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ABSTRACT

This paper discusses visual communication theory. After an examination of the literature, this study built a more extensive bibliography of visual communication in general--theory, research, teaching--as well as a taxonomy that was better grounded. A 95-page bibliography was developed for works from a number of scholarly journals dealing with visual communication. Approximately 1,617 entries were organized into 13 major categories and 90 subcategories that represented the focal point of the work; a number of sources were also cross-referenced. The original 15 most popular (written about) areas and the 15 most popular cross-referenced areas were combined to provide a picture of the areas which are receiving the most attention in the literature. One observation that could be made was that at the top of the combined list was dominated by foundation theoretical areas from psychology (memory, cognition/information processing, and perception) as well as visual communication (mental imagery and visual/verbal interaction). Three of the professional areas also ranked in the top 10 with photography at number 2 and advertising and television/video at numbers 6 and 7. Only one education topic area appeared in the top 10: development/children's studies. The list demonstrates that visual communication has its own areas of theory and scholarly attention and that this literature base is nearly as extensive as the psychology base. The original, cross-referenced, and combined classification lists are included, in addition to the top 10 areas of focus. (Contains 22 references.) (AEF)

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Mapping the Visual Communication Field

by Sandra E. Moriarty

ED 391 520

The study of visual communication is a multi-disciplinary, multi-dimensional effort. People who write on this topic are in mass communication (including photography, advertising, and news editorial areas), film and cinema studies, education, art and aesthetics, anthropology, psychology, philosophy, linguistics, semiotics, architecture and even archaeology.

This rich melange of viewpoints is an asset because of the insights that come from cross-fertilization, however it causes some problems academically for those of us who teach visual communication because of a lack of any sense of common theory. This is not to suggest that there is or should be a central of core theory that organizes the field, however, it would be easier to order a curriculum, as well as a graduate program of study, if there were some notion of at least the important theories and scholars from the various disciplines that need to be covered.

This is Part II of a project that began last year. Part I looked at visual communication theory, primarily through a survey sent to IVLA members, as well as members of the Visual Communication Division of AEJMC (Association for Education in Journalism and Mass Communication), and people who

attend the summer Visual Communication Conference. Part II, which is the topic of this paper, now looks at the body of literature and the categories that emerge from the writings to develop a taxonomy of topics and some sense of the location of the most important, or at least the most frequently written about, areas of study.

Review

But first let's look at a review of some of the major pieces of work similar to this effort. In terms of books, Probably the most important book specifically focused on visual communication theory is So Worth's series of essays which appeared in his landmark book, *Studying Visual Communication*.¹ Another important work is a book of readings called *Visual Literacy* edited by Moore and Dwyer, which comes from the educational media discipline but includes a number of essays that relate to basic visual communication theory, as well.² Paul Lester's textbook on visual communication is another important general introduction to the topic.³ Rune Pettersson's *Visual Information* is a useful textbook that focuses more on information theory.⁴ The Morgan and Welton book, *See What I Mean?* approaches visual communication

from a communication theory perspective.⁵ Arthur Asa Berger's *Seeing is Believing* is an introduction to visual communication from a more semiotic perspective.⁶ John Berger's book, *Ways of Seeing*, is a series of essays based on a BBC television series by the same name.⁷ Artist Deborah Curtiss has written a book, *Introduction to Visual Literacy*, which explains how we learn to appreciate and use various aesthetic elements.⁸ Communication scholar Donis Dondis also analyzed the basic elements of images and composition in terms of syntax and visual literacy in her book, *A Primer of Visual Literacy*.⁹ Most recently Paul Messaris's book also titled *Visual Literacy*, takes on the conventional view of visual literacy as a learned process similar to language and instead proposes that visual literacy is largely a natural process.¹⁰

Other important conceptual investigations includes a work by Braden and Baca, "Toward a Conceptual Map for Visual Literacy Constructs" that attempts to map the field of visual literacy in terms of basic concepts, as this report hopes to do for the broader area of visual communication.¹¹ An important theoretical analysis of the instructional/educational technology viewpoint was developed by John Hortin in his review, "The Theoretical Foundations of Visual Learning" in Moore and Dwyer's book of readings.¹² The visual literacy approach outlined by Hortin begins with verbal language as a fundamental model and focuses on the transactional processes by which we receive and transmit visual meaning. This approach reflects the work of many IVLA scholars.

