# broadcasting: 

## RADIO AND TELEVISION

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## broadcasting: <br> RADIO AND TELEVISION

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 and LAWTON
## broadcasting: radio and television

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## preface

PA SCAL, French philosopher and physicist of the seventeenth century, once said, "The last thing we discover when writing a book is what to put at the beginning." We know what Pascal meant. It is difficult to decide how best to introduce this book to various groups of readers.

We have written primarily for college students and program staff members of radio and television stations. However, those who are occasionally called upon to appear before the microphone will, in our opinion, find it helpful.

Those who write about radio and television programs are naturally tempted to emphasize dramatic shows that are skillfully written and artistically produced. We have tried to resist this temptation, to give equal attention to other program types that constitute the major part of the station's daily schedule.

Our purpose is to present essential information in nontechnical language and in the order that will be most meaningful to the reader. The first seven chapters describe our radio and television systems, consider the public service responsibilities of these important mass media, and suggest standards for evaluating broadcast programs. The remaining chapters discuss, in this order, planning and promoting the program schedule, preparing the various types of programs, rehearsing and producing them, and ways of evaluating listener response. The glossaries of radio and television terms include only those that are widely used and, hence, important for the beginner. The bibliography is limited to books and articles our students have found most helpful.

In our opinion, the basic college courses in broadcastingwhether by radio or television-belong in the liberal arts curriculum. In objective and content they should parallel courses in such allied fields as play production and creative writing. More specifically, the objectives should be one or more of the following: to give the student a general understanding of the broadcasting industry and of the part radio and television play in our society, to develop more intelligent listeners, to motivate improvement in speaking and writing skills, to prepare students for the occasional microphone appearances any community leader may be called on to make, and to provide basic training for the few who may find a place in the broadcasting profession.

College courses in radio follow diverse patterns. Some teachers devote considerable time to background information and advice on various types of programs before the students get their first microphone assignments. Other teachers make simple assignments at the first meeting and provide information where it is needed. As those who use our student manual Projects for Radio Speech well know, we follow the second procedure. We believe, however, that Broadcasting: Radio and Television can be readily adapted to either type of course.

In each chapter except the first, we have included reading lists, exercises, and broadcasting assignments for teachers who do not use the Projects. There are more exercises and assignments than can be fitted into a semester course. The teacher will, of course, choose those that best fit his objectives and the needs of his students. To include as much information about broadcasting as possible, and to keep the information up to date, we specify that radio and television topics be used for some of the newscasts, talks, interviews, discussions, and documentary programs.

The poet's admonition that new occasions teach new duties and that we must bestir ourselves to keep abreast of truth ap-
plies with special force to anyone who writes about radio and television. What will happen to frequency modulation broadcasting? What is the future of radio networks? How many television stations can advertisers support? How will television affect the movies and the theater? What about color television? What changes can we expect in listener interest? How many and what types of jobs will be available? No one knows the answers. This is the reason we do not include a section on how to get a job in radio or television. The situation is chang. ing so rapidly that information on duties and wages may be out of date by the time a book is published.

We should note, however, that the above questions do not concern the fundamental processes of oral communication. The main differences between radio talk programsspeeches, conversations, interviews, discussions, commentar-ies-and their preradio counterparts, are that radio speakers generally talk to individuals rather than audiences, that they use the volume appropriate for a living room, and that speakers and listeners cannot see each other. This is also true of interpretative reading and reading before a microphone. Radio acting is essentially interpretative reading without the visual aids of costumes and stage setting, with the actor's position on the stage suggested by his relationship to the microphone.

The obvious, but important, fact about studio "telecasts" is that the "televiewer" can see the performer but the performer cannot see him. The good television speaker uses visual aids, including movement (on a restricted scale), gesture and facial expression, and talks as he would to a few individuals in a relatively small room. At present (1951) there is a prejudice against reading talk programs from script, probably because few television speakers have mastered the art of effective interpretative reading while maintaining the illusion of eye contact with the unseen audience. The television actor has the assistance of makeup, costumes, and stage
settings, but he must act in a restricted space and with inadequate rehearsals. His problems resemble those of the extemporaneous speaker who must do the best he can in a hurry. In their first experiences, television actors feel that they are acting in a telephone booth with bright lights shining in their faces.

Our point is this: while the mechanics of oral communication have changed with the discovery of the telephone and the microphone, the fundamentals of good communication have not changed. The experienced writer simply adapts his writing skills to the new situation; the same is true of program directors and participants. We believe, then, that the basic information on preparing and producing programs will not greatly change in the foreseeable future.

In writing this book we have borrowed information and ideas from many minds. We are indebted to the students who helped develop our first radio courses more than twenty years ago, and to others who have offered suggestions based on out-of-school experiences. We have borrowed ideas freely from current writings in the field. When we have quoted directly, our acknowledgments are given in footnotes; to other, unnamed, writers we extend our thanks.

In addition, we acknowledge our indeltedness to the National Broadcasting Company for permission to quote freely from NBC-Radio and Television Broadcast Standards; to the National Association of Broadcasters for extended quotations from Standards of Practice; to Random House, Inc., for permission to quote from the introductory discussion in Invitation to Learning; to the Northwestern University Reviewing Stand and the University of Chicago Round Table for permission to quote illustrative passages from their broadcast discussions; to Broadcasting-Telecasting, Variety, Sponsor, and Time magazines for permission to quote certain paragraphs from their publications; to the Columbia Broadcasting System for permission to quote scenes from the TV version
of "The Aldrich Family"; to Appleton-Century-Crofts Publishing Company for permission to quote from Margaret Loomis Cook's article in O'Neil's The Advertising Agency Looks at Radio; to Caroline Ellis for permission to quote from an address given at Creighton University before a District Meeting of the Association of Women Radio Directors; to the Mutual Broadcasting System and Ted Lloyd for permission to quote an excerpt from "Ben Hur"; to the World Broadcasting System for permission to quote from World Broadcasting System continuities; to Station WKY-TV for permission to reprint Translube and Epperly TV commercials; to Dumont Television Network, Columbia Broadcasting System, National Broadcasting Company, WGN-TV, WTMJTV, WKY-TV, KOTV, WRGB, Radio Corporation of America, Altec-Lansing Co., General Electric Co., William Kahn, and Jack Logan for permission to use pictures.

We hasten to amend the familiar statement, "The views expressed on this program are not necessarily endorsed by this station" to read, "The views expressed by the authors are not necessarily shared by those whose opinions we quote."
H. L. E.
S. P. L.

January, 1952

## 

## UNDERSTANDING RADIO AND 

## mmmmm THIS IS BROADCASTING

BROADCASTING means different things to different people. To the average listener it means news, weather reports, and entertainment which he picks up "free" from a standard broadcasting station. The businessman thinks of radio as a way of selling goods and services. To the advertising man, radio is one long succession of listener ratings. When they're up, he's up; when they're down, he has visions of unemployment. No one can truthfully say that the advertising agency doesn't try to give its public what it wants.

To the student of public opinion, radio is important as one of the three great "mass media," the other two being the newspaper and the motion picture. The educator wishes to use radio and television to supplement the work of the classroom and to continue education beyond school years. The idealist believes that broadcasting offers a way of creating good will and understanding among nations; the dictators demonstrated radio's effectiveness in sowing suspicion and spreading distrust.

The effects of broadcasting, though admittedly great, are hard to estimate accurately. We are a nation of radio listeners,
with over $70,000,000$ radio and $12,000,000$ TV receiving sets distributed in almost $40,000,000$ homes and $6,000,000$ automobiles. In urban centers the number of television receivers is increasing rapidly. Network programs have millions of auditors who tend to laugh, cry, give, or buy in response to the suggestions of the performers and the exhortations of the announcer. Control of radio broadcasting could mean, to an alarming degree, control of the public mind.

Radio advertisers have proved the accuracy of the slogan, "The more they listen, the more they buy." The repeated sug. gestions and exhortations in the commercials break down resistance and result in sales. In World War II the Office of War Information used radio successfully in getting us to do such diverse things as saving waste fats, joining the Red Cross, giving blood, and buying Victory Bonds. Broadcasts are effective in securing immediate action.

Not so widely known, but of at least equal importance, are the experiences of the educational broadcasting stations. From the records of these stations, and from careful experiments, we know that the radio can successfully transmit information as simple as weather or market reports, as complex as the organization of the United Nations. We know that tastes for better music and drama can be developed through directed listening, that school children can be taught to sing and draw by skilled radio teachers.

What is even more startling, we know that the opinions of as many as a fourth of the listeners can be measurably changed by listening to a single broadcast on a controversial issue. The unexpected success of Orson Welles in scaring more than a million people with his overly realistic dramatization, "The Invasion from Mars," and Kate Smith's achievement in selling $\$ 39,000,000$ worth of Victory Bonds with sixty-five short network broadcasts in twenty hours, provide striking evidence of how listeners may be moved to action by skilled performers.

Hitler was quick to recognize the value of broadcasting in
propaganda campaigns. His one-time radio specialist, E. Hadamowsky, wrote, "We are possessed in radio of a miraculous power . . . that does not stop at the borders of cities and does not turn back from closed doors; that jumps rivers, mountains and seas; that is able to force peoples under the spell of one powerful spirit."

Radio was used with devastating effect in Hitler's campaigns and in the other dictator countries. The qualifications, objectives, and ethics of those who control radio are matters of public concern.

While radio is not as effective as print in teaching complicated factual material, its effects are important because it reaches so many listeners and has the capacity to repeat its information so persistently. Information may be spread thinly by radio, but it is spread far and on repeated occasions. Television, using sight and sound, can perhaps increase the depth as well as the breadth of general public information.

All of us, whether prospective producers or consumers of programs, need to understand our broadcasting system: what it is, why it is what it is, where it came from, and where we hope it is going.

## HOW IT BEGAN

Station KDKA (Pittsburgh) may be, as its founders claim, "the first broadcasting station in the world," but it did not do the first broadcasting. Indeed, the idea of broadcasting was not in the minds of those who did the pioneer research in this field. In so far as they were interested in practical application of their work, they thought of wireless telegraphy. In 1892, Sir William Crookes, commenting on the work of Farraday, Maxwell, and Hertz, wrote in the London Fortnightly Review: "Here is unfolded to us a new and astonishing world . . . the bewildering possibility of telegraphy without wire, posts, cables, or any of our present costly appliances. . . . This is no mere dream of a visionary philosopher."

Marconi set about to make this dream a reality. He went to

London in 1896 and made various demonstrations before representatives of the post office and the navy. By 1899, he was sending code messages as far as eighty-five miles. On December 12, 1901, he sent the letter " $S$ " across the Atlantic.

In the United States, men like Reginald Fessenden and Lee de Forest were experimenting with the transmission of voice and music by wireless. By 1903, according to A. F. Harlow, ${ }^{1}$ Fessenden had succeeded in throwing his voice over a mile by wireless. On Christmas Eve, 1906, he made what Harlow believes was the first radio broadcast in history, including vocal and instrumental music, the reading of a poem, and a speech. In the summer of 1907, Admiral R. D. Evans, about to leave with twenty-four ships on a world tour, had them equipped with de Forest's wireless telephones. In 1908, de Forest broadcast from Eiffel Tower, in Paris, and was heard "throughout Western Europe." On January 20, 1910, he arranged the first broadcast of grand opera, a double-bill, consisting of Cavalleria Rusticana and Pagliacci, and received reports from about fifty listeners.

During 1919, Dr. Frank Conrad, of Westinghouse Electric Company, broadcast phonograph records, talks, and scores of athletic contests from a transmitter in his home. Late in that year, H. P. Davis, vice-president of Westinghouse, decided that efforts to develop the radio telephone as a confidential means of communication were all wrong. Instead it should be exploited as "the only means of instantaneous collective communication ever devised." Plans for a broadcasting station were laid early in 1920. In need of something spectacular to start off with, it was decided to open election night with broadcasts of the Harding-Cox election returns. The company made a number of receiving sets and distributed them to friends. "Thus," said Davis, "was the first radio audience drafted."

[^0]At first little consideration was given to what was broadcast. People bought receivers for the novelty of hearing, well mixed with static, weather reports, recorded music, athletic contests, and whatever volunteer amateur talent could do. But the novelty wore off. It became evident that better programs must be provided and that better programs would cost a good deal. The problem of getting the money was settled, without a full-scale discussion of alternative methods, when broadcasting stations began to sell time to advertisers.

This, in brief, is how broadcasting started in the United States. The story of its development, and of the problems that arose, will be told in subsequent chapters.

## AND STILLIT GROWS

Standard broadcasting, technically known as amplitude modulation (AM), occupies but a small part of the radio spectrum. Other types have been developed in what the engineers speak of, conservatively enough, as the "higher frequencies." These include frequency modulation (FM), television (TV), and facsimile (Fax). These types will be explained in later chapters. In July, 1951, the Federal Communications Commission (FCC) reported that 2284 standard stations (AM), 651 FM stations, and 107 TV stations were on the air. Fax remained in the experimental stage.

The largest part of the radio spectrum is now reserved, not for public broadcasting, but for different types of point-topoint communication. Early in 1947, the FCC announced that since the close of the war it had approved nearly 200,000 applications covering forty categories of radio service, and that the total number of such licenses was nearly 530,000 !

These forty classifications include governmental services (army, aviation, navy, forestry, etc.), common carriers (ra-dio-telephony and telegraphy), transportation (aviation, shipping), and emergency services (police, fire, etc.). The FCC estimates that police departments have 23,000 mobile
transmitters. Many trucks, buses, and taxis are equipped with two-way radio systems. The Railroad Radio service, designed to increase safety and efficiency of railroad operations, began operation January 1, 1946. The FCC is experimenting with a Rural Radio-Telephone Service to connect isolated homes with a central telephone exchange, and also with a Citizens Radio Communication Service "intended primarily to provide facilities for personal utilization of radio."

## THE AMERICAN WAY

Every Sunday evening the national networks offer the American public a $\$ 150,000$ "free show." In addition, listeners may choose, if they prefer, programs of nearby unaffiliated stations. Moreover, metropolitan audiences may view several hours of televised programs. For this evening's entertainment and for comparable broadcasts throughout the week, we make no direct payment. Except for a number of noncommercial stations, our broadcasting system is privately owned and operated. Its income is derived from the sale of advertising. Unlike the newspaper and the motion picture, broadcasting stations must obtain licenses under laws enacted by Congress and administered by the Federal Communications Commission (FCC). To obtain a license, the station must promise to serve the public interest, convenience, and necessity.

The general pattern of governmental regulations follows that used for railroads, telephones, telegraph, bus systems, and other utilities where competition for facilities does not serve the public interest.

The American way is not the usual way. Some countries, notably Canada, Australia, and New Zealand, have combinations of commercial and government-owned stations. In Britain all broadcasting is done by a government corporation, the BBC , and financed by an annual tax on receiving sets. The directors of the BBC are responsible to the government in
much the same way that the regents of a state university are responsible to the legislature. More direct governmental control prevails in most other countries.

We know, of course, that someone pays for our "free" programs. The station owners pay sizable sums for transmitters and broadcasting facilities. The cost of AM and FM stations ranges from $\$ 50,000$ to $\$ 250,000$, depending on power, number of studios, and completeness of equipment. Annual operation costs for small stations run from $\$ 50,000$ to $\$ 75$,000 ; for full-time regional stations, from $\$ 200,000$ to $\$ 250$,000 . For television stations, the expenses may be ten times as much.

The listeners also pay. In 1942, the value of receiving sets in American homes was almost 2 billion dollars. In 1946, more than $\$ 800,000$ was spent for receivers, tubes, parts, and batteries. In 1950, listeners spent about two billion dollars for the purchase and maintenance of new radio and television sets. The cost of electric current to operate the radio and TV sets more than equals the national networks' income from the sale of sponsored time.

The commercial sponsors are quick to point out that they pay for our "free" entertainment. In fact, the advertiser pays more than the cost of broadcasting the program he sponsors. A cigarette manufacturer, for example, may pay enough for his half-hour comedy show to cover the costs of a sustaining symphony program of equal length. But the statement that advertisers pay for our free programs is only partially correct. The sponsor's advertising costs are included in his distribution costs and are passed on to those who buy his products. The advertiser who does not succeed in doing this must eventually go out of business. Furthermore, it costs the advertiser about two cents a receiver to reach the listener with his program, while it costs the listener about three cents to hear the broadcast.

Our purpose is not to advocate or condemn our broadcast-
ing system, but simply to tell how it works. The available evidence, however, indicates that the average listener is fairly well satisfied with what he gets. If general dissatisfaction should develop, Congress can pass legislation strengthening, lessening, or defining the powers of the Federal Communications Commission.

## THE PEOPLE LISTEN

From 80 to 97 percent of our family units have radios, depending on the part of the country, and more than 10 percent have TV receivers, mostly in metropolitan centers. Various studies indicate that the average set is turned on from two to four hours a day. Children begin listening when they are four and a half to five years old. More women than men listen at almost any hour of the day. About one-third of the listeners have less than an eighth-grade education, and a majority have not finished high school.

The American listener, however, should not be treated like a twelve-year-old. He is a normal, adult citizen-the bestpaid, best-informed citizen in the world. He is likely to tune in the station that comes in loudest and to listen, with varying degrees of attention, to whatever is broadcast. "I just turn your station on and keep it on all day." After his day's work, the average listener wants to relax and be entertained. He welcomes news summaries and moderate amounts of vocational information, and likes to think that he gets some education from shows like "Information Please" or "One Man's Family."

Families in the higher income brackets listen less but more selectively than do those lower on the economic scale. And there are sizable minority audiences for the better educational and cultural programs, including discussions of current problems, serious drama, and good music.

In the United States, radio frequencies are public property. Operators of commercial stations are permitted to use these
frequencies for private profit, if it can be shown that the broadcast programs, or part of them, serve the "public interest." This phrase is vague, perhaps necessarily so. Obviously it means more than that large numbers of the public are interested in hearing a given program.

Between those who regard broadcasting as a business which must place profits first and public service second, and those concerned primarily with its educational and cultural possibilities, there are differences of opinions on questions such as these:

1. To what extent should Congress, through the FCC, regulate the types of broadcast programs?
2. Does the tendency to measure the value of a program by the number of its listeners generally serve the public interest?
3. Is joint ownership of newspapers and broadcasting stations good public policy?
4. Who now controls the content of radio programs?
5. To what extent can commercial stations be expected to provide discussions of local controversial issues?
6. To what extent can commercial stations be expected to serve listeners in thinly populated areas?
7. To what extent can commercial stations be expected to spend money on programs that bring in no revenue?
8. Can individual commercial stations really be expected to originate any considerable number of educational or cultural programs?
9. To what extent do you agree with the statement: "We are giving the public what it wants"?
10. Do present FCC regulations infringe on our cherished right to freedom of speech?

The FCC is sometimes charged with limiting someone's right to freedom of speech. To analyze this charge, we raise these questions:

1. Should the owner of a broadcasting station have the right to use it to promote his own beliefs, as the newspaper owner has the clear right to use his press?
2. Is an owner obligated ethically to see that news commentators of varying political beliefs are given time on his station?
3. Does a sponsor have an ethical right to finance speakers or commentators who reflect only his point of view?
4. Does the policy of charging for radio time during political campaigns give the "big money" interests an advantage?
5. Does the fact that speakers representing the party in power broadcast between political campaigns more frequently than opposition speakers indicate an abuse of privilege?
6. If only religious speakers who refrain from sectarian arguments are permitted to broadcast, is freedom of speech curtailed?
7. Is it an abridgement of freedom of speech to limit the number or length of commercials?

In this brief chapter we have sketched the development and, to some degree, the extent of broadcasting in the United States. We have raised a number of fundamental issues arising partly from our failure to recognize the effects of listening on the public mind and partly from the nature of our broadcasting system, which attempts to combine the two objectives of private profit and public service. It is important, we believe, that every citizen, whether producer or consumer of radio programs, consider these problems and contribute to their wise solution.

## chapter 2

## BROADCASTING IN THE PUBLIC INTEREST

THE year was 1947. In a small dark room six staff members of the British Broadcasting Corporation were watching the image of a serious-faced speaker on a television screen. The speaker was talking quietly. One listener dropped his head on his chest, fast asleep. Three others soon joined him. The speaker had hypnotized his subjects by television. The BBC officials promptly banned hypnotists from television programs.
The year was 1938. On the evening of October 30, Orson Welles and his Mercury Theater players presented over a national network a freely adapted version of H. G. Wells' imaginative novel, War of the $W$ orlds. Using actual place names and the familiar devices of newscasting, the broadcast became so realistic that many listeners thought monsters armed with death rays were destroying all resistance, and that the end of the world was at hand. What was intended as a Halloween hoax had produced a near panic. The Federal Communications Commission issued a statement calling the
broadcast "regrettable" and directed that thereafter the expressions commonly used in newscasting (such as "Bulletin," "Flash," "Stand by for an important announcement") be employed only in the broadcasting of actual news.

## THERELATION OF GOVERNMENT TO BROADCASTING

In broadcasting and television we have a sort of psychological "atomic bomb" which, used unwisely in times of stress, may put the listener's critical powers to sleep or stimulate him to unreasoned, even hysterical, action. It is significant that in both the above instances corrective measures were taken by governmental lodies. But the relation of the government to broadcasting differs in the two countries.

The British Broadcasting Corporation (BBC) is a publicly owned company, created by the government and, of course, responsible to it. The broadcasting system is financed by an annual tax on receiving sets. The directors set the policies and employ individuals to put them into effect. Critics charge that the BBC gives the listener what it thinks he ought to have rather than what he would like to hear.

Broadcasting stations in the United States are, with a few rather important exceptions, privately owned and conducted as business enterprises. This is also true of our radio networks. Our radio legislation has followed the familiar pattern of regulation rather than direct control or operation. From 1927 to 1934 the regulating agency was the Federal Radio Commission. In 1934 the Federal Communications Commission (FCC) was created and given the added responsibility for administering federal legislation dealing with interstate telephone and telegraph communication. The Radio Act states explicitly that the Commission shall not exercise direct censorship of program content or interfere with freedom of speech, but, on the other hand, that it shall license stations only if the "public interest, convenience, and necessity" are thereby served.

The first tasks undertaken by both commissions were to reassign available frequencies to eliminate, or at least reduce, interference among stations, and to prescribe minimum engineering standards. Although the owners of individual stations did not like those actions of the commission that denied their applications for certain frequencies, or required the installation of more efficient broadcasting equipment, the industry as a whole approved this type of government regulation.

The representatives of educational and other noncommercial stations were not happy about the treatment accorded them. They argued that commission rules and procedures favored commercial stations and asked that certain frequencies be set aside for noncommercial stations. The FCC took no direct action on these matters as far as amplitude modulation broadcasting was concerned. But it did protect the existing educational stations and when, in 1945, a portion of the radio spectrum was designated for FM broadcasting, twenty of the ninety frequencies made available were reserved for noncommercial stations.

Recently the FCC has, with increasing frequency, raised questions such as those at the conclusion of Chapter 1. The Commission has held public hearings on these important issues: (1) Is the joint ownership of newspapers and radio stations good public policy? (2) Are the high power (clear channel) stations fulfilling their original assignment of serving the thinly populated areas? (3) Should radio stations be permitted to have an editorial policy on controversial issues? (4) What are the public service responsibilities of broadcasting stations?

On March 7, 1946, the FCC published its tentative answer to the last question in a bulletin entitled Public Service Responsibility of Broadcast Licensees:

In issuing and renewing the licenses of broadcast stations the Commission proposes to give particular consideration to four program service factors relevant to the public interest. These are: (1)
the carrying of sustaining programs, with particular reference to the retention by licensees of a proper discretion and responsibility for maintaining a well-balanced program structure; (2) the carrying of local live programs; (3) the carrying of programs devoted to the discussion of public issues, and (4) the elimination of advertising excesses.

The broadcasting industry has opposed vigorously, even bitterly at times, the consideration of these matters by the FCC. Through their trade association, the National Association of Broadcasters (NAB), the commercial broadcasters argue that the Commission is exceeding its legal authority; that its actions in suggesting types of program content violate the Bill of Rights, interfering especially with the right of freedom of speech; that the Commission is taking the first step toward government ownership and operation of broadcasting stations.

In his keynote address at the annual convention of the NAB, September 16, 1947, President Justin Miller said: ". . . unless the broadcasters of America are willing to put up an intelligent and unremitting battle, American radio broadcasting will be taken over, step by step, until it becomes a government operation . . . similar to that of the public schools, or the publications of a government bureau." ${ }^{1}$

One further instance illustrates the fears of the broadcasting industry that government regulation will lead to government ownership. The FCC sent invitations to forty-nine organizations and thirty-six individuals to appear at the March, 1948, hearings on whether it is in the public interest for broadcasting stations to take editorial positions on controversial issues. An editorial in the December 7, 1947, issue of radio's weekly news magazine, Broadcasting, complained that ten of the forty-nine invited organizations "are easily identified as definitely left of center," and that, of the thirtysix individuals invited to testify, "at least twenty-two are

[^1]college professors." The editorial writer hastens to admit that he does not "have anything against college professors as a class. They are nearly always highly intelligent just as they are more often than not extremely 'liberal' in their viewpoints."

Privately owned industries, naturally enough, have never welcomed government regulation. And the method of opposing the action under consideration by arguing that it is a step toward an extreme and undesired ultimate goal, is as old as the legislative process. It is entirely proper for the commercial broadcasters to oppose pending legislation or FCC actions. It is equally proper for those who approve FCC actions, and those who advocate further governmental regulation, to present their case. This is the American way, based on the belief that out of full and free discussion will come legislation that represents an informed public opinion. As long as the public remains reasonably satisfied with radio programs, there will be no effective demand for government ownership of all broadcasting stations. We will undoubtedly continue to have debates between critics and representatives of the radio industry on issues dealing with the public service aspects of broadcasting. This, too, is the American way.

- FREEDOM OF SPEECH: CENSORSHIP. Spokesmen for the broadcasting industry, in commenting on an adverse FCC decision, often charge that the Commission has violated Section 326 of the Communications Act of 1934, which reads:

Nothing in this act shall be understood or construed to give the Commission the power of censorship over the communications or signals transmitted by any radio station and no regulation or condition shall be promulgated or fixed by the Commission which shall interfere with the right of free speech by means of radio communication.

At various points in the Act, the Commission is instructed to see that the broadcasting stations serve the "public interest,
convenience, and necessity." In effect, the industry complains that, in attempting to follow this directive, the FCC violates Section 326. The members of the Commission obviously do not agree. The difference of opinion arises partly from opposing views as to the proper functions of a governmental agency. One group seemingly holds that the FCC should act only when expressly directed to do so; the other, that it should act unless expressly forbidden to do so.

The Commission is constantly acting on such matters as requests for more power, permissions to broadcast at night, or applications for new stations. In making these decisions, the FCC members are acting indirectly on matters that touch on free speech and censorship. The following questions are typical:

1. When two stations apply for the same wave length, should the FCC grant one request and refuse the other without reference to program content or quality?
2. What is the status of the disappointed applicant's claim that he has been denied freedom of speech by radio?
3. Can the FCC set up and apply program standards without indirectly censoring programs that do not meet these standards?
4. Does the "right of free speech by means of radio" include the right to use a station to present only one side of a controversial issue?
5. Does the policy of charging for radio time during political campaigns ensure freedom of speech for minority parties with limited campaign funds?
6. Does the fact that the party in power gets the lion's share of radio time because talks by high governmental officials are usually adjudged nonpolitical and "in the public interest," constitute unfair discrimination against opposition and minority parties?
The Commission believes that the "public interest" clause authorizes it to consider program quality and that it avoids censorship since it does not pass judgment on the content or artistry of programs before they are broadcast. In general, the courts have found for the Commission in cases dealing with freedom of speech or censorship.

It is pertinent to inquire how the "right of free speech" can be applied to broadcasting. Every citizen, if he wants to, can stand on his soap box and say what he pleases as long as he avoids slander, libel, or incitement to violence. But he obviously cannot be provided with a broadcasting station. Nor does the Bill of Rights promise anyone an audience. Freedom of speech does not include compulsion to listen. Yet, as Walter Lippmann points out, freedom of speech achieves "its essential purposes only when different opinions are expounded in the same hall to the same audience." This is best accomplished in broadcasting by some sort of discussion program.

What, then, should freedom of speech mean to the radio listener? He should, as we have said, hear more than one side of controversial matters. He should know who the speakers are, whom they represent, and whether they can speak with authority on the question at issue. He should know that, once chosen, they are free to speak without fear or favor, subject only to considerations of good manners and good taste.

## GENERAL EFFECTS ON LISTENERS

Carefully controlled studies have shown that individual programs have influenced many listeners to believe what the broadcaster wanted them to believe, to enjoy what he placed before them, and to act as he wanted them to act. But the evidence is as yet too incomplete to warrant conclusions about the effects of radio listening on our thought processes and our general culture. Because most broadcast and television shows are intended for mass audiences, it seems likely that they will reflect existing ideas and tastes. We should, however, consider the questions that have been raised by writers on the subject.

1. Does radio listening tend to form bad listening habits? Most listening is done at home under conditions that make sustained attention difficult. Many listeners make a bad situation worse by leaving the radio on and paying casual atten-
tion as they go about their tasks. Students who ought to know better, say the critics, study their lessons to the accompaniment of whatever happens to be on the air.

Psychologists are generally agreed that the proper direction of attention is essential to the highest mental efficiency. Our attention is distracted by stimuli which attract attention to something else. When possible, we should avoid distraction by shutting it off or going somewhere else. If this cannot be done, we can take some comfort in knowing that we may finally become accustomed to distracting stimuli. In fact, there is some evidence that such distractions "make for greater attention after the worker has become accustomed to them." ${ }^{22}$ If he resolves not to let the distraction interfere with his work, his efficiency is "not infrequently increased."

Industrial psychologists have studied the effects of noise on the worker. Laird has shown, for example, that typing in a noisy room requires more energy than typing in a quiet room. ${ }^{3}$ Under such conditions, efficiency is maintained only by drawing on the worker's reserve of energy.

Although the evidence does not support predictions that continued radio listening will produce a nation with jangled nerves and unable to pay sustained attention, it does suggest the value of this simple rule: When you are not actively listening to the radio, turn it off!
2. Does radio listening encourage emotionalism? This question properly implies a distinction between "emotionalism" and "emotion." The one is excessive, with little regard for reality; it accents our tendency to rationalize rather than to reason. The other is restrained: a blend of thought and feeling, an attempt to portray real people in credible situations.

Daytime serials, labeled "soap opera" by those who don't like them, are especially vulnerable on this count. The hero-

[^2]ine suffers five days a week, year after year, from the activities of a succession of other women. Someone else is nearly always to blame for her woes. She is strong and right; the opposing characters are weak or evil or both. Broadcasters reply, with convincing proofs, that serials have some millions of devoted listeners. Many of these listeners testify that they have received aid and comfort from the serials, ranging from "getting them away from it all" to showing them how to act in time of trouble.

The evidence offered by those seeking to convict the serials of crimes against the public interest leads to the Scotch verdict, "not proved." We have seen no convincing proof that listening to serials makes neurotics out of well-balanced people. Neither have we seen any proofs that serials have helped make well-balanced people out of neurotics. A listening program consisting largely of soap operas would be about as stimulating intellectually as a reading diet restricted to pulp magazines. Neither program would help the individual to see life steadily and see it whole. But our basic freedoms include freedom to remain ignorant, or nearly so.

It seems, if one can judge from listening, quite all right for the writer to use a whole battery of emotional appeals in his commercial copy. When it comes to the presentation of public and controversial issues, however, a different standard prevails. Witness the following excerpts from the 1947 report of the NAB special committee on standards of practice: "No dramatization of political issues should be permitted." And again, "No dramatizations of controversial issues should be permitted. The material should be presented in a straightforward manner to appeal to the intellect and reasoning of the listener, rather than to his emotions. The presentation should be made by properly identified authorities."
3. Does radio listening tend to standardize us? This question refers to the growth of broadcasting networks making it possible for listeners from coast to coast-or beyond, for
that matter-to laugh at the same comedian, be influenced by the same commentator, or enjoy the same symphony. When 20 million women are given the same recipe at the same time, when the boy in Denver idealizes the same radio hero as does the boy in the Bronx, when the farm girl and her city cousin listen to the same advice on how to develop an irresistible personality, we may be developing a type of national unity that we do not want.

The critics point to another significant fact. There is a growing tendency for network shows to originate in New York or Hollywood. From the producer's point of view, this is understandable; talent, ranging from amateurs to stars, is available, the former at minimum rates. But there are many who wonder whether it is good to have our manner of speech, our tastes in drama and music, our opinions on matters rang. ing from styles to national elections, shaped by specialists in mass entertainment and those who reflect the views of the city dweller.

But there is another side of the story. Within recent years the number of low-power local stations has greatly increased. Moreover, there is considerable variety in network programming. We needn't all listen to the same commentator; we can, if we wish, hear both sides of current issues and both candidates in political campaigns; we can tune in music or plays ranging from very bad to very good.

We should remember, too, that we get ideas and standards from other and diverse sources. We subscribe to different newspapers, read different books, converse with different friends. While the tendency to center network broadcasting in New York and Hollywood is in many ways unfortunate, there is, to our knowledge, no evidence of a resultant standardization.

- RADIO AS A PROPAGANDA MEDIUM. The propagandist preceded the advertiser in discovering the effective-
ness of broadcasting. In 1915 Germany was providing, through radio amateurs, a free service to newspapers at home and abroad including news bulletins, commentaries in various languages, and code messages to secret agencies. A United States listener picked up and decoded a message beginning: "To propagandists in North Africa: Spread the following rumors among the tribes . . ."

The Bolsheviks sent wireless messages urging the masses to rise against their bourgeois and military oppressors. Japan instituted short-wave propaganda broadcasting in 1935. Hitler and Mussolini used radio effectively in their rise to power, later in their wars of aggression. Hitler's propaganda agency developed a technique of psychological warfare in which broadcasting played an important part.

By 1935 Hitler's propaganda organization was in high gear. The Saar plebiscite, January 13, when the voters were practically unanimous in favoring return to German rule, provides convincing evidence of the effectiveness of radio as a propaganda medium. Certain German stations devoted practically full time to the campaign. The broadcasts included Saar news and songs; plays showing the advantages of German citizenship; interviews with Saar workers; broadcasts on Saar landscapes; Saar political problems and the future of Saar youths; and, most important, broadcasts from huge mass meetings of speeches by Hitler and other Nazi leaders. Since there was no presentation of the other side, whether by radio, assembly, or press, the Nazis' monopoly of the means and content of communication produced a monopoly of opinion.

Until World War II, our government took no active part in the radio war of nationalistic propagandas. This was partly because broadcasting was a private business, and partly because of our isolationist tendencies. When the war began, our government took over existing short-wave transmitters, built others, established listening centers for the analysis of enemy
propaganda, and began the whole business of psychological warfare, with radio playing a major part.

By 1942, with the fighting war in full swing, Germany was broadcasting propaganda in thirty-six languages, Great Britain in forty-three, and Japan in seventeen. The United States ultimately broadcast in some forty languages or dialects. In 1945, Radio Moscow was producing eighty-eight hours of domestic broadcasts daily in seventy dialects, and sixty-four hours of foreign programs in twenty-eight languages. Other nations were also using radio to maintain morale on the home front and to instruct the citizen as to his part in the war effort. To make sure that the listener was not misled by foreign propaganda, Germany produced sets which could receive only local programs and provided severe penalties for listening to foreign stations. The Japanese government banned sets with short-wave bands, permitting standard sets for local reception only.

When World War II ended, we were confronted with an important decision. Should we alone among major nations cease using radio to explain and support our foreign policies? After lengthy debate, Congress voted no and set up a broadcasting unit in the Department of State. In October, 1950, these "Voice of America" broadcasts totaled 200 program hours a week in twenty-four languages, including, of course, Russian and Korean. At that time, Russia's international broadcasts totaled more than 500 program hours a week. In supporting the Department's request for an increased operating budget and funds to build six high-power stations, Secretary Acheson said: "Many commercial products in this country have had more funds available for advertising than we have applied to this vital function of getting an accurate picture of America to the peoples of the world." Congress granted what Broadcasting (October 2, 1950) called a "record increase of funds," nearly 60 million dollars for "Voice of America."

## INTERNATIONAL IMPLICATIONS

Some fifty nations are engaged in international broadcasting. While the published objective in most cases is to promote good will and understanding among nations, there are often economic and nationalistic purposes. Thus Britain's short-wave broadcasts before the war were designed "to unify the Empire"; Russia's, to win converts to Communism; ours, to "promote the Good Neighbor Policy." In other instances, the purpose may be to increase the tourist business or to increase international trade.

World War II demonstrated the effectiveness of broadcasting in psychological warfare. Theoretically, it should be equally effective in promoting international law and the peaceful settlement of disputes. There is, however, a real difficulty. A campaign for an international organization is not likely to be conducted by a single nation. To be successful, it should come from an international body with short-wave transmitters sufficiently powerful to reach directly the peoples of the countries involved. Moreover, the people must have freedom to listen. For a government to permit its citizens to hear broadcasts attacking, even indirectly, its policies and procedures, requires statesmanship of a high order.

The League of Nations made a sincere, but not very effective, attempt to use radio. At first the League supplied information to radio stations. Later, after prolonged negotiations with the Swiss government, it set up its own broadcasting facilities. Radio Nations began operations early in 1932. Its programs supplied information on League activities, but neglected active propagation of the League idea during crises when it was urgent that public opinion be mobilized for the maintenance of world peace and order. ${ }^{4}$ It is interesting to note that radio was used in the first open defiance of the

[^3]League when Japan moved into Manchuria. While the organization of the United Nations was in progress at San Francisco, our short-wave transmitters carried full reports of the meetings. During the meeting of the United Nations Security Council at Hunter College, New York, in 1946, twenty-six short-wave stations on the East Coast and ten on the West broadcast summaries of each session. Four "Voice of America" stations, beamed to Europe, broadcast all meetings in their entirety, thus giving listeners access to a complete report of what their representatives said.

In 1946, David Sarnoff, president of the Radio Corporation of America (RCA), proposed that the United Nations establish an independent broadcasting system to carry the public proceedings of the various United Nations organizations, in all major languages, to all parts of the world. He said that engineering problems can be met, but that political problems offer greater difficulty. Success of the enterprise would require not only the consent of member nations but their active support as well.

Because the United Nations has been confronted with so many critical problems, this proposal has probably not yet been seriously considered; certainly it has not been adopted. However, it is interesting to note that the United Nation's Educational, Scientific, and Cultural Organization (UNESCO) has drawn plans for the use of mass communication in its program of promoting collaboration among nations through education, science, and culture.

In 1950, Mr. Sarnoff suggested that the United States could distribute millions of receivers to people in other lands at a relatively modest cost, as an aid to international understanding. He further predicted international television within five years.

## EXERCISES AND BROADCASTING ASSIGNMENTS

Note. In some institutions, the course in broadcasting. begins with lectures, readings, and class discussion, designed to give the student
a general understanding of radio before he "goes on the air." In others, the course begins with simple broadcasting assignments, presenting for a general radio audience such information as is contained in this book and in the suggested readings. The exercises and broadcasting assignments, here and in succeeding chapters, may be used in both types of courses.

1. Make a three-minute speech to the class based on information in one of the readings. Your purpose is to make this information clear and interesting to your classmates.
2. In preparation for your talk, listen to a radio speech that is designed to give information. Submit a 300 -word analysis, stressing such factors as clarity and interestingness.
3. Prepare a three-minute speech designed to give the radio audience interesting and accurate information about some small phase of broadcasting. Your delivery time should not vary more than ten seconds from the three-minute goal. Consult Chapters 11 and 22 for advice on the writing and delivery of talks. The following topics are suggestions only; you may use one of your own choosing.
a. What is the FCC?
b. Broadcasting in Britain
c. Who censors broadcasts?
d. What is the NAB?
e. Radio and freedom of speech
f. Do you study with the radio on?
g. Those soap operas
h. Hitler's radio propaganda
i. The United Nations use radio
j. Freedom to listen
k. What is the RCA?
4. Listen to an authority interview with particular attention to these points: How did the questioner qualify the interviewer as an authority? Did the questions follow an outline? Did the participants seem to be reading a script or talking to each other? Was the interview interesting? If not, why not? Turn in a report using these questions to evaluate the interview.
5. The class may be assigned to prepare and broadcast authority interviews on topics discussed in this chapter and in the readings. The "authority" should be prepared to answer the questions briefly and accurately. The interviewer's questions should be arranged in orderly sequence. The method of preparing and producing interviews is described in Chapter 11.
6. Analyze the work of the leader, or moderator, in one of the network discussion programs. How did he get the discussion started? Did he keep it on the track? If so, how? If not, why not? Did he give his own opinions? Hand in your evaluation of the program.
7. Organize a panel or symposium to discuss one of the basic questions listed in this chapter. The method of preparing and presenting these program types is described in Chapter 12. For information on the question for discussion, consult the bibliography in the appendix.
8. To bring the information up to date, assign short talks on such topics as:
a. Recent decisions of the FCC
b. Televising Congressional hearings
c. Television in political campaigns
d. Behind the Iron Curtain
9. Have three or four students broadcast to the class a discussion on "Television and the Public Interest."

## READINGS

Bryson, Lyman, and Rowden, Dorothy, "Radio as an Agency of National Unity," Annals of the American Academy of Political and Social Science, March, 1946, pp. 137-144.
Chester, Giraud, "How Good is British Radio?" Quarterly Journal of Speech, October, 1949, pp. 320-328.
Durr, Clifford J., "Freedom of Speech for Whom?" Public Opinion Quarterly, Fall, 1940, pp. 391-406.
Federal Communications Commission, Public Service Responsibility of Broadcast Licensees, March, 1946, part 1.
Fly, James L., "What Can the Listener Rightfully Expect?" Education on the Air, 1947, Ohio State University Press, pp. 421-26.
Heffron, E. J., "Should Radio Be as Free as the Press?" Commonweal, February 20, 1948, pp. 466-469.
Midgley, Ned, The Advertising and Business Side of Radio, PrenticeHall, Inc., 1948, chap. 1.
Sarnoff, David, and others, "Freedom of Communication," Public Opinion Quarterly, Spring, 1946, pp. 85-92.
Siepmann, Charles A., Radio Television and Society, Oxford University Press, 1950, chap. 3.
Waller, Judith, Radio: the Fifth Estate, Houghton Mifllin Company, 1946, chap. 4.
"What Should Be the Criteria for Broadcasting in the Public Interest?" (a Symposium), Education on the Air 1947, Ohio State University Press, pp. 67-85.
White, Llewellyn, The American Radio, University of Chicago Press, 1947, chap. 1.
"Would Government Supervision Improve Radio Programs?" (a Peoples' Platform Broadcast), Education on the Air, 1946, Ohio State University Press, pp. 83-94.

# chapter 3 

## THE MECHANICS OF BROADCASTING

## AURALSTATIONS

THIS chapter is not intended for the radio engineer or technician. Rather, we are attempting to describe in nontechnical language what happens when you stand in front of a microphone or TV camera and produce sounds and images which can be picked up by receiving sets miles away.

First, a few simple facts about sound. All sounds are made by something vibrating and setting up disturbances in the air. A sound is really a vibrating series of air waves. The faster the vibrations, the higher the pitch or frequency. Every material thing has its own frequency characteristics. If you hit a hollow log, you get an entirely different sound than if you hit a dishpan. Furthermore, every material thing tends to respond to any "sound which approximates its own frequency characteristics. It responds by vibrating sympathetically. If you shout into a piano, some of the strings vibrate. If your pitch is high, the response is high. The piano strings are set in motion by the frequencies in your voice.

Suppose that instead of piano strings you have a very thin piece of metal, crinkled like a piece of crepe paper. This corresponds to the diaphragm of a microphone. If it is thin enough and flexible enough, it is capable of responding to a great many frequencies. Suppose that you mount this diaphragm so it can vibrate freely and suspend it in a magnetic field. Whenever sound vibrations strike the diaphragm a flow of electricity will result, varying with the amount and type of

SIMPLIFIED SKETCH OF
VELOCITY MICROPHONE


Figure 1. Principle of Velocity Microphone.
sound. You would then have a velocity microphone. All types of microphones operate on this basic principle of setting up electrical waves by disturbing a magnetic field with sound waves. Several of them are illustrated in Part IV of this book. Figure 1 illustrates the principle.

This electrical flow, called the "audio wave" is amplified and carried by wire to the radio transmitter.

At the transmitter a radio wave is being generated by an oscillator, the function of which is to release electrical energy into the air as electronic waves. Freed from the restraint of being confined to wire, these waves, known as "carrier waves," travel with the speed of light. The carrier, like all waves, has two characteristics: amplitude and frequency.

Amplitude is a synonym for force or strength. Radio waves may be sent out with more or less force, depending on how much electrical power is used. The power is measured in watts. A station of 100 -watt power is quite a weak station and cannot be heard very far; a station of 50,000 watts is power-


Figure 2. Line Representation of $5 \mathrm{KC}, 10 \mathrm{KW}$ Wave.
ful and on a good frequency can be heard for hundreds of miles.

Frequency refers to the rate at which the electronic impulses are released. This is determined by the size to which the quartz crystal oscillator is ground. The frequency with which the impulses occur is measured in "cycles" per second, each cycle representing a complete wave.

If a radio transmitter releases its electrical impulses at the rate of 5000 cycles a second, it is said to have a frequency of five kilocycles, because "kilo" means "thousand." On your receiving set, if you turn the dial to, say 550 , you will receive
the impulses of stations which are transmitting on 550 kilocycles, or 550,000 cycles a second.

Waves can be represented by a series of zigzag lines, in which the height represents the amplitude, while the distance between the lines represents frequency. The carrier wave is of a constant amplitude and frequency. Figure 2, therefore, represents the carrier wave of a radio station which is broadcasting with ten-kilowatt power and a frequency of five kilocycles.


Figure 3. Line Representation of 50 KC and 100 KC Wave Lengths.
Frequency is the same thing as wave length. All radio waves travel at the same rate of speed, but high frequency impulses are released with greater rapidity, so their wave lengths are shorter. Figure 3 represents a carrier wave of 50 kc and one of 100 kc .

The carrier wave, of course, has no characteristics of speech or music. If its frequency could be reduced to the range of human hearing, it would be heard as a steady monotone.

In order to broadcast speech and music the audio wave
must be "carved" upon the carrier wave. This process, which takes place at the transmitter, is called modulation.

In standard broadcasting, modulation is accomplished by altering the amplitude characteristics of the carrier wave. The stations most commonly heard in this country, between
audo wave


CARRIER WAVE
MODULATED IN
amplitude


CARrIER WAVE MODULATED IN frequency


Figure 4. AM and FM Modulated Waves.
550 and 1600 kc , are amplitude modulation, or AM, stations. FM stations, which have become more common since 1946, modulate the carrier wave in its frequency characteristics. A visual representation of this difference is shown in Figure 4.

The radio waves leave the transmitter antenna and travel in all directions with equal strength. The waves which travel along the surface of the earth and reach receiving sets directly, are called "ground waves." The waves that travel upward encounter an active layer of ionic activity which surrounds the earth. When AM waves hit this Kennelly-Heaviside layer or ionosphere they are reflected back to earth.

These reflected waves are called "sky waves." Ground waves effectually reach radio receivers in homes only if the homes are within horizon sight of the top of the transmitter tower. However, to some extent AM ground waves tend to follow the curvature of the earth for some distance beyond the horizon. Sky waves, because of the angles at which they are deflected, travel much farther. Homes which are located where ground and sky waves coincide receive a station with dependable volume day and night.

Since the ionosphere is more active at night, some homes which cannot receive a station in the daytime are able to get it after dark. Because the ionic activity varies in intensity with a number of factors, including sunspots, the strength with which sky waves are received varies. Automatic volume controls in receiving sets help rectify these differences in volume.

If two stations on the same frequency are too close to each other geographically, they broadcast into one another's territory. To avoid this type of "interference" stations are required to operate far enough apart or with low enough power that they will not interfere with one another.

When two stations have frequencies which are very similar to each other you sometimes have difficulty in tuning out one of them. This is another type of "interference." The Federal Communications Commission (FCC) requires that stations transmit a minimum of ten kilocycles apart in the broadcast band to avoid this interference. If the FCC grants a license to one station to operate on 630 kilocycles, it will not issue other licenses closer than 610 or 650 in the same coverage area, but will grant permission to broadcast on 620 and 640 to stations located at a safe distance. Ordinarily, this arrangement permits listeners to get a reasonable number of AM stations without this type of interference.

FM has several technical advantages over AM broadcasting. It has better sound quality because it is capable of carry-
ing a wider range of frequencies, and reproduces more overtones which add richness to a sound. Static is reduced to a minimum. There is little or no fading because FM does not make use of sky waves for coverage. And, finally, there is almost no station interference.

It has been commonly assumed that FM stations eventually will replace AM in this country, except possibly for a few superpowered AM stations intended for rural coverage and for emergency communication. However, by 1950, FM seemed to be losing ground for other than technical reasons.

- NETWORKS. Network broadcasting, by which several stations broadcast the same program at the same time, can be accomplished by carrying programs to different stations on high-fidelity telephone wires. FM can make use of this type of chain broadcasting when wires capable of carrying a frequency load of 15,000 cycles are available. However, FM networks usually use relay stations which receive the signal from one station within its horizon range and rebroadcast it to the next station in a relay series without the use of wires. The entire country might be covered with an FM program if relay transmitters should be established every thirty-five or forty miles.
- AURAL STATION CLASSIFICATIONS. Classifications of stations change from time to time. In general, the Federal Communications Commission assigns a number of "cleared channel" stations to frequencies which may be used by no other station. These stations, which broadcast with $50-\mathrm{kw}$ power, are intended to give coverage to urban and rural areas in large sections of the country. Some stations are assigned to regions, and have no frequency competitors within certain prescribed areas, which vary depending on circumstances. Other stations are designed to cover a city and the surrounding rural territory, and others are intended to serve only large cities or "clusters" of towns which are close together.

Frequency modulation stations are intended to cover local areas or a cluster of towns. For greater coverage a few have especially high antenna towers or an especially eminent height on which to place the towers. Because desirable sites are few in some areas, they must be shared.

International stations, of which there are about thirty in this country, are assigned to very high frequencies outside the standard band, operate with a minimum power of 50 kw , and can be beamed to cover great distances by bouncing the sky waves off the ionosphere at angles which will return to earth at the desired areas.

## VISUAL STATIONS

Only trained engineers may be expected to understand the technical workings of radio. This is particularly true of visual radio. It is, however, desirable that nontechnical students of radio should have a general idea of the mechanical process by which programs are transmitted and received.

Two types of visual broadcasting are facsimile and television. Visual broadcasting, mechanically speaking, is the process of translating light waves into electrical charges, synchronizing them with radio waves, and then turning them back into light again.

- FACSIMILE. In order to turn light waves into electrical waves, a photoelectric cell is used. The photoelectric cell resulted from the discovery in 1873 that the element selenium transmits electricity better in the light than in the dark. The photocell (short for photoelectric cell) utilizes selenium in such a way that when light shines on it, it will permit electricity to pass through it; when there is no light, there is no electric current. Furthermore, the brighter the light, the greater the current.

If you will look at Figure 5, you will notice that it is made up of a series of dots. The spaces between and within the dots


Figure 5. are white. Now think of the spaces as being made up of a series of white dots. If you could set up a photocell opposite each one of the dots, black and white, only the photocells opposite the white dots would permit electricity to pass through because the black dots do not reflect light. Suppose you should arrange a bank of electric lights to match your bank of photocells, and should connect each one of the lights to its corresponding cell. The lights connected with the cells opposite the black marks would not light, and you would have a picture in unlighted bulbs which would duplicate the original.

Now, suppose you have only one photocell connected to all of the light bulbs, and point it at each of the dots, one at a time, beginning at the left side of the top line and moving to the right. On the first two dots you would get light, then for five dots you would get no light. Substitute a printing apparatus for the light bulbs-an apparatus which will print a dot every time the photocell is exposed to a black dot. This could be done by having the printing apparatus move across a piece of paper at the same rate as the photocell is moved across the first line of the picture. The result would be a printed copy of the first line as shown in Figure 6. Then move the photocell - - - down one line and repeat the process; if the paFigure 6. per on which the printing is taking place at the other end is moved up one line, you would then have a total printing like that given in Figure 7 -which you will recog-- - - nize as the top two lines of the original drawing. - - If the process is repeated for every line, you will Figure 7. soon have a duplicate of the entire drawing. Obviously, the more dots you have, the clearer the picture. You can get an idea of this by comparing a newspaper picture with one in a magazine.

An apparatus which scans a page of printed words or pic-
tures, with the photocell scanning each dot and each line in turn automatically, with a printing apparatus operating synchronously with it, is one type of facsimile.

Radio facsimile operates the same way, except that radio waves are used instead of wires. A photocell is shuttled back and forth across the copy, much as the human eye sweeps back and forth across a printed page. From fifteen to fortyfour square inches a minute can be scanned, depending on the system used. The impulses set up are imposed on a carrier wave and sent through the air.

Several methods are employed in the printing apparatus on the receiving end. One method, now falling into disuse, makes use of paper with a black backing. Small sparks burn the front side of the paper exposing the black lacking as printed words. Another method is to use two pieces of paper, one carbon, and the other for the printing; a series of pressures push the carbon against the printing paper, thereby marking it. A more recent method prints by using small electrical charges fired against an electro-chemical paper. The paper is a continuous roll, as wide as four newspaper columns of type. Facsimile broadcasting is still in the experimental stage and has not been authorized for commercial use. Experimental facsimile transmitters have been built by newspapermen who visualize the day when the average householder will wake up in the morning to find his newspaper all printed and waiting in his receiver.

The possible usefulness of facsimile is still conjectural. One suggestion has been that facsimile might have uses in connection with radio talks; for example, while a kitchen expert demonstrates a cooking process by television, speaking by aural radio, the recipe can be transmitted simultaneously by facsimile. Facsimile has been used to give weather directions to planes and information to police in radio cars. With radio, television, and facsimile, a listener could hear an announcer, watch an event, and be receiving photographs, maps,
or bibliography to supplement the event all at the same time.

- TELEVISION. Television is an extension of the facsimile idea. Facsimile does not transmit the image of moving objects. In order to get the effect of motion, each picture would have to be completed very rapidly and then replaced by another picture which represents the next infinitesimal movement of the image being transmitted. For example, to create the illusion of movement of a man raising his arm, a whole series of pictures of the arm at different steps in the upraising would have to be presented to the eye. Motion pictures achieve this illusion of movement by presenting a series of still pictures very rapidly-sixteen a second for silent pictures and twenty-four for sound. Because of a peculiarity known as "persistence of vision," by which the retina of the eye retains the effect of an image an instant after it has vanished, the watcher gets the illusion of a continuous movement. Television makes use of the same illusion, sending out complete pictures at the rate of thirty a second.

Obviously it could not do this by the slow scanning method which has been described (in an oversimplified form) to explain how facsimile works. The first step in transmitting television consists, as in facsimile, in breaking up the picture into its component parts, or points. Each complete picture represents $1 / 30$ of a second. It is broken up into 441 or 525 horizontal lines. The number of dots in each line is about 600, making the total number of dots in a 441 line picture nearly 265,000 . In order to scan 265,000 dots, line by line, thirty times a second, an instrument capable of scanning at the rate of 45,000 miles an hour is needed. Such an instrument is the iconoscope, which is a large vacuum tube. Across it, near one end, is a piece of mica a few inches square, coated with millions of tiny particles of silver which have been sensitized
with caesium; the latter is a metallic element which is the most electropositive (capable of becoming charged with electricity) of all the elements.

Each tiny particle of silver is insulated from the others, and each becomes, in effect, a tiny photoelectric cell. Together, the particles constitute a "mosaic" on the mica. The picture is focused on this mosaic through a lens. If light falls on a particle, it loses electrons, and acquires a slight positive electrical charge. The more light, the greater the charge. If no light falls on it, there is no change in its electrical status. The other side of the mica is covered with a metal alloy coating which becomes a sort of "electronic picture"; that is, it becomes charged in tiny spots proportionate to the amount of light falling on the mosaic.

At the opposite end of the vacuum tube is an "electronic gun." This amazing instrument focuses an electronic beam on the particles, scanning them. The beam moves across the first of its lines from left to right at the rate of two miles a second, and then back from right to left at twenty miles a second. When it has completed the scanning of a complete picture at the right-hand bottom of the mosaic, it must jump to the upper left-hand corner to start all over again on the next picture.

The method just described is called progressive scanning. A favored method is interlaced scanning by which the electronic gun first scans the odd-numbered lines, $1,3,5$, etc., and then returns to the even-numbered lines. This interlacing of the impulses results in less flicker effect at the receiving end.

The iconoscope really performs a double duty; it scans the picture and converts the light beams into high-frequency electrical waves.

A more recent development, the orthiconoscope (called the image orthicon) is more sensitive than the iconoscope. Working on a slightly different principle, the orthicon can success-
fully transmit pictures from a room with ordinary lighting. Additional light is, however, still desirable.

After the electrical impulses leave the camera they are carried by wire to the transmitter where they are magnified a million times and imposed on the radio carrier wave which is released through the antenna.

Television waves are in the ultra-high frequency ranges, and are permitted very wide channels of 6000 kc . This is to allow for the wide variation in the frequencies which come from the iconoscope. In effect, each frequency represents a different degree of light or dark, and many such variations are needed to give a satisfactory picture with different shades of light and shadow. Such a wide variation is not needed for sound radio, because the human ear could not hear such a range of sound frequencies. In fact, each television channel uses more frequencies than all of the standard-band aural radio transmitters in the country. There is some evidence that reduction of the channel increases the distance over which television may be transmitted.

On the receiving end of television the problem is to translate the electrical impulses back into light. The instrument with which this is done is called the kinescope. This is another vacuum tube with another electronic gun. The gun aims its received series of electrons against a screen. The number of electrons permitted to flow with each charge is regulated by a grid; if a spot scanned by the iconoscope is bright, the grid permits many electrons to flow to a corresponding spot on the screen. The electronic beam is invisible, but the fluorescent element in the screen lights up in proportion to the charge received. During its early years, television has been less clear than other pictorial media. Although the television picture has 265,000 tiny dots of light, a fine-grain photograph contains about $50,000,000$ dots in an $8 \times 10^{\prime \prime}$ print. A 35 mm professional movie has, in general, about 500,000
points of light in each frame; 16 mm home equipment has about $125,000 .{ }^{1}$ Improvements in clarity of TV have been rapid.

Color television principles have been known since 1928. One method makes use of three colored glass filters-red, green, and blue-mounted on a rotating disk so that each third picture is a different color. Rapid scanning, at the rate of sixty frames each second, blends the series into a composite color picture at the receiving end, where a similar disk is synchronized with the one in the studio.

This mechanical scanning has met competition in several forms of electronic scanning, including methods known as dot-interlacing, line-interlacing, and frequency-interlacing.

Early in 1951, the FCC, after lengthy hearings, announced minimum engineering standards for transmission and receiving equipment for color television. At the date set for examining equipment, only that produced by the CBS engineers met the FCC standards. Other systems will probably be approved and licensed soon. The reader should examine the trade journal, Broadcasting-Telecasting, for up-to-date information.

Experimental progress is being made with stereoscopic effects. One old method, on which effort has not been entirely abandoned, is to alternate the pictures through filters of different colors, for example, red and blue. The person viewing the picture wears glasses with one blue lens and one red lens. One instant one picture is invisible to one eye; the next picture is invisible to the other eye. This alternation gives a dimensional effect to the pictures but is a strain on the eyes. Another method is for the viewer to wear glasses in which each lens is polarized the opposite from its mate. Alternate "frames" of the picture are polarized accordingly. A third method is to arrange the lens on the camera so that it alter-
${ }^{1}$ Donald G. Fink, "The Technique of Television," in Porterfield and Reynolds, We Present Television, W. W. Norton and Company, 1940, p. 71.
nates from side to side rapidly. A fourth procedure uses rotating mirrors, one on each side of the lens, which alternately reflect the light, or view, into the lens.

TV stations are classified into two general power groups: those which are intended to serve a single large city, and those which cover a larger metropolitan area of several closely located population centers.

Network distribution of programs is accomplished by relay stations, coaxial cable, and motion picture sound films.

## NEWER DEVELOPMENTS

Several more types of radio wave transmission should be mentioned.

Radio waves can be used to heat homes, cook, treat disease, keep homes free from germs, and perform many other functions in human life. Low-powered radio transmitters for use on trains, in factories, and on the farm, as well as citizen's "walkie-talkie" sets are increasing in number.

In the field of communication one development is the proposed use of high-flying planes to act as relay transmitters of audio and visual programs. Fourteen planes are able to cover about four-fifths of the population if the planes stay over fixed areas, each covering a territory of some 103,000 square miles. Network and rural coverage problems of FM and television could be solved by this "stratovision" method, although cable, film, and fixed relay stations seem more likely to become standard.

Various multiplex systems of broadcasting have been developed, the most publicized of which is Pulse Time Modulation. This is a type of radio transmission which sends out series of short bursts, or pulses, each approximately one-half millionth of a second in duration. Several hundred thousand pulses are sent out each second. These pulses can alternate the programs they carry, thus making it possible to broadcast more than one program at the same time on the same fre-
quency. In one demonstration, eight programs were sent on the same frequency; each of the eight programs was "sampled" by the pulses 24,000 times in each second. At the receiving end the receiver was tuned to pick up any one of the eight sets of impulses. The listener was able to hear any selected sound program, because his ear combined the 24,000 individual impulses into a steady sound, just as the eye combines the various still pictures of cinema into the effect of a moving picture. Visual as well as aural programs can be distributed among the pulsations; thus teletype, facsimile, television, and a selection of radio programs from which the listener can choose can all be broadcast at the same time on the same frequency.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Make a four-minute speech to the class on a topic discussed in this chapter or in one of the readings. Consider the possibility of using pictures or diagrams on the blackboard to illustrate your point. Topics such as the following may be presented:
a. What does the microphone do?
b. What is FM?
c. What is AM?
d. What do the numbers on your radio dial mean?
e. Sky waves and ground waves
f. What is interference?
g. What happens to AM waves after sundown?
h. How are AM stations classified?
i. What is facsimile?
j. What do those dots mean?
k. What is the main difference between facsimile and television?
2. What is progressive scanning?
m . How is colored television produced?
n. How far can television programs be received effectively?
3. Investigate the possibility of using sound films to explain the mechanics of broadcasting. A list of companies producing educational films is included in the Appendix. Among the current films on radio and television are: "Behind Your Radio Dial," "Sound," "Sound Waves and Their Sources," "Air Waves,"
"Stepping Along with TV," and "The Story of FM." A panel, consisting of a chairman and three or four class members should preview the film and decide how best to present it to the class. The program should include: an introductory statement by the chairman; a showing of the film; and a discussion among panel members, calling attention to the important points and answering questions from the audience.
4. Interviews may also be arranged with another member of the class as an "authority" on a topic discussed in this chapter or in the readings. The authority should be responsible for the accuracy of his replies. The interviewer should prepare a list of questions that focus attention on important points. During the interview he should interrupt with questions when the answers are not clear.
5. Interview a radio control room operator, engineer, technician, repairman, or operator of an amateur short-wave station on some phase of his work. Prepare in advance a number of simple questions to keep the interview from becoming too technical. Do not be afraid to ask questions when you need further explanation. Consult Chapter 11 for information on interviews.
6. Listen to a broadcast interview intended to present technical information in layman's language. Note the presence or absence of methods designed to make the meanings clear. Submit a report evaluating the program.
7. If there is a television station in your area, study the use and effectiveness of visual aids such as diagrams, charts, pictures, and "live" demonstrations in presenting technical information. Report your observations in writing or in a short speech to the class.
8. Arrange for the class to visit a radio or television station. Explain to the manager that you are interested in equipment and its uses, rather than in the program. Have three or four students prepared to question members of the technical staff.
9. To bring the information on the topic up to date, have three or four students give a series of four-minute talks on "The Story of Color Television."
10. The teacher and two or three students might give an illustrated talk on "riding gain." This might include controlling volume during a short speech and simple board fades.
11. The same procedure might be followed in demonstrating the use of recorded musical themes or sound effects.

## READINGS

Abbot, Waldo, Handbook of Broadcasting, 3rd ed., McGraw-Hill Book Company, 1950, chaps. 1 and 2.
Beville, Hugh M., "The Challenge of the New Media: Television, FM, and Facsimile," Journalism Quarterly, March, 1948, pp. 3-11. Chester, Giraud, and Garrison, Garnet, Radio and Television, Ap-pleton-Century-Crofts, 1950, chaps. 3 and 15.
Harlow, A. F., Old Wires and New W aves, D. Appleton-Century Company, 1936.
Hotaling, Burton J., "Facsimile Broadcasting: Problems and Possibilities," Journalism Quarterly, June, 1948, pp. 139-144.
Hubbell, Richard, Television Programming and Production, Murray Hill Books, Inc., 1945.
Midgley, Ned, The Advertising and Business Side of Radio, PrenticeHall, Inc., 1948, chap. 3.
Morgan, A. P., Getting Acquainted with Radio, Appleton-CenturyCrofts, 1940.
Poole, Lynn, Science via Television, Johns Hopkins University Press, 1950.

Porterfield, John, and Reynolds, Kay, We Present Television, W. W. Norton \& Co., 1940.
Tomlinson, John D., The International Control of Radio Communications, J. W. Edwards, Ann Arbor, Michigan, 1945, chaps. 1 and 2.
Tyler, Kingdon S., Modern Radio, Harcourt, Brace and Company, 1944.

## chapter

## THE BROADCASTING BUSINESS

THE first commercial broadcasting stations began operation in 1920. The first commercially sponsored program went on the air in 1922; the first sponsored network program in 1928. In the relatively few years since then broadcasting has become a major industry.

DIMENSIONS OF BROADCASTING
In 1922 there were probably not more than 400,000 receiving sets in the United States. In 1950 there were almost 80 million, more than there were bathtubs or kitchen stoves. Optimistic authorities estimate that by 1952, 17 million families, representing 50 percent of the population, will own TV receivers. The total American investment in radio is somewhat more than 4 billion dollars. In 1950 American investment in TV plants, receivers, and stations was estimated at 3.5 billion dollars, as contrasted with 2.8 billion dollars for the movie industry.

The broadcasting industry employs thousands of people. The FCC reports that on October 15, 1949, seven networks and 2016 AM stations had 43,208 full-time employees, including administrative officers. The weekly pay roll was $\$ 3$, . 334,950. These figures do not include those employed on FM and television stations. One authority estimated the number employed, directly and indirectly, in the television field at 100,000 in 1950. This includes those employed in making, selling, and installing TV receivers.

Many thousands, whether as individuals or as employees of various agencies, spend at least part of their time on broadcasting and problems connected with it.

America spends more than 2 billion dollars a year for radio and TV. This includes the cost of time sales, talent, electricity, receivers, tubes, parts, and repairs.

## THE STATION STAFF

The basic unit of broadcasting is the station. Stations may be owned by individuals, corporations, or networks. They may operate independently, or they may be affiliated with a network from which they get a large proportion of their programs.

The size of the staff naturally varies with the size of the station and the nature of its programs. A 250 -watt local station may have a half-dozen full-time employees; a 50,000 -watt clear channel station, 100 or more; a national network, 400 or 500 . The FCC reports that, as of October 15, 1949, the average station, excluding the networks and eleven key stations, had 17.8 full-time employees. Of the 2005 stations included in this report, 1045 had less than fifteen full-time employees; their average was 8.8. The staff size of television stations in 1950 ranged from twenty to more than a hundred.
Regardless of the size of the station, certain things must be done. The engineering staff must see that the station is oper-


Figure 8. Chart of Functional Units of Station Operation.
ating according to FCC standards, conduct field tests, and arrange for broadcasting special events. Someone must keep the station log, make periodic reports required by the FCC, check program schedules to avoid conflicts, keep the music library in order, and see that copyright regulations are observed. Someone must sell local advertising, check the wording of commercials to make sure there are no actionable statements, and make contracts with national advertisers. Someone must gather data on listener interest, and build good will for the station. And someone must announce the programs, operate the volume control, and do what is required to keep the station on the air.

On small stations, one person will, in all probability, have various duties. The announcer may serve as part-time salesman, write his own continuity, and broadcast the news. The secretary may be the woman's editor, check commercial contests, and think up program ideas in her spare time. The manager may take his turn as studio operator, give good-will speeches before local groups, and serve as farm director. The staff organization of larger stations resembles that of a network.

Educational stations do not follow this general pattern. Financed from school and state budgets, they have no need of a sales department and spend less on promotion and publicity. They originate more programs than most commercial stations and hence have larger program staffs.

Figure 8 shows the different kinds of jobs to be done at a broadcasting station.

- COMPENSATION OF BROADCASTERS. The table below, based on data gathered by the FCC, gives the type of services rendered and the average weekly compensation of network and broadcast station employees. The sample includes all the full-time employees of seven networks and 2016 AM stations, as of October 5, 1949.

| $\quad$ Classification of Duties | Number <br> Employed | Average <br> Weekly <br> Compensation |
| :--- | ---: | :---: |
| 1. General officers and assistants |  |  |
| (executives) | 2,435 | 159.31 |
| 2. Clerical employees | 8,059 | 45.50 |
| 3. Program employees | 14,601 | 71.00 |
| 4. Engineers and technicians | 10,896 | 79.61 |
| 5. Commercial employees | 4,497 | 94.75 |
| 6. Promotion and publicity | 744 | 87.13 |
| 7. Building service employees | 1,568 | 45.18 |
| 8. All others | $\underline{408}$ | $\underline{84.10}$ |
| Total | 43,208 | $\mathbf{7 7 . 4 1}$ |

The second table gives the average weekly salary of those employed in program and commercial departments.
Network and
11 Key Stations
1005 Other
Stations

Program Department

| A. Supervisors | 175 | 86.60 |
| :--- | ---: | ---: |
| B. Others | 124 | 67.50 |
| Commercial Department |  |  |
| A. Supervisors | 202 | 146.00 |
| B. Others | 112 | 80.00 |

We are particularly interested in the duties and compensation of the individuals in the program division. The latest available data from the FCC report for 1947 is summarized in the third table. The "nonstaff employees" are on temporary assignment in connection with some program or series.

| $\quad$Classification <br> of Duties | Number of <br> Staff <br> Employees | Average <br> Weekly <br> Salary | Number of <br> Nonslaff <br> Employees | Average <br> Weekly <br> Salary |
| :--- | :---: | :---: | :---: | :---: |
| Supervisors | 1450 | 92.92 | 0 | 0 |
| Announcers | 3247 | 61.95 | 415 | 61.86 |
| Singers | 174 | 66.22 | 728 | 41.70 |
| Sound Effects | 132 | 74.57 | 31 | 26.16 |
| Production | 512 | 86.50 | 93 | 122.70 |
| Musicians | 1939 | 86.96 | 1423 | 37.50 |
| Writers | 1035 | 47.14 | 186 | 104.72 |
| News Personnel | 890 | 69.31 | 222 | 136.24 |
| Actors | 40 | 93.38 | 1216 | 49.31 |
| Others | 893 | 61.36 | 717 | 87.63 |

In February, 1949, ${ }^{1}$ thirty-eight TV stations employed 2540 persons, 777 of whom were on part time, for an aggregate weekly pay roll of $\$ 159,482$. Typical pay in television ran as follows:

Audio and video engineers, $\$ 50$ to $\$ 100$; transmitter engineers, $\$ 66$ to $\$ 110$; maintenance, $\$ 50$ to $\$ 136$; TV cameramen, $\$ 45$ to $\$ 95$; stage hands, carpenters, grips, $\$ 39$ to $\$ 104$; studio assistants (mike men, etc.) $\$ 36$ to $\$ 72$; studio and field engineers, $\$ 92$ to $\$ 110$; relay operators, $\$ 60$ to $\$ 175$; mike boom operators, $\$ 88$; master control engineer, $\$ 70$; chief engineers, $\$ 135$ to $\$ 215$; assistant chief engineers, $\$ 92$ to $\$ 150$; technical supervisors, $\$ 78$ to $\$ 177$; projectionist, $\$ 40$ to $\$ 135$; film directors, $\$ 50$ to $\$ 110$; film editors, $\$ 35$ to $\$ 100$; movie cameramen, $\$ 55$ to $\$ 109$; assistant cameramen, $\$ 30$ to $\$ 40$; announcers, $\$ 45$ to $\$ 150$; artists (actors, singers), $\$ 42$ to $\$ 137$; musicians, $\$ 65$ to $\$ 69$; writers, $\$ 35$ to $\$ 81$; newsmen, $\$ 60$ to $\$ 137$; floormen, $\$ 32$ to $\$ 42$; artist (scenery or title), $\$ 26$ to $\$ 90$; sound effects men, $\$ 40$ to $\$ 44$; make up men, $\$ 60$; program managers, $\$ 95$ to $\$ 200$; traffic men, $\$ 43$ to $\$ 87$; producers and directors, $\$ 40$ to $\$ 144$; assistant producers, $\$ 40$ to $\$ 75$; floor supervisors, $\$ 40$ to $\$ 75$; coordinator, $\$ 70$ to $\$ 110$; facilities manager, $\$ 70$; production manager, $\$ 100$ to $\$ 125$; program supervisor, $\$ 135$ to $\$ 150$; art director, $\$ 70$ to $\$ 144$; managers, $\$ 106$ to $\$ 240$; executive assistants, $\$ 65$ to $\$ 131$; clerical help, $\$ 35$ to $\$ 49$; sales promotion, $\$ 55$ to $\$ 100$; building service employees, $\$ 25$ to $\$ 55$; director of operations, $\$ 153$ to $\$ 182$; salesmen, $\$ 110$ to $\$ 115$.

## NETWORKS

To the engineer, a network is a system of long-distance telephone lines. Programs, usually originating in the main studios, are carried by these lines to member stations for simultaneous broadcasting. To the businessman, a network is an organization which provides broadcasting facilities for regional or national advertising. To the listener, a network is some sort of arrangement which makes it possible for him to enjoy broadcasts from overseas and programs of national importance, as well as "stars of stage, screen, and radio."

At the start of 1949 , more than 1100 of the standard stations were affiliated with one of the four major networks.

[^4]Some of the others have regional network affiliations; the others operate as independents. In 1950 every television station was making use of live programs or films from one or more network source. The networks own few stations. Instead, they enter into separate agreements with existing stations. These contracts effect options on certain segments of the station's broadcasting time and fix the amounts the network pays the station for broadcasting network commercial programs and the rates paid by the station for network sustaining shows.

Network income is largely derived from brokerage of the time of affiliate stations; sales of time on network-owned stations, records, talent, studio tours, and other items make the networks themselves distinctly "big business," with about onethird of the total broadcasting revenue.

Network organizations deal for the most part with advertising agencies handling accounts of national advertisers. Sometimes, the network prepares and produces the shows; more frequently this is done by employees of the advertising agency, with the network supplying studio facilities and the services of engineers and staff announcers. In 1948-1949, there was a strong trend for networks to acquire ownership of programs which had been "packages" (owned by writers, performers, or others). It is probable that the proportion of income to networks from talent or program sales will show a substantial increase. Furthermore, the growing practice of charging studio rental fees to sponsors for rehearsals of television productions seems likely to result in substantial added income. The network pays the stations carrying the broadcast a part of the money it receives from the advertiser. Arrangements vary quite a bit, but 40 percent is not unusual. From the other 60 percent, the network pays its operating expenses, including the rental of telephone lines, provides sustaining programs, and pays dividends to its stockholders.

Advertising rates are fixed by each station. They are based on such general considerations as number of sets in the listen-
ing area, results of listener surveys, and the presence or absence of competing stations. Specific factors influencing rates include: length of program or announcement, time of day selected for the broadcast, and number of programs covered by the contract.

