The History of Objects and Images

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There is very little argument against the notion that the study of design history is essential to a proper design education. Design history provides us with inspiration, as well as valuable examples of design successes and failures. John Heskett wrote, "Although it is a truisim that the past never completely repeats itself, history can be used as an essential tool in understanding our current situation. Moreover, it contains a fund of generic ideas about design practice that illustrates possibilities for understanding newly emerging technologies."[1] But design history is not merely valuable to designers. It proves to be valuable for those in other disciplines as well. Such study can help any individual to understand how profoundly design affects the lives of every human being. Winston Churchill recognized this, stating, "We shape our buildings, and afterwards our buildings shape us."[2] But how can we hope to teach design history unless we have at least a working definition of the term "design?"

There have been, especially in the last several decades, countless attempts to realize a definition for "design." In the last half-century, definitions for the term have taken on a broader sense. Recently Richard Buchanan referred to design as "liberal art of technological culture."[3] Prior to that, Victor Papenek stated that "All men are designers. All that we do, almost all the time is design, for design is basic to all human activity."[4] Yet typically when design educators teach design history, they lecture on a subject far more narrow than either of these descriptions represent. Perhaps the difficulty lies in the prospect that we are speaking of design in two different senses: the traditional sense, and the broad sense. If this is the case, then while it is important that design educators continue to teach traditional design history, we should supplement that history by imparting a strong understanding of the broader sense of design as an interdisciplinary, world-wide, cultural, and very human activity that predates written history.

Design, as we speak of it in the traditional sense, is thought to have truly begun approximately around the time of the Industrial Revolution. (Admittedly, certain design educators such as Philip Meggs have looked at design as beginning prior to this, though not generally in much depth). Design in the traditional sense is also generally thought of as being professionalized. That is to say, in standard design history courses, students primarily study the work of individuals who are considered professional designers. In addition, traditional design seems to occur chiefly in developed nations, especially in Europe and the United States. Design also traditionally refers to certain specific subbranches, such as graphic design and product design. This is design as we speak of it in the traditional sense.

However, more and more of the design community also speaks of design in the broad sense. This signification corresponds with Herb Simon's definition of design as "changing existing situations into preferred ones."[5] Of this definition, Victor Margolin has written, "While this may seem too comprehensive to some, I find it useful because it emphasizes the open horizon of design activity in addition to the existing artifacts that already represent that activity."[6] Indeed, Simon's definition includes the entire artificial world. This broad sense of design goes beyond professionalized design, is interdisciplinary and global in nature, predates written history, and is deeply connected to culture. When speaking of design in the broad sense, one can include crafts, art, and architecture among other things. It occurs world-wide, and is committed even by individuals who have never heard of the discipline of design. Yet we only tend to study design that occurs when professional designers in highly-developed countries create an artifact. Moreover, we rarely hear discussion of such occurrences before the industrial revolution. Two years ago for this very event, Robert Sedlack wrote, "…one issue may be that the teaching of design history tends to be short-sighted, only going back to the beginning of the industrial revolution."[7] We speak of this broader sense of design frequently, and it is crucial to what we do, yet it is generally missing for the most part from design history courses.

One might wonder what is to be gained by examining design history from such a broad perspective. It can be argued that a far-reaching definition of design could convolute the discipline. However, this broad notion of design is at the very root of the traditional design we practice and teach. If we are to truly understand design, in any sense, we must examine this more expansive perspective. There is much to be learned by examining design in the broader sense. Its study encourages a more open and non-ethnocentric view which can lead to better design decisions. There are wonderful examples of design successes and disappointments in this broader design history. One such example is the design of three-dimensional coastal relief maps made by early Eskimos. These maps were made of wood, and floated if the boat was overturned. Such a case study of design can prove very useful for informing design decisions. Design history in this broader sense can help the design community understand how and why humans design. In addition we can seek to understand how profoundly those designs can affect society at large, and we can guide the student toward more responsible design.

The well-supported premise that this broad notion of design should be reflected in design education resulted in the creation of a required freshman design history class at Carnegie Mellon University called The History of Objects and Images, which focuses on cultures and their artifacts as central to design. This class complements, rather than replaces the traditional design history course. The class takes some inspiration from material culture, which is the study of material objects that have or had cultural meaning. Students were first introduced to the broader idea of design based upon Simon's definition. Then the course proceeded with a series of guest lecturers. Lecture topics included discussion of other cultures or subcultures, such as the culture of Turkey, or the subculture that surrounds J.R.R. Tolkien's "The Lord of the Rings." There have also been several lectures about pre-industrial design. One such lecture covered the history of weapons, which dated back to the first time someone threw a rock, and showed the evolution of weapons all the way into modern times. Additionally, some lectures were intended to present students with other disciplinary perspectives, including art history and the performing arts. These lectures set the stage for a widened perspective, and were reinforced by two assignments.

