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AUTHOR   Lenze, James S.
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ABSTRACT
              The purpose of this paper is to explore another facet
of visual literacy--technical visual communication (TVC)--and to
discuss how this new perspective can further strengthen visual
literacy as a discipline. Unlike visual literacy, which looks to a
desirable state of affairs, TVC addresses the nature of actual visual
communication. Both visual literacy and TVC seek to empower
individuals to interpret images and form opinions concerning the
images' origins, construction, meaning, and intent, but TVC goes
beyond this to examine how visual communication can be used to
manipulate and propagandize. Another difference between the two is
visual literacy examines technology as a subset, while technology is
more central to TVC. Visual literacy practitioners can benefit from a
continuous source of information concerning old and new technologies,
while TVC can benefit from a substantial visual literacy research
base. Technical communication programs are making visual literacy a
more fundamental part of the curriculum. The program at Lawrence
Technological University (Southfield, Michigan), for example, has
three main components: (1) technical writing; (2) oral communication;
and (3) technical visual communication. Visual communication is being
emphasized by such programs in order to make technical communication
students more visually literate. Two figures depict the
directionality of visual literacy components and the three components
of Lawrence Tech's program. (AEF)

Technical Communication: A New Perspective On Visual Literacy

James S. Lenze

Purpose

The purpose of this paper is to explore another facet of visual literacy —technical visual communication (TVC)—and discuss how this new perspective can further strengthen Visual Literacy as a discipline. TVC is a recognized area of study and practice in the field of technical communication. TVC encompasses such issues as typography of text, visual aid design, visual display and presentation, multimedia, and computer generated graphics. Clearly, TVC is a field of study that stands beneath the two umbrellas of visual literacy and technical communication.

This paper will examine how TVC fits within the study of visual literacy. It will highlight those features of technical visual communication that differ from the study of visual literacy.

The Holistic View of Visual Literacy

It can be argued that Visual Literacy, as a field, is comprised of subsets from other disciplines (Moore & Dwyer, 1994). For example, visual learning theory is certainly a major focus in the study of visual literacy and, likewise, is a major focus in the study of educational psychology. It can be further argued that the strength of the study of visual literacy comes directly from its diversity.

With practitioners from many fields approaching visual literacy from different perspectives the study of visual literacy becomes more holistic. Visual literacy has been approached from such diverse perspectives as learning theory (Dwyer & Moore, 1992), film (Robinson, 1985), advertising (Sayre & Mariarty, 1993), computer science (Couch, Couch, & Peterson, 1993), and even folk art (Cunningham, 1992). Although Visual Literacy is a field which is struggling to define itself, it does, in fact, have a more complete view of itself than most disciplines. The study of TVC presents the visual literacy practitioner with another facet of visual literacy.

Definitions

Visual literacy is about empowerment. Its practitioners are dedicated to empowering people to see and interpret images. A visualy literate person is able to see images and form opinions concerning the image's origins, construction, meaning, and intent. There is an inherent morality within this definition. Visual literacy protects the individual from manipulation through visual images. It does *not* instruct the individual on *how* to manipulate through visual images except for the purpose of understanding such manipulation in order to prevent it.
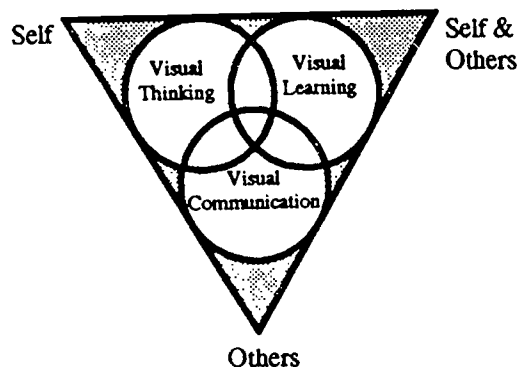
Seels (1994) addresses visual communication as a component of visual literacy (See figure 1). Her definition,

"using visual symbols to express ideas and convey meaning." (p. 109) fits well withing the definition of visual literacy. Her focus is on empowering individuals to understand visual images.

Figure 1
Seels' Directionality of
Visual Literacy Components

Although the emphasis is on the sender of the visual message, there is still a focus on empowering the receiver of the message to clearly understand the message. This approach does not account for those visual messages that are meant to manipulate or deceive the receiver. Visual literacy practitioners are not naive. Rather, they are describing a desirable state of affairs.

A different perspective is expressed in TVC. According Shelton (1993a), TVC focuses on the design of visual messages to do the same kinds of things as visual literacy's visual communication component but it goes on to "influence, propagandize, and prostitute." (p. 617). Again, the focus is on the sender and the visual message but the purposes are significantly different.

Unlike visual literacy, which looks to a desireable state of affairs, TVC addresses the nature of actual visual communication. In this regard, TVC takes a broader look at visual communication.

Again, visual literacy practitioners are not naive and TVC practitioners are not evil propaganda merchants. These two groups approach the same topic from different angles. This is the central theme of this study. Since each group takes a different approach to the study of visual communication, both groups stand to gain by examining the other's research and ideas.

