The literature of film and literature of television are, to a large extent, two separate entities. The major film theorists have not had much to say about television, and television has inspired few theorists of its own--few, that is, whose major concern, like the film theorists', is aesthetics. One of the earliest forms of commentary on television is the production manual, most of which are elementary surveys covering technology, program types, basic principles of perception, composition and camera movement. Drawing on 31 production manuals--four of these in particular (Hubbell's "Television Programming & Production"; Millerson's "The Technique of Television Production") Royal's Anthology, "Television Production Problems"; and Zettl's "Sight-Sound-Motion")--a study examined the treatment of film and video theory. Two areas in particular were concentrated on: (1) specific references to film theory and conventional filmic practices, as they are applied to television; (2) discussions of television's unique, essential properties. In "Television Programming and Production," Richard Hubbell goes to greater pains than most in comparing television to its antecedents; he poses four striking questions that probe the essential nature of television. The manuals that contrast television with film, on the other hand, identify such distinct characteristics as its live/immediate/spontaneous/simultaneous nature, and its relatively small image size. These manuals show scholars what areas deserve the greatest attention in future books on television theory. Major issues on television's image quality have gone almost completely uninvestigated. (Contains 67 notes.) (TB)
This is a word-processed copy of a paper presented at the conference of the University Film and Video Association, Carbondale, Illinois, August 6, 1982. At that time the author was an Assistant Professor in the Department of Speech at the University of Missouri-St. Louis.
The literature of film and the literature of television are, to a large extent, two separate entities. This is true to a much greater degree than one might logically expect given the many obvious similarities between film and television in such areas as equipment, production technique and capability, and content. A major concern of film theorists since the early days of film has been film's relationship to other arts which preceded it historically, such as still photography, literature, and theatre. However, the major film theorists have not had much to say about television, and television has inspired few theorists of its own--few, that is, whose major concern, like the film theorists', is aesthetics. Zettl has estimated that "the writings that are specifically concerned with television aesthetics would probably fit quite comfortably into a normal-sized briefcase." Thanks to Zettl and numerous others, this situation is changing. Recent work on aesthetic aspects of television breaks down fairly neatly into a number of categories, including the following: work inspired by the new concept and technology of "video," written mostly by video artists; work concerned with television "literacy," in most cases extending McLuhan's ideas on the electronic/print dichotomy; work concerned with "reading" television, in many cases employing the vocabulary and methods of semiotics (the emphasis in these works tends to be on criticism and theory development, whereas the works on television "literacy" tend to be concerned with viewer training); critical studies of television programs and genres, in some cases combined with discussion of social, technical, and other factors; and work on the psychology of perception and communication. Some of this material contributes substantially, some only marginally, to television aesthetics. As a whole, the work indicates that theorists and critics are beginning to give television the attention it deserves as an art form.

Predating the categories just listed is the television production manual, which over the years has been the most common form of packaging for discussions of television aesthetics. Most of the manuals have been elementary surveys
covering technology; program types; basic principles of perception, composition, camera movement, etc.; and rules of thumb to use in producing programs. Most of these matters involve conventional wisdom borrowed from the film industry or established early by the television broadcasting industry. So despite the large number of production manuals published since the 1940s, only a few have made substantial, original contributions to television aesthetic theory. Only a few I have seen contain any sort of inquiry into the essential nature of television as a medium of art. These inquiries are typically confined to a chapter or two, or spread throughout the book in mixture with the practical material on production. However, for many years television production manuals were practically the only source of video theory (which duplicated film theory where appropriate and focused on the differences between film and video where necessary). Furthermore, the best television production manuals (particularly Zettl's books) are classics in the television literature, worthy of the attention of any film theorist or filmmaker—and, of course, necessary reading for anyone interested in television aesthetics.

My aim in this essay is to describe in summary fashion the treatment of film theory and video theory in television production manuals to date and to suggest some areas that deserve greater attention in future books on television production. To bring the study within manageable limits for a short essay, I will focus on two content areas that seem among the most critical in charting the relationship between film theory and video theory. The first area is specific references to film theory and conventional filmic practices, particularly as these are applied to television. The second area is discussion of television's unique, essential properties. The first area stresses the similarity of film and television and highlights the historical continuity of their evolution. The second area emphasizes television's dissimilarity to film (as well as to other media, particularly radio and theatre) and makes clear the necessity to modify previous assumptions and practices.

