



:: A DESIGN CULTURE JOURNAL ::

UNIDCOM :: IADE :: FCT

FORMS OF PERSUASION: THE VISUAL RHETORIC OF DESIGN ARTIFACTS::

LESLIE ATZMON

Leslie Atzmon is an Associate Professor of Graphic Design and Design History at Eastern Michigan University in the United States. Atzmon received her MFA in graphic design at Eastern Michigan University, and completed her PhD in design history at Middlesex University in London, England. Atzmon has presented and published her work in national and international venues. Her principle areas of research interest are Victorian science and late nineteenth-century fantasy imagery, book history, and the history of typography.

Introduction

Graphic design historian Michael Golec has written that design history addresses “materials, forms, and concepts” that are applicable to both graphic design and product design. Golec also observes that although there is significant overlap between the two disciplinary discourses, their historical and critical research remains separate.ⁱ In this essay, I discuss the common role visual rhetorical analysis can play in graphic and product design historical work.

Traditionally, rhetoric has been defined as “the art of using language so as to persuade or influence others.”ⁱⁱ New work in visual rhetoric, however, is enlarging the scope of what can be counted as persuasive. As Charles A. Hill explains, visual entities are often not “obviously and explicitly persuasive.”ⁱⁱⁱ This description makes room for the idea that certain cultural artifacts, such as designed objects, that were not previously seen as persuasive, in fact, have a persuasive dimension. I also would like to suggest that an artifact might be persuasive on more than one level. When we consider persuasion, we tend to think of verbal messages that have a narrow, tactical persuasive objective—a speech that wants to convince us to vote for so-and-so, or an ad that tries to persuade us to buy a particular product. We tend to ignore or overlook a different level of persuasion that has to do, not with a calculated objective, but with a larger interpretive framework, a worldview, or a broader set of meta-values or meta-beliefs. Design artifacts are particularly effective at this other level of persuasion; they offer audiences communicative data that reflect, and also orchestrate, an array of cultural concerns. Scholars of both graphic and product design need to attend scrupulously to the form, creation, and uses of designed artifacts. It is here

that we see how design artifacts are involved in the generation of cultural belief systems. Both evidencing and influencing cultural themes, they fulfill a profoundly rhetorical function.

Visual Narrative and Visual Rhetoric

The meanings communicated by design objects are often organized in narrative structures, though the narratives are frequently not linear or plot-based as they are in verbal narratives.^{iv} Instead, design narratives are typically constructed of layered and interconnected meanings that are articulated in a holistic fashion both in the physical form of design artifacts, and also in their use processes. Design becomes narrative when the meanings generated by its material form come together to tell a story.

Some may argue that what I am calling “design narratives” have no clear beginning, middle, or end, and lack the kinds of explicit syntactic “directional” markers that would allow an interpretation to gain a more secure purchase. But I would argue that the kinds of “free” associations we make when we interpret a design object are, in fact, not free at all, and that the object’s structure and content, the messages transmitted, and the structure and content of the user’s interpretation of these messages are all programmed on a deep level by various cultural beliefs and attitudes.

I feel it is essential at this point to touch on the character of design processes just a bit. Designers don’t just make things; as Richard Buchanan puts it so well, they “fashion objects to speak in particular voices.”^v Design processes often begin with detailed research on the project topic. With this information informing her thinking, a designer will frequently consider the overall meaning and the discrete sub-meanings the artifact will embody. Transforming these ideas into material form is the most challenging part of the design process. The designer must sort out how these meanings might be manifested in the choices she makes about the formal qualities of the designed object. A designer typically makes choices about her design’s formal qualities based, in great part, on the *substance* of what she intends to *communicate*.

Of course, if certain forms communicate specific ideas (such as dynamism, the dangers of totalitarianism, or the value of mourning) there must be agreed-upon cultural meanings understood by both designer and user. A well-trained designer, for instance, would be acutely aware of the culturally based messages his choice of an angled teacup handle would likely communicate to its users. He might begin his creation process *intent on communicating a dynamic quality* through the teacup handle, as one component of an overall concept or “story” the cup would embody. All the choices the designer makes about the form of the teacup would be similarly considered both in relation to formal choices already made and in light of the total meaning he intends to communicate in this cup.

User-generated meanings are *colored* or *influenced* or *guided* but not necessarily *determined* by the designers’ intentions; these intentions are manifested in the choices made about the material aesthetic form the work takes. A heavy bodied teacup with a sharply angled handle, for example, might contain an intended narrative about overstimulation followed by lethargy due to the formal contrast between the physical form of its body and its handle. But the user might, for instance, interpret the narrative as lethargy followed by overstimulation.

In many graphic and product design artifacts, the narratives may take some work to sort out. Design narratives rarely provide explicit chronological or syntactic “directional” markers—visual equivalents of the “and then...” in a fairy tale, or the “meanwhile, during dinner...” in a novel—to help us discern and then parse the stages of our experience. In some cases, a linear, plot-based narrative may be explicitly available on one level in a design artifact, but connected non-linear narrative elements may function at other levels. All of these meanings contribute to an overall narrative.

I'd like to argue that our traditional definition and understanding of narrative—of what counts as a narrative, of the ways in which our minds habitually weave meanings together with narrative thread—is extremely limited. Along with the traditional notion of narrative, in which the meanings expressed by an artifact are explicitly arranged in a chronologically unfolding sequence, “narrative” ought also to include the idea of constellations of meanings embodied in a material artifact that are assembled and repeatedly re-assembled by its users over time.

