

Literacy, Language, and Learning

The nature and
consequences of
reading and writing

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The concept of literacy in print and film

MICHAEL COLE and HELEN KEYSAR

Preliminary comments

Literacy is conventionally understood as the ability to use graphic symbols to represent spoken language. Literacy so conceived is one important class of mediated human activity. It is a form of literacy based on print. In addition, in ordinary language, literacy often refers to the ability to interpret or negotiate understanding within any mode of communication. Thus we speak of film literacy or music literacy or computer literacy, and we mean by these terms the ability to understand and explain film or music or computers. When someone says that she is musically illiterate, we think we know what she means; she cannot make knowledgeable interpretations of events presented in the medium. Insofar as the ability to *use symbols* is essential to literacy, then it is clear that the second, increasingly commonsense notion of the concept is inaccurate or incomplete. To reconcile the technical and everyday notions of literacy, the whole notion of the relation between use of a medium of communication and "literacy" in that medium must be modified. Otherwise we cannot coherently understand literacy as an activity common to media other than print.

Webster's provides a dual definition of *literate*. To be literate is to "be able to read and write," but it is also to be "well versed in literature or creative writing." This contrast implies that there is more than one pattern of interacting with text, just as there is more than one way that text relates to its referents; moreover, these different patterns of interaction implicate different consequences. In this chapter, we begin to generate a concept of literacy that is sufficient and appropriate to a variety of media in relation to their contexts of use. We then pose questions about the applicability of this concept of literacy to media other than print. The subject of our

investigation is the boundaries within which different forms of mediated human activity share a *common* structure such that increasing use of that structure to interpret communicative events represents greater literacy in the medium.

Starting from our current understandings of the consequences of engaging in activity involving print, we consider the extent to which there exists a general theory of mediated activity within which print, film, drama, television, and other "media" constitute particular configurations. By contrasting some shared understandings about print literacy and understandings about other forms of mediated human activity, we gain three kinds of benefits: (1) Our knowledge of print literacy might be applied to help us understand mediated activity involving other media; (2) accepted generalizations about the nature of other mediated activities might give us insight into print literacy; and (3) we might make progress toward a general theory of mediated human activity.

Given our basic concern with the application of a concept of literacy to media other than print, it would be appropriate to discuss any and all types of media. In this chapter, we have chosen to focus our attention on film and, to a lesser degree, on theater, both because these forms appear to challenge some common assumptions about literacy and because issues relevant to film literacy illuminate both the concept of literacy itself and fundamental questions about mediation in contemporary societies. That film and theater are *directed*, that is, call forth overtly an act or series of acts of mediation, is particularly important, because it emphasizes the interactive and partial natures of these forms. Problems of interpretation, of audience, of historical context, and of point of view come forward immediately when we approach the idea of film literacy. In addition, the physical resemblance of the projections of film to "the real world" presents key questions about the process by which the spectator interacts with the medium.

To some degree, the specific instances of film and theater that we will discuss are coincidental and arguably eccentric as choices for analyses. Our discussion began with an old chestnut; how can a play written four hundred years ago be said to create the same response in a modern audience that it did (say) in Shakespeare's day? Our explorations of possible responses led to the discovery that we had had parallel experiences with the text of Shakespeare's *Romeo and Juliet* and the Franco Zeffirelli film drawn from that text. Somewhat later, we discovered antithetical responses to Robert Altman's film *Nashville*, provoking us to consider the possibility of different kinds

or degrees of film literacy. The relative accessibility of Zeffirelli's *Romeo and Juliet* contrasted forcefully with the relative inaccessibility of *Nashville*. This contrast provoked our discussion of the relevance of filmic modes of narration and point of view, each of which has instructive parallels in literacy theory. We turn to these films in this chapter not because either or both are archetypal or perfect as objects for analyses of film literacy but because together they constrained and revealed central questions about our concepts of literacy.

In pursuing this line of inquiry, we are mindful of important work that explores differential forms (or bias) of activity associated with different media (Barthes, 1977; Burke, 1973; McLuhan, 1962; Salomon, 1979; and many others). At the same time, statements about properties specific to a medium *imply* that there is a general theory applying to all media, such that special cases and their relationships to each other can be systematically understood. We want to continue the inquiry into the nature of that theory. As an entry point, we will summarize what we consider to be a working consensus concerning some important features of mediated activity involving print. Next we will propose some very general propositions concerning mediated human activity, and we will briefly apply these principles to print. Then we will present informal accounts of our individual reactions to reading *Romeo and Juliet*, the Zeffirelli film, and the film *Nashville*. Finally, we will use the contrast between film and print as mediated activities to articulate the relevance of a unified communications framework for understanding of specific "media effects."

A rough consensus concerning print

During recent decades there has been much and varied scholarly activity intended to describe and explain the impact of print literacy on individuals, the activities they engage in, and the societies they live in. Coming from such diverse sources as art history (Schmandt-Besserat, 1978), anthropology (Goody, 1977), history (Ong, 1971), and psychology (Bruner & Olson, 1977-78; Scribner & Cole, 1981), we find general adherence to the following summary of the consequences of literacy.