Out of thirty-one production manuals reviewed for this study, I will focus on the following works, which have the most to say about theory and
aesthetics: Hubbell's *Television Programming & Production*; Millerson's *The Technique of Television Production*; Royal's anthology, *Television Production Problems* (specifically, Kelly's essay, "Television Production Facilities"); and Zettl's *Sight-Sound-Motion*. The other manuals reviewed contain little or no theory. They concentrate on what-it-is (equipment and studios) and how-to-do-it (conventional production practices), with most of this knowledge coming from the authors' practical experience. In many cases other production manuals are listed in the bibliography, but rarely are other works footnoted in the text. The authors attempt to demystify the production process by presenting conventional wisdom. The virtue of this wisdom is its practical use value. What is wanting in many cases is some explanation of how and why an idea came to be conventional wisdom—who thought of the idea? How has the idea been used in specific films or television programs? What evidence is there that the audience actually responds in the way the author claims? The manuals selected for closer examination here are generally more conscientious, although by no means comprehensive, in answering these questions. While most of the television production manuals that have been written are largely obsolete because of rapid developments in hardware, those which delve into theory can still stimulate after ten, twenty, or even thirty years. While hardware comes and goes, issues raised by theory tend to endure.

**Video as Extension of Film in Theory and Practice**

According to Millerson, "Most of the conventions of television have come from the established cinema." These include: "Most editing principles and camera control. The extensive use of backlight. The presence of light in 'totally dark' scenes. . . . High-pitched voices for small creatures (e.g. mice). The echo accompanying ghostly manifestations. Background music." That many conventions are similar follows logically from the similarity in essential nature of the two media. This similarity has been concisely described by Rider, who points out that film and television are both photographic media, and that each "affords the use of visual images, motion, color, and sound in an infinite variety of combinations and relationships."
Probably the close similarity of the two media is more often taken for
granted than made explicit or emphasized. Millerson presents an exhaustive
inventory of "devices used in productional rhetoric" in television, a sort
of grand summary of the ways in which the artistic material can be manipulated
and meaning conveyed in television. Every one of the devices is also usable in
film, although Millerson does not point this out. The great majority of Zettl's
book is applicable to both television and film, but only a few statements in the
first chapter emphasize their organic similarities--their common "aesthetic
language" and "fundamental aesthetic elements," namely "light, space,
time-motion, and sound," and, among these elements, the primacy of light as
the "materiæ" of both film and television.

Hubbell went to greater pains than most authors have in comparing
television with its historical antecedents--theatre, radio, and especially film.
"A Background for Camera Technique" is an appreciative chapter on film
history from Méliès through Porter, Griffith, Caligari, The Last Laugh, and
Eisenstein and Pudovkin. This chapter, and others titled "The Nature of
Television," "Distinctive Characteristics of Television," "The Theatre and
Television," "Television and Motion Pictures," and "Blind Radio vs.
Television," provide a foundation for Hubbell's consideration, in a chapter
titled "Fundamental Problems and Theory," of four questions on the essential
nature of television:

1. What is the primary tool of television--the camera as in
the cinema, or the actor as in the theatre, or the
microphone as in aural radio? Or is it a combination of
two or three? Does the answer to this question hold
true at all times, or does it vary for different types
of programs?

2. What is the primary process in television? Is it video
cutting as in the cinema, or is it camera handling, or
is it an equal measure of audio and video editing?
(3) Is the single shot the basic unit of television as it is in motion pictures?

(4) How should the video be used to develop a technique for television without flatly imitating motion pictures? How can we evolve an audio-visual technique as right for television as the Russian theory of montage is for motion pictures?23

While we may quarrel with Hubbell's generalizations about film and theatre, his questions are nonetheless remarkable for their time. The gathering together of these aesthetic probes in one place remains, to my knowledge, unique in the literature.