Buchanan describes design as an “architectonic art” that is structured by the choices and decisions designers make. He argues that design is a rhetorical process that produces rhetorical products:

The skilful practice of design involves a skilful practice of rhetoric, not only in formulating the thought or plan of a product, through all the activities of verbal invention and persuasion that go on between designers...but also in persuasively presenting and declaring that thought in products. From the smallest, most incidental object to the largest, integrated technological system, designers are providing an amplification of ideas through man-made things.^{vi}

Designers may consciously focus on only the aesthetic qualities of the form, or they may devise an arbitrary process to produce a designed object. If they are not trained, designers may not even be aware of the meanings underlying their process and the communicative power of the choices they make. Whatever the design process, though, the designer's beliefs and attitudes shape choices made about the material form. The designer's aesthetic convictions are necessarily influenced by the culture(s) in which the designer is immersed, and the material form of the design object embodies these beliefs and attitudes.

These embodied beliefs and attitudes, in turn, can be construed as narrative in that they come together in an artifact to structure complex overt or covert meanings that are transmitted to users in time; these accounts can, at the same time, be construed as rhetorical in that they inevitably have some felt or unfelt impact on the users' beliefs and attitudes. Visual rhetorical analysis therefore involves apprehending the constitutive elements and structures of these messages and deciphering their meanings; gaining insight into this sort of visual rhetoric also deepens an understanding of the culture in which an artifact was created and was, or is, used.

The Rhetorical Material of Aesthetic Form

When discussing visual rhetorical analysis, Sonja Foss warns that the analytical response must be rhetorical and not *merely aesthetic*—even when considering such qualities as color, form, or texture. I would like to stress that aesthetic form should not be taken to mean *merely* composition, line, texture, color, and other general formal features. This definition ignores the expressive possibilities contained in choices about formal elements. Each formal element of an artifact offers insight into the creative intent of those involved in the design of the artifact.

In an aesthetic response, according to Foss, the viewer may *enjoy* color, *sense* form, or *value* texture. In a rhetorical response, on the other hand, she argues that “colors, lines, textures, and rhythms” in an artifact provide a basis for the viewer to *infer the existence of images, emotions, and ideas*.^{vii} Such a distinction can be useful, although the dividing line is a delicate one. When experiencing a visual object it is hard to know when the mere observation of a texture, say, evolves into analyzing why that texture has the value it does. It is difficult to ferret out whether a “mathematical” sense gleaned from a poster design, for example, is suggested by geometric subject matter, by the fact that it is printed on grid paper, by the sorts of geometric shapes included in the piece, by the relationship of geometric elements on the page, by the sense communicated by “clean” technical looking pen lines, or by the rich black ink against smooth white paper. Foss' description of visual rhetorical analysis contends with the sorts of meanings one can find in the first three items listed, but she hopes to isolate the equally relevant last two items—elements that might be called rhetorical aesthetic material.^{viii} Designers take it for granted that the character of blotchy ink on paper or the smooth surface of a metallic toaster are part of visual

form, and designers consider the ways that an audience might construe meaning embodied in this form. Design scholarship, however, has yet to embrace fully aesthetic material as rhetorical.

Reconsidering Design Scholarship

Visual rhetorical analysis of the form, creation, and use of design artifacts augments existing approaches for scholarship in visual culture studies, design history, and design theory—three discourses that are central to contemporary graphic design and product design scholarship. I would like to argue that visual culture studies falls short in its ability to deal with material aesthetic form and historical contexts. I agree with design historian Victor Margolin who argues that “Some scholars have drawn on semiotics...which...tend[s] to treat the work outside its historical location.”^{ix} Visual culture studies research, which draws on semiotics, and is typically ahistorical, certainly fits with this type of scholarship. Visual culture studies scholarship also tends to give short shrift to the formal, material character of visual entities. According to Guy Julier, it “renders the viewer almost inanimate in relation to the viewed...disembodying images from their primary contexts of encounter.”^x

This separation, I would argue, is a result of the context in which visual culture studies emerged. Visual culture studies embraces a theoretical approach developed in response to nineteenth-century, so-called reflectionist, object-focused, art historical models. In much visual culture studies, therefore, aesthetic form is considered to be a superficial aspect of a visual object. In *Visual Culture: The Reader*, Jessica Evans and Stuart Hall point out that the evaluation of the aestheticized object in art history has been superseded by analysis of “visual metaphors and terminologies of looking and seeing” in cultural studies. Since Evans and Hall’s book came out in 1999, visual culture studies has focused on a common litany of themes—“the society of the spectacle and the simulacrum; the politics of representation; the male gaze and the possibility of a female gaze; the ‘mirror stage’: fetishism and voyeurism; the reproduction of the image.”^{xi} This approach casts visual entities as “images” or representations to be viewed.

Visual culture studies attend to meanings generated by “spectators” who “view” these “images.” Deep-seated analysis of visual form highlights problems with certain commonly used terms in much visual culture work. “Image” is the commonly used terminology for visual entities in visual culture studies. The term “image,” I would argue, actually diminishes the material aspects of visual entities—it impedes material analysis by construing artifacts as copies or likenesses, or as entities that represent something else. Almost anything can, of course, be fruitfully construed as an image in this sense of the term. It is imperative, however, to realize that we lose the “object”—the fully embodied, material artifact with its rich formal rhetoric—when we use “image” exclusively. Labeling all visual objects “images” also lumps the varied array of visual artifacts into one undifferentiated group. Semiotics, which influenced the methodology of visual culture studies, helped foment a range of theoretical approaches that have been embraced by visual culture studies. In semiotics, Evans explains, “Language is a series of ‘negative’ values, each sign not so much expressing a meaning as marking a divergence of meaning between itself and other signs within the collective symbolic system of language.”^{xii} She offers the pragmatic example of how a set of distinctions between dead/living, cooked/raw operate in English...to distinguish between the signifiers mutton and sheep, whereas the French signifier mouton cuts only one conceptual unit. It is not the case that there is pure, positive content, which is then “clothed in the form of a signifier.”^{xiii}

