Towards a Redefinition of Design

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For many reasons the role of design in contemporary society continues to be misunderstood. On one hand, the word has such general and vague usage in many discourses that it verges on meaninglessness, and, on the other, design is often understood as being synonymous with decoration or appearance, as a 'look.' In North America it is typical to either consider design as something superfluous added to the basic solution of a problem, or to glorify it as status symbol. We are surrounded by design, whether 'designed' or not, by devaluing it we undermine the vital role of designers in the contemporary world. In the following I would like to aim at a broad working definition of design as an activity, regardless of discipline, relevant to the Poshnodern condition. I am not striving for a fixed definition of the term, but intend to explore the deeper meanings of the word in order to better understand design as a discipline and to have a useful definition that is comprehensible to those not actively engaged in design themselves.

When one looks for a contemporary definition of design one quickly discovers this is not an easy task; even many texts devoted to the subject intentionally avoid succinct definitions.' Of the definitions of design available, the following selection present a range of possibilities:

> [Design] has gained the composite meaning of aim plus thing aimed at. It has come to stand for a process - from the original conception through the plan and the manufacture to the finished object.[2]

> Design is the conscious and intuitive effort to impose meaningful order.[3]

> Design is the area of human experience, skill and knowledge that reflects man's concern with the appreciation and adaptation of his surroundings in the light of his material and spiritual needs. In particular, it relates with configuration, composition, meaning, value and purpose in man-made phenomena.[4]

While each of these definitions is workable, none of them seems to capture the entire scope of what the word implies. One of the most comprehensive definitions of design is to be found in the complete 1989 edition of *The Oxford English Dictionary*. The English word **design** has its origins in Latin and can be used as both a noun and as a verb as interrelated terms. I am concerned here with defining design as an activity and so will rely mainly on the three major meanings associated with the verb. By briefly examining each of these, it should be possible to synthesize a broad definition.

The first aspect of design is defined as follows:

> **I.** [after L. *designare,* F. *désigner*] To mark out, nominate, appoint, **DESIGNATE**.[5]

The act of designation refers to assigning, indicating, and specifying. This somewhat elusive definition comes from the Latin words *signare* and *signum,* both of which mean to mark or to signify. It implies the act of giving something to another or to the world: naming, assigning a fate, having a distinctive mark, appointing to an office. This aspect of design tends to be an older meaning of the word as is conveyed in a line written by John Donne in 1610: "The Sonne, which designes priesthod, is so much bigger than the Moon."[6] Here Donne uses the word to indicate or symbolize that the sun signifies or means priesthood. Design is an aiming at or pointing towards something else, the potential for meaning.

The second part of the definition is the most conventional:

> **II.** [allied to DESIGN *sb.* I, obs. F. *desseigner*] To **plan,** purpose, intend.[7]

This refers to design as the intentional act of planning. To quote a sub-definition in the dictionary it is to "form a plan or scheme of; to conceive and arrange in the mind; to originate mentally, plan out, contrive."[8] This is the inventive aspect of design that involves thinking, the intentional arranging of something to fulfil a purpose. The word 'purpose' denotes that design is useful, that it accommodates needs.

The third part of the definition is essential and potentially controversial, since it seems to be the aspect of design that is missing in many definitions:

> **III.** [allied to DESIGN *sb.* II, It. *disegnare,* F. *dessiner*] To sketch, delineate, **draw;** to fashion artistically.[9]

This is design as the act of drawing as is conveyed in a

passage from John Evelyn's diary of 1644; "the prospect was so tempting that I designed it with my crayon."[10] In this third part of the definition we find further elaboration that allows us to come closer to a working definition, a direct reference to execution, and the idea that design is to "make the preliminary sketch of (a work of art, a picture, statue, ornamental fabric, etc.); to make the plans and drawings necessary for the construction of (a building, ship, machine, etc.), which the workmen have to follow."[11] In the third part we also find reference to the notion of design as a decorative activity, as the adornment of an object or structure.

If the three definitions of the verb design described in the *Oxford English Dictionary* are synthesized into a working definition we arrive at the following:

> Design is the act of conceiving or contriving in the mind a purposeful plan, scheme or project, conveyed through drawing for subsequent execution (to be carried into effect by action, to be designated).

