

The background of the cover is a photograph of a man in a dark coat speaking into a microphone. A large video camera is in the foreground, out of focus, with its lens pointing towards the man. The title 'SINGLE-CAMERA VIDEO' is overlaid on the right side of the image.

SINGLE-CAMERA VIDEO

The Creative Challenge

Michael H. Adams



SINGLE-CAMERA VIDEO: THE CREATIVE CHALLENGE

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Preface

I've watched both the television industry and video production instruction change significantly in the past decade. Consider that for most of the medium's fifty-year history students were placed in a studio and control room, assigned roles such as camera operator and technical director, and then trained to practice and produce live or live-on tape programs. By the late 1970s some schools were following the in-studio experience with a single-camera class using cumbersome cameras and crude editing systems. Today, while many students still follow the traditional path of an introductory studio class followed by a single-camera class, others learn the single-camera system first and later go into the control room to complete editing or to incorporate an edited project into a studio-based program. Now and in the future a television production person will need to know about both single-camera and control room techniques.

The way in which this text introduces video production is partly a result of the amazing advances in the technology of single-camera video and editing, improvements that have made the equipment easier to understand and use. Learning about the technology now takes less time, which means you'll have more time to learn the creative process of turning an idea into content, the language of audio and video, and the techniques of directing and editing. I wrote this book because I believe it's time to move the learning experience surrounding the creation of television out of a technology-dominated environment and place it in an environment where the creative process comes first.

My goal is to give you all the knowledge, both technical and creative, that you need to complete any single-camera, edited video production. While the text includes comparisons to studio and control room-based production, all the basic information about cameras, lights, microphones, and video recorders used in single-camera production is included for those who have not had a previous video class. The text covers in detail the total production process—how to write, produce, direct, and edit single-camera television.

The book is organized in the same way you would organize a production, with three main sections for pre-production, production, and post-production. Within these sections, several levels of project options are presented. After completing a simple three-week group project, you'll have a chance to work on a six-week individual or group project or a longer semester-long or quarter-long individual project. All the technical and creative options are discussed. Whether this is your first, second, or only television production class, *Single-Camera Video: The Creative Challenge* will give you a thorough grounding in single-camera video.

Acknowledgments

The production of a book, like a television program, requires the assistance and cooperation of many people. First, I would like to thank Stan Stoga at Wm. C. Brown for encouraging me to write this book. I would also like to thank my developmental editor Jane Lambert and her staff. I am grateful as well to the following reviewers for their helpful comments: Charles F. Aust, West Georgia College; Marvin Diskin, Purdue University; James Hurt, West Georgia College; Charles Ingold, University of Northern Colorado; Cynthia M. Lont, George Mason University; Jeffrey M. McCall, DePauw University; Dennis H. Pack, Winona State University; J. C. Turner, University of Northern Iowa.

In the gathering and production of visuals I want to thank many friends, colleagues, and students for their kind assistance. Ron Dyas at Cal State Fullerton allowed me to include his useful and well-designed production management forms. At San Jose State Charles Chess furnished real-world production information and Jim Lefever suggested visuals and provided school video equipment. Dozens of my television students participated in the photo sessions and allowed me to accompany them on location and document the single-camera process. Two of them, Merrick Klaus and Bob Aunchman, helped me take the pictures. Pol van Rhee was always available to suggest the best way to use existing computer and printer resources in the production of the manuscript. Longtime friend Fred Golan furnished treatments and scripts and invited me to go on location and see him work as a professional director. And neighbor Jonathan Arthur let me learn about and photograph his audio studio that he uses for film and video music scoring.

Finally, video professionals and manufacturers provided additional help with visuals. Christin Hardman was always available to answer technical questions and pointed the way to many Bay Area resources. For equipment photos, thanks to Mark Overington of Avid Technology, Gerrie Schmidt of Sony Corporation, Dave Detmers of Ampex, Gary Youngs of TVA Production services, Felix and Chris of Videomedia, and Denise Gallant of CMX corporation.