Our commonly used terms (or signifiers) are distinguished, according to these ideas, not so much by what they positively represent (signifieds), but by contrast with what they don’t represent and by the network of neighboring meanings. Why then is the catch-all signifier “image” so widely used for the whole range of visual entities (signifieds)? While semiotics is always relational, I suggest that labeling all visual entities “images” obliterates crucial contrasts and differences, and refuses to consider visual artifacts in the context of a network of neighboring meanings. The very premises of semiotics, then, seem to militate against allowing a single term like “image,” which has no clear antonym, to carry so much weight. Semiotics suggests that theory should reconnect

with visual material form. We ought to be able to refer to visual entities by using a rich and varied set of descriptive terms, and in the meantime, visual scholars should seek a terminology that acknowledges the materiality of visual artifacts and deepens our understanding of their rhetorical potential.

Designed objects, moreover, have “spectators” who are often *users*. Users gather rhetorical meaning from interacting with the material form of design artifacts; they also bring rhetorical information to artifacts through the ways that they *use* them. The ways that designed artifacts are used generates meaning, and these user-generated meanings depend a great deal on the visual form of an artifact. Design artifacts also frequently make meaning through physical spaces or real or imagined qualities of touch, smell, and sound; these are also material aesthetic qualities. Sensory attributes and the material character of the visual form of artifacts cannot easily be decoded by analyzing what they do or do not represent.

The material qualities of, and meanings that inhere in, design artifacts are likewise indebted to the historical contexts in which they were created or used. Although visual culture studies research typically fails to attend to these sorts of conjunctural meanings, it is important to note that some recent visual culture scholarship that is grounded in historical analysis recognizes the relevance of the material object. In their introduction to *The Nineteenth-Century Visual Culture Reader*, editors Vanessa R. Schwartz and Jeannene M. Przybylski challenge visual culture studies’ “move away from a certain kind of object-orientation.”^{xiv} They call for “attention to the formal elements and conventions of the material objects.”^{xv} Although a number of the essays in this collection endeavor to insert the material object into the inevitable web of theoretical visual culture, the rhetorical function of the aesthetic form of visual artifacts itself is not central to the authors’ theses. As Victor Margolin astutely argues, “we need to locate graphic design practice in the historical circumstances of its production and work from there to do formal or textual analyses.”^{xvi} Graphic and product design scholarship can expand on this notion by demonstrating that deep-seated visual rhetorical analysis of the material aesthetic form of design can *lead to new insights about historical circumstances*.

Many design scholars embrace visual culture studies even though graphic design and product design have, until very recently, been conspicuously missing in visual culture studies work. Graphic design and product design historians, of course, write about their respective discipline’s artifacts. Many design historians utilize the “reflectionist” nineteenth-century art historical aesthetic approach to scholarship.^{xvii} Other design historians look to other design and art movements, with prominent cultural phenomena briefly presented as background to reinforce their arguments—what Teal Triggs has called a “familiar assortment of critical biographies, historical narratives and anthologized readers.”^{xviii} Such an approach is exemplified by, but is by no means limited to, Phillip Meggs’ groundbreaking survey *A History of Graphic Design*—and this approach is still prevalent in recent publications.^{xix} Much product design historical work has likewise retained a strong focus on styles and periods (along with technical discussions of manufacturing and materials). Visual work, however, is not just a function of other art and design movements with a smattering of cultural influence, as most scholarship in product and graphic design history would have it.

There is more substantive graphic design and product design historical research, such as the gorgeous *Graphic Design in Germany, 1890-1945* by Jeremy Aynsley, the informative book *Graphic Design: Reproduction and Representation Since 1800* by Paul Jobling and David Crowley, the impressive volume *Twentieth-Century Design* by Jonathan Woodham, and the broad-based survey *Design: The History, Theory and Practice of Product Design* by Bernhard Burdek.^{xx} These books detail the technological, social, and political environments in which design functions. But even these books don’t address subtle, but equally fascinating, cultural themes that can be read in the material form of design artifacts—themes that are typically less obvious than the technological and political factors presented in these culturally and socially oriented design historical works.

Design theorist Christopher Lindner's fascinating collection, *Urban Space and Cityscapes: Perspectives from Modernism and Contemporary Culture*, presents a wonderfully cross-disciplinary series of essays that demonstrate the dynamic relationships among cultural forces, visual and verbal texts, and urban design. In *Design After Modernism: Beyond the Object*, editor John Thackara argues that postmodern design is "an art of experience" that deals with "whole systems" and "collective participation" rather than individual "experts solving problems" in order to produce "individual products."^{xxi} Although Lindner's and Thackara's contributors make some fascinating points, the essays included in these anthologies do not address the rhetorical role of the material object itself in the discourses of political, social, or cultural theory.

Political, social, and cultural theory is crucial to design theoretical work, and linguistic and cultural theory is paramount in visual culture studies scholarship. Theory from these verbal disciplines, in fact, buttresses contemporary design discourse. In our rush to champion theory that comes out of non-visual disciplines, I believe we've neglected possible theoretical approaches that embrace visual form. I sometimes wonder if our love affair with political, linguistic, and cultural theory becomes a sort of self-aggrandizing attempt to ensure that visual research is perceived as rational and intellectual. This approach has tended to "verbalize" the discourse in visual culture studies and design scholarship; such scholarship inadvertently reinforces the notion that intellectual and rhetorical analysis is a purely verbal process. These sorts of verbally based scholarly approaches have merit, of course—they engage in intriguing verbal analysis of visual phenomena. In such a world, however, we can lose sight of the power of visual form as a location of complex theoretical constructs in and of itself. Ignoring the layered communicative functions of visual artifacts themselves, however, shortchanges the very visuality these scholars attempt to appreciate.