The influence of these factors is evident in the station rate cards published in Standard Rates and Data Service. A single hour of Class "A" time on a 50,000 -watt station sells for $\$ 1000$; on a 250 -watt station in Milwaukee, Wisconsin, for $\$ 150.00$; on a newer 250 -watt station in the same city, for $\$ 100.00$. A 250 -watt station in a city of 35,000 offers Class "A" time for $\$ 80.00$ per single one-hour program, Class "B" time for $\$ 60.00$, and Class "C" time for $\$ 40.00$. Television time rates range from $\$ 125.00$ an hour in a small city to $\$ 1000$ an hour in a large metropolitan center. Rates to local advertisers are somewhat less than for national network sponsors. The cost of a network program is determined by the rate cards of the stations to be included, plus studio and talent charges.

In 1927, at the birth of the networks, total radio advertising gross receipts were about 4 million dollars a year. By 1930 this had increased to some 56 million dollars; 1935, 87 million dollars; 1940, 200 million dollars; 1945, more than 400 million dollars. In 1950 the estimated gross of radio and TV exceeded 600 million dollars. However operating costs had increased, as had also the number of stations to divide the income. Newertheless, 1950 was the first year that a majority of television stations showed a profit.

- NETW ORK STAFF ORGANIZATION. A national network may have from 800 to 1000 employees in seven major departments: administration, engineering, program, promotion, sales, station relations, and office and studio management. The functions of each department and its approximate size are indicated in the following outline.

1. Administration-about 10 percent of employees
a. President
b. Executive Vice-President
c. Legal Department
d. Treasurer
e. Continuity Acceptance
2. Engineering Department-about 15 percent of employees
a. Management
b. Studio Division
c. Transmitter Division
3. Station Relations Department-about 5 percent of employees
a. Management
b. Station Relations Division
c. Traffic Division
4. Promotion Department-about 10 percent of employees
a. Management
b. Promotion Division
c. Research Division
d. Press Division
e. Information Division
f. Library Division
5. Sales Department-about 15 percent of employees
a. Management
b. Network Sales Division
c. Spot and Local Sales Division
d. Sales Service Division
6. Program Department-about 30 percent of employees
a. General Program Management
b. News and Special Features Division
c. Public Service Division
d. Program Sales Division
e. Production Division
f. Script Division
g. Announcing Division
h. Music Division
7. Office and Studio Management-about 15 percent of employees
a. Employment and Personnel Office
b. Purchasing Department
c. Central Stenographic Service
d. Mimeographing Service
e. Mail and Messenger Service
f. Guest Relations Service

- STATION-NETW ORK RELATIONS. The FCC is not empowered to license networks. It regulates their operation by prescribing conditions under which it will renew the licenses of affiliated stations. The affiliation contract may not cover more than a two-year period. The affiliated station is free to carry programs from other networks. The network cannot fix station rates for other than network programs. Station managers have the right to refuse network programs which they "reasonably believe to be unsuitable or unsatisfactory." Stations cannot belong to an organization maintaining more than one network serving the same territory.

The station must have fifty-six days in which to clear time for a network commercial program. The network may not option more than three hours from any one of the following sections of the broadcasting day: 8:00 А.м. to 1:00 P.м.; 1:00 P.M. to 6:00 Р.м.; 6:00 P.M. to $11: 00$ P.M.; 11:00 P.M. to 8:00 А.м.

## THE ADVERTISING AGENCIES

Advertising agencies play an important part in commercial broadcasting. They supply general knowledge of marketing methods and skill in designing sales campaigns for different types of products. They represent the advertiser in negotiations with stations or networks and explain to their clients the values and limitations of broadcast advertising. They operate on a commission basis, usually charging 15 percent of the client's advertising budget.

Most business concerns employ a single agency for all types of advertising. This makes possible a coördinated plan in which each advertising medium is used for a specific audience and objective. Large agencies employ specialists in each type of advertising. There is lively competition for the large
advertising accounts. The advertiser often bases his choice on plans submitted by the agencies. These proposals usually include, in addition to a recommended advertising budget, the proportions to be devoted to newspaper, magazine, display, direct mail, and broadcast advertising.

When the amount to be spent has been fixed, agency specialists draw up a plan based on such factors as size of budget, nature of product, tastes of the people who are likely to buy it, and the hours at which they listen or can be induced to listen. Decisions must be reached on these basic questions: (1) Should the advertiser buy time on a network or make contracts directly with selected stations? (2) Should he sponsor a program or use spot commercials? (3) If the decision is to sponsor a program, should it be "live" or transcribed? (4) If spot commercials are chosen, should they be played from transcriptions or read by announcers?

The advertising agency not only provides the commercial copy but in most instances is responsible for the entire program. Many agencies have a radio staff which prepares and produces the show, hiring special talent when needed. Or they may employ a producer who, for a fixed sum, prepares and produces the program at the network studio. Such contracts for package shows usually include the salaries of writers, actors, musicians, and directors, in addition to production expenses, transportation costs, and prizes. Variety estimated in February, 1947, that seven evening network shows were paid at least $\$ 20,000$ each per week for production costs. At the other extreme, average production costs of seven daytime network serials was $\$ 2250$ a week for five fifteen-minute episodes. A separate contract with the network covers line rentals, salaries of the engineering staff, and general network expenses.

In television a simple quiz show can be done for less than $\$ 100$ talent and production costs. "People's Platform" is
packaged for about \$600. "On Trial," a panel-type show using celebrities, runs about $\$ 3000$. Half-hour dramatic programs like "The Goldbergs," "The Actors' Studio," and "Chevrolet on Broadway," are in the $\$ 4000$ to $\$ 6000$ bracket. The sixty-minute "Studio One" costs about $\$ 8000$, while the full-hour "Ford Theater" has cost as much as $\$ 17,000$ for a single performance. ${ }^{2}$

Smaller agencies do most of their business with advertisers using single stations or local networks. However, a large proportion of local spot advertising is sold by station employees, who in many instances write the copy. Sometimes the copy is prepared by the advertising department of the sponsor's own company.

Many broadcasters will not accept large advertising accounts unless the sponsor employs an agency. The agencies, at least the large ones, employ specialists in radio advertising. Since the agency commission, usually 15 percent, is paid by the advertiser, broadcasters are getting the work of specialists without putting them on station or network pay rolls. Furthermore, responsible advertising agencies investigate the companies whose products they advertise, and the claims made for their products. This safeguards the broadcasters from violating pure food and drug laws and the standards set by the Federal Trade Commission.

This procedure has a disadvantage from the listener's viewpoint. Advertising agencies, especially those handling the large accounts, tend to be conservative. Thus they are likely to advise their clients to buy a successful program, or, failing that, to produce a "reasonable facsimile thereof." Regional and local stations often imitate successful network shows. The result may be, and often is, too much of this and too little of anything else-an unbalanced listener diet.

[^5]
## STATION REPRESENTATIVES

Sales staffs of local and regional stations are kept busy with local time sales, which, in 1949, amounted to 42.2 percent of radio's total income. Most stations cannot afford fulltime salesmen in New York and other large cities to handle national and regional nonnetwork advertising. In 1949, these sales totaled 26.2 percent of radio's income. To get their share of this advertising, many stations employ "station representatives" who sell time on a commission basis. The 1950 Broadcasting Yearbook lists fifty individuals or companies who act as station representatives. The Branham Company, for example, has offices in Chicago, New York, Atlanta, St. Louis, Dallas, Detroit, San Francisco, Los Angeles, Memphis, and Charlotte, North Carolina.
Many representatives have only a few stations as clients, but several have more than fifty in the United States and Canada. They often deal directly with time buyers of advertising agencies. They handle their clients' advertising in trade journals and by direct mail and often work with station sales managers and advertising agencies on local promotion and merchandising campaigns.

## PROGRAM, PRODUCTION, AND TRANSCRIPTION SERVICES

The 1950 Broadcasting Yearbook lists 704 "Radio and Television Program, Production, and Transcription Services." These include transcription, television film, talent, and script writing firms. They fall into several categories:

1. Those which make records of the kind sold to the general public. Such records, when properly cleared through the companies, with copyrights and American Federation of Musicians regulations taken care of, can be sold to radio stations for broadcasting. These records are usually ten or twelve inches in diameter and play at seventy-eight or forty-five revolutions per minute (r.p.m.).
2. Those which provide musical libraries to stations for an annual fee. Different music selections are usually cut in separate grooves on 16 -inch disks, which play at thirty-three and one-third or forty-five r.p.m., so a number of pieces can be put on the same record. A record of this size and speed is called a transcription. Often the announcements for the music are supplied to the station in script form. Some companies sell recorded sound effects.
3. Those which produce, buy, or act as agent for programs of any kind, usually on fifteen-minute transeriptions or film. The local station may sell sponsorship of these programs to an advertiser, or may use them in sustaining periods.
4. Those which produce programs for advertising agencies for sponsorship.
5. Those which simply record or film programs, or commercial spots, prepared by advertising agencies or production companies.

- TRANSCRIPTION AND FILM PRODUCERS. Almost every radio station subscribes to one or more transcription libraries and almost every TV station gets films from several sources. Rates are based upon the size of the station, and sometimes on its income. Some of the better-known library and recording services are Lang-Worth, NBC Thesaurus, and World Broadcasting System. New film library services are being developed rapidly. New high-fidelity recording is available for FM stations, and a few companies are already offering programs recorded on wire, film, or tape.

Films and transcriptions are very important in broadcasting. Stations make extensive use of transcriptions and films to bring higher quality talent than the station could afford locally and to obtain program balance by using programs of a type which could not be produced locally. They can be used to supplement an advertiser's network program by playing them on stations which do not belong to the network. Advertisers also use them to "spot" or pinpoint their advertising in areas where it is most needed, to insure uniform quality of their programming on the different stations, and to get good talent less expensively than they could if they sponsored live programs.

One of the growing values of films and recordings is that they may be made at on-the-spot news events and later edited into programs which if broadcast full length might be lacking in dramatic values at some points.

- PRODUCTION AND SCRIPT SERVICES. The large number of concerns which offer to write scripts or produce programs indicates their usefulness. The number has almost quadrupled in the last decade. Their services are almost entirely to advertising agencies which do not maintain radio production departments. Most production agencies also have talent under contract to them.
- TALENT AGENCIES. Although there are many talent agencies, most of the better-known talent is under contract to a handful of the larger talent bureaus. One of the most important is the Music Corporation of America. Many individual artists have their own agents who also often serve as publicity representatives. A talent agent usually receives 10 percent of the income of his clients. A production company which has talent under contract and which sells packaged shows may not, under American Federation of Radio Artists (AFRA) regulations, collect a talent fee in addition to the profit on the package; however, an agent who also "coaches" his talent may receive extra percentages for the training.
- NEWS SERVICES. The largest news-gathering agencies which serve radio in this country are Associated Press (AP) and the United Press (UP). These companies not only send twenty-four-hour-a-day news to stations by teletype, but send also scripts for feature, sport, women's, religious, and other programs which may be read or dramatized by station staffs. Other important press services include International News Service, Trans-Radio Press, and Reuters, Ltd. News on film is provided by groups like Telenews and by networks.
- OTHER PROGRAM SERVICE GROUPS. Various departments of the federal government, representatives of foreign governments, organizations like the Red Cross, the National Safety Council, and numerous educational and propaganda organizations supply radio scripts and transcriptions which may be used by stations at their own discretion. During World War II, the volume of material supplied to stations from various wartime agencies of the government and military forces was so great that nearly all broadcasting time could have been filled with this material alone, until the Office of War Information (OWI) began to serve as a clearing house.
- SPECIALIZED SERVICE GROUPS. Nearly every phase of broadcasting finds groups of specialists ready to give advice or undertake improvements. Ten companies offer to assist in management problems. More than sixty companies are ready to improve public relations, promotion activities, and labor relations of stations. About thirty consultants are ready to serve as "show-doctors" to make suggestions for programs which are not drawing large audiences. And there are companies who measure audience responses and make market analyses, an important service group. These will be discussed in a later chapter.

Figure 9 shows some of the various possible relationships among the intricate organizations that go to make up broadcasting. For instance, an advertising agency may produce spot continuities, which their time buyer places on a station through a station representative. Or it may prepare a commercial transcription, which, through the time buyer and station "rep," finds its way to the station. It may have to draw on talent agencies for personnel. It might hire a transcription company to do the recording; the transcription company might have to hire production services; the production agency


Figure 9.
might have to hire talent through a talent agency. Other possible combinations and methods of getting a broadcast program may lee noted by following the arrows on Figure 9.

## COMPETITION WITH OTHER BUSINESS

The development of a communications medium of such size as broadcasting soon inevitably affected the advertising and entertainment business. The effect on music and musicians was soon apparent and assumed serious proportions with the growth of network broadcasting. Those who had radio sets could, if they wanted to, hear ten or twelve hours of recorded music a day. The sale of pianos, phonographs, and sheet music dropped rapidly, though not all of this decline was due to the growth of broadcasting. The introduction of talking pictures and the depression were at least equally responsible. The sale of phonograph records in 1932 was only a tenth of the number sold in 1921. The use of recorded music reduced the number of musicians employed in movie theaters from 19,000 in 1925 to 3000 in 1932. Similarly, with network broadcasting one studio orchestra provides music for hundreds of stations and millions of listeners.

As much as 95 percent of the music broadcast on stations in the United States and Canada is recorded or transcribed. In 1942, members of the American Federation of Musicians received 3 million dollars for making records. If musicians had been employed at each station, they would have received 100 million dollars. This comparison is startling but unrealistic; most stations could not afford much live music.

The situation is now somewhat improved as far as the musicians are concerned. The unions have secured higher wage scales in many localities, and a number of large stations have agreed to employ staff orchestras. New contacts with transcription companies provide higher salaries for musicians
making the records and a royalty based on the number sold. From these royalties a welfare fund of considerable size is currently used to pay unemployed musicians to give free concerts in nearby cities. The unions have also secured a strict enforcement of the copyright laws which provides royalties for composers as long as their compositions are broadcast by transcription or played on televised programs.

On the other side of the picture, radio has done much to popularize music. High-priced dance bands tour the country keeping engagements secured because of their radio appearances. A financial partnership between radio and transcription companies, along with other factors, has greatly increased the sale of records. The teaching of music in schools and listening to broadcast music have increased the number of high-school bands and orchestras. Sales of musical instruments and sheet music have increased. Television stations are employing more musicians, both for live programs and in the production of TV films.

Radio and television compete with newspapers for a share of the advertiser's dollar. As radio advertising increased, newspaper owners became alarmed. Some bought or built radio stations to have control of both advertising media. Some refuse to carry program listings unless the space is bought at regular advertising rates. A few refuse to sell space for that purpose. Currently only a third of our newspapers carry radio news comparable to their coverage of the movies. Newsgathering agencies at first refused to sell their services to radio stations on networks. However, when CBS started to build its own news service, the Associated Press and United Press yielded to the inevitable and began to sell radio versions of the news.

Because of the depression and World War II, the effect of broadcasting news on the sale of newspapers is difficult to measure. We do know that from 1920 to 1940 newspaper circulation increased 42 percent while the population increased

24 percent. We know, too, that during the war the great increase in radio advertising was due in part to paper rationing, which made it impossible for newspapers and magazines to expand their advertising columns.

A number of factors are tending to minimize the apparent conflict between radio and publications. Magazines and newspapers are buying radio time to increase their circulation; radio stations, in turn, usually buy space in local newspapers to announce new programs or special events. In some instances, newspapers publish radio program listings and stations reciprocate by references to the newspaper. Advertisers have learned that generally an effective sales campaign should use all media. Newspapers, in addition to buying radio stations, have been especially interested in facsimile and its possible effect on their business. Newspapers have been among the first and most active owners of television stations.

The development of network dramatic and comedy-variety shows provides entertainment formerly available only at the theater or the movie. There has been a decline in total theater attendance during part of radio's thirty-year history, but it is difficult to prove whether radio was a major cause. The movie industry feared radio competition but has had difficulty in deciding what to do about it. Sometimes theater stars were allowed to appear on the radio; sometimes they were not. Sometimes those who were allowed to broadcast collected a fee; and sometimes they were part of a promotion campaign for a forthcoming picture. In 1950 movie attendance had decreased. It seemed likely that the rapid increase in the number of television sets was partly, perhaps largely, responsible. However, families who did not have television sets were also going to the movies less frequently.

Since the 1920's there has been a financial connection between the radio and cinema industries, partly because of joint patent rights on sound equipment and partly because officials regarded joint ownership as a good investment. Some motion
picture companies have bought radio stations and are constructing television stations. Because the technical and production problems of radio and television are nearly the same, joint experimentation is proving profitable to both industries.

Two possible developments are awaited with interest. Theater owners are proposing to connect a chain of theaters by coaxial cable so that live shows can be projected on the fullsized movie screen. This was tried successfully when certain movie theaters showed live telecasts of football games. The promoters of "phonovision" propose to install receivers in homes as metered sets are available in hotels. When the individual wishes to receive a phonovision program he calls the telephone company, which makes the connection and adds the service charge to the telephone bill. Most important of all is the fact that TV outlets are demanding more film production than Hollywood could supply even if it were willing to release all of its current features.

Managers of professional teams and directors of intercollegiate athletics are currently asking themselves and one another, whether they should permit the televising of games and, if so, what they should charge for the privilege. Broadcasting magazine, September 4, 1950, reports that a "survey of college football gate receipts is scheduled this fall to determine the impact of television on attendance, with the television networks and the National Collegiate Athletic Association as joint sponsors." The National Opinion Research Center is making a preliminary survey with the costs underwritten by the television networks. The Western Conference voted against live television for the 1950-1951 season, but has under consideration a plan to sell television rights for 19511952 games to theaters all over the nation.

In the meantime, Broadcasting (September 17, 1950) reports that the Gillette Safety Razor Company bought exclusive television rights from baseball for $\$ 800,000$. The

American Broadcasting Company reportedly paid the University of Pennsylvania $\$ 75,000$ for nonexclusive television rights for the 1950-1951 season. ${ }^{3}$ Marshall Smith and Richard Oulahan report in Life magazine (October 16, 1950) that Notre Dame "gets $\$ 185,000$ a football season out of TV," but that "customers are staying away from smaller games to watch big games on television."

## ADVERTISING AND THE PUBLIC INTEREST

The American system of private, commercial, competitive broadcasting has some shortcomings. Competition for listeners leads programmers to cater to a relatively low standard of public taste; educational and cultural programs are usually relegated to the poorer listening periods. Broadcasters themselves become the arbiters of program merit, and exercise a type of censorship which, if misused, would be dangerous. The rigid time-scheduling necessitated by the network system is not adapted to the best creative productions; ideas cannot always be compressed or extended effectively into fifteenminute periods.

On the other hand, competition for listeners stimulates the production of programs which people like. The advertiser pays enough for popular shows to provide funds from which the stations and networks may produce better informational and cultural features than would otherwise be available. Our competitive system, plus our state stations, tend to safeguard freedom of speech. Large listening audiences make possible mass production of receivers at low costs; thus more people have access to radio and television than in other countries.

The advertiser in newspapers and magazines furnishes copy only for the space he buys, whereas the radio advertiser

[^6]generally supplies the program as well as the commercials. It is interesting to imagine what would happen if this practice prevailed in magazine advertising. The firm that bought two full-page ads might supply ten or twelve pages of reading matter. Since advertisers, naturally enough, tend to imitate successful advertising, purchasers of other pages might supply the same type of reading matter. The editor might find himself committed to publish an issue made up largely of mystery stories, and the printed equivalent of soap opera. The radio program director often finds himself in just this situation; he must broadcast a daily program that lacks balance and variety.

Another aspect of this situation may more seriously affect the public interest. In 1944, for example, four advertising agencies handled 38 percent of one network's commercial accounts; the same was true of at least two other national networks and has continued to be the "normal" situation. The result is that a few individuals in some ten or twelve agencies have the opportunity to influence the tone and content of many of the most popular broadcasts. It is easy to understand why these programs are not likely to criticize entrenched interests, or, for that matter, to find fault with things as they are in our society. Network commercial broadcasts are likely to be conservative when they deal with controversial matters in programs other than forums. This is not by way of criticismwe cannot reasonably expect programs designed for mass entertainment to offer much leadership in social or political reform.

Someone, somewhere, is responsible for the content of each broadcast. Attitudes can be changed so subtly by a series of programs that the listener is not aware of the process and may even not be aware of the result. Critics of the FCC frequently express their distrust of anything resembling censorship of program content. It would seem equally important to avoid censorship by any other small unofficial group.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Broadcast a four-minute speech to the class giving information taken from such sources as current issues of Broadcasting-Telecasting, Broadcasting Yearbook, Standard Rate and Data Service, or publications listed in Appendix C. Your purpose is to bring the information in this chapter up to date.
2. Prepare for broadcasting over a local station a four-minute talk on some phase of the broadcasting business. The fact that this talk is for the general radio listener should affect your choice of words, the amount of information, and your choice of illustrations. Consult Chapters 11 and 22 for advice on the writing and delivery of radio talks. These topics are suggestions only:
a. The first sponsored broadcast
b. Broadcasting is big business
c. Television is big business
d. The ABC's of buying radio time
e. Advertising rates for television
f. How does a network work?
g. What is a network affiliate?
h. Your chances of getting a radio (or television) job
i. What salary can you expect?
j. How many are required to run a radio (or television) station?
k. What is a package show?
3. Introducing the station representative
m . What does the advertising agency do?
n. What is the station $\log$ ?
o. "This program is recorded (or transcribed)"
4. The material in this chapter and the readings may be used in authority interviews. Participants should follow the suggestions for assignments in preceding chapters. You may also arrange "live" or recorded interviews with the manager of a local station, the head of an advertising agency, the business or advertising manager of the newspaper, or some other local authority.
5. Prepare a four-minute newscast for a series on "Radio News of the Week."
6. Groups of three or four may be assigned to produce twelve-minute panel discussions on topics similar to those listed below. The purpose may be to provide information from different sources or to present different points of view. The duties of the chairman and panel members are considered in Chapter 12. For further in-
formation, see Chapter 20 of Discussion and Debate, by H. L. Ewbank and J. J. Auer.
a. Advantages and disadvantages of network affiliation
b. Spot commercials vs. sponsored programs
c. Advertising and the public interest
d. Should live television of football games be permitted?
e. Competition between radio and newspapers
f. Competition between television and movies
g. Competition between radio and professional musicians
h. Competition between radio and television
7. In preparation for the panel, listen to a broadcast program of this type. If available, listen to the "Chicago Round Table" and the "Northwestern Reviewing Stand"; if these programs are not carried in your area, choose a local or regional discussion. If you are to be the leader, or moderator, study the work of that individual; if not, focus your attention on one of the panel members. Hand in a report on this project.
8. Assume that the director of athletics, the manager of a TV Station, and the head of an advertising agency are discussing whether local football games should be televised. Write and produce a tenminute documentary program, giving in dialogue form the points that would be made by each participant. Other situations may be presented in this fashion.

## READINGS

Broadcasting Yearbook, Broadcasting Publications, Inc.
Cassady, Ralph, Jr., and Williams, Robert M., "Radio as an Advertising Medium," Harvard Business Review, January, 1949, pp. 62-78.
Chester, Giraud, and Garrison, Garnet, Radio and Television, Ap-pleton-Century-Crofts, 1950, chap. 8.
Coase, R. H., British Broadcasting, Harvard University Press, 1950, chap. 5.
Crosby, R. J., "Radio and Who Makes It," Atlantic Monthly, January, 1948, pp. 23-29.
Federal Communications Commission, The Public Service Responsibility of Broadcast Licensees, 1946, part 4.
Garver, Robert I., Successful Radio Advertising, Prentice-Hall, Inc., 1949, chaps. 10 and 11.
"General Mills of Minneapolis," Fortune, April, 1945, pp. 116 ff.
Harbord, James G., "America's Position in Radio Communication," Foreign Affairs, April, 1946, pp. 465-474.

Midgley, Ned, The Advertising and Business Side of Radio, PrenticeHall, Inc., 1949, chaps. 4 and 5.
"Radio and the International Scene," Education on the Air, 1946, Ohio State University Press, pp. 5-66.
Robinson, Thomas P., Radio Networks and the Federal Government, Columbia University Press, 1943, chap. 11.
Sandage, Charles H., Radio Advertising for Retailers, Harvard University Press, 1945 , chap 4.
Waller, Judith, Radio: the Fifth Estate, Houghton Miffin Company, 1946, chap. 4.
Wolfe, Charles H., Modern Radio Advertising, Funk \& Wagnalls Company, 1949, chaps. 1 and 2.

## chapter 5

## GOVERNMENT CONTROLS OF BROADCASTING

Ewere apparent. Ham operators listened in on supposedly private messages, filled the air with trivial chatter, and on at least one occasion sent out a false SOS signal. The development of wireless telephony, and later of broadcasting, increased the confusion and intensified the need for regulation. The fact that radio waves cross national boundaries meant that some form of international control must be devised.

## INTERNATIONALCONTROLS

Certain facts about the beginnings of radio telegraphy are essential to an understanding of the attempts to reach international agreements about broadcasting. In 1897 the wireless Telegraph and Signal Company, Ltd., was incorporated in Great Britain to take over all Marconi patents, "past, present and future." Affliate companies, having exclusive use of these patents, were formed in the United States in 1899 and
in Canada in 1903. In 1900 a British company was formed for the operation of marine wireless services "all over the world." This company made a contract with Lloyd's of London to install Marconi apparatus on ships under its jurisdiction. The ship stations were to be in charge of Marconi company operators who were instructed not to communicate with stations using other types of equipment.

Meanwhile German scientists, notably Glaby, Braun, and Arco, had developed a different type of apparatus. In June, 1903, a German company was formed to do for this equipment what the British company was doing for Marconi's. In the United States, also in 1903, the National Electric Signalling Company was organized to develop the Fessenden patents, and Lee de Forest was attempting to get financial backing for his. At this point, the main interest was in shore-to-ship and ship-to-ship communication of weather reports, distress signals, and commercial messages.

It became obvious that unregulated competition among these radio telegraph systems served neither the public interest nor that of the companies themselves. Moreover, the evidence seemed to indicate that various governments were eager to gain control of radio telegraphic communication for political and nationalistic purposes. The need for international agreement was immediate and pressing. A precedent existed in the Telegraph Convention adopted at St. Petersburg in 1875.

Germany took the initiative, inviting the principal maritime nations to send delegates to a "Preliminary Wireless Conference" in Berlin in August, 1903. Five nations sent delegates. The main question concerned obligatory handling of messages regardless of apparatus employed. The second conference met in Berlin in 1906; the third, in London in 1912. The second conference, lasting a month, included delegates from thirty countries; the recommendations of the third conference were signed by forty-three countries and ratified by
thirty-nine before World War I. By 1927, ninety-seven countries had announced their acceptance of the London agreements. The principles and procedures of international regulation of radio telegraphy had acquired practically worldwide recognition. The requirement that ships and coastal stations handle messages regardless of the type of equipment used was not accepted by all nations until 1912. Shortly before the London conference the Titanic hit an iceberg and sank with a loss of 1500 lives. On the eve of the disaster, the radio operator of the Californian tried several times to report the presence of icebergs but the Titanic operator, busy with other duties, did not respond. At the time there was no warning signal that would interrupt other messages, and no requirement that an operator be on duty at all times. When the Titanic hit the iceberg, the Californian was just a few miles away. In fact, officers on the bridge saw rockets sent up by the Titanic, speculated about their meaning, but did not call their radio operator who had retired after sixteen hours continuous duty. The Carpathia, fifty-eight miles away, picked up the distress signal more or less by chance and arrived in time to pick up 703 survivors. At the opening of the London conference, nations who had opposed the obligatory handling of messages withdrew their objections.

The fourth conference, originally scheduled for 1917, finally met in Washington in 1927. The delay was caused, first, by the war; later, by efforts of the League of Nations to deal with the matter; and by attempts to combine the Radio-Telegraph and Telegraph Conventions. The United States had neither joined the League of Nations nor adhered to the Telegraph Convention.

The volume and complexity of matters confronting the Washington Conference is indicated by the fact that the agenda was a 700 -page volume of proposals from private and public agencies. The most important outcomes of this Confer- ence, as far as public policy is concerned, were the formation of the International Telecommunications Union, including telegraphy, radio telegraphy, and radio telephony, and the plans for international allocation of wave lengths.

This story has been recounted in some detail to show the problems and procedures encountered in international regulation of communications. Broadcasting, as we know it today, has always been regarded as a national service. But because radio waves do not stop at national boundaries and may interfere with transmissions from stations in other countries, there must be some sort of international agreement. Thus far, the situation has been dealt with on a regional basis. The International Broadcasting Union, founded in 1925, deals with interference among European stations. The South American Broadcasting Union, established in 1934, deals with similar problems on that continent. The North American Broadcasting Agreement, dating from a conference at Havana in December, 1937, has essentially the same function for stations in Canada, the United States, Mexico, Cuba, Haiti, and the Dominican Republic.

Short-wave broadcasting, essentially international in scope, and often propagandistic in content, cannot be satisfactorily dealt with by regional agreements. To avoid interference, wave lengths must be assigned by one central agency. We have noted elsewhere the attempts of the League of Nations to set up a short-wave information service and similar proposals for the United Nations.

We conclude (1) that international control of the engineering aspects of broadcasting is necessary for effective radio communication and (2) that progress has been made in setting up these controls. Once agreed upon after long discussion and negotiations, the international regulations have been generally followed, though there is no effective method of forcing nations to obey them.

## DEVELOPMENTOF AMERICAN GOVERNMENT CONTROLS

Our government first took official notice of wireless telegraphy in 1904 when the President appointed an interdepartmental board to consider its use in governmental services. This board recommended that all wireless stations be licensed to prevent control "by monopolies or trusts," and to avoid interference with stations "necessary to the national defense." The report suggested that the Department of Commerce and Labor administer all radio legislation.

The first Radio Act, passed May 4, 1910, required every ship leaving a United States port with fifty or more people aboard to be equipped with radio telegraphic apparatus capable of communication at distances of 100 miles. The ship was required to carry qualified operators. The Department of Commerce and Labor was authorized to make such regulations as might be necessary to ensure enforcement of the law. Representatives of the wireless industry and some others opposed the bill, charging that it would make the President or the Secretary of Commerce and Labor a "czar" of wireless, that it would check the growth of an infant industry and deprive amateurs of a harmless and improving pastime. This Act of 1910, extended and amended in 1912, remained in force until 1927. It dealt with point-to-point communication, establishing regulations concerning safety at sea, handling of commercial messages, and national defense. The Act did not contemplate the rapid development of broadcasting, and made no provisions for the problems it presented.

Radio historians label 1926 as the year of chaos in broadcasting. The reasons are understandable enough. The Division of Radio of the Department of Commerce licensed stations as well as operators. From 1919 to 1921 all private broadcasters were assigned a single wave length, 360 meters ( 750 kilocycles). In 1921 they were allowed to choose between that and 400 meters ( 833 kilocycles). Lacking direct authority to deal with such matters as programming, the nature and extent of broadcast advertising, and interference with government stations, Herbert Hoover, then Secretary of Commerce, attempted indirect control by refusing to issue licenses where the new stations would interfere with existing ones. He also called a series of Radio Conferences, hoping that representatives of the industry might regulate their own activities to their mutual advantage and in the public interest. Both attempts failed.

These regulations were reasonably effective, however, until 1926, when the courts and the Attorney General held that the Act of 1912 did not empower the Secretary of Commerce to withhold licenses when the applicant was legally qualified, to fix hours of operation, to regulate power the station might use, or to assign a wave length. On July 9, 1926, Secretary Hoover issued a statement abandoning his efforts and urging the stations to undertake self-regulation.

The plea had little noticeable effect. From that date to Felbruary, 1927, when Congress passed the first legislation dealing directly with broadcasting, nearly 200 new stations joined those on the already crowded broadcast band, choosing their own power, frequency, and operating schedules. With everyone doing as he pleased, no one could be sure of being heard.

The Radio Act of 1927 attempted to bring some sort of order out of the confusion. The Federal Radio Commission was created, with power to regulate "all forms of interstate and foreign radio transmissions," to maintain "the control of the United States over all the channels of interstate and foreign broadcasting," and to "provide for the use of such channels, but not the ownership thereof, by individuals, firms, or corporations. . . ." The law forbade the Commission to infringe on constitutional rights to freedom of speech and directed that all decisions be based on serving the "public interest, convenience, and necessity." These five words, included also
in the Radio Act of 1934, are vague, perhaps necessarily so. Their meaning in specific situations has been the subject of debate in almost every major case before the Commissions.

## THE FEDERAL COMMUNICATIONS COMMISSION

The Radio Act of 1934 abolished the Radio Commission and replaced it with the Federal Communications Commission with jurisdiction over all interstate and foreign commerce and communication by wire and radio. The Commission consists of seven members, nominated by the President and confirmed by the Senate. Not more than four members may belong to one political party. The radio sections of the Act are for the most part taken from the Act of 1927.

The FCC, like some other recently created agencies, does not fit into our traditional separation of administrative, legislative, and judicial functions. Quite the reverse is true. The FCC administers legislation enacted by Congress. It has authority, within the broad limits of the "public interest" clause, to make regulations that have the force of law. And it judges whether someone has violated Congressional legislation or FCC regulations. Whether it is wise to give the FCC these three types of power is a question on which there are vigorous and sincere differences of opinion.

Among the administrative powers and duties of the FCC are these: to grant, withhold or revoke licenses; to assign wave lengths and power; to classify stations and assign call letters; to require stations to keep records and make reports; to assign portions of the broadcast band for different types of broadcasting; to make special regulations for stations engaged in chain broadcasting; to prescribe qualifications for station engineers and operators; to set engineering standards for transmitting equipment; to inspect all radio stations; to
assign stations for special services; and to study new uses of radio.

In exercising its legislative function, the FCC has made detailed regulations covering many of these matters. Of special interest are those concerning station operation. Each station must keep a log noting the type of program broadcast during each period. Sponsored programs must be identified, and the $\log$ must indicate just when the sponsor acknowledgment was made. Recorded or transcribed programs must be identified at the beginning and end of the broadcast, or every thirty minutes on longer programs. Single recordings must be identified as such before they are played, except for background music, sound effects, or themes identifying the station or sponsor. The station must be identified each time it comes on or leaves the air, as well as every hour, plus some other quarter-hour point during each hour. This flexibility is to avoid interrupting the program at an inconvenient point; but if a station identification is delayed it must be given at the first opportunity. The $\log$ must state when each station identification is made. The station must report periodically the proportion of broadcast time devoted to (1) different program types, (2) network and local programs, (3) sponsored or sustaining features, and (4) live or transcribed shows.

Our radio law goes beyond the wording of the Act of 1934. It includes FCC regulations and practices and, in some instances, court decisions on their legality. This is especially true when the issue is the meaning of the "public interest" clause.

In deciding whether an application for a license to operate a broadcasting station should be granted or denied, the Commission has applied three criteria:

1. The applicant must have satisfactory financial, technical, and other qualifications. The applicant must be financially able to construct and operate the station during the licensing period. If he is
not a radio engineer, he must promise to employ properly qualified technicians. In judging the "other qualifications" the FCC has asked whether the applicant has a good reputation, whether he is likely to consider the public interest as well as profits if his application is granted.
2. Alien ownership or control must be avoided. The applicant for a new station must furnish the names of stockholders and the amount of stock each owns. Any important change in the station's financial structure must be approved by the Commission. In recent decisions, the Commission tends to favor local owners over absentee owners and those who plan to devote full time to radio over owners who regard it as an investment or side interest.
3. Competition must be preserved. The American way is to avoid monopoly when possible, and to regulate rather closely those that seem necessary. An added reason for strict regulation of broadcasting is to avoid giving a few persons too much power over means of controlling public opinion.

In 1938 the FCC began to investigate charges that a type of monopoly existed in network broadcasting. The Department of Justice joined in the investigation which was conducted intermittently for more than two years. In 1941 the Commission issued a set of regulations stating the conditions under which it would grant licenses to stations having network affiliations. (See Station Network Relations in Chapter 4.) The networks raised vigorous objections to this type of indirect control but the United States Supreme Court ruled that the contractual relations of stations may be considered in granting licenses.

The ruling that stations cannot belong to an organization maintaining more than one network serving the same area applied to NBC which then owned the Red and Blue networks and had a practical monopoly of chain broadcasting in certain areas. The Blue network, now the American Broadcasting Company, was sold to comply with this regulation.

From time to time, the Commission has called attention to a type of monopoly resulting when newspapers and radio stations are owned by the same individual or group. Lengthy hearings on this question were conducted in 1941-1942.

Meanwhile, interested individuals sought court action to determine whether the Commission had legal authority to consider the joint ownership of newspapers and broadcasting stations in licensing stations. The United States Supreme Court upheld the Commission's right to hold hearings on the subject, but found nothing in the law which would allow discrimination against newspaper-owned stations. The purpose of the hearing might be to determine whether legislation is needed. The hearings were formally closed in 1944. In reporting to Congress, the FCC indicated that newspaper ownership might be considered along with other matters in licensing stations.

Reversing its earlier practices, the FCC now generally refuses to consider the economic effects of a proposed new station on existing stations in the area. The trend is seemingly toward the preservation of economic competition even at the risk of bankruptcy for both old and new stations. The practice of protecting existing stations as long as they carried good programs was based on the idea that the community would be better served by one prosperous station than by two struggling to remain solvent. The argument for licensing new stations in an area is that competition for listeners will stimulate old and new stations to improve their programs. The Commission has been criticized with equal vigor for both procedures.

The developments in FM and television have posed new problems for the Commission. To avoid "duopoly" it has ruled that no person or group may control more than one FM or TV station in an area. To avoid monopoly over a wider area, it has ruled that no person or group may control more than six FM or five TV stations. The fact that most FM stations are owned by operators of AM stations raised the duopoly issue in a different form. By late 1947, it became apparent that, during the experimental or change-over period, the regulation would not be applied even when both stations operate in the same area and carry the same programs. How-
ever, it seemed likely that the joint operators would be expected gradually to develop separate programs for the two stations.

In September, 1948, the television boom caused the Commission to declare a moratorium on applications for licenses or construction permits, pending decisions on enlarging the television band and possible changes in engineering standards. At the time, thirty-seven television stations were in operation, construction permits for eighty-six others had been issued, and 303 applications for new stations were on file.

## - COMMISSION ACTION ON PROGRAM CONTENT.

 The Radio Act of 1934 states that the Commission must not censor programs or take any action abridging freedom of speech. However, it must see that stations serve the "public interest, convenience, and necessity." This has been interpreted to mean that the Commission may not prescribe program content in advance, but that it may consider program plans when an applicant seeks a new station, and past programs when the station asks for a renewal of its license. The Act forbids the broadcasting of "obscene, indecent, or profane language" and specifies that stations furnishing time for political broadcasts must grant equal opportunities to all legally qualified candidates and parties. Section 316 forbids broadcasts concerning any "lottery, gift enterprise, or similar scheme offering prizes dependent in whole or in part upon lot or chance . . ." Persons who knowingly violate this section may be fined "not more than $\$ 1000$ or imprisoned not more than one year, or both, for each and every day during which such offense occurs." This is certainly specific enough, but on larger issues the Act leaves the Commission uninstructed as to its duties and powers to deal with program standards and content.In dealing with these questions, the FCC follows a standard procedure for this type of governmental agency. It calls a

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hearing and invites interested individuals and grou ${ }_{i} 8_{5}$ sentatives to present testimony. Members of the Broadc vision then prepare a tentative report and receive cor. and suggestions. When these have been considered, a finı port is issued which has the force of law, unless it is succ fully challenged in the appropriate courts.

Any citizen or any group may file complaints about broa cast programs with the FCC. On December 13, 1939, the Commission issued a report classifying the more frequent complaints. The list included: astrology, fortune telling, solicitation of funds, false or misleading advertising, liquor and cigarette advertising, horse racing, refusal to allot time for discussion of controversial issues, defamatory statements, offensive references to religious beliefs, unlabelled propaganda, "blood and thunder" children's programs, editorializing on political, religious, or racial questions, excessive advertising, interrupting concerts for the insertion of commercials, and too many contests.

Some of these program items have been banned by network or NAB codes, or by individual stations. A charge of defamation can be settled by court action. Objections to cigarette advertising have largely ceased. Beer and wine are advertised on the air, and, in 1950, broadcasters were testing listener reactions in Hawaii and Alaska to programs advertising "hard" liquor. In 1950 the FCC ruled that stations may take an editorial position on controversial matters when they believe that one side has not been adequately presented.

- THE FCC BLUE BOOK. For some time spokesmen for the broadcasting industry had asked the FCC to explain what it regarded as good public-service programming. The requests became more insistent when, in April, 1945, the Commission announced a policy "of more detailed review of broadcast station performance when passing upon application for license renewals."


## B?OADCASTING: RADIO AND TELEVISION

, ese requests were answered when on March 7, 1946, the心 released a report entitled Public Service Responsibility f Broadcast Licensees. Commonly called the Blue Book because of the color of its paper cover, the report announced four criteria the Commission proposed to use in granting applications of new stations or renewing the licenses of those on the air. The following explanations of these four criteria are summarized from the Blue Book:

1. The Carrying of Sustaining Programs. Our radio system is financed from the sale of time to advertisers. The FCC notes that the most popular programs on the air are commercial but that sustaining programs also play an integral and irreplaceable part in the American system of broadcasting. The sustaining program has five distinctive and outstanding functions:
a. To secure a . . . balanced interpretation of public needs.
b. To provide programs which by their very nature cannot be sponsored with propriety.
c. To provide programs for significant minority tastes and interests.
d. To provide programs devoted to the needs and purposes of nonprofit organizations.
e. To provide a field for experimentation in new types of programs.
2. The Carrying of Local Live Programs. The Commission has given "repeated and explicit recognition" to the need for adequate reflection in programs of local interests, activities, and talents. Local live programs may often be good business policy. The local station should follow the example of the local newspaper. The editor does not discharge his photographers and reporters because he can get enough material to fill his pages from the national news and picture services.
3. The Carrying of Programs Devoted to Public Discussion. The FCC agrees that the use of broadcasting as an instrument for the dissemination of news, ideas, and opinions raises a multitude of problems of a complex and sometimes delicate nature. But the station manager should not avoid the problems by failing to schedule discussion programs. "The public interest clearly requires that an adequate amount of time be made available for the discussion of public issues." This factor the Commission proposed to con-
sider in determining whether a station is serving the public interest.
4. The Elimination of Commercial Advertising Excesses. The FCC recognizes advertising as an indispensible part of our system of broadcasting. However, this does not mean that broadcasting should be run solely in the interest of the advertiser. A limitation on the amount and character of advertising has always been one element of public interest. The Blue Book considers these criteria in determining whether a station is practicing advertising excesses: the time devoted to commercials; the length of individual commercials; the number of spot commercials; the time between commercials; the use of patriotic appeals in commercials; physiological descriptions in commercials; commercials that propagandize for a point of view on a controversial issue instead of selling goods or services; the intermixture of program and advertising.

The immediate reaction of the industry was that in issuing the Blue Book the FCC was attempting to control program content and interfering with freedom of speech. However, a poll of station managers nine months later showed that 53 percent of them believed that the long-term effect of the Blue Book would be good from the listener's point of view, and 59 percent thought it would be good for the stations. Only 7 percent thought it would be bad for listeners, and 11 percent that it would be bad for the broadcasters.

## THE FEDERAL TRADE COMMISSION

The Radio and Periodical Division of the Federal Trade Commission examines commercial copy for possible violations of the laws relating to false or misleading advertising. Stations and networks must submit periodically copies or transcriptions of all commercials broadcast during specified periods. These are examined and any suspected of being false or misleading are set aside for further investigation. During the last few years about 2 percent of the commercials were held for special examination. Periodicals contained almost three times as much questioned advertising. Drug advertising ranks first in copy held for further investigation, with cos-
metics and toiletries second, and food products, including beverages, third.

Suspected commercials are examined closely to determine which violate the law. The FTC asks advertisers using illegal methods to sign promises to discontinue them. Uncoöperative advertisers are given adverse publicity and "cease and desist orders" are issued. In extreme cases, the Department of Justice may be asked to prosecute offenders.

## COPYRIGHT CONTROLS

Unfortunately, we do not have a single, up-to-date copyright law. Instead, we have several laws, some of them recent, others enacted in the eighteenth century. They were generally designed to protect authors and publishers of books, plays, and music. Their application to radio scripts and music composed for broadcasting is less clear and less satisfactory.

This much is clear. The laws protect composers, authors, and publishers from unauthorized broadcasting of copyrighted works. Permissions must be secured in advance for direct quotation of four or five lines of poetry or an equivalent amount of prose. Royalties charged for the use of material on commercial programs are usually high. Copyrights may be extended to fifty-six years from date of original publication; after that the material is generally in the public domain. The best advice is: When in doubt, ask for permission. Be safe or you may be sorry.

Authors of radio scripts may register them in the United States Copyright Office as "dramatic compositions," "dra-matico-musical compositions," or "lectures." If the scripts are not reproduced for sale the registration fee is one dollar. Barnouw ${ }^{1}$ notes that a script writer may be the victim of theft of a title, of an idea, or of a way of expressing the idea. Copyright laws do not give the author rights to the title or the idea.

[^7]However, if the author can demonstrate theft of title or idea for a program, he may sue for damages under fair trade legislation. The Author's League of America invites members to file synopses, scenarios, ideas, and outlines in registered, sealed, dated envelopes, to be used as evidence in case of controversy over who borrowed from whom.

The author does have property rights in his own expression of an idea. He can collect damages if someone, without advance permission, uses, with or without quotation marks, any substantial portion of his language.

- MUSIC COPYRIGHTS. Musicians and music publishers viewed the growth of broadcasting with alarm. Would a single network orchestra, broadcasting over a hundred stations, mean unemployment for other musicians? Would the repeated playing of a hit tune wear it out so quickly that the sale of copies would be adversely affected? Could a way be found to collect royalties on each use of a recording?

The first group organized to deal with such problems was the American Society of Composers, Authors, and Publishers (ASCAP). In 1923, ASCAP negotiated a contract providing that stations or networks could use any music controlled by its members by paying a flat annual fee. The fees were distributed to members according to their ratings on such matters as prestige and the popularity of their music. In 1932 contracts provided that stations using ASCAP music pay a percentage of their gross annual income; from 1935 to 1940 this amount was fixed at 5 percent. At that time ASCAP controlled about 2 million compositions and arrangements.

For some time broadcasters had complained that ASCAP had almost a monopoly control of popular music. In September, 1939, the National Association of Broadcasters formed a competing organization, Broadcast Music, Inc. (BMI). This group hired writers to turn out popular music, bought the rights to compositions by non-ASCAP writers, and purchased
music listings controlled by single publishers. From those sources, BMI gained control of about 200,000 titles. Stock in BMI was sold to stations at 50 percent of what they had paid to ASCAP. Stations and networks were urged to substitute BMI music for that controlled by ASCAP. By January 1, 1941, when the ASCAP contracts expired, about 80 percent of the stations were broadcasting BMI music exclusively.

At about this point the Department of Justice initiated proceedings against both organizations, charging that ASCAP was a monopoly and that BMI was becoming a monopoly as far as radio music was concerned. The proceedings ended when both organizations signed consent decrees including the following stipulations:

Broadcasters have the option of paying royalties on the basis of a flat fee, a fee for each use of copyright music, or a percentage of income. Rates must be on the same basis for all broadcasters. No exclusive contracts can be made. Royalties must be distributed to composers, authors, and publishers on a standardized basis, known to the membership of the organization. Requirements for membership in the two organizations must not be so high as to result in "closed" corporations.

One by one networks and stations signed new contracts with ASCAP running until 1949 or 1950, usually retaining their membership in BMI. Contracts vary, but percentage rates were lowered and based on income after deductions for sales, costs, agency commissions, and line rentals, instead of on gross income. Here is a typical agreement: The network pays ASCAP a royalty of 2.75 percent of its income to cover all commercial programs and the right of member stations to broadcast these programs, and 200 dollars per member station per year for the right to use ASCAP music on sustaining programs. The station pays the network 2.75 percent of its income for broadcasting network sponsored programs, and pays ASCAP 2.25 percent of its income from local sponsored broadcasts, plus a "ratio-to-income" fee for the use of ASCAP
music on local sustaining shows. BMI fees amount to almost 1 percent of station income.

The activities of labor unions, notably the musician's union headed by Cesar Petrillo, will be discussed later.

## OTHER FEDERAL CONTROLS

Other federal agencies are concerned with certain aspects of broadcasting. The Food and Drug Administration acts when products are not accurately labeled on the air as well as on the package. The Securities and Exchange Commission watches stock manipulations in financing stations or networks. The Interstate Commerce Commission is concerned whenever interstate trade is involved.

In wartime additional controls are necessary. The President is empowered to take over all radio broadcasting in case of war or national emergency. During World War II, the Office of Censorship forbade the broadcasting of certain information and worked with broadcasters in setting up a voluntary code governing all programs. The Office of War Information followed the same coöperative procedure in determining what stations and networks might reasonably be expected to do as their share in the war effort.

EXERCISES AND BROADCASTING ASSIGNMENTS

1. Prepare a four-minute informative speech designed for the listening audience of a local station. Assume that your listeners know about as much about broadcasting as you did when you began to study radio. Explain any technical terms, and use examples more freely than would be necessary for a speech to your class. Topics such as the following may be used:
a. Radio telegraphy
b. Radio telephony
c. The need for international agreements
d. The first international conference (1903)
e. The Washington conference (1927)
f. Our first radio law (1910)
g. The year of chaos in broadcasting
h. "Public interest, convenience, and necessity"
i. The Federal Radio Commission
j. The organization of the FCC
k. The powers of the FCC
2. The FCC Blue Book
m . The story of ASCAP
n. The story of BMI
o. The Voice of America
p. The law on lotteries
q. The FCC and censorship
3. Following the instructions given in assignments for earlier chapters, conduct an authority interview on a topic such as those listed above.
4. In preparation for taking part in a symposium or debate, listen to the "America's Town Meeting of the Air" or the "American Forum of the Air." Note especially the work of the moderator and what happened in the forum period. Hand in a report describing and evaluating the broadcast. If these programs are not heard in your area, base your report on the transcript of another recent discussion.
5. The class will broadcast a series of fifteen-minute symposiums or debate forums similar to "America's Town Meeting of the Air" or "American Forum of the Air." The cast includes a moderator and two speakers who present different sides of a current issue. For a Town Meeting, follow this schedule: moderator's opening statement, thirty seconds; the speeches, four minutes each; questions from the studio audience, four minutes; moderator's summary, thirty seconds. The "American Forum of the Air" is described in Chapter 12. These questions may be discussed with profit :
a. Should the same people own newspapers and radio stations?
b. Should radio stations be allowed to present only one side of a controversial issue?
c. Should the powers of the FCC be increased? (or diminished?)
d. Should we endorse the proposals in the FCC Blue Book?
e. Does the FCC censor program content?
f. Should the government exercise more control over commercials?
g. Should the law on lotteries be more strictly enforced?
h. Should the FCC reserve television channels for noncommercial stations?
i. Do present copyright laws adequately protect the radio writer?
j. Should commercial stations be required to carry a specified number of educational or cultural programs?
6. Broadcast to the class a three-minute speech supplementing the information on this chapter with that found in one of the sug. gested readings or in a current publication.
7. Consult the Congressional Record for a debate on a radio question. Broadcast to the class a ten-minute cutting of this debate. See Chapter 13 for information about this type of documentary program. If Congressional Records are not available, use discussions in recent volumes of Education on the Air.
8. Dramatize a fifteen-minute courtroom scene where an issue rather than an individual is on trial. The attorney for each side presents an expert witness and cross-examines the opposing witness. The student witness must present the opinion held by the authority he represents. The judge conducts the trial, which concludes with a one-minute summary by each attorney, and presents the case to the listeners who serve as the jury.
9. Arrange a ten-minute quiz program with questions drawn from this and preceding chapters. The cast includes a quiz master and three or four contestants picked at random from the class.

## READINGS

Banning, William P., Commercial Broadcasting Pioneer, Harvard University Press, 1946, chaps. 14, 15.
Barth, A., and Katz, E., "FM and Freedom of the Air," American Mercury, July, 1945, pp. 35-42.
Coase, R. H., British Broadcasting, Harvard University Press, 1950, chaps. 6, 7.
"FCC versus Networks," Fortune, May, 1943.
Federal Communications Commission, Public Service Responsibility of Broadcast Licensees, 1946, part 2.
Hettinger, H. S., and Porter, W. A., "Radio Regulation: A Case Study," Annals of the American Academy of Political and Social Science, May, 1942, pp. 121-137.
Otterman, Harvey, "International Regulation of Radio," U.S. Department of State Bulletin, February 18, 1945.

Penn, David, "The Voice of America," Education on the Air, 1949, Ohio State University Press, pp. 101-110.
Robinson, Thomas P., Radio Networks and the Federal Government, Columbia University Press, 1943.
Schramm, Wilbur (editor), Mass Communications, University of Illinois Press, 1949, part 2.
Siebert, Fred S., "Communications and Government," Communications in Modern Society, University of Illinois Press, 1948, pp. 7-14.
Siebert, Fred S., "Legal Problems of Radio News," Journalism Quarterly, June, 1946, pp. 189-193.
Siepmann, Charles A., Radio, Television, and Society, Oxford University Press, 1950, chaps. 2, 3.
Tomlinson, John D., The International Control of Radio Communications, J. W. Edwards, Ann Arbor, Michigan, 1945.
Waller, Judith, Radio: the Fifth Estate, Houghton Mifflin Company, 1946, chap. 4.
White, Llewellyn, The American Radio, University of Chicago Press, 1947, chap. 7.
"Would Government Supervision Improve Radio Programs?" Education on the Air, 1946, Ohio State University Press, pp. 83-94.

## NONGOVERNMENTAL

## CONTROLS OF

## BROADCASTING

AMERICANS generally subscribe to the axiom "That government is best which governs least." Consequently, legislative restrictions are usually placed on an industry only after it is clear that it cannot, or will not, voluntarily operate in the public interest. It is generally agreed that such matters as the licensing and technical operation of broadcasting stations must be decided by the FCC, but this agreement does not extend to regulations designed to improve program content. Our purpose here is to examine attempts at self-regulation in that field.

## THE NATIONAL ASSOCIATION OF BROADCASTERS

Founded in 1923, the NAB had, in 1947, about 1450 members and an annual income of approximately 635,000 dollars. NAB describes itself as "the all-purpose trade association of
the broadcasting industry" and is generally recognized as its official spokesman. NAB conducts or sponsors research, gives member stations information on technical matters, opposes unfriendly legislation, and builds a favorable attitude toward private ownership and operation of broadcasting stations.

We are here concerned with the Association's attempts at self-regulation of program content. In 1939 the NAB adopted a Code Manual to guide member stations on such matters as children's programs, treatment of controversial issues, newscasts, religious broadcasting, unacceptable advertising accounts, length of commercial copy, and educational broadcasting. This code has been revised three times, most recently in 1948 (with a television supplement in 1951).

The 1948 revision, entitled Standards of Practice for American Broadcasters, differs markedly from the earlier editions. In general, it avoids mention of unacceptable sponsorship or disapproved practices, and contains general statements of ideals and objectives. This approach is evident in the first section of the code, "The Broadcasters' Creed":

## We Believe:

That American Broadcasting is a living symbol of democracy; a significant and necessary instrument for maintaining freedom of expression, as established by the First Amendment to the Constitution of the United States;

That its influence in the arts, in science, in education, in commerce and upon the public welfare, generally, is of such magnitude that the only proper measure of its responsibility is the common good of the whole people;

That it is our obligation to serve the people in such manner as to reflect credit upon our profession and to encourage aspiration toward a better estate for all mankind; by making available to every person in America, such programs as will perpetuate the traditional leadership of the United States in all phases of the broadcasting art;

That we should make full and ingenious use of man's store of knowledge, his talents, and his skills and exercise critical and discerning judgment concerning all broadcasting operations to the end that we may, intelligently and sympathetically:

Observe the proprieties and customs of civilized society;
Respect the rights and sensitivities of all people;
Honor the sanctity of marriage and the home;
Protect and uphold the dignity and brotherhood of all mankind;
Enrich the daily life of the people through the factual reporting and analysis of the news, and through programs of education, entertainment and information;

Provide for the fair discussion of matters of general public concern; engage in works directed toward the common good; and volunteer our aid and comfort in times of stress and emergency;

Contribute to the economic welfare of all, by expanding the channels of trade; by encouraging the development and conservation of natural resources; and by bringing together the buyer and seller through the broadcasting of information pertaining to goods and services.

Even the most captious critic can find little to quarrel with in these statements, though some there are who wonder whether the standards are fully applied in the day-by-day programming of the average station. The student of rhetoric will note that the creed contains, to an unusual degree, those stereotyped words and phrases to which we have been taught from childhood to give favorable response.

In a later section the code deals more specifically with four problems facing the program producer or station manager:

Sound effects and expressions characteristically associated with news broadcasts (such as "bulletin," "flash," etc.) should be reserved for announcement of news, and the use of any deceptive techniques in connection with fictional events and non-news programs should be unacceptable.

When plot development requires the use of material which depends upon physical or mental handicaps it should be used in such a way as to spare the sensibilities of sufferers from similar defects.

The regular and recurrent broadcasting, in advance of sports events, of information relating to prevailing odds, the effect of which could be expected to encourage gambling, should not be permitted.

Simulation of court atmosphere or use of the term "Court" in a program title should be done only in such a manner as to eliminate the possibility of creating the false impression that the proceedings broadcast are vested with judicial or official authority.

This section concludes with the statement that in the case of network programs, the originating station should assume responsibility "for conforming such programs to these Standards of Practice."

## ADVERTISING STANDARDS

The report of the special committee on standards of practice in 1947 contained a section captioned "Business Not Acceptable." Broadcasters, the committee said, should not accept advertising of: (1) hard liquor; (2) any product or service, the sale or rendition of which constitutes a violation of law; (3) any occultism, fortune telling, mind reading, or character reading by hand writing, numerology, palm reading, astrology, or phrenology ; (4) matrimonial agencies; (5) "dopester," tip sheet, or race track publications; (6) offers of "homework" except by firms of unquestioned responsibility; (7) all forms of speculative finance; (8) reducing agents, including foods and beverages designed solely to perform that function; (9) products designed for care and relief of ailments which are chronic or irremediable, or for conditions in which self-medication presents an element of danger; (10) mortuaries, cemeteries, morticians, casket makers, memorial parks, or any product or service associated with burial, unless both product and commercial copy are handled with the highest standards of good taste and business ethics; (11) products which are not acceptable conversational topics in mixed groups; (12) laxatives, deodorants, and products claiming similar functions, unless both program and commercial copy are handled in accordance with the highest standards of good taste and business ethics; (13) any school, person, or organization offering services of a professional or specialized character, until the advertiser has satisfied himself that such person or organization is able to fulfill all claims made and inducements offered; (14) professions in which it is deemed unethical to advertise.

This section, which closely parallels the regulations con-
tained in the 1945 edition of NBC's Program Policies and Working Manual is not found in the 1948 NAB code. In its stead are these paragraphs:

Advertising is the life blood of the free, competitive American system of broadcasting. It makes possible the presentation, to all the American people, of the finest programs of entertainment, information and culture.

Diligence should be exercised to the end that advertising copy accepted for broadcasting complies with pertinent federal, state and local laws. Acceptance of advertising should be predicated upon such considerations as the integrity of the advertiser, the quality of the product, the value of service, and the validity of claims made.

In accepting advertising the broadcaster should exercise great care that he is not conveying to his audience information which is misleading, dangerous to health or character, distasteful or contrary to the proprieties and customs characteristic of his audience, or in violation of business and professional ethics.

Advertising copy should contain no claims intended to disparage competitors, competing products, or other industries, professions or institutions.

Advertising copy should contain no claims that a product will effect a cure.

Good taste should always govern the content, placement and presentation of announcements. Disturbing or annoying sound effects and devices, blatant announcing, and over-repetition should be avoided.

- LENGTH OF COMMERCIAL COPY. On this point the NAB code is specific: The maximum time to be used for advertising, allowable to any single sponsor, regardless of type of program should be:

|  | 6:00 P.M. <br> to | All Other |
| :---: | :---: | :---: |
| Length of Program | $11: 00$ P.M. | Hours |
| 5 minutes | $1: 00$ | $1: 15$ |
| 10 minutes | $2: 00$ | $2: 10$ |
| 15 minutes | $2: 30$ | $3: 00$ |
| 25 minutes | $2: 50$ | $4: 00$ |
| 30 minutes | $3: 00$ | $4: 15$ |
| 45 minutes | $4: 30$ | $5: 45$ |
| 60 minutes | $6: 00$ | $7: 00$ |

- APPROVED ADVERTISING PRACTICES. The code qualifies these time allotments in certain instances and includes approved practices concerning such matters as spot commercials, contests, and premiums. Items of special interest to the prospective broadcaster and to the public are summarized here:

1. Station breaks between programs are not included in the time allotments for single advertisers.
2. All multiple sponsorship or announcement programs, "except as hereinafter provided," are allowed three minutes of advertising for each fifteen minutes, excluding station breaks.
3. Recognizing that such programs as shopping guides, market information, rural news, and the like render a definite service, time allotments for such programs may be waived for one hour per day.
4. A single sponsor may advertise any number of his products within the framework of the program structure. This is intended to prevent his use of "simulated spot announcements" preceding the introduction of the program or after its apparent sign-off.
5. The placement of more than one commercial announcement between two commercial programs should not be permitted except in those instances when one of the two announcements is a sponsored time signal, weather report, station promotion, or location announcement of not to exceed a total of ten seconds in length.
6. Contests. Programs designed to "buy" listeners should be avoided. Acceptable contests should be won on the basis of ability and skill, rather than chance. All contest details should be clearly and completely announced and the winners' names released as soon as possible. When contestants are required to send in such items as box tops or labels, "reasonable facsimiles thereof" should be made acceptable. All references to prizes or gifts should be included in the advertising time allowance.
7. Premiums and Offers. The broadcaster should investigate and approve full details of proposed offers before any public announcement is made. The termination date should be announced as far in advance as possible. There should be no misleading descriptions of premiums or gifts which will distort or enlarge their value in the minds of the listeners.

The makers of this code were undoubtedly in a dilemma. They wished to produce a document which would convince
the public that there is no need for government control of broadcast programs. But, to get the code adopted, they had to leave the station and network managers as free as possible to make their own decisions on the acceptance or rejection of programs. The result is, in many instances, a set of generalities and phrases that can be variously interpreted: "good taste" should prevail in all announcements; "disturbing or annoying sound effects" should be avoided. The broadcaster should "uphold the dignity and brotherhood of all mankind."

This code contains no procedure for detecting violations and dealing with member stations that persistently fail to live up to its standards. Doctors and lawyers found guilty of unethical or improper practices are denied membership in their professional organizations. It may be reasonably argued that this development will come later when the NAB has acquired prestige as an exponent of public-service broadcasting.

## NETWORK REGULATION OF BROADCASTING

Soon after their organization, the networks found it necessary to establish regulations concerning their relations with advertising agencies and with affiliated stations. Rules about program procedures and content were formulated as occasion rose. While the codes developed by the major network differ in detail, that of the National Broadcasting Company is fairly typical. Originally adopted in 1934, the code was revised in 1939 and again in 1945. The 1945 version is published under the title, NBC Program Policies and Working Manual. ${ }^{1}$

The NBC regulations, applying only to programs carried by that network, can be more complete and more specific than the NAB code which attempts to set standards for all Ameri-

[^8]can broadcasters. The problem of enforcement is also much simpler, since those who make the decisions are employed by that network. However, when allowance is made for these factors, there are differences between the two codes that merit consideration here.

1. The NBC code is more restrained on its statement of radio's influence and mission. Witness these statements:

No program should lower the moral standards of those who receive it.
Law, natural and divine, must not be belittled or ridiculed, nor must a sentiment be created against it.

As far as possible, life should not be misrepresented, at least not in such a way as to place in the minds of youth false values on life and human behavior.
2. The NBC code is much more specific in stating types of program content or production methods to be avoided:

Statements and suggestions which ridicule or deride religious views, creeds and customs are prohibited.
. . . No inference should be left that extra-marital relations are socially or morally justifiable, and offenders should never be portrayed sympathetically.

Murder, or revenge as a motive for murder, shall not be justified. Episodes involving the kidnapping of children are forbidden. Suicide shall never be presented as a satisfactory solution of any human problem.

Fictional events shall not be presented in the form of authentic news announcements.

Sacrilegious, blasphemous, profane, salacious, obscene, vulgar, or indecent material is not acceptable for broadcast, and no language of doubtful propriety will be sanctioned.

Insobriety and excessive drinking must not be portrayed as desirable or as prevalent factors in American life. Reference to narcotic addiction should be avoided as far as possible, because of the known fact that mere mention is potentially dangerous to susceptible persons. It must never be presented except as a vicious habit.

NBC reserves the right to pass upon the qualifications of speakers on specialized, technical or scientific subjects.
3. The NBC code contains a section on unacceptable business. It corresponds, in general, to the list included in the NAB manual until the 1948 revision.
4. The NBC code allows more time for commercial announcements on some programs. The differences are shown in the accompanying table.

| Length of <br> Program | NAB Code (1948) <br> Daytime | NBC Code (1945) <br> Night | All <br> Newscasts | Other <br> Daytime | Other <br> Night |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 5 minutes | $1: 15$ | $1: 00$ | $1: 20$ | $2: 00$ | $1: 45$ |
| 10 minutes | $2: 10$ | $2: 00$ | $1: 45$ | $2: 30$ | $2: 00$ |
| 15 minutes | $3: 10$ | $2: 30$ | $2: 15$ | $3: 15$ | $2: 30$ |
| 30 minutes | $4: 15$ | $3: 00$ |  | $4: 30$ | $3: 00$ |
| 60 minutes | $7: 00$ | $6: 00$ |  | $9: 00$ | $6: 00$ |

5. The NBC code contains regulations applicable to its network programs that would naturally not be found in the NAB manual which is designed for individual stations. The sections of special interest to our readers are given here in slightly abridged form.

Continuity. Whenever possible, all continuity, including all spoken lines and commercial copy, must be submitted at least forty-eight hours before the broadcast. The production director will exercise strict control over all ad-lib programs. NBC reserves the right (1) to approve all continuities, including the words of songs and commercial copy (2) to require changes in program or announcements, (3) to investigate the accuracy of all statements and claims in copy submitted for broadcasting.

Impersonations. Written authorization must be obtained for impersonation of living persons. The use of such impersonations must be clearly announced unless the script makes that fact obvious.

Testimonials. Scripts containing testimonials or using a person's name for advertising purposes, must be accompanied by written authorizations. Testimonials must reflect the authenticated experiences of living witnesses. NBC employees may not broadcast personal testimonials or ask listeners to purchase products as a favor to themselves. Appeals for Funds. Appeals for funds are generally unacceptable.
(Exceptions are made for such causes as the Red Cross.) Dramatic action may not be used for such appeals in the commercial part of the program. A fictitious character in a play may not urge listeners to purchase the product to alleviate a fictitious situation. For example: "Send in a box top and help widow Jones pay off the mortgage."

Dramatized Commercials. When dramatized commercials involve statements by doctors, dentists, or other professional persons, the lines must be read by members of those professions, reciting actual experiences, or it must be clear that the scenes are fictitious.

Daytime Serials. New story material should be given a minimum of ten and a half minutes in a fifteen-minute program.

It should be remembered that final responsibility on program matters rests with the individual station. The manager may refuse to broadcast network programs he believes improper or unsuited to his listeners. The rejection of sponsored programs would, of course, mean a loss of station revenue. The situation is quite different in the case of network sustaining broadcasts. Although affiliated stations must pay the network for a stated number of programs, the choice is left entirely to the local manager. He may use them simply to fill in unsold time, to balance his program schedule, or to bring to his audience something he thinks they ought to hear.

The local management may, and often does, establish station policies reflecting, in various degrees, the need for revenue, local tastes and interests, and the ideals of the program manager.

## CONTROLS BY UNIONS AND GUILDS

Organizations of station and network employees, and of writers, actors, announcers, and musicians, exercise considerable, though indirect, control over broadcasting. These unions and guilds include the American Federation of Musicians, National Association of Broadcast Engineers and Technicians, American Federation of Radio Artists, Radio Writers' Guild, Radio Actors' Guild, American Guild of Radio Announcers and Producers, International Brotherhood of Elec-
trical Workers (AFL), American Communications Association (CIO), and the National Association of Broadcast Engineers and Technicians. These organizations follow the usual practices of labor unions in other fields, in negotiations with employers on wages, hours, and working conditions.

One of these groups, the AFM, has, under the militant leadership of Cesar Petrillo, attracted wide and sometimes unfavorable attention. The public generally condemned AFM actions in forcing a network to cancel a broadcast from a summer camp for student musicians at Interlochen, Michigan, and in refusing to permit stations to broadcast music from other nations, unless "standby" musicians are employed in this country. Petrillo has claimed jurisdiction over "platter turners" who handle records and transcriptions in control rooms. The National Association of Broadcast Engineers and Technicians claimed that a "platter turner" is a technician, not a musician. Often he is neither!

On the other hand, the AFM has, in addition to bargaining successfully for wage increases, required recording companies to pay from one cent to two and a quarter cents for each record sold into an employees' welfare fund. Petrillo has promised to use part of this fund to provide free public concerts by otherwise unemployed musicians. He points to the fact that his union has often authorized broadcasting by student musicians when permission was sought in advance.

## CONTROLS BY LISTENERS

Broadcasters frequently assert that the listener really determines what is broadcast. He does this simply by listening or refusing to listen. If a program fails to attract an audience, the advertiser refuses to renew his contract. Sponsors, agency representatives, station managers, as well as writers and radio showmen, are constantly studying audience surveys to discover what the public wants. One must admit that broadcasters are usually, even unduly, sensitive to criticism. A hundred
genuine letters of protest would cause revision of the offending program and might result in its demise.

But this type of criticism is largely negative in character. The average letter writer lacks the incentive and the knowledge to produce the type of commentary that one finds in reviews of current books, movies and plays. Robert Landry, formerly radio editor of Variety, was among the first to emphasize the need for radio critics and became one of them. In its Blue Book, the FCC strongly endorsed this idea, saying that responsible criticism of the sort appearing in Variety, the Sunday edition of The New York Times and, occasionally, in monthly magazines, can "raise the standards of public appreciation" and "bring to bear an objective judgment on questions of good taste and of artistic merit."

The average listener can participate in the improvement of radio programs, or in adapting them to local interests and tastes, through membership in radio listener councils. Pioneer groups of this sort include the Radio Council of Greater Cleveland, the Wisconsin Association for Better Radio Listening, and Radio Listeners of Northern California. The activities of these associations include: (1) publicizing outstanding programs, (2) checking on the failure of local stations to carry desired network sustaining features, (3) representing the public in conferences with broadcasters on program matters, and (4) giving instruction in methods of evaluating different types of broadcasters. The Wisconsin group, for example, has published a pamphlet, Let's Learn to Listen, and conducts a weekly "Broadcast on Broadcasts" over the state network of noncommercial stations.

Various commercial stations, equally interested in serving their communities, have organized listener panels. These groups may discuss program ideas, preview specimen programs, and otherwise serve as connecting links between producer and consumer of broadcasts.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Prepare a four-minute speech designed for broadcasting over a local station. Your purpose may be either to present information or to convince your listeners that something is important or unimportant, good or bad. You will, of course, use information as evidence to support your conclusions. Topics such as the following may be used. The wording would depend on your purpose.
a. What is the NAB?
b. The 1939 NAB code
c. The 1948 NAB code
d. "Business not Acceptable"
e. The length of commercials
f. What makes a commercial seem long?
g. Contests and premiums
h. The NBC code
i. A Comparison of the NAB and NBC codes
j. Petrillo and the AFM
k. Organized listener groups
2. How are the codes enforced?
m . How does the movie industry censor its product?
n. "The Invasion from Mars"
o. "We give the public what it wants"
p. What about codes for television?
3. Organize a listening project to discover how carefully the codes are observed in practice. For this purpose the class will be divided into groups of five or six. Each group will be assigncd a type of broadcast, and each individual one or more specific programs. Each group will present a joint report, orally or in writing, as the teacher prefers.
4. Organize the class for a survey of listener's attitudes on some questions considered in this chapter. The questions to be asked, the method of selecting persons to be interviewed, and the conduct of the interview should be given careful attention. Some of the questions used in other surveys might be suitable. For information on this research method, see Chapters 23 and 24, and sources listed in the bibliography in the Appendix.
5. The class might broadcast a series on government control vs. voluntary regulation of radio programs. The series may include different program types, for example:
a. Talks on what is done in other countries; self-censorship in the motion picture industry, etc.
b. Interviews with a local station manager and a representative of an advertising agency on "unacceptable business."
c. Panel discussions with students presenting different points of view on such topics as
What, if anything, should be done about commercials?
What does the average listener think about commercials?
Who controls the content of radio programs?
What appeals do you think improper in commercials?
Editing or censorship?
d. Symposiums or debates on such issues as

Should the ban on advertising hard liquor (or some other product) be continued?
Do certain giveaway shows violate the lottery law?
Is the 1948 NAB code better than the 1945 version?
Should discussion programs on controversial issues be sponsored?
c. Documentary or dramatized discussions, for example:

Petrillo and the AFM
A parent-teacher meeting discusses commercials on children's shows
Representatives of the sponsor, the advertising agency, and the network discuss sample commercials
A meeting of the Association for Better Radio Listening
A "court room" scene in which a sponsor is charged with violating a code
6. Broadcast to the class a four-minute talk, supplementing the information in this chapter with that found in one of the suggested readings or in a current publication.
7. Broadcast to the class a three-minute newscast in a series, "Television News and Views."
8. Have four or five members read to the class examples of commercials that, in their opinion, violate the code. The reading should be followed by class discussion.

## READINGS

Allen, Dorothea, "The British Way of Radio," Hollywood Quarterly, No. 4, 1949, pp. 362-368.
Bryson, Lyman (editor), Time for Reason about Radio, George W. Stewart, Inc., 1948, part 2.

Chester, Giraud, and Garrison, Garnet, Radio and Television, Ap-pleton-Century-Crofts, 1950, chap. 11.
"Is Radio Assuming Its Post War Responsibilities?" Education on the Air, 1946, Ohio State University Press, pp. 95-105.
Lear, John, "You Can't Say That on the Air," Saturday Evening Post, July 12, 1947, pp. 22 ff.
National Association of Broadcasters, Management in the Public Interest, Washington, D.C., 1945.
"Organized Radio Listeners," Educaiion on the Air, 1949, Ohio State University Press, pp. 354-366.
"Radio Program Controls: a Network of Inadequacy," Yale Law Journal, December, 1947, pp. 275-294.
Rose, Cornelia B., National Policy for Radio Broadcasting, Harper \& . Brothers, 1940.
Shaw, Robert, "Forms of Censorship," Hollywood Quarterly, January, 1946, pp. 199-210.
Waller, Judith, Radio: the Fifth Estate, Houghton Mifflin Company, 1946, chap. 5.
White, Llewellyn, The American Radio, University of Chicago Press, 1947, chaps. 4, 20.

## THE ART OF

 BROADCASTINGTHE word "art" has various meanings. We use it here to refer, first, to skilled workmanship and, second, to programs that are beautiful or of lasting value. Thus, we judge broadcasts by two standards: functional and aesthetic. Much confusion in discussions of the significance of radio programs arises from failure to distinguish between these two often conflicting standards. We raise, then, these questions: Have broadcasters developed skilled and efficient methods of conveying information, entertaining listeners, and selling goods? Have they developed an aural art of significance and permanent value?

## PROGRAMSTANDARDS

We begin our consideration of these questions by reminding ourselves that radio, like the telephone, is simply a method of communication, used for many purposes and with varying degrees of efficiency. Broadcasts range from stockmarket reports, where clearness of articulation and accuracy
of information are of the greatest importance, to music and drama that rightly win the praise of professional critics. Broadcasting merits neither blanket praise or universal condemnation. Each program should be judged in terms of its listeners and its objectives.

