

2 / Film and Television Literacy

Children do not always understand film or television the same way adults do. A friend of mine remembers his early misinterpretation of television: he thought that if he changed channels he would see different parts of the same character's body. For example, if a character's head was on the screen, he thought he could find the feet on another channel. To him, the screen was a real-world space, and everything happening in this same real-world space was surely related. This same friend tells of overhearing a child, about age 3, at the film *E.T.* Whenever the character Elliot was off-screen, the boy would ask, "Where's Elliot, Dad? Where's Elliot?" He did not realize that a given shot merely *samples* the world of a film: that a character can be off-camera and still be alive and well in the film.

As these anecdotes illustrate, our understanding of film or television depends upon knowing the medium's symbolic code. For example, if Image A and Image B alternate on the screen in progressively shorter and quicker fragments (a technique known as accelerated montage), an experienced moviegoer, one familiar with the code, will get the message that A and B exist at the same time but in separate spaces, and that they are converging on each other either spatially or dramati-

cally. Learning to decode the symbols of film or television is something like learning to read. The skills it requires are not as specialized as those needed for reading, but they are nevertheless considerable. By metaphoric extension from the medium of print, I shall refer to knowledge of this audiovisual code as television (or film) literacy. (Because television and film use the same basic code and because films appear on television, I treat them in this book as equivalent, although some theorists, notably Marshall McLuhan, emphasize their differences. Most often I use the term television literacy, with the understanding that it includes film literacy.)

Some of the elements a television viewer must decode are visual, generated by techniques such as cutting from one shot to another, panning the camera from one side of a scene to another, zooming from long shot to close-up, splitting the screen. Others are auditory, such as faceless narrators or canned laughter. Each of these techniques is a form of symbolic representation, that is, each technique stands for something in the real world. For example, when a camera zooms in on a detail it communicates a relationship between that detail and its larger context. A simple cut usually means a change of perspective on a given scene. A dissolve (where one shot visually dissolves into another) signifies a change of scene or a change of time. Split screen denotes an act of comparison. The use of a faceless narrator implies that the person narrating has some distance, either physical or psychological, from the scene being portrayed. Symbolic conventions like these, taken together, form a code the viewer must know in order to comprehend what happens on the screen.¹

One reason children sometimes misunderstand film or television is that they do not always know how to interpret the relationships between shots. (A shot is a sequence in which the camera is continuously on.) These

relationships usually carry information about space and time; for example, two successive shots can represent a change of scene or two points of view on the same scene. Visual signals separating large film units, such as dissolves or fades (where one shot gradually fades into or out of black) serve as punctuation, giving cues as to how the shots are interrelated.² The ability to understand such interrelationships partly depends on a child's stage of development. There is evidence that children cannot correctly infer relationships among scenes in adult TV shows until some time after age seven. Younger children tend to treat each shot as an independent entity. Many young children do not even use the *order* of shots in interpreting a dramatic program; thus their memories of the program have a fragmented quality.³

Recent research in the United States indicates that the ability to interpret a sequence of shots does exist to some extent at younger ages. After watching a puppet film made especially for children, only thirty seconds long, and with a familiar theme, even three- and five-year-olds could act out the film using the same puppets that appeared in the film, and their reconstructions were just as accurate when the film consisted of separate shots as when it consisted of one thirty-second shot.⁴ Thus, children between ages three and five in the TV-saturated United States have a rudimentary knowledge of interrelations between shots that they can apply to material at their own level, but they are unable to comprehend the connections in adult shows (which they nevertheless love to watch). The growth of this skill is a developmental process not complete before age ten.⁵

Even after children have the basic idea of interrelating shots, particular methods (what film-makers call techniques of montage) can still confuse them. In a second study using short puppet films, more than 80 percent of the four-year-olds correctly reenacted action that was

portrayed in a single shot without the use of montage techniques, but almost half did not understand accelerated montage, in which alternating shots depict a simultaneous time relation. Such inferences about time seemed particularly difficult. Inferences about character perspective—what someone is seeing or thinking—were somewhat easier: about 60 percent of the four-year-olds understood a technique to show character perspective by placing the camera where the character would be and using voiceover to present the character's voice.