Emphasizing the Visual in Visual Rhetorical Analysis

My proposed approach considers design artifacts from a different vantage. While visual culture studies commonly focus on perception and the circulation of images, and substantive design theoretical and historical work typically elaborates the ways that cultural factors *influence* the creation, form, and use of design artifacts, my approach puts design artifacts front and center by positioning them as a set of complex visual rhetorical "texts" to be interpreted. Visual rhetorical analysis dispenses with the usual hierarchy of fine over applied art, and it levels the distinctions among all visual media, including separate design disciplines such as product design and graphic design.

In my proposed approach I address how cultural factors have influenced design, but I also look for cultural themes that emerge from visual rhetorical analysis of the form and use of the design artifact itself. The meanings extracted from the form and use of design artifacts may or may not concern the sorts of political and social issues commonly addressed in design history and theory. This process can tap into liminal cultural themes—including certain scientific and philosophical discourses not typically considered in design historical or theoretical work—and it can be utilized in any sort of visual research.

In her groundbreaking book *The Art of Describing: Dutch Art in the Seventeenth Century*, art historian Svetlana Alpers points out that one misses the visual meanings in seventeenth-century Dutch art when it is interpreted according to the "model" of "rhetorical evocation" based on Italian art. Instead, Alpers taps into the symbiotic relationship between seventeenth-century Dutch art and contemporaneous Dutch natural science.^{xxii} Alpers argues that the mindset behind VanEyck's detailed work (Figure 1) is cut from the same cloth as the discourse that, two centuries later, encouraged the invention of microscopes and telescopes in Holland. A traditional art historical reading would focus on iconography, such as the dog standing for faithfulness and the knotted rope symbolizing the knot of marriage. Alpers looks for the cultural meanings in the visual form, such as the scientific and ocular precision of the concave mirror. She suggests that "northern viewers [would] find it easier to trust what was presented to their eyes in the lens, because they were used to pictures being a detailed record of the

world seen.”^{xxiii} Alpers is *not* saying that the scientific thinking of the time—which includes Kepler’s description of the eye and mapmaking—was “a source for or influence upon the art.” Rather, she points “to a cultural ambience and to a particular model of a picture that offers appropriate terms and suggests strategies for dealing with the nature of northern images.”^{xxiv}

Gerry Beegan likewise suggests strategies for dealing with mid-nineteenth-century disaster visuals in the *Illustrated London News*, a popular periodical. In his forthcoming essay “Industrialization, Human Agency, and the Materiality of the Illustration in the Victorian Press,” Beegan relates a shift in the visual rhetoric of disaster illustrations in the mid-nineteenth century to a transition in public perception of devastating industrial disasters. Before the 1850s, disaster images were reproduced as engravings in which the illustrator had much artistic license (Figure 2a), while by the late 1850s these illustrations emulated the real-life immediacy of photographic imagery (Figure 2b). The detached quality of these later disaster illustrations, Beegan argues, “cushioned the intensity of the anxieties they aroused” in a public that was beginning to fear accelerating industrialization.

Mirroring photography’s “dispassionate” qualities in an illustration demanded innovative reproduction technologies. According to Beegan, technologically generated formal qualities in either phase of disaster images should not be ignored. These traits need to be analyzed in conjunction with these illustrations’ “interpretive” or “photographic” visual features. Furthermore, Beegan argues, both sorts of illustrations are modified by paratextual relationships with their captions and other adjacent texts. The typographic and illustrative form and content of the disaster images in the *Illustrated London News*, Beegan argues, together produce a rhetoric of powerlessness in the face of the relentless forward march of nineteenth-century industrialization.

Jane Webb likewise reveals the rhetoric of Renaissance Neo-Platonic theory in the drawings of early nineteenth-century designer and British Royal Academician John Flaxman (Figures 3a and 3b). According to Webb, Flaxman believed that his line drawing technique allowed him to represent visually the Neoplatonic “essential form” of any object—including his own designed objects. In her forthcoming essay “The Essential Outline: John Flaxman and Neoplatonism in Early Nineteenth-Century Manufactures,” Webb explains that Flaxman’s illustrations were echoed in “the popular graphics contained in pattern books for manufactures, that pared down the designs of Classical works to a simple outline, providing the designer with a repository of archetypes from which to select and draw.”^{xxv} Webb examines “Flaxman’s method of anatomical study and the evocation of Neo-Platonic geometry as an example of the ideal of artistic and manufacturing design in the period.”^{xxvi}

This process allows Webb to outline “a specific model of [manufacturing] design practice” based in “the context of [an] evolving design culture...in Britain in the 1830s.”^{xxvii} Webb offers fascinating connections between early nineteenth-century Neoplatonist thought and the Neoplatonist rhetoric that structured Flaxman’s design and his design process. These insights help manifest Webb’s engaging thesis, which proposes that Neoplatonist philosophy was a verbal catalyst for the visual language of early manufacturing design. Both Webb and Beegan seek “conjunctural” meanings—meanings that are specifically apparent at a particular time—in their respective artifacts.