The introduction of literate devices into a society changes the actual and possible interactions between people and the world. These changes can occur at all levels of aggregation of human activity. That is, they can be found in the kinds of trade that people can engage in, the size of the social units that can reasonably be held together,

the way that the transmission of culture is organized for the young, and so forth.

Insofar as thinking is understood to be "the process of internalizing the ways of acting, imagining and symbolizing that exist in [one's] culture" (Bruner, Olver, & Greenfield, 1966), changes in trade and political organization (that is, changes in people's normal intercourse with each other and their environments) will go hand in hand with changes in intellectual processes (Goody, 1977).

When characterizing the mental concomitants of changes in human interaction wrought by interaction with literate technologies, special attention is focused on those interactions where the given literate technologies are central components – for example, systems of accounting (Schmandt-Besserat, 1978; Goody, 1977), laws and rules, the transmission of important cultural knowledge (Havelock, 1976), and knowledge-seeking activities (McLuhan, 1962). This is not to say that interactions where no literate device is present will not be affected by the presence of literacy in a society; such changes in the social order are strongly assumed to be present and crucial to understanding the consequences of literacy. However, in terms of *psychological process* hypotheses, interactions directly involving literate technologies are the primary focus.

Within those contexts, where the technology of writing is an element in the interaction, literacy is conceived to exert its effect by producing a *functional reorganization* of the system of activities; it is in freeing language of its spatial and temporal restrictions that literacy has its primary effects. Crudely put, literacy is said to act primarily through its ability to hold information intact over periods of time and to transmit information faithfully over distance.¹ Using the relevant psychological terminology for the moment, literacy functions to change the relation between memory and such processes as attention, inference, and classification. Unloosed from the mental burden of remembering, people are freer to put more mental resources into reasoning about the information at hand, logical syllogisms can be used to clarify relations among propositions, and taxonomically organized category systems are rendered "visible."

There is also agreement that the causal impact of literate technology is not unidirectional from technology to activity. Activities provide greater and lesser opportunities for particular literate technologies to be effective. As recounted in Goody (1977) or Schmandt-Besserat (1978), the interplay of socioeconomic and literate-technological forces represents a classical case of dialectical interacting systems that are always incipiently in a process of change.

Unresolved issues. Our ability to give a general account of the consequences of literacy for which there is rather widespread agreement provokes us to turn our attention to the many issues in dispute within this general consensus. To what extent does literacy do more than enable certain functional reorganizations of activity? Does it also bias the structure of the interactions of which it is a part (Olson, 1977; McLuhan, 1962)? How general are the changes wrought by literacy within a literate culture or literate individuals (Scribner & Cole, 1981)? What are the social and economic conditions necessary for literacy to enter into the ongoing organization of activities in a productive way (Scribner, 1981)? To what extent can the changes wrought by literacy be considered to reflect a general direction in human history or individual development (Goody, 1977)?

It will not be easy to resolve disputes over these questions, in part because they are interconnected with each other in just the ways that print is interconnected with the individuals and societies that use it. One course is to propose general principles that might apply, with appropriate transformations, to any form of mediated activity. We take this to be the effort of such writers as McLuhan (1962). Another important endeavor is to work out a number of cases in great detail, seeking in each case to explicate general mechanisms as well as possible. Such work exists, as our brief review indicates. If the first approach strikes the average academic as speculation, often tending to the wild side, the second strikes the general reader as unnecessarily detailed and labored. In the remainder of this chapter, we will attempt to avoid tendentious detail, yet keep our generalizations tethered to, if not tied down to, grounded arguments and concrete instances.

Some common propositions about mediated human activity

While there is no prototheory of mediated human activity in the sense that there is a prototheory of print literacy, there are several key propositions concerning mediated activity that enjoy wide acceptance. The following propositions appear most powerful to us at the present stage of our thinking.

Proposition 1. Of the knowledge we have of the world very little comes from scenes in which we have literally participated. In this sense, we have little direct experience of the world. Rather, much (some would say all) of our knowledge is obtained *indirectly*. It is not *immediately* experienced; rather, it is *constructed* – it is *mediated*.

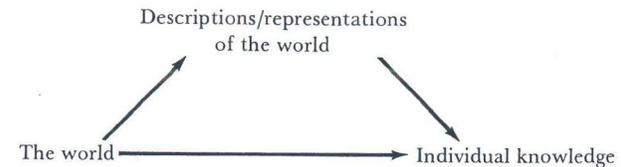


Figure 4.1

This understanding is represented differently by different writers in different traditions. Whether from semiotics, literary criticism, or psychology, this basic idea can be represented in terms of Figure 4.1. In this figure, individual knowledge is depicted as arising from direct experience of the physical world ("raw experience") and from indirect knowledge (mediated experience) that comes through prior representations. Even in scenes where we may be considered immediate participants, interaction may be considered mediated insofar as understandings coded in language constrain activity or one or more "media" are instrumental to the activity (Percy, 1975; Olson, 1976).