The four-year-olds had no trouble understanding ellipsis, in which two parts of an action are shown with a gap between and the viewer must mentally fill in the gap. The relative ease of interpreting this technique may derive from the fact that, developmentally, comprehension of action precedes understanding of time or the perspective of another person. Reconstructing space, either from a succession of shots, from camera movement, or from partial view, was of intermediate difficulty, about the same as character perspective. Understanding of all techniques improved with age.⁶

Lack of understanding of montage techniques can lead to dramatic misunderstanding. In Germany, some six-year-olds thought the hero in a televised version of *Town and Country Mouse* was a different, older mouse in close-up than in long shot. When African adults who lacked experience with film and photographs were shown films about insect pests, they expressed pleasure that they did not have insects as large as those depicted in close-up shots.⁷ Evidently specific experience with the code of film, as well as a certain stage of cognitive development, is necessary for understanding the symbols used in television and film.

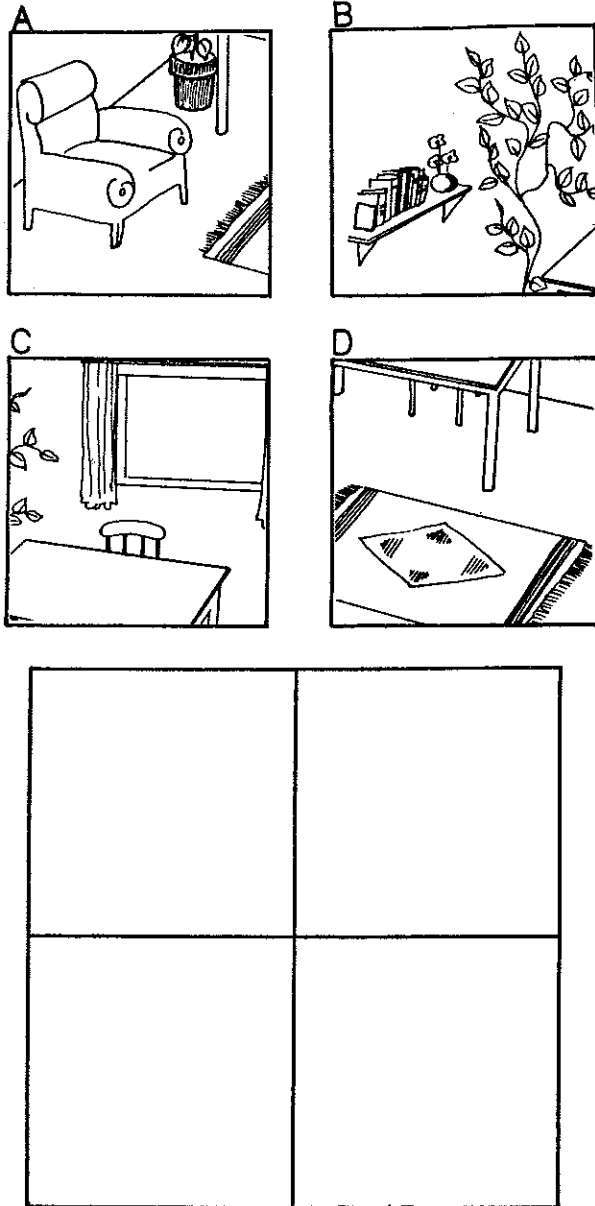
In Israel, Gavriel Salomon and Akiba Cohen studied the understanding of montage techniques in ten-year-

olds, using five versions of an eight-minute film. One version was based on the fragmentation of space: shots were taken from different points of view, so that the viewer had to interrelate fragmented spaces to follow the plot. Another version contained logical gaps: segments of some scenes were deleted, creating brief breaks in continuity. A third version was made up of numerous close-ups interspersed with long shots; a fourth of many zoom-ins and zoom-outs. The fifth version was as simple and straightforward as possible.