As we try to imagine the practice of a more rigorous design analysis, it would be helpful to begin by addressing intentionality—how and why artifacts and objects are created and used in the way that they are. Conscious motivation is just one possible way of discussing a rhetoric of design. There’s always motivation or intention in design—even if the designer is unaware of what that motivation or intention is. The design process involves imagining the form and function of an artifact that is to serve a purpose for a group of users. As I noted earlier, this process typically includes abstract conceptualization of the overall “meaning” of an artifact in light of its client’s goals, its function, and its target audience. The final form and ultimate use of an artifact reflects this process. “Reading” an artifact as a rhetorical “text” in its broad cultural context allows one to extract various intentions and motivations that even the designer may not be aware of. Tapping the *visual rhetoric* of design

artifacts confronts and confounds accepted norms by demonstrating that visual phenomena function as powerful information sources in their own right.

What, you might be wondering, would this sort of analysis entail? In a forthcoming essay, I discuss the visual form of luminous-looking cone-shaped rays of light that are prominent in Sime's illustrations (Figure 4a).^{xxviii} These cone-shaped bands of light are very suggestive of Victorian ideas about the concentrated power of light rays of the new x-ray technology. In the late nineteenth century, x-rays were understood to be a modern diagnostic tool. At the same time, x-rays could do what the human eye and mind could not: they could "see" through flesh and produce a record of the body's interior. Late nineteenth-century interest in and fear of the ghostly images of the body's interior produced by x-rays resonated with discomfort at the inability to keep the invisible under wraps. Indeed, these concentrated rays of light straddle a fine line between their ability to illuminate or to disintegrate an object. The horrible skin diseases contracted by early radiologists were tangible proof of the dangers involved. Sime might not have consciously intended that his light rays conjure up fearsome notions of x-rays in his audience. He is likely to have internalized widely accepted ideas about the form of x-rays, depicted in advertisements and other popular venues, and engaged them for affective purpose. Indeed, Sime's light rays look like popular contemporaneous depictions in which x-rays appear as cone-shaped visible light (Figure 4b). Sime utilizes late nineteenth-century ideas about how these invisible rays might look in order to emphasize both revelatory and destructive power in his illustrations.

Sime's rays of light are rhetorical because they embody cultural themes dealing with the character of x-rays in the Victorian era. Sime intentionally or unintentionally instilled meaning through the formal choices he made during the creation process. And his audience consciously or unconsciously gathered meaning from his designs, in some measure, through the material aesthetic qualities of his representations—such as the luminosity of Sime's cone-shaped light rays and the texture they create against adjacent dark areas.

Let's return for a moment to Svetlana Alpers' statement that seventeenth-century natural science was not "a source for or influence upon the art." Instead, Alpers offers the more subliminal, but much more sublime influence of "a cultural ambience and...a particular model of a picture that...suggests strategies for dealing with the nature of northern images."^{xxix} I'm likewise calling for a renewed visual culture of the object—for a new focus on the visual form of the designed product as a site of rich rhetorical material. I hope this research approach will add to existing scholarship that utilizes verbally based theoretical approaches to visual phenomena. At the same time, I'm convinced that addressing the rhetorical power of visual artifacts can contribute to the body of both graphic and product design discourse.

Figures

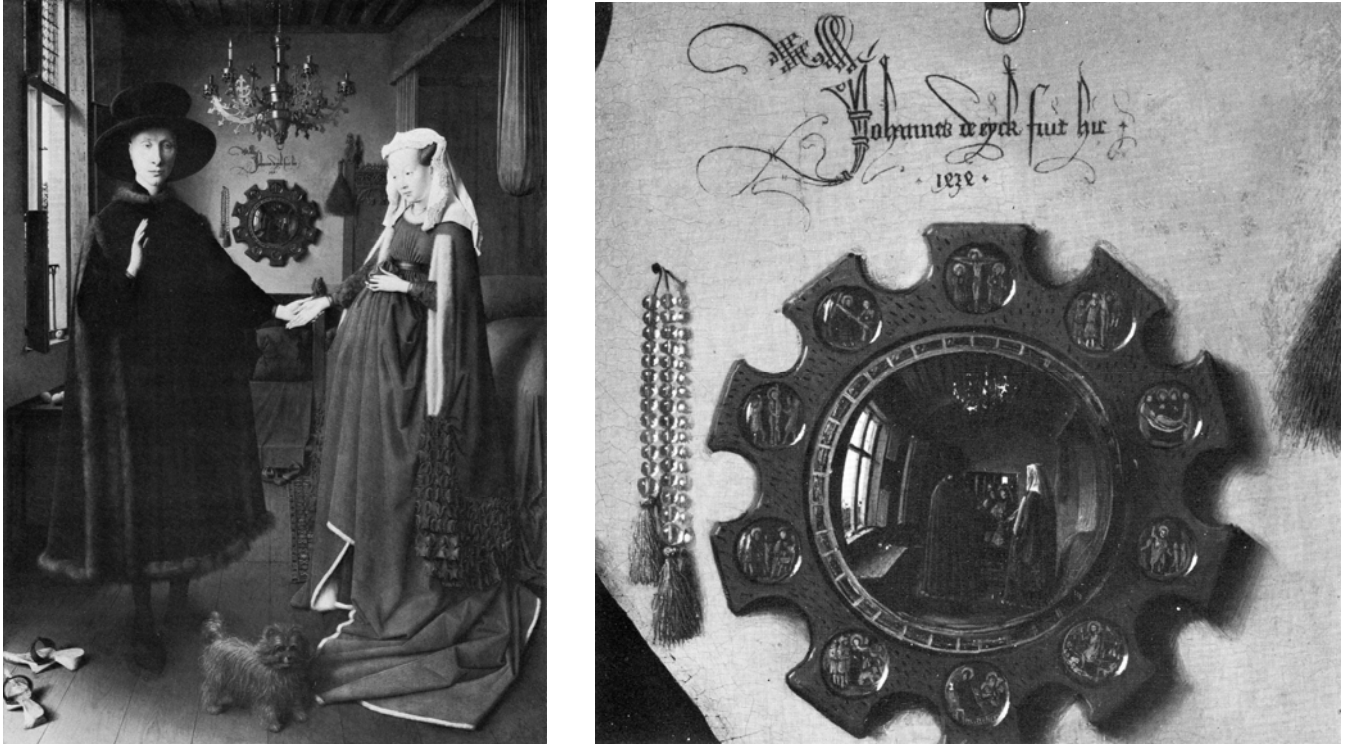


Figure 1. Jan van Eyck, *The Arnolfini Wedding*, 1434 and detail of the same painting.

