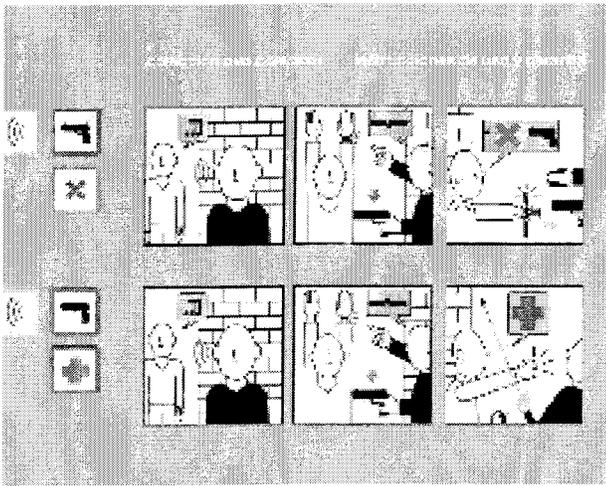


Icon Busting; Freeing Students from Architectural Stereotypes

CRAIG S. GRIFFEN

Philadelphia University



Words are disappearing and are being replaced by images. From airport signs to computer screens to assembly instruction sheets for products, designers and graphic artists seem to rely less on written descriptions and more on pictures to communicate information. International companies like IKEA and Apple Computer include sets of instructions that use only images to describe how to assemble their products. In this way they can better communicate across a wide range of languages. (Figure 1 shows how a Spanish graphic designer used the language of airline safety instructions to explain the guarantee policy for a watch manufacturer.) Computer operating systems across international boundaries rely on similar icons to make their functions more universally understood without the need of a written language. These companies realize that a diverse range of cultures still share many common ideas that can be best represented in graphic form. In effect this "language" of images could be seen as a graphic version of Esperanto, the written/spoken

language that merges several European languages together. With an increasingly interconnected world, owing much to the Internet and easier travel, there is a likewise increased need to be able to communicate with other people. Using graphic images as a common language has some obvious advantages. Images can speak a universal language that allows people to share a common understanding. Kate Nesbitt, in a comparison of two articles on semiotics by Agrest & Gandelsonas and Broadbent, points out their shared recognition of "the importance of the "social contract" in language; it is a set of conventions that allows the linguistic sign to function and produces consensus about meaning."¹ This social contract is key to any one language. However it is harder to extend across borders because of the wide-range of meanings that can be applied to any object. For example a graphic designer for airport signage should not use a dollar sign as a symbol to represent money as it has meaning to only one culture and may not be universally understood. The reality that most people, regardless of background, would still comprehend the meaning of the dollar sign is evidence of the dominance of western, especially American, culture. To make an image as universally recognizable as possible, shapes are reduced to a "lowest common denominator" of form that homogenizes the image. Because western culture likely has the greatest worldwide recognition factor, the images tend to be mostly based in western cultural forms; another bi-product of globalization that encourages students to believe their culture is one of the "best".

Architecture students from around the world have been able to communicate their ideas in competitions through the medium of drawings. While design teaching has always relied on drawings and images

as a means to express ideas not easily described with words, I feel they can be dangerous when they reduce complex ideas into a convenient but often over-generalized image. While reducing an idea to a single image or icon promotes greater communication, it also serves as a set of blinders to students. Preconceived images bias the student's thinking and can be a limiting obstacle to creative discovery. The icon can easily slip into a stereotype that tends to define the "box" that we ask them to think "outside of". To open their minds to broader ideas we should reveal to students the existing stigmas and stereotypes silently embedded in symbols, both positive and negative connotations, before they can hope for a fresh view of any design problem. Some of the first barriers for architecture students in particular to overcome are the biases and prejudices of the built environment that they bring with them to design. Students arrive at school with years of preconceived ideas about the basic typologies of architecture. If we can demonstrate how powerful and ubiquitous these typologies are we can better teach how to use them as a communicating device and not abuse them by assuming all cultures think alike.

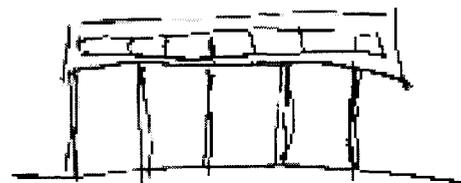
TYOLOGICAL STEREOTYPES



In my fourth-year studio course I try to reveal to the students their own unconscious western biases through a series of exercises. The first is a classic "psychoanalysis" drawing analysis exercise. Its goal is to show how common some stereotypes are regardless of a person's background. They are each asked to make a gesture sketch, as quickly as possible, of an object or building type to effectively communicate its meaning to someone who does not speak their language. The subjects are typically objects like a chair, a telephone, a church and a house. The results still surprise me (and them) by how remarkably similar the images are within the class and across the several years. For example most students consistently draw a "telephone" in the tabletop style, with a handset, cord, base and



sometimes even a rotary dial, that has not been produced in any quantity for decades. (Fig. 2) These students, whose main phone is likely a cell phone hung on their hip, still draw a form that has not been around for quite a while and which they have likely never owned or used. This demonstrates the power of an image to stay in the collective minds of a culture long after it has become obsolete. The "house" drawing is another revealing subject matter. While these students are in the upper level of their architectural education and have been exposed to many different styles and ideas of "house", they consistently draw the kindergarten image of a house with gable roof, symmetrical punched windows, centered door and smoking chimney. Are we inadequately teaching our students to think more abstractly or rather are the images so potent that they say something about the power of symbols? An interesting thing about the "house" form is that while it is a western cultural phenomenon, is not exclusive to western societies. Our culture has spread so widely that children in non-western third-world countries have drawn the same house typology image even though they have never lived in anything like it.