Most of all, I want to thank my best friend and companion for her acceptance of what I do, whether writing, teaching, or producing. I dedicate this book to my wife, Barbara.

Michael H. Adams
July 25, 1991

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SECTION I

Introduction to Single-Camera Video Production

You're seated in a partially darkened room surrounded by that familiar group of fellow video production students. You're watching television. In less than a minute the single-camera video production that you've been working on for weeks will be revealed for the first time. You glance at the screen again and there it is, that brief electronic slate announcing that your production is about to begin.

A big five flashes on the screen. Just a few more seconds. You have been watching other students' shows for more than an hour. You've been impressed by a few, but yours will be better. *Four*. You feel a knot in the pit of your stomach. The countdown seems to take forever. *Three*. You tell yourself it will be all over in less than ten minutes and then you can feel normal again. *Two*. No more numbers now—just black. Then your show begins. For the first time an audience is looking at the results of your creative vision. All those hours of work, the phone calls, the writing, the rehearsing, the taping, and the editing—it all comes down to less than ten minutes. But they're watching. They seem interested.

Your show looks good. Maybe you *are* going to make it in television after all. But something even more exciting has happened. For the first time you are beginning to see the totality of television production. As a result of your first production, you are beginning to visualize many of the events around you in a more structured way, just as a producer of video sees them. Instead of just viewing life, you find yourself organizing it into camera shots and stories.

Perhaps this project is not your first experience with television. Maybe you have already completed a studio class and are starting to make some comparisons. Unlike a studio production, where everyone arrived, participated in a production, viewed it, and left at the same time, this new experience has been a more individual one. It has been dominated by sudden inspirations, strange locations, and solitary hours in an editing room. Before, you received instant feedback. If a program didn't look right, it would be taped again, immediately. Not this time. This time there is no going back.

Now the credits are rolling. The show fades to black, and you hope your career will not fade with it. You try not to look at your audience of fellow students, but they're already applauding. You smile. You have passed the test.

Single-Camera Video: The Creative Challenge will show you how to produce single-camera, edited television. The major emphasis in this text will be on how to use the technology and techniques of television production to serve the creative process. In addition to furnishing practical information on equipment selection and operation, this book will provide a usable organizational framework for production and a look at the attitudes and skills that will help you create your best work. This book is about thinking, creating, organizing, and problem solving in the single-camera video production environment. Your step-by-step introduction to the fascinating process of single-camera video production, from idea to screening of your finished show, begins now.

Chapter 1

A Beginning Perspective

The television production industry has changed more in the past decade than in its entire fifty-year history. A greatly expanded choice of production technology is changing both the definition and purpose of television. These recent changes in television will affect you as a student learning the process of single-camera video production, and they will affect you as a future producer of single-camera video.

A CHANGING INDUSTRY

The evolutionary improvements in television technology that took place in television's early decades led to better-quality network programs. More recently, revolutionary changes are affecting how and where television is used, who its audiences are, and what tasks the people who make a career in television perform. Why has this happened? In part these changes are the effects of smaller cameras and video recorders and faster editing systems. But they are also the result of the changing attitudes of the creators of video programs as they react to the new challenges presented by this technology. A career in video today is much different than it was ten years ago.

Early television was more burdened than served by its technology. In fact, multi-camera, control room-based television was born of technical necessity. Because they lacked a lightweight, portable camera, the video pioneers of the forties and fifties were obliged to carry on the activities of the emerging medium in a fixed studio setting. And since there was no way to store or edit the electronic images from a video camera, early television had to be a strictly live, or "real-time," endeavor. Although some of the early programs were shot and edited on film, like a movie, the process was time-consuming and too expensive. As a result a system was developed that used more than one camera and a *switcher*, a device for selecting pictures from more than one camera focused on the same scene so that programs could be edited as they were being done. Television, defined by the limitations of its technology, remained a live, studio-based medium for its first forty years.