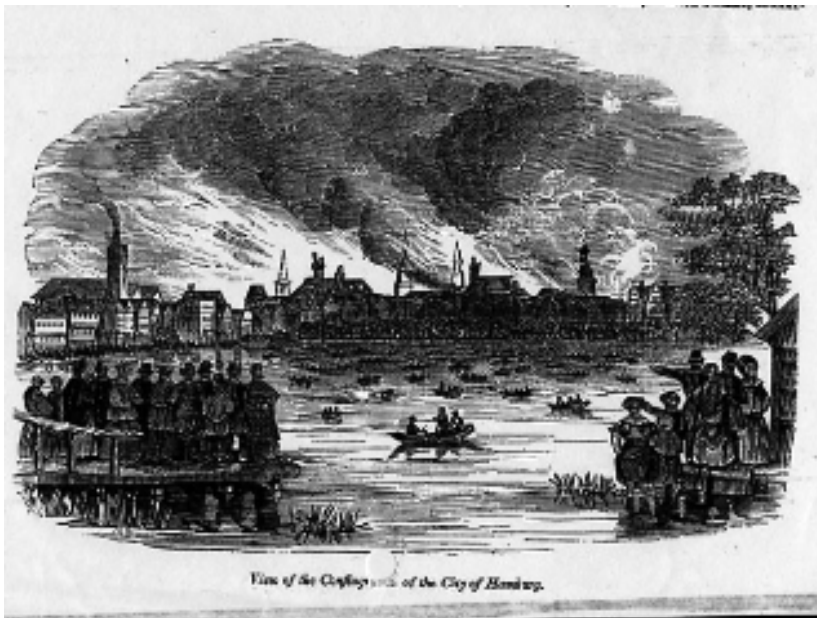


Figure 2a. "View of the Conflagration of the City of Hamburg" the *Illustrated London News*, May 14, 1842.



Figure 2b. "Scenes of the Boiler Explosion at Dean, in Rossendale," the *Illustrated London News*, June 26, 1858.

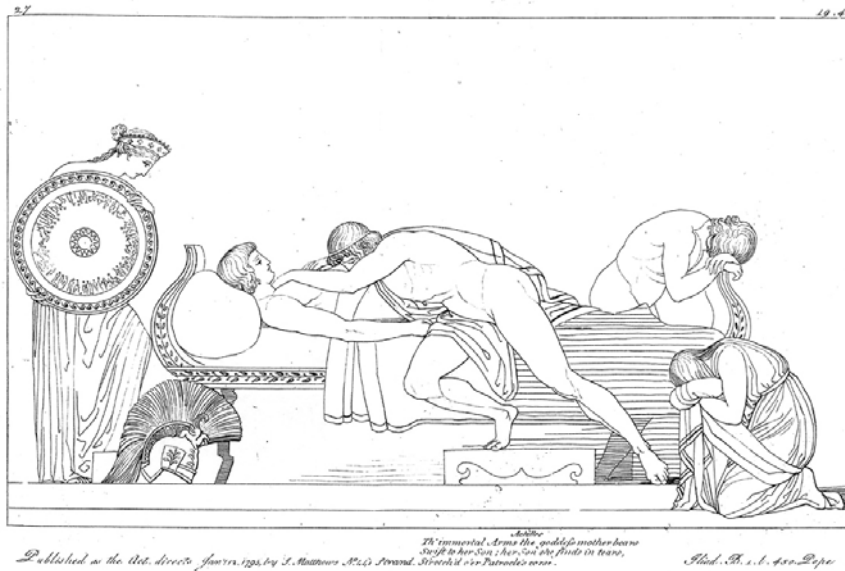


Figure 3a. John Flaxman, A scene from the *Iliad* in which Thetis brings armour to Achilles who is draped in mourning over his dead friend Patroklos. What is immediately apparent from this image is that Flaxman's graphic work was completely reliant on the accuracy of a very simple outline to portray all the necessary details of the narrative.

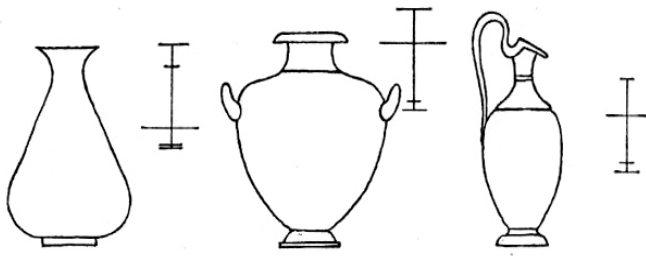


Figure 3b. Science and Art drawings, 1868. These images and other outline drawings had become part of an institutionalized design education system in which studying by copying had become the central system of instruction.

