

NURTURING THE PERSONAL AND THE INTUITIVE IN THE DESIGN STUDIO

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Abstract

The design process, like all creative activities, involves both rational aspects and other less easily-explicable non-rational aspects, such as the roles of intuition, imagination and personal insight. There are therefore different ways of knowing and learning involved in teaching design.

In an academic context, such as that of the university, where the design educator is expected to defend his or her teaching methods with intellectual rigor and academic credibility, the normal reaction is to explain design as a problem-solving activity, with the specific cognitive techniques and thinking strategies used by the designer clarified as much as possible. Specific stages of design have been identified and these can be taught with relative confidence by design educators. The development of technical skills is also dealt with at length in most design schools, but the more “fuzzy” non-rational aspects are usually avoided. In my experience most design teachers are not sufficiently confident to explore the potential roles that these may play in the design process. Students are guided in terms of methods, skills and techniques, but are usually left to find their own way through the more ‘mystical’ lands of intuition, empathy and imagination.

This paper will attempt to address this rather unsatisfactory situation by arguing for a more balanced and holistic approach to design education, in which both the personal, irrational aspects of the designer and the more rational, objective aspects of the design process are taken into account and nurtured.

A definition of design as an interactive process will be presented at the outset of this paper, illustrating that it is a highly personal process, one in which both the “design problem” and the designer him/herself are changed by the process.

Design as a “creative encounter” between the self and the world will also be considered. The concept of a “creative mode of being” will be examined in the context of the design studio. In addition to this, the heuristic nature of the design process, which calls for an attitude of freedom, not-knowing and exploration, will be discussed. Eastern philosophical concepts will be presented and analysed in an effort to understand how the intangible and highly personal parts of the design process may be nurtured intelligently by the design educator.

Key Words: *design education, creative encounter, intuition, play, beginners’ mind*

Introduction

The design process, like other creative activities, is multi-faceted. Whether one is designing a piece of furniture, a logo or a building, the process involves both rational aspects and other less easily-explicable non-rational aspects, such as the roles of intuition, imagination and personal insight. There are therefore different ways of knowing and learning involved in teaching design.

In an academic context, such as that of the university, where rationality is valued above all else, this often presents difficulties for the design educator, who is expected to defend his or her teaching methods with intellectual rigor and academic credibility. No single prescribed teaching methodology exists in the field of design education, and there are no clear-cut criteria for evaluation. One could argue that, compared with the precision and clarity of thought in the sciences, design is a “messy” activity and the teaching of it may be seen as equally so.

One response to this perception is that design is presented largely as a problem-solving process, which provides a cognitive framework of analysis, synthesis and evaluation (Lawson 1990). But as designers we all know that this is only a fraction of what is really involved.

In the field of architecture a broad way of measuring the success of a design is by considering the 3 categories outlined by Vitruvius: *utilitas*, *firmitas* and *venustas* (Evers 2006:12). *Utilitas* refers to function, *firmitas* to structure and *venustas* to that elusive quality inherent in all good design, whatever the field, which is "delight". This latter characteristic is this intangible and highly personal contribution to the design process, and when it is present in a design, it is unmistakable. Unfortunately though, it often appears to be lacking.

Since the products of all design must inevitably be evaluated comparatively, the fear of failure often results in students settling for 'safe' solutions, rather than imaginative, fresh ones. They typically resort to tricks, techniques and imagery that have worked for other designers in the past (McNiff 1998 and London 1989). Predictable, formulaic responses are the result, with designs often lacking a personal, delightful quality. Instead they are merely poor imitations of the fashions of the day as seen in the glossy magazines. This perception is based on my personal experience of nearly 20 years as a design educator, external examiner and visiting lecturer at a number of architecture schools in the country. It forms the basis of research I am currently engaged in, which aims to investigate the role of personal worldview as a catalyst in nurturing intuitive thought in the creative process.

Of concern to me is that the personal intuitive response is not being given enough attention in the design studio, and this paper argues for a more balanced and holistic approach to design education, one which values the personal and irrational as well as what is usually thought of as the more objective and rational aspects of the design process.