This definition suggests that design is a sequential activity moving from intellectual conception, through drawing to realization. The several definitions presented above are Modern definitions of design that have their origins in classical antiquity and, more specifically, during the Renaissance. Vitruvius's *Ten Books of Architecture,* the only treatise on architecture to survive from antiquity, had a profound influence on the Renaissance in Europe and the emergence of modem design disciplines. Vitruvius's edict that a good architect (designer) has to have the ability to combine theory (thinking - mind) and practice (making - hand) corresponds to the basic aspects of design suggested in the *OED* definitions. Vitruvius writes that those "who have aimed at acquiring manual skill without scholarship have never been able to reach a position of authority to correspond to their pains, while those who relied only upon theories and scholarship were obviously hunting the shadow, not the substance."[12] Vitruvius also states that design work should be evaluated against three basic properties: *utilitas* (usefulness), *firmitas* (firmness, strength, endurance), and *venustas* (beauty, delight)." In all the definitions we have touched upon above, it can be determined that design in some way combines thinking or conception, and making or execution. Here lies the essence, and the problematic, of design.

Richard Kearney describes in *The Wake of Imagination* the evolving nature of human production and creation, which correspond to the Premodern, the Modem, and the Postmodern periods in Western history.[14] Premodern cultures (e.g. indigenous, ancient Greek and medieval cultures) exemplify the role of the craftsman or *demiurge,* where making is mimetic, imitative of the making by the Creator, and is inextricably linked with a conception of the cosmos. Works made in Premodern cultures are often symbolic and can contribute to celebratory rituals. These traditions emphasize craft handiwork and continuity by maintaining and gradually transforming established models over long periods of time. This way of making and working does not distinguish between theory and practice, or between thinking and making, and there is no strong emphasis placed on authorship or originality. This unity and appropriateness to human production is captured in Adolf Loos's description of an indigenous mountain village:

> The mountains and the clouds are reflected in the lake, as are the houses, farms and chapels. They stand as if they had never been built by human hands. They look as though they have come from God's own workshop, just like the mountains and the trees, the clouds and the blue sky.[15]

The Modem or humanist period, initiated during the Renaissance, shifted emphasis from a theocentric to an anthropocentric model, that of the inventor. This is evident in Modem figures such as the scientific experimenter (e.g. Galileo), the conquering explorer (e.g. Christopher Columbus) and the Romantic ideal of the artist (e.g. Vincent van Gogh). The possibility for meaning transfers from transcendent connections with a cosmos, to the immanent genius of a creating individual producing original works. Unlike previous periods the Renaissance highly valued authorship and invention, it is here we see the emergence of design and the central role of drawing. During the Renaissance tremendous emphasis was placed on *disegno* as the ability to draw, construct perspectives, understand proportion and geometry; skill in drawing was required in order to be a painter, architect, or designer of fortifications. For instance, Leonardo da Vinci used his remarkable drawing skills to both probe the world around him and invent new things. However, drawing can act as a mediator or as a hindrance between the inventive mind and the executed work. The Renaissance emphasis on drawing prefigured the development and systematization of practice and the emergence of the various design professions. It also enabled a split to gradually develop between thinking (theory) and execution (practice).[16]

Finally, Keamey uses the figure of the *bricoleur* to represent the Postmodem era. The work of this figure is no longer mimetic or productive, but is instead parodic, "someone who plays around with fragments of meaning which he himself has not created....[who] becomes a 'player' in a game of signs, an 'operator' in an electronic media network."[17] As is suggested by Kearney's description, Postmodernism alters the working techniques of the designer, radically questions the importance of authorship, and challenges the role of design in contemporary culture.

Postmodemity, the period initiated by the electronic and media revolution of the 1950s and 1960s, has tendencies that are both liberating and destructive. The Age of the Hyperreal has brought with it a rejection of traditional "meta-narratives," hierarchies, institutions and methods. Postmodernism implies many things: from hybridization to historicism, from empowerment to nihilism. The crisis that confronts the contemporary world is evident every time one turns on the news to 'participate' in the events of the global village. The following quotation from George Steiner contains both a

critique of our condition and a possible attitude for the redefinition of design in the contemporary world:

> Creation should be custody; a human construction should be the elicitation and housing of the great springs of being. But we know reality is otherwise. Technology has ravaged the earth and degraded natural forms to mere utility. Man has labored and thought not with but against the grain of things, he has not given lodging to the forces and creatures of the natural world but made them homeless.[18]

Here, I propose to revisit the three basic aspects of the definition as presented in the *Oxford English Dictionary* and to expand upon them, in order to arrive at a modified definition of design, one that attempts to more closely reflect the Postmodern world. The various definitions of design presented above do not adequately address a number of issues, such as authorship, making, use and meaning.

The first aspect of design is the act of designating or marking out. It is a primary one, and has deep existential implications. Marking out or ordering the world contributes to making the world comprehensible and habitable. There has always existed the necessity for humankind to configure the world both metaphysically (with cosmologies, stories, institutions and names), and materially, through the making of implements, objects, shelter, texts and art. Where this was once a stable endeavour it has now been transformed into one that is constantly changing. We can say that design is something which is aimed at, that it is a meaningful act, but, that the location of that meaning is not constant in the contemporary world. Meaning is continually open to interpretation and reinterpretation. Design is an ongoing questioning (hermeneutics) of the world and our place in that world, this is the most difficult aspect of design. As Steiner indicates, human creation should be a custody of the world, rather than the destruction of the world.