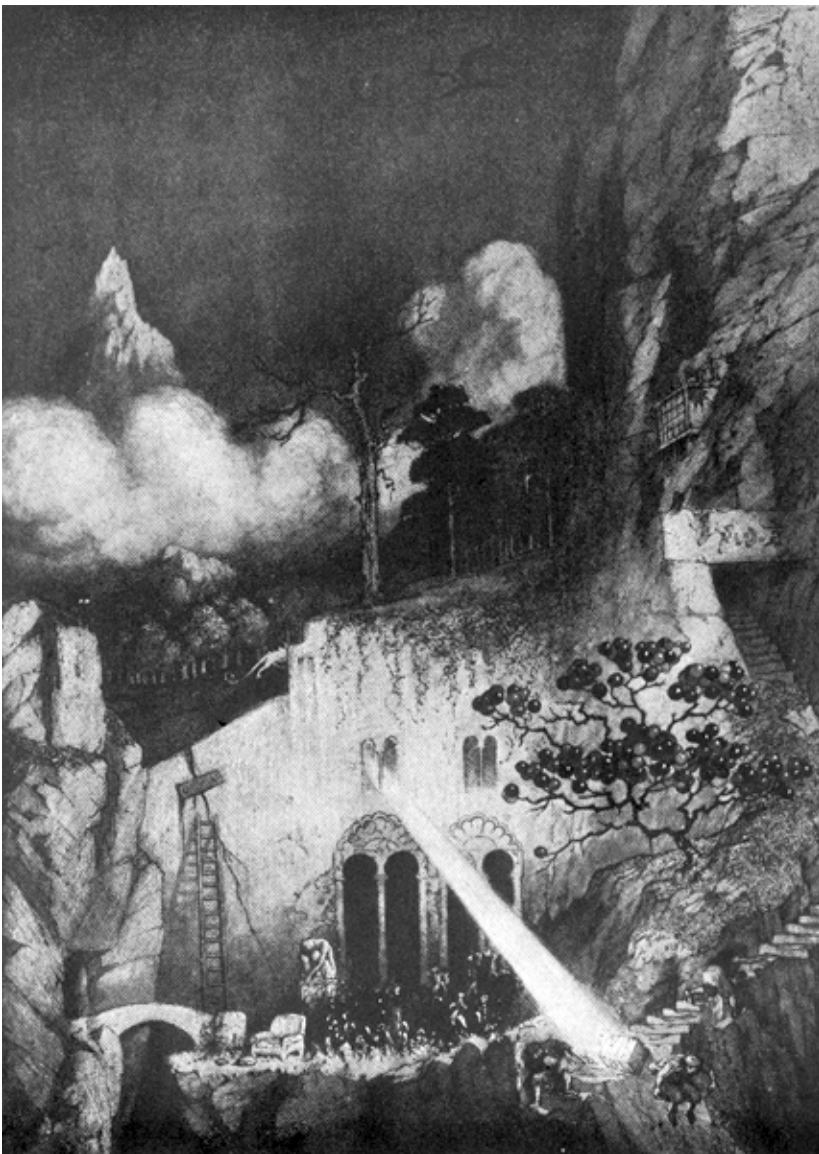


Figure 4a. "The Probable Adventure of three Literary Men," Sidney Sime, 1911, from Lord Dunsany's *The Book of Wonder*.



Figure 4b. Advertisement for Sozodont tooth powder that includes an x-ray machine and light ray, 1896.

Notes

- ⁱ Michael Golec, "Call for Papers for the 2007 College Art Association Conference," (fall 2006).
- ⁱⁱ Oxford English Dictionary, 1. a.
- ⁱⁱⁱ Charles A. Hill, "The Psychology of Rhetorical Images," in *Defining Visual Rhetorics*, ed. Marguerite Helmers and Charles Hill (Mahwah, New Jersey: Lawrence Erlbaum Associates, 2004), 25.
- ^{iv} Design artifacts always carry meaning, but this content may not be structured as a narrative. Non-narrative design typically communicates one or more conceptual propositions.
- ^v Richard Buchanan, "Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice," *Design Discourse: History, Theory, Criticism*, ed. Victor Margolin (Chicago: University of Chicago Press, 1989), 101.
- ^{vi} Buchanan, 109.
- ^{vii} Sonja K. Foss, "Framing the Study of Visual Rhetoric: Toward a Transformation of Rhetorical Theory," in *Defining Visual Rhetorics*, ed. Marguerite Helmers and Charles Hill (Mahwah, New Jersey: Lawrence Erlbaum Associates, 2004), 306.
- ^{viii} I would like to thank Jack Williamson for several productive discussions about what we both agree is a false aesthetic-rhetorical dichotomy for design artifacts.
- ^{ix} Félix Béltran, "Toward a History of Graphic Design" (Félix Béltran interview with Victor Margolin, 2000), <http://tigger.uic.edu/~victor/articles/interview.pdf>, (accessed June 3, 2007).
- ^x Guy Julier, "From Visual Culture to Design Culture," *Design Issues* 22, 1 (Winter 2006): 73-74, 66.
- ^{xi} Jessica Evans, "Introduction," in *Visual Culture: The Reader*, ed. Jessica Evans and Stuart Hall (London: Sage, with the Open University, 1999), 1.
- ^{xii} Evans and Hall, 13.
- ^{xiii} Evans and Hall, 12.
- ^{xiv} Vanessa R. Schwartz and Jeannene M. Przyblyski, eds., *The Nineteenth-Century Visual Culture Reader* (New York: Routledge, 2004), 7.
- ^{xv} Schwartz and Przyblyski, 8.
- ^{xvi} Béltran, <http://tigger.uic.edu/~victor/articles/interview.pdf> (accessed June 3, 2007).
- ^{xvii} Anne Bush, "Through the Looking Glass: Territories of the Historiographic Gaze," *New Perspectives: Critical Histories of Graphic Design*, Part 1. *Visible Language* 28, no. 3 (Spring 1994): 220.
- ^{xviii} Teal Triggs, "Call for Papers for the New Views: Repositioning Graphic Design History Conference," <http://itrdu1.arts.ac.uk/newviews/root/home.htm> (accessed June 19, 2007).