To throw the students a curve, after I ask them to draw a "house", I ask them to draw a "modern

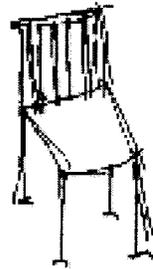
house". This is greeted with subdued laughter and confused looks as they try to represent the difference between the two. (Fig. 3) Usually the result has a flat roof, horizontal ribbon windows, broad wall planes and sometimes pilotis. The "icon" of any thing labeled Modern architecture usually returns to the International Style image even though like the telephone, it has been "out-of-fashion" for decades. We discuss how their image of the two different house types is the same shared by the general public and accounts for the public's general mistrust of architecture labeled "modern". This demonstrates the power of just a word to conjure up stereotypes that are generalized into a limited set of physical qualities. The "modern house" drawing invariably has material implications in its representation, typically steel, glass and concrete. Through this example we talk about engrained associations between construction materials and architectural style.

MATERIAL STEREOTYPES

Because students associate materials with different architectural styles throughout time, they have developed a set of stigmas about construction materials. Throughout their study of architectural history, students see that the oldest buildings, from Egyptian and Greek times on through the centuries, are made of stone. Brick is observed on buildings from Roman times through the last century but rarely on a work of modern architecture. Wood as well may have had such an ancient pedigree had it physically survived the thousands of years it has been used. Even so it is still perceived along with brick and stone as a "traditional" building materials. On the other hand, because of their relatively recent development during the 19th century, materials such as steel, reinforced concrete and plate glass have had a profound effect on the development of modern architecture. The steel frame's ability to open up building interiors to endless spatial possibilities has helped reconceive our notion of space itself. These new materials provide such a freedom of expression that they have become an inseparable part of the language of modern architecture and thus have become "modern" materials themselves, or at least to my students they have. Because of this tendency, students will make assumptions about the timeliness of their design based solely upon the materials chosen for the exterior. If asked why they chose to use steel and glass for an elevation, they will often reply because it is a "modern building", as

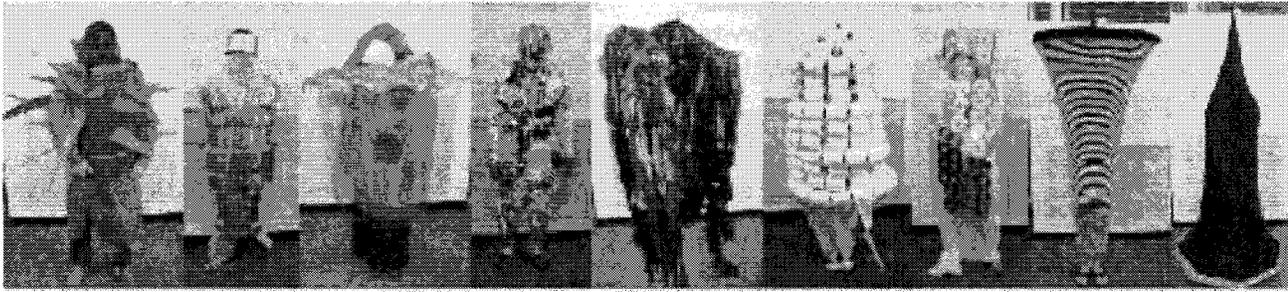
if you could never make a modern building out of brick. This course teaches students that materials should be judged upon inherent psychological and physical properties rather than applied stereotypes from society. It can be difficult to separate some of the psychological properties from cultural stereotypes but in their studio projects they get a chance to test this idea.