Research in the fields of design methodology and cognitive psychology has demonstrated that design is a complex series of intellectual activities embracing both these polarities (Jones 1970 and Reitman 1965). Design as a problem-solving activity involves conscious and unconscious selection, and much of design and creativity research has been an attempt to explain how unconscious selection occurs, for example by identifying techniques such as association, mind-mapping and other cognitive processes. These techniques, which aim to make unconscious selectivity processes conscious, are derived from mathematics, statistics and other heuristic methods of inquiry, and are easily understood. They can therefore be taught with relative confidence by design educators.

But the greatest value of design education does not lie in the teaching of problem-solving methods. These are obviously useful skills to develop, and are relevant to almost every professional education, but problem-solving in a design context deals only with the well-defined aspects of the design problem, and these are often limited in their value when compared with the power of an experienced designer's intuitive knowledge. The teaching of problem-solving tends to emphasise what can be explained over what is actually experienced, and it must therefore be borne in mind that the full potential of a designer can never be realised by only developing this skill.

The other dimension of the design process is the contribution of personal creativity, often referred to as intuition, which is difficult to explain but which cannot be ignored. MacKinnon (1970) describes the multi-faceted nature of human creativity as follows: "Most persons live a sort of half-life, giving expression to only a very limited part of themselves, and realizing only a few of their potentialities. In contrast, the creative person has the courage to experience the opposites of his nature, and to attempt some reconciliation of them in an individuated expression of himself."

The opposites to which MacKinnon is referring are reason and emotion, cognitive versus affective, and objectivity as opposed to subjectivity. The subjective domain of human experience, including feelings, fantasies, sensations and memories, plays an undeniable role in the design process and it is my belief that the greatest value of a design education lies in the integration of these personal aspects with the more objective ones. In this way a wholeness may be achieved, so that by integrating reason and feeling, we can address design education in all its fullness and achieve deeper, more meaningful results with our students.

This paper will consider the factors involved which may have an influence on the often neglected personal aspects of designing. But first it will consider the nature of the design process itself, as a process that changes not only the environment, but also the designer.

Design as an interactive process

It is widely acknowledged that the design process is an iterative one, consisting of insights and evaluations that do not necessarily occur in a linear manner. Many analogies for it have been proposed. Zeisel (1981) uses the metaphor of a cyclically converging spiral to represent the process, in which each cycle in the spiral includes the three basic activities of imaging, presenting and testing. Imaging is the generation of mental representations, which may be pictures, analogies or abstract ideas that provide visions for a possible solution. Presenting involves the commitment of mental images and ideas to physical form, such as doodles, drawings, notes, or models. These then allow the designer to see them, manipulate them, and communicate them to others. Testing is the evaluation of the presented design ideas. The wide circle at the beginning of the converging spiral represents the "broad brush stroke" of the designer's initial attempts at responding to the design problem. The knowledge gained in each cycle of imaging, presenting and testing is then applied to the following stage, and the circle gradually tightens up until an acceptable design solution is found. The overall direction of the spiral is determined by the designer's ability to regularly "step outside" the process, in order to compare it to his or her emerging goals. The end point of the converging spiral is not absolute, but simply represents the decision of the designer to "live with potential and as yet unseen side effects of the problem."

This may give the impression that the design process is a tight, rationally controlled process, but as designers, we all know this not to be the case. The process also calls for more subjective input. For example, the process of imaging requires the designer to be able to draw from an inner store of memories, associations, fantasies and imaginings. It means being conscious of one's inner world of ideas and emotions. The process of presentation demands a commitment to one's own ideas and beliefs so that they can be transferred from imagination into reality, and this naturally calls for a sense of confidence in one's personal interpretation of the problem. Testing, or evaluation, requires an openness of mind that enables the designer to stand back from the work and look critically at it. It demands an intellectual curiosity and attitude of inquiry, as well as the habit of being extremely observant of the world around.

It is therefore clear that the subjective world is an important part of the design process. And there needs to be a clear understanding of when and where it can appropriately be applied. Peter Stringer, in his article *The Myths of Architectural Creativity* (1975) points out that both objective knowledge and subjective knowledge play legitimate roles in design education. Zeisel (1981:14) concurs by stating that designing is "a process that once started, feeds itself by both drawing on outside information and by generating information from within". There are therefore two sources of input, two kinds of testing and two kinds of knowledge. These should not be seen as separate, but the design process should rather be viewed as a process of interaction between the external objective world and the subjective inner world of the designer. The designer must therefore be clear in his or her mind regarding the exact nature and constraints of the problem, but on the other hand, must also explore his or her own world of goals, aspirations and intuitions. Out of this interaction a synthesis is discovered that becomes a highly personal response to the design problem. And as a result of this interaction, insights are discovered by the designer that become part of his or her own experience, and which ultimately contribute to his or her personal growth.