Technology

Eventually, two important changes would occur in the technology of television, changes that would ultimately affect the creative process of video production. First, with the introduction in 1956 of the videotape recorder, or *VTR*, for recording and playing back television images and sound, and its continued refinement into the 1980s, recording and editing video could be done

The technology has made it easier to tape at a location away from the studio. *a.* As a man holds an old-style camera, another shoulders a large “portable” VTR. *b.* A man with a camcorder—the modern all-in-one camera and videotape recorder. (Courtesy of Ampex Corporation.)



a.



b.

instantly and inexpensively. Second, improvements in video-camera technology led to considerable downsizing, allowing broadcast-quality video production to take place at any location. Did these technical improvements in video attract a broader group of creative people? Possibly. Were new forms of television created using the new video technology? Absolutely. No longer would television technology limit creativity.

The original technology of television, the multiple-camera studio and remote truck, however, was not suddenly replaced by a single camera, a portable VTR, and an editor. News, sports, game shows, variety shows, daily soaps, and interview shows are still produced in studios using traditional multi-camera technology. But television shows that would have been done on film, such as documentaries, dramas, and other programs requiring portable equipment at a number of locations, are now shot and edited with video equipment. Single-camera video has become a supplement to, not a replacement for, the studio and control room.

The improvements in video technology present new creative challenges. First, and most obvious, you have new equipment to learn about, equipment that must serve the production at a location often far from engineering help. Second, you need to use a slightly different language to communicate the principles of single-camera production to talent and crew. Those with some knowledge of the lexicon of the studio and control room will discover that much of the creative language of single-camera video is a combination of that used in the studio and that used in traditional film production. Finally, while a show may be taped on location with a single-camera, it may be edited in a traditional control room and integrated into a familiar studio-based program format.

Perception

Inevitably changes in video technology began to influence the types of programs produced and thus changed the public perception of television. For most of its fifty-year history, television meant over-the-air broadcasting, period. A television station in a major city would broadcast network and locally produced programs to homes equipped with an antenna and a receiver. Now, in

the 1990s, most homes are equipped to receive more than thirty-six channels via cable, major corporations produce television programs for their employees, and home viewers can obtain on videocassette dozens of short programs on any subject. At the office new employees may be trained with videotapes or presented with a weekly company newscast. In the department store a shopper may select clothes while the latest music video flashes nearby. And if you miss a friend's wedding, you may be able to watch it later on a home videocassette recorder, or *VCR*. Today, almost everyone has daily access to one of the many new forms of television. The purpose, the scope, and the perception of television is changing, and as viewer expectations of the medium change, the definition of a career in professional video is changing as well.

Most creative and technical careers in television production have and will continue to be directly influenced by technology. In the past the cumbersome nature of the early equipment and the large number of technical people needed to operate and maintain it may have discouraged some creative people from choosing a career in television. In the studio-based video environment, the creative person became a producer, writer, or director of live video, and the technical person became a camera operator, technical director, or engineer. Often they kept these jobs for life. Today, the situation is much more complex.

Career

Permanent positions in television production are disappearing as many of the jobs that were full-time staff positions several years ago have been converted to free-lance. Deregulation of broadcasting and the changing economic picture of the industry has made it more cost-effective to hire production personnel for each project than to have them on staff when no productions are being taped. Even those positions long considered necessary, such as studio camera operator, are in jeopardy. One company has advertised that its robotic camera system allows one person to take the place of five camera operators and technicians. Another company has demonstrated an entire computerized television station that allows the facility to operate at nights and on weekends with a single technical person.

Do these changes mean that there may not be a job for you in television production in the future? On the contrary, more video production is taking place than ever before. But the nature of a television job, where the work takes place, and the purposes of the productions are different than they were in the past. Instead of being produced strictly at a broadcast station, more and more television programs are being made in hospitals, corporations, service industries, independent production facilities, and on location everywhere. Instead of learning a single skill and practicing it for life, the video professional of today must know how to select and operate all production equipment, both stationary and portable. For the future video professional there will be plenty of television waiting to be produced. Traditional jobs will exist and new jobs will emerge to serve a growing and diverse industry.

Changes in both the technology and the perception of television seem to be breaking down some of the old career barriers between those in broadcasting and those in *nonbroadcast*—video for corporate, classroom, or home