As the practice of design has become more and more collaborative, students clearly need to be able to learn to work with disparate personalities and disciplines. Therefore, students were assigned teams with which to work for the entire semester. The teams were interdisciplinary in nature, usually incorporating at least one communication designer, industrial designer, and non-design major. These teams had to work together in order to complete the two required assignments.

Once students had begun to learn the dynamics of a culture from guest lectures, they were asked, as a team, to create a culture of their own. This was the first assignment. The students were told to develop artifacts, images, and traditions that represented the team's common values and interests. Each team was assigned a basic polygon or platonic solid as their identifying icon, since basic geometric shapes are commonly found among designed artifacts in most (if not all) cultures. This shape was the team's departure point for their cultural identity. It also served as a way to bridge the studio class with the history class, as students were asked to complete a project involving their shapes in the studio course as well. Students continued to build their cultures over half the semester. They then developed presentations for the class, during which they discussed the aspects of their culture, as well as some of the challenges and insights they discovered along the way. Students were graded as a team for this project. The intent was that students learn the elements of a culture, as well as how to use a culture to inform their design.

The second assignment the teams were given was to research an existing culture. Cultures were assigned to each team based upon the nature and scope of their social, economic, and technological factors. They included the Aztecs, The Gupta Empire, Islam, and the Ghana Kingdom. The objective was to understand the objects and images that represented the culture's identity and way of life. Once the research phase was complete, students were asked to present the information to their classmates in such a way as to engage them. Discussion of the culture's rise, peak and fall needed to be covered. In addition, students were asked to turn in a paper as well, which was to be more academic in nature. Both the paper and the presentation were broken up into sections: cultural overview; art and design; architecture; politics; and religion. Students labeled the sections that they completed, enabling us to grade students individually, as well as holistically. The goal of this assignment was to help students to further understand how designed artifacts both reflect and affect a culture.

This second assignment was very popular. Students came at it with a great deal of enthusiasm and creativity. In order to help classmates understand their assigned culture, teams included in their presentations props, maps, sound, and even ethic food! One team filmed a very clever video based upon a documentary we had shown earlier in the semester. However, there were some teams who were too concerned with presenting in an academic fashion, and failed to engage their classmates. Nonetheless, this assignment was very successful overall and seemed to meet our goals.

It was our hope that the first assignment, to invent a culture, would make the second assignment, researching a culture, more meaningful. Unfortunately, the first assignment was not as successful as we had hoped. The difficulty seemed to lie in the fact that our freshman students initially had trouble seeing how culture and design were connected. By the time our students had made that mental connection, it was too late to make the most of the assignment. In addition, teams often need an adjustment period in order to fall into a dynamic. This assignment required that the teams had already become more familiar with one another then they actually were.

The History of Objects and Images is under continual refinement. During the first year, students were actually asked to research their own families and develop an identity for them. The intent was to get students to look at their families as a culture. This assignment was replaced in the second year by the invention of a team subculture. During this upcoming year, we intend to keep the two assignments the same as last year, but reverse the order. In this way, we hope to allow teams time to get to know one another while researching an existing culture. This should also set the stage for students to better understand how design and culture are related before they embark on creating their own culture. Teams will be encouraged to use the culture that they research as a departure point for their invented culture. In addition, we will add more discussion throughout the course about how culture and design are linked. The goal is to help students to understand design in its broad sense, just as the Design History course helps students to understand design in its traditional sense.

Traditional design history courses are very important to a design education. However, by itself this view of history is too narrow in light of design today. Students will be required, upon graduation, to be able to see the bigger picture of design. They need to understand design in its broader sense, as an interdisciplinary, global, cultural, and ancient human activity. By supplementing the education of our students with this broader picture of design history, we can create a future for the design community that is much more enlightened, tolerant, responsible, and user-centered. By encouraging a more collaborative and expansive course curriculum in this broader design history our students will graduate as better designers. We at Carnegie Mellon University's School of Design will continue to explore the means to do just this.

Endnotes

[1] Heskett, John "Past, Present, and Future in Design for Industry" *Design Issues* Vol 17, No.1

[2] Churchill, Winston, 28 October 1943 to the House of Commons, meeting in the House of Lords

[3] Buchanan, Richard "Wicked Problems in Design Thinking" from *The Idea of Design*

[4] Papanek, Victor *Design For the Real World*

[5] Herbert Simon, *Sciences of the Artificial*, p. 130

[6] Margolin, Victor "Design Studies: A Proposal for a New Doctorate" from *The Education of a Graphic Designer*

[7] Sedlack, Robert P., Jr. "Embracing Art History to Enhance Design Education" from AIGA FutureHistory 2002