

Interactive Aesthetics

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1 Introduction

The process of graphically designing communication artifacts used to be a personal activity, depending upon the creative impulse of an individual—the graphic designer.¹ The graphic designer traditionally behaved as the representative of the audience. Only a trained and competent graphic designer could make the client's vision accessible to the prospective audience by re-communicating our common cultural signs and symbols in new visual contexts.² Possessing an intrinsic ability to communicate visually by innovatively synthesizing our common visual language comprising signs and symbols,³ graphic designers served as visual translators between the client and the audience. Graphic designers regurgitated culturally-derived signs and symbols (specifically representing cultural idiosyncrasies of the targeted audience) into a design gestalt, that is, a visual configuration of text and image amalgamations. Since the graphic designer usually was a member of the audience that s/he represented, the design gestalt created would be, intrinsically, culturally appropriate for the prospective audience. Therefore, communication artifacts that used culturally-specific signs and symbols transmitted the message successfully because the targeted audience was visually literate, that is, able to comprehend the visual language.⁴ That was then.

What if the targeted audience does not understand the visual language of the design gestalt? Now, when culturally specific signs, symbols, visual techniques, and treatments are presented to an audience of a different culture than the graphic designer, the audience has difficulty accessing, interpreting, and decoding meaning. For instance, in a conversation with Philip Meggs, Sylvia Woodard Harris describes how a group of American students tried to encourage inhabitants of a village in Nepal to take certain sanitation precautions. They presented the inhabitants with a three-foot-tall graphic of a fly contaminating food with infectious bacteria. It was the intent of the American students to persuade the inhabitants to take the recommended precautions. Instead, the inhabitants of the village only laughed because they felt they had nothing to worry about. After all, the flies in their village were minuscule compared to the giant ones in the graphic. The student designers were unsuccessful at communicating because they assumed the audience had the visual literacy necessary to decipher the message. (quoted in Meggs, 4)⁵

1 Paul Rand *Good Design Is Good Will* (New Haven, CT: Yale University Press, 1982), 2.

2 Giovanni Aneceshi, "Visibility in Progress," *Design Issues* 12:3: (Autumn 1996): 8–9.

3 M. Friedman, *Graphic Design in America: A Visual Language History* (Minneapolis, MN: Walker Art Center, 1989), 135.

4 P. B. Meggs, *Type & Image: The Language of Graphic Design* (New York: John Wiley & Sons, 1992), 4.

5 *Ibid.*, 4.



It follows that now (especially now), in the wake of globalization, e-commerce, electronic communication, and Internet accessibility in remote parts of the world, graphic designers world-wide should no longer assume that s/he speaks the same visual language as the audience. For the sake of clear communication, an interim stage is needed in the graphic design process in which the audience gives feedback on how the communication artifact is being designed (and should be designed). Audience input (not just client input is required in the graphic design process well before the printing of the final visual form. E-mail and Adobe Acrobat's portable document format (PDF) provides a cost-effective way of acquiring audience input *if* the electronic communication is characterized by a conversational exchange between participants, and interactivity between the participants and the design gestalt of the communication artifact (coined in this paper as the applied theory of interactive aesthetics).

2 Introducing Interactive Aesthetics

The Applied Theory of Interactive Aesthetics (IA) stipulates that the use of interactive technologies within the design gestalt of a communication artifact will facilitate remote participation in an evolving graphic design process. When applied to the creation of computer-generated sketches of the communication artifact, the theory of interactive aesthetics enables a remote client, graphic designer, and especially the prospective audience, to participate electronically in the design of the communication artifact. Thus, the audience becomes engaged in the graphic design process electronically in addition to (or instead of) vis-à-vis meetings with the client and the graphic designer. From conception to production, design decisions can be made in a virtual space. Through an interactive process, the participants of this new design team can use a combination of computer-mediated communication technologies including e-mail and the portable document format (PDF) embedded with various interactive options to design and exchange information about the aesthetic development of the communication artifact. Furthermore, participants from remote parts of the world can rely upon these two technologies to interact throughout the design process. Within this global context, a graphic designer may be of a different culture than the client and/or the audience. Perhaps the audience speaks a different language than the graphic designer and the client. Regardless of cultural differences and language barriers, the graphic designer, the client, and the audience can and will work together in a team using interactive technologies. Figure 1 visualizes how a graphic design process can involve multilingual participants from various parts of the world who use the same kind of technology to design the communication artifact.