Proposition 2. Insofar as our knowledge is mediated, it is an *incomplete* rendition of the original event. This incompleteness arises from two primary sources:

First, any representation/description of the world is necessarily an incomplete rendition (re-presentation) of the original. It is not only that a picture is worth a thousand words, but that no amount of talk (and no picture) can completely replicate the events it represents; the most precise verbal or visual presentation of the world is limited by the resources of the actor and the forms of the medium.

Second, an account arising from any interaction between people is incomplete, because a communicative verbal formulation is always and necessarily a compromise between what the speaker experienced and what can be coded in terms of prior knowledge of the world such that part of the referred-to events are now understood in common (Holquist, 1981). This incompleteness has many ramifications, among them the very possibility of distinguishing the self and others, which is the very motivational force of communication itself.

These two sources of incompleteness interact to increase the overall uncertainty in the system of mediation as it relates to the match between some supposed state of reality ("the original") and some understood version of it (the mediated representation-as-understood). From this incompleteness issues a central paradox common

to all forms of mediated human activity: It is very hard to figure out what is going on in the world, but we all do so all the time.

Proposition 3. Mediated knowledge is not only incomplete; it is incomplete in ways that reflect the selective factors operating at the time of the events that were encoded. In this respect, mediation always reflects a point of view. It is in this sense "biased" to coincide with the systems of understandings that guided its selection process. These systems are shaped by prior history and current context and are intimately tied to language.

Insofar as mediation is successful, we are led to say that something has been established in common between a state of the world (raw experience) and the individual, or between two individuals: We say that *communication* has occurred. Here we take *communication* in its root sense of "putting in common."²

Applying our three propositions to print

No extended discussion of print literacy is necessary because one or more of our basic propositions has been presupposed in much of the research we summarized in the earlier section on writing. However, it may prove useful to reformulate the consensus concerning print literacy in the current framework, at least with respect to its psychological consequences, which are our chief concerns here.

1. *Indirectness.* The basically mediated nature of literate activity is taken for granted. Not even pictographic systems of writing are considered direct copies of the referents of writing.
2. *Incompleteness.* Discussion here focuses on the way in which different models of representation (orthographies) interact with language forms and the communication demands in society to produce different systems of literacy (Glushko, 1979; Hatano, 1982; Scribner & Cole, 1981). So, for example, a syllabic script like Vai may be optimal with respect to speed of acquisition and adequate to its terms. Yet its syllabic structure may reduce its intelligibility outside close social bonds, reducing the possibilities of wider use (Scribner & Cole, 1981).
3. *Selectivity.* The selectivity in the way that writing systems permit or promote various representations and processing skills has also evoked discussion; argument centers on the nature of the selection constraints that different technologies of representation and reproduction foster. (Some, like Havelock, 1976, argue that

the special representative powers of the alphabet enable totally new forms of thought; see also Olson, 1977.)

This discussion could be expanded at this point to explore print literacy in terms of our three propositions about mediated activity. Instead we will apply them to the notion of literacy in film and then return to print in a more general theoretical context.

Literacy and film

The concept of literacy has frequently been applied to media other than print.³ But theory in this area is still in its infancy, and contradictions abound. Thus, while film theorists may discuss the knowledge that enables various "readings" of a film, Seldes (1960) can assert that "there is no illiteracy in film." When such contradictory statements in otherwise reasonable discourse arise we immediately begin to reexamine our initial assumption. It is really useful to speak of "reading film"? Does the concept of literacy apply untransformed?

As a means of sharpening the issues, we will recount episodes that illustrate our concerns with the applicability of concepts from the study of print to the study of film. We chose these encounters not for their decisiveness with respect to a comprehensive theory; we have no such theory to offer. But we believe that they raise significant questions that such a theory should address and suggest some problems and approaches that could usefully be applied to the study of print literacy.

"*Romeo and Juliet.*" Both authors of this chapter encountered Shakespeare's *Romeo and Juliet* first in a printed version and much later in a film directed by Franco Zeffirelli. Kayssar, a literature major on her way to a career in drama, came to the play with a different orientation than Cole, whose liberal arts education led to a career in psychology. But their reactions to the printed play and then the film, as recalled in the discussions that provoked this chapter, were similar in many respects.

Cole summarized his experience as follows: Romeo and Juliet are sufficiently universal symbols in our society that it is impossible for me to remember my first encounter with the *idea* of Romeo and Juliet. It was a part of doing something else. In high school, however, I clearly remember encountering Shakespeare's play in a literature class. My main response to reading it was slight annoyance. I found Shakespearean English difficult to understand; I looked upon Romeo and Juliet as a couple of headstrong teenagers who killed themselves.

Now, wiser about, if not freer from, the fear of disapproval of my opinions about *Romeo and Juliet*, I will add that I thought they were real dopes to do it.

