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**ABSTRACT**

Since visual knowledge of the specialties within graphics and photography is difficult to pinpoint because it is nonverbal and intuitive, graphics educators fall back on teaching technical expertise--the procedures and equipment used for newspapers, magazines, and television stations. For centuries visual knowledge was the realm of the unlettered, the communication system for the ignorant, and only in the modern era has meaning been found for the term "visual literacy." By 1920, Roger Fry had proposed that all art could be seen as essentially an arrangement of shapes, lines, and colors--a concept that formed the basis for formalist criticism, now pervasive in the thought and teaching of almost all things visual. While a visual language was emerging in art, the older definition (art as storytelling) persisted in the popular mind and was adopted in the early seventies by the "visual literacy" movement in education. However, reading pictures is not exactly like reading language. The definition of visual literacy might include recognition of the value of visual experience. Instead of seeing only symbols and their hidden meanings, the adult eye might be trained to see their textures and patterns and to know enough of the formal elements to interpret ordinary visual images. Higher forms of visual literacy might include the principles of design, such as unity and proportion, derived from classical theories of aesthetics. Graphics instructors sometimes confuse technical computer skills with real visual knowledge, but intuitive aspects of visual knowledge could be explored in the computerized studio. This applied arts approach draws on theoretical developments of art and on the applied nature of professional and technical education. (Footnotes and references are appended.) (NKA)

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The Knowing Eye

An Applied Arts Approach to Visual Knowledge

K. Barnhurst

TO THE EDUCATIONAL RESOURCES  
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Artists, wrote Harold Osborne, are "generally practical men not always prone to analytical profundity." Graphics educators have shown the same tendency when setting the parameters and directions of the field.<sup>1</sup> The reasons are clear. Visual knowledge of the specialties within graphics and photography is difficult to pin down because it is non-verbal and intuitive. So educators fall back on technical know-how -- the procedures and equipment at newspapers, magazines, and television stations.

Confronted with the task of defining what constitutes "visual literacy," graphics educators may be inclined again to propose the technical alternative, a definition that combines media knowledge with another popular concept, "computer literacy." Computer applications have, after all, changed the way all mass communications are created. Defining the technical skill would seem to avoid the alternative, defining visual knowledge itself.

Visual knowledge is a sort of Grand Central Station of the academic

and professional disciplines. The place is partly an eclectic structure from the fine arts, along with the unfinished wing of graphic design. The streets bring in commuters from the freeway of psychology, the boulevard of sociology, and the old highway of aesthetics. Marketing and advertising are taxi stands. The station handles trains from cultural anthropology and psycholinguistics, the subways of semiotics, and bus routes for many other fields. The connections with journalism and communications theory are just in the planning stages.

No wonder practitioners, confronted with this Manhattan traffic jam of ideas, prefer to stay in a technological New Jersey. Yet we must venture in, for the very reasons that make it so difficult. The definitions of basic graphic education developed by the American Institute of Graphic Arts do not even mention journalism or mass communications theory. The technical handbooks tend to ignore visual aesthetics. The difficulty is also an opportunity, but it must be approached tentatively and gingerly.

#### Visual Images and Verbal Symbols

The phrase "visual literacy" is built from two terms that have long been combined and confused. Beginning in prehistory, the letters of the alphabet developed from images, from representations of concrete things. In the standard example, a "pictograph" or simple drawing of an ox meant ox. Slowly the drawing lost much of its detail and took on a more abstract meaning, becoming what is called an ideograph that meant food. And eventually the Phoenicians turned the ox-drawing on its side, making it a symbol for a sound (actually a pause) in speech, and its connection to the original ox was lost.<sup>2</sup> The lesson here is that before there were

letters, there were pictures. Symbols developed slowly, at least in their written form.

In the same way, all writing is founded on metaphors. Many of them are dead, the images now lost, but good writing generally creates new metaphors and brings up fresh images. The study of metaphor has a literature that clearly establishes the centrality of the image to language. There is also some anecdotal evidence from scientists that thought itself is fundamentally visual, that images come first in the mind and symbols come later.<sup>3</sup> So symbols depend (at least initially) on visual images, but images exist and can communicate independently of symbols.

The paradox of visual images is that they are primary, yet they are treated as secondary. A universal example can be found in literacy itself. Consider the child's acquisition of language: Seeing, of course, is a natural ability that develops early. To a young child's eyes writing is no more than a texture. The child first sees language the way most adults see Arabic -- as a fascinating pattern only. Later the child learns that the pattern is made up of discrete elements, that the elements or characters combine to form groups, which in turn form larger and larger groups, and that there is meaning hidden in all this. The most basic literacy requires a shift from seeing forms and shapes, the images of letters, to thinking of them as symbols for something else. The images themselves get lost in the hunt for hidden meaning.