## - THE CRITICS VS. THE BROADCASTING INDUSTRY.

 The casual critic notes the conflict between those who think of radio as "show business" and those who regard it as a means of broadcasting culture. But this conflict is not peculiar to radio. It exists between the Broadway producer and those active in the Little Theater, between writers of detective stories and those aspiring to produce the great American novel.These critics often ignore financial realities. The Broadway producer has invested thousands of dollars before the opening night. If the playgoers stay away in large numbers, he must recoup his losses by putting on a popular play or become an ex-producer. The publisher relies on an occasional best seller to compensate for books that do not pay their way. The network broadcaster is constantly reminded that his show must attract millions of listeners if his contract is to be renewed. Moreover, salaries of writers, actors, directors, and musicians depend on the producer's or publisher's success in "giving the public what it wants." These individuals should not be criticized too harshly if they stand where they can see the line at the box office and hear the sound of the cash register.

Commercial broadcasters rightly call attention to the conditions under which they work. Their sponsors are spending large sums, sometimes millions of dollars annually, to advertise their products. To justify these expenditures, they must reach as many potential buyers as possible. Sponsors and broadcasters alike must repress any desires for a program that would rank high on the artistic scale in favor of one with mass appeal. However, there are exceptions. An increasing
number of sponsors interested in creating good will for a business or industry rather than in selling a low-cost, widely used product, have found that symphonies, forums, and similar programs attract sizable audiences of the people they want to reach. Not every successful program needs to be directed at the listener who spells out words as he reads and follows lines with his finger.

In evaluating programs, we should remember that most of them are written and produced in a hurry. The writer must turn out a show a week, sometimes two or three soap opera episodes a day. The director has at most a few hours in which to select and rehearse his cast. The commentator must speak with assumed authority, but inadequate preparation, on whatever topic is of current importance. Since we cannot reasonably expect from ordinary broadcasts much of significance or permanent value, they should be judged by journalistic, rather than literary standards.

We hasten to add that the industry is producing an increasing number of quality programs. A good many are sustaining features that produce no revenue. Business offices do not usually favor production budgets for such features comparable to amounts spent on commercial shows. It must be admitted, too, that these sustaining programs are often scheduled for the less desirable, and less salable, hours.

The industry might well increase its budgets for experimentation designed to develop new program forms. The limited ventures there have been in this field have yielded valuable results. In learning how to broadcast symphonies, directors discovered facts about microphone placement, studio arrangements, and adapting music for radio that have benefited all musical programs. From attempts to improve discussions, broadcasters have found ways of making talks programs more interesting and hence more effective. Writers of "experimental" drama have developed techniques of structure and production that have been widely adopted.

## - listening CONDitions affect program

 STANDARDS. In an earlier chapter we noted that the radio listener at home is subject to distractions not usually present when he is in the theater, concert auditorium, or lecture hall. Moreover, there is in most instances little psychological preparation for home listening comparable to dressing up, driving downtown, finding a parking place, pushing your way through the lobby, being shown to a seat. Most of these audiences come with a sense of expectancy, a desire to hear the speaker, a willingness to be entertained.The broadcaster cannot rely on this physical and mental preparation. His attempts to compensate for this lack often result in exaggeration to catch attention, heightened emotionalism to hold attention, and simple, slow-moving plots so the listener may be interrupted without losing the thread of the story. Regardless of what the critics say about them, writers of daytime serials have found a way to hold the attention of large audiences under adverse listening conditions. An important reason for the popularity of musical programs is that they do not require continuous listening.

- LISTENING TO BROADCAST MUSIC. The broadcasting of the best music by standard (AM) stations has never been satisfactory to trained musicians. The difficulties involve frequency range, intensity range, and auditory perspective.

Standard broadcasting stations do very well for popular orchestras whose music does not usually vary greatly in volume or intensity. For symphonic music the situation is quite different. Standard stations have about half the frequency range needed to transmit the tonal color and quality of the music produced by a good symphony orchestra. Symphonic music is likely to range from very soft to very loud, varying as much as eighty-five decibels in intensity. To safeguard equipment and to avoid fading or blasting, studio engineers
tend to reduce the power at the input when the orchestra plays very loudly and to increase the power when it plays softly, holding to variations of about thirty decibels. This means, of course, that much of the expressiveness of concert music is lost in broadcasting. Frequency modulation equipment largely overcomes these difficulties.

Auditory perspective refers to general acoustic effects on the ear. When you listen to music in a concert hall you hear through both ears the sounds produced by the orchestra, plus the reflections of the sound from ceiling, walls, and floor. When the music is broadcast, however, the microphone usually picks up the sound from a single source. The microphone acts as a single ear; so does the radio receiver. Even the use of a number of microphones does not completely rectify this loss, nor does the use of FM transmitters.

- LISTENING TO BROADCAST DRAMA. We speak of going to the theater to see a play, or of staying home to hear a broadcast version. Of course, at the theater we hope to hear the actors as well as to see the acting, costumes, and scenery. The common assumption is that two senses are better than one. Although this may be true in many, even most, instances, it is not true of all broadcast drama.

The radio play has a freedom to move about in time and space which is difficult to achieve on the stage. The radio playwright does not worry about renting costumes, borrowing furniture, or building stage sets. He can place his actors in a room, on a mountain, in a rocket ship, even among the planets with Buck Rogers. With a musical bridge and a sound effect or two, he can shift scenes from a house to a battlefield, from Florida to Siberia, from Earth to Mercury.

Television and the cinema have this freedom in time and space, too, but the broadcast drama has a psychological advantage. The theater and television show the stage set as the producer imagines it; but the listener to the radio play is free
to picture for himself both the scene and the appearance of the characters. These mind-pictures vary greatly among listeners, for each must create his vision from his own past experiences. And because he has done this, each is satisfied. For this reason, radio is the most intimate of all dramatic media. The listener is freer to use his imagination not only as to how things look, but also as to temperatures, odors, muscle stresses, and tastes.

In time duration and time shifts, too, broadcasting can create the greatest sense of reality. The illusion that an hour or a generation has passed is simply accomplished by the use of fades, montage, or sound effects. Time shifts from century to century, forward or backward, are thus effected in a few seconds, as contrasted with the ten-minute intervals in the theater while the stage crew changes the set, the actors change costumes, and the audience is reminded that one may smoke only in the outer lobby.

The use of acoustic perspective, with such devices as echo chambers and rooms with sound absorbent walls to suggest action in caves or out-of-doors, was developed by radio producers. The use of musical instruments, sound, sound-filtered voices to suggest characterization, psychological attitude, mood or action, is another radio contribution.

## - LISTENING TO CONTROVERSY. Until recently at

 least, directors of commercial stations have generally avoided plays with controversial themes and those that stress imperfections in our capitalistic system. They often broadcast programs of recorded music in preference to network forums and documentaries. Listeners, say these program directors, want to be entertained, to look on the sunny side of life.There are, however, other reasons. The radio audience, according to many broadcasters, is among the least selective, least trained in critical listening, and most conservative, of audiences. Officials of companies that use radio to advertise
their products also tend to be conservative. Broadcasters, naturally enough, do not want to offend either listeners or sponsors. They know, too, that drama is essentially emotional and tends to exaggerate by using extreme, or at least untypical, examples. Various combinations of these reasons keep most broadcasting to the right of center.

## STEPS IN PROGRAM DEVELOPMENT

At first radio was thought of as a mechanical device for transmitting familiar program forms, talks, music, athletic events, plays, etc. But experience showed that alterations in the methods of presentation made the program more effective. Gradually it became apparent that these changes constituted real differences and a new art form began to emerge.

- THE RADIO PLAY. Radio drama followed, in its development, these three steps: direct borrowing, adaptation, and creation. At first, broadcasters set up microphones in the theater and attempted to put the stage play on the air. Then lines which depended on vision for clarity were cut, and lines written in to let the radio audience know what the actors were doing. By 1926 plays were written especially for radio; by 1934 writers were developing radio drama as a distinct art form.

Admittedly, the radio dramatist faces some handicaps. He is often required to write for fifteen- or thirty-minute programs. In such instances he must avoid abstract themes, situations that can only be understood by those with broad cultural background, or dialogue which will be appreciated by listeners with literary or dramatic training. These limitations often result in simple situations, broad characterizations, and plots based on common denominators of human experience. Radio listeners know that such emotions as love and hate, fear and courage, greed and generosity, are the mainsprings of human action, and they like to be able to recognize the
motivation. They may not recognize the more subtle presentation of idea and motivation in "Beyond the Horizon," "The Glass Menagerie," or "The Devil Passes." To judge the usual radio play by the standards of the dramatic critic is like judg. ing the square dance by the stylistic concepts of the ballet.

There is, however, a danger in encouraging radio dramatists to write only for the unselected audience. If we give people only what they like, they do not have the chance to develop an appreciation for anything else. Broadcast schedules should, and do, include plays for the more sophisticated listeners. But the improvement of radio drama does not mean that it should more closely resemble stage plays. It means, rather, continued experiments in creating programs conceived in terms of the medium, its capacity for expression in sound alone, and its freedom in time and space.

- RADIO MUSIC. The most obvious thing to say about broadcast music is that radio has developed an appreciation of good music.

The initial scepticism of many program directors gave classical and semiclassical music little chance on the air. But the pioneer broadcasts of the Damrosch Appreciation Hour and the New York Philharmonic Orchestra helped remove or lessen this scepticism. In 1930-1931 the Cities' Service concerts ranked among the top ten evening programs in popularity. In 1933-1934 the Metropolitan Opera and the Philadelphia, New York, and Minneapolis Symphonies obtained sponsors. So did such first-rank musicians as Albert Spalding, Jascha Heifetz, Carmella Ponselle, John McCormack, Nino Martini, Lawrence Tibbett, and Richard Crooks. The Metropolitan Opera was a leading daytime broadcast from 1933 to 1937. Programs of semiclassical music, like the Voice of Firestone, the Ford Sunday Evening Hour, the Bayer Program, and the Boston Symphony had good audience ratings for years.

Recently, sponsors for concert music have been somewhat harder to find. Increased salaries of union musicians is partly responsible. However, popular bands have included more classical and semiclassical selections in their programs. Furthermore, classical music stations like WQXR, KFAC, KSMO, and WQQW found that good music is good business in cities of $2,500,000$ or more.

Broadcasters tried to adapt concert and operatic music to radio by reducing variations in volume, by setting up batteries of microphones to secure a proper balance of sounds, and by having commentators summarize the story and tell what is taking place in the concert hall.

Then the art of radio music was conceived. Music was written to conform to radio's mechanical limitations. Pitch range does not exceed that of reasonably good AM equipment; there are no extreme variations in volume; the instruments included can be grouped around the microphones with less loss in acoustic perspective. Musicians have written operas which require little movement about the stage. The story moves more rapidly than in standard operatic forms; there are fewer arias and solos that do not advance the plot. The preparation of original music to heighten the mood or symbolize the actions of a play is almost a daily occurrence.

- TALKS. The simplest thing to do, though often not the most effective, is to set a microphone before the speaker and tell him when to start and when to stop. But broadcasters have developed a number of talk forms especially suited to the medium.

Dramatized news was distinctly a radio creation, borrowed by the cinema with success. The news summary has no counterpart in the newspaper. On-the-spot broadcasts, with or without television, achieve a sense of dramatic immediacy not previously possible. Before the days of radio, the journalist
used the interview to gather materials for his story; now he puts it on the air. In style, content, and method, the news commentary differs from the editorial and the syndicated column. The quiz programs have some distant relationship to the spelling matches of an earlier day but certainly no parallel in modern communication.

- HYBRID FORMS. Radio and recording equipment make possible the effective blending of program types in a single broadcast. The lecturer may use dramatized examples, whether actual or hypothetical, to state his problem and illustrate his points. He can use portable recording equipment to bring to his listeners the voice and views of individuals who cannot be present in the studio. The radio dramatist created the narrator, usually one of the main characters in the play, who tells the story and fades out as the actors begin to speak their lines. A radio debate may begin with one or more dramatized scenes that reveal the problem and state the issues. Expert opinion may, on occasion, be recorded and introduced at the proper point in the argument.

These hybrid forms are particularly effective when they combine the imaginary and the real. The 1949 series "CBS Was There" placed a newscaster at the scene of events as far removed in time and space as the destruction of Carthage and the dedication of the cemetery at Gettysburg. In an earlier chapter, we referred to Orson Welles' "Invasion from Mars," which presented H. G. Wells' story in the form of a newscast so effectively that a million people were panic-stricken.

We have occasional examples of documentary programs that use the dramatic techniques to convey factual information, to present problems in their historical setting, or to urge the necessity of the favored solution. Unfortunately, documentaries, though effective in creating interest in a problem, take considerable time to prepare and are expensive to pro-
duce. For this reason, and because they are usually sustaining features, they appear only occasionally on broadcast schedules.

## A WORD ABOUT TELEVISION

It is too early to do more than hazard a guess about television's eventual contribution to the art of communication. Although some producers are striving toward creative productions, they are handicapped by an administrative attitude that TV is merely a pictorial means of reporting sports and of projecting vaudeville, theater, and cinema. This is essentially the same attitude that retarded the development of radio as an art form before 1937. With a television set we can again speak of seeing a play. In many instances we may see a televised movie film adapted, we hope, to the size of our TV screen and home viewing conditions. It seems clear that televised plays will use the production techniques developed by movie directors.

While we have learned to accept and enjoy broadcasts of recorded music, no one knows just how much is lost when we cannot see the musicians. Television recovers whatever loss there is and may heighten the effect by focusing the camera on sections of the orchestra or by close-up shots of individual performers. Certainly it restores the action and pageantry of the opera; whether it will do much more would seem to depend on the acting ability of the musicians.
The television lecturer can make use of visual demonstrations. The newscaster can refer to maps to locate the country about which he speaks. The dramatic immediacy of a TV sportscast, or other on-the-spot description of an event, cannot be equaled by any other form of reporting.

Dancing, juggling, acrobatics, and the half-forgotten vaudeville acts now play an important part in television programming. The process of adapting these and other forms to the medium is just beginning. It seems likely that we will finally
have television programs that retain the intimacy of radio, the sweep of the cinema, the immediacy of the theater, and in addition something that can properly be called television art.

We began this chapter with two questions: Have the broadcasters developed skilled and efficient methods of conveying information, entertaining listeners and selling goods? Have they developed an aural art of significance and permanent value? The answer to the first question is "Yes." To the second: "Yes, with reservations." The broadcasters have produced more such programs than might be expected when one remembers that the industry must sell goods and services by pleasing most of the people most of the time.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Read to the class, with an appropriate introduction, an example of radio criticism from Variety, the Sunday New York Times, the British New Statesman and Nation, the Saturday Review of Literature, or Broadcasting-Telecasting.
2. Assuming that you are a radio critic of the type described by Landry, Siepmann, or Lazarsfeld, write and broadcast to the class a three-minute criticism of a current program or series. If equipment is available, parts of the program may be recorded and used to illustrate the critical comments.
3. The class may be divided into committees of five or six to produce a series of "Broadcasts on Broadcasting." Each program should deal with a single program type and each individual should analyze a different program. The broadcast might be a discussion in which each committee member gives his observations. Recorded illustrations of good and poor writing and production techniques would be helpful.
4. Groups of four or five may present and discuss recorded programs with high audience ratings, or that have won awards at such occasions as the American Exhibition of Educational Radio Programs. The chairman should introduce the program in not more than 150 words and lead the group in discussing its merits.
5. Groups of four or five may present symposiums or debate forums on such topics as these:
a. What standards should be used in evaluating a program?
b. Is there such a thing as a good daytime serial?
c. Why don't more people listen to "good" programs?
d. What do we mean by the "art" of broadcasting?
e. The effect of listening conditions on program quality
f. What artistic advantages, if any, does the radio play have over televised drama?
g. The critics versus the sponsors
$h$. The effect of broadcast listening on music appreciation
6. Study a program that has had high audience ratings for a number of years and try to determine the reason for its popularity. Report your observations to the class.
7. Examine audience ratings for semiclassical or classical music for the past five years for evidence of increased listener appreciation. The ratings will be found in the Broadcasting Yearbook.

## READINGS

Chester, Giraud, and Garrison, Garnet, Radio and Television, Ap-pleton-Century-Crofts, 1950, chap. 33.
Crosby, J., "Rebel Radio Reviewer," Reader's Digest, November, 1946, pp. 71 ff .
DeVoto, Bernard, "On a Note of Triumph," Harper's Magazine, July, 1945, pp. 33-36.
Duerr, Edwin, Radio and Television Acting, Rinehart \& Co., 1950, chap. 1.
Kaplan, Milton, Radio and Poetry, Columbia University Press, 1949.
Landry, Robert, "Wanted: Radio Critics," Public Opinion Quarterly, vol. 4, 1940, pp. 620-29.
Lazarsfeld, Paul, "Role of Criticism in the Management of Mass Communications," Communications in Modern Society, University of Illinois Press, 1948, pp. 186-204.
Midgley, Ned, The Advertising and Business Side of Radio, PrenticeHall, Inc., 1948, chap. 20.
Reis, Irving, "Radio as an Art Form," Educational Broadcasting, 1937, University of Chicago Press, pp. 283-305.
"Revolt against Radio," Fortune, March, 1947, pp. 100 ff.
Seldes, Gilbert, "How Dense is the Mass?" Atlantic Monthly, November, 1948, pp. 23-27.
Siepmann, Charles A., "Further Thoughts on Radio Criticism," Public Opinion Quarterly, vol. 5, 1941, pp. 308-312.
Titterton, L. M., "Radio and Its Progeny," American Scholar, vol. 10, 1941, pp. 498-506.

Weaver, Luther, The Technique of Radio Writing, Prentice-Hall, Inc., 1948, chap. 18.
"What Will Television Do to American Life?" Education on the Air, 1949, Ohio State University Press, pp. 39-72.
Williams, Albert N., Listening, University of Denver Press, 1948.

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## PLANNING THE BROADCAST

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## chapter 8

## CHOOSING THE



From the preceding chapters you have gained a general understanding of the broadcasting business. However, you are not ready to ask a program manager for time on the air. He will properly expect you to have considered these basic questions: (1) What listeners do you hope to attract? (2) What effect do you wish to produce on them? (3) What type of programs do you propose?

## PROGRAM CLASSIFICATIONS

This seems as good a place as any to explain the various, and sometimes confusing, categories commonly used in classifying radio programs. This confusion arises from the fact that different bases are used, sometimes in the same listing of program types.

[^9]1. A commercial program is one paid for by a sponsor, or one that is interrupted by a spot commercial at intervals of less than fifteen minutes.
2. A sustaining program is neither paid for by a sponsor nor interrupted by spot commercials.
3. A network program is furnished to the station by a network or another station.
4. A recorded program uses phonograph records, electrical transscriptions, or other means of mechanical reproduction, for the main part of the broadcast.
5. A wire program is one where the text is distributed to the stations by telephone, telegraph, or similar means, and read by a local announcer.
6. A live broadcast, in contrast to recorded programs, uses live talent, whether originating in the studio or by remote control.
7. A sustaining public service announcement is not paid for by a sponsor and is devoted to a nonprofit cause.
8. A spot announcement is paid for by a sponsor to advertise goods or services.
Further distinctions among commercial programs should be noted. Some network programs are not sponsored nationally but are sold to local sponsors by some of the stations: These coöp (for coöperative) shows are therefore sustaining in some towns but commercial in others. A program like "America's Town Meeting of the Air" might even be considered network public service in towns where it is not sponsored, but not technically classified as public service in cities where it is sponsored.

Other programs are sponsored by several advertisers who share the costs and the time devoted to commercials; such shows are classified as participating programs.

- CLASSIFICATION BASED ON PURPOSES. Every good program, like every good speech, has a definite objective which determines the content of the broadcast and colors the manner of its presentation. Writers on communication, whether written or oral, usually list five general ends or purposes, and corresponding tests for measuring success:

1. To convey information. Did the listener learn something of value or gain a better understanding of an important topic?
2. To develop appreciation. Did the listener learn to understand and to enjoy better music, drama, or other literary forms?
3. To form or change attitudes. Did the listener change his attitude on the topic, or form an opinion if he had none?
4. To secure action. Was the listener moved to do what the broadcaster wanted him to do?
5. To amuse or entertain. Did the listener forget his cares and enjoy the program?

Commercial programs usually combine the last two objectives. The advertiser hopes that the listener will enjoy the program and show his gratitude by purchasing the sponsor's product. Somewhat less frequently, the commercial program combines the objective of securing action with the other purposes.

- CLASSIFICATION BASED ON PROGRAM TYPES.

The statement that radio programs consist of words, music, and sound effects, in varying combinations, is true enough but not especially helpful. Somewhat more useful is the listing of programs under these five headings: talks, dramatizations, dramas, music, and variety.

Talk programs include conversations, interviews, discussions, and debates, as well as all types of speeches. The speaker in a talk program is responsible for what he says as well as for his skill in saying it. From this point of view, quiz and audience-participation shows might be classified as talk programs.

Dramatic and dramatized programs use the same general method of telling a story but the story differs. The dramatist decides what kind of play he will write, devises a plot, invents characters, and creates dialogue by imagining what each character would say in that situation. The writer of a dramatization, on the other hand, usually begins with an historical event, an episode in the life of an actual person, or a current
newsworthy situation. His plot and characters come, not from his imagination, but from books, documents, newspapers, or direct observation. His task is to present an authentic story or body of information in dramatic form. But he cannot change the plot or historic characters to suit his fancy. If he invents minor characters or dialogue, he must not alter the overall accuracy of the story.

Broadcast drama ranges from daytime serials and evening continued stories to radio versions of stage plays and occasional drama written especially for radio. Broadcast dramatizations also vary widely, from dramatized commercials and programs based on cases from the files of the Los Angeles police department or the FBI, to scenes from the lives of great men and women and adaptations of great books and Bible stories. The usual classifications of drama, comedy, tragedy, farce, phantasy, melodrama, mystery, etc., may also be used in classifying radio drama.

Musical programs constitute at least half of the average station's broadcast day. The most obvious classification is based upon whether the music is vocal or instrumental, live or recorded. To these may be added categories based on number of performers, kinds of musical instruments, and type of music. As to quality, musical programs may be ranked as hillbilly or western, old favorites, popular, light-popular, semiclassical, or classical. The proper proportion of these types on the station program is a matter of continuing controversy between the listening public and the trained musician. Such popular program titles as "Your Hit Parade," "Hymns of All Churches," "The Album of Familiar Music," and "Western Jamboree" suggest a classification based on content.

The variety program, as the name implies, includes two or more types of material. The comedy-variety show, featuring such veterans of vaudeville days as Jack Benny, Fred Allen, Edgar Bergen, and Bob Hope, has from its inception ranked among our most expensive and most popular radio shows.

Quite another type of variety program might consist, for example, of scenes from plays, poetry, discussion of books, and semiclassical music.

The classification of programs most commonly used in television is very similar. They are listed here in the rank order of the time given them on the air in the three-year period, 1947-1950: ${ }^{2}$ sports, children's shows, variety, dramatic, educational, news, audience participation, music, special events, commentators, discussion. Weather reports and time signals are sometimes listed separately. Any of these could easily be classified under the five general categories which we have listed for radio: talk, drama, dramatization, music, or variety. A further distinction is made letween live programs, sound-on-film, and the combination of film and live voices.

## - CLASSIFICATION BASED ON PROGRAM CONTENT.

The station log often contains such entries as European News, Religion in the News, News and Views, The National Radio Pulpit, Sports Round-Up, Capitol Comment, Music Appreciation Hour, Hymns of All Churches, and the Revival Hour.

## - CLASSIFICATION BASED ON INTENDED LISTEN.

 $E R S$. In some instances this category is hard to distinguish from that based on program content. However, most writers on broadcasting list separately women's programs, programs for children, and school broadcasts.Our purpose in giving these classifications is to indicate the decisions that must be made by someone before a program goes on the air. The factors that should be considered in making these decisions are discussed in this and subsequent chapters.

## ANALYZINGTHEINTENDED AUDIENCE

The most obvious thing to say here is that the audience should be analyzed with relation to the purpose of the broad-
${ }^{2}$ Based on summaries in "Telestatus," Broadcasting.
cast. The advertiser of dog food wants to attract an audience of dog owners. The store that specializes in men's work clothes might have a large audience but not the right audience. The program that aims to create good will for an organization or a cause may succeed with a relatively small audience that includes a fair quota of community leaders. The broadcaster, having decided what listeners he wishes to reach, looks about for a program that will attract and hold them.

A large proportion of commercial broadcasts advertise such products as candy bars, soft drinks, household cleaners, breakfast foods, remedies for headache or the common cold, and tobacco. These are low-cost items that are purchased frequently by a large proportion of the listening audience. To these advertisers the number of listeners is of great importance. Consequently they are on the lookout for programs with "mass appeal." Studies are constantly in progress to determine program popularity. For instance, Lazarsfeld and Kendall ${ }^{3}$ found that in 1948, comedy programs, newscasts, sports broadcasts, popular music, and mysteries were liked about equally by the general audience, and were typical of American radio. In 1950 the TV programs highest on the popularity list were variety, drama, sports, and audienceparticipation shows.

Obviously the program planner should not overlook differences in program preferences based on the listeners' age, sex, education, occupation, economic status, and place of residence. These differences should be considered in choosing the type of program for a projected series.

- AGE AND PROGRAM PREFERENCES. We are frequently told that boys and girls like the same programs as their elders. The accuracy of this statement depends on such factors as age and home environment. It is difficult to get

[^10]dependable data on program preferences of the very young. They cannot fill out the usual questionnaires, and reports from parents and teachers may not be wholly objective. We here report a few recent studies, some of which also compare the preference of boys and girls.

Sara Cohen found that in Oklahoma City schools the only major difference in program preferences between pupils aged seven and eight and those aged nine and ten was that the younger ones liked storytelling better. ${ }^{\text {a }}$

In 1943 the Blue Network (now ABC) studied the program preferences of 3000 boys and girls in twenty-nine cities. Between the ages of eight and twelve, boys showed increased interest in "thriller" dramas and popular orchestras and a decreasing preference for afternoon serials. Girls in the same age bracket had increasing interest in thriller dramas, popular orchestras, action and sophisticated detective stories, and decreasing preference for afternoon serials.

Between ages twelve and sixteen, boys showed increased interest in thriller dramas and popular orchestras, decreased preference for afternoon serials, children's once-a-week shows, and, suprisingly, quiz programs. Girls from twelve to sixteen showed increased liking only for popular orchestras, decreased preference for action and sophisticated detective shows, family drama, afternoon and evening serials, thrillers, and once-a-week "kid shows."

Advertisers are now coming to recognize that teen-agers constitute a large market and that there are few programs tailored to fit their interests. Sponsors who have tried to reach the teen-age consumer report the most success from programs of popular music-especially disk jockeys-audience participation shows, and fast-paced variety programs.

For a number of years, F. L. Whan ${ }^{5}$ has conducted exten-

[^11]sive surveys of radio listening in Iowa. The 1950 survey, for example, included interviews with members of 9215 families, classified in three age groups: 21 to 35 years, 36 to 50 years, and over 50 . The persons interviewed were asked to choose from a list of fifteen types of programs the five they liked best. The first table, including those items on which there is the greatest difference, indicates the percentages of each age group that selected the program type. (Fractions of percentages are omitted in this and the following tables.)

| Type | Women |  |  | Men |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $21-35$ | $36-50$ | Over | $21-35$ | $36-50$ | Over <br> 50 |
|  |  |  |  |  |  |  |
| News broadcasts | 72 | 77 | 78 | 80 | 85 | 85 |
| Popular music | $64^{a}$ | 43 | 25 | 64 | 37 | 25 |
| Complete drama | 46 | 36 | 26 | 38 | 27 | 17 |
| Old-time music | 19 | 22 | 30 | 23 | 29 | 37 |
| Religious programs | 20 | 33 | 49 | 12 | 17 | 33 |
| Talks and comment | 9 | 15 | 21 | 11 | 19 | 25 |
| Sports broadcasts | 33 | 22 | 20 | 54 | 50 | 39 |

- From carlier survey.

Using a slightly different list of programs, Lazarsfeld and Kendall ${ }^{6}$ got similar results from 3529 personal interviews representing a cross section of the United States adult population. The persons interviewed were given a set of cards listing different types of radio programs and asked which types they liked best. The second table shows evening program preferences according to ages of men and women with high-school education. The scores are percentages of the people in each age group.

During the 1948-1949 school year, Raymond Cheydleur ${ }^{7}$ surveyed the radio listening habits of 1270 students in nine Wisconsin high schools located in villages having a population of less than 2500 . The students were given a list of
${ }^{6}$ Op. cit., p. 136.
${ }^{7}$ Unpublished MA Thesis, University of Wisconsin, 1949.
twenty-five program types and asked to choose the five they liked best. The third table shows their preference scores (the best liked type is ranked 1 , etc.).

| Program Type | Boys' <br> Ranking | Girls' <br> Ranking |
| :--- | :---: | :---: |
| Comedy | 1 | 2 |
| Mysteries | 2 | 3 |
| Sportscasts | 3 | 15 |
| Popular music | 4 | 1 |
| Old-time music | 5 | 6 |
| Dance and jazz music | 6 | 4 |
| Giveaway shows | 7 | 7 |
| News | 8 | 9 |
| Band music | 9 | 8 |
| Complete drama | 10 | 5 |

Interest in news broadcasts increases with the age of listeners. High-school boys are more likely than girls to listen to sports programs, less likely to prefer radio plays. Interest in old-time music, religious programs, and talks increases with

| Program Type | $21-29$ | $30-49$ | 50 and <br> Over |
| :--- | :---: | :---: | :---: |
| News broadcasts | 72 | 75 | 79 |
| Comedy programs | 72 | 64 | 57 |
| Popular and dance music | 68 | 56 | 32 |
| Complete dramas | 51 | 39 | 43 |
| Discussions of public issues | 33 | 45 | 54 |
| Sports programs | 41 | 35 | 34 |
| Classical music | 21 | 27 | 36 |

age; the reverse is true of popular music, complete drama, and sports programs. Preferences for classical music, band music, and audience-participation shows are about the same for the different age groups.

- SEX AND PROGRAM PREFERENCES. Whan's ${ }^{8}$ data on program preferences of women and men, regardless of age,
${ }^{8}$ Op. cit., p. 86.
are found in the accompanying table. They were asked to choose from this list the five types of programs they liked best.

Lazarsfeld and Kendall ${ }^{9}$ found a few significant differences between program preferences of men and women. Women thought more highly of quiz programs, audience-participation

| Program Type | Women | Men |
| :--- | :---: | :---: |
| News broadcasts | 72 | 80 |
| Featured comedians | 66 | 71 |
| Audience-participation | 47 | 42 |
| Popular music | 48 | 40 |
| Complete drama | 43 | 33 |
| Variety programs | 32 | 30 |
| Serial drama | 30 | 15 |
| Religious music | 28 | 18 |
| Devotionals | 28 | 18 |
| Classical music | 21 | 16 |
| Old-time music | 19 | 23 |
| Homemaking | 18 | 4 |
| Sports | 17 | 39 |
| Talks and commentary | 15 | 20 |
| Band music | 13 | 14 |
| Market reports | 13 | 25 |
| Talks on farming | 9 | 17 |

shows, complete dramas, and semiclassical music. Men were more likely to prefer newscasts, comedy programs, discussions of public issues, sports programs, and hillbilly or western music. There were no significant differences in other program types.

With all data of this kind, it should be remembered that program tastes differ somewhat from time to time as new types emerge and new personalities become popular. The data presented here are illustrative of many studies.

- EDUCATION AND PROGRAM PREFERENCES. The men and women interviewed in Whan's 1950 Iowa survey were classified in three groups: those who had attended col-
${ }^{9}$ Op. cit., p. 137.
lege, those who had gone to high school, and those who had gone only to grade school. The following table includes only those program types on which education seemed to influence listener preference. ${ }^{10}$

| Program Type | Women |  |  | Men |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coll. | High <br> School | Grade | Coll. | High <br> School | Grade |
|  |  | 47 | 50 | 34 | 51 | 51 |
| Popular music | 46 | 39 | 25 | 35 | 32 | 17 |
| Complete drama | 15 | 24 | 32 | 9 | 10 | 13 |
| Serial drama | 37 | 15 | 10 | 26 | 7 | 6 |
| Classical music | 38 | 31 | 20 | 55 | 32 | 38 |
| Sportscasts | 24 | 13 | 13 | 26 | 15 | 18 |
| Talks, commentary | 24 |  |  |  |  |  |

In the study reported by Lazarsfeld and Kendall, evening program preferences were classified according to the age and education of the persons interviewed. The answers of men and women were not tabulated separately. Only those types in which education seems to influence listener preferences are included in the table on page 138. ${ }^{11}$

It is interesting to note, in this table, the combined influences of age and education. For example, while young people with college backgrounds (age 21-29) rate news higher than do young people with high-school or grade-school education, the older people in each educational category value news more highly than the younger. This also applies to discussions of public issues and classical music. The reverse is true for complete dramas, and mostly true for comedy programs.

- RESIDENCE AND PROGRAM PREFERENCES. Whan's 1947 Iowa survey classified those interviewed as urban, those living in cities of more than 2500; village, those living in villages of less than 2500; and farm, those living on

[^12]| Program Type | College |  |  | High School |  |  | Grade School |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 21-29 | 30-49 | Over 50 | 21-29 | 30-49 | Over 50 | 21-29 | 30-49 | Over 50 |
| News broadcasts | 75 | 78 | 83 | 72 | 75 | 79 | 61 | 70 | 74 |
| Comedy programs | 70 | 59 | 49 | 72 | 64 | 57 | 55 | 52 | 51 |
| Complete dramas | 61 | 55 | 46 | 51 | 39 | 43 | 44 | 42 | 32 |
| Discussions of public issues | 59 | 63 | 67 | 33 | 45 | 54 | 21 | 37 | 36 |
| Semiclassical music | 55 | 48 | 50 | 28 | 36 | 36 | 14 | 20 | 25 |
| Classical music | 53 | 50 | 61 | 21 | 27 | 36 | 15 | 21 | 24 |
| Hillbilly and western music | 10 | 8 | 19 | 24 | 22 | 20 | 42 | 39 | 38 |

farms. Instances of marked differences due presumably to place of residence are noted in the accompanying table. ${ }^{12}$

|  | Women |  |  | Men |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Village | Farm | Urban | Village | Farm |
| News broadcasts | 65 | 75 | 79 | 76 | 81 | 84 |
| Popular music | 52 | 37 | 39 | 48 | 33 | 35 |
| Complete drama | 52 | 37 | 35 | 40 | 31 | 25 |
| Variety programs | 37 | 31 | 27 | 37 | 26 | 23 |
| Classical music | 28 | 20 | 13 | 25 | 12 | 8 |
| Old-tine music | 15 | 21 | 23 | 15 | 28 | 31 |
| Sportscasts | 19 | 16 | 14 | 44 | 41 | 30 |
| Scrial drama | 27 | 35 | 32 | 12 | 18 | 17 |

News broadcasts, heading the list for all groups, are prized most highly by farm men and women. Popular music, complete dramas, variety programs, and classical music appeal most to city dwellers. Sports programs appeal most to city men; serial drama, to women living in villages. The largest audience for old-time music is found in rural areas.

[^13]There are regional differences too. Ratings on specific television programs differ in Philadelphia and Boston. Religious music is more popular in the South than elsewhere. Polkas and shottisches, which get little response in the Southwest are well liked in the North Central States. Even within the same occupational groups there are pronounced regional differences. Oklahoma farmers, for example, like hillbilly music much better than do farmers in Iowa. Differences of this sort are important in precision programming.

At present most television sets are in metropolitan areas. Whan found in 1950 that only 1 percent of Iowa farm houses had television sets. This suggests that to reach rural dwellers advertisers will use radio for some time.

## CHOOSING THE PROGRAM

Earlier in this chapter we made the point that every good radio program has a specific purpose and is directed at a definite audience. Assuming that you have made these choices, the next step is to choose the type of program. It would seem easy enough to consult the data on listener preferences and pick the kind of program that members of your hoped-for audience like best. But it is not usually as simple as that. The fact that adults like news broadcasts may not mean that they would like more than are already available. The fact that Wisconsin high-school students ranked news eighth and ninth in their list of program preferences does not prove that they would dislike news for teen-agers. The fact that a good many people like mystery or detective stories does not necessarily mean that they would like more of them. The producer of a sponsored program has the initial task of convincing the advertiser that the program will sell his product-and the continuing task of keeping him convinced that he is getting his money's worth. The producer of a sustaining series must persuade the station manager that his program is building suffi-
cient good will and prestige to compensate for loss of advertising revenue. These problems and others involved in planning a program are discussed in the next chapter.

## EXERCISES AND broadcasting assignments

1. Prepare for broadcasting to a general audience a three-minute talk on a topic discussed in this chapter or in the readings. Your purpose is to make your subject clear and interesting to consumers, rather than producers, of radio programs. See Chapter 11 for advice on these points.
2. In preparation for the quiz show described in Exercise 3, listen to two or three programs of this type. Note how the quiz master is introduced, how he gets the program under way, and what devices he uses to keep listeners interested. Note, also, such points as the amount of time given each contestant, and the qualities of a good competitor. Hand in a report summarizing your findings on these and similar points.
3. Organize a ten-minute quiz show with questions based on this chapter and the readings. The cast should include the quiz master, an assistant, and four contestants who may participate as individuals or as members of two teams. For example, two women may be pitted against two men; two sophomores against two seniors. All six should join in planning the show's format. The quiz master and the assistant prepare the questions. To provide variety, the first round might be true-false questions; the second might require the contestant to pick the right answer from two or three; in the third, he might be asked to answer in one sentence, etc. This part of the plan, including the questions, should be kept secret. Because in some shows the quiz master cannot leave the microphone, the assistant meets the contestants, and sees that they are in the proper place. During the program, he keeps score and delivers the prizes.
4. Assume that an advertising agency is auditioning commercials and choosing the announcer for a sponsor's program. The cast includes two writers, two announcers, representatives of the agency, the sponsor, and the station or network. Each writer prepares two or three specimen commercials which are read alternately by the two announcers. After the audition the representatives discuss both commercials and announcers and make their choice.
5. In preparation for the preceding assignment, listen to a number of commercials. Choose the one you like best and submit a report describing each commercial and giving reasons for your choice.
6. Assume that representatives of an advertising agency and a local station are trying to sell class $B$ or $C$ time to a sponsor. Broadcast a ten-minute sales' conference, either ad lib or from script as your teacher may prefer.
7. Representatives of an advertising agency and a local station may discuss with a sponsor the relative merits of
a. A program and spot announcements
b. Transcribed package shows and live programs
c. Semiclassical and popular music
d. Mysteries and news reports, etc.

The discussion should begin with a description of the sponsor's product and the age, sex, and place of residence of prospective purchasers.
8. Some of the topics listed above, and others considered in this chapter, may be presented in authority interviews with class members representing the advertising agency, the sponsor, or the polling agency that gathered data on listener preferences.
9. Suppose a local radio station wishes a sponsor for $7: 00$ to $7: 15$ A.M., across the board. Have three students prepare sales talks, each for a different prospective sponsor.
10. As program manager of a local station, you are discussing public service broadcasting with representatives of the PTA, the Red Cross, and the community union. In a ten-minute broadcast, consider the time available and the type of program best suited to each group.
11. Assignments 9 and 10 may also be used for television programs.

## READINGS

Abbot, Waldo, Handbook of Broadcasting, 3rd ed., McGraw-Hill Book Company, 1950, chap. 3.
Callahan, Jennie W., Radio Workshop for Children, McGraw-Hill Book Company, 1948, part 4.
Federal Communications Commission, Public Service Responsibility of Broadcast Licensees, March 7, 1946, chap. 2.
"How to Build and Produce a Successful Radio Program," Education on the Air, 1948, Ohio State University Press, pp. 249-278 (a symposium).

Lazarsfeld, Paul, and Kendall, Patricia, Radio Listening in America, Prentice-Hall, Inc., 1948.
Levenson, William B., Teaching Through Radio, Farrar and Rinehart, 1945, chap. 5.
McMillin, John, "Principles and Problems of Daytime Radio Programming," Education on the Air, 1943, Ohio State University

- Press, pp. 349-356.

Parker, Everett C., and Others, Religious Broadcasting, Harper \& Brothers, 1948, sec. 1.
Poole, Lynn, Science via Television, Johns Hopkins University Press, 1950, chap. 2.
Read, Conyers, "Problems of Program Organization," Radio and Education, 1935, University of Chicago Press, pp. 158-162.
Sandage, C. H., Radio Advertising for Retailers, Harvard University Press, 1946, pp. 152-178.
Waller, Judith, Radio: the Fifth Estate, Houghton Mifflin Company, 1946, chap. 6.

## chapter 9

## PLANNING

 THE PROGRAMIN THIS chapter we discuss further questions that must be answered before the advertiser agrees to become a sponsor. Although these questions apply most directly to commercial broadcasts, they deal also with matters that should be considered by producers of sustaining programs.

CHOOSING THE SPECIFIC OBJECTIVE
Commercial broadcasters have one of these objectives: to popularize a brand name so people will ask for it at their local stores; to persuade people to patronize the sponsor's store or to buy his services; to get people to send money for articles described on the air; or to win good will for a business or industry. In terms of method, these types are commonly called brand advertising, direct selling, and institutional advertising.

National advertisers make extensive use of brand advertising. Those who sponsor programs hope to attract large numbers of appreciative listeners who are also prospective
purchasers. These advertisers spend large sums of money in the belief that enjoyment of the programs will be expressed in increased sales of the product. There is evidence to support this belief. A few years ago, the Columbia Broadcasting System employed Elmo Roper to study the sales effectiveness of the network's forty sponsored evening programs. He found that in every case those who listened to the broadcasts were more likely to use the product than were nonlisteners; that regular listeners were more likely to buy the product than were occasional listeners. Spot announcements are also used in brand advertising. The listener learns the brand name through sheer repetition.

Recent studies, notably one by Hofstra for NBC, show that TV owners substantially increase their purchases of brands advertised by sponsors of television programs. The percentages of increase were: cigarettes, 18.9; razor blades, 28.3; coffee, 17.9; soap, 27.1; gasoline, 60.2; cheese, 16.8 ; tea, 38.1 ; and dentifrices, 27.1. ${ }^{1}$

Occasionally radio is used for direct selling. The listener is urged to send cash with his order for the advertised article. This method is generally limited to nonrepeat items selling for not more than two dollars--seasonal items, such as shrubs during planting season, and novelty items of various sorts. Farm people are more likely to respond to direct sales advertising than are city dwellers; people with low incomes, than those in higher-income brackets.

Institutional advertising is occasionally used by single units of considerable size, but more frequently by large businesses or industries. Department stores, for example, may combine institutional advertising to build good will for the store with direct advertising of certain articles. Corporations and industries may sponsor outstanding programs, such as Du Pont's "Cavalcade of America," or "The Telephone Hour," to gain prestige and favorable public opinion. Some,

[^14]like General Electric, combine institutional advertising to gain good will with direct advertising of certain articles.

Producers of noncommercial public-service programs may have as their objective winning good will for the Red Cross or the United Nations; getting subscriptions for the Community Chest, or members for the Parent-Teachers' Association; winning public support for increasing teachers' salaries or buying fire-fighting equipment.

An early decision must be made among networks, transcriptions, and individual stations. Only manufacturers of nationally distributed items attempt to blanket the country with network programs. Those who sell regionally distributed items use regional networks or individual stations in the area. Sponsors whose products have a spotty distribution can use transcriptions or spot ads, either to bolster sales in weak areas or to continue promotion in more profitable market areas. Local businesses such as retail stores naturally use only local outlets.

Another choice must be made between stations with differing coverage. Some products are intended primarily for farmers. Since some stations specialize in rural appeal and have good coverage in farming areas, they would be a good choice for the manufacturer of stock food or farm supplies, but they might be a poor choice for other products.

## CHOOSING PROGRAM LENGTH <br> AND FREQUENCY

This brings the advertiser at once to the size of his radio budget and the perplexing question of how to get the most for his money. Should he buy spot commercials or sponsor a program? If he decides to become a sponsor, what length program is best suited to his purse and purpose? How shall he decide between program length and frequency?

In the available space, we can do little more than suggest
ways of arriving at answers to these questions. Wolfe ${ }^{2}$ advises local advertisers to "plan a minimum campaign period of not less than six months" and to allot at least 15 or 20 percent of the total advertising budget to radio. He cautions department stores not to undertake institutional advertising unless they are willing to stay on the air for a year. This does not mean that radio cannot be used effectively for shorter periods to advertise special events.

With this information in mind, the advertiser should decide whether to buy more time for six months or less expensive programs for a year. In Standard Rate and Data Service he will find the rate cards for all stations and networks. He will learn that time costs vary with the number of people living in the station's service area, time of day at which the broadcast is scheduled, and number of programs included in the contract.

Consider, for example, the rate card of a 250 -watt station in a Midwestern city with 20,000 inhabitants. Three sets of rates are quoted: Class A Time, 11:30 A.m. to 1:00 P.m., 6:00 to 10:00 p.м., and all day Sunday; Class B Time, 8:00 to 11:30 А.м. and 11:00 to 6:00 p.м.; Class C Time, 6:00 to 8:00 A.M. and 10:00 P.m. to midnight.

The rates for one hour are shown in dollars in the accompanying schedule.

> Class A Class B Class C

| 1 broadcast | 80 | 60 | 40 |
| :---: | :---: | :---: | :---: |
| 52 broadcasts | 68 | 51 | 34 |

On Class A Time, a fifteen-minute period costs $\$ 32$ for a single program; one minute, $\$ 8.75$; a 100 -word spot $\$ 5.25$. There are proportional discounts for Class B and C Times, and for contracts covering more than one broadcast.

The advertiser on this station can buy six 100 -word com-
${ }^{2}$ Charles H. Wolfe, Modern Radio Advertising, Funk \& Wagnalls Company, 1949, pp. 432, 452.
mercials for the price of a fifteen-minute program period. He would get as much, if not more, time for commercials and avoid the trouble and expense of providing a program. Much the same situation prevails on many stations. This is an important factor in the increasing use of spot commercials. In 1949 spot commercials accounted for 26 percent of the total revenue of United States' stations.

The advertiser must also decide whether to use radio, television, or both. If he wants to reach well-to-do metropolitan consumers, he might well include TV in his campaign, though the cost will be approximately ten times that of comparable radio coverage.

## CHOOSING PROGRAM CONTENT

The sponsor who uses spot commercials usually has only a limited authority over what happens between them. If he is buying a large number, he may stipulate that the commercials be read by a certain announcer or by his favorite disk jockey. If the station has a shopper's guide, or an individual who reads a number of commercials in a conversation about almost any subject, the spot advertiser may insist that his commercials be included in such broadcasts.

The advertiser who buys radio time has control, within limits set by station or network policies, over the program as well as the commercials. In choosing the program, he should consider these factors:

1. The program should create the desired mood or atmosphere. The sponsor who wishes his department store to be known as a friendly place, the headquarters for shoppers who drive in from farm and village for the day, should see that this spirit is reflected both in the broadcasts and in the store. A program designed to attract depositors to a bank would differ in mood from one intended to sell kiss-proof lipstick.
2. The content as well as the mood of the program should be appropriate. The giveaway show, particularly the one called "Break the Bank," would not be sponsored by a bank. "Songs My Mother Used
to Sing" would be inappropriate for a broadcast advertising cigarettes or beer. Church services are appropriately sponsored only by a church. On the other hand, much of the standard radio program fare-newscasts, comedy, daytime and evening serials, popular music -are suitable for varied sponsorship.
3. The program should, of course, interest the intended listeners. Information on listener preferences is presented rather fully in the preceding chapter. However, the advertiser should not overestimate the value of this data. The persons interviewed were expressing preference for a program type, not for a specific program. The fact that young people choose mystery programs more frequently than do their elders does not mean that men over fifty will not enjoy a mystery program that is written especially for them. The fact that interest in comedy programs decreases with age should not cause the sponsor to forget that at least half of the men and women over fifty included comedies in their list of preferences.

In their understandable eagerness to reach mass audiences, advertisers tend to neglect such groups as "teen-agers," those in upper-income brackets, and citizens of foreign birth. The teen-age group, they say, listens to adult programs, but this may be only in preference to fairy stories for the very young, and such programs as "Jack Armstrong," or "Terry and the Pirates." Ask any parent of youngsters aged ten to twelve or thirteen if they see eye-to-eye on such matters as candy bars, slacks, or the educational values of beginning algebra.

Those with incomes of 5000 dollars and above constitute only 7 or 8 percent of the population, but, as Wolfe ${ }^{3}$ says, "they constitute an important market, especially for luxury items." Members of this group listen to the radio less than those in lower-income brackets. This is partly because they can afford other sources of information and entertainment and partly because many broadcasts do not interest them. They prefer, to quote Wolfe again, "classical and semi-classical music, educational programs, and more mature, penetrating news commentaries." This group should not be neglected by sponsors who wish to build good will for their product or industry.
${ }^{3}$ Ibid., pp. 179-180.

In most large cities and some rural areas, citizens of foreign birth and their families constitute important minority groups. They have a natural love of the language and culture of their mother countries. At the same time, they need to know our history, our traditions, and our strange ways of saying things. Some foreign language stations exist but, in our opinion, they are not the best answer to the problem. Local station managers would do well to provide both commercial and sustaining programs for these foreign language groups.

## CALLING FAVORABLE ATTENTION TO THE PRODUCT

Commercials produce all of the commercial station's income and most of the station manager's headaches. On the one hand, he has to satisfy the sponsor who pays for the programs and wants to be sure that everyone hears about his product; on the other, he must satisfy listeners who are more interested in the program than in continued praise of the product.

Early steps to control advertising excesses were taken by the networks and the National Association of Broadcasters, who adopted codes giving maximum commercial time allowable for programs of various length and listing products unacceptable for broadcast advertising. Advertising agencies also try to convince sponsors that the law of diminishing returns operates in this field; that a two-minute commercial may only be half as effective, instead of twice as good, as a oneminute announcement. The FCC does not set limits on commercials; it may, however, consider a station's record in this matter when it applies for a renewal of its license.

In 1947 the National Association of Broadcasters sponsored a study of public attitudes toward broadcasting. The survey, conducted by a professional polling agency, National Opinion Research Center (NORC), is reported by Lazarsfeld and Kendall. ${ }^{4}$ Of those interviewed, 32 percent said they were
${ }^{4}$ Paul Lazarsfeld and Patricia Kendall, Radio Listening in America, Pren-tice-Hall, Inc., pp. 61, 142.
in favor of radio advertising; 35 percent, that they didn't particularly mind it; 22 percent, that they didn't like radio advertising but would put up with it; 9 percent, that they would like to cut out all radio advertising; 2 percent, that they had no opinion. The survey went further than this and asked those interviewed whether they agreed or disagreed with eight statements about radio commercials. In response to these questions, 60 percent said that commercials spoil the program by interrupting it; 60 percent, that they claim too much for the product; 58 percent, that they are boring and repetitious; 46 percent, that they are noisy and distracting; 46 percent, that they are often in bad taste. On the credit side of the ledger, 74 percent said that commercials give useful information about things they may want to buy; 65 percent, that commercials are worth while because they tell who pays for the program; 63 percent, that commercials are often amusing and entertaining.

Daniel Starch found that the most common objections to television advertising are: "Been on too long-tired of seeing it," "Commercial itself is too long," and "boring, tiring, monotonous, etc." Men complain about commercials on sports events that run over into or obscure the action of the game. ${ }^{5}$

The advertiser should resist the temptation to note that 67 percent of those interviewed either like radio advertising or "didn't particularly mind it" and to dismiss the critics as an unimportant but vocal minority. This minority includes a significant proportion of business and professional people who are likely to be influential in shaping public opinion.

On the other hand, there is good evidence that a commercial in TV "may displease a lot of people and still sell a lot of goods; . . . it may delight practically every viewer exposed to it and still not pay for itself in sales." ${ }^{\prime \prime}$ The same thing holds true in radio.

[^15]Instead of ignoring the critics, the sponsor should find out what the listeners think about his commercials. He cannot get this information from his friends at the club, from members of his sales department, or from letters of commendation or complaint. He should have an impartial survey made of a sample representing a cross section of his listening audience. If even a sizable minority believes that his commercials claim too much, are boring, noisy, overly repetitious, or in poor taste, he had best do something about them, especially if his sales are unsatisfactory.

In most instances, the remedy is clear. But to avoid the effect of interrupting the longer programs with commercials may require some ingenuity. The simplest solution would be to have commercials only at the beginning and end of the program. This is now the practice on various fifteen-minute newscasts. The announcer says, "And now for twelve and one-half minutes of uninterrupted news." In dramatic programs, commercials can be given between the acts; in broadcasts of sports, between quarters or halves, or during time-out periods. The feeling of annoyance is lessened if commercials during the programs are lrief and in the mood of the broadcast. In some comedy and variety shows, commercials are so skillfully woven into the program that they provide part of the entertainment. Starch notes that these integrated commercials are the best liked.

The sponsor, reasonably enough, wants his name or his product associated in the listener's mind with his program. To supply this information, the Hooper agency includes in some of its telephone interviews a question asking whether those who are listening to the radio can give the name of the sponsor or of the product advertised. This Sponsor Identification Analysis produces some interesting and disturbing results. For example, only 16 percent of those listening could correctly identify the sponsor of a high-ranking daytime serial that had 41 percent of the listening audience. Only 38 percent
of those listening to a well-known commentator could name his sponsor, and only 25 percent could identify the sponsor of a symphony orchestra. On the other hand, 90 percent of those listening knew the sponsor of a giveaway show, and 80 percent identified the sponsor of a well-known comedy team.

Authorities on radio advertising are not agreed on the significance of this data. Wolfe ${ }^{7}$ cautions against giving too much importance to it. "There are," he says, "many known successful shows with average and low sponsor identification. ${ }^{37} \mathrm{He}$ cites an instance where a deliberate attempt to increase sponsor identification actually resulted in decreased sales. He does not, however, cite any instances where an advertiser with a high identification rating set about to decrease it.

Here are some devices that aid sponsor identification:

1. When possible, the program should be closely related to the product. For example, a program advertising a magazine might dramatize a story from the current issue.
2. Various promotional tie-ins, to be discussed in the next chapter, can be used to keep the sponsor's name before the public.
3. The program might be built around a personality who comes to symbolize the sponsor's product.
4. After the show is over, the main characters may step to the microphone and say nice things about the sponsor.
5. When the sponsor is willing, good-natured humor can be used in his commercials.

Further information on establishing good will for the product advertised is included in the next chapter.

## CHOOSING THE TIME FOR THE BROADCASTS

Radio time salesmen tell about the manager of a store catering to working men who chose a program of semiclassical music because his wife's friends liked that kind of music, and
${ }^{7}$ Op. cit., pp. 257-258.
bought a quarter-hour beginning at 8:00 A.m. because he liked to listen to the program while he was shaving. But the story has a happy ending. The salesman found out when the working men in that area ate breakfast and persuaded the store manager to sponsor at that time a five-minute news summary including sports news.

This probably fictitious incident makes a vital point. The advertiser should choose a time when those he wishes to reach are free to listen. This fact is reflected in current program schedules. Broadcasts for young children are scheduled between the time they get bome from school and the evening meal. Farmers can be reached early in the morning or during the noon hour. Women who do their own housework are likely to be at home during the morning; they may go visiting or shopping in the afternoon. Early evening hours are often scheduled for family listening. Certain types of commercials are not accepted for Sunday programs, though a large listening audience may be available. The number of listeners decreases during the summer.

Business executives who get to their offices at nine are likely to overlook the amount of early morning listening. Those who conduct telephone surveys do not begin interrupting people until eight o'clock. In his survey of radio listening in Iowa, conducted early in April, Whan's interviewers asked members of 8115 families: "At what time this morning was your radio first turned on?" The figures in the table on page 154 are cumulative percentages. ${ }^{8}$

These early morning hours, from 6:00 to 8:00, are often rated as Class C and sell for about half the prices charged for Class A time. The advertiser with a limited budget should study the listening habits of the people he wishes to reach, to see whether he might get more for his money by using the less expensive hours.

[^16]The new advertiser will often find that the best time for his purposes is sold. The station representative will give him a list of "availabilities" from which he must choose the best one for his purposes. The experienced sponsor likes to get time just before or just after a well-established popular program.

| Hour | Urban | Village | Farm |
| :---: | :---: | :---: | :---: |
| 6:00 А.м. | 6 | 11 | 26 |
| 6:30 А.м. | 12 | 20 | 46 |
| 6:15 А.м. | 14 | 22 | 50 |
| 7:00 А.м. | 31 | 41 | 58 |
| 7:30 А.м. | 41 | 56 | 78 |
| 8:00 А.м. | 54 | 66 | 83 |

In that way he benefits from those who tune in early for that broadcast or do not tune off immediately after its conclusion. The advertiser who uses spot commercials is especially anxious to benefit from an audience developed and entertained by a program sponsor.

## MEETING COMPETITION FOR LISTENERS

Any program, whether sponsored or sustaining, is competing with other programs and other activities. Suppose, for example, that time is available on a local station while Fibber McGee and Molly are doing their network show; when this was written, the Fibleer and Molly program had 53 percent of the listening audience; the other three major networks, 40 percent; while the remaining 7 percent were listening to local stations. To complete the picture, it should be noted that while 83 percent of the families called were at home, only 40 percent of the total number called were listening to the radio. Thus 43 percent were available but for one reason or another were not listening to any broadcast.

Let us further assume that time is also available on a local station at 8:30 in the morning. Although 79 percent of the families called answered the telephone, only 14 percent of the total number called were listening to the radio. Of those listening, 65 percent were tuned to one of the national network offerings and 35 percent to a local station.

In either of these situations, as in many others, the person who plans the program faces difficulties. Should he choose a currently popular program type and enter into direct competition with existing programs? Should he try to do something different with the hope that he can build part of his audience from those who are not listening because they do not care for anything that is on the air at the moment? If he chooses the first alternative and produces a good program he may build an audience at the expense of his competitors. If he chooses the second, he has the problem of converting nonlisteners into listeners.

An advertising agency was asked to recommend a summer replacement for a sponsor's winter half-hour variety program. The agency executives noted that comedy shows preceded and followed the sponsor's time slot, and that three competing networks carried detective stories at that time. There seemed to be three alternatives: (1) Another detective story, "on the theory that this was a good time for detective stories"; (2) a comedy to maintain the mood of preceding and following programs; (3) an entirely different type of program. ${ }^{\text { }}$

Of the three the comedy show seemed most logical. The agency reasoned that a fourth detective story at that time was too much. There just weren't that many detective fans. Inevitably, a contrasting show would pull an audience of people who didn't like detective stories. And a comedy show seemed right because there was an audience built up to that mood

[^17]available on the network immediately before and after the sponsor's time slot. All that was needed was a comedy show which differed sufficiently in format from the other two to sustain interest. (Incidentally, the sponsor held out for a whodunnit!)

## exercises and broadcasting assignments

1. Make a four-minute speech to the class, based on one of the suggested readings, or on information found in a recent issue of Broadcasting. Compare or contrast, what you read with information in this chapter.
2. Prepare for broadcasting to a popular audience a three-minute talk presenting information on some topic suggested by this chapter. Remember that you are speaking to consumers, rather than producers of radio programs. Use illustrations and examples. These topics are suggestions only:
a. Brand advertising
b. Direct selling by radio and television
c. Institutional advertising
d. The more they listen, the more they buy
e. Those spot commercials
f. How many for how much?
g. My favorite commercial
h. How long can commercials be?
i. Those early morning programs
j. Television commercials
k. Programs for "teen-agers"
3. Listen to the different programs sponsored by such large advertisers as Procter and Gamble, Coca-Cola, General Mills, or Lever Brothers, for evidence of program planning. Report your findings to the class, orally or in writing as the teacher may prefer.
4. Produce a ten-minute dramatized program in which a time salesman is trying to sell program time to a sponsor. The "cast" includes, in addition to the salesman, representatives of the advertising agency, the sponsor, the station or network program directors and perhaps a narrator. Present a specific situation. For example: (1) the time salesman of a local station is trying to get a bank to sponsor "Town Meeting"; (2) the salesman is urging a hardware store to sponsor a five-minute newscast from 6:30 to 6:35 A.M.; (3) a department store is considering the sponsorship
of a fifteen-minute transcribed program of familiar music "across the board" from 10:30 to 10:45 A.M.
5. Produce the same type of broadcast proposing a local sustaining program. For example: (1) representatives of your class discuss with the program manager of a local station, the possibility of a fifteen-minute weekly series, "Life on the Campus," to be aired Mondays, $5: 30$ to $5: 45$ P.M.: (2) the college dramatic club wishes to do a fifteen-minute weekly series of original dramatizations, "Great Moments in History," to be broadcast Tuesdays, 7:30 to 7:45 P.M.
6. Conduct a fifteen-minute quiz program on sponsor identification. The cast includes the quiz master, an assistant, and two teams of three contestants. The quiz master gives the name of a wellknown program or radio performer; the contestant has not more than ten seconds in which to give the sponsor. One round may consist of news commentators; another of comedy-variety stars, etc. For information on how to keep these programs "alive" and interesting, consult Chapter 17 and listen to successful quiz shows.
7. Listen to the commercials for three or four brands of the same product, for example, cigarettes, soaps, coffee, or remedies for indigestion. What appeals are used to get the listener to buy one brand instead of the others? What qualities are mentioned most frequently? This information may be reported in writing or used as the basis for a discussion "broadcast" to the class.
8. Have three or four students listen for a week, each to a different daytime serial. They should prepare plot outlines for the coming week's episodes and compare their predictions with what happened on the air. This information may be reported in a class broadcast.
9. Assign three or four students to prepare a class broadcast on the "Story of the Spot Commercial." The broadcast might be a narration with live or recorded illustrations, an informal discussion, or a series of brief talks.
10. Have three or four students examine that many different programs to see whether they follow the advice in the section of this chapter on "Choosing the Program Content." They may report their findings in a class broadcast, or in writing, as the teacher may prefer.
11. Other groups might prepare similar broadcasts on planning programs for television.

## READINGS

(Some of the readings for Chapter 8 also contain pertinent information on program planning.)

Cantril, Hadley, and Allport, G. W., The Psychology of Radio, Harper \& Brothers, 1935, chap. 4.
Chester, Giraud, and Garrison, Garnet, Radio and Television, Ap-pleton-Century-Crofts, 1950, chaps. 4, 5.
Levenson, William B., Teaching Through Radio, Farrar and Rinehart, 1945, chap. 5.
McMillin, John, "Principles and Problems of Daytime Radio Programming," Education on the Air, 1943, Ohio State University Press, pp. 349-356.
Menser, Clarence, "The Planning and Production of a Program," Education on the Air, 1941, Ohio State University Press, pp. 221232.

Midgley, Ned, The Advertising and Business Side of Radio, PrenticeHall, Inc., 1948, chaps. 12, 15.
Poole, Lynn, Science via Television, Johns Hopkins University Press, 1950, chaps. 4, 5.
Sprott, Elsie, "Planning Broadcasts for Women in Great Britain," Education on the Air, 1938, Ohio State University Press, pp. 6677.

Waller, Judith, Radio: the Fifth Estate, Houghton Mifflin Company, 1946, chap. 6.
Wolfe, Charles H., Modern Radio Advertising, Funk \& Wagnalls Company, 1949.

## chapter 10

## BUILDING THE RADIO 

TL HE sponsor, the representative of the advertising agency, the production director, and those who put on the show may differ on many things, but not on the desirability of having a large listening audience. The sponsor wants proof that he is getting his money's worth. Unless this evidence is forthcoming, the advertising agency is likely to lose its commission when contract renewal time comes around. The program director and the performers may not like the program, but they like much less the prospect of unemployment.

This accounts for the considerable expenditure of time, energy, and money in activities intended to increase the listening audience. The advertising agency provides publicity as well as advertising for its clients. Networks have well-staffed publicity and public relations departments. Even small stations devote as much time and money as they can afford to promotion and publicity. The better-known writers and performers are sometimes better known because they have their own publicity agents. In addition, there are public relations
counselors, agencies that specialize in conducting contests, and others that pretest programs and claim to be able to predict their popularity with considerable accuracy. One agency offers advice on how much to spend on advertising and how to get valuable free publicity. It regards a single one-column line in Life as equal to twenty-two dollars worth of advertising.

Even with the combined efforts of publicity men representing the station, the network, and the advertising agency, building an audience for a new program is no easy task, for equally skilled publicity crews are trying to build, or maintain, audiences for competing programs on other networks. Unaware of their struggle for his attention, the average listener keeps his radio tuned to the nearest station and his favorite programs. Only when he is in a venturesome mood will he see what else is on the air. This is why sponsors are advised not to expect immediate returns from radio advertising.

Methods of building a radio audience are adaptations of those used in any advertising or promotion campaign. The reader wishing a thorough discussion of these subjects should read specialized works on this subject, several of which are listed at the end of this chapter. There is space here only for brief references to techniques most frequently used in advertising and promoting broadcasts.

## ADVERTISING THE PROGRAMS

First consideration in planning advertising should be given to local newspapers, the source most frequently consulted for ordinary purchases. The newspaper is read, for different purposes, by most members of the family, from youngsters who look at the "funnies" to grandfather who reads the editorials. There is another equally important reason for advertising in the local newspapers. Newspapers and radio are in direct competition for advertising accounts. The station that does not buy advertising space in local papers won't find them eager to
publish radio news and feature stories. In fact, some newspapers charge regular advertising rates for printing the station's program schedules.

Local program sponsors may buy small ads to be run on the day of the broadcast or include mention of the program in its regular ads. National advertisers may buy ads in local papers with space to include the names of local stores or representatives. Networks may advertise their star programs in local papers with space for the name of local affiliated stations. Other devices include mention of the program on the store's letterheads, posters on company trucks, leaflets for inclusion in packages and mailings, a special design announcing the broadcast for use on metered mail, and letters to customers who might have a special interest in the program.

Some advertising is classified in the trade as merchandising. This is a direct attempt to promote the sale of the product in addition to radio advertising. Station men frequently take an active part in merchandising, developing tie-ins whenever possible. For example, local stores are urged to arrange displays of the advertised product with posters announcing the broadcast.

- CONTESTS AS AUDIENCE BUILDERS. We Americans are often told that we value bigness more than quality. Certainly this comment might be properly applied to some national radio contests that have attracted at least 2 million entries. For giving the correct answer the winner may get a $\$ 2000$ watch, a mink coat, a trip to North Borneo, a deepfreeze unit, a vanload of assorted articles, and a year's supply of the sponsor's product. This represents an extreme but not an isolated instance. There are, in addition, a considerable number of contests which award prizes of various sizes to winners of competitions of varying degrees of usefulness and social value. These include prizes of a sack of flour for answering a question about the sponsor's program, seven sil-
ver dollars for solving a simple problem in arithmetic, a bridge table for naming a member of the president's cabinet, and sizable sums for identifying a tune played backwards, or repeating a tongue-twisting jingle correctly. In addition, there are awards that provide musical training for young people of ability, and a $\$ 2500$ prize for the best radio script for a popular program. During the war, a brewing company offered prizes totaling $\$ 50,000$ for the best essays on postwar employment problems.

Contests offering large or unusual prizes for simple tasks attract large numbers of entries and the usual requirement that each entry must be accompanied by a box top "or reasonable facsimile thereof" increases the immediate sale of the product. But the "sixty-four dollar question" is whether the new listeners continue listening and buying or tune in on another contest. To investigate this question the Market Research Corporation interviewed 1000 typical contest entrants. They concluded that 15 percent of the entrants in the contests studied had not used the product, but did continue to use it after the contest.

Wolfe ${ }^{1}$ concludes that contests are likely to build the program audience only if (1) the prizes are big or unusual enough to attract general attention, (2) the contest is sufficiently advertised to reach new listeners, (3) the regulations are announced on the program so entrants are required to listen, and (4) the program is good enough to hold listeners after the contest is over.

The advertiser should not decide to sponsor a contest without considering the purpose, expenses, and problems involved in planning it and judging entries. The first step is to decide the contest's purpose. If it is to stimulate the sale of low-cost items, such as cigarettes, soap products, or breakfast foods, the entrant's task should be simple. He may be asked, for ex-

[^18]ample, to finish the sentence, "I like X soap because . . ." or to suggest a name for a new product. If the aim is to promote the program, contestants may be required to write not to exceed 100 words on "I like your program because . . . ," or to submit program materials ranging from questions for Dr. I.Q. to complete scripts for the Dr. Christian show. To gain good will or prestige for the sponsor, entrants may be asked to tell why they contribute to the Red Cross, or to write a paragraph on "What democracy means to me." Contests with the latter objectives will not attract so many entries but may serve their purpose nonetheless.

The sponsor must decide whether he should have a contest each week, usually as part of the program, or a single event with big prizes. He must be sure that he is not violating the federal lottery law, or leaving the door open for lawsuits initiated by disappointed contestants. The lottery law provides that the contest must be based on knowledge or skill, not on chance; that every entry must be judged; and that awards must go to the best entries. To avoid lawsuits, the rules provide that entries become the property of the sponsor and that the decision of the judges will be final.

Advertising agencies frequently advise clients sponsoring national competitions to employ a contest-judging organization. The R. H. Donnelley Corporation handles most of the large contests. Employing as many as 600 people in the rush season, this firm has devised an elaborate judging system. Preliminary readers throw out entries that are illegible or have not followed the rules. Junior judges apply a rating scale based on qualities stated in the announced rules and discard entries with low ratings. Senior judges review the work of the juniors and make a further cut in the entry list. Executive judges review the work of the juniors and deliver a dozen or so of the best entries to the Donnelley executives, who choose the winners, investigate them to see if they are clearly eligible, and report their names to the sponsor.

- PREMIUMS AS AUDIENCE BUILDERS. Advertisers of such products as toothpaste, soap, coffee, breakfast food, margarine, and peanut butter frequently use premiums to increase immediate sales, and especially to attract new customers. Rules are simple: Anyone, whether she (most of the products thus advertised are purchased by women) heard the offer over the radio or from the folks next door, can get the premium. All she needs to do is to send a box top or label and a small sum, usually a dime or a quarter. There are some exceptions. The radio in the next room is telling me that I can get three nylon hose ("a pair and a spare") for $\$ 1.10$ and a key strip or jar label from a certain brand of coffee.

The premium method has certain advantages over the contest. The remittance, in most cases, covers the cost of buying and mailing the premium. There are no big prizes to attract attention, but if the product is good and the premium honestly described, those who send in their dimes and quarters have no grounds for complaint. The choice of premium is important. It should not be available in ten-cent stores; should be something that the recipient will be glad to show to friends; should be durable so it will continue to remind the owner of the product; should not need to be seen to be appreciated; should be connected with pleasant experiences; and should be easy to mail. One of the most successful premiums was the Victory Sword lapel emblem, a replica of the sword presented to General Eisenhower by the Lord Mayor of London. For a box top and a quarter one could get an emblem that would cost three times as much if available at local stores. In addition, it had sentimental value. The offer had to be withdrawn after a few days because the manufacturer could not produce the emblems fast enough. The advertising agency estimated that there would have been $1,200,000$ replies in the scheduled two weeks. Almost 6000 women wrote the advertiser to express their appreciation.

This is of course an unusual example. The Duane Jones
agency, which conducts many of these premium promotion campaigns, reports that the average two-week campaign on daytime serial programs produces about 300,000 responses. Of these, about one-half are new customers, and about half of these $(75,000)$ continue to use the product. The cost of the program, not counting the premium feature, is about ten cents for each response, or twenty cents for each new purchase of the product. This means that each new permanent customer costs about forty cents.

## PROMOTING THE COMMERCIAL <br> PROGRAM

Promotion includes all activities intended to call favorable attention to the station, network, product, program, or individual "star." Publicity is free promotion. There is a twilight zone between news, feature stories, and advertising in which the publicity agent likes to operate. He stays in the background and tries to keep public attention focused on his client. If he represents a station, network, or advertising agency, he hopes to get a salary increase for service beyond the call of duty. If he works for an individual he usually gets a percentage of his client's earnings.

Much of the publicity agent's success depends on his ability to establish friendly relations with newspapers in his area. He sends them the daily program schedule for inclusion in their radio logs, information about special broadcasts, program changes, and items about "stars of stage, screen, and radio" who are appearing on forthcoming programs. He sends other materials which he hopes will be classified as news, rather than publicity or advertising. These may include such features as accounts of the station's first broadcast; human interest stories about lost pets returned to their owners through the station's broadcasts; pictures of school children broadcasting on the "Know Your School" series; and infor-
mation about on-the-spot broadcasts on newsworthy occasions.
The publicity department of networks and advertising agencies operates on a nation-wide basis. It prepares news items, pictures, and stories for trade and professional journals, magazines, and Sunday editions of important papers. Staff members are encouraged to publish articles and books for the trade and the classroom. Publicity agents, operating on a different literary level, supply pictures and stories about radio "stars" for movie magazines and their radio counterparts.

But publicity agents do not spend all of their time at the typewriter. They create occasions that make news and then supply the story, with pictures. They get their stations to collect funds for disaster victims; give radios to the old folks' home; conduct a spelling match; get the governor to speak at the dedication of a new station; or award a prize for the best essay on "Why I like Station X." Here, too, there are pictures, and a microphone bearing the station's call letters just happens to be the center of attention. Publicity agents take popular shows on tour; arrange for their clients to make a few carefully selected appeals for charities; promote good-natured feuds, notably that between Jack Benny and Fred Allen; or first suggest, and then deny, rumors that John and Mary are about to announce their engagement. Polling agencies publish names and sponsors of the ten or fifteen national network programs with the highest audience rating. Stations with the largest share of local listeners hasten to share this news with as many people as they can reach through advertising, publicity, and in interviews with sponsors. Information concerning those who also ran, and those who hardly ran, is kept as confidential as possible.

A number of awards and citations have been established to recognize various types of excellence and popularity in radio and TV shows. The publicity agents for the winners spread the news and repeat it as often as possible. The March 13,

1950, issue of Broadcasting, for example, contains several such stories. The 1949 du Pont Memorial Awards, of $\$ 1000$ each, went to Morgan Beatty for "excellent and accurate gathering and reporting of news by radio"; to Stations WNOX, Knoxville, and WWJ, Detroit, for "outstanding service in encouraging, fostering, and promoting" programs of high quality. The committee also cited network ABC-TV for the telecast series, "Crusade in Europe," and Station WRCO for its public-service programs. And in Worcester, Massachusetts, the city council passed a formal resolution thanking station WTAG for its weekly series "Your City Government."

In similar vein, the March 20, 1950, issue of Time reports that Jack Benny was voted "the greatest radio personality during the last 25 years" by 330 radio editors in a poll conducted by Radio Daily. Bing Crosby was a close second, and Franklin D. Roosevelt was named as the greatest "noncommercial personality."

During the same week, Station KVOR, Colorado Springs, reported a "High School Day." From 6:45 A.m. to 11:00 P.M., virtually every job on the staff was taken over by sixty students chosen from 100 applicants.

This is by no means a complete listing of the methods used by publicity agents and the more dignified public relation counselors, but it is perhaps enough to show why they sometimes want to "get away from it all." If they think up something different that works, it will be copied by their competitors; if they don't, their employers may soon regard them as expendable.

## PROMOTINGTHE SUSTAINING PROGRAM

The methods described above, adapted to the mood of the broadcast and the tastes of the desired audience, could be used equally well to promote sustaining programs. But this
seldom happens, for the simple but important reason that funds are seldom available for this purpose. This is apparent when we list the usual sustaining broadcasts on commercial stations. Most frequent are programs of recorded music, used to fill periods of unsold time. Next in frequency are programs broadcast by local organizations: for example, the ParentTeacher Association, the American Legion, the Red Cross, the public schools, or the town council. The station lists these programs in the daily $\log$ and local papers usually mention them. But such special promotion as these programs get must come from the organizations that produce them. Occasionally a sustaining program is broadcast by individuals in search of a sponsor, hoping to attract the attention of a sponsor in search of a program. The station management may publicize these programs with the object of selling them.

Noncommercial stations have special promotion problems. When this chapter was written, there were eighty-seven FM and twenty-six AM educational stations owned by publicschool systems, colleges, or universities. With few exceptions, they carry no commercial programs and spend almost nothing for advertising. The fact that they represent educational institutions makes some types of promotion inappropriate. The fact that they operate on fixed budgets makes high-pressure promotion unnecessary. The fact that these budgets are small, compared with expenditures of commercial stations, makes some types of appropriate promotion impossible.

