

To Design. Science and Art.

What is Design?

Consulting a dictionary on graphic design reveals that it is the "art of combining pictures, words, and decoration in the production of books, magazines etc."¹ Even though this represents aspects of graphic design I don't believe that it gets to its core essence. What is it then that defines Design in general and differentiates it from Art? The following two sentences illustrate the problematic: A designer might paint letter forms with brush and ink, that will be screen printed for an exhibition on Typography. On the other hand a painter might design a graphic composition for a mural in a cooperate headquarters. These examples show that many of the words relating to art and design can be used in either context and that production technique, materials, format, audience, intention and value are unspecific to each. In other words they don't reveal anything that is particular to either activity. This vagueness in language is also apparent when talking about graphic design as a profession. Sometimes it is referred to as Communication Design, Visual Communication or still as Commercial Art. Yet a sculptor, a photographer or any artist is a visual communicator. This then would make a graphic designer an artist, which one could argue for, but even if an artist makes graphical designs one would not refer to him or her as designer. Although this might seem like a funny play of words, I am convinced that this inconsistency creates a confusion in the role and relationship of each discipline.

Looking at the definition of art for clarity one often finds a very superficial understanding that doesn't reach beyond beauty, appeal and decoration. When aesthetics is mentioned, it starts to get interesting. Kant thought that "judgments of beauty in terms of aesthetics were sensory, emotional and intellectual all at once."² Viktor Papanek in *Design for the Real World* points out

1. Longman Dictionary of Contemporary English

though that "only a small part of our responsibility lies in the area of aesthetics." This seems to underline that Art may be "of more than ordinary significance." Or as elsewhere mentioned as "skill in conducting any human activity."³ Further the word Art is used in an extremely broad context. It is completely appropriate to talk about the art of fencing, state-of-the-art, the art of war, the art of dancing or the art of building. Even though these are all human activities, a more conclusive definition in relation to design seems necessary.

Definitions

In trying to define the relationship I placed Art and Design at opposite ends of a spectrum and tried assigning words to each discipline. This naive approach didn't work. Many words fit into both categories and this separation didn't define either accurately.

Art	Design
Function follows Form, Play, Woman, Love, Expressive, Risk, Random, Luck, Me, Mine, Question, Experimental, Fluent, philosophy, contain, truth, lie, joke, honest, daring, borderline, new, complex, simple, hard, belief, religion, time	Form follows Function, Work, Man, Sex, Impression, Safe, Organized, Foreseen, you, yours, inform, scientific, systematic, distilled, survival of the fittest, natural selection, explain, lie, truth, temptation, old, simplification, soft, conviction, money, science, pressure

2. <http://en.wikipedia.org/wiki/Aesthetics>

3. art. (n.d.). *Dictionary.com Unabridged (v 1.1)*. Retrieved November 11, 2008, from Dictionary.com website: <http://dictionary.reference.com/browse/art>

Another conception is that designers solve other people's problems and artists create their own problems. Kees Dorst explains it in the following way:

"In design, your goals are partly determined by others, the stakeholders, because the things you create must fulfill some practical purpose in the wider world. In art, this is not the case. An artist determines his or her own goals. They have this freedom because with their creations, artists, do not aim for any practical application, but strive to influence the feeling or thinking of an audience."⁴

Design though isn't solely about solving problems, it also tries to influence feelings or the thinking of an audience. Think advertising. Additionally designers also create their own set of problems, parameters, goals and projects as much as artists work on commission. Each individual's efforts and products don't seem that different from each other. One only needs to visit the design wing of the MoMa where printed matter and three dimensional objects are displayed in the same way paintings and sculptures are. Another place of close encounter is the Museum shop where art and design, but here in form of reproductions, are sold side by side. The commercial aspect of the two is an interesting and difficult subject as it not only deals with the mode of distribution but also with their value. Alexander Rodchenko thought that "Fine Art [was] for the upper class [and] design for the people." A clear differentiation, even though I think out of place. One only needs to think of designer furniture or designer clothing. It is interesting in this context to think of the Arts and Craft Movement which wanted to make sophisticated, handmade objects available to the masses but wasn't able to. Even though Graphic Design was called Commercial Art I don't think it is any more commercial than the so called Fine Art⁵. The

4. Dorst, Kees. Understanding Design. Page 25

5. The term Fine Art is also great contribution to the linguistic confusion. Especially since it implies the existence of a not-so-fine-art. I don't think though that that is possible because any expression and creative effort as naive or simple as it might be can be considered Art.

Dutch design group Experimental Jetset doesn't directly talk about commerce in their following statement but touch on the infrastructure that underlies it:

"We don't see graphic design as art, but we do see art as a form of design. Although it's hard to define art, its not difficult to define its context: there exists a clear infrastructure of exhibition spaces, galleries, museums, art magazines, art publishers, art history, art theory, etc. Art can be seen as the production of objects, concepts and activities intended to function within this specific infrastructure. in our view, this production can certainly be seen as a specific form of design."⁶

Ellen Lupton poignantly adds to this by saying that everyone is in a comercial sphere, either bying or making things for sale. Designers though were "out of the closet."⁷ An interesting example on the exchange of money for effort is a magazine called *Art Prostitute* that was started and is still being designed and published by two graphic designers. This is not to say that Art is made sole to be sold, but rather that it is an inescapable fact. The same is true for design.I think it is more about being compensated for one's time and energy.