Hortin's piece highlights the important work of John Debes¹³ as a

pioneer in this area, as well as scholars like Ruesch and Kees who developed a model of three kinds of nonverbal languages (pictorial, action, object) in their book on nonverbal communication.¹⁴ Francis Dwyer's *Strategies for Improving Visual Learning* is another important early contribution in this area.¹⁵

Also in the Moore and Dwyer book is a review of visual literacy, thinking, learning, and communication by Barbara Seels.¹⁶ Nikos Metallinos has also reviewed visual literacy theory relative to television processing in "Visual Literacy: Suggested Theories for the Study of Television Picture Perception."¹⁷

Some scholars have tried to identify the interrelationships between visual and verbal information such as Roberts Braden¹⁸ who has developed a theory of visual/verbal symbiosis. Ralph Wileman has created a typology of verbal and visual image relationships.¹⁹

From an entirely different discipline, philosopher Nelson Goodman in his analysis of art, *The Language of Art*, also concludes that pictures represent reality in the same way that language does.²⁰ In other words, meaning is determined by convention and thus learned. The Morgan and Welton book, *See What I Mean?* also presumes that visual appreciation is learned.²¹

In contrast to the viewpoint of Nelson and most of the IVLA scholars, communication scholar Paul Messaris's argues in his book *Visual Literacy* that people become visually literate through a process that is basically perceptual and innate rather than learned as is language. His premise, that visual

literacy is a normal human condition, is also argued by Cassidy and Knowlton.²²

Bibliographies and Taxonomies.

A number of bibliographic studies have been done in the visual literacy and visual communication area. Probably the biggest effort is one by Howard Levie, "Research and Theory on Pictures and Imaginal Processes" which appeared in *The Journal of Visual Verbal Languaging* in 1984. Martin Oudejans broadened the topic in his piece "A Bibliography of Visual Literacy" which appeared in the same journal in 1987. Alice Walker has analyzed both IVLA conference proceedings and the *Journal of Visual/Verbal Languaging* (renamed the *Journal of Visual Literacy*) in articles in 1990 and 1991.

As mentioned earlier the findings of the first part of this study, which was a survey of people who teach in the visual communication area, were presented at this summer's Visual Communication conference. That survey asked visual communication scholars to cite the theoretical areas that provide them with a foundation for their work. As one might expect, the number of people who care enough to respond to a questionnaire about the views on theory was rather low and only 37 people provided usable responses. The data from that survey, however, was useful as guideline in developing this second attempt to map the field.

The respondents did mention, however, 17 theoretical areas as providing grounding for visual communication study. When the categories are collapsed, the largest number of mentions were found in the psychology category (49). This down into cognitive/information

processing approaches (22), perception (195), and gestalt approaches (9). Another general category that is summarized here as "meaning theories" (semiotics/ semiology, symbolism) was second with 15 mentions. Visual communication, which emerged in this study as an area with its own body of theory--largely described as representation and imagery studies--was third with 14 mentions. A group of categories--aesthetics, mass communication, and cultural/critical theories-- were tied for fourth, followed by film/cinema studies in the fifth spot.

The exercise of coding and categorizing these responses led to the development of the first draft of a taxonomy. In order to better understand these categories and the body of literature represented by them, Part II of this study looked at the literature itself and tried to build a more extensive bibliography of visual communication in general--theory, research, teaching--as well as a taxonomy that was better grounded.

This Project

This project began by looking through the personal files of the two primary authors and building an initial bibliography based on these works. Then the authors moved to the library for a more systematic combing of certain journals--*The Journal of Visual Literacy* (previously known as the *Journal of Visual/Verbal Languaging*), *Visual Communication Quarterly* (a special section in the *News Photographer* magazine), *Studies in Visual Communication* (now defunct), the *AECT Journal*, and *Visual Sociology and Visual Anthropology*. After the important works in these journals were collected, then the third step

was to go through the citations and references for all the articles collected in the personal files as well as in the articles. All of this work led to the development of a 95-page bibliography (single spaced) with some 1,617 entries organized into 13 major categories and a total of 90 subcategories. (See the Taxonomy in the Appendix).

All of the entries were assigned to categories that seemed to represent the focal point of the work. A number of them, however, crossed over to other categories so a second effort was made to cross-reference all these works allowing either one or two other subcategories to be indicated. Eventually when the bibliography is published, this information will be used to create a cross-referenced index.

The point of this paper is to present the taxonomy as developed for this project. The number of entries in the various categories will be computed to determine the ones that seem to have the most scholarly attention as well as the categories with the highest level of convergence- in other words, those that are being used in a lot of different studies in a lot of different areas. Next the cross-

references were analyzed to see if the pattern is the same as the original assignments. Finally the original category assignments were combined with the cross references to determine the total number of works affiliated with each category. Once again, the aim was to determine the areas where the most work is occurring as is evident from this version of the taxonomy and bibliography.

The Findings

In terms of the original classifications, the 15 most popular (written about) areas are show in the table that follows on the next page.

When you look at those areas in the top 5 that were often cross-referenced, a different pattern emerges with memory clearly leading the list followed by a group comprised of imagery and photography, then cognition/information processing, and visual/verbal interaction. This tends to suggest that certain areas (development, advertising) were the focus of a certain set of studies but were less frequently used as associated variables. Other areas tended to be used more frequently

Original Category Assignments

	<i>n</i>		
1. Development/Children	61	8. Gender Studies	40
2. Advertising	50	9. Creativity	39
3. Visual/Verbal Interaction	49	10. Art/Fine Art	37
4. Photography	48	" . Aesthetics	37
" . Cognition/Info Processing	48	11. Perceptual Cueing	36
5. Memory	43	12. Sociology/Anthropology	30
6. Television/Video	42	" . History	30
7. Mental Imagery	41	13. Signs/Semiotics	29
" . Visual Literacy	41	14. Graphic Design	28
" . Perception	41	15. Publication Design	27
		" . Film/Cinema	27

as variables such as imagery and memory. Photography, cognition/information processing, and visual/verbal comparisons

appeared in the top 5 in both lists. The top 15 categories in the cross-referencing list are shown in the following table.

