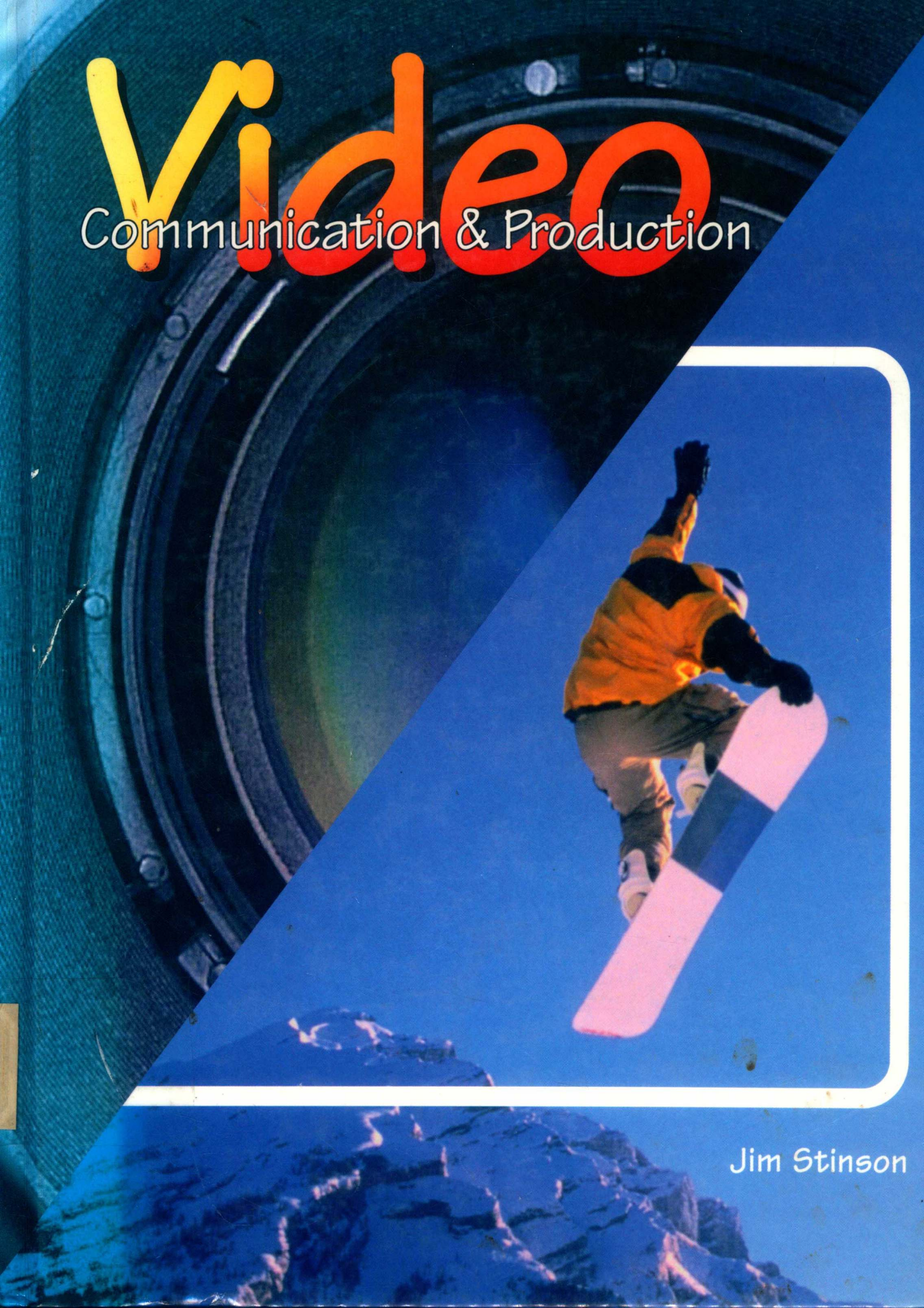
Video

Communication & Production



Jim Stinson

Video Communication & Production

By
Jim Stinson
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About the Author

After graduating from Harvard, **Jim Stinson** studied theater history at the Yale Graduate School and directing at the Yale School of Drama before transferring to the UCLA film school, where he earned the degree of Master of Fine Arts. Although he has worked on filmed commercials, TV series, and features, he has spent much of his career as a writer, producer, director, videographer, and/or editor of educational and corporate programs created in the medium of video.