Hubbell proceeds to answer his own questions. The "primary tool" of television varies, but the medium is "primarily visual";24 "[m]ost 'real television' will be visual first, aural second,"25 suggesting that Hubbell considers the camera the usual "primary tool." The "primary process" in television is editing, according to Hubbell, but "camera handling" is almost as important, and more important than in film. Television editing in live studio situations tends to be slower than film editing because of film's postproduction capabilities; slower editing demands, or at least accommodates, more camera movement, in Hubbell's view.26

The "basic unit," or "building brick," of television is, according to Hubbell, the shot, as in film.27 As for the development of a "technique for television," Hubbell suggests slower cutting than in film, "more extensive use of dissolves and superimposures [than in film] to provide speedier transitions and to enhance pictorial interest,"28 and use of "highly mobile cameras which rove about the studio, taking both objective and subjective approaches to a program."29

If Hubbell's view of film seems biased in favor of montage in the above passages, it is worth noting that his point of departure in theorizing is the invocation of Kuleshov's notion that "in every art there is (1) a raw material, and (2) a method of composing that material which is best suited to its essential
nature." He goes on to describe the Kuleshov-Mozhukin experiment and, in the chapter comparing theatre and television, concludes that television is similar to film in its departure from theatrical standards. For example, in film and television reactions of actors are more important than actions (unlike theatre). Although Hubbell does not cite Kuleshov and Mozhukin here, the connection is clear. A related conclusion is that proscenium staging and the unity of time, place, and action, while standard in theatre, are largely inappropriate in television as well as film (a view the Russian montagists did not invent, but certainly supported). Hubbell qualifies this conclusion by separately considering television news and documentary (which he hopes will "eventually exceed motion pictures in flexibility and freedom from the three unities") and television drama (which apparently "would fit about midway between the flexibility of the cinematic drama and a strict adherence to the three unities").

The theory of montage also exerts considerable influence in Zettl's *Sight-Sound-Motion*. In the longest section on film theory in the book, Zettl explains Eisenstein's five categories of montage (metric, rhythmic, tonal, overtontal, intellectual) and acknowledges their role in shaping his own categories, which are: continuity editing, sequential analytical montage, sectional analytical montage, idea-associative comparison montage, and idea-associative collision montage. Zettl applies the word "montage" to the last four categories only. The five categories are actually parts of a hierarchy of organization, related as follows:

I. continuity editing

II. complexity editing
   A. analytical montage
      1. sequential analytical montage
      2. sectional analytical montage
   B. idea-associative montage
      1. idea-associative comparison montage
2. idea-associative collision montage

According to Zettl, montage (complexity editing) as a whole is organic to film, while only one category, sectional analytical montage, is organic to television\(^{38}\) (and even here, Zettl would prefer multiscreen television with simultaneous contrasting views of a single event\(^{39}\)). Sectional analytical montage "temporarily arrests the progression of an event and examines the isolated moment from various viewpoints."\(^{40}\) Single screen film and television force a sequential order on these viewpoints when sequentiality is not the point being made. At the same time, however, sequentiality per se in single screen live television is usually best handled with a long take on a single, possibly moving, camera--so sequential analytical montage is not organic to television. The usual reason for cutting in television is to reveal some "isolated moment" from another viewpoint.

Zettl is convincing in distinguishing between film and live television as to availability and adaptability of types of editing. The temptation for television to adopt wholesale the techniques of film must have been great in the early days of television. Kelly, in advocating such adoption, argued that television, while similar in some respects to theatre and radio, bore the closest resemblance to film:

Through the instrumentality of the camera, the viewer is not committed to a fixed point of view, as in the theater, but is allowed a constantly changing and intimate view of both people and locations. This fact alone dictates the adoption of moving-picture techniques in the selection of properties, costumes, and physical detail, as well as in basic scenic conception, which will bear the closest and most critical scrutiny without the loss of realism or effectiveness. . . . Cinematic principles that have been discovered to convert the motion-picture camera from an optical device that merely takes a picture to an active agent in developing a story plot
and creating mood through judicious sequences and treatments of scenes apply to the television camera as well as to its movie counterpart.\textsuperscript{41}