Children remembered the straightforward film better than any version that required them to construct a causal or spatial relationship between shots. Only the zoom version was understood virtually as well as the straightforward version.⁸ A zoom is a single shot, and therefore does not require the viewer to infer a relation between shots. This work confirms the American research with younger children on two important points: an understanding of visual techniques cannot be taken for granted, and the use of these techniques affects how well a film will be understood.

The Israeli researchers asked another question: Does a child's ability to interpret the visual techniques of film depend on more general visual skills? Children were tested on skills related to the editing techniques used in the different versions of the film. One of these tests, the Space Construction Task (see figure 1), asked the child to put four pictures together to form a whole. This corresponds to a technique in which camera shots of parts of some scene must be integrated mentally to construct an image of the whole.

All versions of the film except the straightforward one required the child to coordinate bits of spatial information. Not surprisingly, success on the Space Construction Task was correlated with comprehension of



1. An item from the Space Construction Test. (From Salomon, *Interaction of Media, Cognition, and Learning*.)

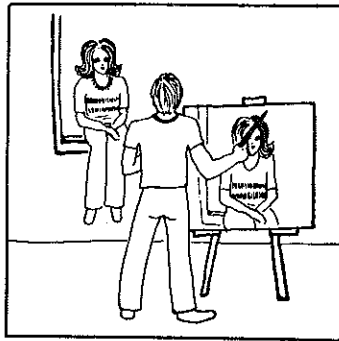
all the versions of the film except the straightforward one: the better a child did on the Space Construction Task, the better he or she understood the more highly edited films. This outcome implies that comprehension of film, with its symbolic devices, is related to more general visual skills.

ACQUIRING TELEVISION LITERACY

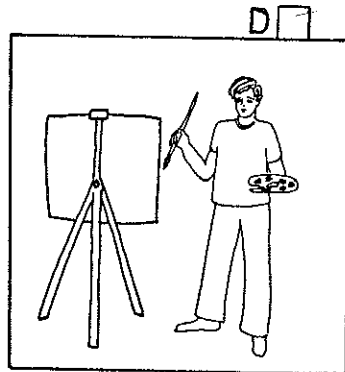
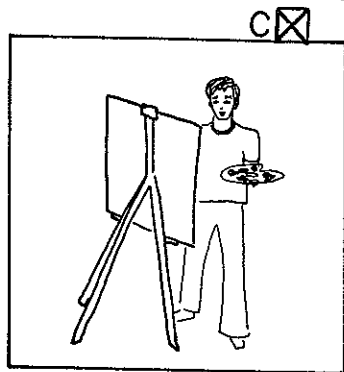
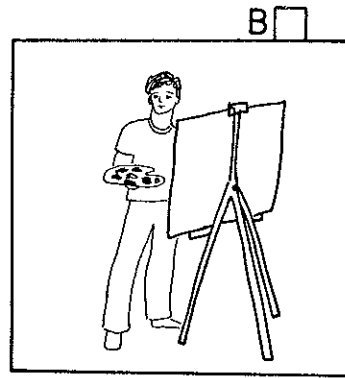
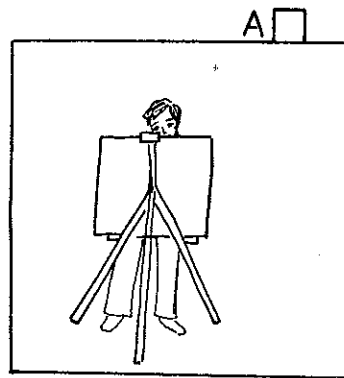
It is very difficult to separate the effects of maturation, general experience, and specific experience with television on the growth of TV literacy skills. By working in Israel, a country with much less television than the United States, Salomon was able to gain some insight into the impact of television-watching experience on these skills. In a sense, his work tests the very idea of TV literacy: Is TV literacy acquired through experience with the medium, as print literacy is?