Turning our attention to the Metropolitan Museum of Art we notices that many of the items on display were never intended to be exhibited as Art but rather as useful objects. The question to use and purpose comes into play here. One could understand Art as being less pragmatic and design as tools that have a direct influence on our physical world. Michael Brady explains it very eloquently: "Design is meant to be looked away from and art to be looked at and into. Design graces our lives with the aesthetic presentation of useful and beneficial things, and art graces us with representations of things to ponder and perceive."⁸ Yet I disagree somewhat with this idea

6. Coles, Alex. Design and Art. Page 12

7. Ellen Lupton at a Lecture at the Cooper Union on September 23rd, 2008

8. From *Art and Design*. http://www.unc.edu/~jbrady/Essays/Art_Design.html

since everything has its use, cultural or physical, either way they are equally valuable. For example an object that is pragmatically useless might have a conceptual benefit, if not in its context of creation then possibly outside of it. One could even understand the use of the purposeless to be just that. The emphasis here is on an experimental and creative⁹ basis, where there are no mistakes because even these have a benefit to them. Leaving the concept of use aside, age and rarity seem to be the crucial differentiation for the exhibits at the Metropolitan Museum. Many of the art objects there are the only surviving **artifacts**¹⁰ from a bygone age.

9. Creative is meant in terms of construction and fabrication. That is bringing objects or concepts together, in an innovative way, to create a new object or concept.

10. 1. any object made by human beings, esp. with a view to subsequent use.

2. a handmade object, as a tool, or the remains of one, as a shard of pottery, characteristic of an earlier time or cultural stage, esp. such an object found at an archaeological excavation.

3. any mass-produced, usually inexpensive object reflecting contemporary society or popular culture: artifacts of the pop rock generation.

4. a substance or structure not naturally present in the matter being observed but formed by artificial means, as during preparation of a microscope slide.

5. a spurious observation or result arising from preparatory or investigative procedures.

6. any feature that is not naturally present but is a product of an extrinsic agent, method, or the like: statistical artifacts that make the inflation rate seem greater than it is.

Also, artefact.

Origin:

1815–25; var. of artefact < L phrase arte factum (something) made with skill. See art, fact

"artifact." *Dictionary.com Unabridged (v 1.1)*. Random House, Inc. 28 Nov. 2008.

<Dictionary.com <http://dictionary.reference.com/browse/artifact>>.

They can embody the spirit and belief system of that time. In other words they express something unique. They've transformed from an item of use to a unique expression, from design to art.

If one sees Art as a form of expression then design can be understood as a process in terms of analysis and synthesis. This would mean that Artists use the design process as much as engineers do. At this point it might be interesting to include engineers, that is the sciences, into the discussion. Especially as the humanities (including law and philosophy), the social and natural sciences include a high degree of creativeness, both conceptual and physical. A current definition calls science "a branch of knowledge or study dealing with a body of facts or truths systematically arranged and showing the operation of general laws" and as "systematic knowledge of the physical or material world gained through observation and experimentation."¹¹

Science and Art

One could understand Design at the center of a spectrum that is made up of Science at one end and Art at the other. Science covers the observation and documentation of our world, whereas Art is the purely expressive and creative force. Design then is the fusion of the two and can lean towards one or the other end of the spectrum. This definition is especially interesting as it can be applied to other fields outside the visual art and design field. The humanities and social sciences for example have scientific aspects in observing people and the world and involves Art in the creation of philosophical thoughts and political laws. These ideas can be translated into the following matrix:

11. science. (n.d.). *Dictionary.com Unabridged (v 1.1)*. Retrieved November 11, 2008, from Dictionary.com website: <http://dictionary.reference.com/browse/science>

experimental	objective	science	space/reality	objective	science
private	design	public	private	design	public
art	subjective	commercial	art fiction	subjective	art/time/

Some of the above mentioned sources either see art as a form of design or design as a form of art. This idea here though rather than understanding one being part of the other or vice versa, sees a gradient of possibilities of which some are more artistic, that is creative and expressive, and others more scientific, in other words observational and factual.

In this multidisciplinary approach it seems appropriate not to think in terms of professions but rather in terms of final products. That is there are no artists, designers or engineers but rather results that are artistic, scientific or a mix of both.