The situation did not change much for many years. As I became more sophisticated in the ways of academe, I learned that *Romeo and Juliet* is considered a *tragedy*, a form of play in which human frailties lead to a lot of unhappiness for decent people. Since the only character fault I attributed to Romeo and Juliet was stupidity (not a trait calculated to evoke strong efforts at empathy), I wondered at the play's reputation. *Othello* terrified me. I readily accepted it as a *tragedy*, not as a teenage romance.

Thus prepared, I went to see Zeffirelli's filmed version of *Romeo and Juliet*. It was a revelation in the sense that it made manifest for me *precisely* the tragic possibilities of all-consuming passion, and it did so in terms that felt very certain and were certainly very strong. I was captured first by the fight among the boys. As the action took its course, and the dangers to which the lovers were exposing themselves became (as they say) apparent to me, I became more and more uncomfortable, reaching a point where I wanted to reach out and say, "No! Stop! Don't do it!"

Keyssar summarized her experience as follows: I was not attracted to the play, the characters, or the world of *Romeo and Juliet* when I first encountered it in a high school literature class nor when I encountered it for the second time in college. The Shakespearean verse did not in itself confound me (I was trained to read poetry), but little in the language or my instruction about the play engaged me. My early encounters with the play – both my own readings and what my teachers said about it – stressed the antagonism between the two families. I found that all rather foolish; I also found it unconvincing that these two young people would end up dead because of their parents' stupidity.

Some years after my first encounter with *Romeo and Juliet* I, too, saw the Zeffirelli film of the play, and I, too, was engaged by the film in a way I had not thought was possible. The physical beauty and sensuality of the images of the young lovers were so strong that the possibility of their deaths was unbearable. I have almost no memory of their families from the film; the warring Capulets and Montagues were treated by Zeffirelli just as my naïve readings had suggested they should be – as the aggravating cultural context. Zeffirelli captured my attention from the beginning by setting the world of *Romeo and Juliet* in the adolescent world of Romeo, his friends, and his foes, not in the culture of their parents. I did not particularly

like or admire Romeo, but I was drawn to his vitality and the vigor of his relationship to his male friends. And that energy was easily reattached to Juliet. I felt myself caught in their fervor of reckless abandon, and while I, as spectator, like Mike, wanted to say, "Stop!" I also wanted neither of them to stop because to stop was to arrest their passion as well as mine.

In the simplest terms, I was also attracted by *Romeo and Juliet's* unabashed eroticism. I, too, felt that pain, that sense of irretrievable loss, that has something to do with the art of tragedy, because the film made me feel what death was all about: It was about absence, and I recognized that absence because the human beings on the screen had been made so present to me.

A second case: "Nashville." How are we to understand the different experiences that resulted from the two forms in which we encountered *Romeo and Juliet*, the written script and the film?

Perhaps a sheer increase in "immediacy" is the reason; we were helped to a Shakespearean response by the physical, evocative properties of color film. McLuhan's distinction between hot and cool media might be a sufficient summary of the two kinds of experience. Perhaps the increasing complexity of each of our own lives over time enabled a more mature interpretation. Perhaps. But these are insufficient constraints on our speculation. To complicate matters, and constrain ourselves, we will include two more accounts, this time of our viewing of Robert Altman's film *Nashville*.

Cole saw *Nashville* in the company of Keyssar in the context of teaching a course on film. He spent a considerable time trying to figure out what was happening. A lot of American popular culture was displayed on the screen, both music and menace. He admired a variety of technical filmmaking achievements. He smiled at the irony of the songs. But he did not like the film, and he felt that he didn't understand it. He came away remembering swatches of action and character. He doubted, as he does on such occasions, that there was all that much to understand. It was not a particularly pleasant experience.

Keyssar's reaction was significantly different. She was exhilarated from the opening credits to the closing boom. She heard the introductory voice-over as a barker's voice announcing a central event of the film, the political campaign. When a garage door covered with the political candidate's logo was raised, she interpreted it as "the curtain going up." Drama is her thing; she liked the gesture.

As the film continued, she noted elements in the film that are not a part of Cole's account. A sign saying "THE BANK" is partially obscured so that it reads "HE BANK"; almost everything in the film is colored red, white, and/or blue; other colors, yellow in particular, take on a coherent signification specific to and mediated by this film.