Sesame Street was introduced to Israel in 1971. At that time Israel was what Salomon calls TV naive: there was only one channel, which had been introduced three years earlier, and it broadcast only four hours a night, of which only half an hour was children's programming. The style of *Sesame Street*, based on the kaleidoscope format of American commercials, was totally novel.

Besides examining the impact of *Sesame Street* on the acquisition of specific knowledge, such as knowledge of the alphabet, Salomon designed tests to measure skills related to the program's code of symbolic representation.⁹ An example from one test is shown in figure 2. Success at this task involves understanding a shift in visual point of view and being able to imagine a point of view different from one's own. This test is related to the production technique of showing the same object or person from different camera angles. The idea was that



Imagine that you are the girl sitting on the window sill. How would you see the painter?



2. An item from the Test of Changing Points of View. (From Salomon, Interaction of Media, Cognition, and Learning.)

children's performance on the test would be improved by experience in watching TV scenes using this technique.

Among seven- to nine-year-olds, heavy viewers of *Sesame Street* did significantly better on all the tests, and this result held for both middle-class and working-class children. In other words, children who watched a lot of this program, whatever their social class, were acquiring specific TV literacy skills, such as understanding the meaning of a close-up. Television literacy is indeed fostered by exposure to television itself.

The children with the highest TV literacy skills also had the greatest knowledge of the show's content. Content in *Sesame Street* means learning numbers, letters, and so forth. In fact, having good TV literacy skills at one time made it easier for children to learn the content taught by the program at a later time. The opposite effect did not occur, however; learning cognitive content did not influence the later acquisition of TV literacy skills. This finding has application to learning in school as well as out, and to older students as well as young children. For example, in a high school physics class that included a series of films, students with more experience with films in general learned more from the physics films. It seems that the value of film as an educational medium depends on the level of film literacy students bring to it.¹⁰

Thus television literacy, developed partly through exposure to television, partly through development, makes it possible to use television to transmit knowledge and cognitive skills to the young child. The parallel to print is clear: the acquisition of basic literacy skills make it possible to use print to transmit information and ideas. There is a difference, however: children must be *taught* to read, but they learn TV literacy on their own by simply watching television.

Salomon has also experimented with using television to cultivate children's more general visual skills. Many of the techniques of television make relationships visible that would otherwise have to be constructed in a person's head. For example, when a camera zooms in on a detail, this makes the relationship between a part and its whole visually explicit. Salomon investigated whether use of the zoom technique to highlight details could help eighth-grade children to single out details from a complex visual display that was not televised.¹¹ He showed one group of children films of a painting, in which the camera zoomed in on details and out again to the entire painting eighty times. Another group simply practiced identifying details from a slide of a painting. Both before and after this training the children were tested by being asked to pick out as many details as possible from a slide of a classroom scene.

Salomon found that the benefit of the zoom training depended on the child's initial level of visual skill. Children who began with low ability to notice details benefited much more from the zoom training than from simple practice. But children who were already skilled in noticing visual detail actually did slightly worse after the zoom experience; for them, simple practice without the zoom was most helpful.

Thus, the value of the zoom technique in teaching children the relationship between a detail and its whole seemed greater at the early stages of learning. At a certain level of skill, the more challenging task of picking out details without the aid of the camera became the best way of perfecting the skill. The same pattern of results emerged with other camera techniques. It seems that camera techniques can promote the learning of visual skills. But in modeling visual processes the camera partially takes over from the

viewer. It can thus do *too* much for a viewer who already has the basic skills. At that point, further development demands a more independent and active form of practice.

USING TELEVISION FORMS AND FORMATS TO IMPROVE LEARNING

Some features of television attract the attention of young children more than others do. For example, action and sound effects are more attention-getting than dialogue. The use of these features to highlight the important points in a television narrative makes those points more understandable to five- and six-year-olds. By age eight, the attention-getting devices become unnecessary; comprehension is good with or without them.¹²

A given TV show or type of show may develop its own special symbolic devices, called formats, and familiarity with the format may help children learn new material from the show. For example, *Sesame Street* has a sorting format: four objects appear on the screen, three of which are identical; the fourth is different in some way. Along with this display goes a song that begins, "One of these things is not like the others."¹³ The idea is that once a child learns the format, the format can help the child learn more complex ways of sorting items.