Literacy, then, is essentially anti-visual. Just as the child learns to ignore how a newspaper feels or tastes, the literate have learned to ignore how a newspaper appears. Literacy reduces the sensation to a means and elevates the symbol to an end. Ultimately,

literacy is available to the blind. Once initiated to the magic of symbols, the mind can fold the symbols back on themselves and, with a sort of blindness, use symbols to study symbol in a rising spiral of abstractions. Language itself has been studied, analyzed into grammars, and subdivided into rhetoric, semantics, linguistics, and other branches of philosophy and literature. But visual images -- the sources of language -- have been largely ignored.

Reality has been turned on its head this way at least since Plato. The central concepts of aesthetics spring not from visual art but from the Poetics of Aristotle. From Pliny the Elder's history of classical art to Vasari's sixteenth century Lives of the Artists to the writings of Ruskin in the nineteenth century, the visual arts were valued as an adjunct to poetry and as a spur to literate knowledge.<sup>4</sup>

Until the latter half of the nineteenth century, visual images were valued for their ability to tell a story and to create the illusion of naturalistic reality. Critics compared art to the verbal story it was meant to represent, and oil painting, according to John Berger, became the supreme art because it was the medium that seemed to create the most naturalistic illusion. The romantic movement encouraged self-expression and acknowledged the emotional content of visual images but did not free them from their storytelling or representational functions.

So the visual was the opposite of literacy. "For what writing supplieth to him which can read, that doth a picture supply to him which is unlearned, and can only look," wrote Durandus in the thirteenth century.<sup>5</sup> In any traditional definition of the terms, "visual literacy" is an oxymoron, the equivalent of illiterate literacy. Visual knowledge for centuries was the realm of the unlettered, the communication system

for the ignorant. No meaning for the term "visual literacy" will be found before the modern era.

#### The Idea of Visual Knowing

Not until G. E. Lessing, the German dramatist and critic of the eighteenth century, did visual knowledge begin, at least philosophically, to escape the tyranny of words. Lessing appears to be the first to have proposed that the proper realm of painting, unlike poetry, is space. Similar concepts were advanced in the nineteenth century by the English essayist Walter Pater and later by Leo Tolstoy.

The ideas took on urgency then, because of the advent of the photograph. Suddenly naturalistic images became readily available. Snapshots and photojournalism took up the work of storytelling, leaving artists free to explore other uses of art. The successors to the Impressionists soon discovered that visual images contained their own, purely visual elements, independent of words. If art is reducible to geometric forms, as Cézanne advocated and artists since Cubism have demonstrated, then seeing must also be learned. Modern art is unintelligible to the visually "illiterate."

By 1920 the critic Roger Fry had proposed that all art, primitive as well as traditional, could be seen on equal terms, as essentially an arrangement of shapes, lines, and colors. These elements became the basis for a body of twentieth century criticism, known as formalism, that is now pervasive in the thought and teaching of almost all things visual. Of the dozen or so books on art history, graphic design, typography, and technical communication on my shelf that use the elements as a basic organizing scheme, not one gives a source for these

fundamental ideas. They have simply been passed down, teacher to student. Mendelowitz's widely used drawing text refers to them as traditional.

So concepts like line, shape, color, and so on have come to be a sort of visual language. Bowman's Graphic Communication and Dondis's A Primer of Visual Literacy are two extended attempts to rationalize this system. Both use language ideas -- vocabulary, grammar, or syntax -- to explore visual knowledge, and both extend the system to all visual messages, including media graphics. Bowman even follows the who-what-when-where approach familiar to newswriting instructors.

These authors use "visual literacy" as a metaphor. But they reject the ut pictura poesis (a picture is like a poem) version of antiquity, with its requirement that images tell stories and copy natural reality. Instead, the metaphor is broadened so that, just as language is a system of symbols and structures producing meaning, visual artifacts contain a system of space, articulated by formal concepts that combine to convey visual meaning.

#### Differing Images and Words

While a visual language was emerging in art, the older definition (art as storytelling) persisted in the popular mind and was adopted in the early seventies by the "visual literacy" movement in education. Using ideas from the new "transformational grammar," the movement proposed that images literally contain subjects, predicates, and objects.<sup>6</sup> Subjects and objects are the components of storytelling and depend on natural representation, and so the new "visual literacy" was really a return of ut pictura poesis, dressed in the garb of the new

grammar. Their educational agenda -- hand students a camera and let them make visual statements -- followed the technical alternative.

But the new clothes and equipment hardly disguised the problems. Reading pictures is not exactly like reading language. There may be certain elements of pictures that are based on social conventions, but the idea that one must learn to read realistic representations, from Renaissance perspective to the photograph, is absurd.<sup>7</sup> Moreover, language -- the sound/characters of the alphabet, their relationships to words, and their combining into thought structures -- hardly resembles visual images at all. Visual images can be "read" the other way around, whole to parts to constituent elements, or in almost any other manner. Language is sequent, bound by time and order, whereas images leave an immediate impression and are examined in impulsive patterns.