Keyssar found herself caught up in the kaleidoscopic pattern of the situations portrayed in the film so that the film as a whole became a moving experience. Cole was never comparably engaged. Both were made uncomfortable by a scene in which a vulnerable girl is manipulated into doing a strip tease before a room full of Nashville businessmen. Both reacted with ironic understanding as the strip scene is intercut with a sequence in which an archetypically laid-back male singer croons to five different women, each of whom momentarily believes that the singer is addressing her – and then perceives differently. Cole and Keyssar then held in common some perceptions of and responses to much of *Nashville*, but the differences in their experience were as marked as the differences between their readings and viewings of *Romeo and Juliet*.⁴

Applying the basic propositions to film

In order to keep this discussion of the basic propositions relevant to the initial print orientation of this essay, we will select applications that seem to us to speak most directly to questions of the consequences of literacy and to the notion of literacy itself.⁵

Is not film immediate? The strong sense of direct access to events represented in film is the central phenomenon of film theory. Barthes (1977) accounts for this sense of directness by referring to photographic images as *analogons*. An analogon is an image the structure of which replicates raw experience in ways that provoke specieswide recognition. In a restricted sense, film, based on photography, is comprised of a set of analogons for which "there is no necessity to set up a relay, that is to say a code, between the object and its image" (Barthes, 1977, p. 16). In this same restricted sense, film could be considered directed, unmediated access to some event.⁶

This sense of immediacy, whatever its applicability to a small photographic image, is too restricted to apply fruitfully to a film. A film, taken from beginning to end, cannot be considered an analogon precisely because the entirety is comprised of pieces, which are, at a minimum, a reduction of the whole. It is possible, of course, to place a camera at a fixed position and cause it to film a geographically and

temporally restricted event. But this is not what filmmakers do. In an earlier era of filmmaking Pudovkin (1929/1970) declared the need for "clear selection, the possibility of the elimination of those insignificances that fulfill only a transition function and are always inseparable from reality, and of the retention only of climactic and dramatic points" (p. 93). Arnheim (1957) makes the same point: "From the time continuum of a scene [the filmmaker] takes only the parts that interest him, and of the spatial totality of objects and events he picks out only what is relevant. Some details he stresses, others he omits altogether" (p. 89).

These comments make clear the several important respects in which film is distinctly *not* an analogon, in Barthes's sense, and not a direct mode of communication in terms of our basic propositions concerning mediated activity:

1. Even a single, continuous piece of film is a selection because it does not provide its own context.
2. While it might be said that analogons "interpret themselves," an entire film does not; when a film does seem to "interpret itself," – that is, when analogons become signs – we can expect to find that the filmmaker's and viewers' notions of "relevance" of the analogons (in Arnheim's sense) coincide.
3. Instead of an analogon, a film is a complex *arrangement* of images that often transforms the interpretations of events represented, thereby changing the meaning of the analogons, considered as a system.
4. The necessary coexistence of selection and arrangement imply a "point of view" to the *entity* produced. In short, communication via film, no less than other forms of communication, is mediated.

What might film literacy be?

The notion of literacy applied to film must refer to more than the ability to recognize analogons. Film literacy is the ability to obtain meaning from the arrangements constructed by the filmmaker, in addition to the meaning obtainable "directly" from analogons. Borrowing from modern semiotic theorists, we will refer to recurring patterns of arrangements as codes.

A hierarchy of codes?

Film images are not the experience of the world reduced to the *image*. We know this to be true in a formal sense, but it is palpably

true in the efforts of filmmakers to make films correspond more closely to real experience, as in the creation of 3-D films with complex sound systems (or in imaginative flights like Aldous Huxley's suggestion for "feelies").⁷

While the creation of 3-D films is a public manifestation of the shortcomings of film-as-unmediated-experience, a far more refined set of ideas concerning mediating mechanisms in film has grown up in the work of film innovators and film theoreticians. It has struck us in reviewing this work that it is possible to "rank" various film techniques for how closely they approximate a direct transmitter of their real-world referent.⁸ We identify the following categories of image-making techniques that are prevalent in film and that seem to offer important distinctions with respect to the kind of mediated activity involved.

1. *Archetypal codes.* Here we have in mind images that are believed to evoke particular responses universally by virtue of primitive, universal, symbol systems. These may be produced either by techniques such as the use of camera angle (shooting up produces the sense of power in the superior part of the image) or by movement patterns of the actors (head bowed in mourning) (Ivanov, 1976).⁹

2. *Psychophysical codes.* Here we have in mind techniques such as the zoom, the closeup, and rapid cutting. These techniques all mimic in some way an aspect of our normal perception of the world such that (for example) a closeup arouses both the sense of attending to detail and the illusion of physical closeness. Yet research with children shows that totally naïve children who can follow the main story outline do not correctly interpret sequences where these devices play a prominent role (Salomon, 1979), indicating that some form of mediated interpretation is necessary. This same research indicates that these psychophysical codes are easily mastered; a little experience with television is enough to master them.

3. *Cultural codes.* A cultural code is an image that evokes a set of culturally linked concepts, although these concepts may not be directly named in the film. The red-white-blue versus yellow-blue color scheme in *Nashville* provides an excellent example of what we mean by a cultural code; red-white-blue signifies the United States, patriotism, the flag, and so on. In contrast, the color yellow is emptied of its conventional cultural signification of cowardice and reestablished as a new code specific to the film. When these codes are not explicitly

tied to the film's story line, they may not be explicitly noted by the viewer.¹⁰

4. *Media and genre codes.* A clear example of such a code is the garage door going up at the beginning of *Nashville*. The "unmediated" interpretation of this event (e.g., the commonsense interpretation given it by Cole) is a garage door going up; Keyssar's interpretation (curtain going up) relies upon a system of events from theater, from which film is historically derived and with which film retains strong intellectual and stylistic ties.