Within these limitations, educational stations must publicize their programs. The college or university president must be convinced that the money spent on broadcasting yields educational returns comparable to the amounts spent for other extension services. He rightly wants to know how many are listening, whether they are the ones for whom the broadcasts are intended, and, if not, what is being done about it.

Educational stations should not be expected to produce many programs that will attract mass audiences. Nor should the value of their broadcasts be measured by this yardstick.

A good many are designed for relatively small groups. A series that provides needed information to a hundred dairy farmers may be produced in preference to popular music that might appeal to thousands. This is not to say that numbers are unimportant, but, during the week, an educational station should serve a large total audience made up of these smaller groups.

The promotion program of an educational station will adapt many of the methods used by commercial broadcasters. Consider, for example, the publicity activities of one of the better-known university stations. Daily program schedules and weekly news releases are sent to newspapers. An occasional feature story, with pictures, is prepared for Sunday editions. The agricultural extension division sends monthly broadcast schedules of the "Farm Program" and "Homemakers' Hour" on request to about 8000 rural families. Stories about "School of the Air" programs appear in the journal of the state educational association. In 1950 the ten "courses" designed for listening in the elementary school had about 395,000 registrants. Nearly 13,000 of the 70,500 students in their "Journeys in Music Land" series attended spring festivals, where they sang songs learned during the year. Exhibits of work done by students in the "Let's Draw" course were circulated in forty-two counties. These occasions were reported in the local papers.

Stories about programs for special groups are sent to trade and vocational journals. Special broadcasts are originated from state fairs and meetings of educational associations. Members of the station staff speak at club meeting and conventions. The radio committee presents an annual report to the faculty. The station enters its best programs in the American Exhibition of Educational Radio Programs and publicizes any awards they receive. The university issues occasional leaflets •and bulletins describing its present programs and future plans for information and education by radio.

In the long run, the basic essential for building a good au-
dience is a good program. For commercial and sustaining programs alike, a satisfied customer is the best advertiser. Attempts to buy an audience with giveaway shows may attract large audiences, only to lose them to programs offering larger prizes or more expensive premiums. Competition in the use of superlatives to describe the program or the product may have the same result. Broadcasters should remember the chagrin of the movie magnate who had to admit that his latest picture was "only colossal," and the public reaction to candidates who try to out-promise each other.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Make a four-minute report to the class on information in one of the suggested readings, or in some more recent publication. Your purpose is to supplement, or bring up to date, the material in this chapter.
2. Prepare for broadcasting to a popular audience a three-minute talk on a topic such as those listed below. Your purpose is to acquaint the listener with methods used to gain and hold his attention. Use a direct, informal style and be as specific as possible.
a. How can advertisers afford those big prizes?
b. "Send a box top and a dime"
c. "I like X soap because . . ."
d. "Do they really judge all the contestants?
e. "All entries become the property of . . ."
f. When is a giveaway show a lottery?
g. When and why did you first listen to this program?
h. Why doesn't the newspaper publish more radio news?
i. "First, have a good program"
3. Study a relatively new radio or television program that can be heard locally and report the methods used to build an audience.
4. With another class member, interview the publicity man for a local station, or a representative of an advertising agency, on how radio or TV audiences are built. In preparation, read at least one article in addition to this chapter, and make a list of questions to guide the conversation. If possible, record and edit the interview; if not, one should take the part of the person interviewed in "broadcasting" the program to the class. You may also interview a local sponsor who has used broadcasting effectively, or the busi-
ness manager of the newspaper, on the attempts of radio men to get free advertising.
5. The class may be divided into groups of four or five-a chairman and three or four panel members-to present to the class a series of fifteen-minute discussions on advertising, publicity, and promotion. For example:
a. Assume that your class is to produce a series of sustaining programs over a local station. Since you have no advertising budget, you will have to rely on your ingenuity to publicize your programs. Your discussion is a committee meeting to consider ways of building an audience.
b. Broadcasting-Telecasting frequently carries sturies of successful promotion campaigns. The chairman asks each panel member to report informally the methods used in one of these campaigns and draws such conclusions as seem warranted.
c. Assume that a sponsor of a new program is considering with representatives of the radio or television industry methods to be used in building an audience. The chairman represents the sponsor who is seeking information. Panel members present the advantages and disadvantages of contests, premiums, direct advertising, and other promotion methods.
d. Assume a joint meeting of newspaper and radio business managers to consider the distinction between radio news, or publicity, and radio advertising. The meeting may take the form of a symposium or debate.
6. Have a committee of four or five survey current radio and television contests. From this information, and that found from sources in the bibliography, prepare a class broadcast on "Highlights in the History of Contests." The program may combine such techniques as narration, dramatized incidents, and reading examples of commercial copy.
7. Another group may prepare a similar program on the history of premium offers.

## READINGS

Broadcasting-Telecasting (the newsweekly of radio and television.) Carlile, John S., Production and Direction of Radio Programs, Pren-tice-Hall, Inc., 1939.
Connah, Douglas D., How to Build the Radio Audience, Harper \& Brothers, 1938.

Lazarsfeld, Paul F., "Audience Building in Educational Broadcasting," Journal of Educational Sociology, May, 1941, pp. 1-9.
Park, Ben, "Report Uncensored," Education on the Air, 1948, Ohio State University Press, pp. 260-265.
"Radio Handouts," Fortune, November, 1947, pp. 140 ff .
Siepmann, Charles H., Radio, Television and Society, Oxford University Press, 1950, chap. 6.
Siepmann, Charles H., and Reisberg, Sidney, "Coverage of a Radio Documentary," Public Opinion Quarterly, Winter, 1948, pp. 649669.

Waller, Judith, Radio: The Fifth Estate, Houghton Mifflin Company, 1946, chaps. 18, 22.

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## PREPARING

 … $\times$ wn THE PROGRAM
## chapter 11

## »mм"TALKS AND INTERVIEWS

TA L K S and interviews have always had a place on broadcasting schedules. These forms of public speaking were, and are, familiar to everybody. We listen to classroom lectures, sermons, campaign speeches. We hear speeches by people who have had unusual experiences, listen to after-dinner speeches, and attend conventions to hear speeches or "papers" by authorities in our business or profession. From the beginning of radio, program directors have broadcast speeches addressed primarily to those present at such occasions.

The history of the radio interview is almost as long. Some interviews were, and still are, speeches interrupted by the interviewer's questions and perhaps by such encouraging remarks as, "How interesting!" or "Now tell us what you saw behind the Iron Curtain." Some enterprising journalist soon conceived the idea that, instead of conducting an interview and writing a story about it, he would bring the celebrity to the station and put the interview on the air. He soon discovered, however, that the successful radio or TV interview, with fixed time limits and the problem of making things clear to the average listener, is quite different from talking to the
same person in his home or at his office. Public speakers, too, soon found that the radio "audience," listening alone or in groups of two or three, prefers person-to-person rather than person-to-audience communication. In this chapter we consider these problems.

## THE BROADCAST TALK

Except for such program types as the newscast, where the announcer usually reads a script prepared by someone else, and the commentary that is usually written and delivered by someone with considerable experience in writing and speaking, the so-called "straight talk" is the neglected stepchild of our radio system. The reasons are fairly obvious. Our radio programs are largely devoted to entertainment, and most talks are not thought of as entertainment. The radio industry thinks of radio as "show business," and most talks are not show business. The use of the word "talk" instead of "speech" or "lecture" is significant. Speeches and lectures are often thought of as inevitably dull and uninteresting, useful only to fill time when a show is not available. The program manager usually prefers an interview or a discussion to a talk, and a show to either of these.

Many speeches or talks are dull, sometimes because they are given by dull people, but also for other reasons. Consider, for example, the time and money spent on talks and dramatic programs. Many talks occur on sustaining programs. The speakers, chosen because of local prestige, or because they are officers of public-service organizations, are often unskilled, both in writing and in reading what they have written. Impressed with the importance of the opportunity, they want to say as much as they can in the allotted time. To do this, they omit illustrations and explanations, and end up with a speech consisting largely of generalizations, each of which might well be expanded into a paragraph. Almost inevitably
the language is stereotyped and stilted, quite unlike the kind the speaker would use in animated conversation.

When the amateur speaker has finished his composition, he mops his brow and says, "There, that's done. Now all I have to do is read it." He knows that singers and actors have to rehearse, but anybody ought to be able to read what he has written. When our amateur reaches the studio, he is introduced to the microphone, told where to sit and not to tap the table with his pencil, and left alone. He suddenly wishes he had read the speech aloud a couple of times, or, better still, that he had turned the assignment over to the vice-president or the corresponding secretary. Suddenly he hears the voice of the announcer, "You will now hear Mr. John Doe, president of the Boosters and Knockers Club, who will speak on 'Make Way for Liberty.'" He gulps, taps the table with his pencil, and begins to read.
Contrast with this the usual preparations for the dramatic show. The script is prepared by a professional writer. The producer studies it, selects the best actors available, calls for needed music and sound effects, and schedules rehearsals. Of course the comparison is in a sense unfair. The dramatic program, representing the combined efforts of professional writers and actors, after rehearsals under the direction of an experienced producer, ought to be more interesting than the amateur's talk. Moreover, the play is intended to provide entertainment ; the talk, to give information, influence attitudes, or get the listeners to do something. Perhaps, then, we should compare the amateur speaker with the veteran commentator, who spends several hours preparing his fifteen-minute speech and gets a good salary for his labors. The comparison is, in each case, between the work of the unpaid amateur and the paid professional.

Speeches are rarely found among the top ten network shows. This distinction usually goes to entertainment shows-
serial stories in the daytime and comedy-variety shows at night. And yet when adults are asked the type of broadcast they value most, newscasts, which are usually straight talks, uniformly rank first. People listen in large numbers to their favorite entertainers on the networks, but get most of the news from relatively anonymous newscasters at local stations. They hear their favorite comedians once a week in a professionally written and rehearsed show, while the local announcer reads the news almost without rehearsal several times a day. We should remember that, except in times of crisis, most talks do not appeal to mass audiences and many of the best speeches are designed for special groups. Talks on gardening are not of prime importance to those who have no gardens, and advice on gardening in Wisconsin would not fit the situation in New Mexico.

Within limitations, the properly constructed speech, or talk, has an important place on broadcast schedules. We expect the minister to give a sermon; we do not expect the President to take part in a dramatization when he presents his recommendations to Congress. The speech is the most efficient method of presenting information and analyses of current issues to interested listeners; it is not usually the best way of creating interested listeners. Moreover, the talk is one of the least expensive ways of producing nonentertainment, or pub-lic-service programs. This factor is of increasing importance to station managers who must compete with television for a share of the advertising dollar. Instead of scheduling unskilled speakers to fill unsold time, the station manager should develop the talk on topics of general interest as a special type of one-man show.

- PREPARING THE RADIO TALK. A few paragraphs back, we said that radio talks are often dull because they are poorly prepared. There is no magic formula that will produce
talks of interest to everyone. However, there are ways of preparing speeches that will hold the attention of listeners the speaker is trying to reach. While we are here directly concerned with studio talks designed for person-to-person communication, much of what we say also applies to public speeches delivered to live audiences outside the studio and broadcast for those who may care to listen. The steps in preparing the talk outlined here do not always follow the order in which they are listed, but they are all essential in preparing an interesting talk that will hold attention.

1. Understand the assignment. This advice, perhaps overly obvious, is of major importance. When he is invited to speak -at least before he begins to prepare his talk-the speaker should seek answers to these questions: Is the talk one of a series? If so, what is the general purpose of the series and what topics have been presented by preceding speakers? Is the talk a complete unit or part of a larger program? If the latter, what precedes and follows the talk? At what hour is the speech scheduled? Who are likely to be listening at that time? What is the precise time allotment? The speaker should know, for example, whether his three-minute talk on the Red Cross membership drive is part of a school broadcast, or a unit following the evening news round-up. Unless he knows his average rate of speaking, he should plan on 150 words a minute.
2. Phrase your purpose in a single sentence. The speaker's general purpose is often indicated when he accepts the invitation to broadcast. He knows whether he is supposed to provide information, to arouse enthusiasm for a cause, to build or change attitudes, to secure action, to interest or entertain his listeners. But in the allotted time he can present only part of what he knows about the topic, or of his reasons for asking others to believe and act as he does. A more specific statement of his objective is needed. For example:

General Purpose Specific Statement
To provide information about Today, I am going to talk about broadcasting.
To build or change attitudes about the United Nations.
To secure funds for the Red Cross.

FM.
The United Nations acted wisely in X situation.
The Red Cross acts promptly and effectively in emergencies.

Until the speaker decides what reaction he hopes to get from his listeners, he is not ready to begin constructing his speech.
3. Analyze the audience. Anything approaching a complete audience analysis is usually impossible. However, this should not excuse the speaker from gathering such information as is available. The time of the broadcast, for example, is important. H. B. Summers reports the finding of a telephone survey of 3500 daytime radio listeners in Columbus, Ohio. Of those listening to talks, 16 percent were just listening, 17 percent were ironing, 12 percent were washing the dishes, and 11 percent were dusting or making beds. The rest were engaged in various household duties or leisure-time activities. ${ }^{1}$ The significance of this information is clear. Unless the speaker is content to address those who are "just listening," he must catch and hold the attention of those who are engaged in routine household tasks. The number of men listening was "too small to justify detailed analysis." More men listen during the evening but then speakers must compete for listeners with the best entertainment programs.

The speaker should also learn as much as he can about the station's regular listeners. Do they live in rural or urban areas? Are they predominantly of one racial, religious, or political group? What are their principal occupations? How much formal education have they had? Where do they rank on the economic scale? What are their attitudes on current issues? The answers to such questions as these help the speaker

[^19] No. 3, Ohio State University Press, 1948.
to visualize his listeners and to talk to them in language they will understand.
4. Choose the best materials. At this point the speaker knows the length of his talk, his purpose, and something about his prospective audience. When he begins to write his speech he will probably have much more material than he can use. His problem is to select that which will be most interesting and most meaningful to his listeners. He should avoid the twin dangers of underestimating their intelligence and overestimating their information. On a relatively new subject the speaker should assume that his listeners have about as much information as he had when he started to study it. He should present statistical information in simplified form, choose illustrations familiar to his listeners, and quote from people they regard as authorities.
5. Make an outline. The outline is as important in building a speech as the architect's blueprints are in building a house. It should begin with a statement of the speaker's purpose and the approximate number of words he can use in the available time. Until he has discovered his most effective rate, he should assume that he will average from 150 to 160 words per minute. His next step is to decide on the number of main points, to state them in short, easily remembered sentences, and to decide how many words should be devoted to each. The short talk, ranging from two to four minutes in length, should usually develop one, not more than two, main points; the fifteen-minute speech should rarely have more than three. The quarter-hour program means from twelve and a half to fourteen minutes of speaking time. "And now for twelve and a half minutes of uninterrupted news."

The order in which the main points are presented depends on the topic and the speaker's purpose. In describing an event the order in which it occurred may be best. In the three-point speech that aims to build attitudes or secure action, the most persuasive argument should usually come first; the least im-
portant, second; and the second in importance, last. The number of words allotted to each point should depend on its relative importance.

The final step in preparing the outline is to select from the available facts, opinions, illustrations, and arguments, those most likely to achieve the speaker's purpose.
6. Talk before you write. There are important differences between the language of conversation and that used in written reports, technical papers, or textbooks. It is no compliment to say that X "talks like a book." Writers of dramatic scripts often record their dialogue and listen to find out whether it sounds like real conversation. If recording equipment is available, the speaker should follow their example. If not, he can speak his sentences before he writes them. It may help if he thinks of his talk as a monologue, constructing sentences that he will say to people like Mr. Smith at the garage, Mrs. Jones who lives next door, Miss Brown who is a clerk stenographer, and Mr. Black who works on his father's farm.
7. Study ways of gaining attention. The problem of gaining attention is simpler if the speaker holds an important position, has had unusual experiences, or is an authority on a subject of current interest. But for others, the first few sentences determines whether the individual who tunes in will continue to listen or dial another station.

It is much easier to say that the first sentences of a radio talk should be interesting than it is to make them so. Even the most skilled writers will not interest everyone. We can, however, learn from analyzing introductions prepared by experienced speakers how to improve our own. The following examples illustrate different methods of gaining attention:
a. Here are the opening sentences of Larry Lesueur's broadcast from Normandy, June 5, 1949. He called it "Beachhead Revisited."

In a few hours it will be the fifth anniversary of D-Day, and if this return visit to the Normandy Beaches proves nothing else, it does
prove that men can destroy a lot faster than they can build. Normandy is still combing the dust of liberation out of its hair. It is a land of patched roofs, of shattered stone houses that gape like blind men. It has taken the people of Normandy these five years to recover from that look of stunned apathy. They're slowly rebuilding their battered villages. ${ }^{2}$
b. On June 9, 1949, U.S. Supreme Court Justice William O. Douglas, broadcast over the CBS network a speech entitled "Peace Through Law." Here are his opening sentences:

There have been two conventional ways of settling disputes between nations. The first is diplomacy; the second is war.

Diplomacy has achieved many notable victories. But the cold fact is that it has ended in bankruptcy or default every generation. Each generation has had its war. Each war has been an increasingly serious blight. Today the stark reality of the atomic bomb has put the horrors of war beyond the wildest imagination. ${ }^{3}$
c. Here are the opening sentences of a talk, "The Comics," delivered by Russell Maloney over the CBS network, January 15, 1948.

Some Americans say their prayers and some don't. Some went to high school and some didn't. Some are Republicans and some are Democrats. Some like vanilla and some like chocolate. But every normal American reads the funnies. He may not like them but he reads them. ${ }^{4}$
8. Study ways of holding attention. Even when we are trying to concentrate, we are not paying attention all the time. For attention is not a continuous process; it comes in spurts. Pillsbury estimates that a unit of attention lasts from five to eight seconds. In that time the listener may hear no more than fifteen to eighteen words. This is the reason for the statement that spoken sentences should seldom be long and rarely be complicated.

[^20]Attention fluctuations also mean that there is need for more repetition than would be necessary in written communication where the reader can go back over sentences that are not clear. Repetition may be of three kinds: reiteration of key words and phrases, repetition of important sentences in the same words, and restatement of the same idea in different words. Clarity and the flow of thoughts are also aided by interlocking sentences which repeat some elements of the preceding sentence.

To hold attention we must vary the style of the speech and the manner of delivery. Moreover, we attend more easily to concrete and specific words than to generalizations and abstract terms. "Logicians may reason about abstractions," said Macaulay, "but the great mass of men must have imagery." Rudolf Flesch writes that in material of average difficulty, the average sentence length should not exceed seventeen words; the number of syllables should not exceed 150 per hundred words; and at least 6 percent of the words should be personal references, i.e., names, personal pronouns, and "words that deal with human beings or their relationships." ${ }^{5}$

We add this advice to radio speakers: Use active verbs. Be sure that your transitions are clear. Use questions as topic sentences, and rhetorical questions that suggest your answer. Especially when you are trying to arouse interest in a topic, proceed from the specific illustration to the general statement, rather than vice versa. Include, before your conclusion, some sentences that can be left out if you are running overtime.

- DELIVERING THE RADIO TALK. We expect the radio actor to rehearse his lines until he can make them sound like spontaneous talk. The fact that he reads from a script does not excuse him from rehearsal. But the amateur speaker often assumes that he can read his talk effectively without practice,
${ }^{5}$ Rudolf Flesch, The Art of Plain Talk, Harper \& Brothers, 1946, pp. 195196.
because he wrote it. As many listeners will testify, this is usually a mistaken assumption. The speaker should rehearse his talk until he can think about his listeners as well as what he is saying to them. Many speakers find it helpful to underscore important words or phrases, and to indicate such things as pauses or changes in rate.

The speaker who has something important to say should not refuse invitations to talk because he lacks the vocal skill of a trained actor or singer. Listeners do not expect authorities on the hydrogen bomb or the situation in Palestine to talk like trained actors or radio announcers. But they rightly expect such individuals to use what vocal skill they have, and to understand the fundamentals of oral communication. For example:

1. The speaker should talk with his audience, not at them. This does not always mean that he talk as he does in ordinary conversation; this may be dull, monotonous, or uninteresting.
2. He should remember that monotony is one of the speaker's deadly sins. The listener cannot pay attention very long to a uniform series of stimuli. Even a pleasant voice can become monotonous. The speaker can secure variety by modulating his pitch, changing his rate of speaking, varying his force and vocal quality.
3. He should remember that monotony of voice and action are closely related. The speaker whose muscles are continuously tense is likely to have a high-pitched monotonous voice; the speaker who slouches, as though he is tired or bored, usually has a voice lacking in animation. It is not an exaggeration to say that the listener can hear changes in facial expression, even though he cannot see them.

## THE TELEVISION TALK

The most important difference between the televised talk and the talk given directly to an audience is that in the former the speaker cannot see his listeners and adapt what he says to what he sees. As yet many speakers have failed to capitalize
on the visual advantage of television. This is regrettable, because there is considerable evidence that a well-prepared televised speech can hold its own against programs of light entertainment.

- USE VISUAL AIDS. Television offers the greatest help to talks that can use maps, charts, exhibits, demonstrations, and dramatized illustrations. A skilled program director, working with the speaker, can devise visual aids that will heighten the effectiveness of most talks. A number of these aids are described briefly here.

Chalk boards. A green, dull-surfaced board and bright yellow chalk seem to get the best results. A few clear-cut lines can show the floor plan of a house, the shape of a leaf, a chemical symbol, the outline of an oil-well shaft, comparative rates of incidence of a disease, or a rise in the cost of living. Although detailed sketches can be prepared in advance and shown at the proper moment, people remember the point longer if the speaker draws the illustration as he talks about it. Televiewers are very tolerant about a speaker's drawing skill.

Adhesion boards. Letter-boards, with grooves into which letters can be stuck, are easily available. Letters or cutouts with flannel or sandpaper backing will stick to a flannel-covered board and can be exchanged easily. Magnetic boards are owned by some stations; cutouts attached to a magnetized base can be placed on it or removed during the talk.

Photographs. Pictures are the most common visual aid in television. They should be large, horizontal, flat-finished, with high contrasts. Photographs and pictures from books can be mounted on racks, celotex mats, or pedestals. They can be held in the hands or shown by an opaque projector. Blow-ups of small but significant portions of a picture are often valuable. Pictures should be mounted on stiff backing with wide margins.

Slides. Glass slides should be $2^{\prime \prime} \times 2^{\prime \prime}$ in size and sealed with plastic, not bound with tape. Regular 35 mm strip films are effective. Slides and films are handled by a projectionist in the control room who takes his cues from the script. The speaker can see them on the monitor screen in the studio.

Maps. Two maps are usually better than one. One can show a large expanse of terrain to establish geographical relationships, while the
other shows a blow-up of the specific area under discussion. The maps should be in outline form, with the significant features in wider lines or darker coloring.

Charts and graphs. Like other visual aids for TV, charts and graphs should be rectangular, drawn in ratio of three to four, being widest horizontally. Gray or light blue mat board with a flat finish is best. Line graphs, pie graphs, or any similar device used by speakers or in books can be effectively employed. They should be simple with the lines boldly drawn or shaded.

Pictorial statistics. Pictorial statistics provide an effective device for comparative statistics. One type uses scaled sizes to clarify a comparison. For example, a lady's hat, twenty times as large as a man's hat beside it, could show that women buy twenty times as many hats as men do. Another method is cumulative comparison: twenty ladies' hats could be drawn beside a single hat for men.

Objects and models. Actual objects are the best visual aids. Test tubes in which experiments are conducted, rats emaciated from eating the wrong food, arrowheads found at the site bf an excavationthe possibilities are limitless. Even large objects can be used. In a discussion of new weapons, a military official had a piece of artillery brought to the station; several men took it apart and assembled it during the talk.

Models, too, are useful. Examples might include a model of a house for a talk on architecture, a sand table on which erosion might be illustrated, scaled models of the planetary system for a talk on astronomy.

Mock-ups and cutaways. Models built to scale, with an area of the surface cut away to expose the inner workings of a piece of machinery, are effective. They have been employed to show an ant's nest, the structure of an automobile casing, and the construction of a water valve.

Films. Films can supplement a talk in many ways. They are especially useful in travelogues, or to demonstrate a process. Lists of available films can be secured from the Catalogue of Selected 16 mm Educational Motion Pictures (New York University Film Library, 71 Washington Square, New York) ; the Directory of U.S. Government Films (Film Service, Federal Security Agency, Washington 25, D.C.) ; and the monthly Educational Film Guide, (New York, H. W. Wilson Co.,) One candidate for the U.S. Senate campaigned during the summer of 1950 with film as his principle visual device. The camera in the studio opened on the candidate speaking. Films which
showed the results of his previous term in office were cut in from the projection room; shots of power dams, erosion control, and recreational areas were all part of the senator's evidence that he had done well by his state.

- PROVIDE A SCRIPT. The TV speaker who uses visual aids must prepare scripts for the producer, audio and visual engineers, announcer, and projectionist, but whenéver possible he should talk from memory or from a memorized outline. Writing the script will help him conform to the time limits and find the best way of phrasing what he wants to say, but if he reads the manuscript he will have difficulty in using the visual aids effectively.

Talks using visual aids should have full camera rehearsals so that the producer can plan the shots and have them indicated on the video section of the scripts. Although some speakers write their suggestions for camera shots, many producers prefer to do this for themselves. Here is a sample script prepared by an experienced TV speaker for a producer who welcomed his suggestions:
video
Camera \#1
Medium shot on Smith

Camera \#2 close-up Smith, holding coins
\#2 tilts down to table

AUDIO
SMITH: All of us complain about taxes. Most of you feel that our tax rate is too high. I want to tell you some things about taxes that perhaps you hadn't thought about very much. When we're talking about taxes, we're talking about money. I have six coins here in my hand. I'm going to stack them up here on the table. (Stacks coins on table in front of him.) Each of these coins represents a day's work. Now let's see what happens to them after you've paid your tax bill. (Lifts off two top coins and places them beside the remaining stack of four.) You work two days out of six to support our present government.


If the camera work is not written into the script by the speaker, the left margin should be very wide so there will be room in which to write the camera directions as they are worked out during rehearsal. Every script should have a cover sheet on which all visual materials are noted.

## - MAKE CERTAIN OF YOUR RESULTS. Many TV talks

 are really demonstrations. Poole ${ }^{6}$ recommends that precautions be taken to make sure that experiments and demonstrations work out the way they are intended. If a 10 percent solution of a chemical kills flies, use a 20 percent solution to be on the safe side. If you want to show a human reflex, use a person who can simulate the reflex if necessary. This is not to deceive the audience but to be sure that they will see what should happen.
## THE INTERVIEW

The interview soon became, and continues to be, a standard type of broadcast programs. We have interviews with members of the audience chosen almost at random from those present at audience-participation shows; interviews with newsworthy individuals who hit a home run in the world series, or who wrote a prize-winning book; interviews with eminent men and women who may not have the time or the skill to prepare a speech.

[^21]- TYPES AND PURPOSES. Because interviews differ so greatly, and in so many different ways, suggestions given with one type in mind may not apply to another. For this reason we divide them into four groups.
"plain folks" interviews. These include man-on-thestreet conversations and those that take place in some quiz programs and audience-participation shows. The interviewer selects people more or less at random, and, after asking their names, where they came from, and how they happen to be there, usually asks their opinion on something or other. Will Brooklyn win the pennant? Is woman's place in the home? Who is your favorite movie star? Questions on quiz programs usually test an individual's knowledge or information; sometimes he is allowed to select the general topic. In most instances there is a prize, ranging from two tickets to the local theater or seven silver dollars to considerable sums. The phrase "the sixty-four dollar question," referring to the last in a series of questions on a popular giveaway program, has become a current idiom in everyday talk.

The content of "plain folks" interviews is not important but is often interesting. Radio listeners enjoy hearing how people like themselves react when suddenly confronted with an interviewer and a microphone. Sometimes they giggle; sometimes they are "scared stiff"; on rare occasions they raise a laugh at the expense of the interviewer. This type of interview is often commercially sponsored. It is inexpensive, requiring no music or actors. The name of the advertiser can be repeated by the simple device of presenting each person interviewed with a sample of the sponsor's product.
persuasive interviews. In this category are interviews designed to get listeners to attend an event, support a program, or advance a cause. Thus we have interviews with movie stars, to arouse interest in their shows; with the head of the Red Cross, about the current campaign for new members; with the superintendent of schools, about the need for a new
building. The interviewer may, and should, raise questions that he thinks listeners would ask if they had the opportunity. Otherwise there is no opportunity in a single interview to present opposing points of view. If the issue is controversial, the station manager should schedule an interview with a leader of the opposition or, better still, arrange a discussion that presents both sides on the same program.

These persuasive interviews are usually unsponsored pub-lic-service programs. Occasionally an advertiser will release time on his broadcasts for this type of interview.
personality interviews. Mr. and Mrs. Average Citizen and their children would like to see such celebrities as President Truman, Mrs. Roosevelt, General Eisenhower, J. Edgar Hoover, Joe Louis, the author of A Tree Grows in Brooklyn, the Lunts, or the man-and-wife team that presents "Fibber McGee and Molly." Seeing them, and others of lesser or local importance, gives us local prestige. We can say to our neighbors, "When I met Mrs. Roosevelt at the White House . . . ," "Yes, I was invited backstage to see the Lunts," or "J. Edgar Hoover told me . . ." If we cannot see these individuals and others who are in the news, we can get acquainted with them by radio. Indeed, we can learn a great deal about people by hearing their voices. We should amend the axiom that seeing is believing by adding that for many people hearing is believing.

There are two main types of personality interviews. One aims to satisfy our curiosity about newsworthy people. Such interviews are successful when listeners feel that they have become acquainted with an interesting person. The other type might be classified as advertising or publicity. The football captain is questioned about tomorrow's game; a movie star about a picture that will soon be released; a candidate about his chances of winning in the coming election.

The content of personality interviews is not usually important. We may learn that the individual likes hunting and fish-
ing; that he reads detective stories; that she is fond of children, sends flowers to veteran's hospitals, and thinks Shakespeare's plays are very good indeed. The football captain says, "We'll be in there fighting"; the candidate thinks he will win if all his friends get out and vote; the movie star says that her picture is the best yet and its all due to her director and her supporting cast. The listener can often predict some of the questions and most of the answers, but he listens nonetheless. Personality interviews may be used on sustaining programs, but those of the second type are found most frequently on commercial shows.
authority interviews. The nature and purpose of this type of interview are clearly implied in the title. The interviewer questions some individual who knows enough about a subject to be regarded as an authority. It should be noted that there are degrees of authority. The freshman home from college knows something about his alma mater, but not as much as the president. The man who returns from six weeks in India knows what he has seen and heard, but he may know much less about India's history than someone who has never been there. Our point is that an individual need not know all about a subject to be an authority on some part of it. If he knows more than his listeners and confines his answers to what he knows, he may properly appear in an authority interview.

The purpose of this type of interview may be to arouse interest in a topic or problem, to provide information and expert opinion on a topic when the listeners are already interested, or to discuss the values and weaknesses of proposed solutions to a problem. In some instances the authority may be asked to state and defend his position on the question. This differs from the persuasive interview where the person interviewed may be urging action on a plan devised by someone else.

The focus of attention in the authority interview is not on the individual but on what he knows and believes. This type
may be used on commercial programs but is more frequently found on public-service broadcasts.

- PREPARING THE INTERVIEW. The first, and obvious, comment on preparing interviews is that the method and extent of preparation vary with the purpose of the program and the speaking skill of the person interviewed. The "plain folks" type is largely impromptu. The interviewer plans a few simple questions, picks from the crowd individuals who look as though they would play the game, and hopes for the best. If he makes a bad guess, he says, "Thank you very much. Here's a tube of our sponsor's toothpaste. I'm sure you'll like it," and hurries to question some one else.

The other types of interviews, however, should be prepared as thoroughly as time and circumstances permit. If the individual to be questioned knows a great deal about the subject to be discussed, speaks fluently, and is accustomed to being interviewed, a single conference to prepare a list of questions to guide the conversation may be sufficient. If this is his first interview, or if the matter is so important that he does not want to run the risks involved in extemporaneous speaking, he may insist that both questions and answers be written out. In such cases, it is often difficult to produce a script that sounds like real talk. To meet this difficulty, the interviewer might volunteer to write a first draft, using the questions and answers agreed upon at this conference. This script should be put into final form, and read aloud once or twice at a later meeting.

Since few people except actors and trained announcers read aloud as effectively as they speak, interviews prepared in this fashion are not likely to sound very spontaneous. We should remember, however, that listeners will excuse lack of skill in speaking or reading if they want to hear what the person interviewed knows and believes about the subject, and if they feel he is doing his best to tell them. An interview that sounds
like a poorly read speech interrupted by questions may get a better listener reaction than a conversation with a glib speaker who likes to hear himself talk.

The experienced speaker should be encouraged to discard the manuscript and speak extemporaneously. He and the interviewer should prepare an outline containing the questions to be discussed and the time allotted to each. They should agree on the appropriate degree of formality. Should they call each other by their first names? Should they attempt to use humor? They should agree on a few simple signals to indicate that they must move on to the next point, or that the interviewer wishes to interrupt with a question.

Here is a simple formula for an authority interview on an important topic. To establish the interviewee as an authority, start with a question that will bring out his study of, or experience with, the subject. Follow with a question about the importance of the topic. Then ask questions based point by point on an outline such as would be made for a speech. Build the interview toward a highlight or climax to give your guest the opportunity to finish with his most important point. React to his statements; don't make the interview sound like a prepared cross-examination. Try to make each question grow out of the preceding answer. Write your conclusion so there will be no awkwardness about closing with the proper amenities; thank the guest, refer to the significance or interestingness of what he has said and lead directly to the closing announcement. Include two or three "cushion" sentences which can be read or left out to assure ending on time.

- THE INTERVIEWER'S QUALIFICATIONS. Interviews are usually conducted by a member of the station's staff of announcers. In choosing his announcers, the program director tries to get individuals with different interests and educational backgrounds. Thus one might be interested in sports, another in music, and a third in political or economic issues.

But an announcer who can read script effectively may be poor at impromptu or extemporaneous interviewing.

The ideal interviewer would have these skills and general qualifications:

1. He should be able to speak without notes and with few grammatical errors.
2. He should be able to pay attention to what the person interviewed is saying, and to adapt, or even abandon, some of his questions as the conversation develops.
3. He should have, or acquire, at least the layman's knowledge of the subject matter of the interview.
4. He should represent the listeners, raising questions they would ask if they had the opportunity.
5. He should be able to guide the conversation from point to point without seeming to do so.
6. He should have the ability to get along with people, to put them at ease, to achieve the appropriate degree of informality, to appear poised and confident when the interview is going badly.

The amateur should not, as he realizes his limitations, give up his ambition to interview world-famous people on the air. Rather, he should note that most of these qualifications can be acquired, at least in some measure, by careful study and experience. Even top-notch interviewers had to start sometime and somewhere. Listeners are not too critical if they feel that the beginner's errors are due to inexperience and not to inadequate preparation.

- DON'TS FOR INTERVIEWERS. The following examples are almost verbatim reports of what can happen in interviews. In some instances, as they say on the radio, "only the names have been changed to protect the innocent."

1. A guest interviewer is introducing a distinguished visitor:
"I first met Mr. X when I was representing our government in the Far East. Our next meeting was when I . . ."
2. The beginning of an interview between interviewer Sam I. and football coach John C.

Announcer: And now, here is your favorite sportscaster, Sam I., with another of his weekly interviews.

I: Thanks, Dick. And good evening, everybody. It took some doing, but I finally managed to get our football coach away from his many admirers who want to congratulate him on his winning team and he's right here in the studio. I know you're all anxious to hear him analyze today's game. But first a word from our sponsor. (One minute commercial.)

I: And now, coach . . . Do you mind if I call you John?
C: No . . . that's my name.
I: Fine. Let's see, you graduated from Middletown University, didn't you?

C: Yes.
I: And, you were an All American tackle in your senior year. Am I right, John?

C: Yes, you're right. But . . .
I: And you played on the team that beat ours fifteen years ago this afternoon. Am I right, John?

C: Yes . . . I guess it was . . .
I: Well, how does it feel to win your first game here?
C: It feels fine.
I: Now, John, let's analyze the game. We received the kick off and failed to gain. After an interchange of punts we had the ball on our forty-yard line. Then, on the first play, our fullback went right down the middle for thirty yards. How did you like our down field blocking?

C: It was pretty good. The boys . . .
I: I thought so too. Then on the next play . . .
3. There is the chap who answers in monosyllables: ${ }^{7}$

I: Ladies and gentlemen. We want you to meet a famous world traveler, Ronald Bowsprit . . . Mr. Bowsprit,
${ }^{7}$ From a script on the problems of the interviewer, by William Harley, program director of Station WHA, Madison, Wisconsin, and Allan Beaumont, director of television programs, Station WTMJ.TV, Milwaukee, Wisconsin.

I understand you've just come back from a trip to the Island of Bali.

B: Yes.
I: Well . . . is it true what they say about the beautiful women in Bali?

B: Uh, yes it is.
I: Uh, I understand that they all have such beautiful posture. Is that true?

B: Ummm . . . yes, uh huh.
I: Yes . . . well . . . is that the result of their carrying everything on their heads?

B: Uh . . . fundamentally, yes.
I: That certainly must have been an exciting trip you took down into that volcano, wasn't it?
B: Uh . . . well . . . no.
4. And then, quoting from the same source, there is the parrot type.

I: Ladies and gentlemen, we want you to meet Mr. Charles Parakeet . . . well-known businessman of this community who has just been honored by the Friends of Our Native Landscape . . . Mr. Parakeet, how did it happen that you received this honor?

P: The honor came to me because I thought up the idea of converting the South Side dump into a playground.
I: Oh, so you thought up the idea of converting the South Side dump into a playground. How did you begin to get the job done?

P: The first thing we did was enlist the aid of all the service clubs in town.

I: I see. You began by soliciting the aid of all the service clubs. Then what did you do?
P: We had to remove all the rubbish and level off the ground and . . . and

I: Remove the rubbish and level off the ground . . . Yes?
P: And grade it.
I: And grade it. That's fine. Now . . .

In spite of the foregoing remarks, there are many excellent interviews on the air. The interviewers have learned to keep in the background, to conduct an informal and friendly conversation, to listen and respond to what the person interviewed is saying, and, in general, to avoid the errors found in the above illustrations. There is, also, an increasing number of people who have learned how to be interviewed. They preserve a proper balance between talking too much and too little. They coöperate with the interviewer in selecting questions of general interest. They are willing to say, "I don't know" when they don't know, and are genuinely interested in sharing what they do know with their listeners.

Specimens of good interviews are found in the sources listed at the end of this chapter. In addition, we can learn what to do and what to avoid by careful listening to broadcast interviews.

- TELEVISED INTERVIEWS. Except for the possibility of using demonstrations and other visual aids, which must be carefully planned in advance, televised and radio interviews are much alike. There seems to be some difficulty in holding the attention of the television audience with a single interview lasting more than four or five minutes. A group interview with two or three personalities or authorities makes a better quarter-hour program.


## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Make a four-minute oral report to the class based on one of the suggested readings. Your purpose, as in previous assignments, is to supplement the information in this chapter.
2. Listen to a radio or television talk that you rate dull or uninteresting; then listen to one that you like. Try to find the reasons for your judgments. Does the difference lie in the topic, in the content, in the delivery, in the speaker's prestige, or in you? Hand in a 400 -word report.
3. Make the same type of comparison of good and poor interviews.
4. Prepare for a classroom "broadcast" a three-minute talk on one
of the following topics or a similar one. Use at least two examples.
a. President Roosevelt's Fireside Chats
b. When, and why, is a speech dull?
c. The political speaker's use of stereotypes
d. How can the speaker analyze the radio or TV audience?
e. How to make statistics interesting
f. Talk before you write
g. Getting off to a good start
h. Keeping your listeners interested
i. Preparing talks for television
j. Man-on-the-street interviews
k. When interviews are preferable to talks
5. When talks are preferable to interviews
m. Don't do these things
6. The instructor will assign two of you one of the four types of interviews. Unless otherwise designated, the time limit will be six minutes. The "plain-folks" type will be done without script; the others may be extempore or from script, as you prefer. In any case, advance preparation is needed. In choosing topics for authority and persuasive interviews, consider your own and your colleague's experiences. If you have dug ditches, sold books, clerked at the ribbon counter, painted houses, taught a Sunday School class, or won a prize for the best cake at the county fair, you can speak with some authority on that experience. On radio and television topics, you may impersonate the author of the book you read. One of you may be the personality for that type of interview.
7. Prepare for classroom broadcasting a talk or interview with live or recorded illustrations. For example:
a. Make a talk on "Do You want to Hear More of This?" Have a colleague read the opening paragraph or two of good and poor speeches. Explain to your listeners why the one is good and how the other can be improved.
b. Interview the person in charge of sound effects about his job. Ask him to demonstrate three or four frequently used effects.
c. Interview the control room operator about his troubles with amateur performers. Demonstrate what happens when the speaker makes sudden changes in volume, holds his script close to the live sides of the microphone, etc.
d. You are meeting with someone who has consented to do his
first radio interview. Broadcast this planning session in which he asks you for advice and you ask him questions about the topic. You agree on a general outline for tomorrow's interview.
e. With a colleague who can illustrate good and bad ways of reading a speech, give a brief illustrated lecture for amateur radio speakers.
f. Using the same procedure, give an illustrated talk on "So you're going to be interviewed."
8. Prepare and record on tape a fifteen-minute interview or discussion with someone outside of class. From the recording make a complete script. Edit the script to five-minute length by cutting the less interesting parts, the least significant portions, and production errors and fluffs. Show the cuts by bracketing the portions which you eliminate. Make enough copies of the script so the entire class can see the complete show and the cuts which you have made. Play the production in class, and let the group discuss the wisdom of your editing.
9. With scissors and cellophane tape, edit the recording made for Exercise 2 to conform to the edited script, five minutes in length.
10. Rudolf Flesch, in The Art of Readable Writing, has formulae to measure clarity and interestingness. Apply these measures to one of your talks.

## Measuring Audience Response to Talks and Interviews

Directions: When you hear the signals-every twenty or thirty seconds-check "Yes" if you like what you hear at the moment; "No" if you dislike what you are hearing; and "?" if you have no decided reactions. In the "Comment" column, write a word or phrase giving the chief reason for your response.

|  | Yes | $\rho$ | No | Comment |  | Yes | $\rho$ | No | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  | 6 |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  | - | - |
| 4 |  |  |  |  | 8 |  |  | - |  |
| 5 |  |  |  |  |  |  |  |  |  |

10. This rating chart may be used to judge talks and interviews in class broadcasts.

## READINGS

Abbot, Waldo, Handbook of Broadcasting, rev. ed., McGraw-Hill Book Company, 1950, chaps. 10, 11.
Charnley, Mitchell, News by Radio, The Macmillan Company, 1948, pp. 196-202 (script of interview).
Chester, Giraud, and Garrison, Garnet, Radio and Television, Apple-ton-Century-Crofts, 1950, chaps. 17, 20 (scripts of talk and interviews).
Crews, Albert, Professional Radio Writing, Houghton Mifflin Company, 1945, chap. 9.
Crews, Albert, Radio Production Directing, Houghton Mifflin Company, 1944, chap. 9.
Hoffman, William G., and Rogers, Ralph L., Effective Radio Speaking, McGraw-Hill Book Company, 1944.
Lawton, Sherman P., Radio Continuity Types, Expression Company, 1938 (scripts of talks and interviews).
Parker, Everett, Inman, Elinor, and Snyder, Ross, Religious Radio, Harper \& Brothers, 1948, chap. 8.
Sullivan, Frank, "Clichés on the Air," Atlantic Monthly, August, 1946, pp. 220-223.
Weaver, Luther, The Technique of Radio Writing, Prentice-Hall, Inc., 1948.

Whipple, James, How to Write for Radio, McGraw-Hill Book Company, 1938, pp. 360-368, 390-398.
Wylie, Max, Radio Writing, Farrar and Rinehart, 1939, pp. 393-399.

## CONVERSATION AND 

IT IS difficult to make a clear-cut distinction between conversation and discussion programs. It is equally hard to distinguish between group interviews and discussions. A case in point is the Mutual Broadcasting System's series, "Meet the Press." Three or four newsmen jointly interview an authority, or someone who occupies a position of importance on a question of current interest. Sometimes the effect is that of crossexamination; sometimes the newsmen express differing opinions and the program becomes an informal discussion.

The difficulty of classifying these and other programs is not of immediate importance. A single broadcast may include brief interviews, conversation, and various forms of discussion. We are interested here in describing the main types of conversational and discussion programs and in noting their values and limitations.

## CONVERSATION

Conversation programs include duologues, two-speaker conversations, and dialogues with three or four participants. 202

These programs are usually given without a script, the participants having a briefing session a few days before they go on the air to decide on general procedure and to talk about the topic. They usually agree on an outline and the time to be spent on each phase of the question. There is no full rehearsal, but participants should have a short "signal practice" or warming-up session just before the program begins. The listener should feel that he is listening in on animated informal talk.

Such programs are often advertised as "spontaneous and unrehearsed." These words, as we have seen, should not be interpreted literally. The participants are chosen because they know something, often a great deal, about the topic. They have read about it, thought about it, and talked about it. During the broadcast they draw on this store of information and may quote almost verbatim what they have said in previous conversations.

- THE DUOLOGUE. The duologue differs from the interview in that the speakers appear as equals, sharing their knowledge and ideas, questioning each other, and responding to what has just been said. Duologues differ from other discussion programs in that the topics selected are generally noncontroversial. The purpose is to interest the listener, to explore areas of agreement, or to provide two sources of information. Thus, two people just returned from Europe might share their experiences; two wives might talk about the care and feeding of husbands; men might tell about their hobbies, or why they support the Red Cross; mothers might exchange experiences on keeping children interested in music lessons.
- THE DIALOGUE. The dialogue is essentially a duologue expanded to include more speakers. Three is the usual, the best, number. Radio listeners find it difficult to identify more than four speakers and to follow the broad outline of their
conversation. Moreover, the least vocal member is likely to be crowded out of a four- or five-way dialogue. The threespeaker conversation obviously provides more sources of information and ideas than does the duologue. Uncertainty about who will speak next, increased opportunity for repartee, and the added possibility of occasional disagreements, may result in a more interesting broadcast.

The best example of broadcast dialogues is the Columbia Broadcasting System's weekly sustaining feature, "Invitation to Learning." Three well-known literary critics converse for twenty-eight minutes about a book "which the world has not been willing or able to let die." ${ }^{11}$ The book to be discussed is chosen well in advance of the broadcast. Participants agree on a general outline and select a passage which is read at the end to give the listener an example of the author's style and to assure an effective conclusion. They do not prearrange the detailed development of the outline. But, although these broadcasts are described as "unrehearsed," it would be hard to find three people better prepared to talk about great books. The program was still on the air late in 1951.

The following excerpts from the book just quoted give some of the authors' ideas about the dialogue as a literary form and illustrate its use:
Cairns: ... Do you think that the dialogue method we employ is more advantageous than the method of a lecture by a single individual?
Van Doren: Certainly I do. One man speaking does not correct himself as readily as any one of us is corrected by the other.
Tate: Isn't another advantage of the dialogue a certain measure and proportion. . . . If you have three minds working on the same ideas, there is not likely to be much exaggeration in the total effect; hence perhaps a sense of proportion will be conveyed to the listener.
Van Doren: And the very fact that a sense of proportion some${ }^{1}$ Huntington Cairns, Allen Tate, and Mark Van Doren, Invitation to Learning, The New Home Library, 1942, p. ix.
times keeps us from exploring the full possibilities of a theme stimulates the listener to do so for himself.
Cairns: I take it that the method we employ is a combination of the dialectical method and the descriptive method and that it possesses the advantages we have enumerated. I wonder if it does not also possess some disadvantages. If we compare our dialogues with the Platonic Dialogues . . .
Van Doren: Oh! Oh!
Tate: Please don't do it!
Cairns: . . . merely as a matter of form-there is at least one conspicuous difference: We participate in our dialogues but Plato participated in none of his. Is that a disadvantage?
Van Doren: That is to say . . . we have not the leisure to correct ourselves completely. Because Plato is not a participant, he is free to manipulate a dialogue and make it go where he wants it to go. We cannot polish our own performances.
Tate: The Platonic Dialogues are artfully written works of the imagination; ours are real conversations. Have there even been any real conversations recorded as ours are in a book?
Cairns: Not that I am aware of. I think the fact that our dialogue is a real, unprepared, conversation gives it an advantage over the written dialogue. In the traditional form of the written dialogue, the author must use dummies which he constantly knocks down. . . . We need no artificial devices, no imaginary opponent, for, in general we represent three distinct points of view.
"Invitation to Learning" does not appear on lists of the ten or fifteen programs with the largest numbers of listeners. However, in 1942, the Columbia Broadcasting System said that over a million people had been listening to it for the past several years. And, in November, 1949, 17 percent of those who had their radios turned on were listening to it. This indicates a sizable audience.

This point should be clear. The dialogue program does not require authorities of the caliber of those in "Invitation to

Learning." Authority is a relative term. If someone knows some things that I do not, he can serve as my authority on those matters. The reverse is also true. If we have three or four people who know more about a subject than the listeners know, they can properly appear in this and other talks programs on that subject.

## DISCUSSION PROGRAMS: THE PANEL

Of the various meanings attached to the term discussion, two concern us here. Political scientists and writers on our form of government use the term "discussion" in a broad sense, to include the speaking and writing that takes place from the time a problem is called to public attention until some solution is agreed upon. It involves such basic ideas as freedom peaceably to assemble and to petition for the redress of grievances, freedom of speech, and freedom to listen.

Walter Bagehot, the distinguished British philosopher, had this concept of discussion when he wrote that progress occurs only when the government is "to a great and growing extent a government by discussion." A free state means one "in which the sovereign power is divided among many persons and in which there is discussion among those persons." From discussion we learn tolerance, which, he says, is "of all ideas the most modern." ${ }^{2}$ Walter Lippmann, Bagehot's American counterpart, says that freedom of speech achieves its essential purpose "only when different opinions are expounded in the same hall to the same audience. . . . For, while the right to talk may be the beginning of freedom, the necessity of listening is what makes the right important. ${ }^{93}$ The purpose of a general discussion-debate program on a given subject, one which may last for months or years and include all sorts of written and oral communication, is to give the public oppor-
${ }^{2}$ Walter Bagehot, "The Age of Discussion," Physics and Politics, Appleton, 1873, pp. 158 ff.
${ }^{3}$ Walter Lippmann, "The Indispensable Opposition," Atlantic Monthly, August, 1939, pp. 187-190.
tunity to analyze the problem, consider the relative merits of different solutions, and finally to approve the one that seems best.
We also use the term discussion in speaking of a single planned but relatively informal meeting where different points of view are presented and in which those present are invited to join in purposeful talk about a problem. In radio discussions direct participation is, of course, limited to those present at the broadcast. However, members of the radio audience may listen in groups and continue the discussion among themselves. They may buy printed copies of the broadcast for further study, discuss the problem at club meetings, and engage in such opinion-forming activities as passing resolutions or writing their representative in Congress.

At this point, we should distinguish between discussion and debate. Discussion is frequently spoken of as coöperative thinking, or thought in process. Participants should be willing to pool their information and join in a search for the best solution to the problem before the group. Debate, on the other hand, occurs between individuals who have studied the evidence and arrived at different conclusions. Taken together, and in this sequence, discussion and debate constitute the democratic process; they are the counterpart of the scientific method in dealing with nonlaboratory problems.
The types of discussion best suited to broadcasting are the panel and the symposium. The term round table is best avoided; it should be reserved for small groups who gather about a table to talk about mutual problems. The term forum, as used here, designates that part of a discussion or debate in which audience members are invited to participate.
The usual radio panel is a half-hour three-way conversation about a current issue. The purpose is either to analyze the problem or to present different points of view about it. Two of the speakers are chosen because they represent different sources of information or because they advocate different
solutions. The third speaker serves as discussion leader. He may also add to the information, or represent those holding a middle-of-the-road opinion on the issue.

The two best-known examples of the radio panel are the University of Chicago's "Round Table" and Northwestern University's "Reviewing Stand."

The "Round Table" was first broadcast over Station WMAQ, Chicago, in February, 1931. It became an NBC network program in October, 1933, and was taken over by ABC when that network was organized. It was the "first regular network program to be broadcast entirely without script." ${ }^{4}$ In the ten-year period, 1938-1948, more than 3 million printed copies of the broadcasts have been sold. George E. Probst, currently in charge of the broadcasts, reported in 1948 that almost a million letters had been written by listeners expressing their appreciation for the more than 700 "Round Table" programs.

The participants, chosen for knowledge of the topic and ability in extemporaneous speaking, usually have a dinner meeting Saturday evening to exchange views and to make a general outline. They meet again Sunday morning to go over the outline and to add personal notes, facts, figures, and quotations which they plan to use in the broadcast. A "rehearsal recording" is then made. This enables the speakers to hear themselves as others hear them, and to discover and correct their own weaknesses.

At the 1939 Institute for Education by Radio, three Chicago "Round Table" veterans were questioned about the lessons they had learned from experience. These excerpts from their replies contain valuable advice for all panel members.

We learned quickly not to emphasize ourselves what someone else is adequately emphasizing.

My strategy is to play up what others play down . . . to give a balanced picture out of our joint participation.
${ }^{4}$ This and the information which follows are taken from Round Table Memorandum, University of Chicago Radio Office, 1948.

We make no pretense of trying to give full information on any point of view, or to reach any definite conclusions.

You cannot cite long statistics. You cannot use technical terms without defining them explicitly . . .

If one of us makes a faux pas . . . another will invariably say "you mean so-and-so," and make it possible to smooth it over.

The excellence of the spontaneity depends in large measure upon the intensity of preparation. ${ }^{5}$

The Northwestern University "Reviewing Stand" has been on the air since 1931, but did not adopt the panel form until 1937 or 1938. In 1949 it was carried by about 175 stations on the Mutual network. In July of that year Robert E. Buchanan, Northwestern University's program director, reported that from 1500 to 3000 printed copies of the discussion were sold each week, and that estimates of the listening audience ranged from 500,000 to $1,000,000$ persons.

The method of preparation is the same as that of the "Round Table," except in the matter of rehearsal. The speakers, having met a few days before the broadcast to discuss the question and make a topical outline, meet an hour before they go on the air. They discuss the outline, are briefed on radio procedure, but do not have a formal rehearsal. Dean McBurney, former director of the "Reviewing Stand," writes, "The speakers reach certain agreements and understanding in the rehearsal. The interesting, vigorous discussion which gave rise to these understandings cannot possibly be repeated. . . . The result: either a stale program or one which begins with advanced 'starting points' beyond the grasp of the audience." ${ }^{\beta}$

The following rules should be presented and explained at the planning session:

1. There are no formal talks. The method of public conversation is used throughout the meeting.

[^22]2. Help your radio audience to identify the speakers: "Jones, what do you think about this situation?" or "I disagree with you, Smith . . ."
3. Individual contributions to the conversation should be brief. Four half-hour "Reviewing Stand" broadcasts had seventy-one, seventythree, eighty-seven, and ninety-one "speeches," ranging in length from two to 200 words.
4. Listen as well as speak. Begin your remarks with reference to what has just been said.
5. Don't sit back and wait to be called on. If two of you try to talk at once, the leader will signal who is to speak first.
6. If you have three points, label them, " $1,2,3$."
7. Help establish your colleagues (and yourself) as authorities on the question: "Jones, you're our expert on labor relations . . . ," "From your ten years in China, Brown, what conclusions . . . ?" "I'm the only small businessman on this panel . . ."

- DUTIES OF THE DISCUSSION LEADER. The leader, or moderator, is an important member of the panel team. He participates in the choice of panel members and arranges a preliminary meeting to plan the broadcast. During the broadcast, he keeps the discussion moving from point to point, tries to keep it from becoming one-sided, checks the member who wants to talk all the time, encourages the timid member to express his views, and, by means of brief summaries, attempts to synthesize the individual contributions into some sort of unity. When he is most effective, he keeps attention focused on the other panel members. His skill in this matter lies in his ability to suggest instead of directing, to ask questions instead of answering them. For example:

1. To question the strength of an argument:
"What evidence do we have to support this contention?"
2. To register degrees of agreement:
"Am I correct in concluding that we agree on this point?"
3. To suggest that the discussion is getting off the track:
"Will someone tell me how this relates to our problem?"
[^23]- getting THE DISCUSSION STARTED. The first test of the leader's skill is his ability to get the problem stated and the discussion under way in two minutes. The following example illustrates the method currently used in "Reviewing Stand" broadcasts:

Topic: Should you Worry about Heart Disease?
Panel: Dr. A. F. Coburn, School of Medicine, Northwestern University: Dr. G. K. Fenn, President, Chicago Heart Association: Dr. Smith Freeman, School of Medicine, Northwestern University.

Moderator: Robert Buchanan, director of the "Reviewing Stand."

Mr. Buchanan: Should you worry about heart disease?
Dr. Coburn: No, I think it is unwise to worry about heart disease. A person should let his physician do the worrying about heart disease.

Dr. Freeman: Yes, I think we should worry about heart disease, but we should be careful about how and when we worry.

Dr. Fenn: No, I don't think you should worry about heart disease, but I think everyone should think about it a lot-and now.

Mr. Buchanan: People--young and old--are always startled when heart disease takes the life of a friend, or when a heart attack slows down the activity of someone they know. We all wonder just how vulnerable we are to heart disease.

> What does the prevalence of heart disease have to do with you? Can it be avoided? Can it be cured? . . .

The second example is from the Chicago "Round Table" broadcast of March 13, 1949.

Panel: Professors Edward Levi, Nathaniel Nathanson, and Malcolm Sharp, of the University of Chicago Law School:

Mr. Levi: The "Round Table" today discusses guilt by association. It is a most difficult problem. Are you, the listeners, guilty through association? Are we, the "Round Table" participants, guilty by association? How do we know?

We are all lawyers here today discussing this problem. Let us begin by giving specific examples of where guilt by association is a principle at work in our society today. Nathanson, do you have an example for us?

Mr . Nathanson: Outstanding examples are found in the government loyalty review program.

The Attorney General has issued a list of subversive organizations. Membership in one of those organizations apparently creates a prima facie case of guilt or disloyalty. One particular instance which has come to my attention is that of the individual who, years ago, bought an insurance policy from an organization which now turns up on the Attorney General's list of Communist front organizations. Is he guilty of disloyalty because of that?

Mr. Levi:
Sharp, how about adding some more examples?
Mr. Sharp: The example which interests me particularly is the discharge of professors at the University of Chicago--rather, at the University of Washington lately.

Mr. Nathanson: That is a Freudian slip, Sharp.
Mr. Sharp: Two professors were discharged for being Communists. One of them was discharged for membership in various Communist front
organizations. This seems to me an ex-
ample of guilt by association.

| Mr. Levi: | A prize example is the evacuation of the Japanese-Americans from the West Coast during the war. We did not have time to try them individually for their individual guilt, so we just took the whole bunch and insisted on their being moved. |
| :---: | :---: |
| Mr. Sharp: | The recent treatment of the musicians, Feurtwanger and Gieseking, by groups who blamed them and wanted to get them out of the country because they have been more or less associated with Nazis is an example of situations we should try to avoid. We have learned that "people are known by the company they keep," that "birds of a feather flock together"-things suggested by such adages-and that is the way we judge people, in part at least. How can we really avoid it? |

In both cases, the network announcer had stated the question and given the names of the panel members. These introductions illustrate different techniques. Moderator Buchanan simply asked the question and the panel members stated their positions in a sentence or two. Professor Levi, in his double capacity of panel member and discussion leader, began with a seventy-word "speech," indicating the difficulty of the problem, and suggesting that the panel members begin by citing specific examples. He makes good use of direct questions.

[^24]from the "Reviewing Stand" broadcast of October 2, 1949, on "Are we Losing the Cold War in Asia?"

Before we go on with our analysis of your positions, there are two assumptions which appear to run through this discussion and I am anxious to examine them just a bit. First, that Asia is vital to American interests. Why is this the case? Why risk American men and money in this area?

What should be our policy in China, McGovern? Do you think we ought to recognize Communist China?

What is this Hindu Pakistan subcontinent?
Do you men expect that we are going to get any substantial aid in Asia from England and other European countries?

Then, in conclusion, what do you men recommend for policy in Asia?

- CONCLUDING THE DISCUSSION. To make sure that the discussion concludes, rather than stops, the leader either makes a brief summary or calls on each panel member for a sentence or two to summarize his own position on the question. Here are the closing statements in two panel discussions. The first is the moderator's final speech in the "Reviewing Stand" program on the "Cold War in Asia":

Yes, the cold war in Asia is apparently a fact, whether we like it or not. Our speakers today believe we must strengthen our position in Asia, as we have done in Europe, if we hope to find the means of bargaining with Russia.

The second example is the concluding section of the Chicago "Round Table" program of September 25, 1949, on "The Atlantic Community Faces the Bomb." The participants are Professors Harold Urey, Institute for Nuclear Studies; Leo Szilard, Institute of Biophysics; William F. Ogburn and Louis Wirth, Department of Sociology-all from the University of Chicago.
Mr. Wirth: There is, finally, this other question: Is
not the psychological atmosphere of the
Russians having the weapon likely to make
them more amenable to negotiations with us
on a more equal and rational basis?

Mr. Wirth: Yes.
Mr. Szilard: I want to say that fortunately I am a physicist and not required to answer psychological questions.
Mr. Wirth: Well, we have agreed, then, that the problem here is one to which all the resources of science and statesmanship must be devoted in the next few years if catastrophe in the world is to be avoided.
Mr. Szilard: A little wisdom will do no harm.
Mr. Ogburn: I think that we must do something. That is the real message--something must be done.

Mr. Wirth: The new urgency of the situation might be a factor in the stimulation of a new effort and a new challenge to the human imagination.

Mr. Szilard: Yes, if the urgency is not too great. If the urgency gets very great, people become hysterical and cannot think clearly.

Mr. Ogburn: But meantime I would step up defenses and try to settle the German problem.

## DISCUSSION PROGRAMS: THE SYMPOSIUM

The symposium differs from the panel chiefly in the formality of presentation. The participants are a chairman or moderator and from two to four speakers, each of whom makes a short speech on the assigned topic. After the speeches the participants may question each other. If an audience is present, the symposium ends with a forum period, during
which audience members are invited to join in the discussion.
Like the panel, the symposium may be used to give the listener essential information about the problem, or to consider different solutions. It provides more information and, if the speeches are properly related to each other, a more unified treatment of the topic than are easily obtained from the panel. Those who choose symposium speakers should, to quote Lasswell, try "to equalize the effect of such factors as skill in the presentation of a point of view, and the prestige of participants." ${ }^{8}$

The best example of the radio symposium is "America's Town Meeting of the Air," originally a sixty-minute discussion series, recently reduced to thirty minutes. It was first broadcast May 30, 1935. Usually there were four speakers, two on each side of a controversial issue. The program is divided into three parts: (1) each speaker presents his views on the question in a seven- or eight-minute statement; (2) the speakers question each other for about ten minutes; (3) the audience members question the speakers for the remainder of the time.

Some idea of the effects of these broadcasts can be gained from listener responses. In 1947, for example, "Town Meeting" was carried by about 225 stations on the ABC network, with an estimated 10 million listeners. During that season 116,950 persons were present at the broadcasts; the management received 105,165 letters and sold 354,365 printed transcripts of the discussions.

- CONDUCTING THE SYMPOSIUM. The leader or moderator of the symposium usually assists in selecting the question and in choosing and briefing the speakers. His duties at the broadcast resemble those of the chairman at a public meeting. In introducing the speakers, he should begin by directing
${ }^{8}$ Harold D. Lasswell, Democracy through Public Opinion, Banta Publishing Company, 1914, p. 93.
attention to the topic. For example, "With this description of the Taft-Hartley Bill in mind, let's see what organized labor thinks about it," is better than, "Mr. John Doe, president of X Union will now speak on 'The Taft-Hartley Bill in Action.'" The introduction should also qualify the speaker as an authority on the subject. Note for example, how George V. Denny introduced a speaker on the "Town Meeting" symposium, December 16, 1947, on the question, "How Can We Maintain Prosperity and Avert Depression?"

Moderator Denny: Many of our economists today blame our last crash on the failure of the Federal Reserve System to properly regulate our flow of credit to our economic machines. Mr. Matt S. Szymcyzk has been a member of the Federal Reserve Board since 1933. He has just returned from his job as director of the Economic Division of the American Military Government in Germany, and he is well qualified in the field of economics and finance.

The forum period which often concludes the symposium presents special problems. Only twelve or fifteen members of the audience can participate even briefly. The rules, announced in advance, usually specify that forum speakers must rise and be recognized before they speak, that the time limit is one minute, and that no one can speak more than once. Sometimes a pressure group attempts to take over the forum period by having members prepared to ask questions or make comments as soon as the forum begins. To deal with this situation the leader may ask that questions be directed to each symposium speaker in turn, or ask all speakers to comment on each question. The leader should rule out of order irrelevant questions or personal remarks. To make sure that the forum ends well, he may arrange with an audience member to ask an important question a minute or two before the sign-off. Or he may call on each symposium speaker for a thirty-second summary of his position on the issue under discussion.

## DEBATES

Debate logically occurs when individuals who have studied a problem disagree as to the best solution. Radio debates are sometimes used to arouse interest in a problem. The debate format is simple. Each side has the same number of speakers and the same amount of time. The proposition in broadcast debates is usually phrased as a question. For example: "Should We Have Compulsory Military Training?" "Should We Have Federal Aid for Elementary Education?" "Should the United Nations Have More Power over the Member Nations?" The moderator states the issue, indicates its importance, and introduces the speakers. Following the prepared speeches, the debaters question each other. There may also be a forum period for audience participation. Listeners' interests are best served if the debaters are about equal in knowledge of the question, prestige, and speaking skill.

There are two opinions on the proper use of conflict and emotional appeals in broadcasts. One group holds that an objective analysis of the problem and consideration of the best solution require an atmosphere of reflective thinking with a minimum of conflict or excitement. The other group admits that this should be so, but says that showmanship is necessary to attract listeners. Those who hold this belief, says Bryson, "use the word 'showmanship' to justify turning a discussion into a battle between personalities." ${ }^{\circ}$

In the critical months preceding our entry into World War II, an increasing number of broadcasts on such programs as the Chicago "Round Table," the Northwestern "Reviewing Stand," the "Town Meeting," and the "People's Platform" were debates between sincere and sometimes highly emotionalized men and women who held opposite beliefs on the vital

[^25]issues before Congress. In such instances, to quote Bryson again, "It is not always possible, in days of tension and hatred, when public questions are so dangerous and confused, to keep anger and the wrong kind of excitement out of these debates."

Nevertheless we should try. There is a possible, though sometimes difficult, middle course. We should use enough of the dramatic element to catch and hold attention without resort to name-calling, personal attacks, or strong emotional appeals that make thought difficult.
"America's Forum of the Air" is the best example of network debate that encourages, or at least permits, controversy on "hot" issues. Theodore W. Granik is the originator and moderator of this series, which has been on the air for fourteen or fifteen years. The debaters, two or four in number, sit at opposite sides of the table before an audience of four or five hundred people.

On February 25, 1950, for example, Arthur Campbell, professor of chemistry at Oberlin College, and Karl Mundt, United States Senator from South Dakota, debated whether security regulations on atomic energy matters should be strengthened. Moderator Granik sketched the vital importance of the issue in a sentence or two, and put a question first to Campbell, then to Mundt, and soon faded out of the picture as the two debaters conducted a spirited dialogue. In the half-hour Campbell spoke fifty-seven times, Mundt fifty-five times, and Granik twenty-three times. Of Granik's speeches, thirteen were routine recognition of speakers or transitional phrases, six were questions or comments to clarify points made by the debaters, and four were questions designed to keep the debate moving.

Sometimes speakers interrupt each other too frequently, or, as happened several times in the Campbell-Mundt debate, both speak at once. In such cases, radio listeners get a feeling of excitement rather than an understanding of the issue. How-
ever, extemporaneous debate has the advantage of immediate refutation of arguments; properly managed, it can contribute light as well as heat.

## - Dramatized and documentary debates.

Dramatized and documentary debates are treated in the next chapter, but merit brief mention here.

Participants in such debates dramatize typical situations to arouse interest in the problem or for use as evidence. They may also impersonate authorities on the question, presenting statements of opinion or selections from speeches prepared by the individual they represent.

In 1937, Milton Dickens produced a series of dramatized radio debates. He and the debaters chose a current controversial question, selected three or four basic issues and the strongest pro and con arguments on each. They then prepared a script, chose a cast, and rehearsed the debate before it was broadcast.

Currently on the air (1951) is a dramatized debate that follows courtroom procedure. Three lawyers carry the leading roles as judge and attorneys on opposing sides of controversial questions. Evidence is supplied by actual authorities who are questioned and cross-examined. The judge rules on the relevancy of questions, summarizes the evidence on both sides and submits the case to the jury which is, of course, the listening audience.

## DOES ANYONE LISTEN TO DEBATE <br> AND DISCUSSION PROGRAMS?

Somewhat to the surprise of those who listen to the radio for entertainment only, the answer is "yes." True, the audience is small compared with the numbers who listen to com-edy-variety shows, but Bryson estimates that a serious discussion on CBS has from 500,000 to $1,000,000$ listeners. These come, he says, from "the three or four million people who are
what might be called debate fans. . . . They like argument and they like to learn. They believe that their own thinking is made better by hearing what opposing speakers have to say." There are "a few million others who may listen if the subject interests them."
Lazarsfeld and Kendall provide further information on audience preferences for serious discussions in their analysis of the results of a survey conducted in 1947 by the National Opinion Research Center. ${ }^{10}$ The 3225 persons interviewed were handed cards listing sixteen different kinds of radio programs and asked which types they liked to listen to in the daytime and in the evening. The results: 22 percent checked talks or discussions about public issues for daytime listening, and 44 percent wanted to listen to such programs in the evening.

The accompanying table shows evening program preferences for discussions of public issues according to age and education of those interviewed.

Age Education

|  | College | High School | Grade School |
| :--- | :---: | :---: | :---: |
| $21-29$ | $59 \%$ | $33 \%$ | $21 \%$ |
| $30-49$ | $63 \%$ | $45 \%$ | $37 \%$ |
| $50-$ over | $67 \%$ | $54 \%$ | $36 \%$ |

From this data, and from other phases of their analysis, Lazarsfeld and Kendall conclude that (1) preference for discussion programs increases with the listener's age and formal education; (2) men are more likely than women to be interested in discussions; and (3) residents of metropolitan areas are more likely to state a preference for discussions than are those who live in the country. To this, we add our opinion that discussion broadcasts serve an audience of sufficient size to warrant their use as public service programs.

[^26]
## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Make a four-minute report to the class on one of the suggested readings. Your purpose, as in preceding assignments, is to supplement the information in this chapter.
2. Listen to one of the well-known network discussions. Note how the leader, or moderator, introduces the other participants and the topic, keeps the discussion on the subject, attempts to secure equal participation, and concludes the broadcast. Hand in a report of your observations.
3. Listen to a discussion program produced by students or other amateurs, and take notes on the same points. In what ways might this discussion be expected to differ from the network program? Hand in a report of your observations.
4. Secure copies of a recent network discussion. Assign the parts to students and have them read sections of the program that illustrate points observed in Exercise 2. This may take the form of an illustrated lecture with the speaker interrupting the reading to comment on what was done and why.
5. Prepare for broadcasting a four-minute talk on a topic suggested by this chapter. Your purpose is to provide information of interest to the general radio audience. Such topics as these may be used:
a. "Invitation to Learning"
b. Discussion and democracy
c. "The Chicago Round Table"
d. "America's Town Meeting of the Air"
e. Who listens to discussions?
f. What is a panel?
g. Should discussions be commercially sponsored?
h. Discussion or debate?
i. "Town Meeting Comes to Town"
6. One or more groups may be assigned to broadcast a committee meeting. Assume, for example, that a committee of four is arranging a radio discussion on a "hot" issue. During the ten-minute broadcast, the group should decide the type of discussion best suited to the situation and what each member should do in planning or producing the discussion program.
7. The class will be divided into groups of four or five to present a series of broadcasts on current issues. Each group will demonstrate a different type of conversation or discussion program. The time limit for conversations with two participants will be eight
minutes. For other types of conversations and discussions fifteen minutes is recommended. The reading and listening assignments are designed to provide information on the objectives and procedures of these programs.
8. This rating chart may be used for a minute-by-minute evaluation of interviews and discussion programs. The teacher will furnish mimeographed charts of the desired length.

## Measuring Audience Response to Interviews and Discussions

Directions: When you hear the signal check "Yes" if you like what you hear at the moment; "No" if you dislike what you are hearing; and "p" if you think it neither good nor bad.

In the comment column write the number of the item in the list below, giving the chief reason for your judgment. For example, if you thought the opening interesting, you would check the "Yes" column and write 3 in the comment column.

## Comment Code

1. Organization clear?
2. Speakers interested?
3. Content interesting?
4. Delivery conversational?
5. Pleasant voice?
6. Variations in rate?

|  | Yes | $\rho$ | No | Comment |  | Yes | $\rho$ | No | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | - |  |  |  |  | 6 |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  | 7 |  |  |  |  |
| 4 |  |  |  |  | 8 |  |  |  |  |
| 5 |  |  |  | 9 |  |  |  |  |  |

Note: After a little practice, the audience will be able to mark the chart every twenty seconds. Sometimes the length of intervals may be varied to get reactions to different speakers, the work of the moderator, etc.

## READINGS

This list includes scripts of well-known discussions as well as advice on when to use these program types and how to prepare them.

American Forum of the Air, Ransdell, Inc. (stenographic reports of discussions and dialogue-debates).
Bryson, Lyman, Time for Reason about Radio, George W. Stewart, Inc., 1948, chap. 2.
Cairns, Huntington, Tate, Allen, and Van Doren, Mark, Invitation to Learning, The New Home Library, 1942 (three-way broadcast conversations about great books).
"Developing Democracy through Radio Discussions," Education on the Air, 1944, Ohio State University Press, pp. 149-169.
Ewbank, H. L., and Auer, J. J., Discussion and Debate, rev. ed., Ap-pleton-Century-Crofts, 1951, part 4.
Gould, S. B., and Dimond, S. A., Training the Local Announcer, Longmans, Green and Company, 1950, chap. 7.
Hudson, Robert B., and Wiebe, Gerhart D., "A Case for Listener Participation," Public Opinion Quarterly, Summer, 1948, pp. 201208.
"Is Labor Getting a Fair Shake on the Air?" Education on the Air, 1947, Ohio State University Press, pp. 123-140 (a symposium).
"Junior Town Meeting, The," Education on the Air, 1948, Ohio State University Press, pp. 367-374.
Kaplan, Milton, Radio and Poetry, Columbia University Press, 1950, chap. 8.
Kercher, Leonard C., "Social Problems on the Air," Public Opinion Quarterly, Fall, 1947, pp. 402-411.
Lawton, Sherman P., Radio Continuity Types, Expression Company, 1938 (scripts of various discussion types).
Northwestern Reviewing Stand, Northwestern University Press (scripts of broadcast discussions and debates).
Overstreet, Harry A., and Overstreet, Bonaro W., Town Meeting Comes to Town, Harper \& Brothers, 1938.
Poole, Lynn, Science via Television, John Hopkins University Press, 1950, chaps. 2, 7.
"Should the FCC have any Control over Programs?" Education on the Air, 1948, Ohio State University Press, pp. 84-98 (a symposium).
Town Meeting, Columbia University Press (scripts of "America's Town Meeting of the Air").
University of Chicago Round Table, University of Chicago Press (scripts of this series of panel discussions).
Whipple, James, How to Write for Radio, McGraw-Hill Book Company, 1938, chap. 18.