The second definition of design as planning, of arrangement contrived in the mind carried forward into a constructed work, presents a number of problems. There is the implication of a Cartesian divorcement from the world and of a thinking, disembodied and all knowing mind imposing order on the world. While it requires a thoughtful outlook on the world, design is an action that also engages the world. The arranging, contriving or inventing of solutions is not necessarily the imposition of a solution created by an individual genius. For instance, collaborative projects and design efforts that evolve over a lengthy period of time challenge Modernist notions of authorship.

Whereas a Modern definition of design places emphasis on contrivance, individual invention and originality, these have been radically questioned in recent years. The quest for originality that underlies modern art and science has been the locus for meaning in the Modem world. This notion of creativity as invention emerged from the development of science and ideas of progress during the Renaissance and Baroque periods. The discovery and conquering of new territories the opening up of new intellectual, political and geographical frontiers - developed as the *raison d'être* of Western civilization.

Design is a purposeful or intentional activity, that aims at something or some end, and is useful. If design contributes to human existence, to making the world comprehensible and habitable, then surely it fulfils needs and purposes. Elaine Scany describes human artifacts as projections of the human body. Products of creation or design respond to human needs and also give back to us in a reciprocal arrangement through their use, meaning is situated between thinking and materiality. The act of designing and the products of design are intertwined, what she has described as "the making sentient of the external world."[19] Scany writes that an artifact "is itself only a midpoint in a total action: the act of human creating includes both the creating of the object and the object's recreating of the human being, and it is only because of the second that the first is undertaken: that "recreating" action is accomplished by the human makers and must be included in any account of the phenomenon of making."[20] Rather than imposing order, design can be a process that both gives to and draws order out of a context. To overcome some of the shortcomings of the definitions of design presented above, the reciprocal tasks of thinking and execution must be unified in order to fully engage the world. This suggests a definition of making that is similar to the craft traditions of Premodern or indigenous cultures.

Since the Renaissance drawing has functioned as the language of design, often supplemented with model making. However, rather than functioning as an intermediary stage between thought and execution, drawings in most cases have acted as representations of that conceived mentally in the mind, divorcing thinking from execution. Instead drawing and other forms of making, such as model making, should take on the characteristics of craft as an integral part of the design process.

In *The Language of Drawing*, Edward Hill defines drawing as an activity that "turns the creative mind to expose its workings. Drawing discloses the heart of visual thought, coalesces spirit and perception, conjures imagination; drawing is an act of mediation...."[21] Hill stresses that drawing, like design, is a vital mediator between the mind and the world, it is a fluid reciprocal process between thinking, imagining and making as the artist strives to make marks on a surface or the designer searches for a project. Drawing is a process of interpretation and a striving for order; Hill continues:

> Drawing diagrams experience. It is a transposition and solidification of the mind's perceptions. From this we see drawing not simply as gesture, but as mediator, as a visual thought process which enables the artist [designer] to transform into an ordered consequence what he perceives in common (or visionary) experience. For the artist, drawing is actually a form of experiencing, a way of measuring the proportions of existence....Drawing, then, is seeing.[22]

Rather than being a representation of ideas, drawing should be making. Drawing is not the exclusive means for exploring design as a wide range of tools and techniques can contribute to design. For instance, along with the conventions of drawing, modelling and actual construction, computer technology is now increasingly capable of facilitating drawing and modelling. The attitude expressed by Hill suggests that making (drawing, modelling, constructing, computer design, etc.) is essential to understanding the world, and, consequently, to maintaining the world for continued human existence. Through making the designer can combine intuition, imagination, analysis and an embodied understanding of the world. We find here an affinity with craft traditions and the possibility to reunite theory and practice. Some designers have converted this attitude into practice and allow the careful execution of artifacts (drawings, models, etc.) to help to see and to reveal the design project through a journey of exploration.[23] The designer does not create representations, even if they will subsequently be used for guiding construction, but instead artifacts or works of design.

Design will continue to be necessary for human survival in the world.[24] The model of the *bricoleur* suggested by Kearney is admirably suited to a reworking of the definition of design. It suggests that work can evolve over time, that it can be a hybrid assemblage of existing material and that design can be a fluid ongoing activity. Authorship is no longer the action of an individual genius, productions can be collaborative efforts. This model of design shuns methodologies, instead it draws upon invention and process. By taking the themes alluded to above, a redefined working definition of design would likely read as follows:

> Design is an activity that responds to human needs, maintains the world and leads to an executable work, developed through a reciprocal action of thinking and making. It is an activity that may be individual or collaborative, spontaneous or evolutionary, original or borrowed that results in the creation of meaningful (continually reinterpreted) and material order.