A lecture¹² citing Vilém Flusser reinforces the above: "On the other hand Flusser also sees a movement of scientists towards art as they are in search for aesthetic models to include in their work. Flusser explains this by citing, that science tends to deal more and more with immaterial matters like quants or bits and bytes. Nowadays it seems as if science is becoming an increasingly [fictitious] character, since it is impossible to say if the smallest parts of the real world are still material or already immaterial and therefore only an idea. This is why Flusser sees not only an aesthetic but also an epistemologic necessity to give up the distinction between art

12. Chadwick Truscott Smith at In-FORM: Vilém Flusser on Design on 27th June 2008 at the Jan van Eyck Academie in Maastricht, the Netherlands. <http://flusser-on-design.blogspot.com/2008/09/butterfly-potato-and-communicative.html>

and science. Taking the fusing of art and science into consideration, he expects a culture that will come up with products which include the knowledge of aesthetics, ethics and experience at the same time, meaning that an object is only well done if it is practical, beautiful and right."

Conclusion

There is no need and no point for science and art to become one. They are rather poles in between which the world as we are able to understand it lies. In other words concepts and creations fall into a spectrum of possibilities which can lean towards science or art or are a blend of the two in form of design. They are modes of activity: an organized archive of evidence, purely expressive and impulsive or an emphatic argument considering the other two. The idea here is to embrace and expand opportunities rather than shutting out and boxing them in.

Maybe its an idealistic thought to see science and art work together on creating an efficient, more humane and sustainable world. It certainly is possible, one only needs to think of the Bauhaus, but it is an effort in which all parties have to be engaged in equally.

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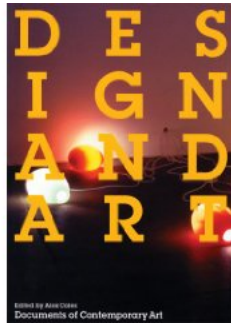
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- [THE STORY OF ART by E H Gombrich 1972](#)

- Coles, Alex. [Design and Art \(Documents of Contemporary Art\)](#). MIT Press, 2007
 - Contemporary design essays focusing on the interrelationship of art and design



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- "In recent decades artists have progressively expanded the boundaries of the art as they have sought to engage with an increasingly pluralistic environment. Teaching, curating, and understanding of art and visual culture are likewise no longer grounded in traditional aesthetics but centred on significant ideas, topics and themes ranging from the everyday to the uncanny, the psychoanalytic to the political." [5]
- Jack Nelson's definition of designart: "Design art could be defined loosely as any art work that attempts to play with the place, function and style by commingling it with architecture, furniture and graphic design." [10]
- Experimental Jetset: "We don't see graphic design as art, but we do see art as a form of design. Although it's not hard to define art, it's not difficult to define its context: there exists a clear infrastructure of exhibition spaces, galleries, museums, art magazines, art publishers, art history, art theory, etc. Art can be seen as the production of objects, concepts and activities intended to function within this specific infrastructure. In our view, this production can certainly be seen as a specific form of design." [12]
- "Walter Gropius' notion of the designer as architect as a 'coordinator' is crucial to the contemporary debate." [14]
- Warhol called his studio 'the Factory'

- Paul Rand: "The designer's overriding motivation is art: art in the service of business, art that enhances the quality of life and deepens appreciation of the familiar world." "Design is a problem-solving activity. It provides a means of clarifying, synthesizing and dramatizing a word, a picture, a product, or an event." [34]
 - George Nelson: "The designer may think of himself as a farmer or a machinist, or he may call himself a designer. It doesn't matter particularly as long as there is someone around with the urge and the competence to give form to an idea." "The designer is frequently the maker and the user as well." [18]
- Picasso said there is no past in art [20] ["*ALL ART HAS BEEN CONTEMPORARY*", a neon installation by Maurizio Nannucci]

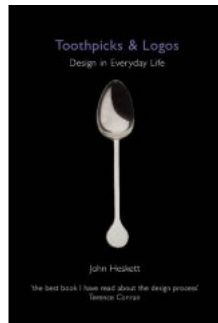
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- In design, your goals are partly determined by others, the stakeholders, because the things you create must fulfil some practical purpose in the wider world. In art, this is not the case. An artist determines his or her own goals. They have this freedom because with their creations, artists, do not aim for any practical application, but strive to influence the feeling or thinking of an audience. [25]
- In Western society, there is a kind of pecking order of professions that is based upon an ancient view of how humanity develops knowledge. The view is that

Knowledge (with a capital K) is generated by fundamental sciences, and then applied by technologists. The technology must then be translated into usable objects, by people called designers. The raking is clear: the more applied, the less 'pure' the knowledge, and so a lower status is conveyed to the people using that knowledge. This odd hierarchical thinking is not limited to the technical side of design either: graphic design and form giving are often descried as 'applied arts'. Clearly, these are lowly occupations when compared to the 'real art'. [186]

- Heskett, John. [Toothpicks and Logos: Design in Everyday Life](#).
 - explores the intricate relationships of our world with design in history, mass media, ergonomics, politics, etc. gives a good list for further reading.



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- [Design for the Real World: Human Ecology and Social Change](#) by Victor Papanek
- [The Universal Traveler](#) by Don Koberg and Jim Bagnall ([Google Books](#))

Web

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- <http://en.wikipedia.org/wiki/Aesthetics>