5. *Theoretical codes.* It is difficult to be explicit about what we mean by a theoretical code. An accessible starting point is Metz's notion of the "language" of film, by which he means that system of codes that allows us to connect the various images that are *presented* and to *represent* them to ourselves in the form of our interpretation of the film. The term *language* needs to be placed in quotation marks in this context because, as Metz (1974) points out, "It is not because the cinema is language that it can tell us such fine stories, but rather it has become language because it has told such fine stories" (p. 47).

In the telling of stories, the different kinds of codes provide us with different kinds of meaning, corresponding to different systems of constraints arising from the film and the audience, as our examples have shown. Recognizing that the interpretation of film cannot rest on any one system of codes in isolation gives us another link to the concept of literacy – for example, the ability to interpret the *system of codes* that the film offers. But as Metz's characterization of the origin of film language indicates, we cannot investigate that system independent of "the stories" that are its driving force. We must, in short, take into account the narrative that provides the environment for the system of codes.

Narrative structure

Earlier we spoke of *codes* as structures of meaning arising out of particular arrangements of photographic images. Starting, as we did, from Barthes's characterization of a photograph, discrete images and sounds appeared to be the obvious unit of analysis. But an individual image or sound may not be a viable or relevant basic unit of film. The term *analgon* might be usefully applied, in Barthes's sense, to units larger than a single photographic frame. *The shot* (a single,

continuous piece of footage) is often considered a basic, meaning-bearing unit.

For purpose of this discussion, it is useful to point out that *events* have some of the properties of analogs; when the structure of an event in a film replicates the structure of our everyday experience, we “re-cognize” it; we have a ready-made interpretation or “schema” for it. These directly understood events are basic to our understanding of film literacy because these events provide the meaning structure within which the filmmaker can construct and embed codes.

The past decade has produced a significant body of psychological research on the way the processes of the comprehension and remembering of stories depend upon the structure of the events within them. Narratives characterized by structural features that deviate from the event structures of everyday life are more difficult to understand, more difficult to remember later, and less pleasant to interact with than stories that adhere to a relatively well specified (and perhaps universal) story schema (See Mandler, 1979, for a review). Thus, for example, a narrative in which there are several parallel developments, in which there are multiple points of view, in which the goals of the protagonists are not specified, or in which the temporal sequence of events is scrambled can be expected to be difficult to interpret; it may also be rated as low in quality by the majority of an ordinary audience. In simple terms, we find it unpleasant to struggle, and, failing to understand, we have a difficult time keeping things straight.

The codes we have been discussing are all experienced by the viewer in a context of the narrative portrayal of ongoing events. So film viewing can be seen to involve two mutually embedded systems of understanding. On the one hand are a set of codes that apply to processes common across events within a film and potentially common across films as well. On the other hand, we have our everyday schema for events in the world: people acting to get things done. These two aspects of knowledge and human interaction form the basis for our interactions with a film.¹¹

This contrast is useful for interpreting the different responses of Cole and Keyssar to the two films. In *Romeo and Juliet* we have a conventionally structured narrative, one that we have some knowledge about even before we enter the theater; the narrative has become a part of our language and culture. Even if the “story” of *Romeo and Juliet* is unknown to us before entering the theater, after viewing the film we will be able to present some diachronic retelling of the film’s tale. The varieties of film codes all work in support of

a story that we understand; in Zeffirelli’s film, they work powerfully indeed.

Romeo and Juliet presents an important contrast to *Nashville* in this respect. Each contains narrative elements, each gives rise to categories of understanding of a broad nature, and each suggests a significance that transcends the narrative. But they differ in their underlying strategies of creating meaning. *Romeo and Juliet* works *through* narrative to embody categories of understanding that operate on us very powerfully. We ponder the mystery of Shakespeare’s ability to create a story powerful enough to transcend centuries.

Nashville works *through* a concept (a theory, if you prefer). The fragments of narrative interwoven into its structure are elements in the tapestry of that concept. The concept itself is difficult to formulate. *Nashville* is the name of a place, *Romeo and Juliet* are people. The film is not intended as a documentary about the place.

Nashville defies our tendency to make a temporally coherent story out of what we are seeing. Altman wants us to read the codes synchronically, without benefit of a strong narrative structure to carry us along. *Nashville*’s narrative, narrowly understood, is about a political rally; there are within it many intertwining narratives whose connections to each other are not made obvious causally or temporally, except insofar as the cultural setting and the “political rally” narrative suggest connections. Their connection, we want to argue, is conceptual. Upon first viewing, it is very difficult to keep straight what is happening or to retell the “story.” In short, *Nashville* fits the description of a poorly structured narrative. We can expect it to cause difficulties of recall, and hence difficulty in linking (already difficult-to-interpret) events late in the film to events early on. We can also expect the effort to be frustrating, producing negative feelings about the film.¹²