## chapter 13

## DOCUMENTARY, ACTUALITY, AND DRAMATIZED 

AS WE noted in the preceding chapter, dramatic techniques are sometimes used in discussion programs to portray an historical event, arouse interest in a current problem, convey information about it, or arouse listeners to appropriate action. Because the terms documentary, actuality, and dramatized discussion, mean different things to different people, they require definition here.

The documentary has been defined as "a dramatic program whose purpose is to explore a subject rather than tell a story."1 It "deals with contemporary situations in terms of reality" and may use actors "as spokesmen for authentic and realistic reporting of real situations." ${ }^{2}$ The actuality is a type of documentary in which people speak their own opinions in their
${ }^{1}$ Erik Barnouw, Handbook of Radio Writing, D. C. Heath and Company, 1947, p. 151.
${ }^{2}$ Lyman Bryson, Time for Reason about Radio, George W. Stewart, Ine., 1948, p. 74.
own characters, instead of having actors read lines written by someone else. The dramatized discussion makes more extensive use of dramatic forms and techniques. It differs from the actuality in that it uses actors; from the documentary in that it may portray typical, rather than actual, situations. Dramatized scenes may also be used to present the problem for discussion or to illustrate points made in a speech.

In deciding when to permit the use of documentary, actuality, or dramatization, program directors are confronted with a real dilemma. They know that dramatic devices arouse interest and stir the emotions. But they also know that people do not think clearly when their emotions are deeply stirred. Moreover, it is generally agreed that decisions on controversial questions should be reached after calm consideration of evidence and argument on all sides of the issue.

How can the dramatic elements be properly used and properly controlled to serve these ends? As a partial answer to this question, officials of the CBS and NBC networks prohibited the use of dramatizations in the 1936 presidential campaign. In announcing this decision, a network spokesman said that dramatic broadcasts would "throw the campaign almost wholly over to the emotional side" and that "the turn of national issues might well depend on the skill of warring dramatists rather than on the merits of the issues . . ." ${ }^{3}$ This policy, however, was not followed by other networks, and some CBS and NBC affiliates permitted dramatized broadcasts on local issues.

CBS attempts to make an admittedly difficult distinction between controversial and noncontroversial issues. Their 1948 policy is thus explained by Lyman Bryson, then CBS Counselor on Public Affairs: "We do not dramatize controversial issues. . . . We do not allow a political party to dramatize a political argument, or to use an actor to express the opinion of an imaginary character. . . . We do not al-

[^27] low dramatized versions of labor disputes or of tax arguments." But on questions that seem to lie outside the realm of controversy, CBS will use "the persuasive powers of a dramatist and of skillful actors" ${ }^{\text {" }}$ to show, for example, that race riots should be stopped, or that the freedoms listed in the Bill of Rights are precious and must be preserved. Such programs are carefully prepared by the network and presented as pub-lic-service features.

## DOCUMENTARY BROADCASTS

No one seems to know just when broadcasts resembling the present-day documentary were first produced. We do know that much of the pioneer work was done by staff members of the British Broadcasting Corporation (BBC), and that they followed rather closely the pattern set by their countrymen who developed the documentary film. We know that in 1935 the BBC was presenting broadcasts that combined documentary and actuality techniques. No distinction between these types was made at that time.

These 1935 BBC broadcasts presented economic and social problems of people living in a selected area. Trained observers and script writers spent months studying the area, interviewing the people, recording conversations, and building the program. The broadcasts, running one and a half hours, told "in true documentary fashion the problems of the workers and management, the problems of the housewife, the needs of the children, etc." ${ }^{5}$

The first noteworthy American experiment in the use of documentary technique in presenting current controversial issues seems to have been a series on American issues produced in New York for the BBC and broadcast in Great Britain in 1938. The series included: "Ecce Homo," written

[^28]by Pare Lorentz, presenting a picture of unemployment in this country; "G-Men Against Crime," the story of our FBI; "Crosstown Manhattan," the story of a typical New York street; and "No Help Wanted," by William N. Robson, another view of the depression and efforts of the Works Progress Administration to find jobs for the unemployed.

Late in 1946 the Columbia Broadcasting System created the CBS Documentary Unit which was, as Edward R. Murrow said, "an involved, difficult, expensive, and altogether obvious thing to do." ${ }^{5}$ The unit consisted of four or five people with ability in research, writing, and directing. These men were relieved of all other duties and told to produce perhaps a dozen major productions a year on vital public issues, each based on research of the highest order. It was understood that the broadcasts would be scheduled when ready and that they would replace programs with well-established audiences.
"Eagle's Brood," the Documentary Unit's first broadcast was a full-hour program on juvenile delinquency. Robert L. Shayon, the writer-producer, spent about four months studying the subject, talking to people in different parts of the country, recording conversations and interviews, writing and rewriting the script. Murrow remarked that an acceptable program might have been written in the office after studying the literature on juvenile delinquency. The main contribution of the field study was the stamp of authenticity it provided. Dialogue was correct, and people talked as they do in life. Whether this stamp of authenticity was worth what it cost in time and money is a matter on which there can be real difference of opinion.

In recent years various governmental agencies have used documentaries to explain what they are doing and why. This form was used extensively during World War II to show why we couldn't do business with Hitler, as well as to build and

[^29]maintain morale. We can mention only a few individual writers and programs. Norman Corwin should be recognized for his skill in the use of narration. In his series "So This Is Radio" he introduced assistant narrators. One of them was a "footnote man" who interrupted the chief narrator to cite the sources of the evidence. The footnote man, to quote Barnouw, ${ }^{7}$ was "always heralded by a buzzer, a sort of radio asterisk." In addition to establishing the accuracy of the information, this device added a dramatic element to the narration.

On August 8, 1948, Jack Gould, then radio editor of The New York Times, wrote of Morton Wishengrad's documentary, "Communism ; U.S. Brand," "On Monday night, American radio not only had something to say but the courage to say it. Wishengrad," he continued, "abjured the temptation to indulge in reckless Red-baiting and instead chose to let communism's own words speak for themselves." The result was "a brilliantly successful and provocative documentary." The same theme was treated from a different angle in Joel Sayre's documentary, "Clear and Present Danger," a study of loyalty investigations and their implications, broadcast by the ABC network, June 5, 1950.

One of the most important televised documentaries yet produced, is the series based on General Eisenhower's book, Crusade in Europe.

An interesting simplification of the documentary is the technique used in presenting John Hersey's story of the atomic bomb at Hiroshima. ABC presented it on four successive nights with reading voices, and without dramatization, sound effects, or music.

Writers and directors of early documentaries stressed the dramatic elements in writing and production and tried to avoid anything resembling a speech. They soon discovered the difficulties in presenting a complex controversial problem entirely in dialogue form. Their solution was to make in-

[^30]creased use of the narrator and of short statements or speeches by authorities on the point at issue. Edward R. Murrow ${ }^{8}$ has expressed the belief that future documentaries will be concerned rather less with production and will place more stress on hearing and understanding what is said than on overriding the voice with music or sound effects. He hopes that these programs will become more controversial. Robert Saudek, ${ }^{9}$ of the American Broadcasting Company, agrees that the "most important single objective is to maintain the integrity of the subject. Whatever technique is used, it must not overbalance the subject itself." The ABC found, in planning programs on slum clearance, that the proposed solutions were based on complex economic factors which did not lend themselves to interpretation by dramatic techniques. They therefore decided to have the principal solutions discussed by eminent authorities.

Producers of documentary programs naturally want to know how many listeners they attract and with what effect. Only a limited amount of evidence on these questions is as yet available. Murrow reports that when one of the CBS Documentary Unit's programs was substituted without previous announcement for a popular mystery show, only about 2 percent of the listeners shifted to another station. Kercher, with the assistance of his students, studied the audience for the 1947 broadcast of "Eagle's Brood" and "A Long Life and a Merry One" in the primary service area of Station WKZO, Kalamazoo, Michigan. His findings are based on 1076 interviews, a balanced sample of the residents of that area. Of those interviewed, 17 percent listened to "Eagle's Brood," 12 percent to "A Long Life and a Merry One," while 6.3 percent heard both programs. The most frequent reason for

[^31]not listening was that the individual did not know about the programs. ${ }^{10}$

Elmo C. Wilson reports a study designed to measure the effectiveness of certain CBS documentaries in changing the opinions of listeners. Questions based on the main points in the broadcasts were answered by listeners before and after hearing the programs. Here are some of the changes of opinion produced by the "Eagle's Brood," on juvenile delinquency, and "A Long Life and a Merry One," a documentary on health and medical care. The numbers in the accompanying table are percentages of those who were interviewed. ${ }^{11}$

| Opinion | Before <br> Listening | After <br> Listening |
| :--- | :--- | :---: |
| A. "Eagle's Brood" |  |  |
| The Present method of dealing with |  |  |
| juvenile delinquency is: |  |  |
| (a) Good or excellent | 14 | 9 |
| (b) Fairly good | 44 | 25 |
| (c) Poor or very poor | 42 | 66 |
| B. "A Long Life and a Merry One" |  |  |
| Good medical care is available to: |  |  |
| (a) Nearly everyone | 27 | 4 |
| (b) Most people | 13 | 13 |
| (c) About one-half | 32 | 36 |
| (d) Only some | 28 | 17 |

A carefully controlled study of the documentary program was made by the Research Branch of the Army's Information and Education Division. ${ }^{12}$ The problem was to discover the relative effectiveness of the documentary and the straight talk

[^32]in changing opinions of soldiers on the probable length of the war with Japan. The two types of scripts, containing the same information, were prepared and recorded by skilled writers and actors. Transcriptions were played to soldiers in platoon groups as part of the regular orientation program.

The findings significant for our purpose are:

1. Asked to rate the broadcasts on a scale from "very interesting" to "very dull," 60 percent rated the talk very interesting; 71 percent the documentary very interesting.
2. Asked whether they would like to have more such radio programs, 83 percent voted for more talks, 88 percent for more documentaries.
3. Asked whether they thought the information about the Pacific War was accurate or inaccurate, 65 percent judged both talk and documentary completely accurate.
4. Asked whether anything about the program seemed like propaganda, 65 percent thought there was no propaganda in the talks, 62 percent that there was none on the documentaries.
5. Of those hearing the talks, 47 percent increased their estimate of the time required to defeat Japan; 50 percent of those who heard the documentaries increased their estimates.

The authors conclude that these differences are not large enough to be significant. We should note, however, that these soldiers were not a typical radio audience. They were not free to choose another program, and they were vitally interested in the time required to defeat Japan. These findings may or may not apply to the general audience whose members are only casually interested in the problem treated in the broadcasts. In deciding whether to use the talk or the documentary, the program director should consider relative costs in time and money. He wants to know whether the documentary is enough better than the talk to justify the added expenditure.

We should not conclude that documentaries always require top-flight writers, star actors, and a man-sized budget. Examples to the contrary are found on currently popular crime shows such as "Gang Busters," "Meet the FBI," "Big Story,"

DOCUMENTARY AND DRAMATIZED DISCUSSION 233 and "Dragnet." Competently written and produced, these weekly half-hour shows are based on actual cases: "only the names are changed to protect the innocent." Further evidence on this point, though from a different angle, is the fact that the expensive CBS Documentary Unit was discontinued when the network needed funds to develop television.

## ACTUALITY BROADCASTS

Actuality broadcasts, in which people speak their own opinions and tell their own stories, have always had a place on program schedules-in interviews, eye-witness accounts, and various types of discussions. But actualities as we now know them became possible and popular only with the recent development of portable, high-fidelity recorders. The producer of these programs can now supplement his own on-thespot recordings with those made at other times and places. He may also use phonograph records of voices of famous people. Barnouw notes that the Library of Congress and the Department of the Interior, for example, have shown that actuality broadcasts can be valuable in acquainting us with our own land and its people. ${ }^{13}$ He believes that in such instances this technique has advantages over the use of professional voices.

Many of us first realized the importance and effectiveness of actuality programs during World War II. The "Army Hour" took us to army camps in this country and to battle areas overseas. We heard the voices of soldiers, sometimes against a background of battle sounds. Radio reporters carried their recorders on air raids, describing what they saw and heard with an accompaniment of motor noises, orders, and machine-gun fire. We heard the sound of history as it happened on the Normandy beachhead and on battleships int the Pacific.

To illustrate uses of actuality broadcasts and methods of

[^33]preparing them, we describe a few typical examples. "TransAtlantic Call," broadcast on the CBS network from January, 1943, to April, 1946, was designed to promote better understanding between American and British listeners. Bryson says, "We sent out a crew of men skilled in finding typical and picturesque people and in persuading them to talk . . . ${ }^{14}$ The script was written on the spot; the writers told in each person's own words what he wanted to say. Participants were rehearsed a bit to help get them over their nervousness. The crew recorded the music, the typical sounds, the sound atmosphere of places and ways of life. After a time, however, producers of this documentary form began to use professional actors.

Robert Shayon's full-hour actuality, "Operation Crossroads," shows what can be done when time and money are available for advance preparations. He traveled about the country to discover what questions people were asking about atomic energy. Then he put these questions to men and women who were qualified to express opinions. The program began with Admiral Blandy speaking from his flagship enroute to a test explosion of the atomic bomb. Then people from different parts of the country began asking questions. Answerers included Justice William O. Douglas, Archibald MacLeish, Mrs. Wendell Willkie, Albert Einstein, and Harold Urey.

When Norman Corwin received the One World Award for his efforts to promote international understanding, he used the money to take his recording equipment and his assistant around the world with him. He returned with enough recorded material to stay on the air a hundred hours, from which he built thirteen half-hour actuality broadcasts.

Ben Park has demonstrated the effectiveness of actuality programs in presenting current social problems. In Education on the Air, 1948, he describes the methods used in preparing "Report Uncensored," a series of half-hour programs
${ }^{14}$ Bryson, op. cit., pp. 73-78. broadcast by Station WBBM, Chicago. He spent five months in research, consultation, and promotion before the first program went on the air. Having decided to begin with facts about juvenile delinquents and their treatment, he got permission from directors of state institutions to talk with delinquents who had committed various types of offenses. He asked leading questions and then sat back and listened to their stories, recording the conversations on tape. Using about a fifth of the material he accumulated in this way, he built and recorded two complete programs. These were tested on four audiences: (1) professional people, including sociologists, social workers, psychiatrists, and policemen; (2) writers for radio, newspapers, and trade journals; (3) a convention of juvenile court judges; (4) listeners who expected to hear a variety show.
"Report Uncensored" was given unusual advance promotion. WBBM broadcast 100 station-break spot announcements. Radio advertisements were placed in various newspapers; news stories were released daily for six weeks. The WBBM Speaker's Bureau sent speakers to eighty audiences. Scripts and transcriptions were sent on request to schools and colleges. National magazines published 25,000 words about the series, newspapers an additional 55,000 words.

Park believes that actuality programs edited from recordings are often superior to documentaries and dramatizations. "No matter what I do in writing a script," he says ,"it does not measure up . . . in authenticity and dramatic impact . . . to what is said on the tapes." The outline he had prepared in advance often had to be seriously amended or even discarded, "because the recordings told the story so very much better . . . What we could not get on tape we dramatized or narrated . . . We followed to the limit the rule that from must proceed from content." ${ }^{15}$

Actuality features are frequently used on news programs.

[^34]The reporter takes a portable transmitter to the event and combines interviews, parts of important speeches, crowd noises, and crowd voices with his narration. If immediate broadcasting is not called for, he uses a tape recorder and edits the material before it goes on the air. The commentator may use cuttings from recordings made at different occasions, present or past, to illustrate and support his interpretation of the news. A recent example of this method is the weekly news feature, "Voices and Events," produced by James Fleming on the NBC network.

Sometimes proceedings of official meetings are broadcast and we can get our impressions first-hand rather than from a commentator. Recent examples include nominating conventions, legislative assemblies, sessions of United Nations organizations, and meetings of city councils, school boards, and traffic courts. Such actuality programs serve to keep the citizen informed about the various governments under which he lives. We should also mention those actualities in which someone tells his troubles and seeks advice from a panel of authorities.

Some of these programs can be produced inexpensively and with little advance preparation. The producer of the more complicated actualities needs, in addition to an expense account, an active imagination, a sense of the dramatic, more background information than he usually has, and time to create a unified program. He may begin with a central idea and look for pertinent materials to develop it; or he may begin with a list of available materials, including recordings, and choose his theme from them. The process of cutting and splicing tape recordings, and of fitting them neatly into the narration, is not as simple as it sounds. But when time, talent, and recordings are available, the results more than justify the effort.

Live telecasts, like those of the Kefauver crime investigation and meetings of the United Nations, are in one sense ac- tuality broadcasts, but without the editing that characterizes a finished product. Television actualities, at least up to early 1952, have been limited largely to news summaries. A few motion picture re-runs, similar to the cinema versions of the "March of Time," have been televised. A large number of films from the "information" offices of foreign countries, the United Nations, and organizations interested in "causes" have done from fair to good jobs in presenting various topics. A real opportunity is open to TV film men to create actuality programs of the caliber that radio has produced too infrequently.

## DRAMATIZED DISCUSSIONS

When we use the term "dramatized discussions," we are not thinking of dramatizations of literary forms such as the short story or the novel. Rather, we are thinking of programs that use the dramatic form, with actors, studio music, and sound effects, to arouse interest in, or provide information about, an important problem. Sometimes such programs recreate an historical event; sometimes they present typical, rather than actual situations.

Certain programs of this type have won awards at the Annual American Exhibition of Educational Radio Programs. In 1948 the series "CBS Is There" won a First Award for "the most ingenious new idea in educational and public service radio." ${ }^{16}$ In 1949 a First Award went to ABC's fullhour program, "VD-the Conspiracy of Silence," for "a fearless and dignified presentation of one of the most urgent medical problems of our time..17 The script was written by Erik Barnouw, director of radio courses at Columbia University.

Behind the VD program there is a story. In 1947, T. L. Richman, of the United States Public Health Service, enlisted

[^35]Barnouw's aid in breaking radio silence, and a century-old taboo, on the subject of syphilis. He wanted to tell those who cannot be reached by printed matter that most cases can be cured with penicillin in less than two weeks of treatment. With some misgivings, Columbia University authorized Barnouw to produce a number of transcribed programs to be distributed by the Public Health Service to State and local public health departments.

Barnouw first enlisted the support of the clergy. The Reverend Everett Parker, program director for the Protestant Radio Commission, quickly persuaded his board to prepare a script which would show indirectly that the denominations represented on the Commission endorsed the project. The gist of the script was that a minister counseled with a person who needed treatment and then brought him to a clinic. The program was approved by the various groups concerned and transcribed, with Raymond Massey in the role of the minister. Sandra Michael wrote another program in the series, "Unborn Child," for expectant mothers. To catch the attention of young listeners, Barnouw prepared a couple of programs which began as though they were mysteries, gradually developing into something much more serious. For the rural South, he had two programs in which the narration was sung in ballad style, with a hillbilly melody. Roy Acuff starred in one.

While these programs were being prepared, Barnouw was constantly beset with fear that they would never reach the air. He sent letters to twenty station managers in the Eastern area explaining the project and inviting them to a conference at the expense of Columbia University. Twelve of these managers came. They suggested that he get one of the networks to produce a program, to serve as a precedent. Robert Saudek of the American Broadcasting Company responded to the challenge and took full responsibility for the program which won the First Award. In the 300 letters received after the broadcast there was only one protest.

Other dramatized discussions that have won awards at the Exhibition of Educational Radio Programs include:

1. "Menace in White," a full-hour CBS program, cited as "an extraordinarily competent marshaling of radio's resources . . . to throw a spotlight on the evil of medical charlatanism."
2. "Living, 1949," a professionally produced NBC series, with narrator, dramatic casts, and occasional speakers, "presenting in a stimulating and entertaining manner the problems of our time."
3. "Doorway to Life," a half-hour CBS series with a professional cast, "presenting in entertaining dramatic form common problems met by all parents."
4. "Mind Your Manners," a half-hour NBC program, written and produced by Allen Ludden with a cast of six grammar-school and high-school students, "a lively, showmanlike presentation of youth's everyday problems . . . the panel of teen-agers makes the program appear fresh, spontaneous, and entirely their own."
5. "Assignment: UN," a fifteen-minute program planned and produced by Station WNYC, "for an extremely competent job of integrating . . . the dramatization of a problem and the interview of an authority . . . at the level and interests of its audience."
In October, 1948, BBC dramatized the trial of the British traitor, William Joyce (Lord Haw-Haw). William Salter, radio critic for the British magazine, The Statesman and Na tion, wrote of it:

The trial was altogether too recent for the . . . impersonation of actual participants. . . . There was merely the impersonation of abstract legal voices, and to that extent was the drama of the trial diluted. . . . Yet I found the program fascinating, largely I believe because of the association evoked. What made the program were the records of extracts from Joyce's first and last broadcastings from Germany. How surprisingly moving that last recording was: Joyce defiant to the end-and drunk! ${ }^{18}$

Although most local stations, except those operated by colleges and universities, do not usually have time and talent to produce such dramatized discussions as we have described, they can easily use scripts distributed by such national organ-

[^36]izations as the Red Cross and the Parent-Teachers' Association. Other organizations, too, supply recorded programs with space for a local message.

The foregoing statement is not meant to imply that local groups should never attempt dramatized discussions. It simply calls attention to the fact that if such programs are to compete successfully with professional productions they require better than average skill in writing, acting, and directing. On the other hand, there are many cases in which local groups have used brief dramatizations of typical cases in introducing discussions, and dramatized illustrations in other talks programs.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Make a four-minute talk to the class on a topic discussed in this chapter supplemented by one of the readings. Your purpose is to provide clear and accurate information.
2. The topics listed below, and others like them, may be presented as lecture-forums in class broadcasts, a four-minute talk to be followed by a four-minute forum in which members of the program group quiz the speaker. The program director usually serves as chairman.
a. Let's begin with definitions
b. The CBS Documentary Unit
c. How much emotional appeal?
d. Dramatization or drama?
e. The use of portable recorders
f. The story of VD programs
g. The United Nations' programs
h. Norman Corwin's programs
i. How many listen?
j. With what effect?
k. Documentary or straight talks?
l. The use of these program types in political campaigns
3. Read a script, or listen to a recording of one of these program types. Hand in a 500 -word evaluation of the program.
4. A group of four or five may give a lecture-demonstration. The lecturer states the purpose of the program and introduces the other group members who read sections of the script illustrating points in the lecture. Members of the group join in an informal discussion of the script to conclude the program.
5. A committee of four or five is planning a documentary program based on a current Congressional debate. The materials are available in the Congressional Record. The group broadcasts to the class a ten-minute committee meeting to choose the debate, and decide each member's part in producing it. The documentary program should be broadcast a week or two later.
6. If recording equipment is available, a committee may be assigned to produce an actuality broadcast. Transcriptions of "actualities" may be available at the local radio station. If so, the committee may give two programs: a lecture-demonstration, as outlined in exercise four; and, a week or two later, a program prepared and recorded by the group.
7. A group of six or seven may follow the same procedure with a dramatized discussion. Scripts of such discussions are listed in the readings; current scripts and transcriptions may be obtained from the networks or stations producing them.

## READINGS

Barnouw, Erik, Handbook of Radio Writing, D. C. Heath and Company, 1947, pp. 151-157.
Bryson, Lyman, Time for Reason about Radio, George W. Stewart, Inc., 1948, chap. 2.
Carson, Saul, "Notes toward Examination of the Radio Documentary," Hollywood Quarterly, Fall, 1949, pp. 69-75.
"Documentary Programs," Education on the Air, 1948, Ohio State University Press, pp. 279-295.
Hanson, Howard C., "The Human Adventure," Quarterly Journal of Speech, October, 1945, pp. 329-333.
Hardy, Forsyth (editor), Grierson on Documentary, Harcourt, Brace and Company, 1947.
Kaplan, Milton A., Radio and Poetry, Columbia University Press, 1950, chap. 5.
Murrow, Edward R., "Preparation of the Documentary Broadcast," Education on the Air, 1947, Ohio State University Press, pp. 377380.

Wilson, Elmo C., "The Effectiveness of Documentary Broadcasts," Public Opinion Quarterly, Spring, 1948, pp. 19-29.

Wylie, Max, Radio and Television Writing, Rinehart and Co., 1950, pp. 383 ff .

## SCRIPTS OF DOCUMENTARY AND DRAMATIZED DISCUSSIONS

Ayres, Stuart, "How Fake Propaganda May Start," in Radio Writing, Max Wylie (editor), Farrar and Rinehart, 1939, pp. 461-466.
Bauer, William W. (comp.), Your Health Dramatized, E. P. Dutton \& Company, 1939.
Calhoun, Dorothy, "George Washington, the Farmer," in Radio Continuity Types, Sherman P. Lawton (comp.), Expression Company, 1939, pp. 445-453.
Calhoun, Harold, and Calhoun, Dorothy, Let Freedom Ring, U.S. Office of Education, 1939. Thirteen documentary or dramatized programs on the Bill of Rights.
"Court of Current Issues," Education on the Air, 1950, Ohio State University Press, pp. 75-90 (script of televised discussions).
Dickens, Milton, "King Football: A Business or a Game?" in Radio Continuity Types, Sherman P. Lawton (comp.), Expression Company, 1939, pp. 412-424 (a dramatized debate).
Robson, William N., "No Help Wanted," in Best Broadcasts of 1938-39, Max Wylie (comp.), McGraw-Hill Book Company, pp. 449-472.
Schoenfeld, Bernard, "We Become A Nation," in Best Broadcasts of 1938-39, Max Wylie (comp.), McGraw-Hill Book Company, pp. 473-498.
Whipple, James, "Major Walter Reed and the Yellow Fever Commission," How to Write for Radio, McGraw-Hill Book Company, 1938, pp. 180-201.

## chapter 14



BoOKS are written to be read, stage plays to be seen, and radio plays to be heard. Television can reproduce and sometimes increase the effectiveness of a stage play. But in radio the effectiveness of an adaptation seldom equals the effectiveness of a show designed and written for broadcasting, built around a single one of the senses, drawing the listeners into imaginative participation in a world where time and space can be juggled as freely as in the mind itself.

Adaptations play a large part in radio and television, with such series as the Theater Guild, Lux Radio Theater, Screen Guild Players, Hallmark Playhouse, Chicago Theater of the Air, Philco Playhouse, Circle Theater, and Kraft Theater.

A basic consideration in choosing material for adaptation is whether permission can be obtained from the author or copyright owner. In general, copyrights run for twenty-eight years and can be renewed once. Hence all works which have been published fifty-six years are free from copyright restrictions, while many are available after twenty-eight years.

Amateur writers should be encouraged to try adaptations. They learn about structure, style, and storytelling when the 243
original was done by a competent writer. They learn the need of putting action into sound for radio, and the need to visualize action for television.

## ADAPTING ONE.ACT PLAYS

One-act stage plays often transfer fairly well to the microphone without much change. In choosing them, the adapter should ask: Is all the action clear and properly emphasized? If the stage action depends on pantomime, the sudden unannounced entrance of a character, or the way something or someone looks, the adapter must provide dialogue to make the situation clear to the radio audience. The following excerpts show how a stage play can be rewritten for radio and television.

## Stace Version

(Carl, seated on davenport in front of the fire, picks up the firetongs and stirs the embers. No other light is in the room, but the glow is great enough so the audience can see the French doors leading onto the veranda. Slowly one of the French doors opens. Harry, hat pulled forward over his eyes, edges into the room. He stands looking at Carl's back a moment, and then says . . .)

Harry: Well, Carl . . .
Carl: (Obviously startled, jumps to his feet, looks closely at Harry and recognizes him.) Harry! (Takes half a step backward toward fireplace. Is clearly nervous.)
Harry: Yeah, it's Harry. (Carl fumbles for his pocket.) None of that!
Carl: (pulling cigarette case from side pocket) Don't worry, Harry, just-just getting this. (Harry looks at case and takes step closer.) Sit down, Harry. . . . Have one? (Offering cigarette.)
Harry: No. (An automatic revolver has appeared in his hand. Carl looks at it, then at Harry's face.) All right, let's have it. (Carl straightens his shoulders and looks momentarily defiant. Harry's face, what can be seen of it under the hat, is deadly firm. Carl puts his hand up to his throat, slowly unties his necktie. Neither man takes his eyes off the other. Loosening his collar, Carl dandles a locket hung around his neck by a chain. Sullenly he reaches be-
hind his neck with both hands, unsnaps it, tosses it up and down in his hand once or twice, and then flips it on the floor at Harry's feet. Harry, eyes and gun trained on Carl, kneels down, picks up the locket, stuffs it in his side pocket and backs to the door. Once through it, he slams it shut quickly.)

Radio Version
NARRATOR: --and as the scene opens, Carl is alone in the living room. A large fire is sparkling on the hearth.

SOUND: FIRE CRACKLING, THEN RATTLE OF DOOR LATCH.
CARL: Who's that? Who's at the door? ...
SOUND: DOOR LATCH, FOLLOTED BY DOOR SQUEAK.
CARL: Who's there?... Who are you?
SOUND: DOOR CLOSES.
CARL: Oh, so it's you, Harry----
HARRY: (at a distance) Yeah, it's me----Harry.
CARL. I could hardly see your face in this dim light. I----

HARRY: (closer) Get your hand out of your pocket, Carl.
CARL: (with forced laugh) I wasn't reaching for a gun, Harry. Just wanted to get this cigarette case. Come on over by the fire and sit down ... No? Well, ... have a cigarette, Harry?

HARRY: No, I don't want to sit down and I don't want a cigarette. You know what I've come for.

CARL: But I...
HARRY: And I don't want to do anymore talking--or I'll talk with this!

CARL: Put that gun down, Harry, don't point it at me like that.

HARRY: Shut up and give me that locket. The locket you keep that formula in.

CARL: Harry, I don't have...

HARRY: Yes, you do, Carl. It's around your neck. Hand it over.

CARL: I have to unfasten my tie ... I ... I can't quite...

HARRY: Hurry up with it.
CARL: Give me time ... give me time ... it's ...
HARRY: No funny business ...
CARL: This catch on the chain is stuck.... There, I've got it ... m'mmmm ... pretty, isn't it?

HARRY: You haven't got time to stand there admiring it. Hand it over.

CARL: O.K. There it is ...
SOUND: CHAIN AND LOCKET THROWN ON FLOOR.
CARL: Pick it up.
HARRY: Yeah, I will, Carl. I'll pick it up. And you keep your hands high, see?.....Keep 'em high until I'm out of sight ... This is it, all right ... Keep those hands up until I get this door closed ... That's right ... Well, a pleasant good evening to you ... Carl.

SOUND: DOOR CLOSES.
A televised version of this scene could keep the original play dialogue and action intact. The adapting problem would consist of planning the camera work for effective portrayal of the action. The beginning might look something like this:

## Television Version

VIDEO
Camera \#1
long shot on whole set.

Camera \#2
medium-close shot on Carl, with French doors just visible at right of frame.

AUDIO
(Music b.g. Carl rises and goes to fireplace. Kneels.

Stirs embers.

Returns to davenport.
\#2 to French doors.
Music nervous and ominous. French
door opens slowly and Harry enters.
Music stops abruptly.)
\#l close-up on Carl. HARRY: WELL, CARL----
Here sight and sound are combined to lead up to an emphasis on Carl's startled reaction when Harry speaks.

In this example, the stage action takes about two minutes; the radio version about ninety seconds. When physical action is put into lines, the scene often takes longer.

The adapter must first measure the length of the play. Suppose the stage version takes from twenty minutes to half an hour, and must be cut to a fifteen-minute broadcast. This means only eleven or twelve minutes of dialogue, depending on announcements and musical signature.

The first step in cutting is to distinguish between action and business. Action is the term applied to incidents which move the story forward. The discovery of a clue in a mystery or a proposal of marriage in a love story would clearly be action. Incidental things like lighting a cigarette, pouring a cup of coffee, running fingers through the hair, or turning on a light would be considered business. The adapter must decide what to keep on the basis of its importance to the story. For example, turning on a light might be a signal to a confederate; the incident would then be action, not business, because it is important in the development of the story. Business makes a scene seem more natural, and often reveals characterization; in adaptations, however, lines dealing with business are often expendable.

The next step is to decide whether the first part of the stage show can be eliminated. Usually a well-written one-act play does not waste time in getting under way, but sometimes the first eight or ten lines can be cut without interfering with its clarity or effectiveness.

Finally, ruthless cutting of other lines is often necessary. Do not keep a line because it is well written, or clever, or because you like it. Keep it only if it is essential to clarity of action or characterization.

## ADAPTING FULL.LENGTH PLAYS

Adapting full-length stage plays is more difficult. Two hours of dialogue must be reduced to thirty minutes or an hour at most. The adapter should first summarize the central plot in a few simple sentences and then decide what scenes are necessary to tell the story. He must make sure that all of the action is clear. It is often necessary to cut the sulpplots and to eliminate all characters not essential to the main theme of the story. The amateur writer can profitably compare stage and radio versions of plays in books cited at the end of this chapter.

Some types of deletions are illustrated in the following treatment of Oscar Wilde's The Importance of Being Earnest. ${ }^{1}$ Only the italicized lines were kept for the radio version. The cuts are numbered.

First Act
Scene-Morning-room in Algernon's flat in Half-Moon Street. The room is luxuriously and artistically furnished. The sound of a piano is heard in the adjoining room. (Lane is arranging afternoon tea on the table, and after the music has ceased, Algernon enters.)
[1] Alg: Did you hear what I was playing, Lane?
Lane: I didn't think it polite to listen, sir.
Alg: I'm sorry for that, for your sake. I don't play accurately -anyone can play accurately-but I play with wonderful expression. As far as the piano is concerned, sentiment is my forte. I keep science for Life.
Lane: Yes, sir.
Alg: And speaking of the science of Life, have you got the cucumber sandwiches cut for Lady Bracknell?
${ }^{1}$ Radio version in Short Plays for Stage and Radio, Carless Jones, published by the University of New Mexico Press, Albuquerque, 1939. Used by permission.

Lane: Yes, sir. (Hands them on a salver.)
Alg: (Inspects them, takes two, and sits down on the sofa.) Oh! . . . by the way, Lane, I see from your book that on Thursday night, when Lord Shoreman and Mr. Worthing were dining with me, eight bottles of champagne are entered as having been consumed.
Lane: Yes, sir; eight bottles and a pint.
AlG: Why is it that at a bachelor's establishment the servants invariably drink the champagne? I ask merely for information.
LaNE: I attribute it to the superior quality of the wine, sir. I have often observed that in married households the champagne is rarely of a first-rate brand.
Alg: Good Heavens! Is marriage so demoralizing as that?
Lane: I believe it is a very pleasant state, sir. I have had very little experience of it myself up to the present. I have only been married once. That was in consequence of a misunderstanding between myself and a young person.
Alg: (Languidly.) I don't know that I am much interested in your family life, Lane.
Lane: No, sir; it is not a very interesting subject. I never think of it myself.
Alg: Very natural, I am sure. That will do, Lane, thank you.
Lane: Thank you, sir. (Lane goes out).
Alg: Lane's views on marriage seem somewhat lax. Really, if the lower orders don't set us a good example, what on earth is the use of them? They seem, as a class, to have absolutely no sense of moral responsibility.
(Enter Lane.)
Lane: Mr. Ernest Worthing.
(Enter Jack.) (Lane goes out.)
Alg: How are you, my dear Ernest? What brings you up to town?
Jack: Oh, pleasure, pleasure! What else should bring one anywhere? Feasting as usual, I see Algy!
Alg: (Stiffly.) I believe it is customary in good society to take some slight refreshment at five o'clock. Where have you been since last Thursday?
Jack: (Sitting down on the sofa.) In the country.

The rather long first cut accomplishes two things; it eliminates a character and cuts lines which are not essential to the plot. The mention of the cucumber sandwiches for the aunt who is coming is made after Jack arrives, so it is not necessary earlier.
[2] Alg: What on earth do you do there?
Jack: (Pulling off his gloves.) When one is in town one amuses oneself. When one is in the country one amuses other people. It is excessively boring.
Alg: And who are the people you amuse?
Jack: (Airily.) Oh, neighbours, neighbours.
AlG: Got nice neighbours in your part of Shropshire?
Jack: Perfectly horrid! Never speak to one of them.
Alc: How immensely you must amuse them! (Goes over and takes sandwich.) By the way, Shropshire is your county, is it not?
Jack: Eh? Shropshire? Yes, of course. Hallo! Why all these cups? Why cucumber sandwiches? Why such reckless extravagance in one so young? Who is coming to tea?
Alg: Oh! . . . Merely Aunt Augusta and Gwendolen.
Jack: How perfectly delightjul!
Alg: Yes, that is all very well; but I am afraid Aunt Augusta won't quite approve of your being here.
Jack: May I ask why?
Alg: My dear fellow, the way you firt with Gwendolen is perfectly disgraceful. It is almost as bad as the way Gwendolen flirts with you.
Jack: I am in love with Gwendolen. I have come up to town expressly to propose to her.
AlG: I thought you had come up for pleasure? . . . I call that business.
JACK: How ulterly unromantic you are!
The second cut eliminates some very witty lines, but they do not affect the story. They are just Oscar Wilde being clever.
[3] Alc: I really don't see anything romantic in proposing. It is very romantic to be in love. But there is nothing romantic about a definite proposal. Why, one may be accepted. One
usually is, I believe. Then the excitement is all over. The very essence of romance is uncertainty. If ever I get married I'll certainly try to forget the fact.
Jack: I have no doubt about that, dear Algy. The Divorce Court was specially invented for people whose memories are so curiously constituted.
Alg: Oh! There is no use speculating on that subject. Divorces are made in Heaven- (Jack puts out his hand to take a sandwich. Algernon at once interferes.) Please don't touch the cucumber sandwiches. They are ordered specially for Aunt Augusta. (Takes one and eats it.)
Jack: Well, you have been eating them all the time.
Alg: That is quite a different matter. She is my aunt. (Takes plate from below.) Have some bread and bulter. The bread and bulter is for Gwendolen. Gwendolen is devoted to bread and butter.

The third cut is just business; interesting, but not essential.
[4] Jack: (Advancing to table and helping himself.) And very good bread and butter it is, too.
AlG: Well, my dear fellow, you need not eat as if you were going to eat it all. You behave as if you were married to her already. You are not married to her already, and I don't think you ever will be.
JAck: Why on earth do you say that?
Alg: Well, in the first place, girls never marry the men they flirt with. Girls don't think it right.
Jack: Oh, that is nonsense!
Alg: It isn't. It is a great truth. It accounts for the extraordinary number of bachelors that one sees all over the place. In the second place, I don't give my consent.
Jack: Your consent!
Alg: My dear fellow, Gwendolen is my first cousin. And before I allow you to marry her, you will have to clear up the whole question of Cecily. (Rings bell.)
JAck: Cecily! What on earth do you mean? What do you mean, Algy, by Cecily? I don't know anyone of the name of Cecily.
(Enter Lane.)
This cut is efficient; the lines are interesting but not needed.
[5] Alc: Bring me that cigarette case Mr. Worthing left in the smoking-room the last time he dined here.
Lane: Yes, sir. (Lane goes out.)
Alc: I have here a cigarette case that you left in the smoking. room the last time you dined here. ${ }^{2}$
Jack: Do you mean to say you have had my cigarette case all this time? I wish to goodness you had let me know. I have been writing frantic letters to Scotland Yard about it. I was very nearly offering a large reward.
Alg: Well, I wish you would offer one. I happen to be more than usually hard up.
Jack: There is no good offering a large reward now that the thing is found.
(Enter Lane with the cigarette case on a salver. Algernon takes it at once. Lane goes out.)
Alg: I think that is rather mean of you, Ernest, I must say. (Opens case and examines it.) However, it makes no matter, for, now that I look at the inscription inside, I find that the thing isn't yours after all.
Jack: Of course it's mine. (Moving to him.) You have seen me with it a hundred times, and you have no right whatsoever to read what is written inside. It is a very ungentlemanly thing to read a private cigarette case.
Alg: Oh! It is absurd to have a hard-and-fast rule about what one should read and what one shouldn't. More than half of modern culture depends on what one shouldn't read.
Jack: I am quite aware of the fact, and I don't propose to discuss modern culture. It isn't the sort of thing one should talk of in private. I simply want my cigarette case back.
Alc: Yes; but this isn't your cigarette case. This cigarette case is a present from someone of the name of Cecily, and you said you didn't know anyone of that name.
Jack: Well, if you want to know, Cecily happens to be my aunt.
Alg: Your aunt!
Jack: Yes, charming old lady she is, too. Lives at Tunbridge Wells. Just give it back to me, Algy.
Alc: (Retreating to back of sofa.) But why does she call herself Cecily if she is your aunt and lives at Tunbridge
${ }^{2}$ This line was written in.

Wells? (Reading.) "From little Cecily with her fondest love."
Jack: (Moving to sofa and kneeling upon it.) My dear fellow, what on earth is there in that? Some aunts are tall, some aunts are not tall.

The fifth cut is nonessential business; inscription is clear without these lines.
[6] That is a matter that surely an aunt may be allowed to decide for herself. You seem to think that every aunt should be exactly like your aunt! That is absurd! For Heaven's sake, give me back my cigarette case. (Follows Algy round the room.)
Alg: Yes, but why does your aunt call you her uncle? "From little Cecily, with her fondest love to her dear Uncle Jack." There is no objection, I admit, to an aunt being a small aunt, but why an aunt, no matter what her size may be, should call her own nephew her uncle, I can't quite make out. Besides, your name isn't Jack at all; it is Ernest.
Jack: It isn't Ernest; it's Jack.
Cuts six and seven are just Oscar Wilde being clever again.
[8] Alc: You have always told me it was Ernest. I have introduced you to everyone as Ernest. You answer to the name of Ernest. You look as if your name was Ernest. You are the most earnest looking person I ever saw in my life. It is perfectly absurd your saying that your name isn't Ernest. It's on your cards. Here is one of them. (Taking it from case.) "Mr. Ernest Worthing, B. 4, The Albany." I'll keep this as a proof that your name is Ernest if ever you attempt to deny it to me, or to Gwendolen, or to anyone else. (Puts the card in his pocket.)
Jack: Well, my name is Ernest in town and Jack in the country, and the cigarette case was given to me in the country.
This cut is unfortunate because the name of Ernest is important. Besides, this type of breezy dialogue is good radio. However it is not essential to the action.
[9] Alg: Yes, but that does not account for the fact that your small Aunt Cecily, who lives at Tunbridge Wells, calls you her dear uncle. Come old boy, you had much better have the thing out at once.
JACK: My dear Algy, you talk exactly as if you were a dentist. It is very vulgar to talk like a dentist when one isn't a dentist. It produces a false impression.
Alg: Well, that is exactly what dentists always do. Now, go on! Tell me the whole thing. I may mention that I have always suspected you of being a confirmed and secret Bunburyist; and I am quite sure of it now.
Jack: Bunburyist! What on earth do you mean by a Bunburyist?
Alg: I'll reveal to you the meaning of that incomparable expression as soon as you are kind enough to inform me why are you Ernest in town and Jack in the country?
JACK: Well, produce my cigarette case first.
The ninth cut is just Oscar Wilde being clever.
[10] Alg: Here it is. (Hands cigarette case.) Now produce your explanation, and pray make it improbable. (Sits on sofa.)

Cut number ten is interesting. "Pray make it improlable" would be bad radio. It is not natural, conversational style, and the subtle humor is not likely to be caught by radio listeners.

Usually an adapted stage play cannot be thought of as a radio play, but as a stage play which is being broadcastwith changes which make the action clear, and some adjustment to time limitations. The Lux Radio Theater and the NBC University of the Air, veteran adapters, stick close to original dialogue and story development.

In one sense, complete adaptation is not possible. The orig. inal conception, which was not for the broadcast medium, will dominate. Material can be altered and cut; action can be put into words; but the good adapter often does much more. He understands the possibilities of radio in time and space, possibilities that are not limited to the three walls of a stage, and tries to take advantage of them. Some adapters change the
order of incidents, substitute sound for action, treat some of the voices acoustically, make use of flashbacks, montage, character-narrators, or other devices which help make a radio show effective. But as far as possible, enough of the original text should be retained so that the spirit, intent, and style of the original author will not be violated.

Beginners will find that the two central problems of adapta-tion-compression by cutting to suit time limitations, and putting action into the lines of the characters or narrator for clarity-are big enough problems without attempting to improve the author's script.

For television, some cutting is usually necessary to bring the play within the time allotment; the essential stage action can be kept. Television programming of stage shows is largely a production, rather than a writing, problem. The writer may preplan the camera work, but the producer has final authority on these matters.

## ADAPTING MUSICALS

Grand opera is usually broadcast from the stage without any real adaptation. Usually the radio writer outlines the action of the story and writes lines for a narrator to explain coming scenes. Explanation of the plot, description of settings, characters, and costumes, and information about the composition and its composer usually constitute the material which give a radio framework to opera on the air. Occasionally the explanatory material comes just before the musical high-spots. Sometimes the lines of songs are translated.

Light opera receives about the same preparation for broadcasting. In both opera and musical comedy, the listener's interest is in the music. If the music is good, he says the broadcast is good. Some of the humor in musical comedies amuses the listeners, and most of the dialogue helps clarify the situation. But in large part the lines of musical shows are in-
tended only to lead up to musical numbers. Except for the few musicals written especially for radio, these broadcasts have been "stage shows with some explanation by a narrator."

Television has little difficulty in handling musical shows; here, as with stage plays, the problem is more in production than in writing.

## ADAPTING NOVELS

Novels have been broadcast in various ways. Some program directors, searching for good programs that can be provided inexpensively, have discovered that people enjoy listening to someone who can read from the printed page effectively. Station WHA, University of Wisconsin, carries two such half-hour programs, "A Chapter a Day" and "A Chapter a Night."

Sometimes the books are read without cutting or adaptation. Usually, however, the reader prepares five to ten "chapters" that carry the story and can be read comfortably in the allotted time. The radio chapter may include parts of two or three of the book's chapters. The reader introduces each day's program with a summary similar to that used in serial stories in magazines.

A second method of presenting novels on the air is for a reader to select the passages which he believes most important, either because they are pertinent parts of the central plot or because they represent the author's best style. The reader tells what takes place between scenes.

In a third method, passages from the book are read by a narrator and the dialogue parts are read by actors, sometimes with full production and sound effects. As far as possible, the author's dialogue is kept. Intervening passages are summarized by a narrator or by a character in the play. It is this latter method-the use of a character-narrator-that Orson Welles developed so successfully. He calls it the "first-person singular" technique. For example, his broadcast of "Suspi-
cion," told in the form of a diary, was well suited to the method, because the wife in the play could read the lines from the diary, as if telling the audience about her suspicions; her voice then fades out as the next scene fades in, carrying on the story.

External character-narrators are also used. In Ellington's adaptation of Ben Hur, the scene is set in a bookshop, where Mr. Meggs, the owner, greets Youngfellow. Youngfellow charges that Meggs is uninterested in current events. Meggs replies that he is very interested in current events and that he knows that faith will solve the problem of the modern world. In fact, says Meggs, "Here's a friend of mine who can answer all the questions that need answering today." He hands Youngfellow a copy of Ben Hur, and continues, "Ben Hur, a young man who lived in an age when the world was in just about the same state as it is today. There were wars, heavy taxes, persecution . . ." And Meggs becomes an external narrator, summarizing passages which lead up to the broadcast scenes.

To introduce the first scene, he gives a brief background, referring to the haughty Roman Empire and the bondage of Jerusalem. He explains that the Israelites are waiting for their savior who, they have heard, had already been born. Then Meggs sets the scene by describing Ben Hur, and his friend Messala, who had been born in Jerusalem but had spent his last five years in Rome. A musical background is worked in and serves as transition to the first scene.

In the first scene, Messala, who has come under the influence of Roman Culture, sneers at Ben Hur's respect for learning and his views that peace and love are important. War is the most noble occupation of man, Messala thinks. He and Ben Hur break up their friendship, feeling that they can never again agree. Music sneaks in as Messala says "You will learn that the world is as Rome wills. Love is dead. The God of War reigns!" The music is brought up full and fades as the second scene begins.

Ben Hur's mother assures him that the sword of faith can vanquish the sword of war. Ben Hur says that a wise general knows his enemies, and that he plans to go to Rome to study the Romans. Again
comes a musical transition, this time fading into far-off shouting, followed by the addition of cymbals, trumpets and drums as a procession passes. Through this noise Ben Hur's little sister calls that the new Roman governor has entered Judeah. She and Ben Hur rush to the balcony to watch the procession. The cruel face of the governor is emphasized as his soldiers lash people in the way of his horses. By accident a tile falls from the balcony and hits the governor. Messala and a Roman soldier break in the door, arrest Ben Hur and send his mother and sister to prison.

A music crescendo climaxes the scene and changes to background with the quiet voices of people, sound of the clank of chains, tympanis in march rhythm, and the tramp of feet. Bystanders watch Ben Hur being taken through the streets like a dog on a rope; he has been sentenced to work on prison ships for life. The soldiers stop for a drink, but they give no water to Ben Hur. The bystanders are afraid to relieve his thirst, but a child, the son of Young Joseph of Nazareth, steps forward and gives him a drink.

A musical transition fades into the sound of slaves rowing, chanting dully. Arrius, in charge of the fleet, asks the slave-driver who Ben Hur is and orders that he shall be sent to him at relief time. The scene fades out with the driver lashing the slaves into faster rowing. The moans of the slaves mingle with a music bridge, which fades out for a conversation between Arrius and Ben Hur. The latter is telling his story to Arrius when a pirate ship is sighted. Arrius orders the fleet into battle, and in returning Ben Hur to his bench, tells the driver, "You need not lock him in his place."

Then the theme music which introduced the show fades in to bring back the book-shop scene and Mr. Meggs. Youngfellow inquires "Did they have the battle at sea, Mr. Meggs?" The sound of fierce battling begins and holds as background while Meggs continues:

Meggs: Yes, and this battle was one of the first fought in that age. You can imagine the blind terror of two hundred trapped galley slaves, chained to their benches, while above them raged a furious fight in which they were hopeless to defend themselves! Through the early part of this battle, Ben Hur remained at his oar; but when the vessel caught fire, he remembered that Arrius had instructed the Hortator to leave his ankle chains unlocked. Realizing he was free, he hurried to the deck to help the man who had shown
him kindness. The Roman chief had been thrown into the ocean and was sinking beneath the waves when Ben Hur rescued him. In gratitude Arrius adopted Ben Hur and he went to live in Rome as the son of the powerful chief. One day he heard of Simonides, a rich merchant who, it was rumored, had been a slave of his father, the Prince Hur. They said Simonides had built his fortune on the money salvaged after the house of Hur had fallen. Hoping he might learn something of his lost mother and sister, Ben Hur called on Simonides. ${ }^{3}$

This introduces the next scene.
Readers may think that some of the action which is merely summarized in the preceding narration should have been dramatized. It is true that a great deal of action and a large span of time are skipped over hurriedly. Different adapters would probably dramatize different portions of the story. In a book as complex in plot as Ben Hur, the adapter must choose some central thread or emphasis. The problem is mainly one of analysis and a sense of what is dramatic. The above summary illustrates both the use of an external narrator and one writer's choice of material for dramatic presentation.

## ADAPTING SHORT STORIES

Some short stories are unsuitable for stage use because they are improbable, having plots that lack substance or no plot at all, and skip about in time and place. ${ }^{4}$ Short stories have much more in common with radio than one-act plays do and are often suitable for broadcasting. Modern short stories are usually tightly constructed and free from excess verbiage. The easiest to adapt are those with a story of modern life, a simple plot, and strong characterizations. Experienced writers can handle fantasies, stories dealing with social problems, psychological studies, and similar types successfully. The beginner is safest with stories which depend on action rather
${ }^{3}$ Norman S. Weiser, The Writer's Radio Theater, 1940-1941, Harper \& Brothers, 1941, pp. 50-68.
${ }^{4}$ See H. N. Hildebrand, Writing the One Act Play, Alfred A. Knopf, Inc., 1925, chap. 1.
than ideas, on simple rather than subtle emotions. Generally speaking, he does best with tales of love, crime, and family situations. He must select stories that do not violate station policies or offend listeners' tastes.

The adapter may find that some incidents are already in dialogue form and can be used as they are. Often, however, short-story writers use dialogue for their lighter and less important incidents and tell the principal action in the third person. The radio adapter should curb his temptation to follow this pattern. Exercising his best judgment, he should outline the action and decide which incidents are necessary to tell the story. Then, as far as time allows, he writes every important turning point into the dialogue. This is a very important principle, although it is probably more frequently violated than any other. The skilled adapter avoids the temptation to include description just because it is good writing. He might let a narrator explain important facts in the setting or situation, but as far as possible he gives such lines to characters within the scenes. He remains faithful to the spirit and dialogue of the author, but he makes his adjustments in terms of clarity, time limitations, and the specialized techniques of radio. And whenever possible he follows the principles of structure, characterization, form, and dialogue used by writers of drama.

In adapting stories for television, the writer faces the added task of planning the stage action. Since the narrator is not as effective when he is seen reading longish passages from a script, the principal action must be indicated or explained in the dialogue. The key scenes are selected on the same basis as for radio.

A word should be said about broadcasts of nonfiction books, biographies, and essays, whether read verbatim or in edited versions. Perhaps the most notable example was the reading of Hersey's Hiroshima, presented as a public-service feature by the American Broadcasting Company. Several edu-
cational stations offer programs of this type regularly. When done by competent readers, such programs can be a valuable contribution to listeners who want something more than entertainment in their radio diet.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Assign a cast to broadcast the stage version of a one-act play, with an announcer reading the lines that describe the scene and the action. Have another cast broadcast the radio adaptation. The class should discuss the differences between scripts.
2. Assign one cast to broadcast the stage version, and another the radio adaptation of The Importance of Being Earnest. This should be done section by section with brief comments after each.
3. Have two or three students select a book for the "A Chapter a Day" program and read a ten-minute cutting as the first chapter. This program can be set up as an audition, with the class making the decision.
4. Compare a radio adaptation of a short story with the original. Hand in a 300 -word report summarizing what you learned about making this type of adaptations.
5. If scripts are available, compare the television version of a short story or one-act play with the original.
6. A panel, consisting of a leader and two or three members, may discuss copyright laws and royalties that apply to adaptations and incidental music. Time limit, ten minutes.
7. Another panel may discuss Douglas Coulter's statement that "contrary to general belief, making a good adaptation requires more technical skill than writing an original piece." (See preface to his Columbia W orkshop Plays.)
8. Divide the class into groups to write and produce a fifteenminute radio adaptation of a short story or one-act play. Scenes from full-length stage plays may be used. Each group should include two writers, a director, and a sound-effects technician. After the script is prepared, the director will hold auditions to select actors. See later chapters for information about directing and producing dramatic programs.
9. The teacher may supply charts similar to those used in measuring audience response to interviews and discussions for use in evaluating the adaptations.
10. Using the weekly log of a radio station (from a newspaper listing
or directly from the station), underline the programs which you know are dramas. Mark with a star those which are usually adaptations. (If you do not know, talk with the program manager of the station assigned to you.) Report the results in class. How much dramatic programming? When does it come? Any pattern of scheduling? Using the key symbols which usually appear in the printed log, note how many such programs are network, transcription or local live. In class, compare the facts which apply to a network affiliate station with those of an independent station. Make the same comparison between daytime and full-time stations. What conclusions do you reach?
11. Make the same comparison between an AM and a TV station.

## READINGS

Barnouw, Erik, Handbook of Radio Writing, D. C. Heath and Company, 1947, pp. 213-220, Appendix B.
Cantril, Hadley, The Invasion from Mars, Princeton University Press, 1940.

Cohn, Morris C., "Author's Moral Rights: Film and Radio," Hollywood Quarterly, 1945-46, pp. 69-79.
Crews, Albert, Professional Radio Writing, Houghton Mifflin Company, 1945, chap. 18.
Fitelson, H. W. (editor), Theater Guild on the Air, Rinehart and Co., 1947 (radio adaptations of plays).
Kaplan, Milton A., Radio and Poetry, Columbia University Press, 1950, chap. 6.
Whipple, James, How to Write for Radio, McGraw-Hill Book Company, 1938, chaps. 12, 13, 14.
Wylie, Max, Radio Writing, Farrar and Rinehart, 1939, chaps. 11, 12, 13.

## SCRIPTS OF RADIO ADAPTATIONS

Note: This is by no means a complete list of adaptations published up to 1951. Consult other sources in the bibliography, or books published after 1951.

## SHORT STORIES

Coulter, Douglas (editor), Columbia Workshop Plays, McGraw-Hill Book Company, 1939, contains adaptations of the following short stories:
"A Drink of Water," Wilbur Daniel Steele's story, adapted by Brian J. Byrne.
"A Trip to Czardis," Edwin Granberry's story; adapted by James and Elizabeth Hart.
"Daniel Webster and the Sea Serpent," Stephen Vincent Benét's story, adapted by Sheldon Clark.
"Never Come Monday," Eric Knight's story, adapted by Stephen Fox.
"Nine Prisoners," William March's story, adapted by Brian J. Byrne.
"The Half-Pint Flask," Dubose Heyward's story, adapted by Irving Reis.
Whipple, James, How to Write for Radio, McGraw-Hill Book Company, 1938.
"A Green Coupe," Joel Dane's story, adapted by Don Becker. The text of the story is also included.
Wylie, Max, Radio Writing, Farrar and Rinehart, 1939, has these short-story adaptations:
"Mr. Sycamore," Robert Ayre's story, adapted by Leopold Prosser.
"Seven Waves Away," Richard Sales' story, adapted by Margaret Levereth. The text of the story is also included.
"The Flying Yorkshireman," Eric Knight's story, adapted by Charles Jackson.
Wylie, Max (editor), Best Broadcasts of 1938-1939, McGraw-Hill Book Company, 1939.
"Surprise for the Boys," Herbert Lewis' story, adapted by Victor Smith.

## adaptations of STAGE PLAYS

Barnouw, Erik, Handbook of Radio Writing, D. C. Heath and Company, 1947.
"Macbeth on the Air," a combination of dramatic passages from Shakespeare and narrative passages from Holinshed's Chronicles.
Skornia, H. J., Lee, Robert H., and Brewer, Fred A., Creative Broadcasting, Prentice-Hall, Inc., 1950.
"Cyrano de Bergerac," a full hour adaptation of Edmond Rostand's play, by Robert H. Lee.
Whipple, James, How to Write for Radio, McGraw-Hill Book Company, 1938.
"A Bargain's A Bargain," Larry E. Johnson's one-act play, adapted by James Whipple. The stage version is also included.
"Drums of Conscience," Arthur K. Aker's play, adapted by James Whipple.
Wylie, Max (editor), Best Broadcasts of 1938-1939, McGraw-Hill Book Company, 1939.
"Blood of the Martyrs," a one-act play by Percival Wilde, based on a short story by Stephen Vincent Benét, adapted by Donald Macfarlane.
"The Lighthouse Keepers," Paul Cloquemin's play, adapted by the CBS continuity staff.

ADAPTATIONS OF NOVELS
Weiser, Norman S., The Writer's Radio Theater, 1940-1941, Harper \& Brothers, 1941.
"Ben Hur," Lew Wallace's novel, adapted by Elpha H. Ellington.
Whipple, James, How to Write for Radio, McGraw-Hill Book Company, 1938.
"The Frozen Pirate," William Clark Russell's novel, adapted by James Whipple.
"Treasure Island," episode one of a series of sixty•five, based on Robert Louis Stevenson's novel.

## ADAPTATIONS OF BIBLE STORIES

Wylie, Max, Radio Writing, Farrar and Rinehart, 1939.
"The Gates of Samaria," the story of Elisha, adapted by Max Wylie.
"The Story of Job," adapted by Margaret Sangster.

## chapter 15

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## GENERAL CONSIDERATIONS

DOCUMENTARIES and informational dramas have a serious purpose, but the object of most broadcast drama is to be entertaining or interesting. When is a situation interesting? When it is thought-provoking, when it deals with a strong emotion, a crisis, a problem to be solved, or a contrast in character.

Broadcast plays for the most part frankly cater to the tastes and interests of the average listener who wants confirmation of his own beliefs. He likes to be shocked, but not really horrified; frightened, but not for long. He feels the need for learning, but he doesn't want many facts in one program. He likes a good sparkling comedy if he can get it, and he dotes on sitting safely at home while the broadcast characters wallow in crime which doesn't pay. The story can be one of love, adventure, mystery, family life-almost anything. Several kinds, however, seem to predominate: those in which the listener thinks he sees himself, his family, or his friends ("Ma Perkins," "One Man's Family," "Date with Judy"); those which serve as an escape from the prosaic monotony of daily living ("Lights Out," "Inner Sanctum") ; those in which he
vicariously escapes from delicious danger ("Lone Ranger," "Fat Man," "Suspense"); and those which permit him to feel superior to others whose human foibles are amusing ("My Friend Irma," "Duffy's Tavern," "Fibber McGee," "Life of Riley"). Television shows like "Studio One" and "Philco Playhouse" have dared to try fantasy and challenging psychological studies, reminiscent of the 1938 experimental Columbia Workshop. It remains to be seen whether televiewers will rise to such presentations, or whether TV, like radio, will settle into a groove of formula.

Obviously, some kinds of stories are difficult to televise. Sea battles might be managed ly alternating water-tank shots with miniature battleships and live shots of gunners, or motion pictures of a sea battle might be cut in. Generally speaking, however, stories that involve large action, like horse races, a policeman chasing a bandit, or a busy street scene, are too difficult for ordinary TV production. Films produced for television are not limited by such considerations. The opportunity to do well-edited, delivery-perfect shows on film for television may lead to their more frequent use when production catches up with demand.

- CHOOSING A PLOT. A good plot for radio or television is basically the same as a good plot for any other medium. Someone wants something; he faces difficulties in getting what he wants; finally he gets it-or doesn't. In general, fastmoving action is better than psychological situations. Action does not necessarily mean physical movement such as the horse riding and gun play of the good western movie. Action means plot development. Is there a real struggle, and is someone constantly doing something about it, with failures or successes in every scene? A good play is not "about something" but is "someone doing something."
- bLOCKING OUT THE SCENES. Basically a play is a scene or set of scenes in which characters, setting, and action
are combined to tell a story. Theoretically, the ideal play would be a single scene, with nothing to break the continuity or unity of the mood. Practically, there is no ideal number of scenes. A very effective dramatized monologue by W. H. Auden, "The Dark Valley," had one continuous half-hour scene without even a music break. The famous "Cartwheel," ${ }^{2}$ by Vick Knight, had twenty-two scenes, averaging less than forty seconds each, in a quarter-hour program.

The first step in writing a broadcast play is to plan the scenes and the approximate time to be allotted to each. The simplest method of doing this is to write a scenario or summary of the action. The problem should be stated in the first sentence. "Judy wants her father's permission to go to the country club dance with Harry." "Hacker, a Kansas City ward leader, is found shot to death in the back room of a saloon; several political enemies are in the saloon at the time and it appears likely that one of them killed him." Each sentence in the summary should advance the story. No description of characters or setting should be included. This summary then guides the development of the play, each sentence representing a necessary scene. For a TV play, these scenes determine the settings. Worthington Minor, veteran TV producer, insists that it is "of greatest importance" to design a play scientifically before a word is put on paper. ${ }^{3}$

The first scene should start the action, set the mood, and make clear the essential factors of character, time, costume, or setting.
"For Richer-For Richer" gets the action started, the approximate time stated, some of the setting and costumes explained, and two of the characters introduced in four lines: ${ }^{4}$
${ }^{1}$ Max Wylie (editor), Best Broadcasts, 1939-1940, McGraw-Hill Book Company, 1940, pp. 30-43.
${ }^{2}$ Douglas Coulter (editor), Columbia Workshop Plays, McGraw.Hill Book Company, 1939, pp. 245-259.
${ }^{3}$ Quoted by Max Wylie, Radio and Television Writing, Rinehart and Co., 1950, pp. 448-449.
${ }^{4}$ True Boardman, in Wylie, op. cit., pp. 44 ff.
PEGGY: Susan. Are you feeling better? I left the
dance early because I thought.-.
SUSAN: (blithely) Oh, hello, Peggy.
PEGGY: (astonished) Susan, what are you doing up and
dressed and with a bag packed?
SUSAN: I'm eloping. Isn't it wonderful?
"Surprise for the Boys" opens with a reporter telephoning his editor from the state prison. The editor won't talk to him. This slight delay arouses interest and creates tension. The reporter puts the call through again and starts giving the facts about an execution soon to take place. This gives the information needed to understand the program. Every succeeding scene should complicate or clarify the situation, create or remove an obstacle to the solution.

The flashback scene usually indicates a reversal in time. This is really a scene within a scene. A witness in "Famous Jury Trials," being examined by an attorney, starts to give evidence; the voice fades out, and the evidence is given in dramatized form. Finally, the voice of the witness fades in, bringing the listener back to the present tense and the courtroom. The flashback is a convenient way to avoid telling a story episodically, in chronological order.

The montage is a useful device for compressing a series of actions into a few lines, spanning time briefly, and securing climax. A true montage pulls together lines which would normally belong in separate scenes.

VOICE 1: Have you heard?--Jim Bandy's a herol
VOICE 2: Jim Bandy--he was just a kid.
VOICE 3: Yeah--Yeah--knocked off eight Jap fighter planes single-handed.

VOICE 1: Why, he lives right down the street here---
SOUND: CLICKER: ROLLING PRESSES. FADE IN AND OUT QUICKLY.

## VOICE 4: Port Darwin, Australia. Forces returning here today from the Coral Sea area report many acts of heroism. One story of outstanding bravery concerns James Bandy, American pilot from Hillsville, Texas. (FO)

VOICE 5: (FI)---and for extreme courage under fire and heroism beyond the call of duty, I am honored to bestow on you the American Flying Cross.

This is not really a scene, but it tells the story of several scenes.

Closely related to the montage is a sequence of brief scenes, such as those in Eric Knight's "Never Come Monday." In this story, circumstances have led people all over the world to believe that the days of the week have stopped moving, and that every day is Sunday. Stephen Fox, who adapted this show for radio, gives us a rapid-fire series of scenes of very few lines each: a working girl does not have to get up; mill hands take the train to Brighton for a Sunday picnic; manufacturers complain to the Prime Minister that they are getting behind on their orders. All of these little scenes are related to the story, but are not really a part of plot development. This might seem to violate the rule that every scene should carry the plot forward, but rules are made for amateurs. The working-girl scene, for instance, does not create or remove an obstacle to the solution of the story, but it amplifies and emphasizes the central situation, namely, that the days of the week are standing still.

Many writers deliberately break a series of slow, heavy scenes with lighter spots for variety of movement and contrast. The mixture of murder and comedy which "The Thin Man" bequeathed to motion pictures is an example. Murders in such shows are not meant to be taken seriously. Tragedy often gains emphasis by contrasting lighter scenes. In "A Trip to Czardis, ${ }^{, 6}$ a mother takes her two sons to see their father

[^37]just before his execution. The older boy has been to Czardis. He tells his brother about it-about the balloons and lemonade and ice cream cones; his voice fades into a flashback in which the boy and his father are heard in carnival spirit. At the end of the play, after the execution, when the wagon with the boys and their mother is leaving town, the older boy is crying and the younger boy says "We never got our ice cream cones, did we?" In this case, the closing scene gains strength by contrast with the gayety of the flashback.

The writer of TV plays is not usually expected to include complete camera directions in the script. Working out the camera shots is the producer's job, and space is left on the script for him to write in directions as the show develops. However, much of the necessary camera work is implied by the dialogue and the author's description of action. In the three excerpts reproduced here from the TV version of "The Aldrich Family, ${ }^{, 97}$ several camera changes are implicit in the dialogue.

In this excerpt the author states the settings, leaving the detail to the producer:

AUDIO
CAMERA
PHONE BOOTH. HOMER.
HOMER
I--your friend Homer. I've been asked to ask you a question but there isn't anything to get upset about. You know that necktie of yours?
SAM

What necktie?
HOMER
Your yellow and brown one. If that were cut very carefully about three inches from the end, and then maybe sewed together afterwards, would you object, Mr. Aldrich?

## CORNER OF SAM'S OFFICE. SAM at phone. SAM

Who did you say this is?
${ }^{7}$ Used by permission of copyright owners. In these excerpts, as with other NBC.TV scripts, space for camera directions is at the right of the page. Nearly every other company has video direction at the left.

HOMER
Homer. H---can you hear me? SAM
Yes.
HOMER
O-M-E---Can you still hear me?
SAM
Home? . . .
HOMER
Yes---only now add an R. ... Have you added it?

## SAM

I think so.
The dialogue here compels the director to change scenes and almost necessarily means that the shots will be close-ups. In this next excerpt, the camera action is implied by the physical action of the characters.

AUDIO
CAMERA
MISS EGGLESTON'S CLASSROOM. MISS EGGLESTON AND STUDENTS.

MISS EGGLESTON
And before we proceed any farther, I want the class to get out your pencils and
write the following rule: "Knowledge is the entrance through the--
SOUND: (DOOR OPENS)
MISS EGGLESTON looks out of the corner of her eyes.
HOMER ENTERS CLASSROOM--apparently trying to slide in, not realizing he is being noticed.

MISS EGGLESTON
(Continues to speak, OFF) Knowledge--do you have that, class?

CLASS
Yes, Miss Eggleston.
MISS EGGLESTON
Is the entrance--through the portals of happiness--do you have that?

In this scene it is almost inevitable that one camera will open with a long shot of the entire classroom, followed by a close-up of Miss Eggleston. A second camera will take Ho-
mer's entrance and "pan" him as he makes his stealthy progress toward his seat. The writer has, by his dialogue, planned the scene.

Complete freedom in the use of the camera is left to the producer in the following scene.

## AUDIO <br> CAMERA

HENRY
Let go of me.
HAROLD
You make me.
HENRY
You make me.
HAROLD
Says who?

## HENRY

Says who yourself.
HAROLD
Who wants to know?
Some writers put in at least part of the production directions. The script of the television serial, "Vine Street," contains the dialogue, camera shots planned as in a movie scenario, special effects and sometimes sketches of the scenes. However, writers should usually give their attention to the story, leaving camera angles and trick shots to the cameramen and producer. Nevertheless, the writer must know enough about production to realize the possibilities and limitations of his medium.

Scene-shifts that involve quick changes of costume should be avoided; the television play has no intermission which actors can use for this purpose. For example, a scene showing people in fishing clothes followed closely by a shot of the same people in evening dress would be both difficult and unrealistic, though one of the scenes could be filmed before the program and spliced into the show. This process, however, is expensive and TV writers must try to avoid expense. When quick changes are essential, a zippered costume can be worn over another costume. Sometimes adding or removing a scarf, necktie, or coat can give the effect of a costume change.

- PLANNING TRANSITIONS. Transitions from scene to scene in radio are made by the use of fades, cut-offs, narrators, sound effects, music, and various combinations of these.

In the simple fade the characters walk away from the mike on the last line or toward it on the first lines of a scene. Fades are most effective when the scene shifts from one group to another and no particular time lapse is indicated. They are used, however, for flashbacks when the same people fade back to events that occurred months or years before.

The cross-fade is sometimes used for flashbacks and montage effects and to contrast or blend different voices and sounds. Here the lines of one scene begin as the last lines of the preceding scene are spoken. In writing the script the crossfade is indicated by double columns, as in the following dialogue, which includes Mary, the narrator, Sam, and Jane.

MARY: I didn't enjoy the days I spent at their house. They were always quarreling. Sam was always complaining. If it SAM: These eggs are too wasn't one thing it was another--(fade) salty. I can't see why I can't have my eggs without too much salt. Always too much salt in everything.
Jane wasn't much better. It seemed to me that Jane nagged Sam quite a bit. Maybe he came in a little late, and she'd want to know where he'd been. Maybe he JaNE: You might at least be spilled some cigarette ashes on the rug.

The cut-off is the reverse of a fade. A line is spoken "up cold" at the microphone with normal volume through to the last word. A cut-off at the end of a scene leaves the audience expectant and tense, in contrast to the natural listener relaxation during fades. A first line spoken cold at the opening of the scene is a "sock" opening, best used to startle the listener into immediate alertness. Cut-offs are not classed as fades but as transitions involving changes in time and place.

Narrators have been overused to describe settings, action, characters, and even to "make clear the meaning and mood." Such use of a narrator is a crutch on which a weak scene can limp along. Oboler calls it lazy writing. The narrator who says "The scene is in a hotel lobby," or "We find two women talking earnestly to each other," or "This gay little comedy will brighten up your day," is doing a job which, in most cases, should be done by lines from the characters within the scenes. Narrators are useful to summarize action covering long periods of time, to give details of setting and situations which cannot be put into dialogue without delaying the action, and to explain action which cannot be effectively put into dialogue. Greater reality is often achieved by the use of the character-narrator who gives an eye-witness account of what happened between scenes. The ordinary narrator is an intruder; the character-narrator is a part of the show.

One rare but effective device is the use of several characternarrators. Different characters take up the narrative in turn. For example, the son greets the mother, shows her his brand new commission in the naval air force, and expresses great enthusiasm and eagerness to get into action. Then the son becomes a narrator and says to the audience, "I knew that mother was worried about my going to war. She was probably proud of my commission, but I could see, etc."

Sound effects are used in transitions to indicate the location of the scene (lapping waves, roaring motors, frogs, birds), to indicate time (clocks, roosters, bells), and to tell something
about the action (automobile noises, gunfire). A continuous sound with a fade in the middle is useful if the same characters continue the action from one scene to another. For example, a car leaves one location, fades to indicate a lapse of time, and then becomes louder, indicating that the characters are arriving at their destination.

Musical transitions indicate the mood or pace of a scene (exciting music to introduce a race), geographical location (Southern songs, national anthems), the period of history (Victorian music boxes), or even something about the characters by having music that symbolizes them.

Various combinations can be used, as in this example:

|  | VOICES | SOUND | MUSIC |
| :---: | :---: | :---: | :---: |
| MARY: | Goodbye--goodbye, everybody. |  |  |
| LARRY: | Goodbye and thanks for everything. |  |  |
| VOICES: | Goodbye, good luck. Have a good time, etc. | CAR MOTOR ROARS |  |
|  |  | OUT OF DRIVE |  |
|  |  | WAY |  |
|  |  | HOLD FULL ABOUT |  |
|  |  | FIVE SECONDS |  |
|  |  | AND THEN FADE | EXCITING AND |
|  |  | TO PURR | RHYTHMIC MUSIC INCREASING |
|  |  |  | SLIGHTLY AS CAR |
| LARRY: | That drive through the night with Mary was all that any man could ask. As the miles went by and Mary dozed, I | CAR CONTINUES | FADES. THEN OUT |
|  |  | TO PURR. |  |
|  |  | FADE ALMOST |  |
|  |  | OUT |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

    thought of the
    years ahead,
    and wondered
        if I could
        make her
        happy. And I
        couldn't help
        wondering what
        Grandmother
        would think
        of her when we
        got to the
        farm in the BACK IN
        morning.
        (Slight
        BUILD SLIGHTLY
        FULL PURR
        CAR VOLUME DOWN SPRING MUSIC
        FADE IN BRIEFLY
        AND OUT
        Grandmother's
        gate, the sun
        was already
        peeping above BIRDS TWITTER
        the horizon.
        CAR HOLD FULL
        AND COMES TO A
        STOP.
        BIRDS CONTINUE
    LARRY: (Yawns) Mary--
Mary, wake up.
We're here.

The writer should be consistent in his use of transitions. The same structural divisions should receive the same type of transitional treatment. Internal consistency of transitional devices is used in the following outline.
Music
NARRATOR
Cross-fade to
SCENE, Location A
Fade to FLASHBACK
Fade back to SCENE, Location A-cut-off

Pause

## SCENE, Location B-start cold <br> Fade to <br> FLASHBACK <br> Fade back to <br> SCENE, Location B

Music. same as before
NARRATOR
Cross-fade to
SCENE
ETC.
In this example, note that music always identifies the narrator, that cross-fades make the transition from the narrator to the next scene, and that simple fades precede and follow the flashback. Such consistency is not always possible; but when it is, the result is greater clarity and coherence in the play.