WITHOUT SYMBOLS

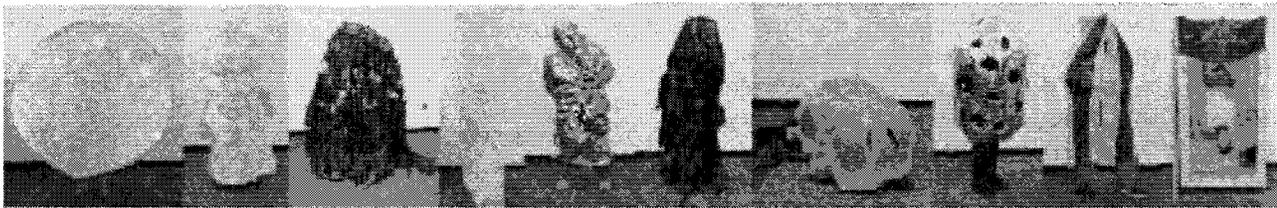


Louis Kahn sought to find the essence or beginning of a building type before he could fully understand it. His search for what he called the Form of an object or building was a method for paring down an idea to its most essential elements.² It was his way to overcome any embedded stigmas that might limit design creativity to a preconceived notion. Too often, recognized symbols are lazily substituted as patches of meaning. In the quick sketches mentioned earlier, the chair image was repeatedly drawn with a square back and seat on four legs. (Fig. 4) The consistency with which the same image was repeatedly drawn gives credence to Venturi's arguments for the power of signs.³ Here the repeated chair image acts as a "Duck" sign to represent *all* "chairs". After the students read Kahn ideas, I conducted an exercise to try to reduce the nature of a chair to its essential features. After some false starts this generally resulted in four qualities: a surface to sit on, a support for the back, elevated above the ground and for only one person. This description rules out similar objects like a stool or bench or features like legs and opens up the formal possibilities to a wide extent. From this essential description, created by a more open-minded approach, they now understand how a chair form like a beanbag chair can be conceptualized and how limited their initial "chair" sketch was.

To make the students design outside the safe realm of symbols, I conducted another exercise (appropriately at Halloween time) to explore the



Emotion Costumes 2002: Anger, Lust, Envy, Pride, Fear, Gluttony, Greed, Surprise



Emotion Costumes 2003: Joy, Gluttony, Fear, Pride, Greed, Sadness, Sloth, Envy, Lust, and Surprise

personification of abstract ideas through the form of costumes. Each student was assigned a basic human emotion or deadly sin and was asked to create a costume that would portray that emotion without the use of symbols. This meant that they could not use dollar signs to represent greed or red lips to represent Lust but instead had to take a phenomenological approach and rely on actual physical properties such as color, texture, reflectivity, hardness, porosity, scale, etc. to convey the idea. These emotions were Anger, Lust, Envy, Pride, Fear, Gluttony, Greed, Joy, Sadness, Sloth and Surprise. (Fig. 5) Emotions such as Anger and Fear were easier for them to portray. For example, Anger utilized red colors and sharp pointed forms that have associations with aggressive behavior. Others like Envy and Pride were more abstract and, without direct reference, were thereby more difficult to represent. The students generally all found it very hard to communicate without the use of symbols yet still produced some wonderfully expressive costumes.

IMPLEMENTATION INTO STUDIO PROJECT

These exercises were in preparation for the main design project. One semester the program, specifically selected to deny the use of symbolism, was for a non-denominational chapel on the historic Princeton college campus. This presented two important challenges. First, as the chapel was non-denomi-



national and served all religions, the students had to communicate the spiritual function of the chapel without any religious symbols that might be offensive. In their initial exercise the quick sketches of a “church” consistently relied upon symbols such as crosses, steeples, towers and rose windows. (Fig. 6) The students were encouraged to dig deeper into issues of how space, light and material can convey a sense of spirituality regardless of specific religious images. Designing a typology so steeped in iconography without the use of symbols proved to be about as difficult as with the costumes. The second problem they faced was how to relate the building to the historic context of the campus without directly mimicking the vocabulary and materials of the 100-year-old surrounding buildings. They were not given the option of relating by total and opposite contrast (an all glass building for example) as I felt it was avoiding the issue. Instead they had to translate the physical and psychological characteristics of the

materials and forms into their facades. The results ranged from uninspired reuse of stone masonry to those who learned to reinterpret it as a concrete or stone veneer panel walls.

CONCLUSION

By the end of the studio the student should be able to think more broadly about the inherent meanings in architectural materials and forms to get past first impressions in search of a deeper reading. They should not mentally label a brick as a sign for traditional architecture but rather as a dense, durable, compressible, stackable and modular unit of masonry with many potential uses and meanings. This approach does not try to deny the existence or importance of cultural associations, but only is meant as a means to help the student make informed decisions about which associations are valid and which are out-dated stereotypes. I hope it is obvious that the intent of this pedagogy is not a semiotics exercise in ways to use symbols to convey meaning in buildings. The results of the Post-Modern movement in architecture demonstrated

some of the inherent dangers with that. Rather it is constructive method of breaking down existing biases about the forms and materials in architecture to wash the slate clean and begin design with an open mind. With a common understanding of the essence of an object rather than a "sound-bite" description, students may possibly communicate more effectively with people in their own culture or other countries who may interpret the an object in the same way.

NOTES

¹ Nesbitt, Kate, *Theorizing a New Agenda for Architecture*, 1996, Princeton Architectural Press, New York

² Wurman, Richard Saul, *What Will Be Has Always Been; The Words of Louis I. Kahn*, 1986, Rizzoli, New York

³ Venturi, Robert, *Learning From Las Vegas, (Second Edition)*, 1977, The MIT Press, Cambridge