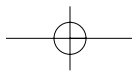
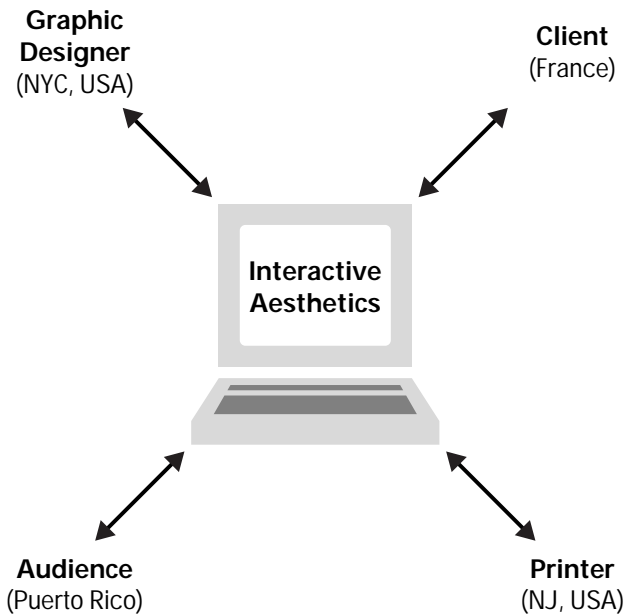


Figure 1

Visualization of how participants may be remotely situated in the graphic design process.



Integrating interactive aesthetics within the communication infrastructure of remote graphic design processes will enable the audience to participate anywhere in the communication process from the conception of the idea to the dissemination of the communication artifact. Interactive Aesthetics is grounded on the principle that technology will enhance graphic design processes and increase productivity. The adoption of IA specifically to the field of graphic design purports to yield better practices that are ethical (because the audience participates earlier in the design process) and virtually foolproof (since the traditional trial and error factor is eliminated). Furthermore, Interactive Aesthetics postulates that, if the audience participates with the graphic designer and the client in the graphic design process, then the design gestalt of the communication artifact will be accessible to the audience (since s/he assisted in deriving it).

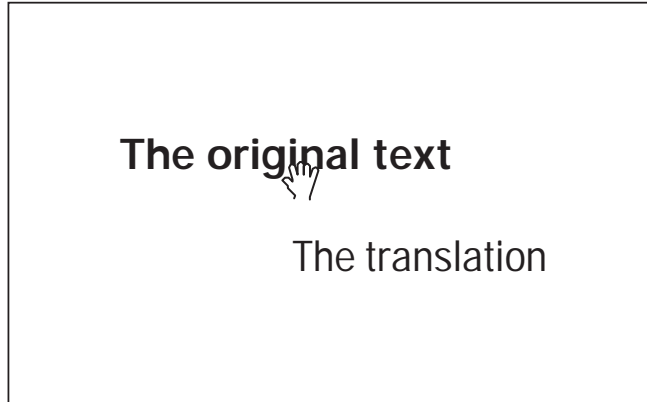
2.1 How do we ensure that the audience comprehends the visual language and dialect of the communication artifact?

Within the kind of remote communication infrastructure that is technologically-dependent, culturally-specific visual forms created by the graphic designer must be accessed and interpreted by the other team members, sometimes, without verbal explanations. The need for the audience to be able to decipher and decode visual signs and symbols predates modernism and the birth of the graphic arts. Historically, as tribe-specific verbal communication systems gradually declined in reliability, the adoption of a visual communication system was successful because the signs and the symbols used in communication processes were limited, simplified, and standardized. The primary purpose of past communication systems was to

preserve history by documenting tribal traditions for future generations. The evolution of our visual communication system from pictorial representations to the predominant use of typographic representations (based on the alphabets as we know them today) resulted from a need by society to represent and express complex ideas, and not only objects and agri[cultural] practices. Technical innovations enabled the mass production and dissemination of substrates to broad and sometimes distant audiences. However, effective communication of ideas to distant audiences depended on, and still depends on, visual language, that is, a nonverbal system of visual dialects, signs, symbols, visual treatments, and applied theories used by professionals, ideally in visual communication and graphic design, to convey messages to targeted audiences. Typically, visual language is comprised of text and image-based information. Image-based information traditionally was used to illustrate the text, but now has progressed to representing and sometimes replacing text. Furthermore, image-based information amplifies message conveyance by incorporating culturally-derived, symbolic forms. However, in order for these visual signs and symbols to transport the intended message, the culturally-specific audience has to be able to decode and decipher the design gestalt.