Nor are pictures and words neat, separate categories. Both are visual. Writing itself -- the words and stories -- depends in part on visual skills, on how well the reporter observes and retains in memory the visible world. Words and symbols behave in complex ways that are little understood, projecting images to the reader which produce tone and style. On top of the visual or metaphorical content of the words is spread the visual form of the words. The shapes and textures, or "plastic" appearance, of symbols and words are just as complex and subtle. Typographic form has no subjects or objects and cannot represent other natural things.

So the ut pictura poesis definition of "visual literacy," in its modern as well as its ancient versions, must be rejected as too narrow to be useful for the words, typography, and pictures combined in the media.



### An Applied Arts Approach

Symbols and images are two very different systems. The former is rooted in images but is structurally at odds with them. The latter is contained in images themselves but depends on words for analysis. Just as each is a means for the other, each can be an end in itself. Until now the effect of education has been to discourage and to stunt visual learning in favor of symbolic learning. Any commonplace example can serve to demonstrate this effect. My students insist that the edges of buildings never curve, and a journalist acquaintance of mine argued all the way to Chicago last week that the parallel lines on the freeway do not converge. These people consider the optical to be an illusion; the truth of reality is symbolic.

The definition of "visual literacy" should assert the value of visual knowledge. Visual alphabetization should, on one level, restore the sight of the child to the adult. Instead of seeing only symbols and their hidden meanings, the adult eye might be trained to see again their textures and patterns. Visual understanding has intrinsic value, it broadens experience. "For we are what we are able to see," wrote Susan Sontag, "even more powerfully and profoundly than we are what furniture of ideas we have stocked in our heads."<sup>8</sup>

Once the value of visual knowledge is accepted, its history will need to be thoroughly researched and written. In effect, words can then be turned to the benefit of images. The terms, principles, and theories derived from the formalist movement can then be developed in the context of the mass media. Unlike the child, the visually knowledgeable adult might then learn how to name the elements of visual language, to tell

their function, and to analyze their meaning. The tools are readily available to teach and measure the words and symbols used to describe other systems.<sup>9</sup> They will need to be validated or redesigned for visual knowledge.

Literacy exists as a continuum that, assuming the ability to speak, begins with knowing the alphabet and enough words to read and fill in the forms and signs of everyday living. Grammar and the niceties of style and diction are more advanced. Visual knowledge may also exist in levels, which might begin with knowing enough of the formal elements to interpret ordinary visual images. Higher forms may include the principles of design, such as unity and proportion, which have been derived from classical theories of aesthetics. Some acceptable level of "visual literacy" will need to be defined.

Considerable controversy exists over whether it is necessary to know any grammar to be able to write well. The new rhetoric of the freshman composition departments takes the functional/technical approach: The student should read and read and write and write, and the teacher should concentrate on the ideas, not on the form. The spelling, grammar, syntax, and conformity to standard style can be cleaned up by computer programs, and in the end, it is hoped, the student will come out writing.

The approach to most media writing is much more formal -- the structures of news writing being the most obvious -- but usually becomes functional/technical as the student produces stories using a computer. A reporting instructor rarely confuses the students' computer skills with their writing. Graphics instructors are more likely to take the menu for the soup, confusing technical skill at a computer with real

visual knowledge. After handing students a camera or a desktop publishing package and letting them make visual images, visual educators will need to be able to judge the results.

"Art," wrote John Dewey, "speaks an idiom that conveys what cannot be said in another language." Most educational tests and measurements have been devised using the theory of technical rationality, under which "propositions which were neither analytically nor empirically testable were held to have no meaning at all. They were dismissed as emotive utterance, poetry, or mere nonsense," according to Donald Schon.<sup>10</sup> His alternative system, called reflection-in-action, may help identify the intuitive and qualitative aspects of "visual literacy." Conveying non-verbal knowledge of this sort requires one-on-one studio experience, where students of the media can learn by example to handle intuitive systems like color and form.

So one possible definition of "visual literacy" would include recognizing and valuing visual experience, knowing the formal structures and theory of visual language, and exploring the intuitive aspects of visual knowledge in the computerized studio. This applied arts approach draws on the theoretical developments of art and on the applied nature of professional and technical education.

Visual images can enliven the individual experience and could reinterpret culture and civilization. But that media images are often glib and banal escapes all but the knowing eye. The utilitarian value of visual knowledge is obvious to editors and producers who must make decisions about the visual content of the media. And the rise of visual culture, as documented in the media, cries out for an informed, literate critique.<sup>11</sup>

Notes

<sup>1</sup>The quotation is from Osborne (p. 12). Ernst cites several studies that found the opinions of journalism graphics educators about the content and future of their field to be unreliable.