Insofar as a viewer knows a variety of film codes (“curtain going up,” for example) he or she has greater access to the general system of constraints that are structuring the narrative. We can expect such viewers to “take more out of” narratively less coherent films and to find them less frustrating. In fact, Keyssar’s reaction shows that for some the film can be gripping. Cole’s reaction, on the other hand, is a clear case where the film codes were not sufficiently well understood to allow a satisfying interaction with the object.¹³

Comparing print and film

The points of contrast between the notions of literacy in print and film are evident. At the same time, there is an overriding similarity;

literacy in both print and film refers to the ability to reconstruct narrative, some account of the sequence of events or items of information, or to construct some concept relating diverse episodes. Yet print and film clearly represent different "systems of literacy," different "galaxies," to use McLuhan's term. Depending upon the overall communicative task of which they are a part, we can expect film and print to display different strengths and weaknesses as communicative devices. Exploring this galaxy is a risky business. There is a tendency, on the one hand, to become so fascinated with the intricacies of individual systems that the larger systems that form and reform them drop from view. It is equally tempting to become so entranced by one's depth of focus that the description that comes back is hardly encompassable in human narrative, fragmenting language and theory into an uneven mosaic (McLuhan being the outstanding case in point).

Given the dangers, we want to illustrate some of the ways that our comparison has influenced us to think about literacy in our respective areas of concern.

The social roles of print and film

In thinking about film and print as systems of mediation, we find it useful to consider them in very broad social-functional terms, focusing upon their respective roles in human affairs. Writing systems grew up initially as devices for counting and naming with a gradual expansion of economic production and trade. The spread of writing to supplant oral information-storage devices for narrative is a very recent innovation connected with the invention and spread of *alphabetic* writing systems. When combined with an efficient way of representing number, writing served as the central tool of physical science theory, upon which the political power and economic attainments of the last 1,000 years have been built.

The research on "consequences of literacy" reviewed earlier in this chapter focuses understandably on the combined social, theoretical, and psychological changes that literacy has produced in those areas of life where it has long been recognized as instrumental to well-being. But this emphasis on socioeconomic instrumentality seems to have restricted both the notion of literacy and the domains to which these theoretical insights can be applied. Forgotten are the consequences of extending writing systems to represent prose that is *not* exclusively intended to operate in the political-economic-technical arena. We need to recall that the earliest extension of alphabetic

technology to prose was to write down the *Iliad* and the *Odyssey*. A brief consideration of the social function and technologies of these epics suggests that they lie partly in the domain of "instrument" and partly in the domain that we will call, for lack of a better term, "entertainment." On the one hand, Homer was treated as a kind of oral encyclopedia of Greek culture, the "text" that all Greek children needed to learn (Havelock, 1976). Many kinds of instrumentality appear here: teachings about the tactics of battle, the proper behavior of soldiers, kin obligation, as well as complex theory of the origins of the world and the Greeks' place in it. While we may be unable to appreciate the didactic utility of knowing who went to Troy with how many men and horses, we can readily appreciate the relevance of the accounts of bravery, loyalty, friendship, and fear – they remain a central part of our own cosmology.

From scholarly detective work (Lord, 1960) and fictional recreation (Renault, 1978) we know something about the nature of the occasions when such epics were performed. We know that their "recitation" was a musical as well as an oral construction; the tales-as-produced were complicated combinations of politics, poetry, and music, formula-bound memory and occasion-specific construction. We also know that they were intended to *entertain* as well as *instruct*. In fact, it can be plausibly argued that is precisely the mixture of these two functions that vexed Plato in the *Republic*. Contemporary research on the consequences of literacy seems to have retained Plato's distaste for literacy in which entertainment elements are central. We don't approve of mixing business and pleasure.

From the current perspective this bifurcation of functions and theories is not likely to be productive. While each new medium may evolve in the context of a specific sphere of human activity, it is erroneous, in fact and in theory, to accept uncritically the "doing-appreciating" antinomy. The ancient and active fields of rhetoric and literary criticism have long been as concerned with the qualities of the doing as with the narrowly utilitarian characteristics of interaction via writing. Aristotle's *Rhetoric* nicely conjoined these concerns, even as Plato's *Republic* was driving a wedge between them. The theory of literacy implicit in the *Rhetoric* focuses on increasing the degree of structuring that the reader can take from text; at the same time, Aristotle develops a theory of what the writer can build into that for specific communicative purposes (Keyssar, 1977). Very similar efforts and converging theories are to be found in the arts as well (Gombrich, 1960; Arnheim, 1957). In the best of this tradition, "being well versed in" is seen as one aspect of the larger doing, as

when Kenneth Burke (1973) speaks of literature as "equipment for living." By providing models of strategic encounters between people and their predicaments, literature provides us with "recipes" for dealing with life. In this respect, film and print share many common characteristics.