Design education therefore not only prepares the designer for their particular profession, but also provides him or her with an opportunity for "self-actualization", to use Abraham Maslow's term, "the becoming fully human, the development of the fullest height... that the particular individual can come to" (Maslow 1971).

It is in this context that I wish to draw attention to certain aspects of the design process which, in my opinion, are often under-valued and misunderstood. Firstly, I will address design as a creative encounter enabling self-actualisation, and secondly, state of mind and 'ways of being' will be considered as powerful tools which design teachers may use to foster open and receptive minds.

Design as a creative encounter

At the heart of the design process, during the “imaging” stage, is what Rollo May (1994) calls the creative encounter. As every designer will recognize, the creative encounter is only an instant within a long sequence of experiences. The design process involves a complex range of cognitive and motivational processes, as well as emotional processes, that are involved in “perceiving, remembering, imagining, appreciating, thinking, planning, deciding and the like” (MacKinnon,1970:21). This complexity is not only tolerated but normally welcomed by the creative person, and it is ultimately experience and intuition that enable the designer to make sense of it all and come up with a strong, unified and appropriate vision.

The creative encounter, according to May, is an “act of encounter” between two poles, which he identifies as the self and the “world-waiting-to-be”. He quotes Archibald McLeish, in his book *Poetry and Experience* (1961:8) who uses the more universal terms of Being and Non-Being as the two polar elements of the creative encounter. McLeish in turn quotes a Chinese poet: “We struggle with Non-Being to force it to yield Being. We knock upon silence for an answering music.” What this means is that the Being, which is the manifestation of creativity or the creative product, ie. a poem, building or piece of music, does not come from the creator or designer, but rather through him. It involves the creator (designer) allowing himself to experience reality directly. The vision of the artist is therefore to be an intermediary between the subject (the person) and the objective world (the world-waiting-to-be). And essential to this role is an attitude of receptivity. This is not to be confused with passivity, but rather the creator / designer holding him- or herself alive and open to hearing and feeling as far as possible. It requires a suspension of judgment, an openness and a willingness to be the vehicle for whatever vision or idea may emerge. It is the opposite of what is referred to as willpower.

It is essentially a neutralisation of personal will or intent, in a sense “going with the flow”, similar to the Taoist idea of yielding and moving through situations like water, never resisting but always bending and adapting. The word Tao literally means a way, path, or route to take. It is also seen as an active, living principle that governs all of nature, including the heart and mind of human beings (Willis 1987:18). It implies that spirit has flowing energy, once quite an unusual idea in western terms, but one which is more readily being accepted, as the world is full of its evidence. Tao works in constant cycles of transformation and change. The laws of cause and effect, and the cycles of nature are among its most obvious examples.

The physical manifestation of Tao is *ch'i* or “life-breath”, as Chuang Tzu calls it (Willis 1987:49). *Ch'i* was identified by the Taoists as being the underlying or continuous essence of all reality, and in the quantum field theory of physics, this very same property is found to make up physical reality and is demonstrated as a real physical phenomenon.”There is actual evidence in physics to prove the existence of a universal unity in reality, or rather the unity of the physical or creative energy of spirit” (Willis 1987:58).

Ch'i is said to move freely and continuously in an uninterrupted current, yet it is also totally natural and effortless. *Ch'i* is never static in its action, even though it is in its essence incomparably still, undifferentiated and all-encompassing. “This is not contradiction, but integration”, according to Taoist philosophy (Willis 1987:58).

Amit Goswami (1996), a physicist, has explored the relationship between quantum field theory and the creative process in several of his papers and books. He uses theories of quantum physics as a way of understanding the notion of openness to all possibility during the creative encounter. In contrast to the act of intention, which is a narrowing or lessening of possibilities through observation and attention, Goswami sees the creative state of mind as one in which all possibilities exist simultaneously and fluidly in a field of energy.