-
- ^{xix} Phillip Meggs, *A History of Graphic Design* (New York: Van Nostrand Reinhold, 1983, Fourth edition, 2006).
- ^{xx} Jeremy Aynsley, *Graphic Design in Germany, 1890-1945* (London: Thames and Hudson, 2000); Paul Jobling and David Crowley, *Graphic Design: Reproduction and Representation since 1800* (Manchester: Manchester University Press, 1996); Jonathan Woodham, *Twentieth-Century Design* (Oxford: Oxford University Press, 1997); Bernhard E. Burdek, *Design: The History, Theory and Practice of Product Design* (Basel: Birkhäuser, 2005).
- ^{xxi} John Thackara, *Design After Modernism: Beyond the Object* (London: Thames and Hudson, 1988), 32.
- ^{xxii} Svetlana Alpers, *The Art of Describing: Dutch Art in the Seventeenth Century* (Chicago: University of Chicago Press, 1983), 25.
- ^{xxiii} Alpers, 25.
- ^{xxiv} Alpers, 26.
- ^{xxv} Jane Webb "The Essential Outline: John Flaxman and Neoplatonism in Early Nineteenth-Century Manufactures," Unpublished essay.
- ^{xxvi} Webb, "The Essential Outline."
- ^{xxvii} Webb, "The Essential Outline."
- ^{xxviii} Leslie Atzmon, "Supernatural Selection: Sidney Sime's Weird Science," unpublished essay.
- ^{xxix} Alpers, 26.

Bibliography

- Alpers, Svetlana. *The Art of Describing: Dutch Art in the Seventeenth Century*. Chicago: University of Chicago Press, 1983.
- Atzmon, Leslie. "Supernatural Selection: Sidney Sime's Weird Science." Unpublished essay.
- Aynsley, Jeremy. *Graphic Design in Germany, 1890-1945*. Berkeley: University of California Press, 2000.
- Beegan, Gerry. "Industrialization, Human Agency, and the Materiality of Illustration in the Victorian Press." Unpublished essay.
- Béltran, Félix. "Toward a History of Graphic Design" (interview with Victor Margolin), 2000. <http://tiger.uic.edu/~victor/articles/interview.pdf> (accessed June 6, 2007).
- Buchanan, Richard. "Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice." In *Design Discourse: History, Theory, Criticism*, edited by Victor Margolin, 91-110. Chicago: University of Chicago Press, 1989.

-
- Burdek, Bernhard E. *Design: The History, Theory and Practice of Product Design*, Basel: Birkhäuser, 2005.
- Bush, Anne. *New Perspectives: Critical Histories of Graphic Design*, Part 1. *Visible Language* 28, 3 (Spring 1994): 219-231.
- Dunsany, Baron Edward John Moreton Drax Plunkett. *The Book of Wonder*. London: Elkin Matthews, 1919.
- Evans, Jessica and Stuart Hall, eds. *Visual Culture: The Reader*. London: Sage in association with the Open University, 1999.
- Foss, Sonja K. "Framing the Study of Visual Rhetoric: Toward a Transformation of Rhetorical Theory." In *Defining Visual Rhetorics*, edited by Marguerite Helmers and Charles A. Hill, 303-14. Mahwah, New Jersey: Lawrence Erlbaum, 2004.
- Helmers, Marguerite. "Call for Manuscripts." In *Visual Rhetoric Series*, Parlor Press, LLC, 2003 [accessed January 24, 2006]. Available from <http://www.parlorpress.com/visualrhetoric.html>.
- Helmers, Marguerite, and Charles A. Hill, eds. *Defining Visual Rhetorics*. Mahwah, New Jersey: Lawrence Erlbaum, 2004.
- Hill, Charles A. "The Psychology of Rhetorical Images." In *Defining Visual Rhetorics*, edited by Marguerite Helmers and Charles A. Hill, 25-40. Mahwah, New Jersey: Lawrence Erlbaum, 2004.
- Jobling, Paul and David Crowley. *Graphic Design: Reproduction and Representation Since 1800*. Manchester: Manchester University Press, 1996.
- Julier, Guy. "From Visual Culture to Design Culture." *Design Issues* 22, 1 (Winter 2006): 64-76.
- Lindner, Christopher, ed. *Urban Space and Cityscapes: Perspectives from Modern and Contemporary Culture*. London: Routledge, 2006.
- Meggs, Phillip. *A History of Graphic Design*. New York: Van Nostrand Reinhold, 1983, fourth edition, 2006.
- Schwartz, Vanessa R. and Jeannene M. Pryzyblyski, Eds. *The Nineteenth-Century Visual Culture Reader*. New York: Routledge, 2004.
- Thackara, John. *Design After Modernism: Beyond the Object*. London: Thames and Hudson, 1988.
- Triggs, Teal. "Call for Papers for the New Views: Repositioning Graphic Design History Conference." London: London College of Communication, <http://itrdu1.arts.ac.uk/newviews/root/home.htm> (accessed June 19, 2007).
- Webb, Jane. "The Essential Outline: John Flaxman and Neoplatonism in Early Nineteenth-Century Manufactures." Unpublished essay.
- Woodham, Jonathan. *Twentieth-Century Design*. Oxford: Oxford University Press, 1997.