Since 1993, he has been a columnist and Contributing Editor at *Videomaker* magazine. In addition to *Video Communication and Production,* his published works include four mystery novels set in Hollywood: *Double Exposure, Low Angles, Truck Shot,* and *TV Safe,* as well as the study, *Restorations of Elizabethan Public Playhouses.*

He has taught film production at Art Center College of Design, film studies at California State University, Los Angeles, and video production at La Cañada High School, La Cañada, CA. Currently, he conducts twelve video production seminars a year at *Videomaker* Expos East and West.

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About this Book

Video Communication and Production fulfills the promise of its title by covering both the ways in which video communicates with viewers and the methods by which it does so. Communication is featured because production by itself has no purpose. If communication were excluded, this book would be like a carpentry manual that covered sawing, drilling, and nailing without ever explaining how to build anything.

This book treats video as a mature and independent medium, rather than merely a variant of television or a recording alternative to film. Video has become fully empowered by the digital revolution that is transforming so many aspects of twenty-first century life.

The topics in this book have been selected and organized with two groups of readers in mind: students preparing for careers in communications media and creators of personal programs who expect to make videos of professional caliber. Though the text does not pretend to include all there is to know about video, it does cover all you need to get started.

To organize this sprawling subject, ***Video Communication and Production*** is presented in six major sections:

- Chapters 1 and 2 help you start making videos immediately.
- Chapters 3 through 7 cover video communication: the concepts and principles behind the hardware and production techniques.
- Chapters 8 and 9 present the crucial process of preproduction: preparing to make successful programs.
- Chapters 10 through 14 introduce all major aspects of videography, lighting, and audio.
- Chapters 15 and 16 survey the art of directing — both the camera and the people it records.
- Chapters 17 through 20 explain the basics of postproduction in both analog/linear and digital/nonlinear modes.

This organization may be termed "semi-random-access:" On the one hand, it is possible to read only the chapters desired, in any order. On the other hand, individual chapters will generally be more useful in conjunction with the others in their sections. In most cases, larger subjects have been distributed among multiple chapters for simplicity of presentation. For this reason, expect to find occasional duplication of material, since the same concepts and techniques may apply to procedures covered in different chapters.

The author and publisher cordially solicit corrections and suggestions from readers. Please help us improve the book by e-mailing us at **www.goodheartwillcox.com**.

Finally, as you use this book, remember that video production is both a demanding discipline and a source of great satisfaction. Like pro golfers, video professionals are generally pleased to be paid for doing things that they would happily do for free. If ***Video Communication and Production*** enhances your pleasure as it increases your skills, then the book will have fulfilled its purpose.

Jim Stinson
Trinidad, California

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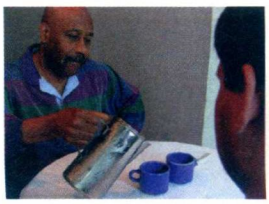