Cinematic editing principles were also to be borrowed where possible. Kelly provides a fascinating example from an early NBC program (unspecified) in which "the exigency of rapidly changing camera angles required not only the duplication or sets but also the use of three separate actors to portray the hands, feet, and face of a single character within the space of a few seconds."\textsuperscript{42} Two points can be drawn from this. First, editing of the "composite woman" variety (which, in Kelly's example, appears to be a too-fast case of Zetl's normally television-organic sectional analytical montage) is not "organic" to live television. Second, as Pryluck pointed out about television and motion pictures, "it seems to be a fact that anything that can be done in a creative way with one set of technology can be done with the other except for certain marginal cases."\textsuperscript{43} Kelly's example suggests that this was true even before the days of videotape.

\textbf{Video Contrasted with Film}

Kelly's endorsement of film techniques goes one step farther. According to Kelly,

much false emphasis, not to say misinformation, may be attributed to the self-styled "television expert" who has attempted to create in the minds of the general public the impression that in television we find ourselves in possession of a new "art medium." With this point of view I take violent issue. The true meaning of television is implicit in its name; \textit{tele} (far) and \textit{vision} (sight). Whatever novelty attaches to the medium lies exclusively within the instrumentality rather than in the material of sight. In short, with television we have opened up only a new medium of communication.\textsuperscript{44}
I believe this passage is as close as anyone has come in a book on television production to endorsing the view of television as "mere transmission device." While Kelly does not view television as merely a transmission device for films, he does see it as little more than a new means of transmitting film-style scripts—film is the art, television is mere technology with which to extend the film art. While Bluem found, a few years later, that television writers, because of the live nature of the medium, tended to include action and dialogue for "covering" purposes (to allow actors time to change costumes, move to another set, etc.), Kelly's story of double sets and triple actors seems to reflect the wish to make film's total artistic capability available to television producers at all costs.

The other production manuals considered here all take the contrasting view that television is an art form with a set of potentials and limitations different in specific ways from film. The differences, with only a few exceptions, have root in the following technological facts of life: (1) the live/immediate/spontaneous/simultaneous nature of television, and (2) television's relatively small image size.

"Television," in books on television production, usually means "live television." Televising of films places television in the role of transmission device, as Hubbell points out, and constitutes a special case which is of no more interest in a discussion of aesthetics than the case of an unedited kinescope film recording. In the first case, recorded film art is transmitted by television; in the second case, live television art is recorded on film. Film and videotape produced specifically for television, and film and videotape used as insert material in live television, pose more interesting problems for any "live television" aesthetic, which only Millerson, to my knowledge, has dealt with:

The dictum that television is essentially a live medium dies hard. After all, it is the value and quality of the product that is the final gauge, and recording offers many advantages.
... for a number of programmes, it is arguable whether immediacy contributes much to success. In drama, dance routines, and musical recitals, for instance, any signs of hesitancy or fault seldom please...

Recorded programmes can have an extremely strong pseudo intimacy. ... We do not disinterestedly dismiss events because they are recorded, but react as eagerly and emotionally as if they were live. ...

Immediacy, then, is a real enough factor. But well contrived writing and production techniques convey a strong impression of immediacy to the film audience, anyway, and the distinction between the appeals of this pseudo immediacy and true actuality is not all that marked. 47

The frequent indistinguishability of live from live-on-tape television adds credence to Millerson's argument. When the viewer has to be told by graphics or announcer that a video segment is "live from New York," or "via satellite," or "file tape," or "recorded earlier," or "recorded in front of a studio audience," the aesthetic interest directly attributable to liveness must be questioned. Production choices become a matter of whether one has a video recorder and how much one wishes to reveal to the audience about one's procedure. Nowadays the only time a viewer can know an image is live without being told is if the image is of himself/herself or if the image and the live subject are both visible. This fairly well limits true liveness to video surveillance and certain works of video art. Even news and sports events we think are exciting because they are live, are in many cases not live. Is a sports event that is recorded on videotape and played back three seconds later really live? Does it matter in the choice of production techniques (e.g., the frozen video frame used to "correct" for faulty transmission of the playback)? Does it matter in the viewer's understanding or appreciation of the program (some viewers will not know the program is delayed, and the sportscasters' mistakes will still be left in;
once in a great while an obscenity may be removed, but who will know the difference?)?