A Focus On Technology

The difference between perspectives is only the beginning of the variations between the TVC and visual literacy. Although TVC practitioners would argue that the message is far more important than the medium (Shelton, 1993a) there is an overt focus on technology in TVC research.

In 1993, the Society for Technical Communication printed a special edition of the STC Technical Communication Journal devoted to Visual Communication. Nine of the ten articles specifically addressed the design and application of technology (Bowes & Elliott, 1993; Burnham, 1993; Horton, 1993; Keyes, 1993; O'Malley, 1993; Search, 1993; Shelton, 1993b; Shelton, 1993c; and Wise, 1993). This special edition also included articles which focused solely on message design (Shelton, 1993a; Williams, 1993). It should also be noted that the technology focused articles dealt with message design for specific technologies. Even visual literacy practitioners would agree that the message is greatly impacted by the medium. Still, the visual literacy research tends to put more emphasis on message design than on the use of a specific technology.

Sharing The Research

The selected readings from each year's International Visual Literacy

Association meeting provide a fairly good perspective on the types of research being conducted by visual literacy practitioners. Each set of readings includes articles on research and theory, teaching and learning, the visual arts, *and* media and technology.

Technology is a subset of the study of visual literacy. This difference between visual literacy and TVC indicates that once again these two groups stand to gain much from an exchange of information. Given the nature of technology to change rapidly, it would be wise for visual literacy practitioners to tap into another source of constantly updated information. Likewise, as TVC explores the application of old and new technologies there is an abundance of solid message design research in visual literacy texts.

The potential for such exchanges is encouraging. For instance, Keyes (1993) article in the STC Technical Communication Journal Visual Communication Special Edition focused on typography, color, and information structure. Although She cites well known sources such as Tinker (1965) and Tufte (1990) she does not cite valuable sources such as Dwyer (1978) and Pettersson (1989). These sources are classics in visual literacy. This is not to say that Keyes work is weak; that would be far from the truth. But the addition of visual literacy texts would make for a stronger examination of the topic.

Putting Them Together

The sharing of ideas has already begun. Visual literacy is becoming a buzz term in technical communication. The technical writer's listserver frequently discusses visual literacy concerns and questions. The Society for Technical Communication has recently formed a discussion group for visual communication. Visual literacy promises to be a foundational principle for that group.

Most importantly, technical communication programs are moving to make visual literacy a fundamental part of their curriculum. Lawrence Technological University in Southfield, Michigan recently approved a bachelor of science degree in technical communication. The program has three main components (See figure 2).

Figure 2
The Three Components of Lawrence
Tech's Bachelor of Science in
Technical Communication Program
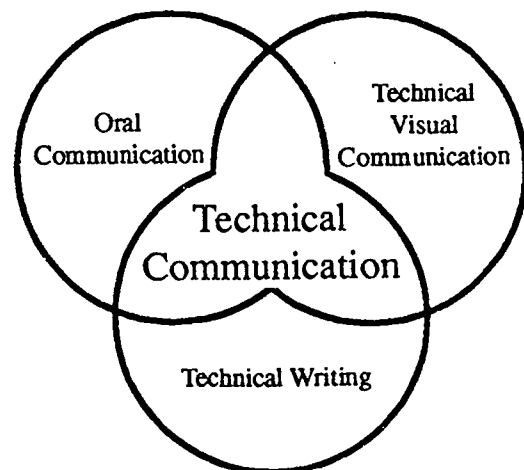
The first component, technical writing, is the foundation of most technical communication programs. In fact, many "technical communication programs" are really "technical writing programs." Course work in the technical writing component includes research and documentation, rhetoric, and research report.

The oral communication component includes course work in speech, collaborative communication, and

interpersonal and nonverbal communication. This component is often a missing or week part of a technical communication program. Lawrence Tech has strengthened this component with faculty who special in oral communication.

The third and final component is the technical visual communication component. This component is often totally overlooked in technical communication programs. Lawrence Tech's visual program includes presentation media, document design, computer assisted instruction, multimedia design, and desktop publishing. The faculty member hired to teach these courses has experience presenting and publishing through the International Visual Literacy Association. The development of visual literacy is fundamental part of Lawrence Tech's technical communication program.

Summary

Visual literacy and tvc share some commonalities in terms of focus. Both seek to empower individuals to interpret images and form opinions concerning the image's origins, construction, meaning, and intent. But TVC goes beyond this to examine how visual communication can be used to manipulate and propagandize.

Visual literacy and TVC also differ in regard to their focus on technology. Visual literacy examines technology as a subset while technology is more central to TVC.

Visual literacy and TVC have much to gain by sharing research. Visual literacy practitioners can benefit from a continuous source of information concerning old and new technologies while TVC can benefit from a substantial visual literacy research base.

Technical communication

programs are now recognizing the importance of visual communication and visual literacy. Courses within these programs are emphasizing visual communication and are working to make their technical communication student visually literate.

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