This fluid world of potential and possibility is the world of the design studio, in which we ideally become clear and unique conduits for all that is possible. It is a way of being, which is more than a state of mind, and one which I believe can be nurtured by the design educator. Buddhist philosophers refer to it as Beginner’s Mind, a state of curiosity, alertness, awareness, and openness to all possibility. According to Shunryu Suzuki (1982:13) “the mind of the beginner is empty, free of the habits of the expert, ready to accept, to doubt, and open to all possibilities. It is the kind of mind which can see things as they are,” It is an attitude of not-knowing, which is soft, flexible and fresh, and is accompanied by a sense of freedom conducive to mental and emotional exploration.

One of the effects of adopting Beginner's Mind is the experience that Maslow (1971:62) refers to as a "peak experience" in life, a "transcendence of self... a oneness where there was a twoness, an integration of some sort of the self with the non-self". It is an experience of timelessness, in which one "loses his past and his future" and lives only in the moment. Mihaly Csikszentmihalyi (1990) calls this the experience of "flow", in which one loses all sense of time and space, accompanied by a feeling of union with the environment, whether it is a mountain one has to climb, or a design problem to solve.

This creative encounter is surely one of the most rewarding aspects of the design process, and ways in which we as design educators can nurture it, deserve attention. I propose that by encouraging our students to adopt an attitude of openness and receptivity as opposed to knowing, and by giving them permission to play as a prelude to problem-solving, we may extend the creative potential of the design process and the design student.

A creative way of being

Maslow's concept of "intrinsic learning", which is learning for its own sake, as opposed to learning in response to the expectations of others – our peers, society or parents, is important in this regard. Intrinsic learning occurs when we are internally motivated by our desire to better understand ourselves and the world around us and inside us, and it is only in this context that we can truly explore, play and discover. Maslow (1971:57) describes self-actualizing people as those who experience a sense of playfulness in their work. By losing themselves in the process, they allow work and play to become one and the same thing, but most importantly, they value their work for the fun and enjoyment it gives them.

Play has long been recognized as an important factor in creative activity (Runco 2007) and design at its most inventive is also at its most playful. It occurs at the boundary between the inner world of the self and the outer world of reality, and this in-between world has been described by psychiatrist D.Winnicott (1971) as a "third area of human living", an area essential to human growth. He says "on the basis of playing... we experience life in the... exciting interweave of subjectivity and objective observation" (Winnicott 1971:64). Huizinga (1950) extends this by saying that "to be a sound culture-creating force this play-element must be pure... It must not be a false seeming, a masking of political purposes behind the illusion of genuine play-forms. True play knows no propaganda; its aim is in itself, and its familiar spirit is happy inspiration"

This can only occur when one is in the right state of mind. Kokot and Colman (1997) argue for the existence of what they call a 'creative mode of being' and compare the attitudes of highly creative children with those of creative yet socialized adults, who often express a frustration and sadness at having lost something of their natural or original nature, their Beginner's Minds. The authors claim that the continued processes of social conditioning in the Western world result in the original or essential self being left behind and ultimately forgotten, with the development of a false sense of self that inhibits creativity from early childhood. Rather than seeing creativity as an additional aspect of the human personality, which can be developed by specific programs, they claim that creativity is a way of being, and that creative individuals are those who live closer to this "essence of being" than others. They describe two states of being: the essential and the conventional.

The essential mode of being is based on the experience of 'being' and is non-separating or whole, open, intuitive, spontaneous and receptive. It lives in the moment, and is a non-competitive, flexible and direct way of knowing the world. In contrast, the conventional mode of being is a state of 'becoming'. It is separative or fragmentary, defensive, factual, calculative and based on assumptions. It lives for past or future and is competitive, inflexible and an indirect way of knowing the world.

In essence what they are saying is that the socially-conditioned creative person typically approaches the creative encounter from the mental mindset of fear and self-protection rather than one of curiosity and wonder. So, the question is how do we, as design educators, counter this in the design studio, where we seek to bring out the freshest and most creative energy from every individual?

Conclusion

Perhaps the most important pre-condition for encouraging a state of creative surrender and openness to all possibility is the establishment of an atmosphere of trust and sincerity in the studio. By creating conditions in which our students feel confident and safe enough to enter into the "creative mode of

being”, they will feel free to explore and experiment without fear of embarrassment. Knowing that they are allowed to, in fact, are almost expected to make mistakes, is very liberating for any student of the creative arts. It eliminates a fear of failure and allows them to take chances in an exploratory and playful manner, all of which are important for a true creative encounter.