Many transition problems can safely be left to the producer. He may substitute a three-second fade for a sevensecond musical transition if the show is a bit long. For other reasons, also, the producer should have considerable leeway on transitions, because the real "feel" of the show may not develop until it is in rehearsal.

- VISUALIZING THE CHARACTERS. The author should know more about his characters than the audience will ever learn from the play. He will find that writing a life history and physical description of each character before writing a single scene gives him a richer conception of his characters, their traits, and their motivations.

Successful radio characters are nearly always unusual people, even though they are introduced as "your next doon neighbor," "typical bride," "all-American," or, like the unusual Quiz Kids, as "typical American school boys and girls." Writers who recommend that "ordinary people" be used as characters ignore the fact that the very essence of drama is the unusual. Let your central character be untypical in his fighting skill, stupidity, selfishness, kindness, or what-
ever else suits the story. Even the "typical housewives" of daytime serials have more patience, honesty, self-control, understanding of others, and energy than most women who listen to them.

Of course, your character must be enough like other people to seem real. But he should not be perfect. Occasional mistakes and failures are necessary to make them seem like real people. As one writer put it, "The radio audience, expecting entertainment, are prepared for its sake to dismiss most considerations of common sense and reality. Therefore, the characters who, from their essential humanity, convince listeners of their real existence and their circumstances start at a tremendous advantage. ${ }^{\prime 8}$

Because of time limitations and conditions which make concentrated listening difficult in many homes, experienced writers draw their characters with broad strokes. They are young or old, good or bad, smart or dumb-but definitely! They are scatter-brained hostesses, slick sleuths, man-chasing girls, drawling small-town lawyers, efficient nurses. There is little place for subtlety of character and personality in the usual radio play, and too much originality is not necessarily advisable. Listeners expect a crook to be either heavy or oily, an old man's voice to crack, a dizzy "dame" to giggle. But they should have some individual characteristics that set them off from others of their type and thus make them seem real. We know, of course, that people are never completely onesided, and can never be fully described with a single adjective. But most radio characters tend to be oversimplified because in most single-unit shows there is no time to develop more than a caricature. In serials the situation is different, since they continue week after week, and the author has an opportunity to develop full characterizations. In fact, listeners come to think of the characters as real people.

Be careful, however, not to perpetuate stereotypes of minor-

[^38]ity groups that will increase tensions and prejudices. Not all Negroes are lazy, Scotsmen penurious, Jews money-grabbing, Mexicans criminal, Irishmen belligerent, or Englishmen effeminate. Although radio has been relatively free from such damaging generalizations, some character representations have had unfortunate implications.

A character's main traits or habits should be related to the action of the play. If the professor is absent-minded, let him forget something that he shouldn't, something that will affect the progress of the story. If the girl is selfish, let that selfishness be an obstacle to the happy solution of the plot. If the uncle is mean, let his meanness cause the trouble around which the play is built. But remember that in most plays the central characters must represent the forces of good, and they must triumph in the last scene. A struggle to acquire material things is not as desirable as a struggle to "do good" or to achieve some spiritual values. The detective is not looking for a reward, but to right a wrong. The man who gains business success is a better radio character if, through the fire and struggle of achievement, he emerges a better man.

The main characters should have contrasting personalities. Jane Ace is rattle-headed; Goodman, her husband, is satirically intellectual. Rochester serves as a foil for Jack Benny. The children in "One Man's Family" are quite different. So are Fibber McGee and Molly, Amos and Andy, Ozzie and Harriet. Color, emphasis, and drama are achieved by contrast.

Perhaps the most common weakness in student writing is inadequate motivation for action. Consider the following synopsis:

John has just been discharged from the Army. His employer had promised to give him his job when he returned; he comes home to find that Mary, his girl, has been going quite steadily with Bill. Alvin, a rich young man, has told John's employer that John showed cowardice under fire and was dishonorably discharged; also that John had made disparaging remarks about his employer. When Mary sees

John she realizes that she has really loved him all the time, and that her interest in Bill was the result of loneliness. She tells John what Alvin has done, whereupon he beats Alvin in a fist-fight, shows his honorable discharge papers to his employers, and is taken back into the firm.

The trouble with this plot is that Alvin has no reason to make trouble for John-at least none is given in the synopsis. This could be corrected easily by eliminating Alvin. Bill, who wants both John's job and John's girl, can be the villain who lies about John's record. Every action of a character should result from some circumstance in the play.

## WRITING THE DIALOGUE

- GENERAL PRINCIPLES. A character's lines should be what such a person would say under the circumstances. This is where most amateurs fail. The writer should constantly ask himself whether this character would say this thing, in this way, with this grammar and pronunciation, with this type of emphasis, under these circumstances. There is no worse criticism of dialogue than to say that lines are interchangeable. If a line could be spoken just as well by someone else, it is probably a bad line. If you know your character well enough, you won't misquote him. The surest way to naturalness in dialogue is to make nearly every line a response to something that has been said.

Various books on radio writing urge beginners to be concise, to compress their material. Actually, beginners have a tendency to say things too concisely, compressing years and highly involved action within a few lines. They generally need to learn to expand their writing for radio work-to amplify scenes without losing audience interest.

One of the easiest ways to expand the dialogue is by introducing a disagreement or an active conflict between hero and villain. An argument makes ideal simple dialogue. People repeat each other's words, throw questions, talk up blind alleys. Next to a disagreement, a "planning session" is best. This is
equivalent to the point in a mystery story where the detective lists all of his clues and considers them one by one, as he decides what to do next. Let your characters analyze the situation and discuss possible plans of action. Many seconds can in this way be filled with dialogue that contributes naturally to the play. Sometimes it is helpful to introduce a new character who has to have what has happened explained to himand the audience gets a recapitulation that also helps in seeing the whole picture. The stupid person who cannot understand when he is told a thing once, and the stubborn one who must have everything proved for him, are the playwright's old and valuable friends.

We have said that each line should advance the story, but even this bit of advice is sometimes successfully violated. Daytime serials provide excellent examples. In certain fifteenminute episodes almost nothing happens. The characters discuss the situation, looking at it from all angles, repeating their ideas in different words. This sort of thing serves a useful purpose, since there is danger of moving the action too fast, especially in radio. Greater significance is sometimes given to situations if the characters have time to talk about them.

Another common bit of advice for writing dialogue is that the style should be simple. While this advice is generally sound, especially for beginners, it should be noted that simplicity is not always desirable. An elevated style might be quite in order for historical scenes, personages of dignity, or poetical situations. The important thing is that the style should fit the story and the characters.

- PLANTING CUES. Single lines can be used to predict later events by implication. A simple remark that the night is dark can prepare the audience for a scene where some one is discovered hiding in the dark. The "feeling that something might happen" can be expressed. A reference to loose boards can prepare the way for a falling floor. Character-narrators
can arouse anticipation by forecasting lines; for example, "If I had known Harry was going to do what he did, I wouldn't have gone," or "John wasn't so tired-looking then. That was before the big trouble came."

Preparatory incidents give clues as to what the climax will be, although the listeners may not be aware of it until the show is over. For instance, in "Of Mice and Men," Lenny squeezes a mouse to death by holding it too tightly; this prepares the audience for the scene in which he kills the ranch girl by gripping her throat and finding that he can't let go. In MacLeish's "Fall of the City," the submission of the people is forecast by reports of how other towns have bowed to the conqueror.

Misleading the audience by false clues is the reverse of forecasting. This is common practice in mystery stories and stories with surprise endings. Arch Oboler uses it in his radio classic, "Baby." The doctor has just told a young wife that she is pregnant. As she walks home, her footsleps beat out a rhythmic pattern "Ba-by-Ba-by." She wonders whether she will have a boy or a girl and what kind of a person her child will turn out to be, but most of all she wonders what her husband will say. Scenes flash through her mind which picture her husband as fun-loving and irresponsible. ${ }^{9}$ She knows their financial situation and we hear her husband's voice saying, "Fine mess we're in! Fine mess! Where'll we get the money? (FADE) Where'll we get the money? Where'll we . . ." But when she arrives home, and before she has a chance to make the announcement, her husband tells her that he has had a raise, and proposes that they use the extra money to make the down payment on a family.

## SETTING THE RADIO STAGE

There are plays in which the setting is the dominating factor. A storm at sea may influence everything that is said and

[^39]done, or the loneliness and isolation of a farm might affect all of the characters. Generally speaking, however, the situation, not the setting, should dominate the dialogue. Too many lines about the dusty, distant horizon are likely to retard the action.

Description of characters and references to action, business, and setting should not seem forced. This information should be worked into the conversation as part of an active scene, instead of taking time out to give the description. Here is an example of what not to do.

SHE: My, what a lovely office this is. Big thick rugs. And look at the view from that window over there. I didn't realize you had so many files. How do you ever keep track of things?

HE: Yes--and it's a very busy office, too. I see you have a new permanent. Sit down in one of those large, comfortable chairs over there by the window.

Assuming that the rugs, window, view, large comfortable chairs and the permanent are important in the play (which they probably are not) the lines could be rewritten like this:

KATE: John--
JOHN: Katie--I didn't expect you to come here to the office.

KATE: I really came down town for a permanent, and thought I'd drop in.

JOHN: Glad you did ...
SOUND: TELEPHONE
JOHN: Just a minute, Katie--sit down over there by the window.

SOUND: TELEPHONE
JOHN: (at phone) Garver speaking ... No, I can't see him now.

SOUND: CLICK OF RECEIVER HUNG UP.
KATE: What a lovely view from here.
Yes, I ...
GIRL'S VOICE: (FI) Sorry, Mr. Garver, I don't want to
disturb you.
JOHN: Oh, I didn't hear you come in, Miss James.
KATE: No wonder, with these thick rugs.
GIRL: I just wanted to file this invoice ...

## FURTHER DO'S AND DON'TS

These bits of advice are based on observation of the kinds of mistakes that beginners commonly make.

1. "Planting" new characters by referring to them before they enter is helpful. When they enter the scene they should be identified immediately but briefly.
2. Once a character is in the scene, don't let him die. If he is going to stand by silently while the others talk, find some excuse to get him off-stage.
3. If there is any doubt about what a character means, rewrite the lines instead of depending on the actor's interpretation. For instance, "No, I don't think so" is better than a doubtful "No."
4. Unusual words and expressions are usually to be avoided. For example, "Gosh" is more natural than "By Jove" for most of us. However, in plays involving specific professions the author should use the necessary terminology accurately. In a story about yachting it may not greatly matter whether everyone in the audience knows what halyards and spherical navigation are; the terms sound very nautical. In locale stories the author should use vocabulary peculiarities and expressions found in the area, even though the audience may not know exactly what they mean. They lend authenticity to a scene.
5. What the characters say should keep the story moving along. Lines just for sake of characterization are wasteful and delay the action.
6. Dialects should be suggested rather than fully reproduced. But they should be authentic or not used at all.
7. It is better to write the script too long and cut it than to expand it after the first writing.
8. The script should suggest the time that an action would require in real life. Don't for example, have a woman put potatoes on to cook and serve them three lines later. Don't have a man telephone from three miles away to say he is coming and then ring the doorbell fifteen seconds later. The simplest way to avoid such absurdities is a transition indicating a lapse of time. But you don't always have to be realistic about the time element. As long as you don't make it too obvious, you might get the potatoes boiled within a fifteenminute script, though they take twenty in real life.

Simulcasts, that is, plays which are heard on radio while they are being telecast, should be written like radio plays. All of the action must be made clear in the lines. Several daytime serials now appearing on TV are written substantially as they would be for radio production.

## WRITING PLAYS FOR TELEVISION

With one important exception, everything said about playwriting in this chapter also applies to television. That exception has to do with radio's need to verbalize everything. The example on pages $270-276$ shows that few words are needed to tell a story when the audience sees what is going on. Radio writers who first made the transition to the new medium tended to be too wordy; to them TV dialogue seemed bare and sparse.
The best dialogue for television integrates sight and sound, instead of supplementing the picture with words or vice versa. Integration at its best means that sight and sound are inter-dependent-one is necessary for effectiveness of the other. An excellent example of what is meant occurred in the first broadcast of "Ethel and Albert" from Schenectady. Albert
was rehearsing for a church play, and couldn't get his lines interpreted to his satisfaction. Finally, he got down on one knee and, holding his script in front of him, "emoted." Ethel came into the room and asked, "What are you doing?" "Rehearsing my lines." "And in your best suit, too." At that point televised dialogue came into its own. The picture would not have been clear without the lines, and Ethel's line would not have, been amusing if Albert had not been seen down on one knee. Visualization is important to the TV writer, but he should keep his ears and eyes open at the same time and challenge his audience to do likewise.

## PLAYWRITING FOR MASS PRODUCTION

Since radio consumes great quantities of words every twenty-four hours, someone must write them rapidly and with little time for revision. We are concerned here with writing original plays. Though some critics maintain that they are neither original nor plays, daily serials and weekly crime and horror shows continue to have millions of devoted listeners.

No one claims that these shows have much literary value. Consider the speed at which they must be written. A fifteenminute daytime serial, containing only nine or ten minutes of dialogue, amounts to 260 episodes a year, equivalent in quantity to seventeen full-length plays. The weekly crime and horror serials are usually thirty-minute affairs, but even so what dramatic writer would undertake to produce a really good one-act play a week for a year? Inevitably, the writers adopt a formula, and try to put some new "twist" on plots and situations long since worn thin.

These programs, in spite of continued criticism, have a place in radio programming comparable to the cartoon strips in our daily newspapers. For that reason, if for no other, we give them special attention here.

- THE DAILY SERIALS. Most successful serials are built around a central character. The most common is the kindhearted person (Mollie Goldberg, Stella Dallas, Just Plain Bill, David Harum) who loves all the world. These stories aim straight at the heart. The central characters spend most of their time helping others out of trouble; they too must be in trouble most of the time. The central ingredient in serials, as indeed in all drama, is some kind of trouble.

In one type of serial the troubles concern domestic, neighborhood, and small-town business problems. "Woe is the keynote, with an eternal procession of burnt biscuits, missed trains, splinter wounds, and back porch misunderstandings. Philosophy of the cracker barrel variety, hysteria . . . and 'wish fulfillment' melodramatics are infallible ingredients." ${ }^{10}$ Other serials involve unusual situations such as theft, murder, physical danger, promoting great enterprises, or winning national elections. These have their strongest appeal for younger, college-educated women who are heavy readers and frequent church-goers. A third group emphasizes love problems. Romance and marital difficulties are the keynote in shows like "Helen Trent," "John's Other Wife," and "Backstage Wife." Farm women, and those with less education, tend to prefer this type of story.

In a few serials, the attempt to achieve professional success plays a prominent part. Usually, however, this is played down. Portia is a lawyer and Joyce is a doctor, but we rarely hear anything about their professional careers. This, of course, is because they are characters in a story, not qualified to give professional advice.
The central characters in these serials rarely change. No matter how long they continue on the air, or what experiences they endure, they remain essentially the same. In a few serials, characters have been allowed to grow older, but the added

[^40]years do not alter their personalities or their goal-to help others in and out of trouble.

Settings are usually in small unidentified communities. These locales appeal more to older women who live on farms, and have less than a high-school education. Unfamiliar settings, like Hollywood and foreign countries, appeal mostly to women who live in cities, are under thirty-five years of age, have high-school or college training, and are relatively heavy readers.

Because serial plots are drawn out over weeks or years, the authors think in terms of "sequences" rather than plot solutions. That is, they will say "I am going to do a sequence (meaning a series of scripts) on John's chance to get a job in the city, or on Jake's trial, or on Mary's discovery that she is going to have a baby."

Irna Phillips says that her formula is "the small-town-woman-with-an-emotional-problem-in-physical-danger . . . all three if you can manage." The typical author of serials expresses his formula in terms of situations rather than plot. For instance, he would not be likely to say "I am writing a story about a girl who goes to New York and tries to get on the stage; she falls in love with a producer, whose jealous wife threatens divorce"; or "I am writing about a woman whose son is sent to prison for theft." He would probably say, "I am writing about a girl torn between her ambition for a career and her decent desires not to break up a family"; or "I am writing about a woman, who, though burdened by personal sorrow, is an inspiration in courage to her neighbors." Some writers tend to specialize in certain types of situations. For example, Frank and Ann Hummert usually deal with women married to wayward husbands. "Helen Trent" was written for women over thirty-five who feel they have been thwarted in love. Mrs. Goldberg writes about domestic problems, as does Elaine Carrington.

Though serial writers deal with themes as old as human na-
ture, they try to keep the daily episodes up to date by placing the central character in troubles resulting from current situations. Thus we find situations involving unemployment, war production, selective service, spies, psychiatry, high prices, the fighting in Korea, and the atomic bomb.

Serials are done in a series of rhythms. There is a daily rhythm because a minor climax must be reached each day. Each episode is usually a bit of action, well-rounded enough so that a person who has tuned in accidentally will get the essence of the situation. Summaries of the situation (not of yesterday's action) are given by the narrator or made clear by the first lines of the dialogue. Then the story moves forward slightly, just enough to approach a minor climax-enough so the listener will be teased into listening the next day to find out what happens next. The pattern of the radio play which is complete in one broadcast, says Barnouw, is: fair-stormfair. For an episode in a serial it is: storm (carried over from the preceding day)-fair-storm (as the "come-on" for the next episode). ${ }^{11}$ There is, also, a weekly rhythm. On Fridays a more or less major climax is reached-the situation is more than usually involved, and the characters are in greater danger. It is assumed that the greater tension will carry the listener's interest over the week end. Finally, there is the unit rhythm, which will usually take about twelve episodes, and which must always end so that a new phase of the epic can be begun in the middle of a week; the show reaches a final climax as far as this phase of the story is concerned. The scripts in this unit constitute a sequence. A sequence usually begins in the middle of a script and ends in the middle of another, a week or two later. Two or three sequences may be running concurrently, so the listener is still left deep in one trouble when another is solved or set aside for later use.

The number of daytime serials on the air does not mean

[^41]employment for large numbers of writers. Twenty-five or thirty writers, with their hired assistants, can supply the current demand. Some authors are responsible for a number of serials. They plan the sequences, summarize what is to happen each day, and hire writers to fill in the dialogue. Though some of the dialogue is surprisingly good, skillful planning of the sequences seems to be more important than superior writing.

- CRIME AND HORROR SHOW S. The number of crime shows has increased considerably during the last few years. Some are of the "whodunit" variety, but more are action stories, in which the hero hunts, and finally captures, a known criminal. Horror shows reached their popularity about the time we entered World War II. Probably because the war supplied plenty of horror, the number of such shows has decreased since then. Both crime and horror programs are likely to have a place on radio schedules as long as they appear in printed literature, on the movie screen, and on the legitimate stage.

These stories are swift moving, packed with excitement and suspense. Motivation is often neither clear nor necessary, for the characters are good or bad by nature, rather than the product of their environment. Transportation is rapid, accomplished by fast cars, airplanes, galloping horses, or some weird electronic sound effect. Villains are usually men of indefinite nationality and almost never young. Justice triumphs when the guilty villain is disposed of by imprisonment, suicide, shooting it out with the law, or some form of capital punishment.

The plot structure of daily serials differs from that of the single unit crime and horror shows in one important respect. In the serials, the hero and his friends are constantly harassed by the villain while they are engaged in some worthwhile enterprise. In the unit drama, the villains have com-
mitted, or are planning to commit, a crime; the hero either prevents the crime or brings the villain to justice.

In 1941, Rowland ${ }^{12}$ analyzed episodes of twenty different crime and horror shows. He divided them into three classes: super-hero, super-sleuth, and horror. Eleven of the programs involved super-heroes who used extra-legal means to outwit blundering villains; five centered around super-sleuths who were agents of the law; two concerned ordinary people who were overshadowed by horror and mystery; one had a mad scientist as the central character; and one featured the ghost of a long-dead hangman.

The crimes committed within the framework of these programs included thirteen murders, twenty cases of larceny, five instances of sabotage, five of kidnaping, and other miscellaneous crimes, including extortion, destruction of property by arson and other means, assault, drug peddling, spy running, jailbreak, and escape from a mental hospital. The super-hero, whether within or without the law, is a person of undaunted courage who struggles perpetually to overcome evil. He is more or less immortal, unchanging, completely predictable, very masculine, an individualist, omnipotent, infallible, secretive, suspicious of the slow processes of law and order, and not deeply rooted in a community. As in the movies, his friendships are platonic, and love scenes as such are taboo; he is somber and does not laugh, because he is emotionless; he is a man of action, not of words or ideas. His friends are inferior to him in strength and intelligence, but extremely devoted to him; preferably they are vague and strange. The hero himself is a caricature, for full characterization would make him seem too perfect to be human.

The horror element is produced by situations involving torture, insanity, the supernatural, or gruesome detail. These devices are used in spite of network policies forbidding such

[^42]scenes. Horror shows seem to be more acceptable on the radio than on television. The radio listener can imagine as much or as little gruesomeness as he chooses. The few horror programs which have been televised have brought more criticism than radio versions ever did.

Some horror shows are closely related to "whodunits" and crime stories in general, simply adding a horror element to the story, emphasized by bass-voiced emcees and elaborate sound effects. "The Inner Sanctum," for example, sought absorbing scripts-almost any kind of story-with logical conclusions. At the other extreme, the "Hermit's Cave" dealt freely with the supernatural, killed at least four people every script, allowed evil forces to win victories in gore, and didn't seem to care about logic, probability, or explanations as long as the audience was thoroughly chilled. "Lights Out," at first a pure horror show, became a series of programs which were often based on sound scientific themes extended into the realm of horror. "The Whistler" mixed mystery and fantasy, emphasizing suspense, but mingling the suspense with horror. "The Shadow" and "The Witch's Tale" have varied considerably, but might be said to have followed a middle ground.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Listen to a play written for radio and hand in a report answering these questions: How many characters were there? Did they seem like real people? If not, why not?
2. Analyze the script of a play written for radio. Hand in a summary of the action as suggested earlier in this chapter. Sources of such scripts are indicated in the readings and in the bibliography in the Appendix.
3. Write twenty to twenty-five lines of dialogue to introduce the characters and the story in situations such as these:
a. Father and mother, at breakfast, are worried about Tom's report card. So is he, but for a different reason.
b. Tom's mother goes to see the principal, who asks Tom's math teacher to join in the conversation.
c. John and Mary are sitting in the porch swing. He wants to propose but is afraid she will say "No." She is afraid he won't ask the all-important question.
d. Henry, age fifteen, asks his father if he can have the car to take Susan to the high-school prom. Father tells him to ask Mother. She says . . .
4. Assign a group broadcast to the first three minutes of three plays written for radio, following this with a brief discussion of what they learned about playwriting from this experience.
5. Assign another group to demonstrate the use of fades, music, and flashbacks in making transitions from one scene to another.
6. Using examples found in these scripts, the class may broadcast a series of ten-minute illustrated talks on such topics as:
a. What happens in the first minute or two ?
b. How do we get from one scene to the next?
c. Setting the radio stage
d. The proper use of sound effects
e. The problem of characterization
f. Cues, false cues, and miscues
g. How do these writers create suspense?
h. What is good radio dialogue?
i. The use of the narrator
7. Assign five or six students to analyze two or three episodes in different daytime serials, paying particular attention to plot, dialogue, and devices used to hold listeners over the week end. They may then write an episode for the serial they analyzed.
8. Other students may follow the same procedure in studying the evening serials, especially crime and horror shows.
9. A group may be assigned to produce a thirty-minute public-service program on "What's Right with Daytime Serials?" The program may include narration, dramatized discussion, interviews with authorities and with typical listeners, and brief dramatized examples. In addition to sources mentioned in the bibliography, the following reports of research should be consulted:
a. W. Lloyd Warner and William E. Henry, "The Radio Daytime Serial: A Symbolic Analysis," Genetic Psychology Monographs, February, 1948, pp. 3-72.
b. Rudolf Arnheim, "The World of the Daytime Serial," Radio Research, 1942-43, Duell, Sloan, and Pearce, 1943, pp. 34-85.
10. Task forces of four may coöperate in writing and producing fifteen-minute original plays. These may follow the pattern of a
program on the air. The group should include two writers, a director, and a sound-effects technician. Group members should join in choosing the plot, visualizing the characters, and planning theme music and sound effects. The director will hold an audition to choose the cast.

## READINGS

Abbot, Waldo, Handbook of Broadcasting, rev. ed., McGraw-Hill Book Company, 1950, chaps. 16, 17.
Barnouw, Erik, Handbook of Radio Writing, D. C. Heath and Company, 1947, pp. 81-113.
Chester, Giraud, and Garrison, Garnet, Radio and Television, Apple-ton-Century-Crofts, 1950, chap. 27.
Crews, Albert, Professional Radio Writing, Houghton Mifflin Company, 1946, chaps. 13-17.
Kaufman, Helen, "The Appeal of Specific Daytime Serials," in Radio Research, 1942-1943, Paul Lazarsfeld and Frank Stanton (editors), Duell, Sloan, and Pearce, 1943, pp. 86-110.
Kingson, Walter, and others, "Four Ways to Drama," Hollywood Quarterly, Spring, 1949, pp. 109-144.
Matthews, William, "Radio Plays as Literature," Hollywood Quarterly, Winter, 1945-1946, pp. 40-50.
Palter, Ruth, "Radio's Attraction for Housewives," Hollywood Quarterly, Spring, 1948, pp. 248-257.
"Public Taste in Entertainment," Fortune, March, 1949, pp. 43 ff.
"Radio Drama," Education on the Air, 1942, Ohio State University Press, 1942, pp. 87-130.
Reis, Irving, "Techniques in Radio Drama," Education on the Air, 1937, Ohio State University Press, 1937, pp. 211-219.
Schreiber, Flora R., "Radio as Arthur Hopkins Presents It," Quarterly Journal of Speech, December, 1945, pp. 439-445.
Seymour, Katharine and Martin, John T. W., Practical Radio Writing, Longmans, Green and Company, 1938, chap. 4.
"Soap Opera," Fortune, March, 1946, pp. 118 ff.

## BOOKS CONTAINING PLAYS WRITTEN FOR RADIO

Barnouw, Erik (editor), Radio Drama in Action, Farrar and Rinehart, 1945.

Corwin, Norman, More by Corwin, Henry Holt and Company, 1944. Corwin, Norman, Thirteen by Corwin, Henry Holt and Company, 1942.

Coulter, Douglas (editor), Columbia Broadcast Plays, McGraw-Hill Book Company, 1939.
Gaver, Jack, and Stanley, Dave (editors), There's Laughter in the Air, Greenberg, Inc., 1945.
Oboler, Arch, Oboler Omnibus: Radio Plays and Personalities, Duell, Sloan, and Pearce, 1945.
Weiser, Norman S., The Writer's Radio Theater, 1940-1941, Harper \& Brothers, 1941.
Welch, Constance, and Eaton, Walter Pritchard, Yale Radio Plays, Expression Company, 1940.
Wishengrad, Morton, Eternal Light, The Crown Press, 1947.
Wylie, Max (editor), Best Broadcasts of 1938-1939, McGraw-Hill Book Company (similar volumes for 1939-1940, and 1940-1941).

## VARIETY AND AUDIENCE-

 " mmmmamarticipation Show
## VARIETY PROGRAMS

Vmore than one type of entertainment. For radio the usual formula calls for an orchestra with a featured soloist, a comedian with his helpers, and a humorous or dramatic sketch. Televised variety resembles the vaudeville of the early 1900 's. We are likely to see dance routines, jugglers, acrobats, animal acts, comedians of the pie-throwing school, and visual versions of stunts like those in "Truth and Consequences." Some programs follow a standard pattern; others act on the theory that the essence of variety is variety. Sometimes the comedians poke fun at themselves. "This Is Show Business," for example, includes tongue-in-cheek interviews with program participants on problems connected with show business.

Variety shows, or reasonable facsimiles thereof, appeared on program schedules almost from the beginning of broadcasting. By 1933 they began to appear more frequently. In

1934 they ranked first in audience popularity and were no lower than third for the next six years. Variety shows again held first place in network-sponsored evening time in 19391940. In 1941 they began to slip both in audience ratings and in amount of time on the air. This decline, however, was neither great nor permanent. In 1946, four of the five most popular programs were variety shows. By 1950 the down-cycle had begun again for radio shows, but televised variety shows ranked high in every city where audience measurements were taken.

Variety shows are usually built around a comedian, or an aspiring comedian, who sets up the gags, introduces the program features, interviews guests, takes part in the skits, and sometimes reads part of the commercials. This busy person is called the emcee (Master of Ceremonies). The leading variety veterans-Jack Benny, Bob Hope, and Fred Allen-are known by more people than are important government offcials or heads of foreign nations. Television has introduced new comedy stars (Robert Lewis, Ken Murray, and Ed Sullivan) and has brought added popularity to such showmen as Paul Whiteman, Milton Berle, Arthur Godfrey, and Fred Waring.

Local television stations carry the network variety programs and most of them also produce one of their own. These usually include a band, soloists, and such local talent as may be available. In addition, they may use musical and comedy film shorts like those seen in the movies. One film service offers more than a thousand three-minute film cuttings which stations may use in building their own shows.

The continuity and commercial copy for variety shows differ from that used on other types of programs only in a greater attempt to keep them in the mood and spirit of the show. Scripts represent joint efforts of a number of "gag men" (an inelegant but sometimes descriptive term) who study the audience response to each show, play up the type of
humor the star can do best, and continually adapt standard humor techniques to current situations and problems.

Amateurs should be warned that comedy-variety shows are of all types the most difficult. The high-ranking programs that seem so simple are written by several skilled and highly paid gag men who become almost desperate in their attempts to provide thirty minutes of comedy week after week. They must compete with shows on other networks and please the popular audience without offending the more discriminating. They must keep a safe distance from the boundary line between the permissible and the vulgar.

Students who, having been warned about the difficulties of writing for comedy-variety shows, still want to try it, may begin with this elementary and uninspired exercise. Given a selected location-such as a service station or a hardware store-get a standard joke book from the dime store and practice switching the jokes to the situation. For instance, take the joke "Where'd you get that bump on your head?" "A guy hit me with a tomato." "I shouldn't think a tomato would make a bump that big." "He forgot to take it out of the can." Gracie Allen switched that joke to "What are you laughing at, Gracie?" "I was shaking the baby blanket out of the window and I dropped it." "What's so funny about that?" "I forgot to take the baby out." This joke could be switched to the service station where an attendant is laughing because a customer has given him a phony dollar-but that is all right, because the gasoline pump was empty. Carried a little farther, the manager of the hardware store complains because the clerk has charged some nails for a customer who hasn't paid his billbut the clerk says it's all right because he filed the points off the nails. "Switching" is a matter of "kicking around" a basically humorous idea and finding either some application for it in another situation, or another ending for an old joke. Of course, such humor has to be built through a series of welltimed lines. Furthermore, good broadcast humor is not usu-
ally a series of jokes, Bob Hope in radio and Henny Youngman in TV to the contrary. More often, it is a continuous situational flow into which the humor is integrated.

Most current variety shows involve some studio audience participation, from applause and laughter on Jack Benny's show, to interviews on the "Breakfast Club" and horseplay stunts on TV's "Stop the Clock."

Although the comedy show is the most popular, it is not the only type of variety program on the air. A Christmas broadcast may include music, interviews with children, letters to Santa Claus, and the reading of Christmas stories. A network program "saluting" a university may include music by the band or orchestra, a short speech by the president, a documentary presentation of an important episode in the university's history, and interviews with research workers in their laboratories and students on their way to classes. For a local program showing the high school at work, the narrator may take the listener from room to room. In one, the glee club is rehearsing; in another, a class in home economics is discussing the value of green and yellow vegetables; in a third, students are rehearsing a scene from a play. The visit might begin and end with a conversation with the principal.

This type of variety program has advantages, especially for local stations. Using local materials, these programs do not duplicate network broadcasts. They provide the opportunity for bits of humor but avoid the difficulty of trying to be funny for fifteen or twenty minutes. When well done, this type of variety program can make information and arguments interesting to the casual listener.

## AUDIENCE-PARTICIPATION PROGRAMS

Shows in which listeners or studio audiences take part in the program are called audience-participation programs.

Listeners at home participate in such shows as request programs and setting-up exercises. In educational programs the listener may perform some act such as filling in the colors of a picture according to directions, or playing an instrument with the studio orchestra. A few television programs demonstrate drawing, dancing, and other activities which video fans might practice during the broadcasts. There are a few puzzle and mystery programs in which listeners are invited to work out answers and wait until the end of the show, or for the next program, for the correct solutions. Contests in which listeners submit entries are a type of audience participation. It can even be said that some listener participation takes place on giveaway programs like the "Pot of Gold," when all the audience has to do is wait and see who wins. There is also a type of listener participation in quiz programs, in which those who listen at home match wits with members of the studio audience.

In radio business, however, "audience participation" refers to quiz shows and stunt programs in which participation is limited to members of the studio audience. The two types are sometimes combined. On some evening shows the stunts are a penalty to contestants who cannot answer a quiz question. On some afternoon shows, all that is asked of a contestant is his willingness to take part.
"Man on the Street" programs are almost as old as broadcasting. They had considerable vogue during the early 1930's, and in various forms have maintained some place on the air ever since. Actually, the quiz program is an extension of the man-on-the-street format.

Amateur shows made their first strong ratings in 1935 and maintained this position for nearly three years. Spelling bees had a brief popularity in 1936-1937. In 1937 audience-participation shows ranked fourth in sponsored network evening time, and third from 1938 to 1941. In 1939 and 1940 participating shows first appeared as sponsored daytime programs. During this period they also constituted 20 percent of evening
network-sponsored shows. The proportion dropped to about 6 percent by 1946, but the number of daytime programs increased. More recently audience-participation shows have lost ground on the networks, but they appear more frequently on local station schedules. The most common type is the telephone quiz which will be discussed separately.

Motivations for listening to these programs seem to include: a chance to get something for nothing; entertainment; a feeling of superiority when contestants muff easy questions; an interest in the personalities of the contestants. ${ }^{1}$ Bob Hawk says, obviously enough, that the factors which make up an effective audience-participation show are a good idea, good contestants, good gags, interesting questions, and good broadcasting facilities.

The idea for a show can be anything from an old-fashioned spelling bee to identification of tunes from brief snatches played by an orchestra. Questions range from those involving information to asking an opinion on a nonsensical topic, or revealing the first words spoken by a wife when her husband asked her to marry him. Almost anything that involves a contest, human interest, and some possibilities for humor, seems to work, at least for a time.

Producers of these shows are keenly aware of the risks involved in selecting participants at random from studio audiences. Some get stage fright and can't say anything. Some try to be smart or funny and succeed only in being risqué. Others ask for just a little more time, or a restatement of the question while they try to interpret signals from a friend in the audience. To reduce these hazards some producers go so far as to hire professionals who are called on if the show is going badly. Others select participants in a prebroadcast session. In neither case should the contestant know what he will be asked to say or do on the air. About 90 percent of these shows are done without scripts.

The auditorium should be so arranged that the Master of

[^43]Ceremonies can see all of the audience and the audience can see all of the contestants. For large auditoriums public address equipment should be installed, and tested in advance to determine the needed volume and to make sure that reverberations of voices on stage do not feed back into the microphone.

In spite of careful planning, the program's success depends largely on chance and almost entirely on the ability of the emcee to take advantage of what chance offers. He must have experience, a ready tongue, and the willingness to use it sparingly. Some shows are spoiled by the emcee's insistence on being the constant center of attention. Schwerin ${ }^{2}$ reports that some do their best work with older people, others with children, still others with information or stunt shows. His findings also indicate that the emcee should spend at least two minutes with each contestant.

Parks Johnson of "Vox Pop" says that the most important trait of the emcee is kindness. Listeners are quick to detect an attitude of smug superiority or a tendency toward sarcasm. They feel sorry for any contestant who is not courteously treated. Schwerin adds that audiences do not like jokes at the expense of the contestants. On the other hand, they do not think it fair for the emcee to help the contestants too much.

For stunt shows, George Allen outlines five steps: (1) Interview. (2) Trap. (Examples: if a man and wife say they have been married twenty-five years, place them back to back and ask them to describe each other; if a participant says he wants to be a singer, have him sing with crackers in his mouth, etc.) (3) Springboard into gags, i.e., the lines which lead up to the stunt. (4) Actual stunt. (5) Pay-off, or finish, which should come at the peak of audience reaction. ${ }^{3}$

The listening audience loses something during audienceparticipation shows when the humor depends on vision for

[^44]full effectiveness. It is likely that too much attention to the studio audience and neglect of the radio listeners have been factors in the recent decline of these shows. Television obviously does not face this handicap; visual stunts are a natural for TV.

During the late 1940's the prize contest type of audienceparticipation show flourished and, we hope, passed its prime. The advertiser should reflect that if he can "Juy" listeners from other programs by offering prizes, someone else can presumably entice his audience by offering larger prizes. However, the advertiser should give his listeners credit for realizing that they have only one chance in many thousands of winning the big prize. There is, in fact, evidence to show that the size of prizes is of little importance in the success of a show. Several national advertisers have reduced their regular and jack-pot prizes with no perceptible loss of audiences; one show is reported to have gained listeners. A larger number of small prizes seems to be more successful in holding an audience than a few big awards. Audiences built on prizes rather than program quality are of little permanent value to the sponsor.

## TELEPHONE QUIZ SHOWS

The large number of telephone quiz programs during recent years puts them in a class by themselves. Almost every conceivable approach has been tried.

In radio, for example, in "Tele-Kid Test," an emcee calls boys and girls under sixteen years of age and asks general information questions; the teen-ager's part of the conversation is broadcast; and prizes are given for right answers. A "beeper" sound is broadcast every twenty or thirty seconds to satisfy regulations concerning the broadcasting of both sides of a telephone conversation. "People Know Everything" asks questions which have been sent in by the public. If one of the first two people called answers correctly, the prize is split be-
tween the contestant and the questioner. People without telephones compete by sending in questions. "Tune-O" uses cards which must be obtained from the sponsor's store. The numbers on the card correspond to a printed list of some 250 tunes. As the tunes are played, the listener identifies them and marks his card accordingly. When he completes five numbers in a row he calls the station to claim his award. "Who's Talking" broadcasts recorded "mystery voices" of people well known in show business. Listeners who are called on the phone are given clues. Photographs of the celebrities, wearing masks, can be obtained at sponsors' stores. "Telequiz," which is offered for local sponsors, uses questions prepared by local librarians.

Television is also making extensive use of phone shows. "The TV Telephone Game" uses a bingo-like system. The station's call letters are written across the top of a card. The contestants put figures from their telephone numbers or social security cards underneath the letters. The game sounds complicated but apparently hasn't confused televiewers. The emcee asks a question and then tells which listeners are eligible. For example, "If your answer is 'No' and you have a 3 under the W in WAM-TV, then circle the 3. If your answer is 'Yes' and you have a 4 under the $W$, circle the 4 . If you have neither a 3 or 4 under the W, disregard this question." "Stop the Music," nationally produced, asks people to identify a tune; if they succeed, they are given a chance to name the "mystery tune" when only a phrase is played. A cumulative jack-pot for the "mystery tune" is offered in addition to the weekly prizes. "Tello-Test," which is also a radio show, is given a TV twist by an artist who sketches clues. "Dialing with Music" uses visual questions, such as the identification of photographs.

The management of Radio Features, which handles a number of these programs, says that the questions should be "findable" in some standard reference; have single, nonvariable answers, universal appeal, and be provocative; blend the fa-
miliar with the unknown; have entertainment and/or educational value; must not offend or be "touchy"; and must have infinite variety. ${ }^{4}$ One formula for handling questions on telephone shows is to use about thirty seconds to identify the contestant, another thirty for the question and answer (if any), and a final half-minute to "get untangled and hang up."

Network telephone shows lean heavily on entertainment because each individual listener has little chance to win and he knows it. Local programs, where the listeners have a better chance at winning, go all out on the quizzes, often with no attempt to mix entertainment with them. Human interest is increased by emphasis on personal build-ups of the contestants.

Some of the current phone quiz shows run very close to violation of the federal lottery law. Section 316, of the Radio Act of 1934, states in part, ". . . no person operating any station shall knowingly permit the broadcasting of any information of . . . any lottery, gift enterprise or similar scheme offering prizes depending in whole or in part upon lot or chance . . ." Producers of quiz shows frequently choose contestants from those who answer a factual question or write the best statements about a topic of current interest. The FCC, charged with enforcing the law, has raised questions about programs where chance is seemingly the predominant element. Regulations based on this investigation were not in effect when this book went to press.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Listen to two or three broadcasts of a currently popular variety or audience-participation show. Does the program follow a formula or pattern? How many minutes are devoted to each part of the show? Does the tempo of different sections vary? Hand in a report covering these and other observations.
2. Prepare a four-minute talk about some variety program or audi-ence-participation show. You will give some information but your main purpose is to interest or entertain a general radio audience. 4 "Nearly Every Station Has One," Sponsor, July 3, and 31, 1950.

These talks resemble feature and human-interest stories in journalism. Here are some general and specific suggestions:
a. Build a talk about some well-known radio or television comedian
b. Tell the story of a popular variety program
c. Tell about talent scouts and amateur shows
d. "Truth or Consequences?"
e. Vaudeville and television
f. The $\$ 64$ question
g. Here's 2000 dollars if you can answer this question
h. The "telephone shows"
i. The first amateur show
j. The growth of prize contests
3. The teacher may assign a group of five students to gather and analyze the jokes and humorous situations in as many comedyvariety shows. Scripts taken from books mentioned in the reading lists may be connpared with current programs. The group may then conduct a ten or twelve-minute panel discussion presenting their findings and conclusions.
4. The same procedure may be followed in studying various types of audience-participation programs.
5. The class may be divided into groups for the preparation and production of fifteen-minute variety or audience-participation programs. To avoid duplication, each group may be assigned a different type of show.
6. From such sources as the Broadcasting Yearbook and Variety, study the popularity of variety and audience-participation programs for a five-year period. Gather available data on the costs of these shows. This information may be presented to the class in talks, interviews, or discussions, as the teacher may prefer.
7. The same procedure may be followed in studying these program types on television.

## READINGS

Abbot, Waldo, Handbook of Broadcasting, rev. ed., McGraw-Hill Book Company, 1950, chap. 21.
Beatty, J., "Daffy Dollars: Give-Away Radio Shows," American Magazine, December, 1946, pp. 38 ff .
Frazier, George, "Bob Hope," Coronet, February, 1948, pp. 142-150. Grant, David K., "The Rise of Audience Participation Programs," Advertising and Selling, June, 1946, pp. 45 ff.

James, Ed, "The Radio Give-Aways," American Mercury, October, 1948, pp. 430-437.
Pringle, H. F., "Information Please," Saturday Evening Post, May, 1946, pp. 18 ff.
"Radio Handouts," Fortune, November, 1947.
Schreiber, Flora, "A New Generation of Radio Comedians," Hollywood Quarterly, Winter, 1947-1948, pp. 129-139.
Waller, Judith, Radio: the Fifth Estate, Houghton Mifflin Company, chap. 8.
Wolfe, Charles, H., Modern Radio Advertising, Funk \& Wagnalls Company, 1949, chaps. 12, 13.

## SCRIPTS

Such extemporaneous or impromptu variety programs as giveaway and quiz shows are not generally available. Scripts of some comedyvariety shows are included in the following books:

Gaver, Jack, and Stanley, Dave (editors), There's Laughter in the Air, Greenberg, Inc., 1945. Twenty-one scripts with brief sketches of well-known comedians.
Lawton, Sherman, P. (editor), Radio Continuity Types, Expression Company, 1938. Includes the "Alka-Seltzer Barn Dance," "Kraft Music Hall," "Woodbury's Paul Whiteman Show," and the "Realsilk Program."
Wylie, Max (editor), Best Broadcasts of 1938-1939, McGraw-Hill Book Company, 1939. Includes "The Kate Smith Hall," and Fred Allen's "Town Hall Tonight."
Wylie, Max (editor), Best Broadcasts of 1940-1941, McGraw-Hill Book Company, 1941. Includes "The Quiz Kids," "The Rudy Vallee Program," and "The Jack Benny Shows."

## chapter 17

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NEWS has always had an important place in broadcasting. In fact, Station KDKA's first scheduled program was news of the 1920 presidential election returns. The Detroit News opened WWJ in 1920 to broadcast brief news bulletins with the idea that people would buy papers to read the whole story. In 1922 the Atlanta Journal and the Philadelphia Inquirer interrupted programs on their stations to flash bulletins about four-alarm fires. On September 23, 1926, the DempseyTunney prize fight was broadcast on a regional network, and a few days later a national network carried the World Series baseball games. NBC, organized in 1926, presented the first nation-wide newscasts and commentaries. Floyd Gibbons was the first network newscaster.

Radio and television can readily scoop the press, especially with spot news and short bulletins. This was graphically shown in 1928. The Associated Press spent $\$ 250,000$ to gather and broadcast the presidential election returns, only to be scooped by the newly organized NBC and CBS networks who broadcast the bulletins before AP newspaper clients could get out special editions. The newspaper men were un-
derstandably annoyed and tried unsuccessfully to prevent the broadcasting of news gathered by such agencies as AP, UP, and INS. Later these agencies sold a radio version of the news to broadcasting stations.

The conflict between press and radio was vigorous and prolonged. The networks and some of the larger stations had reporters in Washington almost from the beginning of network broadcasting, but they were not officially recognized until 1939. In that year, radio newsmen were given seats in Congressional galleries, their own headquarters in the Capitol, and admission to presidential and Congressional press conferences. Special arrangements for radio correspondents at national party conventions were first made in 1940.

There is something to be said on both sides in the pressradio controversy. The newscaster with a pleasing personality, who talks with people, not at them, creates a personal relationship that is rarely found between reporters and newspaper readers. The newspaper can devote more space to both the story and its significance than is usually available on broadcasting schedules. The paper can be read and reread at the reader's convenience and passed on to others. But when things of vital importance happen, millions of people depend on radio for first news of the event. Those who get daily papers can read fuller descriptions of the event and its significance, but those who do not, depend largely on radio for information about current happenings.

The amount of time devoted to radio news programs is a fairly accurate index of listener interest. Network newscasts increased from 1151 hours in 1937 to 5522 in 1944. From 1947 to 1950 there was a slight increase in sponsored network evening news broadcasts, but a decrease in daytime news programs. About 36 percent of our local stations devoted more time to newscasts in 1946 than in 1945. Good newscasts nearly always have good audience ratings. Televised news programs, after an awkward beginning, usually have high sponsor identification. In some areas they have audience ratings equal to network entertainment shows.

Most stations subscribe to a teletype news service. The typical local newscast is read by a staff member from copy supplied by this teletype service. About two-thirds of the local stations carry a large percentage of network news; about half "process," or edit, the teletype version; a growing handful gather and broadcast local news.

## NEWS PROGRAMS

It is difficult to distinguish between newscasts and discussions of current events or authority interviews and equally difficult to draw clear-cut distinctions among types of newscasts. However, the following three-fold classification, listed in order of decreasing frequency, is sufficiently accurate for use in describing the preparation and delivery of news programs.

1. News summaries are just what the name implies. They vary in length from one-sentence "news flashes" to "twelve and a half minutes of uninterrupted news." The five-minute summaries are often called bulletins. Summaries of special types of news are described by listing typical programs: "Religion in the News," "News from the Home Front," "Consumer News," "News from Hollywood," "Science in the News."
2. News analyses and commentaries contain background information and analyses of important current problems. Those who call themselves "analysts" attempt to explain controversial issues without bias. Some commentators present their own points of view and criticize those of opponents; a few go a step further and predict what will happen or what decisions will be made.
3. Actualities, dramatized news, and special events are alike in their use of dramatic techniques to give listeners the sense of being present when something exciting or important
happens. Actualities, whether live or recorded, are eye-witness accounts of newsworthy events in the words of observers and participants. Made possible by the development of portable high-fidelity recorders, actualities have largely replaced dramatized newscasts and summaries written and produced by professional talent. In 1951 two of the networks carried weekly news summaries combining narration and excerpts from recorded actualities. The outstanding programs of this type were Edward R. Murrow's "I Can Hear It Now" and James Fleming's "Voices and Events." Such programs are less expensive, more flexible, and more real than their dramatized predecessors. Special events programs use various program types in reporting such noteworthy occasions as presidential inaugurations or meetings of the United Nations.

## - STATEMENTS OF POLICY ON BROADCAST NEWS.

 The major networks, many individual stations, and the NAB have adopted statements of policy to guide those who select, edit, and broadcast the news. There is general agreement on the following directives:1. News reporting should be factual, fair, and without bias.
2. Originating points of newscasts and sources of all items must be clearly stated.
3. Opinions must be clearly identified as such.
4. Sponsors must not be allowed to influence selection or writing of news items.
5. News must not be presented in a manner likely to cause unnecessary alarm or panic.
6. Newscasts must not contain defamatory or actionable statements.
7. Morbid details, especially in crime or sex stories, should be a voided.
8. Commercials should be appropriate to the program and distinctly set apart from the news.
9. Stories about tragedies which might occur should only be carried when authorized as official warnings.
10. Stories about grand jury indictments and pending legal procedures must not editorialize.
11. Commentators should not represent any group or engage in special pleading for a cause.
12. Such phrases as "Flash," "stand by for the latest news" should be used only on news programs.
Additional restrictions apply in wartime and in periods of national emergency. In such cases news releases must be approved by security officers. In this country censorship is largely voluntary. During World War II, a joint committee of broadcasters and government officials drew up the code. In 1943, after examining 12,000 news broadcasts, investigators found 177 that in their opinion were more or less serious violations.

- SELECTING THE NEWS. Selection of news for broadcasting depends on such factors as length and purpose of the newscast, time of day, interests of the audience, and available material.

News that comes into local newsrooms on the press-radio wire is read and approved by at least one editor hefore it reaches the local station. It is selected as newsworthy and written by a reporter, who sends it to the news-gathering agency. There an editor selects and often cuts or rewrites, the stories that are sent via teletype to networks and stations. There the local editor, faced with more copy than he can use, chooses and arranges items for each newscast. Network shortwave broadcasts from overseas are written and produced by the network news staff in that area.

The selection of items for a news program should depend upon both the importance of the story and the interests of the audience. A story about a labor dispute in a large industry, a Congressional debate on a vital issue, or a United Nations' police action in Korea should be chosen in preference to events of temporary significance. Crime stories are usually "played down" unless they involve public safety. On this basis, a murder might be given passing mention while evidence of widespread organized crime might be of major importance.

Listener interest depends upon such seemingly diverse factors as geographical location of the station and time of the broadcast. Listeners in California are more interested in news from the Orient than are New Yorkers. Interest in hillbilly music is greater in the Southwest than in Boston. Early morning listeners in rural areas want weather and market reports plus a brief summary of headline news; in large cities they are workers who carry their lunches and must be on the job at seven-thirty or eight o'clock. Most of the mid-morning listeners are housewives, who are interested in prices, food, and general family welfare. Noon newscasts are heard by women and men who come home to lunch; they don't want the dark side of the news while they eat. Evening listeners want a general review of the day's events and commentators to help them understand the important news. Dramatized news and edited versions of recorded actualities are usually broadcast evenings or Sunday afternoons.

- PREPARING NEWSCASTS. The nature and extent of preparation for newscasts varies with the station and the type of program.

1. News summaries are, for the most part, selected and edited from copy that comes via teletype from the news service, supplemented by such local items as are available. Local stations without a full-time news editor or connection with a newspaper usually do not broadcast as much local news as their listeners would enjoy.

Five-minute news summaries are really a series of eight to ten bulletins of about equal length on items of front-page importance. The editor's task is to choose the most important, see that they are clearly written, and arrange them in what seems the proper sequence. Fifteen-minute summaries may include the same items with more detail. Some successful newscasters present international, national, state, and local news in that order, concluding with a human interest story.

Others use topical or geographical patterns. One major news agency places an item of secondary importance first and the lead story second, on the ground that listeners often tune in a bit late. Others insist that the first story should be the most important and the most complete.

Broadcasters use various methods of making transitions from one story to the next. Some pause, state the geographical location of the next item, and then proceed. When this method is overused, the result sounds like a series of unconnected paragraphs. Others use a topical outline. We recommend the occasional use of transitional lines; for example: "Now to the labor front," "Back to Washington for our next story," "While Truman and Molotov were conferring, Congress was making history," "Now to the world of sports." No one type of transition is always best; various kinds should be used to avoid monotony.
2. News analysts and commentators, especially those who broadcast more than once a week, have a very difficult assignment. They are supposed to speak objectively and with understanding on whatever topic is uppermost in the news. Pressure groups are quick to supply them with information and arguments on one side of controversial issues. Though commentators conduct personal investigations, interview authorities, employ research assistants to gather evidence, and read about the topic whenever they find time, they obviously cannot speak with authority on the atomic bomb one week and on our relations with Russia the next.

From time to time, analysts and commentators have been accused of intentionally slanting the news. Some years ago a committee appointed by the National Association of Broadcasters investigated a week's output of 300 newscasters and commentators. This committee reported that thirty-nine had presented one or more subjects in a manner that seemed to indicate slanting or prejudice. It would be difficult, however, to prove whether the bias was intentional. On highly controver-
sial issues, what seems a fair statement to one person seems quite the opposite to another. As one psychologist puts it, "We see things not as they are, but as we are." We have learned to make allowance for bias in editorials, advertisements, and propaganda. Surely we have the right to ask commentators and analysts to state the sources of their information and to label their opinions.

Such network commentators as Lowell Thomas and Walter Winchell appear on the list of the most popular evening programs. Commentators develop their own followings, which sometimes depend on such factors as the socio-economic and educational level of listeners. According to one Fortune poll, H. V. Kaltenborn ranked highest in the upper-economic groups, whereas the others preferred Lowell Thomas. On some local stations news commentators have more listeners than such competing entertainers as Charlie McCarthy and Jack Benny.

In writing his script the commentator has an advantage over the newscaster who must say something about such diverse items as the Korean situation, a snow storm in New York, a prize fight somewhere else, and Congressional hearings on statehood for Hawaii. The commentator can choose a central theme, select such news stories as fit into an outline, add whatever he knows about the topic, and thus produce a well-organized speech. Frank Kingdon, veteran commentator, has this to say about the delivery style and personality of successful commentators:

What is conversational? Walter Winchell is the only commentator who can compete with the big variety shows. Is he conversational? You hear the gattling gun delivery. It may be conversational in the Winchell home or in the Stork Club, but not in any drawing room you know. So you write Winchell off as a natural phenomenon occurring once in a generation. Then you think of Drew Pearson, the breathless newsboy dropping his g's on all present participles. And you can't think of any conversation you ever heard being conducted in that tempo. You run through the list-Gabriel Heatter, the emoter
about dogs and hair tonics; Hans Kaltenborn, the staccato chopper of words; Lowell Thomas, the elocutionist's prize pupil; Raymond Swing, with the professional monotone.

None of them quite fits the conversational style. Ray Swing comes nearest to it, but even your favorite professor occasionally changes pace at a dinner table. Come to think about it, Franklin Roosevelt came nearer than anybody else, and you make note of this, but your mind does not rest satisfied by it because the only contemporary of Roosevelt who rivaled him in the use of radio to sway his countrymen was Hitler, who was as far removed from a conversational style as a police siren is far from a lullaby.

So you come to the conclusion that everybody has to do it his own way. . . . But this still leaves you with the question: What is my personal style? One quick way to get attention is to be sensational, to hunt for facts and angles which will stab people to attention. The main trouble with this is that, once you are a sensationalist, you've got to keep on being one. This leads into the pitfall of striving for attention rather than truth, twisting a report for its effect rather than for an honest telling of it. If you practice this long enough, the partition between your memory and your imagination wears so thin that you can never be quite sure on which side you're operating. You would like to be sensational; who wouldn't? But a candid inner voice whispers, and you have to acknowledge, that you haven't the stomach for it-or the knack either.

So you say: "I will talk aloout what interests me, and hope that it will interest enough others so that they will listen." This gives you a point of view, an individual flavor, and you have to take your chance on it. But there always crops up the knotty question of how far you can go with your point of view and keep out of trouble with the sponsor or the station. And that's where the real struggle comes between your judgment and your conscience-the fiercest struggle of all, and the one which really decides whether you can look a mike in the eye. ${ }^{1}$
3. Actualities, dramatized news, and special events are alike in their use of dramatic techniques. The development of portable recorders and motion picture cameras has revolutionized on-the-spot reporting, including actualities and special events, and has relegated dramatized news to an unimpor-

[^45]tant place on broadcast schedules. Newsmen visit battlefronts and peace conferences with recording equipment, short-wave transmitters, and movie cameras. They make it possible for us to hear the sound of history as it happens. Tape recordings and movie film can be cut and edited into concise unified programs for radio and television.

Some actuality broadcasts are almost impromptu; others are planned with considerable care. All require broadcasters with ability to extemporize vivid descriptions and to change plans when the unexpected occurs. When Cincinnati was flooded several years ago, Station WLW was used to direct rescue work and to communicate with citizens in nonflooded areas. One heard: "Two children are signaling from the upstairs window at $\quad$," "Boil all drinking water five minutes," "A doctor is needed at _._." The messages, the replies from radio-equipped rescue boats, and reports from city officials, all spoken with studied calm, gave a vivid picture of a city meeting a crisis competently.

But most actualities require more preparation. The newsman who broadcasts sessions of the traffic court or meetings of the city council, should, in addition to arranging effective microphone placements, be able to explain what is happening for listeners who do not understand judicial and legislative procedures. The reporter assigned to do on-the-spot broadcasts from the crowd gathering for a prize fight, a home-coming celebration, or the arrival of the Lurline in Honolulu, needs to know the history and significance of the event and what is likely to happen. He may write several paragraphs for use if the event does not begin on schedule, or if there are periods when nothing of interest to the radio listener is taking place. He may also practice ad lib descriptions of the scene, the gathering crowd, and the mood of the occasion.

Special events, as we use the term, include such noteworthy occasions as presidential inaugurations, the installation of a university president, the launching of an airplane carrier, or
the signing of a peace treaty. The program may include eyewitness accounts, interviews with plain citizens and important personages, commentary on the significance of the occasion, and all, or significant parts, of the program. Broadcasts of such occasions require a great deal of advance preparation by both engineering and program staffs. Examples of unusual assignments include an interview with Admiral Byrd at the South Pole; sending a short-wave crew and a reporter to the South Pacific for an eye-witness account of an eclipse of the sun; broadcasting the atom bomb tests at Bikini.

Although newsmen must plan their actuality broadcasts carefully, they must also be quick to take advantage of the unexpected. An NBC newsman in China when Chiang Kaishek was kidnapped at once arranged an interview with the temporary head of the government. During the Czechoslovakian crisis, a CBS reporter, talking to the New York office by wireless telephone, was handed a note saying that the Czechs were capitulating. CBS lines were immediately plugged in for a broadcast. Cesar Saerchinger, covering Hitler's entry into Austria, broadcast an unscheduled speech because Hitler happened to stop within range of his microphone.

- THE LANGUAGE OF NEW SCASTS. In the early days of radio, news was often read directly from the newspaper. The first newscasters were newspaper men who often used the traditional journalistic style, summarizing the story in the first sentences and expanding it in paragraphs in order of decreasing importance. While this order may be followed in arranging items in a newscast, it should not be used in individual stories. Newscasters soon found there should be differences between written and oral styles. Sentences intelligible to the reader may be hard to read aloud and hard for the listener to understand. To meet this situation, news distributing agencies now provide radio versions of the news written presumably in good oral style.

The advice on writing talks given in Chapter 11 of this text also applies to news summaries and commentaries. Other points stressed in texts on radio journalism can be summarized as follows:

1. News summaries require brevity. It would take thirteen or fourteen hours to read the average metropolitan daily aloud.
2. The length of individual stories in the fifteen-minute summary should vary according to their importance, from 150 to 400 words.
3. Sources of facts and opinions should always be clearly stated.
4. Precision of statement is both honest and effective.
5. Sentences should seldom be long and never complicated. Avoid inverted sentences and long modifying phrases and clauses.
6. Use simple, familiar words: "buy" instead of "purchase"; "meet" instead of "convene"; "see" instead of "witness"; "use" instead of "utilize."
7. Use action verbs in the active voice. "Truman fights inflation," not "The fight against inflation began yesterday when . . ."
8. Whenever possible, use the present tense.
9. Use round numbers unless the precise figures are important. Write "24 million, 300 thousand," instead of $24,301,104$.
10. Avoid trite phrases when you can, but remember that straining for unusual ways of saying things may be worse than triteness.
11. Suit your style to the mood and formality of the story. Usually say "don't" instead of "do not"; "he'll" instead of "he will."
12. Help your listeners to understand unfamiliar words, especially place names and names of people.
Writers tend to assume that what is clear to them will be equally clear to others. To check this tendency, Flesch says that writing of standard difficulty can be judged by three criteria: (1) Average sentence length not more than seventeen words; (2) word length not more than 150 syllables per 100 running words; (3) personal references (names of people, personal pronouns, words that refer to human beings or their relationships), at least six per 100 words. ${ }^{2}$

- COMMERCIALS ON NEW SCASTS. Commercials will be discussed more fully in Chapter 19. Here we are con-

[^46]cerned with these questions: How long should they be? Where should they be placed? Who should read them?

The code adopted by the National Association of Broadcasters in 1948 allows a maximum of one minute for commercials on a five-minute program, and two and one-half minutes on a fifteen-minute newscast during the evening hours. The daytime maximum is seventy-five seconds for a five-minute broadcast and three minutes for quarter-hour programs. Most listeners regard these as liberal allowances.

During World War II a good many listeners and some station managers sharply criticized the use of a commercial in the middle of a newscast. It was poor taste, they said, to interrupt stories of great battles with commercials plugging this hair tonic or that toothpaste. A good many stations dropped the middle commercials but others still continue to use them. There is some evidence that they are effective.

In deciding who should read commercials we should distinguish between the newscaster and the commentator. The former is a voice reading words usually written by someone else; the latter is supposed to be a mind as well as a voice. It is especially inappropriate for a commentator to interrupt or conclude his analysis of a critical issue with a "plug" for his sponsor's product. The Association of Radio News Analysts opposes this practice and considers it unethical for an analyst to include institutional advertising in the guise of news.

On small stations, for financial reasons, the announcer often reads both news and commercials. Some even use so much the same style of writing and delivery for both that it is difficult to tell immediately when the commercial begins. Although studies by Schwerin indicate that this is the most effective method, most stations that can afford the extra cost use a second announcer for the commercials. They believe that two voices provide needed variety and get better attention. Moreover, the transition from news about international crises, strikes, tornadoes, and train wrecks to "ducky-wucky fall
hats" can be so incongruous that a second announcer for the commercial copy seems advisable.

## TELEVISED NEWS

Televised newscasts utilize one of the following procedures or some combination of them:

1. A single ribbon of teletype tape moves horizontally across the lens.
2. The camera is focused on a teletype roll as the news is printed on it.
3. Typed pages are panned by the camera.
4. Long typed sheets are moved vertically before the lens on a revolving drum.
5. Still pictures are shown while a station newsman gives the news.
6. Silent motion pictures, either supplied by news agencies or taken locally, are used with "voice over."
7. A newscaster at the station delivers the news before the camera, sometimes showing maps, diagrams, or photographs for illustrations.

A combination of methods is recommended. Jack Tobin, manager of Telenews Productions, suggests a formula used by several stations. ${ }^{3}$ The show opens with the standard title (film or cards, with voice over). The announcer appears on the screen and gives a sixty-second summary of headline news. Tobin believes that the listener should get acquainted with the man behind the voice as soon as possible. Then the leading film story is shown, with a lead-in from the announcer. At the end of this clip, the announcer brings the story up to date (as film news is usually several days old) and introduces a local angle, if possible with a still photo. Stills, say Tobin, do not slow down a show if they are interspersed between film clips a few at a time, and if each is shown for not more than five or ten seconds. From that point on, the main film clips, local or syndicated, are shown. The stories can have superimposed date lines, and the announcer should be shown between stories if he can add a late or local development. Titles, Tobin
s "Fundamentals of a TV News Program," The Newscaster, August-September, 1950.
thinks, should only be used for definite break transitions, as from spot news to features or sports. Interviews with eye witnesses are useful when film is not available or too expensive.

Elmer Davis, veteran newscaster, says that pictures alone are not enough. "Suppose you get the signing of a treaty. What do you get? You get pictures of a lot of people putting their names on the document. But that doesn't tell you what's in the treaty, what its complications are, what might happen in consequence. You have to have somebody to tell you that." ${ }^{4}$

Three-fourths of the TV stations did not have a full-time newsman in 1950. In spite of the feeling that a news reporter before the camera is too much like a radio show, nearly all stations used that format. However, more than half of the stations also included motion pictures, interview, still photos, or some similar device. ${ }^{5}$ Half of the narrators read from scripts; most of these tried to use the copy only as a guide, glancing at it occasionally. Some mounted the copy in front of them, but out of sight of the camera. About one-fifth were speaking without script.

## SPORTS NEWS

Sportscasting is older than broadcasting. In 1912, experimental station 9XI, at the University of Minnesota, broadcast reports of football games by Morse code. ${ }^{6}$ Station WWJ, Detroit, broadcast brief reports of the 1920 World Series baseball games. On November 25, 1920, the station at Texas Agricultural College attempted a play-by-play account of their football game with the University of Texas.

Voice sportscasts also had their beginnings in 1920, whereas play-by-play accounts were developed in 1921. On July 2 Major J. Andrew White, assisted by David Sarnoff, broadcast the Dempsey-Carpentier prize fight over Station

[^47]WJY, Hoboken. Because "remotes" were then unknown, the Major's description was telephoned to announcer J. O. Smith at the studio, who repeated it to an estimated 300,000 listeners. In October, 1921, KDKA, Pittsburgh, broadcast the World Series, via direct wire from New York with Grantland Rice at the microphone. In that year, also, the University of Minnesota station aired the home football games with a relay of students carrying play-by-play notes from stadium to studio.

Coast-to-coast broadcasting of big games came with the development of national networks. The network affiliated stations now carry, in addition to play-by-play reports of important games, interviews with contestants and coaches, summaries of sports news, and feature stories about sports in the good old days. The list of network broadcasts includes professional and intercollegiate football, basketball, championship prize fights, ice hockey, horse races, auto races, and such unusual events as corn-husking contests and the soap-box derby. On television one can also see the "lady wrestlers," and individual competition in track and field meets. Individual stations broadcast high-school and college games and other athletic events of local interest.

## - QUALIFICATIONS FOR SPORTS ANNOUNCERS. Bill

 Stern says that a sports announcer "must know sports, appreciate the effort which goes into them, and be possessed of a natural love for everything competitive." Others list "quick intelligence," ability to think calmly in exciting circumstances, and facility in extemporaneous speaking. Red Barber $^{\mathbf{s}}$ believes that sports announcers should have a liberal education and ability to use good English. Colleges and universities, as well as most listeners, do not care to have their games announced by individuals who do great bodily harm to grammar and pronunciation.[^48]Those who give play-by-play accounts of games must be able to speak with animation, and almost continuously, for two hours. They must articulate clearly to be understood and modulate their voices to avoid monotony. Some take lessons in voice and diction and study recordings of their broadcasts; others employ critics to point out errors and weaknesses. Some practice describing scenes and announcing games from play-by-play accounts.

This seems a good place to warn beginners that the number of full-time sportscasters is small. Not more than a dozen are nationally known; less than 100 have regional reputations. Most local stations have an announcer who combines broadcasting local games with other duties.

- PREPARATIONS FOR BROADCASTING. The announcer must know the history of the game and the rules governing it. Barber says he has memorized most of the Spaulding Guide Books as far back as 1899! Those who report horse races must know the records of horses, jockeys, and owners.

When the sportscaster gets his assignment he begins specific preparations. Bill Stern says that he works more than the standard forty-hour week preparing for four hours of broadcasting. He gathers information about the teams and players and, if possible, attends practice sessions. Lynn Brandt sometimes studies movies taken in practice sessions, to help him recognize players in action.

Most sportscasts cover considerable time not spent in actual play. Stations assign a fifteen- or thirty-minute broadcast for a horse race lasting a minute or two. Football games last about two hours, though the playing time is sixty minutes. There are intervals between rounds in boxing, between halves in basketball, and between events in track meets. Furthermore, broadcasts of important games often begin ten or fifteen minutes before game time.

The announcer, representing his station or network, is re-
sponsible for the entire show. He and the engineer usually arrive the day before the game to make final arrangements. The announcer has prepared, usually on cards, information about the players, the coaches, and the records of both teams. He visits publicity agents for both teams to pick up last-minute information about players. He asks whether any special features are scheduled before or during the game and decides whether they can be broadcast effectively. He arranges interviews with former players and other newsworthy individuals, and checks with the engineer to make sure that band music, cheers, and crowd noises can be picked up as sound effects for his show.

Experienced sportscasters know that if they are to speak effectively, good physical condition is just as essential for them as for the players. Consequently, they avoid late pregame parties where excited fans shout at each other in crowded, smoke-filled rooms. Some of them take vocal "workouts" while the teams are doing limbering-up exercises on the field.

- BROADCASTING THE GAMES. The nature and diffculty of the sportscaster's task vary with such factors as tempo and visibility of the game. Baseball presents the fewest problems. Except for base running, the pace is slow; and except when the runner and the ball reach the base at almost the same time in a cloud of dust, visibility is excellent. Most listeners know the players and the game. They do not need to be told that the next batter is walking to the plate, or what happens between innings. When nothing unusual or exciting occurs, the announcer simply reports the action, often in phrases rather than complete sentences. "Ball one, too low, outside"; "foul, strike two"; "Jones singles to the shortstop, out at first."

Announcing basketball games is more difficult because of the rapid and almost continuous action. Before the game be-
gins, the announcer can talk about the players, their style of play, and records of the teams. But, unless he knows the players and speaks fluently, he cannot always follow the ball as it is passed from one player to another. In such cases, he reports which team scored, or failed to score, and names the player later, if he has time. For important games, the announcer has assistants who "spot" the players and record statistical data for use as opportunity offers.

In football, because of the platoon system of substituting offensive and defensive teams, the size of the playing field, and the nature of the game, the announcer often has the most difficult assignment. He must report what is happening in a far corner of the field, when ten or a dozen players are piled in a miscellaneous heap. The plays designed to deceive the opposition often deceive him as well. He must work in what meteorologists call "conditions of low visibility": rain, sleet, snow, or combinations thereof.

Most football announcers use boards with slots showing the positions for each team, into which cards containing such data as the player's name, age, height, weight, year in school, and hometown are inserted. An assistant changes the cards as substitutions are made. Ted Husing has used a board with tiny electrical bulbs which his assistants lighted to show who carried the ball and who made the tackle. The platoon system requires the use of separate boards for offensive and defensive teams. The announcer relies on a "spotter" for each team to tell him who does what, and to assemble information for use between plays and in time-out periods.

Listeners like to know the names of players, but they are more anxious to know the outcome of the play. They want to know what team has the ball, its position on the field, the number of the next down, how many yards are needed for a first down. "Navy has the ball on Army's thirty-yard line; first down and ten" gives this information clearly and compactly. "Smith tried a quarter-back sneak; stopped at the line of scrimmage," tells the story, except for the names of the line-
men who stopped him. These should be given in the next sentence.

Announcers should usually wait until they see what the play is and how it seems to be going before starting to describe it. Otherwise, they will be saying sentences like: "Fullback Smith crashes through center for-(pause)-no gain!"

Occasionally an announcer must broadcast a game from teletype reports. Some announcers, with active imaginations and recorded crowd noises, do these so realistically that the casual listener thinks he is getting an eye-witness account. To fill the time during teletype delays, the announcer describes the scene and gives an imaginary description of the game. We believe that this combination of fact and possible fiction should be discouraged. The announcer should read the reports as they come in, tell what he knows about the players and let it go at that.

In the early days of sportscasting, announcers tried to make every play exciting. When something really thrilling occurred, they got so excited that listeners couldn't tell what had happened. Broadcasters soon found that listeners want a clear, factual statement with controlled excitement reserved for brilliant plays. While the announcer is free to make favorable comments about teams and players, he is less free to make critical remarks. He may say that a team isn't playing as well as in former games or that player X hasn't recovered from his batting slump, but neither sponsor nor team would be pleased if he said, "This uninteresting game comes to you by courtesy of $\qquad$ ."

Whatever the game, the announcer must be nonpartisan, announce the score at frequent intervals, and see that the sponsor's commercials are read at stipulated intervals with the desired vigor.

- SPORTSCASTS BY TELEVISION. So far, advertisers have been willing to pay large sums for the privilege of sponsoring such important sports events as the football game of
the week, championship prize fights, or World Series baseball. Other advertisers want to sponsor home football games of nearby colleges and universities. University authorities and managers of professional teams have been debating the effect of televising games on gate receipts. Most universities voted against "live" telecasting of 1951 football, but allowed delayed showings from film under stipulated conditions.

There has, however, been enough telecasting of different sports to warrant a few general observations. Ability to speak fluently without script is even more important than in radio sportscasting. Announcers with good memories for records and other factual data are more successful than those who must constantly refer to their notes. Since the television audience can see the plays, the announcer must know the game and report it accurately. He has little chance of covering his mistakes.

When they first reported games for television, announcers tried to give a continuous description of plays, but found that in fast-moving events they could not keep up with the action on the screen. Then they decided that since the audience could see the players, the scoreboard, and most of the plays, they would omit much of the description and cue in brief bits of music and sound effects. This did not please the rather large number of listeners who were just starting to learn the game. The current trend is to include more detail, though announcers do not describe the obvious, like, "Now they are going into a huddle," or "The pitcher looks toward first base." The telecaster can be most helpful in explaining the reason for a play, the strategy used by each team, and what constitutes a violation of rules.

Commercials are easily arranged in television. Billboards in the background can keep the product advertised throughout the game. Film clips, slides, and commercials read by local announcers are cut in during time-out periods.

The telecasting crew includes the announcer, an engineer,
cameramen, and sometimes a producer, in addition to one or more assistants. For football, long shots showing the line-up of teams on different parts of the field must be blended with medium or short shots of important plays. For boxing, two cameras, focused at different distances and angles, provide medium and close-up pictures which must be skillfully blended to produce the effect of continuous action. When there is no producer, the announcer decides which camera shots should be used. When the crew includes a producer who knows the game, the announcer can give full attention to reporting the play. Further information on television production is found in Chapter 21.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. From such sources as Broadcasting-Telecasting, the Sunday edition of The New York Times, and the radio column in newspapers, prepare a four-minute broadcast on "Radio and Television News of the Week."
2. Prepare for broadcasting over a local station a four-minute talk on a topic chosen from, or suggested by, this list:
a. News on the "Voice of America"
b. How do we get news from overseas?
c. Does "live" television affect attendance at games?
d. My favorite commentator
e. Is there news that should not be broadcast?
f. Who decides the content of newscasts?
g. The cost of televising a game
h. How is news presented on television?
3. Conduct an audition to choose a newscaster for a local station from three applicants. The audition includes four "rounds":
a. A prepared summary of campus news, two minutes
b. Sight reading of commercial copy, about one minute
c. Sight reading of music continuity, about two minutes
d. Ad lib talk on topic handed to applicants as they finish round three, one minute
Class members should register their choices at the end of each round.
4. Follow the same general plan in selecting a sportscaster for college games. The audition should include:
a. A prepared talk on "Great Moments in History of Football," two minutes
b. Ad lib explanation of three penalties for infractions of rules, about one minute
c. Broadcasting of first two minutes of a recent game
5. Select from three applicants a news analyst or commentator for a series on current campus issues. Each presents a three-minute analysis or commentary and responds to a question or two asked by the student conducting the audition.
6. Four or five class members may examine radio and newspaper versions of as many different news stories, and present their findings in a class broadcast.
7. Listen to such programs as "Voices and Events" or "I Can Hear it Now," which combine narration and excerpts from recordings made at newsworthy events. Hand in a report of your observations. You may record parts of these broadcasts and use them to illustrate a talk to the class.
8. Three or four class members may evaluate as many different commentators in the light of Frank Kingdon's analysis of successful commentators quoted in this chapter.
9. A group of five or six may prepare and produce a documentary program showing how news is gathered by reporters, processed in the network news room, sent to local stations, and finally read by local newscaster. The broadcast might be called "The Life Story of a News Story."
10. Other groups may produce documentary programs on the experiences of famous commentators and chapters in the history of sportscasting.
11. Listen to several different newscasters to see if they adhere closely to the "Statements of Policy on Broadcast News."
12. Assign a committee of four or five to investigate charges of prejudice or bias in newscasts on such controversial issues as strikes, religious or racial discrimination, politics, and international relations. Members should get their evidence from listening to newscasts and from sources listed in the bibliography. Their findings should be broadcast to the class in some form of discussion program.
13. Take recording equipment to a meeting or event such as a county fair, commencement exercises, the home-coming game, a public
hearing, or a mass meeting on a current problem. Record interviews with important people and "grass roots" citizens. If possible, record parts of the program. From these recordings and your own narration, build a broadcast for the class.