<sup>2</sup>Using this example of the letter A, most graphics textbooks trace the development of letterform from pictures. The standard for the field is Craig, and a recent version is Blanchard.

<sup>3</sup>See Shibles and especially Turbayne on confusing the thing with the symbol. For visual thought anecdotes about Einstein, Tesla, and others, see Hanks, et al, and compare Bronowski.

<sup>4</sup>For the documents of art ideas from Plato forward, I have relied on Stern and Robison's compilation. Osborne's history of aesthetics provided a coherent overview and put the documents into context. This section also relies on Griffin's unpublished history of picture use.

<sup>5</sup>See Berger's chapter on the tangibility of oil painting (p. 88). Durandus is quoted in Griffin's paper from Baldwin, Charles Sears, Medieval Rhetoric and Poetic (New York: MacMillan, 1928), p. 530.

<sup>6</sup>Fransecky describes the movement and provides a bibliography. Despite the theoretical narrowness, the movement has developed some sophistication in applications. See Wileman, for example.

<sup>7</sup>See Becker's chapter for an example of pictorial conventions (also see his p. 31), and compare Kennedy's argument against reading pictures.

<sup>8</sup>The Sontag essay, "One Culture and the New Sensibility," is from Against Interpretation (p. 300).

<sup>9</sup>For an example of how formal concepts can be applied to media images, see my articles on the layout of news stories. The educational tools probably begin with Bloom's definitions of objectives.

<sup>10</sup>Dewey's Art As Experience is excerpted in Stern and Robison (p. 496). See the section on technical rationality in Schor (p. 33).

<sup>11</sup>See Goldberger's recent essay.

works consulted

- American Institute of Graphic Arts. "What Should a Basic Graphic Design Education Encompass?" Draft Report of the Education Committee. New York: AIGA, 1985.
- Barnhurst, Kevin G. "News as Art," Journal of the Society of Newspaper Design 24-27, April-September 1987.
- Becher, Howard S. Art Worlds. Berkeley: Univ. of Calif. Press, 1982.
- Berger, John. Ways of Seeing. New York: Penguin, 1972.
- Blanchard, Russell W. Graphic Design. New York: Prentice-Hall, 1984.
- Bloom, B. S., et al. Taxonomy of Educational Objectives. New York: David McKay, 1956.
- Bowker, William J. Graphic Communication. New York: Wiley, 1968.
- Bridgman, J. The Vision of the Eye. Cambridge, Mass.: MIT Press, 1978.
- Craig, James. Designing with Type. Rev. Ed. New York: Watson Guphill, 1980.
- Dondis, Donis A. A Primer of Visual Literacy. Cambridge, Mass.: MIT, 1971.
- Ernst, Sandra B. Teaching Production by Design. AEJ Graphics Division, n.d.

- Fransecky, Rober B. and John L. Debes. Visual Literacy. Washington: Assn. for Educational Comms. and Technology, 1972.
- Fry, Roger. In Vision & Design. Ed., J. B. Bullen. London: Oxford, 1981.
- Goldberger, Paul. "Design: The Risks of Razzle-Dazzle," The New York Times. Sunday, April 12, 1987, 2:1, 34.
- Griffin, Michael. "Turning to a History of Picture Use: Ekphrasis and Conventions of Picture Description," Unpublished paper.
- Hanks, Kurt, et al. Design Yourself. Los Altos, Calif.: William Kaufmann, 1978.
- Kennedy, John M. "Gombrich and Winner: Schema Theories of Perception in Aesthetics," Visual Arts Research 10:2, Fall 1984, pp. 30-36.
- Kepes, Gyorgy. Language of Vision. New York: Paul Theobald, 1969.
- McKim, Robert H. Thinking Visually. Belmont, Calif.: Wadsworth, 1980.
- Mendelowitz's Guide to Drawing. 3d Ed. Rev., Duane A. Wakeham. New York: Holt, Rinehart and Winston, 1982.
- Osborne, Harold. Aesthetics and Art Theory. New York: Dutton, 1970.
- Roberts, Rhys, and Ingram Bywater, trans. The Rhetoric and the Poetics of Aristotle. New York: Modern Library, 1954.
- Schon, Donald A. The Reflective Practitioner. New York: Basic Books, 1982.
- Shibles, Warren. Metaphor: An Annotated Bibliography and History. Whitewater, Wisc.: Language Press, 1971.
- Sontag, Susan. Against Interpretation. New York: Ferrar, Straus, Giroux, 1966.
- Stern, Raphael, and Esther Robison. Changing Concepts of Art. New York: Haven Publications, 1983.
- Turbayne, C. M. The Myth of Metaphor. Columbia: University of South Carolina Press, 1971.
- Wileman, Ralph E. Exercises in Visual Thinking. New York: Hastings, 1980.