Benjamin Zander (Zander & Zander 2000:27), the world renowned conductor and music educator, has developed a clever practice in the music studio for creating just such an atmosphere. He calls it “Giving the student an A”. At the beginning of each new term, he announces that each student in the class will get an A-grade for the course, with only one requirement: that during the first two weeks of term they must write a letter dated six months later, ie. at the end of that term when they will be evaluated, addressed to him, outlining exactly what will have happened to them during that period which makes them an A-grade student. Phrases such as ‘I hope’ or ‘I intend’ are not allowed to appear in these letters. Instead Zander is interested in the person each student will have become in six months time. They must describe as clearly as possible the attitudes, feelings and worldview of that person (themselves), who will have done all he or she wished to do. The conditions for becoming all that they want to be are therefore brought to the fore as the students are encouraged to visualize their full potential, rather than focus on their possible weaknesses. Zander explains that this practice aligns the educator with the student rather than aligning with certain standards set against the student. In this way a sense of self-confidence and mutual trust is built up, as educator and student work together toward a common goal. Zander’s success in music education is clearly evident in some of the DVDs showing him at work (Zander 2006), in which one can experience the confidence and joy of his students firsthand.

I am not suggesting that all design educators should adopt this specific practice, but what emerges here is that it is possible for us to create conditions in which the students feel comfortable and confident to explore their so-called opposites, their rational and emotional aspects, and in doing so, bring about richer and more personal design solutions. By working with them toward a common goal, we allow them to open themselves up to all possibilities, because if they fail during the process, it does not matter. By leaving evaluation to as late a stage in the design process as possible we give them the freedom to explore and play.

And it is only by establishing a sense of personal self-confidence and psychological safety that the students can return to their original, whole selves. By allowing themselves to play, they are encouraged to enjoy the process, with no immediate concern for any specific outcome. A sense of unity with the so-called design problem is achieved, rather than the sense of facing an obstacle. Maslow’s “oneness where there was a two-ness” (Maslow 1971:62) is realised, a state in which the student of any creative discipline experiences the creative act as part of a larger universal process, in contrast to the more stressful western notion of creativity in which the individual is central to the process, and is either successful or unsuccessful.

If we therefore accept that true nurturing of creativity in design education requires the embracing of opposites, the rational and the emotional, it is essential that we allow our students adequate opportunity to enter into a ‘creative mode of being’, so that they can explore their inner, most personal responses to design challenges without fear of criticism. This could take many forms, only one of which is the personal journal, in which they can safely explore their ideas using words, images, collage, drawings and other media. Once a strong and personal vision has been conceived, a dialogue can then occur in the studio, in order to address the other requirements of design, such as functionality and robustness, with confidence.

Personal and individual contact between studio staff and students is therefore an essential factor in order to recognize potential, stimulate discussion and enable them to develop their ideas into successful design products. In my experience this is often a problem, as in our studios contact time is short, student numbers are large and studios are under-staffed. The ratio of staff to students is a crucial consideration, particularly in more complex design disciplines such as architecture.

And how can we place less emphasis on success and more on process? Perhaps one way could be to give our students more projects during the year than they need to submit for evaluation at the final portfolio exam. Some projects could be used as opportunities for growth and discovery, rather than merely a guaranteed and mediocre pass.

Lastly and most importantly, I propose that our own state of mind and attitude plays an important and unacknowledged role in the design studio. The challenge of teaching design is to “encourage our charges by ourselves being those creative persons with whom they can identify. Thus we each would become an educator in the original meaning of the word – one who brings forth or educes from another that which exists as a potentiality within him, through being an example of that which is desired” (MacKinnon 1970:32).

Are we as design teachers truly brave enough to adopt a Beginners Mind? Are we prepared to enter into a ‘creative mode of being’ with our students so that we can gain their trust and increase their self-confidence? Or do we feel we need to “know” all the answers? It is often easier to (subtly) impose our own ideas on students, so that we can achieve safer solutions and higher pass rates, but in doing so we rob them of the possibility of personal growth. For there are no fixed answers in this wonderful world of design, there are only opportunities. As design educators we are in the position of being able to inspire our students to reach their full potential, by working with them in an open and playful manner. In doing so, we enable them and ourselves to become more effective conduits of creative possibility, so that we may contribute to our chosen field of design in a personal and meaningful way.

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Short Biography

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