Regardless of these intricacies and conjectures, much television production still takes place that is "live" in the 1950s sense of the word. Production manuals have developed an elaborate set of principles to describe this kind of production. The following summary is synthesized from Kelly, Hubbell, Millerson, and Zettl, with some original contributions added:

1. Because the number of picture sources is limited practically by the capacity of the switcher, as well as hypothetically by the director's ability to keep track of all the sources, short takes tend to be used relatively sparingly.

2. It is therefore relatively difficult to indicate passage of time or change of location, especially in relation to a specific character.

3. Special transitions and effects such as dissolves, fades, wipes, supers, and mattes may be used relatively often because of their ease and for pacing and visual variety to offset relatively long shot lengths.

4. Shooting in dramatic programs tends to be in sequence and continuous.

5. This may result in more intense performances in some cases, more mistakes in some cases.

6. Programs are edited simultaneously with the performance, as in live radio.

7. For several of the above reasons, programs tend to be less perfectly crafted than a carefully made film.

8. Because shot lengths are relatively long, a relatively great amount of subject and camera movement is common for pacing and visual variety.
9. To accommodate moving cameras and multiple camera angles, relatively open, discontinuous sets are common.\textsuperscript{51}

10. Lighting must accommodate continuous, long-duration shooting of action which in many cases includes subject and/or camera movement.\textsuperscript{54}

11. Audio is of relatively low quality and controllability because postdubbing is impossible.\textsuperscript{55}

12. This may result in a feel of relatively great authenticity or intimacy.

Intimacy, listed above as a possible result of liveness, is more often described as a consequence of television's small screen size. In any case, intimacy is commonly mentioned as one of the unique qualities of television. The argument goes like this: The television receiver provides a fairly small image. The receiver and the image are just the right size for viewing in the home (one's most familiar environment) at rather close distance. Thus one is rather intimate with the set itself. Panoramic scenery and movement, suitable for film (especially widescreen), are unimpressive on television.\textsuperscript{56} Television favors the close-up, an intimate shot which encourages psychological identification with a character.\textsuperscript{57} Film takes the viewer out into the world, whereas television brings the world to the viewer.\textsuperscript{58} The film image is "heroic" in size,\textsuperscript{59} while the television image is "diminutive."\textsuperscript{60} The viewer feels "inferior" to the film image, "superior" to the television image.\textsuperscript{61}

If the last two paraphrases of Millerson (notes 58 and 61) seem unbelievable, consider Zettl's more delicate assertion of a quite similar idea: "In effect, we look \textit{at} the spectacle on the large movie screen but (when properly handled) \textit{into} the event on television."\textsuperscript{62} Because of its small image size, television favors scenes with few characters,\textsuperscript{63} shot as tightly as possible. This discourages horizontal movement and encourages blocking along the depth axis,\textsuperscript{64} which is the same axis as the viewer's gaze. Depth axis blocking and the ubiquitous zoom give television a depth axis orientation greater than film.
This orientation to the line of viewer gaze accounts for Zettl's "looking into" and for television's "subjectivity." It encourages direct address to the camera by performers, a potential manifestation of intimacy. Television newscasts seem to verify this line of reasoning (we "look into" the newsroom).

In television drama, a limited number of characters tends to limit the scope of conflict depicted. Television's long takes and limited capacity for spectacle tend to assure that the conflict will be psychological rather than physical, exploring inner states of mind more than broadly acted behavior. The small scale and psychological nature of conflict contribute to intimacy. While soap operas tend to confirm this reasoning, television news seems to contradict it. But is television news "drama"? Nowadays, is it even television (i.e., live television)? Most dramatic spectacle in news programs is played back on videotape and was formerly played back on film. The speaker-support spectacle of weather maps, box inserts, and kinetic bar graphs is, of course, a different matter.