Concluding comments

These comments bring us back to our earlier assertion that we have found it useful to think of media effects within the common framework provided by the idea of a system of mediated human activity. Each medium thus provides diversity within a large but constrained set of possibilities. In contrasting the two systems of film and print, we constantly find ourselves forced to specify in some detail both the technologies' potential for creating shared meaning and the sociocultural circumstances that make certain orders of meaning valuable.

Because the psychophysical properties, social functions, and specific modes of training for print and film are different, the resulting configurations of activities that can be said to constitute literacy in each medium will necessarily differ. To many, the difference may appear so large that attempts at establishing an overall framework such as we are working toward may appear to put an intolerable burden on the scholar, who must learn the intimate details of several different systems of activity that are similar only at an abstract level.

We seek to see films better, yet not only scholars but most spectators resist analysis of films. Our attraction to films has to do with their ability to transport us away from our ordinary lives, yet films are a potent source of gossip and impetus to conversation in our everyday interactions with social peers. As equipment for living, film is at once more accessible and more difficult to contain than print. We believe that the differences between the "appreciation" and "action" orientations of the media as "equipment for living" raise questions about the very nature of literacy.

Because both the social functions and the training of literacy in print and in film are distinct activities, what we mean by literacy in each medium cannot be reduced to psychophysical properties of the interactions. Yet the boundaries in each area are neither firm nor uncrossed. The problem inheres in the different kinds of questions we ask about literacy in each domain and the limits we encounter when formulating answers to them. Insofar as different academic disciplines map onto the "doing" and "being able" notions of literacy,

the methodology of one discipline may not even be able to ask a kind of question that another can.

Literacy extends people's ability to share meaning in their joint endeavors. In this deep sense, it gives human beings access to other minds. Media, the objects and distinctive patterns of interaction that mediate our activity, are equipment for living in association with one another and with our pasts and futures. A general theory of literacy implies a general theory of mediated human activity; if we expand our notion of literacy to include nonprint media, it is impossible to consider post-Cro-Magnon human interaction without some form of literacy. If we consider the media as equipment for living, the problem is more complex. For the richness of our lives depends not only on how much equipment we carry with us, but how we use that equipment and in what contexts it is relevant. The chisel in the hands of a sculptor is different than the chisel in the hands of a bricklayer, but it is not clear that one uses the tool *better* than the other. The first step, and one that continues to meet with resistance, is to recognize and work with films such as *Romeo and Juliet* and *Nashville*, as well as printed books, as equipments for living. This is not to reduce meaning to usefulness but to enlarge our concepts of "meaning" and "usefulness."

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NOTES

1. The whole issue of "faithfully" is raised rarely in the literature, but it is crucial to Havelock's (1976) argument about what kinds of activities constitute full literacy.
2. When we speak of "putting in common with raw experience" it sounds a little strange, and perhaps stranger to think of this as communication. But in fact "creating something in common with states of the world" is a critical part of that kind of commonness for oneself that psychologists term "thinking."

Moreover, there are additional propositions that we could offer. We limit ourselves here to pointing out that these propositions concerning mediated activity imply that power is a central issue in communication, a point that is brilliantly emphasized by Bakhtin (1973; see also Holquist, 1981).

3. This idea is reflected in the title of Monaco's *How to Read a Film* (1981). Metz's *Film Language* (1974) contains useful summaries of the achievements of film theoreticians and semioticians pursuing this idea.
4. For a more formal analyses of these films see Keysar (in press).
5. In the course of our work we have discovered that it is Proposition 1 that merits most discussion, because all central issues in the study of mediated activity flow from it.
6. The fact that a sense of immediacy is central to film theory produces a curious paradox, for we know that it rests on an illusion. We laugh on those occasions when people are "fooled" into confusing film and reality at the same time that we recognize such "confusion" as a central resource for communication via film.
7. The recent film *Polyester* has implemented part of Huxley's vision.
8. The same kind of attempt can be found in Salomon (1979), Eisenstein, (1947), and elsewhere.
9. We should make it clear that we are not claiming the truth of the theory that generates these categories. However, many scholars have found it useful to posit panhuman cognitive universals, and the applications of these ideas has an honorable history in film theory.
10. The issue of what influence cultural codes exert in cases where they could not be explicated by viewers is a large area of uncertainty in both film theory and cognitive psychology. For example, Cole could retrospectively acknowledge a lot of red, white, and blue in *Nashville* even though he did not formulate that relationship during the film. What intermediate state characterizes this knowledge?
11. We are here reinventing the contrasts, central to linguistic theory, literary theory, and cognitive psychology, between surface structure and deep structure, forms and meaning, paradigmatic and syntagmatic, synchronic and diachronic, *langue and parole*, and metaphor and metonymy that are central to the study of all mediated systems of activity.
12. That a film like *Nashville* may be a popular success despite these difficulties is a testimonial to both the alternative sources of meaning in film and audiences' sophistication in interpreting film.
13. It is worth noting that experiments that attempt to get college students to use arbitrary "grammatical" relations in structuring a set of meaningless lexical tokens have shown the process to be exceedingly difficult and confusing (Miller, 1967).

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