring into the classroom are usually naïve (as compared to those of expert designers), they might be partially generalizable and often possess robustness.

Newstetter and McCracken (2001:66) believe that “our pedagogic practices must bring about a confrontation between the learner model and the expert model. Having students follow prescriptive models of design ... does not constitute confrontation of the sort that can begin the dismantling of the mental model”. Salama (2005) generally criticized design pedagogy because it treats students as machines. All of his many reviews of design education (Salama, 1995, 2005, 2006) affirm the idea that the educational system is designed for the system’s own purposes, rather than the students’ learning needs. Salama argues for experiential learning, and so does the author of this paper (Solovyova & Nanda, 2008). As Confucius wisely proclaimed around 450 BC, “Tell me and I will forget. Show me and I may remember. Involve me and I will understand.” Experiential learning is holistic, embodied and involves tacit processes, not simply logic alone. Pushing for reason alone can even be detrimental: if imagination builds on tacit processes, deliberations of that process shut them off (Hogarth, 2001). It is time to open the doors of interior design education to the entire Self of a learner with his or her intellect, but also culture, beliefs, intuitions and memories.

Conclusion

This paper has provided evidence that intuition is helpful in design. But if that is the case, why do students who rely on intuition fail just as much, if not more, than students who follow only their logic? Writing about the creative leap, which is also an intuitive connection one can make, Hamad states (1990) that one has to master relevant skills and knowledge before such a leap can occur. Hogarth echos Hamad (2001): to be able to use intuition for positive results, one needs to have sufficient experience in the desired domain. Intuition is domain-specific (Hamad, 2001) – it builds upon expertise in a particular field earned through experience. In other words, the more knowledge and skill students acquire in the field of interior design, the more likely they will have fruitful intuitions guiding their designs.

Salama rightly notices that “knowledge is not a substitute for architectural imagination but inadequate knowledge would handicap the general level of design” (Salama, 2003:69). Preparation maximizes the probability of creativity and intuition (Hamad, 1990; Hogarth, 2001). True life experience (that is the essence of experiential learning) offers much richer and holistic preparation than a sequence of discrete coursework.

So what can we do as design educators? There is no sure strategy to infuse fruitful intuitive input into the design process. The first step will be to open our minds and face the reality of the role of intuitive decision-making in interior design. Then we can foster productive intuition by providing a “kind environment” (Hogarth, 2001) and engaging our students in activities like
the “design psychology toolbox” (Israel, 2003), facilitating exploration of the student’s intimate connections with place. Such exercises help to consciously uncover intuitive decisions through explorations of the past.

“The only real valuable thing is intuition,” said Albert Einstein. Let’s trust our intuition, and allow our students trust theirs.

Acknowledgement
This paper will also be published by Middlesex University Press in 2009 in the book entitled: inter_multi_trans_actions: creative practice at the boundaries of architecture, design and art.

References


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