Conclusion

The major questions left unconsidered here relate to television's image quality: what is the aesthetic difference, if any, between a dot that moves and whole pictures that flash? between light emitted by energized phosphors and light reflected off a white screen? between a grid of pixel-type dots and a sheet of colored celluloid? between scanning lines and photographic grain? between high resolution and low resolution? The literature on television and film aesthetics has less to say on these than on any other issues--practically nothing, in fact. This is not surprising, because such matters have little bearing on production technique or criticism--except perhaps at a much more sophisticated level than we are used to.

Ostensibly these are matters of technology at a microscopic level, whereas liveness, image size, and so forth are manageable topics at the level of aesthetics and communication theory. But there is no reason why artists, aestheticians, and communication theorists cannot investigate the minute structure of these technologies. There is a need for art, criticism, theory, and
research to develop "production manuals" and other guides to this hidden world of familiar meaning.
ENDNOTES

1 Among the few who have said anything are Rudolf Arnheim, "A Forecast of Television" (1935), Film as Art (Berkeley: University of California Press, 1957), pp. 188-198; Gianfranco Bettetini, The Language and Technique of the Film, trans. David Osmond-Smith (The Hague: Mouton, 1973), chap. 3; and Christian Metz, Language and Cinema, trans. Donna Jean Umiker-Sebeok (The Hague: Mouton, 1974), section 10.5. I do not mean to neglect the fact that much of what film theorists have said is applicable to television--however, film theorists themselves seldom point out this applicability, and video theorists acknowledge their film predecessors all too infrequently. Correspondingly, video theorists have made a number of original contributions which could be, but rarely are, applied to film.

2 Herbert Zetti, "The Rare Case of Television Aesthetics," Journal of the University Film Association, 30, No. 2 (Spring 1978), 3.


7 M. F. Malik, "Video Physiology," Journal of the University Film Association, 30, No. 4 (Fall 1978), 9-13; and Jon Baggaley, with Margaret Ferguson and Philip Brooks, Psychology of the TV Image (Farnborough, England: Gower, 1980).

8 "Television" and "video" seem to have been largely interchangeable until the rise of portapaks, video art, cable, and industrial and other utilitarian uses of video technology.


10 See the Appendix for a complete list of manuals examined.

In a similar vein, Pryluck has lamented the lack of empirical evidence to substantiate many of the rather offhanded but far-reaching claims of film theorists. Calvin Pryluck, "Motion Pictures and Language--A Comparative Analysis," Journal of the University Film Association, 21, No. 2 (1969), 51.

Millerson, Technique of Television Production, p. 209.

Ibid.


Millerson, Technique of Television Production, pp. 213-219.

Zettl, Sight-Sound-Motion, p. 10.

Ibid., p. 11.

Ibid., p. 18.


Ibid., pp. 11-16, 17-24, 25-33, 34-43, and 44-53 respectively.

Ibid., pp. 133-140.

Ibid., pp. 133-134.

Ibid., p. 136.

Ibid., pp. 136-137.

Ibid., pp. 138, 143.

Ibid., p. 138.

Ibid., p. 143.

Ibid., p. 145.

Ibid., p. 14, emphasized in Hubbell.

Ibid., p. 23.

Ibid., p. 29.

Ibid., pp. 30-31.

Ibid., p. 31.

Ibid.

37 Ibid.

38 Ibid., p. 323.

39 Ibid., p. 318.

40 Ibid., p. 314.


42 Ibid., p. 57.


50 Ibid., p. 43.

51 Ibid., pp. 46-47.

52 Millerson, *Technique of Television Production*, p. 199.


54 Ibid., p. 46.

55 Ibid., p. 329.


59 Rider, "Comparative Analysis of Directing Television and Film Drama," p. 46.
60 Ibid., p. 73.


62 Zettl, *Sight-Sound-Motion*, p. 113, Zettl's emphasis.

63 Bluem, "Influence of Medium Upon Dramaturgical Method," p. 150.


APPENDIX

Production Manuals Consulted