Cross-Referenced Category Assignments

	<i>n</i>		
1. Memory	90	8. Film/Cinema	48
2. Imagery	79	9. Advertising	47
3. Photography	78	10. Pictorial Representation	46
4. Cognition/Info Processing	71	11. History	40
5. Visual/Verbal Interaction	66	12. Perceptual Cueing	38
6. Art/Fine Art	56	14. Graphic Design	25
7. Television/Video	53	15. Photojournalism	25
		15. Research/Methodology	22

Many of the categories appeared in both lists of 15 (photography, imagery, memory, cognition, visual/verbal interaction, art, television, advertising, perceptual cueing). The topics that are on both lists would be categories with the highest level of convergence.

The categories from the original list that didn't show up in the top 15 of the cross-referenced topics include development, visual literacy, gender studies, creativity, and aesthetics. These topics might be considered to be self standing areas or areas where there is less convergence across topics. A few categories only showed up at the top of the cross-referencing list (representation, photojournalism) and these seem to be used as foundation variables across a number of different studies.

Other topics that had 20 to 29 entries include information graphics, visual illusions, representation and realism, visual interpretation, physiology/ vision, pictorial perception, gestalt perception, comprehension, audio/visual/verbal interaction, symbols, publication design, typography, color, cross-cultural studies, ideology/bias, ethics and social responsibility, instructional media/ed tech, and new media.

When both of these lists are combined, you get a picture of the areas which are receiving the most attention in the literature. The top 25 list of the combined categories, which gives you a feeling about the breadth of the spread and the nature of the weighting of the topics investigated, is as follows:

Combined Classifications
(Original Assignments Plus Cross Referencing)

1. Memory	133	" . Creativity	50
2. Photography	126	" . Gender Studies/Stereotypes	50
3. Mental Imagery	120	16. Signs/Semiotics	43
4. Cognition/Info Processing	119	17. Codes/Decoding/Encoding	41
5. Visual/Verbal Interaction	115	18. Broadcast/TV News	40
6. Advertising	97	" . Research/Methodology	40
7. Television/Video	95	19. Audience Factors	39
8. Art/Fine Art	93	20. Sociology/Anthropology	38
9. Perception	83	21. Rhetoric/Persuasion	37
10. Development/Children	79	22. Photojournalism	35
11. Film/Cinema	75	23. Journalism/News	32
12. History	70	24. Information/Content	31
13. Visual Literacy	61	25. Cartoons	30
" . Pictorial Representation	61	" . The Language Metaphor	30
14. Graphic Design	53	(syntax, grammar, etc.)	
15. Aesthetics	50		

Topics that were noted in the teens include visual communication philosophy, visual thinking, imagery and perception, epistemology, psychology of art, attention and selection, hemispheres, dual coding, critical viewing, communication studies, visual metaphors and analogies, audience evaluation/judgment, education (general), instructional materials design, computers in education, and archaeology.

Bringing up the bottom of the taxonomy with nine or fewer entries are imagery and education, vividness studies, neural processing, Psychology (general), subliminal perception, pictorial superiority effect, media literacy, kinesics, perceptual aesthetics, aesthetic education, composition, graphic symbols, advertising design, corporate design, computergraphics, reading and writing, text and illustrations, educational

TV/Film/multi-media, TV commercials, and architecture.

Conclusions

One observation is that the top of all the combined list seems to be dominated by foundation theoretical areas from *psychology* (memory, cognition/information processing, and perception) as well as *visual communication* (mental imagery and visual/verbal interaction). Three of the *professional areas* also ranked in the top 10 with photography at #2, and advertising and television/video at #6 and #7. Only one *educational* topic area appears in the top 10 and that is development/children's studies.

This list, as well as the way the taxonomy evolved, clearly demonstrates that visual communication has its own areas of theory and scholarly attention and that this literature base is nearly as extensive (242) as the psychology base

Major Areas of Focus

1. Professional Areas	297
2. Psychology	264
3. Art and Design	257
4. VisComm Theory	242
5. Education	216
6. Cultural/Critical Studies	185
7. Meaning Studies	36
8. Audience Factors/ Effects/Responses	36
9. History	30
10. Comm Studies	30

(264 which was determined to be the most important foundation theoretical area from the previous study.

The general area of art and design, however, was second in importance with 257 entries; education was also important with 216. Most of the writings (297), however, relate to the various professional areas that employ visual communication such as photography, advertising, television, and film.

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