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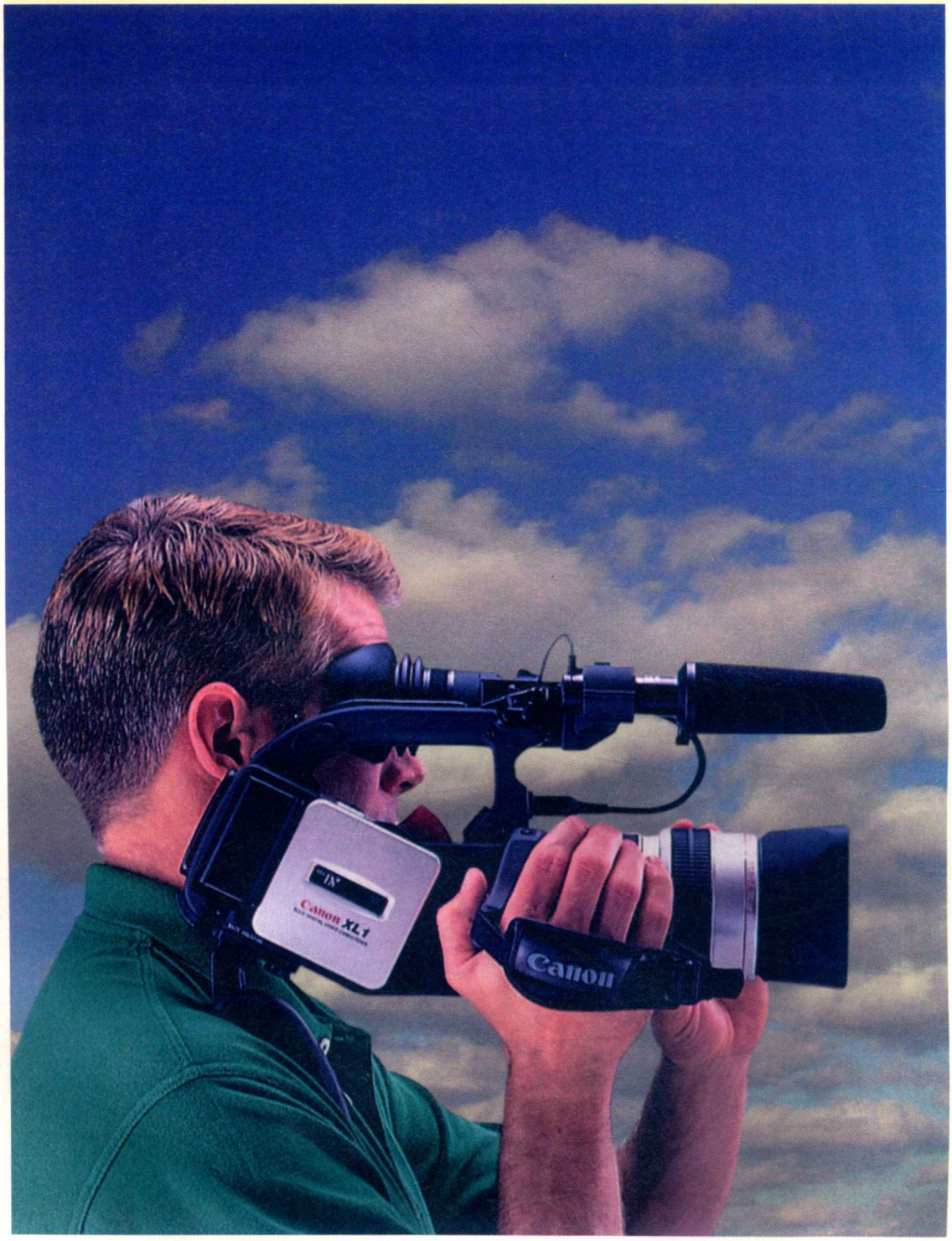
The fictional town of McKinley was created from shots of people, places, and events in the Humboldt County, California, cities of Arcata, Eureka, Ferndale, Fortuna, McKinleyville, and Trinidad. The annual three-day Kinetic Sculpture Race begins in Arcata and ends, more or less, in Ferndale.

Video has become a mature and independent medium, rather than merely a variant of television or a recording alternative to film.



1 About Video

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Objectives

After studying this chapter, you will be able to:

- ❑ Explain the meaning of "Video Communication."
- ❑ Explain why it is important to understand the nature of the video world.
- ❑ List some major types of video programs.
- ❑ Describe the three major phases of video production.

Sue Stinson

About Video

Video is a pursuit that attracts people with a wide variety of talents, so you are almost certain to find a place in it for your particular abilities and interests. Because making videos is so interesting, you may want to pick up a camcorder right now and get started. But if you first take the time to review this chapter and the next, you will have a better idea of what video is all about, and you will be able to make better video programs from the start.

What Is Video?

Exactly what is "video?" The answer is not as obvious as it seems. Until recently, video — as we treat it in this book — did not exist. Instead, there were just two main audiovisual media: *film* and *television*.

Film was the medium used for creating most audiovisual programs, from movies to TV commercials. Film was (and is) an excellent production medium for several reasons:

- Film equipment is relatively portable, so location filming is practical.
- Film's ability to reproduce quality images in black and white or color is highly refined.
- Film picture and sound tracks are usually recorded on separate strips of film (or audio tape), so sophisticated editing is possible.