Programs from Children's Television Workshop use recurrent formats to get the child actively involved through anticipating what comes next. In an example from *The Electric Company*, the camera focuses on street signs, as if the viewer were riding in a car and reading them. Meanwhile a song gives the name of each sign as the camera focuses on it. Then the "car ride" is repeated with the music only, inviting the child to fill in the words.¹⁴ In this way, a symbolic form goes be-

yond transmitting meaning and induces children to create it for themselves.

KNOWING MORE COMPLEX FORMATS

Some older children and adults can switch on a television program in the middle and reconstruct what has happened up to that point. To my knowledge, no research exists on this subject; but it seems to me that these are people who have become familiar with conventional formats on a more complex level than those in children's programs—perhaps the format of the Western or the spy story or a particular situation comedy. Experience with the format then serves as an aid in understanding and even reconstructing content.

One complex format is that of *Hill Street Blues*, a very popular American police show with multiple subplots. Film and television are able to depict many things happening at once, in contrast with print and radio, which are limited to depicting one thing at a time. During scenes at the police station in *Hill Street Blues*, a single shot will show many people carrying out various activities relating to several subplots. I watched *Hill Street Blues* once and found it impossible to follow. I kept looking for a single thread to focus on in these complex scenes. The teenagers with whom I was watching had no difficulty whatsoever, and at least one of them had not been following the show regularly. Clearly they understood the multiple-subplot format and could use it to interpret complex scenes.

Psychology makes the distinction between parallel processing, in which a person takes in multiple pieces of information simultaneously, and serial processing, in which a person processes one item at a time. A complex picture tends to elicit parallel processing, while words elicit serial processing. It seems to me likely that watch-

ing television, in contrast to reading, cultivates parallel processing as strategy for taking in information. Comprehension of a show like *Hill Street Blues* would seem to require and encourage this strategy.

Knowledge of complex formats has value for predicting as well as for understanding. Television-literate people often know what is going to happen next in a film or TV program. Watching a new police drama with my thirteen-year-old son, Matthew, I expressed amazement when the police officer's own daughter turned out to be the culprit. Matthew responded, "It has to be his daughter. That's how all these police shows work. Everything is interconnected." Not only is Matthew able to predict, but he bases his prediction on awareness of a recurrent plot format.

Steven Spielberg, a member of the first generation of movie directors who grew up watching television, has begun to take this sophistication of his audience into account. In an interview following the release of *E.T.* and *Poltergeist*, Spielberg said that after a given shot he tries to keep the audience off balance for the next two, instead of giving them what they expect. He does not want his audience to be able to predict his films too well. Implicit in his remark is the idea that they *will* predict if the format is too conventional. Spielberg remarked about making an earlier film, *Raiders of the Lost Ark*, that because audiences are sophisticated about film, making a movie is like "some kind of kinetic chess—if you don't stay five moves ahead of them, you're dead."¹⁵ It may be partly this transcendence of the conventional formats now mastered by experienced film audiences that makes Spielberg's films so popular.

The idea of television or film literacy may be agreeable to many people because it implies that, mentally, they are doing more than vegetating when they sit in front

of the television set. It may be comforting to parents in particular to think that, while perhaps less literate than they would like in the print medium, their children are acquiring literacy skills in the domain of television. There is a mental challenge to television, although, unlike the case with reading, the challenge can be met without special instruction. Nevertheless, experience with the medium is required to master the code of television.

Although the code of television is complex and varied, there is a danger that it will be used automatically and without effort: that the symbolic code of television will be processed passively rather than actively. This problem cannot be solved on the level of the code itself. It is a question of attitudes toward television and of the web of social interaction in which television or film viewing takes place. This crucial problem of how to turn automatic processing of a code into active mental involvement with a medium will be discussed in later chapters.