This effort to find a Postmodern redefinition of design suggests a strategy that embraces a difficult course by marrying the craft and preserving aspects of Premodern cultures with the inventive traditions of the Modem era. The redefinition of design in contemporary terms has strong implications for the education of designers and for the practice of design.

NOTES

[1] A number of texts have been consulted in search of a definition of design, including the following: G. Broadbent, *Design in Architecture: Architecture and the Human Sciences* (London: David Fulton Pub., 1988); P.J. Grillo, *What is Design?* (Chicago, Paul Theobald and Co., 1960); B. Lawson, *How Designers Think* (London, The Architectural Press Ltd., 1980); J.F. Pile, *Design: Purpose, Form and Meaning* (Amherst: The University of Massachusetts Press, 1979); D. Pye, *The Nature and Aethestics of Design* (London: The Herbert Press, 1978); P.G. Rowe, *Design Thinking* (Cambridge, Mass.: The MIT Press, 1987). I would like to thank my colleagues Dr. Stuart Walker and Catherine Hamel for their insights and comments.

[2] A. Bertram, *Design* (Harmondsworth: Penguin Books Ltd., 1938), p.12.

[3] V. Papanek, *Design for the Real World* (London: Thames and Hudson, 1984), p.4.

[4] Professor L.B. Archer quoted in K. Baynes, *About Design* (London: Design Council Publications, 1976), p.28.

[5] "Design," *The Oxford English Dictionary, Volume IV* (Oxford: Clarendon Press, 1989), p.519.

[6] Ibid., p.519.

[7] Ibid., p.520.

[8] ibid., p.520.

[9] Ibid., p.520.

[10] Ibid., p.520.

[11] Ibid., p.520.

[12] Vitruvius, *The Ten Books of Architecture* (New York: Dover, 1960), p.5.

[13] The definition that is synthesized from the *Oxford English Dictionary* reflects the Modem era from whence it comes and is very similar to the definition of design presented in the famous 1911 edition of the *Encyclopedia Britannica:* "...in the arts, a drawing, more especially when made as a guide for the execution of work; that side of drawing which deals with arrangement rather than representation; and generally, by analogy, a deliberate planning, scheming or purpose. Modem use has tended to associate design with the word "original" in the sense of new or abnormal. The end of design, however, is properly utility, fitness and delight. If a discovery, it should be a discovery of what seems inevitable, an inspiration arising from the conditions, and parallel to invention in the sciences" in *The Encyclopedia Britannica, Volume VIII* (New York: The Encyclopedia Britannica Company, 1910), p.95. Here we see reference to the three Vitruvian requirements of good design, and a somewhat derogatory reference to design as producing "original" works, which seems to suggest a Postmodern scepticism.

[14] R. Kearney, *The Wake of the Imagination* (Minneapolis: University of Minnesota Press, 1988), pp. 12-13.

[15] A. Loos, "Architecture," in Y. Safran and W. Wang, eds., *The Architecture of Adolf Loos* (London: The Arts Council, 1985), p. 104.

[16] See C. Wilkinson, "The New Professionalism in the Renaissance," in S. Kostof, ed., *The Architect: Chapters in the History of the Profession* (New York: Oxford University Press, 1977) for a discussion of the emergence of the architecture profession. See also A. Perez-Gomez, "Architecture as Drawing," *Journal of Architecturai Education,"* Vol. 36, No.2, (Winter 1982).

[17] Kearney, *The Wake of the Imagination,* p.13.

[18] G. Steiner, *Martin Heidegger* (Chicago: University of Chicago Press, 1978), p.136.

[19] E. Scarry, *The Body in Pain: The Making of the World* (New York: Oxford University Press, 1985), p. 281. The final chapter discusses making and the structure of artifacts.

[20] Ibid., p.310.

[21] E. Hill, *The Language of Drawing* (Englewood Cliffs: Prentice-Hall, 1966), p.1. This mediatory aspect of drawing is also described in M. Merleau-Ponty, "Eye and Mind," in J.M. Edie, ed, *The Primacy of Perception* (Evanston, Northwestern University Press, 1964).

[22] Ibid., p.8.

[23] See for instance the work of Daniel Libeskind, Peter Wilson and Peter Salter. See also B. Nicholson, *Appliance House* (Cambridge, Mass.: The MIT Press, 1990).

[24] See R. Neutra, *Survival Through Design* (New York: Oxford University Press, 1954). In this text Neutra defines design as "the act of putting constructs in an order, or disorder, [it] seems to be human activity.