## READINGS

Abbot, Waldo, Handbook of Broadcasting, rev. ed., McGraw-Hill Book Company, 1950, chaps. 8, 9.
Bartlett, Kenneth, "America's Radio News Analysts," Quarterly Journal of Speech, January, 1944, pp. 105-110.
Benton, William, "Shortwave Broadcasting and the News," Journalism Quarterly, June, 1946, pp. 155-159.
Brooks, William F., Radio Newswriting, McGraw-Hill Book Company, 1948.

Cantril, Hadley, "The Role of the Radio Commentator," Public Opin--ion Quarterly, vol. 3, 1939, pp. 654-662.
Charnley, Mitchell V., News by Radio, The Macmillan Company, 1948.

Chester, Giraud, "Power of the Radio Commentator," American Mercury, September, 1947, pp. 334-339.
De Voto, Bernard, "Give it to us Straight," Harper's Magazine, August, 1942, pp. 333-336.
Gould, S. B., and Dimond, S. A., Training the Local Announcer, Longmans, Green and Company, 1950, chaps. 8, 10.
Hollenbeck, Don, "CBS Views the Press," Atlantic Monthly, September, 1948, pp. 49-51.
Shirer, W. L., "America's Radio Traitors," Harper's Magazine, October, 1943, pp. 397-404.
"Should Radio Have an Editorial Policy?" Education on the Air, 1947, Ohio State University Press, pp. 96-122.
Warren, Carl W., Radio News Writing and Editing, Harper \& Brothers, 1947.
Weaver, Luther, The Technique of Radio Writing, Prentice-Hall Inc., 1948, chap. 10.
Wecter, Dixon, "Hearing Is Believing," Atlantic Monthly, June, July, and August, 1945.

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## PROGRAMS FOR 

AL L of the program types discussed in earlier chapters are used for specific audiences as well as for general listening. We here consider the preparation and production of broadcasts designed for special groups.

## WOMEN'S PROGRAMS

Although women's programs are as old as radio, sponsors did not at first recognize their commercial value. In 1932 the advisory council of the National Broadcasting Company wrote that "Many sponsors of commercial programs have turned their attention to programs of information for women. Art, culture, home decoration, and home economics are brought to the woman in her home."

Women do a large share of the nation's buying. They want information on the purchase of home equipment, whether cooking utensils, furniture, or refrigerators. They are inter332
ested in the mechanics of housekeeping, cooking, mending, the care of clothing, and repairing household equipment. They like household hints and short cuts, especially at housecleaning time. They seek advice on how to get the best food values for the least money and how to serve attractive meals.

The 900 radio stations broadcasting in 1944 carried a total of 640 women's programs, but this number decreased considerably in the next few years. Station managers, contrasting the relatively low popularity ratings of women's programs with the higher ratings of entertainment shows, evidently decided that if some entertainment is good, more would be better. But audience ratings may be deceptive. A program with a relatively small audience of prospective purchasers may sell more goods than one with a larger audience composed mainly of those who do not need the sponsor's product.

Available evidence on the relative sales effectiveness of women's programs and entertainment shows is limited and inconclusive. We do know, however, that a woman broadcaster at Iowa State College has had more listeners than any competing commercial show. The largest mail response received by the "National Farm and Home Hour" followed a humorous conversation about homemade pickles and relishes; the second largest came from a program on nutrition fads and frauds. The greatest mail-pull traceable to an OWI radio campaign followed the offer of a booklet "Wartime Canning of Fruits and Vegetables." And Mary Margaret McBride has shown that a woman can build a large audience even in New York City.

Women's programs are especially effective on television. In 1951 every television network, and nearly every station operating in the daytime, carried a program of this type. Telecasts of cooking, child care, sewing, and home safety draw large audiences. Sponsors are realizing the sales possibilities in televised demonstrations of their products. The women who
conduct these programs, whether on radio or television, usually combine practical experience with some training in home economics.

- the content of women's programs. Such factors as time of year and audience affect the content of programs for women. The child-care problems of farm women differ from those of city dwellers. Advice on gardening in Arizona might be interesting, but hardly applicable to gardeners in North Dakota. We have noted that women's interests are not confined to vocational information. Women are interested in the health and welfare of their families. They want information on styles of clothing and use of cosmetics. They want to know what is going on in their community. And, although program ratings may not show it, a good many women would like to have information about books, plays, and music on the "Homemakers' Hour." They need a constructive philosophy of life and appreciate help in getting it.
- PREPARATION OF WOMEN'S PROGRAMS. The woman broadcaster can usually be relied on to work out programs for women. She knows what she wants to say and should be able to talk about it in everyday language. Successful broadcasters on these programs often become radio "personalities." Listeners feel that a friend has dropped in for a pleasant chat. To maintain this friendship, and for ethical reasons, broadcasters should be sure that the commercials are honest and accurate. They should try the product so they can talk about it from experience and should usually write the commercials.

Listeners do not object if these commercials are closely integrated with the program. Mary Cook's advice on this point, written in 1932, is still up to date. She says that most women do not object to the mention of a product in talks on a problem that confronts them. For example, the mother with small children does not resent brief commercials for cod liver oil, soap,
or strained vegetables in talks on child health. Miss Cook believes that "a cooking ingredient such as a shortening . . . should be translated . . . and presented as part of a finished dish. ${ }^{11}$ The listener is interested in shortening, for instance, mainly for what it can contribute toward a fine pie or cake.

Menus or detailed directions are not usually dictated on these programs. Chances of error are too great even if the listener has pencil and paper at hand. Instead, those interested are invited to send for the information.

Variety in program format and content is important. Listeners would tire of programs devoted entirely to a single topic. Some broadcasters make each program a sort of variety show, including, for example, a favorite quotation, a bit of homespun philosophy, a description of costumes mother wore, a lesson from the McGuffey Reader, or items from the news of fifty years ago. Those who broadcast daily may feature a different type of program each day.

Names make news in radio as well as in the local paper. Women's programs might present in brief interviews women who have done unusual things and women who do the usual things unusually well. Names of women who win prizes at county fairs or hobby shows, organize a community project, or return from a trip interest the local audience. Although some broadcasters write a complete script, most of them speak extempore part of the time.

Television has increased the possibility of integrating commercials with the program and has increased the number of coöperative sponsorships. Refrigerators, stoves, and kitchen utensils used in cooking demonstrations may be advertised by one sponsor, ingredients by another. The furniture and draperies in a show on interior decoration, or the baby furniture, toys, and toilet articles in a demonstration of child care, may be supplied by different sponsors.

[^49]
## CHILDREN'S PROGRAMS

Any program which interests boys and girls until they are old enough to prefer adult shows belongs in the category of children's programs. But the programs children like best, and their parents like least, are the fifteen-minute daily adventure thrillers.

## - FAILINGS OF PROGRAMS FOR CHILDREN. Criticism

 of children's programs began early and still continues. In 1933 one writer said, "There seems to be no radio station which has escaped accusations of terrifying children, . . . of teaching them vulgar language, and of filling the house with advertising junk." ${ }^{2}$ In 1940 parents complained that shows like the "Green Hornet" "over-excite children, influence their language and create gangster worship," ${ }^{3}$ and a St. Louis judge blamed the delinquency of six boys on listening to "Gangbusters." ${ }^{4}$One of the most vigorous recent criticisms was voiced by Chairman Coy of the Federal Communications Commission, in an address at the University of Oklahoma in March 1950:

Last fall, the Southern California Association for Better Radio and Television made a survey of television programs scheduled between 6 p.m. and 9 p.m. on Los Angeles stations for one week. It found no crime programs on KFI-TV. Here is what it found on the other stations:

91 murders, 7 stage hold-ups, 3 kidnappings, 10 thefts, 4 burglaries, 2 cases of arson, 2 jailbreaks, 1 murder by explosion of 15 to 20 people, 2 suicides, 1 case of blackmail. Cases of assault and battery-too numerous to tabulate. Also cases of attempted murder. Much of the action takes place in saloons. Brawls too numerous to mention, also drunkenness. Crooked judges, crooked sheriffs, crooked juries.
2 "More about Children's Programs," Education by Radio, May 25, 1933, p. 26.
${ }^{3}$ "Parent's Survey Reveals Antipathy Toward Thrillers," Broadcasting, July 15, 1940.
${ }^{*}$ Time, September 23, 1940, p. 59.

The Association sent a copy of this survey to the Los Angeles television stations. That was three months ago. Last week the Association informed me that not one of the stations that carried the crime programs had offered to talk over the survey, not one had indicated it wanted to correct the situation, although an improvement has been noted in the early evening programs of the NBC station. This is certainly not a very encouraging attitude on the part of the members of an industry that makes so much of its sensitivity to public opinion.

Mr. Coy considered the argument that the violent dangers which child characters endure triumphantly on the air are no more harmful to child listeners than their imagined dangers when they play cowboys and Indians, or cops and rolbers. In refutation he quoted the results of a survey conducted by the California Congress of Parents and Teachers. This organization sent a questionnaire to more than 300 pediatricians, sociologists, neuropsychologists, and psychologists, asking their opinions on the effects of crime programs on children. Here are the results:

90 percent said that radio crime programs have a detrimental psychological effect on children.
93 percent said radio thriller shows and programs ending in suspense have a bad effect.
81 percent said that present-day radio programs contribute to children's delinquency or antisocial behavior.
63 percent conceded that American children need an emotional escape. (This is the favorite apology for such programs.)
BUT 83 percent said that such emotional escape CANNOT be safely provided by thrilling radio programs.

- attempts to improve children's programs. The broadcaster's reply to these criticisms has taken various forms. At first some ignored the criticisms and went on their merry way, making money and putting the burden of proof on those who claimed the shows had damaging effects on children. Advertising agencies said that the trouble with good "kid shows" is that parents don't approve of them. But for the
most part station and network officials made honest efforts to remove objectionable features. As one official said, "Nobody really wants to frighten or injure children."

The National Association of Broadcasting and the national networks have included provisions about children's programs in their statements of program policy. Here is the pertinent section of the NBC code, quoted by permission, from Radio and Television Broadcast Standards, 1951.

Programs for children and young people are designed to convey the commonly accepted moral, social and ethical ideals characteristic of American life; to reflect respect for parents, good morals and honorable behavior; to foster healthy personality development; and to provide opportunities for cultural growth as well as entertainment. The following standards are emphasized.

1. Cruelty, greed and selfishness are not presented as worthy motivations. Unfair exploitation of others for personal gain is not made praiseworthy.
2. References are not made to kidnaping of children or to threats of such kidnaping.
3. Profanity or vulgarity is not permitted.
4. Material which is excessively violent or which would create morbid suspense or other harmful emotional reactions in children is not used.
5. Material is not used in contests and offers designed for children which encourages them to enter strange places or to converse with strangers in an effort to collect box tops or labels. Appeals are not made to children to purchase the product advertised in order to help the characters in the program or to assure its continuance.
6. Copy proposed for broadcast which relates to a secret society for children, and offers of code material to children must be submitted for examination 10 business days before use and NBC reserves the right to require elimination or substitutions.

This code is less complete than NBC's earlier versions. Who can prove whether a script is "excessively violent" or creates "harmful emotional reactions"? The use of abstract terms is not confined to commercial broadcasters. Codes prepared by
educational and civic organizations state that programs should interest without undue excitement, develop constructive social attitudes, build faith in democracy, include accurate information, avoid fear or tension, and identify all fantasy. ${ }^{5}$

Broadcasters point out, we believe correctly, that children's programs have improved considerably in the last few years. "Superman" embarked on a campaign against intolerance. During World War II "The Flying Patrol" gave interesting information about our Coast Guard. "Dick Tracy" fought black markets as well as saboteurs. "The Lone Ranger" has stood for law and order. His cry, "Hi-O, Silver! Awa-a-y!" was used as the password when our troops landed in Africa.

Television has developed some commendable children's shows. "Mr. I. Magination" provides adventure without undue excitement. "Kukla, Fran, and Ollie," and "Lucky Pup" combine whimsy, fantasy, and reality in well-balanced packages. For the older children, TV stations provide hobby shows, home talent programs, and adventure stories.

- GOOD PROGRAMS FOR CHILDREN. Specialists in children's programs believe that familiar stories of animals, heroes, and real life ought to be the basis of programs for younger children. Children are realists, constantly seeking to learn the nature of the world about them. By custom, however, adults have capitalized on the younger child's interest in fantasy and have imposed a continuous succession of fairy tales and imaginative medieval mythology on children. Programs for younger children which stimulate the imagination and love of fantasy in realistic terms-the airplane instead of the magic carpet, television instead of the crystal ball, science instead of magic-perform a real service for society. When admiration is focused on modern democratic heroes instead

[^50]of medieval princes, on healthful living conditions instead of stone castles, on genius instead of genies, literature for younger children will have more social merit.

Some standard literature is, we believe, based on socially unsound concepts. Goldilocks breaks into houses, steals food, breaks furniture, and escapes with our approval. Cinderella achieves her victory through the intercession of magic. Such concepts may be more dangerous than the various excitements in other radio programs. Yet medieval fairy tales persist on programs like "Let's Pretend" and the series gets awards from parent groups!

Some writers of children's programs, wishing to use familiar fairy tales, but unwilling to use some of them in their present form, have adopted a sensible compromise. Caroline Ellis tells how she adapted fairy tales for her "Magic Book":

The teachers decided when we started that we would use the fairy stories which children love so well. . . . There is likely no more tragic and cruel writing in our language than the old fairy tales-as they are. It may be one thing to read to a child about torture and killing and gouging out of eyes and boiling in oil and cracking of bones, but it is quite another thing to put such material on the air in dramatic form, with sound effects. Again, many of the best known and loved stories were too long for a fifteen-minute broadcast-others were too short. So you see my difficulty. To find a story of the right length and a subject matter suited to radio broadcasting. ${ }^{6}$

The "Magic Book" was prepared with a very definite policy. First, all idea of cruelty must be eliminated. Miss Ellis also cut "anything that could be construed as bad manners," and "any sign of disrespect" for older people or the physically handicapped.

Old men became "funny little men." Hunchbacks became dwarfs and gnomes. Old crones and cruel stepmothers became witches. It must not be supposed that because a woman is a stepmother, she is

[^51]also cruel. She is cruel because she is a witch, as well as a stepmother. . . . It is a part of the definite policy that a man isn't mean and parsimonious and dishonest just because he is a rich man. . . . Good always triumphs. Even bad folks who are wicked in the original story, usually repent and become good folks and so escape the awful punishment meted out to them in the original story . . . or at most get banished from the country.

In general straight storytelling seems to work best for younger children. Irene Wicker and Frank Luther found that a generous use of music and high contrasts in characterization sustain interest during story hours. As the children grow older their ability to follow other program types increases.

## FARM PROGRAMS

Except for housewives, farmers constitute the largest occupational group. Furthermore, they listen to the radio more extensively and more purposefully than do most city dwellers. Four-fifths of our commercial stations carry farm programs and one-fifth employ full-time directors of these programs. A few commercial stations, notably WLS, the Prairie Farmer Station, specialize in broadcasts for rural listeners and an FM network in New York State is devoted exclusively to programs for the farmer and his family.

- COMMERCIAL STATIONS. Farm programs on commercial stations are usually arranged and produced by individuals who combine, in varying amounts, training in agriculture and first-hand experience on farms. In 1948, Cheydleur ${ }^{7}$ studied the qualifications of farm program directors employed by 50,000 -watt stations. Of the thirty-three who responded to his inquiries, thirty were college or university graduates, most of them from agricultural colleges, and five had master's degrees. Ten had lived on farms; eight had been

[^52]editors in agricultural extension divisions; three were former county agents; three had taught vocational agriculture in high school; three were former college teachers; and three had worked on farm journals. Farm program directors on smaller stations usually have the same type of background, though not always as much training and experience.

About half of the farm programs on commercial stations are sponsored. Originally it was assumed that sponsorship was profitable only for advertising products closely related to farm needs, such as seeds and fertilizers. But with the increase in farm income, sponsors are using these programs to advertise products that were formerly used only by city dwellers.

Commercials on such programs are frequently read by farm editors, though some believe that this practice associates them too closely with the sponsors and weakens their position as authorities on farm problems. In any case they should insist that advertising copy be written by someone who can talk the farmer's language. They should investigate the sponsor to make sure that the commercials are as accurate as advertising copy in mail-order catalogues and that they can honestly endorse the product.

- NONCOMMERCIAL STATIONS. Farm programs on noncommercial stations are usually prepared and produced by faculty members of agricultural schools, research workers at experiment stations, county agents, or representatives of the United States Department of Agriculture. Agricultural extension workers have always used meetings, institutes, farm visits, demonstrations, bulletins, and direct mail to communicate with their public. Radio is now frequently used to supplement, and sometimes to replace, these slower and more expensive extension methods.

Directors of farm programs on noncommercial stations are frequently chosen from departments of journalism. Their
chief problem is to find subject-matter specialists who can speak effectively and to find ways of presenting information from those who cannot. While these programs are always authoritative, they sometimes lack educational showmanship. But farm programs need not be dull. The 1949 American Exhibition of Educational Radio Programs gave a First Award to "Noon-Time Neighbors," a fifteen-minute farm program prepared and produced by the Agricultural Extension Service of Floyd County, Kentucky. The citation read:

For doing an excellent local service with good voicing, varied content, and with a definite and planned format. . . . Few local broadcasters in this field, not to mention nonprofessional radio individuals, present as down-to-earth information in such an interesting way with such good radio style. ${ }^{8}$

## - FORMAT AND STYLE OF FARM PROGRAMS. In gen-

 eral the structure of farm programs is much like that of other informational broadcasts. Talks, interviews, and discussions predominate, with an occasional documentary or actuality feature. The farm editor with a portable recorder can prepare and edit a wide variety of on-the-spot programs. Detailed descriptions and involved statistical explanations are usually avoided because the chances of misunderstanding are too great. Instead the speaker can talk about the importance of the information and invite those interested to send for a bulletin.Early in the morning, farmers want reports on markets, weather, and road conditions, with a brief summary of the latest news. At the noon hour they listen to brief talks or interviews on immediate farm problems. In the evening they will listen to longer talks and discussions on such topics as taxation, international trade in farm products, and pending legislation that affects their interests.

The farm editor knows, or soon learns, that rural and urban residents are equally intelligent; they just happen to know
${ }^{8}$ Education on the Air, 1949, Ohio State University Press, p. 421.
different things. Farmers don't want "watered-down" information, but they rightly expect speakers to talk their language and to relate information to their problems. They like the same type of entertainment as city folks, but rank some programs differently, preferring "Lum and Abner" to Bob Hope, "Dr. I.Q." to "Information Please," "Grand Old Opry" to Jack Benny, and old-time music to current hit tunes. ${ }^{9}$

- PROMOTING FARM PROGRAMS. Publicity and promotion are just as essential for farm programs as they are for other types of broadcasts. Here are some audience-building activities reported by directors of farm programs:

1. Organizing corn-husking and plowing contests
2. Producing broadcasts from county and state fairs
3. Selecting a "typical farm family"
4. Promoting farm picture exhibits
5. Making surveys of farm listeners
6. Speaking at farm meetings
7. Writing feature articles for newspapers and farm journals
8. Promoting farm safety projects
9. Conducting frozen food demonstrations
10. Interviewing farmers and their families who visit the station

## RELIGIOUS PROGRAMS

The first broadcast of a church service was in 1921, and the first religious program was televised in 1940. Religion is the subject of more broadcasts than any other topic and several AM stations are owned by church groups. Furthermore, religious organizations are important purchasers of radio time.

- NETW ORK POLICIES. Networks differ a good deal in their handling of religious programs. NBC provides regular sustaining time for organizations representing the major faiths: the National Council of Catholic Men for the Roman Catholic Church, the Federal Council of Churches for the
${ }^{9}$ Farm Facts Handbook, Sponsor Publications, Inc., 1949.

Protestant churches which belong to it, and the Jewish Theological Seminary for Jewish groups. CBS generally prepares its own religious programs, in close coöperation with national groups, including some denominations not represented in the NBC schedule. Since 1929, CBS has broadcast the Salt Lake Tabernacle Choir, originated by Station KSL, which is owned by members of the Mormon Church. CBS also cooperates with the National Religious Broadcasters, representing several evangelical Protestant churches that are not members of the Federal Council. Mutual and ABC sell time for religious programs under restrictions which limit the length of the broadcast, the times at which they are acceptable, and requests for contributions.

## - Station policies on religious programs.

 Most commercial stations are willing to provide free time for a series of programs arranged by a committee representing all local churches that wish to be included. As this is written, two-thirds of the commercial stations sell time to well-established religious denominations. About half of the station managers reserve the right to refuse offers from sponsors that are not, in their judgment, genuine religious organizations. There were and probably still are, self-styled religious broadcasters who are more interested in making a living than in teaching a way of life. Programs that urge listeners to send money direct to "national headquarters" should be carefully investigated.Some stations sell time for religious broadcasts at regular commercial rates. Others make a special rate covering the cost of picking up the program from the church. Financial arrangements depend on such factors as the station manager's attitude toward religious programs, the state of his budget, and the number of local churches seeking time on the air.

## - CHURCH ATTITUDES TOW ARD BROADCASTING.

 In 1948 the Episcopal Church bought time at commercialrates to broadcast "Great Scenes from Great Plays," a series of thirty-minute programs broadcast on Tuesday evenings from 8:00 to 8:30 EST. According to Broadcasting Magazine (October 4, 1948), the "only portions of an institutional nature are a Voice of the Church interpreting the drama's message and a thirty-second cut-in" when the local minister invites listeners to attend Sunday services. In 1950 MBC reported gross billings of $\$ 1,465,680$ for religious programs; ABC reported $\$ 1,859,737$ for radio and $\$ 274,619$ for televised religious broadcasts. ${ }^{10}$ The Lutheran Laymen's League bought time from both networks; their total billings were $\$ 876,750$ for radio and $\$ 15,600$ for television. These amounts do not include time bought from individual stations.

Other 1950 sponsors of religious programs include "The Voice of Prophecy" ( $\$ 564,133$ ) ; "The Radio Bible Class" (\$343,342) ; "Dawn Bible Students" Association" (\$239,131); "Young People's Church of the Air" $(\$ 183,302)$; "Gospel Broadcasting Association" ( $\$ 70,708$ ) ; and "The Institute of Religious Science" $(\$ 26,907)$.

Churches and sponsors differ in their attitudes toward the form and content of religious programs. Some hold that their only legitimate purpose is to preach "straight Gospel," and that using entertainment as a back-door approach to religion is improper. Others use any program format that attracts listeners. Most program directors, whether on network or individual stations, want programs that avoid doctrinal controversy. Various churches, however, point out that to them church doctrine is of the utmost importance. They regard broadcasting as a way of spreading their Gospel.

- TYPES OF RELIGIOUS PROGRAMS. Almost every program type is used on religious broadcasts, the most frequent being the broadcast of regular church services. Transcribed programs are next in order, usually consisting of

[^53]religious music and a talk or sermon. Others include "Religion in the News," from the Federal Council of Churches; "Victorious Living," dramatic narratives about people who have applied Christian principles in their daily living, from the International Council of Religious Education; "All Aboard for Adventure," combining dramatized adventure and discussion conducted by a panel of youngsters, from the joint Religious Radio Committee; "Sermons in Song," from the Assemblies of God; "Showers of Blessings," from the Church of the Nazarene; "The Radio Edition of the Bible," dramatized Bible stories from the Joint Religious Radio Committee; a Bible quiz show on KMOX, St. Louis; "The Catholic Question Box," a cross between "Information Please" and a discussion program; a discussion of ethical issues, from the Rhode Island Council of Churches; and televised dramatizations of great religious plays from such groups as Siena College, the College of St. Rose, Bellevue Reformed Church, and Emmanuel Baptist Church of Schenectady.

## EDUCATIONAL BROADCASTS

It is difficult to decide whether certain programs should be classified as entertainment, information, or education, but we can make certain broad distinctions. A program of recorded music with no commentary other than names of musicians and titles of the music, would generally be classified as entertainment; if someone used records and commentary to help listeners understand and appreciate either a type of music or the work of a given musician, the program would be listed as education. One might follow weather and market reports for years without learning much about meteorology or the law of supply and demand. Similarly, one might listen to reports of battles without learning much about military strategy or what caused the war. The distinction between information and education in these instances is clear.

Our concern here is with programs designed for any of
the following purposes: (l) to convey information, general or vocational; (2) to form or change attitudes on problems facing the listeners; (3) to develop appreciation of music, art, and literature; (4) to present evidence on both sides of controversial issues; or (5) to urge listeners to adopt research findings in such fields as agriculture, home economics, and public health.

- ON COMMERCIAL STATIONS. Educational programs on commercial stations are generally unsponsored. Such series as Du Pont's "Cavalcade of America" and United States Steel's "Theater Guild on the Air" are noteworthy exceptions. In addition, the four major networks present forums on current issues that are sometimes commercially sponsored. These programs are arranged and moderated by representatives of universities and civic organizations. Public-school systems, colleges, and universities often broadcast educational programs on local commercial stations. While this is an inexpensive arrangement, it has inherent difficulties. A network affiliated station must clear time on fifty-six days' notice to carry network commercial shows. Or a local advertiser may want to buy the period allotted to a local educational series, which must usually then be shifted to a less desirable time. This is not a criticism of the station manager, who must explain to the stockholders why he refused an advertising contract to retain a program that produces no financial returns.

Spokesmen for the broadcasting industry say, quite correctly, that a majority of their listeners want entertainment and that most educational programs are not entertainment. If they broadcast these programs, they fear that listeners will switch to a competing station and stay there for the evening. They might add that commercial stations are not staffed to prepare and produce educational programs. Although station owners promise to serve the public interest, we cannot, in our opinion, expect them to schedule many programs like
those broadcast by college and university stations. We do not expect newspapers to publish serially a history textbook, or bankers to sponsor a lecture course in money and banking.

We should note, however, that numbers of commercial stations carry educational programs prepared by radio units in public-school systems and colleges and universities. They most frequently broadcast lessons for the elementary grades. When well done, these please parents as well as children, thus building good will for the station. Some institutions supply commercial stations with transcribed programs to broadcast at convenient times in the station's schedule. In one state, fifteen-minute transcribed programs, prepared by the state medical association and the medical school, are carried by more than twenty commercial stations.

- ON EDUCATIONAL STATIONS. Programs of educational stations are designed to supplement, not to duplicate, the programs of commercial stations. In addition to the farm and home broadcasts mentioned earlier, they provide vocational information for smaller occupational groups. Some stations have good audiences for forty-five minute classroom lectures on such subjects as world politics, American literature, contemporary trends in science, introduction to psychology, and music appreciation. Such broadcasts could rarely, if ever, be fitted into schedules of commercial stations.

Several states, including Ohio, Indiana, Minnesota, Oklahoma, and Wisconsin, have "Schools of the Air" for elementary schools. The senior author of this text offers his twentyyear experience with the Wisconsin "School of the Air" in apology for using it as an example. Here the courses, chosen in response to requests from teachers, are prepared in cooperation with the State Department of Public Instruction. Teachers' manuals, containing descriptions of each lesson and suggestions for its use, are sold at cost. In January, 1951, the total registration for ten such "courses" was 492,861, an
increase of nearly 100,000 over 1950. Professor E. B. Gordon teaches singing to approximately 75,000 pupils in grades four to eight; about 58,000 are registered in a course called "Let's Draw." The smallest enrollment is about 20,000 in "Exploring Science."

At present it seems unlikely that television will provide a large number of educational programs; program policies will have to be determined by the costs of building and operating TV stations. However, there are some encouraging signs. The Federal Communications Commission has been urged to set aside frequencies for the use of educational organizations. The first television station owned by a university began operations early in 1950. WWJ-TV, Detroit, has announced an ambitious series of adult education programs. The Board of Education in New York City has decided that all new school buildings should contain facilities for television reception. Various TV station managers and network officials have emphasized the educational possibilities of the medium for classroom use. However, it seems improbable that television broadcasters will be able to give much emphasis to educational programming.

- PREPARING EDUCATIONAL PROGRAMS. The preparation and production of educational programs should be assigned to people who combine knowledge of educational objectives and experience in broadcasting. Practical advice for those who give talks is covered in Chapter 11, which also includes advice on the use of visual devices in televised speeches. Inexperienced speakers, and experienced ones, too, can read with profit Rudolf Flesch's book, The Art of Plain Talk. The objective always is to make talks interesting and clear to the intended listeners.

Those who appear on educational programs need not have the vocal skill expected of professional announcers or actors. Listeners, especially those interested in the topic, will excuse
unskilled delivery if they regard the speaker as an authority and feel that he is doing his best to talk to them.

School broadcasts for classroom listening in the elementary grades present special problems. The script writer must use words that are familiar to the average youngster for whom the program is intended. The attention span, particularly of children in grades one to four, is less than that of older pupils, and still less than that of high-school students and adults. This means short lessons and variety of presentation. It does not mean highly dramatized lessons with many actors and elaborate sound effects. Such programs excite rather than inform youngsters.

Most school broadcasts are designed for elementary grades in schools where one or two teachers teach all subjects, with the possible exception of music and art. The prime requisite for success is an experienced teacher who likes boys and girls and can talk with them as though he were present in the classroom. Of almost equal importance is the classroom teacher who gets the class ready to listen, helps them to follow instructions during the program, and talks it over with them afterward.

Given a successful teacher, school broadcasts do not require large casts or full-scale production. In fact, children in the elementary grades seem to prefer a storyteller who suggests, or impersonates, the characters to a dramatization which requires them to learn new voices each time. Many school broadcasts, including Wisconsin's "Journeys in Music Land," "News of the Week," "Afield with Ranger Mac," "Let's Draw," and "Rhythm and Games" are essentially one-man shows, sometimes with live or dramatized illustrations. When dramatizations are used, youngsters like the "One Man's Family" device in which the same characters appear throughout the course. Those who write or take part in these dramatizations should record some of the lessons and visit classes anonymously while the pupils are listening.

- PROMOTING EDUCATIONAL PROGRAMS. Successful educational programs require promotion and publicity as much as commercial programs do. When people are asked why they did not listen, their most frequent answer is that they did not know the program was on the air. As an example of fairly extensive promotion, we cite the Wisconsin "School of the Air." Descriptions of the courses are published in the journal of the Wisconsin Educational Association. News releases and occasional feature stories are sent to all papers and journals in the state. In 1949-1950 workshops on school broadcasts were held in seven counties. Exhibits displaying the work of outstanding students in the "Let's Draw" course were shown in forty-two counties. Some 5000 boys and girls entered posters in a Farm and Home Safety Competition. More than 500 students in the conservation course "Afield with Ranger Mac" sent in scrapbooks or conservation exhibits. Professor E. B. Gordon held seven music festivals, directing the youngsters in singing songs learned on "Journeys in Music Land." About 13,000 class members sang in the seven festivals. These events were publicized in news releases and in speeches before various groups.


## POLITICAL BROADCASTS

Beginning with the presidential campaign of 1924, candidates and political parties have made extensive use of radio. The Broadcasting Yearbook reports gross billings of $\$ 1,213$,262 for political broadcasts in 1948 and an estimated $\$ 1$,550,000 in 1949. These amounts are for network radio time only. They do not include expenses incurred in arranging and producing programs, amounts spent by candidates for local and state offices to buy time on local stations, or costs of broadcasting and telecasting national political conventions. These last-named events are produced by the networks as public-service features.

Although large sums are spent for political broadcasts, the
programs, in our opinion, are often ineffective. On-the-spot broadcasts from nominating conventions frequently sound more like a semihysterical crowd than like a deliberative assembly preparing to make important decisions. Campaign speakers are often amateurs, both in speaking and in understanding radio audiences. They seem to believe that the way to win is to avoid specific statements, to attack and out-promise the opposing candidate or party. The voter who wants to get an understanding of the issues must often turn to the radio forums.

There is, however, another side to the story. Suppose, for example, a candidate is attempting to win votes in a community containing about equal numbers of farmers, small businessmen, and members of labor unions. All are anxious to know his views on questions to which the three groups give different answers, and the active opposition of any one group may defeat him. In such a situation the candidate almost inevitably talks in generalities, using abstract stereotypes such as peace, justice for all, a fair day's work for a fair day's wage, settling our differences peaceably about the conference table, and taxation based on ability to pay. One candidate said, "All you want is justice. More than that you will not ask. Less than that you shall not have." Of course such statements are interpreted differently by listeners with different interests.

The listener would be best served if opposing candidates would appear, town meeting fashion, on the same broadcast to state their views and to question each other. While few candidates will now consent to such arrangements, an increasing number are learning to talk directly and simply with their radio listeners. However, we should not leave the impression that abstract stereotypes are always to be avoided. Honestly used, they are associated in the listener's mind with general policies and courses of action. The candidate should not be expected to tell months or even years in advance how
he would vote on a bill. He can be expected to state his general position on important issues. We believe that an increasing number of political speakers are learning how to use radio effectively.

## ORGANIZATION PROGRAMS

National organizations like the American Red Cross and the YMCA prepare programs, or material for programs, and short announcements for use on networks and stations. Networks frequently coöperate with organizations in the preparation of these programs. Local units of national organizations, and community groups such as the Parent-Teacher's Association, Chamber of Commerce, 4-H Club, Junior League, and the League of Women Voters are given a great deal of sustaining time. In preparing their programs, organization officers would do well to consider three points.

1. It is better to illustrate what you do than to talk in generalities about what you do. If a 4 - H group uses program time to tell about their purposes and activities, they may not add to the information of their members or arouse much interest in others. If, instead of saying that they teach boys to raise fat hogs, they interviewed a boy who raised the best one shown at the fair, they may provide information of interest to many people. Similarly, the League of Women Voters can undertake programs on different governmental problems, and the Chamber of Commerce can provide informational discussions of local issues.
2. If you are tempted to try dramatic shows or programs requiring skilled production, be sure that you can compete with professional talent. No professional can compete with you in a discussion of local problems, but your membership may not include acting talent comparable to that on sponsored programs. The Junior League of Kansas City, wanting to do something about children's programs, decided to produce one which would hold interest without the bad features of many
programs on the air. They hired a professional writer and used only experienced actors. The result was so good that the series "Cuddles and Tuckie" was transcribed and offered for sale. A cartoon strip of "Cuddles and Tuckie" characters was syndicated and sold to newspapers in towns where the program was aired.
3. When a number of organizations want to produce programs, a production council would help to avoid duplication of subject matter. The council, in coöperation with the local station, might secure at least the part-time services of an experienced director who would work with all participating organizations. The groups should decide whether their objective is to train their members or to produce the best possible broadcast. If the latter, the director should have authority to cast the program after public tryouts. He should remember that the public is accustomed to make distinctions between amateur and professional performances. They do not expect the high-school football team to hire professional players to make the broadcast more interesting to local listeners. Whatever procedure is followed should be made clear in publicity and announcements.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Arrange a series of six-minute interviews with representatives of local stations, or someone who has had experience with one of these programs for specific audiences. The interviews may be recorded for presentation to the class. If such authorities are not available, students may be interviewed on what they have observed and read.
2. Assign four or five students to monitor as many different commercially sponsored children's programs. They should note particularly whether these broadcasts deviate from the codes quoted in this chapter. Their findings should be presented in a class broadcast.
3. Assign another committee to check the content of radio and television programs broadcast by local stations between the hours of 6:00 and 9:00 P.M. Their findings should be compared with
those quoted by FCC Commissioner Coy in this chapter. The information should be presented in a class broadcast.
4. A third committee might survey the religious broadcasts available in the area from radio and television stations. The results of this survey might be included in a fifteen-minute documentary program on "Broadcasting Religion."
5. Arrange a series of four-minute talks to give interesting information to the general radio audience on such topics as:
a. The story of Mary Margaret McBride
b. The first women's programs
c. Women's programs on television
d. Codes for children's programs
e. The story of "Superman"
f. Religion on the air
g. Broadcasting to children in school
h. Teaching singing by radio
i. Politics on the air
6. A local station wants a director of farm programs. Conduct an audition to choose one of three applicants. Each presents the first three minutes of a talk on a fairly technical topic and answers two or three questions asked by a student representing the station manager.
7. Follow the same procedure in choosing someone to have charge of the "Homemaker's Hour."
8. A department store, catering to the station-wagon trade, wants a young woman to do a ten-minute broadcast daily except Saturday and Sunday. Conduct an audition to choose one of three candidates. Allow each one two minutes to describe her program idea and two minutes to read excerpts from a sample script.
9. Broadcast to a general audience a fifteen-minute symposium or debate on such questions as:
a. Should religious programs be commercially sponsored?
b. What should be done about children's programs?
c. Are educational programs necessarily dull?
d. Should school broadcasts be comnercially sponsored?
e. Should schools (or churches) own broadcasting stations?
f. Should educational institutions own television stations?
g. Is the present procedure in political broadcasting satisfactory?
10. Divide the class into four production groups. Each group is to prepare and broadcast a fifteen-minute program for one of the
special audiences discussed in this chapter. The broadcasts should use two or three program types.

## READINGS

Abbot, Waldo, Handbook of Broadcasting, rev. ed., McGraw-Hill Book Company, 1950, chaps. 12, 14.
"Agricultural Broadcasts," Education on the Air, 1947, Ohio State University Press, pp. 355-364.
Callahan, Jennie W., Radio Workshops for Children, McGraw-Hill Book Company, 1948.
Corbett, Thomas C., "Television for Educational Institutions," Educational Record, April, 1950, pp. 168-178.
Goldhill, Walter A., "Censorship of Political Broadcasts," Yale Law Journal, April, 1949, pp. 787-795.
Hough, John K., "The Greatest Story Ever Told," Education on the Air, 1947, Ohio State University Press, pp. 335-344.
Levenson, William R., Teaching Through Radio, Farrar and Rinehart, 1945.
"Organizations Utilizing Radio," Education on the Air, 1948, Ohio State University Press, part 7.
Parker, Everett C., Inman, Elinor, and Snyder, Ross, Religious Radio, Harper \& Brothers, 1948.
Siepmann, Charles A., Radio, Television and Society, Oxford University Press, 1950, chap. 11.
"Television in Agricultural Broadcasting," Education on the Air, 1950, Ohio State University Press, pp. 149-165.
Waller, Judith, Radio: the Fifth Estate, Houghton Miffin Company, 1946, section 3.
Weaver, Luther, The Technique of Radio Writing, Prentice-Hall Inc., 1948, chaps. 14, 16, 17.
"What is Television Doing to Our Children?" Education on the Air, 1950, Ohio State University Press, 1950, pp. 175-188.
"Women's Programs on Local Stations," Education on the Air, 1947, Ohio State University Press, pp. 344-354.
"Writing for a Rural Audience," Education on the Air, 1949, Ohio State University Press, pp. 285-289.

## chapter 19

## CONTINUITY, TITLES,

 ammımAND COMMERCIAL COPYFULL-TIME radio stations must broadcast at least sixteen hours a day, or 112 hours a week. This means thirty-two half-hour or sixty-four quarter-hour shows day after day. Each program requires continuity, and commercial copy must be prepared for sponsored shows. Network staff writers prepare continuity for sustaining programs, and writers for advertising agencies usually prepare commercials. A comparable situation prevails for programs originating on local stations. This means that a good many people spend their days on routine writing assignments. Few staff writers have an opportunity to do creative writing.

## CONTINUITY FOR RADIO

"Continuity" has been loosely defined as "what the announcer says." We prefer to distinguish between noncommercial and commercial announcements. The former we call "continuity," the latter "commercial copy." Writing these an358
nouncements is the most common and, in one sense, the most important writing job in our broadcasting system.

Successful announcements catch the listener's attention, give the necessary information, create the right mood, maintain the listener's interest, and "sign off" the show. There are three kinds of straight announcements: opening, closing, and transitional.

1. The opening announcement must attract attention. Some use an informal approach: "Hello there . . . How'd you like a bit of soft music? Then here's just the thing."

Compare or contrast this example with the opening announcements of recorded programs prepared by the World Broadcasting System:

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ANNCR: It's CLUB MATINEE time ... with a glamorous array
    of talent.
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ANNCR: Start the day right ... with songs that are bright ... with songs that give you a lift. It's your MORNING SPECIAL ... a session of sparkling melody to help you start the day right. ${ }^{1}$
ANNCR: With a blare of bugles and a ruffle of drums the marching columns parade past the reviewing stand, and it's Eyes Right as we open our MORNING SPECIAL with THE DIPLOMAT.

Various devices may be used to attract attention. List the most attractive features of the program. Make a proclamation. Ask a question. Use vivid words and simple sentences. In the attempt to avoid triteness, don't try so hard that your announcements sound artificial or silly. For example: "It's bright sunshine outside now, but let's play 'Moon over Miami." "And in your efforts to get attention don't forget to give the title of the program, the name of the sponsor, the important participants, and, usually, something about the program's content. The style of the announcement should suggest the mood of the show.
${ }^{1}$ World Broadcasting System, "Morning Special," No. 473, by permission.
2. Transitional announcements should do at least two of these things: (a) refer to what took place just before the transition; (b) include the name of the program or sponsor; (c) state what is coming next.

Here are examples from two rather typical programs:
(a-b) In contrast to that swing and sway rhythm of Sammy
Kaye ... here's a jive beat now to set you jump-
ing. ... It's Boris Karl, pounding out BACK
STREET.
(b-c) MIDNIGHT MELODIES moves on now ... to another tune
to stir your memories. ... It was a favorite with
your grand-daddy ... SEEIN' NELLIE HOME.

Transitional announcements must maintain interest in the rest of the program and create the mood for what is to come.
3. Closing announcements repeat once more the facts about the show and usually ask the listeners to "tune in tomorrow at the same time, won't you?" For example:

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ANNCR: So long, Dick, and we'll be gathering again ...
    at ... when (SPONSOR ...) presents another broad-
    cast of THE DICK HAYMES SHOW. }\mp@subsup{}{}{2
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- MUSIC CONTINUITY. The most frequently broadcast program on most stations consists of recorded or transcribed music. Stations usually subscribe to one or more transcription library services, which supply a basic library of recordings and a stated number of new ones each month. Some provide complete programs, including the continuity; others send individual selections and catalogue cards with information about the music. These cards, plus catalogues available in any music store, are excellent sources of material for the continuity writer.

The continuity writer will be given, or will select, records with varying degrees of similarity. A homogeneous group permits the writer to center his copy around a central theme,
${ }^{2}$ World Broadcasting System Continuity, "The Dick Haymes Show," No. 225 , by permission. mood, or idea. A mixture, of military band music, a church choir, and a harmonica solo would require quick adjustment in style as the program proceeds. Actually, such a mixture is rare, although it is not uncommon to include a hymn in a program of western music, or to have a program which deliberately contrasts "hot" and "sweet" tunes.

Many programs emphasize a central idea indicated by the title, such as "Morning Melodies," "Jive Jamboree," "Old Favorites," or "Southern Voices." A program may emphasize the work of a certain composer, orchestra, or soloist. It might be a "mood" show. The selection of records, the central idea of the continuity, and the general style of writing are dictated by the broadcaster's purpose. In the following example, the writer suggests the nature of the music in his opening announcement:
victor red seal 36233-A, air for g String: hold twenty SECONDS: :FADE BEHIND ...
ANNCR: Welcome to AFTERNOON GARDEN PARTY. It's time now to "relax and be gay while music holds sway" for fifteen minutes ... at the AFTERNOON GARDEN PARTY.

NBS THESAURUS 4804-B::2:30::SNEAK IN ...
ANNCR: And while we're relaxing from the heat of mid-
4804-B UP FULL
Music should be selected to fit the time of day and the audience. Although there are always exceptions, a program pattern of this nature would fit many stations: 6:30 A.m., western or hillbilly tunes; 8:00 A.m., popular tunes, played fairly straight, ballad type; 10:00 A.m., church music; 11:00 A.m., lively tunes or military bands; 1:00 p.m., "salon" music; 4:00 P.M., recent releases for the teen-agers; 8:00
P.m., current hits; 10:00 P.M., nostalgic or old-favorite program; 11:00 P.M., dance bands.

Many record programs on small stations are done without prepared continuity. The announcer, lacking time and information to prepare copy, says whatever occurs to him before and after each record. However, most of the better recorded shows have carefully written continuities.

Some record shows emphasize the personality of the announcer, who is then called a "disk jockey." The successful disk jockey may create a character who becomes the center of attention. His fans sometimes listen, not so much to the music, but to what he says about it. Some disk jockeys can ad lib effectively. Others prepare their own copy carefully to get the most out of puns on titles or other grist for their mills. Spoofing the sponsor, playing the wrong record, stopping a record in the middle, expressing personal philosophies-anything seems to go. There are few rules because each good jockey has his own style and method.

Writing continuity for recorded music shows can easily become a dreaded routine job. It is a problem of adjectives, adverbs, and phrases, not of sentences and thought-provoking ideas. Most crooners sound very much alike, and the lyrics and tunes from tin-pan alley fall into a few readily recognized categories. The writer's real problem is to know enough about music, composers, and artists so he is not limited to the repetition of a few trite phrases. The writer should know the type of tune, its current rating, and when it was written; he should know something about the composer, the soloists or vocal groups, the orchestra director, and the instrumentation. He should listen to each record before preparing the continuity to check timing, which is usually indicated on the disk, to capture the flavor of the music, and to avoid misstatements. Except for disk-jockey work, the best continuity for music is one which is least noticeable; after all, the music is the real
program. On the other hand, effective announcements can increase interest in the music, as in the following example.

ANNCR: THE DAVID ROSE SHOW ... a session in modern music
... featuring one of America's outstanding musical personalities ... composer, conductor, arranger ... David Rose ... and his orchestra.
MUSIC: DIXIELAND ONE STEP
ANNCR: That's the kind of music that was first heard along the Delta and was carried northward by the colorful river boats which plied the waters of the Mighty Mississippi. It was born in the years right after the Civil War ... just about the same time that another part of musical Americana was being developed. This other music was part and parcel of the growth of the west from wild and uninhabited land to rich cattle empires. It was the song of the cowboy. We present now the New World Singers with THE LAST ROUND UP. ${ }^{3}$
MUSIC: THE LAST ROUND UP
ANNCR: Most of us first become acquainted with our exciting literary heritage during our grade school or high school days. More often than not, it was our English teacher who first introduced us to Washington Irving's saga of "Rip Van Winkle" or Edgar Allan Poe's fascinating horror story, "The Pit and The Pendulum." But, it was during our preschool days that many of us heard for the first time Henry Wadsworth Longfellow's delightful poem ... THE CHILDREN'S HOUR. We hear next the immortal voice of Walter Huston in a rendition of THE CHILDREN'S HOUR. ${ }^{4}$

Continuity for record shows should give the names of the musicians, the copyright organization, the libraries and numbers of the records, the time they run, the spots at which the music is to start, and whether the music should be faded.

[^54]These general principles also apply to continuity for serious music programs. Here, however, the announcer is usually less obtrusive; here, definitely, the music is the thing. Continuity writers are often too solemn and academic about serious music. They say, "The concert overture differs from the operatic overture in that it is traditionally more lengthy and symmetrical." They could just as easily say it with less starch in their shirts and more meaning in their words: "An overture played at a concert is different from an overture played at an opera. For one thing it is longer and more complete, having a beginning, a middle, and a very noticeable ending." That takes longer, but the listener can follow the idea and is not left to figure out what an "operatic overture" is when the "concert overture" is "traditionally symmetrical." Deems Taylor introduced a more familiar, chatty style of talking about serious music. Recently, music continuity has been trying to say one thing: good music is enjoyable. Composers are pictured as people with personalities, wives, worries, and a sense of humor.

Information to be given in continuity for programs of serious music should include the title of the piece and its English translation, the name of the composer, and how he happened to write this particular work. Listeners like, too, to know how old he was when he wrote it and how much recognition it brought him. Statements from good critics about the value of the music, the mood or idea the piece is trying to convey, the story it tells, or where it fitted into such and such an opera, are interesting and valuable bits of information. The writer should pick out the most significant and interesting facts and tell them to the listeners-tell them, not write it to them. The continuity can be dignified and still in the listener's language.

In philharmonic and symphony concerts the opening continuity describes the concert hall and the mood of the occasion. The announcer is supplied with informational paragraphs about the music or the musicians, for use if there are
unexpected delays, and between numbers. This information, inappropriately called "fill," helps interested but uninformed listeners to understand the music. The same provisions for "fill" are made for musical plays from light comedy to opera. In addition, transitional continuity between acts or scenes summarizes the plot and set the stage for the radio audience. Some "fill" is also needed for televised musical programs.

- anNouncements for talk programs. The formal manner in which radio talks are usually introduced is often a great detriment to their value, interest, and liveliness. Prior to 1937 all talks presented over one national network were introduced by this standardized statement: "At this time, the XX Department of Talks presents Colonel J. C. So-and-So, who will speak on the subject: 'The History of Leather in American Wars.' Colonel So-and-So is President of the Such-and-Such . . ." This must be one of the worst ways to stimulate interest in a talk.

The good announcer remembers that he represents the station as host to the guest speaker. He talks with the speaker in advance to learn the nature and purpose of the speech and to decide what information should be included in the introduction. The announcer's task resembles that of the chairman who introduces speakers at public meetings. He should focus the listener's attention, interest, and sympathy on the speaker and his subject.

If the speaker is not well known, the announcement should show why he is qualified to speak on the subject. Note, for example, how Mr. George V. Denny introduced two speakers on the "Town Meeting" symposium, December 16, 1947. The question was "How Can We Maintain Prosperity and Avert Depression?"

Moderator Denny: Many of our economists today blame our last crash on the failure of the Federal Reserve System to properly regulate the flow of credit to our economic machines. Mr. Matt S.

Szymeyzk has been a member of the Federal Reserve Board since 1933. He has just returned from his job as director of the Economic Division of the American Military Government in Germany, and he is well qualified in the field of economics and finance.

Moderator Denny: Now let's hear another viewpoint. One of the biggest corporations in America, which also operates on a worldwide basis, is the General Electric Company. . . . Mr. Philip D. Reed, chairman of the Board of Directors of that company, served during the war as a member of the War Production Board and as Chief of the Commission for Economic Affairs in London. He is now chairman of the United States Associates of the International Chamber of Commerce.

Mr. Denny might have said more about the accomplishments of these speakers. His problem was to select only those items which qualified them to offer opinions on the question under discussion. These statements are about seventy-five words in length, approximately thirty seconds of speaking time.

If the speaker is well known, the announcement should not repeat familiar information. The usual introduction for the President is, "Ladies and gentlemen, the President of the United States." If, however, the President had just returned from a conference with Stalin, that fact would be included.

In any event, the announcer should avoid those trite phrases that spring so readily to the lips: "I'm sure our speaker needs no introduction . . .," "A recognized authority in his field . . . ," "I'm sure he has a message for us . . ." Brevity and conciseness are needed; the occasion is the speaker's, not the announcer's.

There is no magic formula for writing continuity for talks but a few general rules may be helpful:

1. Put important names and titles first or last in the announcement.
2. Try to "build" the announcement so that the announcer can say the last part with deliberate effect, with a rise in tone, volume, or emphasis.
3. Put the details in related order, so that they hang together.
4. Keep your sentences short without being choppy.
5. Use familiar words which the listener can understand without having to refer to a dictionary. Try to choose words which call up a mental picture or a universal sensation when describing a scene, person, or quality.
6. Avoid being pedantic or wordy. Say what you have to say simply. Don't use two words or a phrase where one word will say the same thing. "We are pleased to be able to present" is better said, "We are pleased to present," and best said, "We present." Best of all, don't say it at all-it's trite!
7. USE YOUR IMAGINATION! Think up new, intriguing ways to introduce a play, a speaker, a variety program, a roundtable, an interview. Keep your ears and eyes open to new techniques, new approaches.
8. Above all, remember that there is no one good type or style of announcement. Adjust to the situation.

## - CONTINUITY FOR DRAMATIC PROGRAMS. An-

 nouncements for dramatic broadcasts should not be confused with the narration which is part of the play. The opening continuity should include, in addition to the title of the play and the name of the author, information that will prepare the listener for what is to follow. The names of "star" actors are generally used in advance publicity and in the opening announcement. Names of other actors are listed, if at all, at the end of the show, along with such credit lines as are required by union regulations and the copyright owner.
## TITLES FOR TELEVISION

Continuity for televised programs should supplement or interpret what appears on the screen. In a play, for example, title cards may identify the actors, give credit to the author and copyright owner, indicate the place of action and the passage of time between scenes. The announcer's continuity will give information about the play, the author, and the actors that cannot be compressed into a few words for titles, or included in the dialogue. Television may show a map or an
exhibit but continuity is needed to explain their significance.
Types of titles commonly used are lettered cards, slides, and scrolls. The height and width of all titles should be in the ratio of three to four.

Lettered cards may be any size as long as they are uniform throughout the program, but $18^{\prime \prime} \times 24^{\prime \prime}$ is preferred. Hard matboard with a dull surface is best; the color should be light gray or some pastel shade. The lettering should be simple, and the message must be expressed in short, familiar words. Backgrounds suggesting the mood of the program add interest. Designs and decoration can be used to suggest the scene and the mood of the show-poker chips for a program about gambling, a lariat for a cowboy show.

Slides are discussed in the preceding chapter. If the station has two projectors, they can be used alternately to avoid the sharp transitions when slides are changed in a single projection.

Scrolls are continuous copy mounted on drums which can be revolved slowly before the camera.

Title cards can be suspended on rings and flipped down before the camera at the proper time. They are sometimes mounted on separate racks so two cameras can cross-fade or cross-dissolve from one to the other. They are often painted on the set so the camera can tilt or pass directly from the title to the show.

Superimpositions are frequent, with the title showing over photographs or miniature sets. Action is achieved by superimposing printed titles over moving scenery, the orchestra, the audience, or the opening shot of the program, or by turning pages of a "book" in which appear consecutive lines of the continuity. In fact any device used in making motion pictures can be adapted for television. However, in televised programs there is a greater need for clear-cut words a few at a time, and a simple uncluttered background. Screen size of TV sets and the usual viewing conditions necessitate precision and sim- plicity. Various trick shots are possible if titles are filmed. Perhaps the most common is the "tumbling letter" technique in which letters spelling the title appear to fall into place. This is done by photographing the title upside down. With the camera in action, the letters are removed from the title board and scrambled. They fall into place when the film is shown right side up. Various types of animated titles, including cartoons, can be filmed, but these are generally too expensive for ordinary use.

Television cannot use pictures exclusively; some words are needed in the announcements. Of course pictures and words must be carefully integrated. For example, in naming the actors, the announcer might say ". . . with a cast including . . ." while the screen shows "Starring. . . ." Pictures of the actors are faded in and out rapidly while the announcer, backed by appropriate music, reads their names.

Types of titles are limited only by the writer's imagination and the director's budget. However, writers should remember that simplicity is essential and that titles can't be too clear.

## COMMERCIAL COPY FOR <br> BROADCASTING

Though sophisticated listeners regard them with irritation, or at best with amused tolerance, commercials are what makes the economic wheels go round. Their type and wording are matters of anxious conference between the agency whose staff members write the copy and the sponsor who pays the bills. We here consider the types of commercials and the problems confronting the writer of commercial copy.

- TYPES OF COMMERCIAL COPY. Advertisers make this classification of commercials:

Straight announcements are delivered by one person. "Station breaks," inserted between programs, are usually ten seconds or twenty-five words in length, though they may be as
long as twenty or thirty seconds. "Spot" announcements, placed within the program or between shows, are usually one minute in length, although they may vary from thirty seconds to two minutes. "Hitchhiker" or "trailer" spots come just after a program sponsored by a company that sells more than one product, but whose program advertises only one. Thus, a show advertising soap flakes may conclude a minute early so another announcer can read a commercial for a shampoo made by the same company. Participation spots are short announcements, usually about thirty seconds in length, for advertisers who share a program. The most common type is the program of recorded music with commercials read between records.

In voice contrast announcements, two or more announcers alternate in reading parts of the commercial. One announcer: "It's quick"! Another: "It's economical." First one: "Yes, it's ACME . . . the best baking powder of all." This is much like the dialogue commercial in which announcers or users of the product talk to each other. Testimonials and interviews with satisfied customers are frequently used, or the announcer may answer questions about the product asked by another announcer or by a character who appears out of nowhere.

The dramatized commercial uses brief scenes in which two or more characters discover the merits of the product and tell each other about it. "Before-and-after" scenes are not uncommon. Example: In the first a man cannot go to a party because he has a headache; his wife advises him to take a B-C Headache Powder. In the second scene the man is enjoying the party and assures his wife that B-C Headache Powders do the job quickly. The audience overhears conversation, a good device for arousing interest. However, direct address is usually more effective in giving the sales message, so dramatizations are often followed by a straight commercial to make a "direct pitch."

Novelty commercials use any kind of sound effect, musical instrument, or trick acoustic treatment of a sound to get attention. The organ-voiced "B______ is probably the best-known example. The novelty value of the auctioneer's chant proved effective in advertising Lucky Strike cigarettes. Used too long, these devices lose their novelty value and irritate many listeners.

Singing commercials, usually based on a well-known tune or rhyme, have proved effective. Although they received considerable criticism for a time they were widely used in 1951. In television, singing commercials frequently accompany cartoons. Jingles use the same principle of capturing attention through the use of rhythm. When well done, both help the listener remember the sponsored product.

- APPROACHING THE LISTENER. The most indirect method of listener approach is through "educational copy" giving the audience information about the product or the manufacturing process. Some surveys show that women are often interested in such commercials. This is especially true when the copy is not built entirely around the product. For example, a woman broadcaster might demonstrate how to wash rayon. Along with advice on the proper temperature of the water and similar helpful information, she can tell her listeners to be sure to use Dreft. Such commercials are often accepted as helpful information rather than advertising.

Commercial copy frequently emphasizes "exhortation," urging listeners to use the product advertised, and suggesting that the next time they buy coffee, they should buy Maxwell House. Most radio commercials are of this kind.

An even more direct appeal is used when advertising is tied in with a "special" offer. Contests and premiums involving the use of box tops or wrappers are clear-cut examples. Another type was used by Seal-Test Ice Cream; the program
advertised ice cream with that trade name every week, but on each broadcast a special flavor-of-the-week was plugged. Department store shows frequently use this approach by offering "radio specials," or a sale of selected items.
Direct-mail advertising aims for the most direct relationship with listeners and the most immediate response. To get people to send money or an order to the station apparently requires longer commercials, more repetition, and a highly personalized approach.

- GENERAL RULES FOR COMMERCIALS. There are too many variables in advertising to be sure at all times of the reason for success or failure. What is more, experienced ad men frequently disagree as to the principles and techniques which make advertising successful. The following principles are offered with the realization that although they can be accepted as a guide by beginners, they are not always strictly followed by professional writers.
get and hold attention. This may be done by the use of novelty, direct questions, vivid word imagery, arousing curiosity, and a lively style. Every phrase should drive the message forward. One sentence must lead directly to the next. No part of the good commercial can be cut without breaking the flow-of-idea progression.
appeal to fundamental human drives and emotion. Associate your product with the attitudes and desires that impel people to do things. People do things which they believe will help them live longer, keep them healthy, or increase their safety. They like to own things and to feel secure economically. Most people react to an economy appeal best if the saving is immediate; it is harder to get across the idea of long-time economy by spending more money for quality goods. People value their prestige; they like to be well thought of. They value their reputation for power, good workmanship, good taste, and social eminence. They like to be on
the band wagon doing what other people do. They like to be personally attractive. They like leisure, recreation, comfort, fun. They have their sentimental side, too, and value highly the normal affections that go along with family living; they want their children to share in the health, safety, prestige, and fun which they are seeking. And they have spiritual needs, and a need for beauty. Most products can legitimately claim to serve one or more of these human needs. The job of the continuity writer is to discover and emphasize the ways in which the product can meet the consumer's fundamental needs.
don't argue. Assume that the listener agrees with you. Just tell him positively, but not aggressively, about the product. Don't compare with other products, except by inference. Although ad men agree with this principle in theory, cigarette advertisers and some others apparently violate it with success. However, one beer manufacturer, whose commercials told about the poor quality of most beers, found that only onefourth of the listeners remembered the sponsor; three out of four listeners might think that his beer was also of poor quality.
be positive in your approach. Aim for favorable attention by establishing a friendly attitude. Tell the listener how he can benefit from, or enjoy, your product. No one likes to be threatened; don't suggest bad results from failure to use your product.
avoid unpleasant associations. Even if the radio industry would let you, don't describe unpleasant physical functions. Don't emphasize the discomfort of a headache; stress the pleasant results from your remedy.
use a single appeal each time. Don't try to cover all of the merits in a single spot. Select one appeal and punch it hard.
vary the appeal. While every advertising campaign should have a central theme, it should not be repeated in the
same words in every commercial. You can vary the statement of the appeal or use the same appeal in different situations.
- WRITING EFFECTIVE COMMERCIALS. Let your lead emphasize the main appeal, and let this appeal be to selfinterest. Aim your lead line directly at the prospect, so that your style is adjusted to the age and sex of your listener. Your copy should show that you really know something about him; an out-of-date slang term addressed to teen-agers is fatal. Talk to one individual, not to "you people out there." Express the benefits of your products in the present tense whenever possible as in "You get instant relief," not "You will get instant relief." Use proof of quality, which might be based upon "scientific evidence," the large sale of the product, or testimonials. Let the listener see himself using or enjoying your product: "You can taste the difference," "Just picture this ring on your hand," "Enjoy the comfortable luxury of a new Buick." Emphasize results, not processes, although educational copy describing processes and ingredients may be useful. Imply a secret or something different about your product: "It's toasted," "Irium adds a sparkle," "There's something about yeast (or butter) that can't be measured in terms of vitamins," "Our new patent process," etc.

The real test of commercials is whether the program attracts listeners who remember the sponsor and his product. This is what the polling agencies call "sponsor identification." Suppose we telephoned a carefully selected sample of 100 homes and found that at twenty of these homes someone was listening to our program. On further questioning we found that 80 percent of the twenty (sixteen) could name the sponsor or the product. We would say that our show had an audience rating of twenty and a sponsor identification rating of eighty. From the advertiser's point of view, this would be better than a program rating of forty, with a sponsor identi-
fication of ten, which would mean that someone knew the sponsor at only four of 100 homes.

Advertisers can, to their chagrin, furnish examples of programs with large audiences and small identification ratings. The use of "gimmicks" is helpful in building sponsor identification. A "gimmick" is defined as "anything which helps impress the sales message." A catchy phrase like "To kill that odor, Nil that odor," a novelty like the whistle of "Rinso White," currently familiar quotations like, "It's a joke, son," attention getters like Cresta Blanca's musical background, titles like "Firestone Hour," and similar devices all help. Repetition is important. Three mentions of a product in a twenty-second station break, and three to five mentions in a one-minute spot, are customary.

In an effort to meet criticism of commercials, some writers resort to self-ridicule and apologies. Examples of self-ridicule are the shows which treat the commercials humorously, and where performers heckle the announcer while he reads the commercial copy. Examples of apologies are, "Here is a sixtysecond commercial announcement," (as if to say, "We know you don't want to hear it, but it's only sixty seconds") and (after the commercial), "We now present thirteen minutes of uninterrupted news." Such practices are likely to confirm some listeners in their belief that commercials are a nuisance. Since they pay the bills, commercials should be treated as an essential and important part of programming. The sales message should be presented without apology, as a natural part of the show.
The style of commercials should be in harmony with the program. A driving, hard-hitting plug would be out of place on a chamber music program. A mood-type soothing commercial would not fit a newscast. A comedy show requires lightness of style but not lightness of content in the commercials. Styles vary greatly with the skill of the writers. The usual
rules of simplicity in sentence structure and word choice apply in every case, but each writer must discover the style he can handle most effectively.

- TELEVISION COMMERCIALS. Television and radio advertising involve the same general principles. The visual appeal makes it possible to reduce the length of commercial copy. The use of company seals or trademarks at the beginning and end of a show can accomplish much. Card title announcements and displays of products, coupled with brief aural presentations, are probably more effective than an equivalent amount of time spent in radio advertising. Background drops with the name of the program and sponsor can be hung at the back of the stage, reminding the audience of the product throughout the show. Scenes in plays can use the advertised products. Quiz shows gives prizes which are seen as well as described. The housewife is not only told that a beauty preparation will work; she can see a beautiful model who uses the preparation. Appeals can be visualized, too. For example, if the appeal is to economy, the listener is not only told he will save three pennies; he is shown the pennies. Any student who plans to enter broadcasting as a profession should learn to think visually.

Film commercials are often prepared by national agencies and distributed to television stations just as transcribed commercials are sent to radio stations. The local announcer, watching the film on a monitor screen, delivers the copy. Here is an example from Station WKY-TV in which the pictures merely augment radio commercial copy.

TIME: DATE: SAVMOR(TRULUBE P.L.) ORIGIN: FILM \& AUDIO

VIDEO
LS: RACING CARS

MS: THROUGH CAR

AUDIO
ANNCR: You don't subject your car to driving conditions on a speedway. ...
Yet each day, your car

WINDSHIELD

LS: CAR TURNS IN
TRAFFIC, STOPS AT STATION, atTENDANT AND CAN

TITLE WORK: CAN
AMID SLUDGE
TITLE WORK:
RECEDING SLUDGE

MS: CAR LEAVING
STATION
SAVMOR SIGN: TITLE
FORK
engine approaches the same high temperature as a racing car ... under normal driving conditions: highway travel ...
... and use in traffic. The same premium-type motor oil that's used by professional racing drivers for their grueling road tests come to you with the same guarantee of superior service for your car at your Savmor Station. ... The new solvent premium-type Trulube P.L. Motor Oil. Savmor's TRULUBE gives better performance, better protection. TRULUBE absolutely prevents sludge from forming in your car's crankcase ...
... plus attacking any sludge that formed before TRULUBE went to work. Savmor's TRULUBE brings greater efficiency and power to your motor ...
... eliminates costly repair bills from prematurely wornout parts.
You can pay more, but you can't buy better than Savmor's Trulube P.L., for there's no finer quality motoroil available todayl Get Trulube P.L. at your friendly Savmor Station! (The preceding reproduced from film.)

Here is a film commercial prepared by the staff of WKY. TV. In contrast to the preceding example, note how the pictorial element and the audio copy supplement each other,
especially at the announcer's line, "And he still has to drive back!"

| TIME: DATE: AIRCRAFTSMEN | ORIGIN: FILM \& AUDIO |
| :---: | :---: | :---: |
| VIDEO | AUDIO |

MS: TWO MEN LEAVING BUILDING

MS: MR. A. GETTING
IN CAR, STARTING, SWITCH TO CAR ARRIVING AND MR. A. GETTING OUT DISHEVELED
CU: MAN FROWNS AND SHAKES HEAD
MS: MAN B, LOOKING AT WATCH, SWITCH TO MAN B

CLIMBING IN BONANZA
LS: PLANE TAKING
OFF
LS: PLANE LANDING

SHOT FROM PLANE WINDOW

ANNCR: Two men off on business trips to Amarillo, Texas. ... Both leave at the same time. ...
... Mr. A. goes by car. ... He'll have to average 50 miles per hour ... for five hours ...

And he still has to drive back!
... Mr. B., the smart businessman, calls Aircraftsmen, Incorporated. He boards a comfortable Beechcraft Bonanza, to turn a business trip into a holiday treat!

He'll arrive in Amarillo an hour and a half later ... in time for a leisurely lunch ... and he'll meet his appointment fresh, ready to work at peak efficiency. ... Riding in a Beechcraft Bonanza Luxury Cruiser, its big comfortable seats and easy-vision windows, Mr. B. turns a hard day-and-a-half trip into a short, pleasant jaunt. Aircraftsmen, Incorporated, your own personal airline that's always ready, offers charter service throughout the Southwest ... at rates of only 15 cents per mile. Three can


In the following example, the commercial is blended with the program.
GEORGE EPPERLY SHOT

VIDEO
\#3 CU CUT-OUT CAR IN FRONT OF DEL CITY BACKGROUND. (DO NOT SET UP ON DRUM)

DISSOLVE TO \#2 CU MAURY

DISSOLVE TO \#l CU
PHONE. TILT TO CU
PENCIL TAPPING.
FOLLOT HAND TO PHONE
AND HOLD DIAL. ON

FOLLOT HANDS TO
STACK OF LETTERS.
DOLLY IN ON SIG OF OPENED LETTER.
TILT UP TO PICTURE
IN MIRROR FRAME.
DOLLY IN ON SIG.
DOLLY BACK TO INCLUDE

|  | AUDIO |
| :---: | :---: |
| MUSIC. . . . . . . . . THEME. . . . . . . . . . |  |
| ANN: | George Epperly, George |
|  | Epperly Real Estate and the |
|  | friendly folks at Del City present the music of Ken |
|  | Wright ... and the songs of Helen Webb. |
| MAURY: | And I'm Maury Ferguson. |
|  | Thanks for joining Ken and |
|  | Helen and me ... and I hope |
|  | ant one. Things are not so |
|  | pleasant right now for poor |
|  | Helen, though. Just a min-ute--I'll show you what I mean. |
| BIZ: | HELEN BEGINS TAPPING PENCIL |
|  | IN FRONT ON CUE. THEN |
|  | PICKS UP PHONE, STARTS TO |
|  | DIAL ... PUTS PHONE BACK IN |
|  | CRADLE AFTER DIALING THREE DIGITS |
| MUSIC: | .. INTRO TO "I USED TO LOVE |
|  | YOU." |
| BIZ: | ... HELEN REACHES FOR STACK |
|  | OF LETTERS, UNTIES RIBBON, |
|  | OPENS ONE LETTER, HOLDS FOR |
|  | CAMERA TO READ. |
| MUSIC: | VERSE. (Helen, SING TO |
|  | TURE) |

HELEN'S REFLECTION IN
MIRROR ALONG WITH
PICTURE.
DOLLY BACK TO BIZ
INCLUDE BACK OF
HELEN'S HEAD, PICTURE IN HANDS, REFLECTION IN MIRROR.

AT END OF SONG, DOLLY IN TO CU PICTURE. FOLLOW PIECES TO DESK \& DOLLY IN.

TILT UP TO
REFLECTION OF HELEN WITH PHONE AT EAR.
LEAVE BLANK SPACE (HALF THE FRAME) AT RIGHT.
SUPERIMP \#2 WITH
LEFT SIDE MASKED. MCU MAURY WITH PHONE AT EAR.

DISSOLVE TO \#3. HOUSE CARD.

BIZ: ... AT END OF VERSE, HELEN TAKE PICTURE AWAY FROM MIRROR, HOLD IN FRONT ...

MUSIC: ... CHORUS. (HELEN, SING TO PICTURE, POINTING FINGER, GESTURING WITH PICTURE, ETC.)

BIZ: ... AT END OF SONG TEAR PICTURE, LET PIECES FALL ON DESK.

SOUND: TELEPHONE RINGS.
BIZ: ... HELEN ANSWER PHONE.

HELEN: (EXCITED) Hello?
MAURY: Hello, Helen, this is Maury.
HELEN: (DISAPPOINTED) Oh, hello, Maury, what do you want?
MAURY: (ENTHUSIASTIC) I just had to call you and tell you about the new houses at Del City.
HELEN: (BRIGHTENING) Yes, I know, Maury, we drove out to Del City last Sunday, and they're building the cutest houses. I saw one, that's really a dream!
MAURY: It's a beautiful house, all right, Helen, but here's what the man of the family will be interested in hearing. This house costs only 8500 dollars! Hard to be-
lieve isn't it? And the payments are only 55 dollars a month, insurance and taxes included. Here's another thing--Del City houses are well built. Built to last. This is a cross-section of the foundation which is used at Del City. It's called "Pier footing." The reason for the name is that it works on the same principle as the piling under a modern bridge. With "pier footing" the expansion and contraction of the ground doesn't move the house. So you're protected against those big, ugly cracks in the floor which you see in houses with different types of foundations. You've seen it--cracks in the flooring, the baseboard pulled away from the floor. Yes, homes in Del City are built right--and they're priced right. Drive out to Del City, this very week end, and look around. Check the houses there--and compare ... anywhere in town. Del City--next to the biggest city in Oklahoma-- available, "live" examples can be recorded and played to the class.
a. Spot commercials f. Educational commercials
b. Public service spots
c. Multi-voice commercials
d. Singing commercials
e. Dialogue continuity
g. Continuity for music programs
h. Continuity for a Red Cross campaign
3. Have the class listen to the continuity on different types of noncommercial programs, and report their observations in not to exceed 300 words.
4. Give each student one of these writing assignments:
a. Five twenty-five word station-break announcements for Quaker Oats to run Monday through Friday
b. Two 150 -word commercials on nylon shirts-one should be written for men; the other for housewives
c. A series of five one-minute spot announcements for accident prevention week
d. The opening, middle, and closing commercials for "Mr. District Attorney"
e. Two one-minute dialogue commercials for X soap
f. Two one-minute testimonial commercials for $X$ nail polish
g. A singing commercial for $\mathbf{X}$ hair tonic
5. Write opening and closing continuity for a fifteen-minute continuity on one of the following themes:
a. Songs Mother used to sing
b. Hillbilly or folk music
c. A Fourth of July program
d. A safety program
e. Know your library
f. An interview with a visiting authority or personality
g. A visit to a local elementary school
h. An interview with the football captain
i. A student discussion on a campus issue
j. A Thanksgiving program
6. Assign four or five students to produce a fifteen-minute informal discussion or documentary on "Television Commercials." Data should come from viewing television as well as from reading about it.
7. Analyze and report on the continuity used on religious programs.
8. Conduct a series of auditions to select an announcer to read the copy prepared in Exercise 4. Have three contestants in each case
and whenever possible adapt the copy to local sponsors and stations.
9. Make a careful study of the commercials used by a sponsor who spends a million dollars or more a year in radio advertising. Compare these announcements with those used by local advertisers.
10. Perhaps the local radio station or a local sponsor will offer a prize for the best commercials written by the class. Have the judges discuss five or six of the best entries, and explain their reasons for selecting the prize winner.

## READINGS

Abbot, Waldo, Handbook of Broadcasting, rev. ed., McGraw-Hill Book Company, 1950, chap. 9.
Chester, Giraud, and Garrison, Garnet, Radio and Television, Apple-ton-Century-Crofts, 1950, chap. 19.
Crews, Albert, Professional Radio Writing, Houghton Mifflin Company, 1945, chaps. 8, 12.
Cunningham, R. M., "Medicine Men of the Air," Reader's Digest, January, 1945.
Gould, G. B., and Dimond, G. A., Training the Local Announcer, Longmans, Green and Company, 1950, chaps. 5, 6.
Lazarsfeld, Paul F., and Stanton, Frank M. (editors), Radio Research, 1942-1943, Duell, Sloane, and Pearce, 1943, pp. 465-485.
Midgley, Ned, The Advertising and Business Side of Radio, PrenticeHall, Inc., 1948, chap. 14.
Sandage, Charles H., Radio Advertising for Retailers, Harvard University Press, 1945, chap. 10.
Stanton, Frank N., "Commercial Effects of Radio," Journal of Applied Psychology, 1940, pp. 673-684.
Warren, Carl, Radio News Writing and Editing, Harper \& Brothers, 1947, chap. 19.
Wolfe, Charles H., Modern Radio Advertising, Funk \& Wagnalls Company, 1949.
Wylie, Max, Radio Wriling, Farrar and Rinehart, 1939.