Traditionally, the graphic designer has relied upon an audience's visual literacy to decode the design gestalt, that is, the visual configuration of signs and symbols from a codified visual language system. Communication artifacts whose purpose is to persuade (that rely on the audience's level of visual literacy) communicate their messages only when the targeted audience succeeds in deciphering or decoding the design gestalt's meaning. However, what if the audience only understands a language different than that of the graphic designer? In the design of a communication artifact for multilingual participants, the designer has at his or her fingertips access to cost-effective, electronic translating software (e.g., www.freetranslation.com/) that can be used to translate the text of the communication artifact into the language of the participants. After the text is translated, the graphic designer has a few other options for integrating the translated text into the graphic design process. The translations may be included in the e-mail that transports the PDF-formatted document to the participant; or, the graphic designer may opt to design an electronic version of the communication artifact for each language and even dialect that the client and audience understands. Another option available to the graphic designer is to integrate a rollover interactive technique that reveals the translation of each line of text that completes a single thought. By moving the mouse over the text, an otherwise hidden field become visible, showing the translation of the rolled-over text. Figure 2 demonstrates the rollover technique as a type of interactive aesthetic.

Figure 2
 Visualization of the interactive option
 (rollover) for translating text for the viewer.



2.2 How do we engage a remote participant in the technical and conceptual process of designing a communication artifact?

My graphic design process entails sketching by hand on a paper substrate. Once I derive a concept for the artifact's design gestalt, I render quick thumbnail sketches of what the final visual form of the communication artifact might look like (including the choice of typeface, paper, background textures, graphics, positioning of elements within the composition, size variation of typographic and image-based information for contrast, hierarchy, balance, and consistency). Then, using the computer as a tool, I recreate one or more of the thumbnail sketches using a combination of industry-standard page layout, graphic design, and digital imaging software applications such as QuarkXpress, Photoshop, and Adobe Illustrator, respectively. When a mockup (that is, a close-to-final, computer-generated sketch) has been developed, I present it to the client for approval. Upon acceptance, the mockup undergoes minimal revisions (as requested by the client), and is forwarded to the printer on a disk compiling all of the graphics used in the design gestalt including images and typefaces. Once printed, the communication artifact is transported to the client, who then distributes it to the audience for consumption (broadly defined as usage).

The process of designing a communication artifact traditionally starts with the client communicating to the graphic designer what is to be designed and for whom it is to be designed. The graphic designer then responds with a visual translation in quick thumbnail sketches. The client then either chooses or approves a thumbnail sketch. The graphic designer communicates with the client about a mockup s/he rendered of what the final communication artifact will resemble. The client then approves or disapproves of the mockup. After its approval, the electronic file is transported on a disk or over the Internet to the printer. (See figure 3) Traditionally, the audience participates in the graphic design process

Figure 3
 Visualization of a traditional graphic design process.

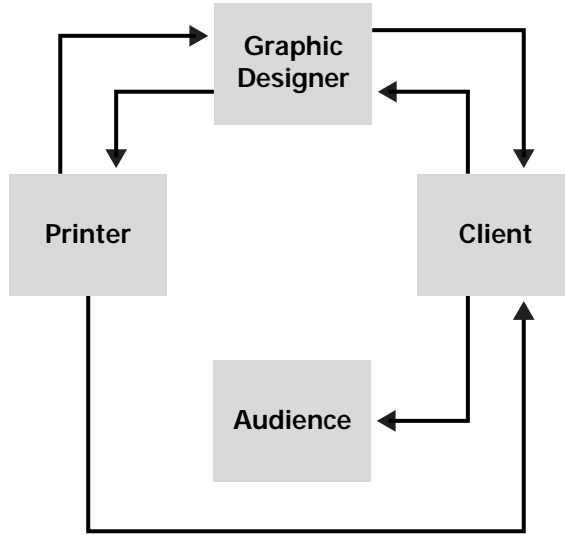
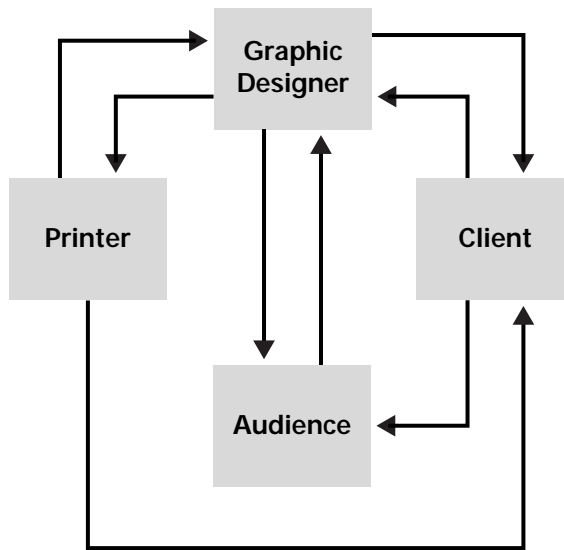