Television was the medium used for broadcasting studio programs as they happened (**"live"**), and other programs previously produced on (or copied onto) film, **Figure 1-1.**

Originally, television was not an ideal production medium for several reasons:

- Its equipment was heavy, complex, and tied down by cables to its control systems.
- Its image quality was markedly lower than that of film, and its ability to render shades of gray from black to white was limited. (Color could not be reproduced at all, except in experimental setups.)
- It could not be recorded for later editing, except by copying the live signal to film and then treating it as if it were a filmed program. These "kinescope" films degraded picture quality even further.

As the popularity of television grew over the years, equipment manufacturers gradually solved most of its problems. They miniaturized hardware until a broadcast-quality camera and its recorder could be combined in a package smaller than the size of a film camera plus its attendant sound tape recorder. This combination ***camcorder*** also considerably reduced the tangle of studio cables. At the same time, engineers greatly improved picture sharpness and gray scale range and developed high-quality color. They perfected videotape recording, so the television signal could be electronically copied and edited.

Today you can obtain high quality video and audio from camcorders that weigh less than three pounds, Figure 1-2.

In short, television technology eventually improved until the medium rivaled the abilities of film. Today you can produce professional quality programs on either film or videotape with comparable ease and practicality.

Figure 1-1.
Comedians Dean Martin and Jerry Lewis in a 1950s TV studio. (Gene Lester/Archive Photos)

Figure 1-2.
A consumer format digital video camcorder.

Nevertheless, the two media remain quite different in many essential respects. Though film has continued to evolve over the years, it is still essentially the same medium. By contrast, the electronic production technology that began as "television" has changed so drastically that it needs a name of its own.

That is why we now call it ***video.***

Video versus Film

Some film makers think that video is less desirable than their own medium in several ways:

- Video picture clarity is comparatively coarse because its resolution is relatively low, **Figure 1-3.**
- Video color sometimes lacks a certain richness and "snap" that is hard to describe but easy to see in film. That is why many TV commercials are shot on film, even though they will be seen only on video.
- Until recently, video has offered less flexibility in sound editing. It is common for even simple films to mix as many as eight or more audio tracks. Sound editing has been more cumbersome in video.

In other ways, however, film is less desirable than video:

- Film is much more expensive to shoot and process to a final composite positive print. While small format video can cost as little as two dollars an hour, finished film costs hundreds of times as much.
- Film is less tolerant of different light levels, so it must be supplied in several grades of light sensitivity, to suit different conditions.
- Film sound is more cumbersome, since it is almost always recorded on a separate tape recorder.
- Film color balancing is time-consuming and expensive.
- Film titles and effects, such as dissolves and double exposures, cannot be added in real time and evaluated on the edited working copy. Instead, they must be created separately in the film laboratory.
- Film editing requires negative cutting, a tedious and expensive extra step. Since the original camera film is rarely used to create an edited program, a negative cutter must match it, frame-for-frame to the program's completed "work print," before viewable "release prints" can be made.

Figure 1-3.
At close range, the low resolution of video is obvious. (PBS)

Converging Technologies

Today, however, the arguments for and against film or video are growing outdated. Whatever the alleged weaknesses of film or video, they are now becoming less important as the two media grow ever closer together. High-definition video, for example, is close to the visual quality of film; and modern film stocks have wider exposure ranges.

At the same time, visual hybrids are being created. For example, most commercials are shot on film, which is then transferred immediately to tape. The rest of the production process is pure video. In other cases, videotape work prints are made, editing is completed, and then the film negative is cut to match the tape. Finally, in many theatrical films, the special effects are created electronically and then transferred to film.

Building computerized special effects involves digitizing the film: scanning it frame-by-frame and converting it to a pattern of tiny dots. Since a large computer can convert a frame of film to a matrix of about 4,000 by 3,000 pixels (dots), the digitized images remain film-sharp.

Digital postproduction helps video as well as film, especially in sound editing. Since computerized editing software can handle an almost limitless number of audio channels, multilayer sound tracks are now common.

Although film and video use different production techniques, they speak the same audiovisual "language." If you master this language, you can use it to communicate in either medium or in any hybrid of both.