Figure 4
 Visualization of a new graphic design process using interactive aesthetics.



only as the captive audience that receives the message that the communication artifact transmits.⁶ The audience completes the communication process of the graphic form, but does not contribute to its construction. On the contrary, with the new graphic design process (where the graphic designer employs IA), participation from the client still takes place; however, the audience contributes to the aesthetics of the design gestalt early in the design process.⁷ (See figure 4)

6 A. C. Tyler, "Shaping Belief: The Role of Audience in Visual Communication" in V. Margolin and R. Buchanan, eds., *The Idea of Design* (Cambridge: The MIT Press, 1992), 104.

7 *Ibid.*, 105.



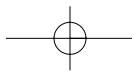
In recent years, there has been a significant advancement in communication technologies that, when utilized in the graphic design process of communication artifacts, can bring about this revolutionary participatory design process. It is Adobe Acrobat 4.0's portable document format. PDF-formatted documents can be e-mailed and edited electronically by the recipient. Hypertextual links can enable selected words to be translated or transport the viewer to an external Website. Digital versions of standard drawing tools enable the recipient to "markup" the electronic document. Editable text options also enable the recipient to add or delete text in the electronic document. Furthermore, there is a breadth of diversity in interactive options available to graphic designers, who use other industry-standard applications to design multimedia communication artifacts (for print and electronic media). For instance, editable fields, drag-and-drop, rollover (as previously illustrated), and show or hide features are a few of the input and output options that facilitate conversational exchange between an audience and the design gestalt. For example, when the rollover interactive technique is utilized, the meaning of a culturally-specific sign could be revealed to an audience or it could allow the audience, to participate in the creation and construction of the design gestalt.

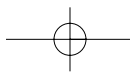
Implementing interactive aesthetics into the new graphic design process requires generating the communication artifact on the computer and embedding interactive techniques within its design gestalt. The graphic designer uses the computer to render sketches of the communication artifact's design gestalt, and then transport the sketch to the client and to the targeted audience for feedback. When applied to the process of designing a communication artifact using the PDF format, IA can enable the audience and the client to participate in the graphic design process from conception of the idea to production of the final visual form through an iterative process of the graphic designer e-mailing PDF-formatted sketches to the participants. Provided that each participant has, at least, Adobe Acrobat Reader installed on the hard drive (if not, it can be downloaded from the Web for free), s/he can access the sketch by simply opening the e-mail attachment.

3 Conclusion

The very idea of acquiring audience feedback in graphic design processes is nothing new. Graphic designers always have been encouraged to solicit feedback from the both client and the targeted audience in varying stages of a communication artifact's development.⁸ What is innovative about IA in the graphic design processes is that the participants can co-design, that is participate in the conceptual design and production of a communication artifact, without being in the same room, city, state, or even country. Under these remote circumstances, the following criteria should be met

8 P. B. Meggs, *Type & Image: The Language of Graphic Design*, 160; and A. C. Tyler, "Shaping Belief: The Role of Audience in Visual Communication," 105.





when applying IA in order to ensure that the graphic design process yields a communicable design gestalt:

- 1 Each participant of the team must be able to technically access the communication artifact using a personal computer, with at least minimal graphic capabilities and Internet access.
- 2 Each participant must be able to read any text-based information existing in the communication artifact.
- 3 Each member of the new graphic design team must be able to participate in the graphic design of the communication artifact (across platforms) regardless of whether or not s/he knows how to use the industry standard desktop publishing, image editing, and page layout applications that were used to create it.
- 4 Each member of the new graphic design team must be able to participate in the graphic design of the communication artifact (across platforms) regardless of his or her level of visual literacy, that is, comprehension and ability to use the rudimentary aesthetic principles of layout design and typographic treatment that establishes hierarchy; organizes textual and image-based information in a consistent manner; and creates aesthetic appeal that ensures audience response.
- 5 The audience must “get it” (that is, recognize, acknowledge, and comprehend the design gestalt’s meaning).
- 6 The electronic version of the communication artifact must be interactive in order to engage the participants in the graphic design process.