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## DIRECTING THE

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## chapter 20

## DIRECTING RADIO PROGRAMS

A GOOD radio show blends words, music, and sound so completely that the listener infers much from little, has his imagination stimulated, and feels that he has heard something worth while. To create this impression is the duty and the opportunity of the producer or director. His tasks range all the way from a few hurried suggestions to the guest speaker to complete responsibility for special events, dramatic broadcasts, and variety shows.

Fully prepared program directors should be skilled teachers who can get results in a hurry. The teacher of discussion and other types of talk programs takes several weeks to prepare for important public performances. The director of radio discussions must do what he can in a few hours. The professional theater director rehearses his cast for a month and then opens his show in Baltimore to polish the rough spots before the play faces New York critics. Rehearsal time for radio drama is seldom more than twelve or fifteen hours; frequently it is five or six. Broadcasts may be good or bad but
they must begin and end on time. The stop watch is the director's standard equipment.

To maintain friendly relations with announcers, speakers, actors, musicians, and studio technicians, the director must have tact and patience. He may disagree with authors, sponsors, and agency representatives but only rarely can he tell them so. He must direct temperamental actors and musicians who can't be fired because they are under contract. He must decide to adjudicate or ignore the feuds between performers and engineers. The day of the "arty" director who shouts and paces is past. The director who cannot win the respect and the best efforts of those with whom he works will soon be available for another position.

## THE DIRECTOR'S TECHNICAL TRAINING

The theater director must know how to set and light the stage, how to dress and make up the actors so they will resemble the characters they represent. Similarly, the radio director must know the characteristics of studios and microphones so he may use those available to the best advantage.

- THE DIRECTOR MUST KNOW HIS STUDIOS. He must know how sound waves behave in different types of studios. He must remember that when sound strikes a surface, part of it is absorbed by the material, part is transmitted through the material, and part is reflected into the air. Reverberation results when sounds prolonged by reflection overlap later sounds, and thereby create difficulty in distinguishing the separate sounds. Typically, in a very live room a sound persists for five seconds, while speech sounds are created at an average rate of three per second. Thus, if an audible part of each sound is reflected from studio walls, fifteen separate sounds are in the air at once. Distinctness is lost and the result may be a jumble of noises.

The principal method of avoiding reverberation is to use acoustic materials on the walls and ceiling. The problem is to create conditions that will transmit the sound with as little distortion as possible. Although the sound travels in all directions, the engineer is interested in its impact on the microphone.

Many think of a radio studio as heavily carpeted and curtained, with the voice dissipating into the walls so it seems lost. At one time the idea was to get studios as "dead" as possible. The usual result was that the sound seemed unnatural. It is now customary, in the typical studio, to keep the sound live, but with less reverberation than occurs in an ordinary room. The materials used combine acoustical plaster, tile, fibre board, and felts, with plywood, or some other hard wallboard.

The reverberative characteristics of speech sounds differ greatly. There are also reverberative differences between speech and music and among different musical instruments. Because of these differences it is desirable to have separate studios for speech and music, and different types of studios for different orchestral combinations. Since this is obviously impossible at most stations, architects plan studios that can be adapted to a variety of purposes.

One approved type of modern studio is the "live-end, deadend" construction. The "dead" end uses highly absorbent materials and may have a "saw-tooth" construction to reflect unabsorbed sound toward an angled ceiling. (IIls. 10, 11.) Music programs can originate in the live end and be picked up by a microphone in the dead end. The dead end can be used for out-of-door scenes and the live end for indoor effects. The "live-end, dead-end" studio requires expert knowledge of pick-ups for its successful use. This may be a disadvantage where the number of studios is limited.

Some studios have screens with different types of surfaces which can be shifted until the desired effect is obtained.

Others have louvre doors, dead on one side and live on the other, which can be adjusted for different degrees of sound brilliance. In others, the ceilings are broken by ridges, designed to lessen reverberation. (Ill. 12.)

Some of the CBS studios in New York have panels of polished wood, backed by nine different degrees of sound absorbing materials. The doors, each weighing 600 pounds, are three inches thick, with a lead core, and are well gasketed to make them sound proof. Windows are avoided because of the reverberation from highly polished glass surfaces; thus air conditioning is necessary. Glass partitions between control rooms and studios are double or triple, with air spaces between, insulated from the rigid structure of the wall by felt or rubber strips. Usually the glass on the studio side is slanted to reflect sound toward the sound-absorbent ceiling.
"Floating" studios, once considered ideal, are still used at networks and large metropolitan stations, although they are now seldom built. One at the Chicago NBC station has a wooden floor supported on springs. The space between the concrete base and the wood is filled with sound-absorbent material to prevent resonance. The outer walls are of four-inch terra-cotta tile. The studio is set within the tiled room, with air spaces between. On the walls spring clips support metal lath. The rough plaster is covered with acoustic material. This type of construction eliminates most sound which might be conducted to the studio through the building itself.

In television studios large overall surfaces are treated to achieve high absorptive characteristics, while the sets used within the large space act as reflecting screens to keep the sound from becoming too dead.

## - THE DIRECTOR MUST KNOW HIS MICROPHONE.

 All microphones disturb a magnetic field with sound waves and create a flow of electricity which, in amplitude and frequency, corresponds to the original sound.There are three principal types of modern microphones. The velocity mike uses a suspended metallic ribbon, which vibrates freely and directly in response to sound waves. Various pressure types of microphones use fixed diaphragms or other materials which respond to air-pressure changes of sound waves. Cardioids have two ribbons, one mounted freely to act like a velocity, the other baffled to respond like a pressure microphone. ( Ills. 1-8 incl.)

The producer must know the directional characteristics of microphones. Unidirectional microphones, as the name implies, are sensitive only in one direction. The working area in front of the sensitive side is roughly egg-shaped. Other microphones, especially velocities, are bidirectional, and the working area is shaped approximately like a figure eight, with the microphone as the center. Nondirectional microphones, usually pressure types, are equally sensitive in all directions and give a circular working area. Cardioids are sensitive in a pattern which roughly approximates a heart. Nondirectional microphones ("eight-ball," "salt-shaker," and others) can be used directionally by pointing them at the speaker so he talks directly into the top instead of across it.

Studio microphones are usually mounted on floor stands for dramatic work, and on table stands for announcements, interviews, or other talk programs. Sometimes mikes are suspended to avoid sharp noises when nervous performers kick the floor stand or tap the table on which the microphone is placed. Sometimes mikes are mounted from booms on a dolly, so they can be moved during the broadcast.

The microphone's frequency range and sensitivity should be considered in choosing the best type for a broadcast. A music program requires a microphone of wide frequency range. If there is a studio audience, a cardioid might be used, with the dominantly sensitive side toward the musicians. Studio orchestras can be grouped on the sensitive sides of a bidirectional, or around a nondirectional, microphone. The
bidirectional type is best for interviews, the nondirectional for discussion programs. A dramatic program with definite fades and a small cast might use a bidirectional mike; the nondirectional type might be better for a show with a large cast and predominantly musical transitions. An on-the-street broadcast clearly calls for a rugged, relatively insensitive, unidirectional hand or lapel microphone. For a sportscast, the microphone should be mounted on a table so the announcer's hands are free for making notes and handling copy.

Amateurs would naturally like specific rules about when and how to use different types of microphones. But such rules are couched in general terms, and inevitably so. The choice and placement of microphones depends on such variable factors as number and types available, number and size of studios, simplicity or complexity of the program, and the amount of rehearsal time. The producer should know the possibilities of his equipment and do his best with what he has.

## THE DIRECTOR'S USE OF SOUND

In the early days of broadcasting, directors underestimated the listener's ability to visualize the scene and the performers from clues in the dialogue. At first, in presenting plays, the announcer described the setting, the costume, and the actors. In some cases, he would interrupt the dialogue to tell what was happening on the stage. Then came a period in which various types of sound effects were, as we now think, overused. If someone entered the room, there must be the sound of a door opening and closing; if someone asked for a glass of water, someone must pour a glass of water or a reasonable facsimile thereof. Sometimes so much attention was paid to sounds that they almost crowded the performers off the stage, The current trend is to use few sound effects, to keep those used in the background, and to focus attention on the story. The crime show "Dragnet" is an excellent example of the effectiveness of this method.

In addition to spoken words, the director works with sound effects, acoustical effects, and incidental music.

- SOUND EFFECTS. Sound effects are classified according to the method of producing them, as vocal, manual, and electrical. Most sound effects are available on records, produced by professional companies. (IIl. 27.)
"Live" vocal effects are still used for such sounds as baby cries, animal noises, and bird calls. The director does not want a standard baby cry. The script may call for a six-months-old baby who is hungry. The dog in the play is not just any dog; it is a special breed of dog, hit by an auto, growling at an enemy, or baying at the moon.

Manual effects are used for sounds not otherwise available, or to adapt available recorded effects to the specific situation. The director may have a record of crowd noises on a busy street which can serve as a background for a scene where the bandit robs a bank and escapes in broad daylight. Most radio fans are familiar with the use of coconut shells to suggest the sound of an approaching horse; beans, salt, or cellophane to indicate rain, waves, or fire; metal sheets for thunder; crushed berry boxes for breaking down a door. Each network has a room full of manual effects, used to supplement the record library and tape recordings of actual sounds. Many of these manual effects can be created by local production groups.

Electrical effects include such sounds as the hum of motors, telegraph clickers and door buzzers, and high-frequency electrical tones, including the shrill feed-back. Thunder, cannons, and similar sounds can be obtained by attaching a tautly stretched copper screen to the magnetic pick-up arm of a phonograph and beating or scraping the screen with drum sticks.

The best rule for sound effects is that unless they are needed they should be eliminated. A show cluttered with sound which does not aid the action is the mark of an amateur.

It is not enough for the effect "to sound like" the object represented; it must, to the ear, be the sound desired. Finally, sound effects should act; precise timing is important, but it is equally important that the sound reflect and help create the desired mood. There are as many ways of closing a door as there are moods of human nature.

- ACOUSTIC EFFECTS. Acoustic treatment of sound is an alteration of the whole sound, usually the voice. The illusion of space is of increasing importance in radio production. In an open field the sound of the voice is dissipated into the air without echoes. The result is a "dead" or reverberationless effect. In small rooms, where reverberation gives a "live" effect to the sounds, it is customary to represent small spaces by dead pick-ups and large enclosures like halls or caverns by a live effect.

Very live surfaces are used to reflect sound when a brilliant tone is wanted; dead, and preferably large, spaces are used for outdoor scenes. Two examples illustrate the contrast. Irving Reis wanted to create the effect of two men talking on a distant planet. He used a dead studio so there would be no echo. The men stood a long distance from the microphone so their voices would be partly lost in the room before they were picked up; the volume level was increased to build the sound to sufficient intensity. Arch Oboler wanted a reverse effect in "bathysphere." Two men were supposed to be in a bathysphere at the bottom of the ocean. The actors were confined in a small box arrangement so their voices would have the slightly reverberatory effect of the diving bell.

Extreme echoes for cave scenes, or booming notes for disembodied voices, are achieved by an echo chamber: a long, narrow, extremely live room which reflects the sound in overlapping waves. A fairly good reverberative effect is obtained by speaking into a microphone placed inside an ordinary piano.

A "reverberation synthesizer" microphone makes any de-
gree of reverberation possible from a single studio. As the voice hits the microphone, it is picked up by extra wires which feed it back into the microphone, overlapping the original sound. By adjusting the apparatus the echoless effect of a dead room is managed; by increasing the synthetic reverberations, an extremely live sound flow is created.

The filtering of sounds for special purposes is done on apparatus similar to the tone control on receiving sets. For example, an ordinary telephone is represented by screening out some of the lower frequencies. If a hollow effect is wanted, the higher overtones are filtered out. Queer vocal sounds can be obtained by taking out the middle frequencies. The tone filter was used successfully when one director wanted the effect of a Revolutionary Army band playing "Yankee Doodle" inside a bottle. The piece was orchestrated for very soft strings, woodwinds, and celeste to get the effect of a music box. The orchestra was placed in a separate studio and their music was fed through a filter into the main studio where it was picked up by the microphone to go on the air. A thin, far-away, tiny effect was the result.

The sonovox is another interesting acoustical device. This apparatus transmits sound through two small cylindrical objects which look something like old-fashioned earphones. These units are placed against the speaker's throat. The sound from the sonovox takes the place of the laryngeal vibrations of the voice. The person using it, merely moves his mouth as he would if talking or singing, and thus articulates the sonovox sound into speech. For instance, if notes played by a pipe organ are transmitted through the sonovox, and the articulator moves his mouth as if saying "radio," he says "radio" with the voice of the organ. In Disney's "Reluctant Dragon" a train whistle was articulated into words by Robert Benchley, thus making the train talk. Chimes, bells, animals-almost any sound can be articulated into speech by use of the sonovox.

- INCIDENTAL MUSIC. Music is occasionally used as a sound effect. We hear Sally practising her music lesson; a thief, groping in the darkness, accidentally strikes the piano keys; a door opens and we hear the dance band. Music may also imitate sounds. The pipe organ can be played to sound like a storm; low pitched pipes suggest thunder; long sweeping glissandos on the flute give the sound of wind.

More frequently, however, music is used as theme or fanfare, bridge or transition, to create moods and suggest characterizations. Fanfares call attention to the coming program. Theme music serves the same purpose, helps identify the program, and, at the end, provides a "cushion" which can be shortened or lengthened so the show can be "signed off" on time. The musical bridge is one of the easiest ways to bridge the gap between scenes, or to indicate transitions from one place to another. When music is overused, the play becomes a series of short dialogues interrupted by bits of music. Mood music sets the stage for the program, or the coming scene, suggests the action, and helps the actors in their characterizations. If a character is supposedly tripping down the street, the music trips along in little, quick steps. If a chain gang is struggling to pull a great log through the woods, the music groans, strains, and struggles rhythmically with the workers' "heave ho's." Music to indicate action, like that used on the "Lone Ranger" serial to suggest running horses, is overworked, but indispensable.

The work of Benny Herrman, while exceptional, shows what can be done if a director has an imaginative composer as a colleague. He believes that original music is necessary for the fullest effect in a radio play because familiar music tends to distract the listener's attention from the drama and because freshly composed music, inspired by the script, is more likely to create the desired effect than music obtained from standard sources.

Examples of Herrmann's composition include music to sug-
gest the coldness of an iceberg, the precision of a time clock in a factory, the shrill wind, and the scattering of autumn leaves. Asked to write music for the story of "Mr. Sycamore," in which a mailman turns into a sycamore tree, he decided that turning into a sycamore tree might be a very pleasant experience. He scored the piece for strings, harp, celeste, and flute-all delicate instruments-and a theme which "was wistful, but not too sad." "After all," he said, "the man turning into the tree was a postman and his feet were tired. He was glad to be at peace."

In Lord Dunsany's "Gods of the Mountain," three Indian beggars sit in a desert and pretend to be stone gods. They are fed and worshiped by the people until the real gods are heard in the distance. Herrmann's job was to express the giant stone footsteps in music. The sound-effects department worked with him. The actors were in one studio, and Herrmann, with earphones, in another. His orchestra included extra kettledrums and tom-toms. In a third studio the sound-effects man manipulated a large bag of rocks. At a cue from the producer, the orchestra would produce an ominous rumble; on the off-beat, the sound-effects man would throw the bag of rocks from one end of the studio to the other. The effect was that of ponderous stone feet, moving slowly and terribly across the desert.

Local production groups are usually limited to music from standard "mood" records or to phrases selected from recorded musical compositions. The works of serious modern composers are generally the best sources.

## MICROPHONE TECHNIQUES

Much, probably too much, has been said about microphone technique. Fundamentally, this is simply finding the best relation of the performer to the microphone. This relationship varies with the performer, the desired effect, the studio, and the available microphones. There can be no specific rules governing all cases. We can, however, give general information
about such matters as microphone distance, the use of fades, setting the radio stage, and producing crowd scenes.

Experienced speakers know how far they should stand from the microphone and what volume they should use for informal talk. If they wish to give the effect of addressing a large audience, they stand several feet from the microphone and speak in a loud voice. To give the effect of intimate, per-son-to-person talk, they stand near the microphone and use very little volume. The voices of different participants in interviews, conversations, and discussions are likely to differ in volume. If so, the distances of each from the microphone must be adjusted to give the impression that they are seated comfortably with the microphone between them.

Speakers and actors often use increased volume to show mounting excitement or emotion. Since such sudden increases may overload the equipment and cause "hlasting," one should reverse the normal procedure and step back from the microphone before increasing the volume. Also experiment with changes in pitch, rate, and quality without much increase in volume. Sometimes, using less force close to the microphone gets the best results.

Actors and directors should know how to use "fades" effectively. The notation "fade out" (FO) on a script means that the voice dies away as the speaker or actor leaves the room; "fade in" (FI) means that the voice is heard off stage, becoming louder as the speaker approaches the microphone. These are also called "studio fades," to distinguish them from "board fades," which are done by the control board operator. Studio fades are frequently used between scenes to indicate a lapse of time or a shift in locale, though they may be used when a character enters or leaves the radio stage. Fades should be preceded by a line in the script so the listener can interpret the action. It usually takes eight or ten words with the character in motion to make an effective fade; the usual distance covered is ten or twelve feet.

If music is used between scenes, definite fades are usually unnecessary. Closing a scene with a line read full force, with the speaker "up cold" to the microphone, gives a quite different effect from a faded line. Opening lines read "up cold" start a scene off with dynamic vigor and lead into a scene of fast movement and much action. If the climax of a scene comes in the last line it should not be faded. Tag lines, even though they are climactic, can be faded out if they are repeated as the character walks away.

Board fades are frequently used for musical programs because groups of musicians cannot usually vary their distance from the microphone or regulate their volume satisfactorily. In plays, board fades may be used for quick shifts from one scene to another.

For the radio listener, the speakers nearest the microphone occupy the center of the stage. The director asks: Where is the principal action taking place? With which character is the listener supposed to identify himself? The microphone is usually kept at full volume for principal characters and dominant action. In dinner-table scenes, for example, actors may be placed at varying distances, with the central character at the microphone as if at the head of the table. If two characters are on stage and one is crossing the room, he speaks as he moves while the other stays at the microphone. Sometimes the situation is more complicated. Suppose two actors are on stage and the principal character is searching the room for a hidden document. The director may have the microphone "follow him around the room," which means that he would stand at the microphone, speaking at normal volume, while the lines indicate his movements. Conversation from the other speaker would be heard at varying distances. Radio listeners accept the convention of the "moving microphone" as the center of interest moves from place to place.

Student directors have trouble with crowd scenes. Crowd effects are better accomplished by a few characters than by
many. Three or four people at a distance and two or three closer to the microphone get the best results without the confusion of many voices. Those at a distance should speak real words, not quite distinctly; to mumble meaninglessly just to make noises is poor technique. Those closer to the microphone should speak real lines, meaningful to the situation, which will "come through" the other sound. If a recording of a crowd is used, it should be fed in after the actors have started their crowd sounds and faded out before the live voices have quieted down. Crowd records can augment the studio voices effectively, but rarely give a convincing result by themselves.

## DIRECTING DIFFERENT TYPES OF BROADCASTS

A minute or two before the program begins the director announces the time and takes his position in the control room. From that point he directs the program by visual signals. A raised arm means "stand by"; the program is about to begin. On the second, he points at the person who speaks the first line. "DC" on the script, when sound effects and music are broadcast from the control room, means wait for a direct cue. Directions to change positions at the microphone are indicated by pointing to the person involved and moving the open hands apart to indicate that he should get farther away, or bringing them together to show that he should get closer. A lifted hand, palm up, means "louder"; down means "softly"; a slowly descending hand means "fade slowly." A sharply descending hand, slantwise or down, means to "cut" the music or sound effect. The index finger moved across the throat usually means to cut immediately, or to leave out a provisional cut. A circle made by the thumb and index finger means that "everything is O.K." A cranking motion means "speed up." The index finger on the nose means that the timing is all right, "on the nose." Individual directors develop other signals such as

## Uses of Several Types of Microphones

The microphones illustrated in the following pages do not represent all types on the market. They do, however, represent the major principles involved in microphone construction and show the general uses to which microphones are put.

1. The RCA senior velocity microphone, $44-\mathrm{BX}$, is intended primarily for studio use where a microphone of the highest quality of reproduction is desired. It can be used with practically any audio facilities system and is found in almost all of the leading studios in the country. The directional pattern is substantially a figure eight, thus making it bidirectional.
2. Because of its midget size, the $\mathrm{KB} \cdot 2 \mathrm{C}$ does not conceal the facial features of performers. It weighs only twelve ounces and is ideal for remote broadcasts. In addition, it will give excellent service in any of the applications suggested for the 44 -BX velocity microphone, with no sacrifice in output level or perceptible change in quality. However, the windscreening in the KB-2C is not as effective as on the $44 . \mathrm{BX}$; hence it is best not to attempt to work too close to the KB-2C if excitation due to breath puffs is to be avoided.
3. The Altec-Lansing M-11 is a nondirectional, high-fidelity, pencil-like mike, useful for any situation where unobtrusiveness is desired. Attached to a flexible cable, it is especially handy when emcee or announcer must move around, as in man-on-the-street and audience-participation shows.
4. The BTP-1A radio microphone is a crystal-controlled portable UHF transmitter and microphone, especially adapted to broadcasts by announcers mingling with crowds on the street, at conventions, in large stores, at golf matches, or in other locations where wire connections are difficult or impractical. Its maximum satisfactory range is determined largely by the interference level at the receiver location. Under ideal conditions, several miles may be covered; however, building structures or other media possessing a high signal attenuation will limit the working range. Overall transmitted quality is comparable to a network line.
5. The 88-A microphone is suitable for use in AM, FM, and TV studios for the following applications: (1) where concealment of the microphone is desirable; (2) where the artist must work extremely close to the microphone; (3) where audience participation requires use of a microphone which is rugged and may be handled readily; (4) where the announcer must work very close to the microphone; (5) in newscasting and conference programs where each participant has a microphone; (6) in broadcast and television remotes; (7) on
programs and announcements on remotes where a rugged microphone is required which will not be boomy when worked close; (8) in sportcasting where a light rugged microphone is required; (9) in out-of-door remotes of all kinds where the microphone will be subjected to weather; (10) for news events where small microphone will not hide speaker; (11) on interview programs where a light-weight microphone facilitates quick and easy handling.
6. The RCA 77-D high-fidelity microphone provides a choice of directional pattern in AM, FM, and TV studios. As a bidirectional microphone, it can be used in place of the $44-\mathrm{BX}$ with some loss in high frequency response. As a unidirection microphone, the 77-D may be used to advantage in the following applications: (1) on general programs and studio announcements; (2) on television boomsthe required amount of microphone movement is reduced, the pick-up of unwanted sound back of the microphone is reduced, and the working distance to the microphone is increased; (3) where it is desirable to cover a large area with a single microphone; (4) where studio acoustics are more live than optimum; (5) where it is desirable to eliminate audience noise originating behind the microphone; (6) where the directional pattern permits orientation to eliminate undesirable reflections; (7) where the announcer must work close to the microphone; (8) on general programs and announcing in remote locations; (9) for plays, stage presentations, banquets, news events where it is desirable to reduce the pick-up of sound behind the microphone; (10) where the directional properties will help to reduce the effects of an overly reverberant location.

As a nondirectional microphone, the following applications are suggested: (1) for announcing in studios and remotes where the announcer must work close to the microphone; (2) on out-of-door programs where the microphone need only be protected against rain.

The 77-D is extremely versatile, and experience has shown that its characteristics may be adjusted to cover almost any pick-up condition.
7. The MI-6206-G offers outstanding performance as a public address microphone. Its relatively wide frequency response, high sensitivity, and attractive appearance also readily adapt it for use as a "talk-back" microphone in broadcast studios. It is well suited to the requirements of a program director's microphone, or it may be used for emergency announcements.
8. The MI-6204-C microphone is of new design, as compared with other RCA varacoustics which it resembles. A slide adjustment which changes the physical characteristics of the labyrinth permits a choice of nondirectional, bidirectional, or unidirectional operation. In addition, three variations between the unidirectional and bidirectional pattern may be obtained. The varacoustic microphone is suitable for public address use under high reverberatory conditions and for stage pick-ups where auditorium noises are to be kept to a minimum. As an economy microphone it may also be used for similar broadcast applications when shock mounting is not required.


1. 44-BX Microphone in Use. Scene from radio comedr. "Life with Luigi." (Photo by courtesy of the Columbia Broadeasting System.)

2. KB-2C "Bantam" Velocity Microphone in Use. Jinx Falkenburg. NBC star. poses with the miniature RCA velocity microphone. which has a sensitivity and output equal to that of the $44-3.2$. (Photo by courtesy of the National Broadcasting Company.)

3. Altec-Lansing M-11 Microphone in Use. Here the microphone is mounted for studio work and is being used by Walter Winchell and Frank Sinatra.
4. B'TP.|A Microphone in Use in a Remote Broadcast.


5. I'ressure Microphone. Type idi-A.
6. P'olydirectional Mierophone. Type 77-1).


7. Aeropressure Mierophone. Type M11-6206.
8. Varacoustic Mierophone, Type MI-620)


9. Dual ANI-TV Studio. $33^{\prime} \times 45^{\prime}$. Two Stories High. It can be adapted for either radio or TV productions: walls include "splayed wing. as well as cylindrical reflectors. Resiliant, squeakless floor is made by $l^{\prime}$ lengths of tongue-and-groove beech, fitted and held in place by mastic. An acoustical canopy is suspended above the work area. (Photo by courtesy of WGN. Chicago.)
10. Pylon Construction. Here is a corner of Classroom Studio A at the University of Oklahoma. Notice the vertical pylons and dropped cciling.


11. San-Tooth 1 all Construction for Fistreme Aeonstic Deadening.
12. Domre Door Construction. Doors behind actors are adjusable to almost ant degree of liveness or cleadness: reverse side of door- is pulished maple.


13. "School of the Air." These programs involve research. script preparation, authority presentation, and student participation.
14. Classroom Radio Program. Follow-up period by teacher is an important part of utilization of classroom radio programs.


15. Direction from the Control Room. Director of radio drama program gives directions by public address system from control room.
16. Multiple Microphone Set-Up for Student Panel Discussion.

clenching the fist to indicate that more animation is needed. A sign that a line should be read vigorously should be made vigorously; a signal to sneak in the music slowly is made by raising the hand slowly.

The performers should, of course, watch the director to catch his signals. He in turn should be poised and reassuring even when things are not going well. If he registers displeasure, he may discourage or further confuse the performers.

- DIRECTING MUSIC PROGRAMS. The station's music director is responsible for arranging and rehearsing musical programs. The responsibility of the producer, even though he may know a good deal about music, is limited to microphone set-ups and the overall timing of the broadcast.

On every control board there is a galvanometer, often called the "volume indicator" or "VI Meter." This term is slightly inaccurate, as the meter really measures intensity, a combination of volume and pitch. The director and engineer in the control room watch the VI meter to tell when speakers and musicians use too much or too little force. To correct this the performers vary their distance from the microphone, or the engineer adjusts the equipment to let the needed amount of volume through. To avoid injuring the microphone's delicate mechanism, intensity is usually kept fairly constant. This fact has long been a sore point with musicians who feel that their best efforts are lost when extreme variations in volume are not allowed. Variation in orchestral intensity may be as great as 100,000 to one. For FM, considerable variation is permitted. FM transmission equipment is not so greatly disturbed by volume changes; sounds of extremely low volume are picked up, and loud sounds go through freely without blasting the equipment or the listener's ears.

In singing, the power created by the voice varies from 1000 to 30,000 microwatts, considerably more than the range of conversational speech. This means that singers should stand farther from the microphone than speakers, if comparable in-
tensity is wanted. There are exceptions. Some crooners, for example, use such low volume that they must be very close to the microphone to get the needed intensity. In AM broadcasting, vocalists lean or step backward for loud notes, and forward for soft ones.

The director of bands and orchestras has the task of grouping his musicians at proper distances from the microphone. An analysis of set-ups for bands and orchestras on the networks shows that for purposes of microphone placement musical instruments can be divided into five groups. Group one includes those which are usually closest to the microphone: pianos, harps, when used for special effects, and guitars and mandolins in solos or in small instrumental groups. First violins may be in group one or two, depending on the orchestral arrangement. Second violins and cellos are usually in group two. Woodwinds and the celeste may be in group two or three, oboes and trumpets in group three or four. French horns, bassoons, and clarinets are in group four; trombones, cornets, and bass viols in group four or five. Group five usually includes xylophones, vibraphones, chimes, triangles, snare and bass drums, tympani, tubas, traps, and the pipe organ. This classification gives the producer a starting point in arranging a musical set-up. It may require modification to get the best results from available studio and microphone equipment.

The foregoing groupings are based on the use of one microphone. Some directors use a microphone for each group. Sepanate microphones are nearly always provided for vocalists who appear with orchestras. Sometimes various microphones are used to arrange the performers so they look well to the studio audience.

The best distance of instruments from the microphone is not always based on their average intensity. This is because some instruments are used singly, others in groups; some merge in the overall sound pattern, others dominate the pattern.

The set-up for dance orchestras is determined by their styl-
ization. The Guy Lombardo style is, in the current phrase, "very sweet" or "sticky." It is an oversimplified melodic arrangement with the guitar and piano predominant as a basis for rhythmic embellishments. These two instruments are placed near the microphone so they "cut through" the other music. The Hal Kemp type of band is "sweet" and rhythmic. Muted trumpets produce the staccato rhythmic effect under a saxophone section. Trumpets and saxophones are near the microphone. In bands like Henry Busse's, the rhythmic arrangement is carefully balanced with the melody. This places a strong burden on the drums which, with the string bass and piano, are near the microphone. Swing bands like those of Artie Shaw and Benny Goodman are "very hot," and set-ups vary with the size of the band. In general, the different sections are quite equally balanced in microphone position because swing style depends on individual musicianship balanced against a massed band effect.

During the broadcast the producer is in the control room; his script is marked to show the timing of the different numbers and of the announcer's copy as worked out during rehearsal. He keeps in communication with the band leader by prearranged signals. Some of the more commonly used are:

## Messace

Start the theme melody
Take the first ending and repeat the chorus
Take the second ending and conclude
Repeat
Play entire arrangement
Conclude with the chorus
Play the chord
Play predetermined fanfare
Start at the beginning of musical number

Signals
Make letter " $T$ "-with fingers or baton and finger
Hold one finger vertically
Hold two fingers vertically
Same as above
Lower hands, palms vertically
Clench fist during selection
Clench fist during program
Salute
Point up

With symphony and opera programs where differences in volume are very great, the producer keeps the engineer informed of what is coming, so he can be ready to adjust the equipment. The broadcasts of the Metropolitan Opera a few years ago illustrate one method. The production director read the score some six bars ahead, and used hand signals to tell the engineer what was coming. A raised finger meant a man's voice; two fingers meant a duet; the circled thumb and index finger meant a woman soloist; all five fingers meant choruses; a clenched fist meant the entire company. The engineer had time to adjust the volume and tone controls to suit the music.

- DIRECTING TALK PROGRAMS. On most talk programs the producer makes general arrangements and times the show, but his directing function is slight. Especially is this true of talks given by newscasters and other staff members.

A producer assigned to a guest speaker helps him find his best microphone position and may make suggestions about his talk. The producer should warn the guest about blasting, weaving, or talking "off-mike." He helps the speaker make provisional cuts in the script and acquaints him with the usual signals about pace, position, and volume. He provides a stand-by program, such as recorded music, in case an inexperienced speaker finishes too soon; and he may prepare both long and short closing announcements so the announcer can fill or cut as needed.

Stations frequently carry special talks from a "remote" point, such as a banquet or convention. Here the producer arranges for the telephone lines, and sees that microphones are provided for the speaker, the person who introduces him, and the announcer. Extra mikes may be needed to pick up audience applause. The equipment should be placed and tested before the meeting begins. The closing announcement should generally be given from the station; if the talk runs overtime, it can be faded out without disturbing the banquet.

Discussion programs are usually in charge of a chairman who has made arrangements for the program. It is his responsibility to see that the discussion is well organized. The producer adjusts mike levels in a prebroadcast period and stands by in the control room to give needed signals. Occasionally the producer becomes an active director. In such cases he may use signs which direct speakers to "Cut in on him," "Don't tap pencil on table," "Give an example," etc. The participants are often seated around a nondirectional microphone at a padded table; occasionally mikes are provided for each speaker. Sometimes tables with five or six sides are used, with upright clampboards so participants can see their notes without looking away from the microphone. (Ill. 16.)
For discussion programs with audience participation such as "America's Town Meeting of the Air," a parabolic microphone is aimed at the auditorium for questions from the audience; the platform speakers use another mike for their replies. Sometimes portable microphones on long cables are passed to audience members who wish to speak or ask questions.

The producer assigned to a special event, such as a parade or the inauguration of a President, must decide whether to pick up reports from individuals stationed at different points, or to use a mobile transmitter. The first method requires telephone lines or the use of small portable transmitters. The producer usually directs the broadcast by telephone from the studio.

Networks frequently arrange news pick-ups from widely separated countries. In such cases, the newscasters know when to start speaking by listening to word cues given by the preceding newsman. These cues are arranged by cable, telephone, or short-wave radio communication. National broadcasts are ordinarily carried to the central network studios by telephone, whereas international broadcasts are short-waved. Arrangements for such multiple-point pick-ups are the producer's job.

At the local station newsworthy events may be covered by a newscaster who carries a small relay transmitter. The producer remains at the studio to decide how long to continue the remote broadcast. He keeps in touch with events by telephone and decides whether a news "break" is important enough to interrupt the regular program.

Coverage of sporting events, such as football or baseball games, necessitates placing microphones to pick up bands, crowd noises, or special ceremonies. Sometimes the producer also assumes partial responsibility for "spotters," helps round up personalities or authorities for interviews between halves, and watches for possible errors in the sportscast. Frequently, the announcer is his own producer and, except for an assistant or two, assumes responsibility for the broadcast.

Quiz shows, audience participation programs, and "giveaways" add to the producer's duties. He must make sure that participants are available and that equipment needed for the stunts is ready for use.

- DIRECTING DRAMATIC SHOWS. preliminary script analysis. The producer's first step for a dramatic show is a careful reading of the script. True, for such regular network programs as daytime serials, he may start rehearsals without this advance preparation. But he knows the format and the characters, and can usually guess what the next episode will be. For important unit shows, the producer must make a careful study of the script before choosing his cast. He may decide that some rewriting is necessary. Putting in missing sound cues, breaking up long speeches, putting in lines to identify the characters, and cutting superfluous lines are within his province.

After this reading the producer should answer such questions as these: What is the flavor of the show? What is the general mood? What is the overall pace? What is the intended effect? Is it satirical, gay, seriously attitudinal, sentimental,
solemn, romantic? The proper selection of cast and music depends on the answers to these questions, and the treatment of each scene depends on the producer's decision as to the purpose of the show.

The director should write brief paragraphs describing each character. These should indicate the character's principal personal traits, attitudes, motivation, and the voice type and delivery style most likely to portray the character. Such summaries as the following help both director and actors:

| JAKE HOOVER: | Retired banker, who has turned his great energies from business to fast-paced outdoor recreation. He is authoritarian and self-confident, but not to the point of being aggressively domineering. At heart he means well for everyone but seems to believe that the quickest way of solving problems for other people is for him to issue orders. He adores his grand-daughter Sally, and is proud of her seamanship, while he has suspicious scorn of the landlubber, Van, who would like to marry her. Jake's voice is deep and full, and capable of expressing great warmth when he talks to Sally. Usually, his manner is almost brusque and his speech clipped. |
| :---: | :---: |

Next, the director should study the play scene by scene. He knows that variety in pace and mood hold interest. How can the scenes be contrasted in tempo and flavor? How can this be done and still maintain the general mood of the show? And how can it be done so that the show moves toward a climax in production as well as in plot? Within each scene, too, there should be rise and fall of tempo, yet so sparingly used that the overall mood is not lost. The amateur producer should "block out" the entire script, with marginal notes to indicate the treatment for different passages. He can estimate the time required for each scene and mark provisional cuts if the script seems too long. Professional directors and actors may
not need such detailed analysis, especially for serial programs.

For network shows, the producer requisitions the necessary studios and equipment. For local broadcasts, he must often round up what he needs, including sound effects and incidental music. In both situations, the director must provide copies of the script for the cast, the technical crew, the musicians, the sponsor, and the station files.
choosing a cast. For many network programs, ranging from daytime serials to comedy-variety shows, participants are employed on a contract basis. Except for minor parts, there is no casting problem. Unit plays, on the other hand, require casting for each show.

Networks, large advertising agencies, and stations that broadcast dramatic shows, have a card file containing names and relevant data on actors and actresses available on a piecework basis. From this file the director selects those to be called for auditions. He naturally calls those who are well known in preference to those who are not; those who can do character parts with little coaching in preference to beginners. For local dramatic shows, casts are usually drawn from college radio workshops and community theater groups.

Passages from the script to be broadcast should be used in the tryouts. These passages should allow the director to contrast the actors' voices in different combinations. Each candidate should be given a synopsis of the script and the director's diagnosis of each character. While the director may want to see radio actors before hiring them, his first impression should be auditory rather than visual. For television the process is reversed. Television and FM equipment faithfully reproduce vocal defects that might not be noted in AM broadcasting.
conducting rehearsals. First rehearsals are simply line readings to acquaint the actors with their parts. The director describes each character and each character's reaction to the
others. A favorite method is to ask the actors to recall a comparable situation in his own life. If this method fails, the director explains in detail what he wants, and often reads the lines the way he wants them read. For radio courses, the imitation method should be used only as a last resort.

Rehearsal time varies; ten or twelve hours for a good halfhour network show is not unusual. A highly produced series of dramas might be rehearsed seventeen or eighteen hours. A few directors never rehearse their plays as complete units. Convinced that a too-smooth performance leads to a let-down on the air, they follow the movie technique of rehearsing bits or scenes separately. The casts of some daily shows just run through the script a time or two before airing. The amount of rehearsal is also limited by the budget. AFRA and AFM rates for rehearsal time are less than for air time but expenses for overtime mount fast. A common AFRA ruling is that there must be four hours of paid rehearsal time, but this should be the minimum in most cases. The actor is prepared when he sounds as though he is speaking each line spontaneously, in response to something or someone.

During rehearsals the volume of the receiver in the control room should be louder than for normal reception so the director can detect minor flaws more easily. As the rehearsal proceeds, the director indicates on his script the proper tuning at different points. Most directors ask the actors, sound-effects people, and musicians to underline their portions of the script so they won't miss any cues for board fades, microphone shifts, or possible blast levels. The director in the control room uses a talk-back microphone to give directions during rehearsals. (Ill. 15.)

The director's primary job, in relation to line reading, is to make sure that each performer recognizes the motivation for his speeches. Every line is in a good script because another line or the situation calls for it. Every good line is a response
and a motivation, designed to get a response from another actor or from the audience. Keeping this motivation-response relationship foremost is the essence of good line reading and of good directing.

Every director should ask these questions about his shows: Does the program run smoothly, without dead spots? Does it run so rapidly that the audience can't follow easily? Are cues picked up promptly, without overrunning each other? Are there variations in tempo, so the show doesn't stay on the same level too long? Is the show built with a series of tense moments, leading to a final climax of sound, pace, and action? Do the actors sound like real people? Is there sufficient contrast in voices? Do the actors sound as though they are really listening as well as talking?

## SHOWMANSHIP

The term showmanship as used by professional directors means that the program is good entertainment. They think of good entertainment as shows that attract and hold large audiences. In the early days of broadcasting there was a tendency to define showmanship as something commercial programs had and educational programs lacked. Now most directors agree that there are different kinds of showmanship, depending on the nature and purpose of the program. Good showmanship for religious broadcasts would differ from that of comedy-variety shows. (Ills. 13 and 14.)

The qualities most frequently mentioned in discussions of showmanship are an overall unity, a pace or tempo appropriate to the mood of the show, variations within the limits of this mood or tempo, a series of minor climaxes leading to a major climax near the end of the broadcast, and one or more unexpected "twists" in the plot, so the end of the story cannot be seen from the beginning. When a program has "variety within unity" it has showmanship.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Broadcast a four-minute talk to the class on a topic discussed in this chapter. Include information found in one of the suggested readings.
2. Prepare for broadcasting to a general audience an eight-minute lecture-demonstration on a topic suggested by the following list. The series might be called "Behind the Scenes in Radio."
a. Fading in and out
b. Three manual sound effects
c. Musical bridges
d. Picking up cues
e. Setting the radio stage
f. Shifting the radio scene
g. A dress rehearsal
h. Getting off to a good start
i. "Remote" broadcasts
j. Conducting on-the-spot broadcasts
k. How sound waves behave
3. Prepare for broadcasting a series of interviews with authorities on different phases of radio production. If "live" specialists are not available, a member of the class can be the authority, basing his answers on sources mentioned in the reading list. For example, you may interview:
a. The control operator, on what he controls
b. The sound-effects technician, on some part of his work
c. The orchestra director, on the placement of microphones
d. A member of the technical staff, on microphones
e. Someone who knows, on the acoustical treatment of studios
f. A dramatic director, on the qualities of a good radio actor
g. A director of discussion programs, on hints to young discussers
h. An experienced interviewer, on his problems
i. A dramatic director, on the use of theme and incidental music
4. Divide the class into groups consisting of a chairman and four colleagues. Each group should analyze the production methods used in two or three broadcasts of a good series. Each student should examine one phase of the director's work as revealed in the broadcasts. The results of this study may be presented in a series of eight-minute panel discussions.
5. Each class member should direct a nondramatic program. This
category includes interviews, discussions, on-the-spot broadcasts from such occasions as conventions or celebrations, and broad. casts edited from recordings of actualities. He should hand in a report summarizing what he did and what he would do differently next time.
6. As a final project, each class member should direct a fifteenminute dramatic program. For purposes of this assignment, this category includes daytime serials, mystery and crime shows, documentaries, adaptations of stories or stage plays, and plays written for broadcasting. If time is available, the director, cast, control board operator, and sound-effects technician, should tell what they learned from this experience, in a ten-minute discussion before the class. The director should hand in a report of his activities from selecting the script to the final broadcast.

## READINGS

Barnouw, Erik, Handbook of Radio Production, D. C. Heath and Company, 1949.
Carlile, John S., Production and Direction of Radio Programs, Prentice-Hall, Inc., 1939.
Crews, Albert, Radio Production Directing, Houghton Mifflin Company, 1944.
Duerr, Edwin, Radio Acting, Rinehart and Company, 1949.
Kingson, Walter, and Cowgill, Rome, Radio Drama Acting and Production, Rinehart and Company, 1950.
Levenson, William B., Teaching through Radio, Farrar and Rinehart, 1945, pp. 103-135.
McGill, Earle, Radio Directing, McGraw-Hill Book Company, 1940.
Tyler, Kingdon, Modern Radio, Harcourt, Brace and Company, 1944, chap. 3.
Waller, Judith, Radio: the Fifth Estate, Houghton Mifflin Company, 1950, pp. 112-121.
White, Melvin R., Beginning Radio Production, The Northwestern Press, 1950.
Willis, Edgar E., Foundations in Broadcasting, Oxford University Press, 1951, chaps. 12, 14.

## chapter 21

## DIRECTING TELEVISION' PROGRAMS

A GOOD television show blends sound and sight into a unified composition. The ideal TV director-producer is qualified to handle good radio productions and in addition knows something about photography, principles of pantomime and stage business, stagecraft, costuming, make-up, and choreography. He thinks of these things in relation to home rather than theater reception, electronic rather than photochemical reproduction, small-audience rather than theater psychology, small rather than large-screen projection. The beginner, however, should not give up in despair. He should remember that our TV director-producers had less information than he has when they began work a few years ago.

UNDERSTANDING HIS JOB

- THE TV STAFF. Besides writers, announcers, sound technicians, engineers, and musicians, whose duties are similar in radio and television, the TV producer must work with technicians who have no counterpart in radio. At network stu413
dios, the following specialists must be consulted as soon as the director gets his assignment, since much of their work must be completed before rehearsal time:

The designer, who plans the sets and sometimes properties and decor.

The construction carpenter, who may be expected to build Rome in less than a day.
The painter, who must know electronic responses to color and techniques of perspective and shadowing.

The facilities director, who knows where to get an eighteenthcentury brooch or the larva of a Florida fruit fly.

The costumer, who designs and makes the necessary covering for ballet fairies, knights in armor, or just ordinary people.

The costume mistress, who has charge of the wardrobe stock and issues it to the right people in the right sizes.

The technical director, who sees that electrical outlets, generators, and other equipment are in good operation and arranges the cables so people won't trip over them.

The make-up artist, who is needed during the planning stages if unusual problems of character representation are involved.

The title artist, who prepares title cards with credit lines, as well as slides, Iransparencies, or special effects.

Photographers, who are sometimes needed to prepare background murals or special titling effects, and always for publicity purposes.

Animators, whose skill may be needed for expository illustrations or cartoon highlighting.

Cinema cameramen, who may be needed to shoot outdoor scenes, special sequences, or part of the commercials.

During rehearsals and final production, other members of the TV production team enter the play. These include:

The video engineer, who manipulates the controls to keep the right cameras "hot" and in phase.

The audio engineer, who cuts in the right microphones with balanced volume and feeds in records or transcriptions as needed.

The floor carpenter, who, with his stage hands, sets and strikes the scenery.

Property men, who supply and remove furniture, and other properties, but sometimes must not move electric lamps because that is a function of electricians.

An electrician, who, with light meter, has charge of the lighting staff, which adjusts the various lights to get a shadow behind the murderer or to remove the shadows from the hero's face.

Cameramen, who must use the right focal lengths to get long, medium, or close-up shots as required, who "pan" or "tilt" their cameras to follow action or emphasize effects desired by the director.

The microphone boom man, who, seated on a mobile dolly, follows the action with the mike. The mike is suspended at the end of a boom; its distance, direction, and angle are controlled by cables.

Pushers, who dolly the cameras toward or away from the scene, moving them into position for the next shots.

And, not to be overlooked is the floor manager. He is the man with headphones who receives directions from the producer in the control room and relays them to everybody else except the cameramen, who receive their orders directly from the producer.

Projectionists, who, in a separate room, cut in the slides and films as required. They get directions from the producer by wall speaker or headphones.

Actually, all of this is not as complicated as it sounds. The jobs are combined, especially at nonunion stations, and most shows are handled by a staff of ten or twelve in addition to the cast. (Ills. 23 and 26.)

- STUDIOS AND LAYOUT. A production studio for television can be any reasonably large space, usually battened on walls and ceiling by acoustic absorbent material. One wellknown TV production studio has room for only one set at a time, so that flats and backgrounds for seven hours of telecasting must be stacked in the order in which they will be needed. Between shows or scenes, while the stationary camera is focused on title cards, stagehands remove the set just used to expose the one needed next. In contrast, a newer New York studio is so large that eight or ten full sets can be in place at once. At Station KOTV, Tulsa, the studios are on the ground floor with direct entrance from the street so that scenery and heavy properties can be moved by trucks. The sets in use are lined against one wall; a space along the opposite wall is kept clear for camera pathways and other studio traffic (Ill. 19).

Newer studios, like WGN.TV (Ill. 9) have grids useful for hanging lights and entire sets, and catwalks for those who manipulate lights and scenery. Control rooms are several feet above the studio floor, in order that those in charge of the show can follow the action. The producer is commander in chief. With him in the control room are the program director, the production assistant, and the video and audio engineers. A producer representing the advertising agency may also be present (Ills. 22 and 24).

At least two cameras are used for most programs to follow the action; a stationary camera is focused on title cards and other illustrative material. A cable from each camera leads to a separate viewing screen in the control room, and an additional screen shows which picture is broadcast (III. 21). The producer decides which shots go on the air and usually operates the switches that cut cameras in or out. Sometimes he signals the video engineer who operates the switches.

- CAMERAS AND SHOTS. Television cameras usually have three lenses with different focal lengths so mounted that they can be interchanged easily. From an average distance, the wide-angle lens picks up a full length shot of a person; the medium lens, a picture from the hips up; the small lens, a close-up of head and shoulders (Ill. 34). Shots of whole sets are used on occasion, and distance shots are obviously necessary for outdoor scenes. For studio production, however, best results come from a predominance of close shots which provide large pictures of significant portions of the scene, or focus attention on the actors who at the moment have the center of the stage.

Telephoto lenses are used at football games, for example, to catch distant action and seemingly bring it close to the screen (Ill. 33). Special microscopic attachments can be added to enlarge tiny objects. A zoomar lens can change the apparent distance of the shot while keeping it in focus. The
effect is to bring the picture closer, as though the camera were moving toward the scene. (Ill. 34.)

Most studios have a camera mounted on a "dolly" which can be moved while the camera is in action or between shots (Ill. 20). Thence comes the name, "dolly shots." Turning the camera from side to side to follow an action or to change emphasis is called "panning" or "to pan." A "tilt shot" is achieved by tipping the camera up or down. "Trucking" is moving the camera parallel to the action taking place. "Superimpositions" or, less elegantly, "superimps," are made by using two cameras at the same time: a piano player can be seen in full while his fingers at the keyboard are shown close up; ghostly figures, played against a black drop on one camera, can enter a scene enacted on another camera.

A "fade-out" is accomplished by reducing the light transmitted through the camera so that the picture darkens and leaves the screen black; a "fade-in" is obviously the opposite. When one scene is "faded in" as another is "faded out" so that both are momentarily overlapped, the result is a "crossfade."

A "dissolve" is made by bringing a scene into focus at the beginning of a shot or by throwing it out of focus at the end of a scene. One scene can be "cross-dissolved" with another by bringing in the new picture while the other is partly in focus. This is the same as a "lap-dissolve" in motion pictures. A dissolve is the opposite of a "take," in which a camera, already focused, picks up the scene with full brilliance. A "take" is, therefore, the same as "coming on cold" at the microphone.

Over-the-shoulder shots, elevated shots which look down on a scene, profiles, silhouettes-possible uses of the camera are limited only by ingenuity. Understanding the camera and its capacities is an important requisite of the TV producer.

As a part of his advance planning, the producer decides what types of transitions to use. Although no absolute rules can be established, an example will illustrate the possibilities.

Suppose a situation ends with an actor leaving the room. If he is simply going from room to room, or through the door to out-of-doors, an action transition can be used. One camera shows him leaving the room; he passes through the door into an adjoining set where another camera instantly shows him coming through. If the second situation is supposed to be at another place with other people, but at practically the same time, another camera "takes" the second scene. This is a cut transition. If, however, time is supposed to elapse between the two situations, a fade transition can be used. If the action of the two situations is closely related in content as well as in time, a cross-fade might be the best way to indicate it. Dissolves, which ordinarily should be used sparingly, are good for leading into flashbacks, to indicate a lapse into unconsciousness, and other time-mental situations, although they are sometimes used in place of a simple fade.

- STAGING. The facilities director is in charge of sets and properties. He should see that the station has an adequate supply of standard set units so that the producer can use what is available and thereby avoid the expense of new construction.
Flats, familiar to any student of the theater, are used in most TV sets. These are wooden frames nine or ten feet high, covered with canvas or similar material. When sized with glue, they may be repainted as many as eighty times with water color or casein-base paints. Stock sizes are likely to run four, five, and five feet nine inches, with filler pieces eighteen inches or two feet in width. For interiors they can be painted, wall-papered or textured. Molding, columns, and other decorative materials give needed variations. For exteriors the flats can be painted, textured, or surfaced with false brick or blocks of celotex to represent stone. Door and window sections can be varied by changes in hardware, draperies, and molding. Interlocking units of bookcases, mantles, and cupboards should be available. Flats should be built with at-
tached bracing to avoid the necessity of screwing detachable braces into the floor. Platform pieces, scaled to fit each other, can be used variously as steps, speakers' stands, bars, hotel desks, or stairway landings. (Ill. 25.)

There has been some experimentation with block building units, hollow boxes which can be piled into almost any combination to represent walls and can be covered, or textured, according to need.

Backdrops, primarily for variety shows or dance routines, are sometimes useful to represent outdoor views as seen through windows or doors.

Photographic murals, blown up to wall size, can be used as background for news, discussion, or education programs, and to replace backdrops in dramatic shows. Some stock murals can be purchased at about the price of good wallpaper.

Cycloramas, of plaster or drapery, are used for light and shadow effects behind scenes which do not require a realistic setting.

Sets may be classified as follows:
Realistic, which look like the places in which the action takes place.
Stylistic, which capitalize on symbolism. These could include a simple backdrop with a painted Fujiyama to indicate that the show is taking place in Japan, or exaggerated decor to suggest the Victorian period.

Abstract, either geometric decoration or contrasting lights and shadows. Frequently used for fashion shows, dance groups, and some musical numbers.

Display settings, including counters, show windows and similar spaces, used to exhibit merchandise.

The plain office set, usually just a desk or table and chairs with suitable acoutrement, for programs of news, discussion shows, talks, and other programs when the background is not an integral part of the show. Usually used against a plain blue or gray cyclorama or flat.

Miniatures are good for opening shots or to represent a large area like a village, countryside, or city.

Novelly backgrounds of all kinds, including cartoons, to back up variety numbers, "kid" shows, or any light program.

An apron set or just no set at all, for audience-participation shows, some speaking programs, and similar productions which do not require a background. Such programs are frequently presented simply against a plain curtain.

Planning the staging begins with a study of the show's needs and an examination of the studio floor plan. Every major studio has scaled floor plans on which the producer, with the aid of the designer, can indicate exactly where sets and properties will go. Tiny scaled models of the furniture can be placed on the floor plan to see if they will fit (Ill. 17). Projection scales, triangular-shaped flat pieces representing the areas which different lenses will include from various distances, can be placed on the floor plan to determine whether the staging is properly planned in relation to probable camera positions.

Even the most casual televiewer must have noted that TV sets are usually much simpler than those used in the theater. Ills. 29 and 30 exemplify this point for both network and local programming.

Color is an important factor in all TV staging, as the electronic pick-up of color is as yet tricky and variable. Most commercial producers follow rules-of-thumb, but few are in complete agreement. They do agree that plain black and plain white should be avoided. Black is usually represented by dark gray, brown, or blue to avoid the glare which sometimes accompanies a full black treatment. White can be approximated by the use of yellow or pale blue. Shiny reflective white surfaces, such as those of refrigerators, can be toned down by a spraying of liquid wax or a treatment of Bon Ami. Pastel colors are best for things which should appear white on the receiver. Blue seems to be the most dependable color in its shading variations; indeed, one Texas producer paints all his sets in shades of blue. One Midwest designer uses a red filter to look at the colors in designs or final sets to see how they will appear on the screen. This, he says, gives him a good working
basis for selecting colors. Red, however, is the most tricky color of all; some orthicon tubes pick up a certain shade of red as black, while others reproduce it as white. The final test of all color combinations can be made only with the camera, tube, and lighting to be used on the broadcast.

The use of line in designing sets can greatly aid in establishing the mood of a show. ${ }^{1}$ Horizontal lines tend to give a feeling of quiet, rest and repose. Strong diagonals produce a sensation of violent reaction. Vertical lines are associated with aspiration and spiritual uplift. Straight lines express rigidity and masculinity; curved lines, femininity. Broken lines suggest informality or disorder, while irregular lines suggest excitement.

A few standard principles can be stated with some assurance. One is that large patterns are helpful if not used too freely. Striped furniture might be used against a wallpaper with a large floral design, but to dress a character in checkered plaid against such staging would probably seem too "busy." Another rule in designing TV sets is to exaggerate. Shadowing, graining, and perspective lines should be carried to a degree that might seem overdone for ordinary stage work. However, for those portions of the set included in close-ups, the exaggeration must be only moderate. And, one final safe rule: Use different stage levels. In planning variety shows, put the numbers on different levels. For a play, include a staircase with a landing if you can. For a talk, plan visual illustrative materials of different sizes to force the camera to make changes.

Although some theater and cinema directors believe their experience qualifies them to direct television shows, television directors with five or six years of experience say that nearly every show presents different problems. They believe it will be some years before standard principles or conventional ap-
${ }^{1}$ See Howland Bettinger, Television Techniques, Harper \& Brothers, 1947, for a discussion of the psychology of line, mass, and form.
proaches emerge. The field is open for directors with fresh techniques and creative imagination.

- LIGHTING. Television presents lighting problems quite different from those of theater and cinema, although it has borrowed liberally from both. Some procedures which generally get satisfactory results have been developed for lighting telèvised scenes. (III. 28.)
The basic overall lighting of a set is called key-lighting. This is the amount of light necessary to get a clear picture. Broad, diffused lights give overall illumination rather than sharp, focused beams. These lights are usually at camera height, predominantly in front of the set, although most directors make some use of side-lighting as part of key-lighting. A gas discharge type of light (i.e., fluorescent, mercury vapor, cathode) is generally recommended, as these lights give off less heat and have a good spread of beam.

Fill-lighting is done by overhead lights. The purpose is to illuminate areas which might otherwise appear dark; it also helps to give the illumination a more natural appearance.

Back-lighting gives depth and perspective to pictures which otherwise appear flat. These lights, usually incandescent, are hung overhead at the back of the set and angled slightly toward the performers so that some light falls on the head and shoulders.
Modeling lights, properly used, minimize bad features and accentuate good ones. They are usually incandescent spots. When hung directly overhead, they direct attention to such matters as the size, shape, and general outline of the performers; from the side, they eliminate shadows and bring out highlights in the hair. The obe light, mounted on top of the camera, helps to eliminate shadows under the eyes and chin.
Highlighting, accomplished by spots, brings out the center of interest. Follow-spots, as the name suggest, follow the star performer as he or she moves around the set.

With today's improved cameras and lenses, the amount of illumination required is not as great as it was a few years ago. This, combined with improved air conditioning, has made TV working conditions much more comfortable. It is not the amount of light that matters so much in TV as the way in which it is used. Furthermore, the scale of contrasts is not as great as for film work; in film, the scale of degrees of light and shadow may be as great as $1-500$; in TV it seldom exceeds 1-20.

In planning the lighting, the producer must give full consideration to the movements of performers. As they change position, their relationship to the lighting changes. In motion pictures this problem is solved by arranging a new lighting set-up for each shot. But in TV the producer must plan for proper and balanced lighting for all positions in which the basic illumination is not satisfactory.

- MAKE-UP AND COSTUMING. Methods of producing televised shows are frequently adaptations of basic techniques used in theater and cinema. This is particularly true as far as make-up and costuming are concerned.

Few TV announcers, newscasters, or speakers use make-up. For most people, however, a good basic suntan gives a more healthful and attractive appearance. Cake foundations rather than creams are usually recommended, as they do not reflect the light.

A bit of light brown applied along the side of the face to the chin will outline the face more definitely. Bluish-red lipstick, a gray eyebrow pencil, and tan powder are usually recommended. Beyond these simple applications, make-up naturally depends entirely on the characterization. Features to be accentuated should be outlined in grays or browns, but the choice depends on the lighting. Generally speaking, the better the camera, the less make-up is needed. Moreover, because of camera close-ups, make-up is less exaggerated than for stage
work; wigs and beards must be as carefully applied as for motion pictures.

Costuming for TV offers few problems peculiar to the medium. The costumes should be in harmony with the personality of the character, the mood of the program, the period and locale of the action. The color of a costume must be considered in relationship to the sets and to other costumes. Patterns are generally good, but intricate prints should be avoided as they tend to seem "busy." Dark blues and browns for men's suits, and light blues, orange, and yellow for dresses are safe color selections.

## GENERAL PRODUCTION PROBLEMS

In making his advance preparations, as well as in rehearsals, the producer should follow these rules or principles:

1. Use "establishing shots" for every new situation. (See term, "situation" in Glossary.) In cinema, the standard approach is to have a long shot which shows the whole setting, a medium shot which includes the central area of the action, followed by a close-up of the person who is the center of attention. In TV, the opposite approach is sometimes most effective; a close-up of an arrowhead, while the announcer is introducing a program, may lead into an interview on Indian lore. In such a situation the locale is not important, but the idea is. The arrowhead establishes the idea. Where locale is important, miniature settings can be used for long shots, the whole set for a medium shot and the significant element for a close-up. This approach, however, is seldom as effective in TV as it is in movies. The producer must decide the important element in each new situation, and his establishing shot should emphasize it.
2. Make it big and keep it simple. Avoid lengthy shots of a whole set, or many people, or many different objects. One successful producer of nondramatic programs estimates that 85 percent of the time should be used in close or medium.
close shots of objects, charts, or demonstration materials. The same principle is essential for dramatic presentations.
3. Get variety. A production which involves too many quick camera changes gives a jumpy effect. However, short of that undesirable result, the producer should plan on relatively frequent changes in shot length and angles.
4. Make the camera "act. Significant camera movement with dolly and pan action gives variety and emphasizes important points. Such movement should be meaningful, however, and not stuck in for the sake of variety. The pictures should be guided by a dynamic concept; the action must always be pressing forward.
5. Use emphasis shots freely. Focus on the twinkling toes of a dancer, the time bomb about to explode, the map showing enemy positions, the football about to be kicked.
6. Get reactions as well as actions. Best results are often obtained when reaction rather than action is shown. To see the expression on the actor's face as he hears a line may be better than to see the speaker. A boxer receiving the blow makes a better shot than the boxer delivering it. A quiz contestant hearing the question is better than the emcee asking it. There are, of course, exceptions-a tennis player hitting the ball is better than his opponent waiting to receive it.
7. Don't expect the impossible. The director should learn what can be done with available equipment and to work within its limitations. Let us say that camera \#1 is used for extreme close-ups and that it is in action at stage right. The producer wants an extreme close-up for some business at stage left. Camera \#1 cannot be used at stage left without an intervening shot from camera \#2 while \#1 is being moved. Even then \#1 cannot be moved completely around behind \#2 because of the large cables leading to \#2. So \#1 has to be edged up against \#2, where it takes its shot. Obviously, \#2 must then take over on the same scene at stage left before \#1 can move out again or before \#2 itself can be used in another position.
8. Aim for unity and balance. Unity requires that each shot tell a single story, including only those elements which contribute to it. A two-shot sequence should not be confused by the movement of other characters; an emphasis shot should, if possible, exclude objects and actions which do not contribute directly to the central idea. Balance is poor if the frame is weighted too heavily in any direction. A split shot in which two actions are taking place simultaneously violates both unity and balance unless there is a conscious purpose in associating them. Double actions should be closely related in content.
9. Avoid awkward framing. Feet which stand on the bottom line of the frame, a head which borders the top of the picture, or a hand reaching out of the frame violate this principle. The center of interest ought to be within the middle three-fourths of the screen.
10. Avoid awkward attachments and distracting lines. A clock directly above the head of the actor, for example, might give a ludicrous effect. Lines leading out of the corner, or uninterrupted horizontal lines across the picture are bad.

During dress rehearsals and broadcasts, the producer keeps thinking ahead. He notes what shots will be needed and gets them set up. "Get a two-shot on Bob and Jane, with \#1," he tells the floor manager, while camera \#2 is taking a medium shot. The manager motions to the pusher who dollies \#l camera into position. The cameraman frames and focuses the couple (a two-shot). "Take 1," says the producer and the switch is flipped to put camera \#l on the air. A small red light on top of \#l camera comes on showing the performers that this camera is "on talley."

## - DIRECTING MUSIC AND VARIETY SHOWS. Musical

 groups, apart from variety shows, are not common in TV. Only a few instrumentalists and vocalists have programs. Music is mainly an aural expression; TV is predominantly visual. The result is that most music programs are really tele-vised radio shows. However, the coöperation of cameraman and producer sometimes results in exciting programs. The usual techniques are simple. The camera changes from one instrumental group in an orchestra to another as it takes up the theme or melody. Shots are varied by picking up close-ups of the director, the hands of an instrumentalist, or the reactions of the studio audience. Superimps, low-angle shots, elevated or over-the-shoulder shots, and zooms are occasionally used to make the music pleasurable to watch as well as to hear. A few experimental programs have used pictures suggested by the music and abstract designs in attempts to express the music visually.

In variety programs the musical numbers are varied by dance groups, comedians, magicians, acrobats, or any other available talent. An emcee, frequently the orchestra leader, makes introductions and transitions. Such shows range from simple "apron jobs" to elaborate productions with several complicated sets. They vary from a miscellaneous collection of talent to highly integrated productions with central themes. Themes like "winter sports," "love," or "Paris" might motivate every number in a program: the music is related to the topic, the sets portray it, the ballet group expresses it in storydance, and the comedians tie their jokes to it.

Presenting ballets or dance groups is one of the most difficult camera jobs in television. Dancing, by its very nature, would seem to be a "natural" for TV. Yet TV is at its best in close-ups while dance groups, especially ballets, must be seen as a whole for full appreciation. The answer rests in the work of the author and choreographer. Dance productions should incorporate as many spots as possible in which only one, two, or three dancers are in action. Then the producer can get meaningful variety into the show.

- DIRECTING TALK PROGRAMS. Visual aids for talks and discussions were considered in an earlier chapter. The
producer's job is to help place and display illustrative materials so that speakers can refer to them easily and the camera can pick them up effectively. (Ill. 31.)

Few special settings are needed for the average talk. A preacher might stand before a painted cathedral arch. The set for a political speaker might include a large picture or cutout of his candidate. Interviews might be placed in a simple living room set. Round-table discussions might use a V-shaped table arrangement, with the moderator at the apex. A standard office set might suffice for demonstrations. Elaborate settings for talk programs are not generally needed. (Ill. 32.)

These simple rules apply to most nondramatic programs:

1. Place all objects to be shown on a small table or shelf below the sight-line of the camera. The speaker can reach down for them without calling attention to his movement.
2. Don't show objects, charts, etc., until you are ready to talk about them.
3. Be sure that all visual aids are held long enough to be seen and understood. The viewer needs to do more than see the object; he should have time to see what it means.
4. Use almost any of the camera techniques that help make other kinds of shows effective.

A situation that arose in a recent talk program illustrates how individualized most production problems are. A lecturer, demonstrating a piece of equipment, wanted to indicate something on a chart with a pointer. The set-up required that the chart be placed across the room. Now an actor can cross a room in a play, with camera following him, and the action of the play is not stopped. However, if a lecturer takes time out to walk across the room, the show is interrupted until he gets there. The solution was for the lecturer to pick up a pointer and start to point it toward the chart. Another camera cut in on a close shot of the chart, with the end of a pointer showing against it. An assistant who was holding this second pointer stood outside the frame. Still talking, the lecturer moved
across the room, and the boom mike preceded him to keep his volume level. When he arrived at the chart he exchanged pointers with the assistant, the assistant moved out of the way, and the camera changed to a medium shot which showed the lecturer and his chart together. Similar problems frequently arise in talk programs. It is the producer's job to solve them.

- DIRECTING DRAMATIC SHOWS. Casting problems for televised plays are not very different from those of theater and motion pictures. Skillful use of voice and body to express ideas is the first requisite. The actors, however, need to resemble the characters more closely than is necessary for theater acting, since there is a limit to what make-up can do for close camera shots. Unlike radio and motion pictures, TV requires that actors have quick and dependable memories. Furthermore, unlike any other modern dramatic medium, TV places a premium on performers who can ad lib dialogue and find effective words to fit almost any situation. Some TV plays leave part of the dialogue to the creativeness of the actors; the situation of a scene is outlined, and the actors work out the lines in character. A more common reason is that quick wits and verbal skill are necessary if anything goes wrong during a production. In a movie, mistakes can be corrected by reshooting the scene; in radio, the actor has a script to get back to; in the theater he has a prompter, and his mistakes with one audience can be corrected the next night. In a teleplay, the actor usually has only one chance at a final production. His one-night audience might fill a New York theater every night for years. But he has no second chance. So the most valuable TV players are those who can take command of a situation in which lines are forgotten or cues missed, and rescue the scene without noticeable awkwardness.

First rehearsals are always "dry runs," without equipment, in any available room. Actors and director work out characterization, interpretation, pace, and mood. Next may follow a
"business rehearsal" in which performers walk through the action on the set; tentative stage positions are indicated, sometimes by marking them in the floor with chalk (Ill. 18). Then comes a technical rehearsal, with lights, camera, and floor crew. This is usually a long, detailed job.

Total rehearsal time for a first class show may run as high as thirty or forty hours. Often, because of the budget and limited studio space, the time is much less. If he is lucky, the producer may get a few run-through rehearsals where lines are polished and technical factors perfected before the dress rehearsal.

Nearly everything we have said about general TV production applies to dramatic performances. The dramatic producer should aim for simplicity, emphasis, and rhythm. Simple, straightforward storytelling by uncluttered shots which follow the dialogue visually is usually best, and is certainly safest. But if the play or scene can be enhanced by camera tricks and surprise shots, they should be used. The point is that tricks and devices should not become dominant.

Emphasis in dramatic production means that words, lines, scenes, and objects related to key situations should be pointed up. Naturally the actors will point their lines and actions by stress, duration, and inflection. The camera, too, can aid. It can linger on a significant facial expression, anticipate a line by looking at an object which is going to be mentioned, or cut in a succession of close-ups at key moments.

Pace variations of the script and story can be accompanied by pace variations in the shots. Solemn, thoughtful passages can be paced by pictures which hold the scenes longer than usual. Fast action can be accompanied by quick short shots, cutbacks, and swift variation. The camera can aid the rhythm by increasing the tempo of the shots as the climax approaches.

Acting for television is about the same as stage acting, except that it must be done on a much smaller stage. The lenses used in TV have a shallow depth of focus. The maximum
front-to-rear working space for significant action, without getting out of focus, is usually about eight feet. However, by the skillful use of the camera and by change of lenses, large action can be kept fairly well in focus. Movement is the essence of both motion pictures and TV, and the wise director keeps some stage action or business going most of the time. However, most human movements have to be slowed down or they look jerky. (Ill. 20.)

As with all arts, definite and specific rules for directing TV plays are impossible. Perhaps the best example to illustrate some types of problems is "The Mysterious Mummy Case," which NBC aired several times during its experimental days with television. A 4000 -year-old mummy was supposed to be responsible for the death of anyone who disturbed his forty centuries of privacy. Each time one of his victims died a candle went out and could never be relighted. The main stage was too crowded to allow a close-up of the candle, so an identical burning candle was placed in another room with camera \#2 focused on it. An effects man blew wind across the stage to make that candle flicker; then a switch was made to camera \#2 in the effects room, where candle two was seen to go out. Someone put out the candle on the stage so that when a switch was made back to camera \#1, the characters were trying vainly to light the candle there. Camera \#2 was switched back in for a close-up of a hand trying to make candle two burn; it wouldn't, because the effects man had just treated it with carbon tetrachloride. This device of duplicate sets and properties was used again in the same show. One of the deaths took place in a photographic darkroom where a scientist had just developed a film showing the ectoplasmic center of the mummy. The scientist got excited and knocked over some books; in turn, the books tipped a bottle of ink which blotted out the image on the negative. The scientist grabbed the film, overturning a bottle of acid from which smoking fumes arose. Choking from the fumes, the scientist tried to open the door,
but found that the latch had fallen into place, locking him in the room to suffer the mummy's vengeance. During this scene cutbacks were made to the effects room to show the latch falling into place, the film, the ink bottle falling over, the acid bottle, and the shaking of the door as the scientist tried to escape. Effects men were busy; one pulled a lever to tip the ink bottle; another put black paper over the film to make it look as if ink had been spilled on it; a third sprayed ink upward through an atomizer to make the stain grow on a blotting pad; the fourth blew asthma powder through a tube to create yellowish fumes.

A similar problem faced by one of the authors of this book required three sets. A marionette was to climb out of a light socket and shake hands with a man. The living room set, where the man was seated, had a real wall, and the light socket was fastened in it. The lid was presumably pushed open by the marionette inside it. An identical false wall and socket lid were constructed so an effects man could push the lid out from behind; this was shown in a close-up on another camera. A third false wall with a large-scale replica of the covered socket was made big enough for the marionette to crawl through. The marionette crawled through the magniscale opening, close-up, and was then shown standing beside the original socket shaking hands with the man. No one questioned whether such a large marionette could possibly have come through such a small socket.

Problems of this kind are naturally worked out in advance of rehearsal periods. Others may arise during rehearsal, but the need for adequate advance planning is evident.

## TELEVISION FILMS

Films used in television are of three kinds: productions originally made for the movies; films of TV shows made during telecasts; films made for distribution to TV stations.

The older theater films are generally unsatisfactory from

17. Pre-Rehearsal Work. Robert Wade and Robert Elwell, of WNBT, using model and floor plan. discuss possibilities. (Photo by courtesy of the National Broadcasting Company.)
18. Floor-Marking During Rehearsal. (Photo by courtesy of WKY.TV.)


19. KOTV Studio (deseribed on page 415). Unusual layout has all production areas arranged along one side of studio. (Photo by Exel.)
20. Production in Action. Overall shot of a CBS.TV studio in New York shows Raymond Massey, Eva LeGallienne, and Patricia Kirkland on stage in a scene from the Ford Theater's production of Years Ago. (Photo by courtesy of the Columbia Broadcasting System.)


21. "Shading Desk" at WRGB. Three screens show what each studio camera is seeing, the next two what the movie and slide projection cameras are seeing. and the last the picture actually being broadcast. (Photo by courtesy of General Electric Company.)

22. Directors at Control Board. Control panel overlooks the WRGB studio-audio director at left. video director in center. and production director at right. (Photo by courtesy of General Electric Company.)
23. Looking Down from Control Room on Scene from "Studio One." Floor manager signals "ready" as cameraman focuses on boy in front of house-front flat scene from Fa ther and the Angels. (Photo by courtesy of the Columbia Broadcasting System.)

24. Producer at Work. Shot is from control room on the same level as the studio. (Photo by courtesy of Dumont Teler ision Network. bl William Kahn.)
25. TV Stagecraft. Production facilities crew are shown in workshop.
(Photo by courtesy of the National Broadcasting Company.)


26. Technical Floor Crew in Operation at CBS-TV Studio. Floor manager, who transmits director's cues, is crouched in center with hand upraised about to throw a signal. (Photo by courtesy of the Columbia Broadcasting System.)
27. Sound Truck. Sound-effects man doubles at recorded and manual sound effects. Purpose of two playback arms on left-hand turntable is to permit continuous reproduction of a recorded sound. (Photo by courtesy of the Columhia Broadcasting System.)


28. Lighting Crew at Control Switches. Lighting is controlled from central switchboard at WNBT. (Photo by courtesy of the National Broadcasting Company.)
29. Simple Set in Dramatic Program. Scene from "Roscoe Karns, Inside Detective," shows the simplicity of store set. (Photo by courtesy of Dumont Television Network, by William Kahn.)


30. One-Camera Simple Talent Show in Production. (Photo by courtesy of WTMJ.TV.)

31. Use of Visual Device in Talk (Sunday School Lesson). Flannel cutouts cling to flannel covering of board mounted on easel; figures can be changed readily as the story develops. (Photo by Jack Logan.)
32. Office Set. Simple props suggest setting for educational TV show on health. (Photo by Jack L.ogan.)


33. Sports Pick-Up. Shot is taken from high in the press hox, overlooking Owen Siadium, University of Oklahoma. (Photo by courtesy of WKY.TV.)
34. Zoomar Lens Makes Instantaneous Cutting Possible. It can go from long shots to close-ups, wide angles to closeups, and vice versa, without switching cameras. (Photo by courtesy of the Columbia Broadcasting System.)

35. Remote Television Cruiser Truck of Dumont's New York Affiliate, WABD, Shooting Fifth Avenue Scene for Special Telecast. (Photo by courtesy of Dumont Television Network.)
a technical point of view, and Hollywood producers are reluctant to release their newer and better features for telecasting. Films of live programs, made to distribute to nonnetwork stations, have various trade names such as kinescope recordings, telefilms, etc. Their quality improved markedly during 1950, and they seem likely to become a permanent part of the TV business. More TV film is produced in an average week than Hollywood has ever released in a year.

The traditionally high cost of film productions led to early assumptions that it would not pay to produce TV films. The use of multiple cameras offers a partial solution. Several angles and distances are shot at the same time, eliminating the necessity for stopping the action while new camera and lighting set-ups are made. Careful preplanning permits almost continuous production. In the editing room the TV film is assembled from the most effective shots and combinations. There are at least four clear-cut advantages of such films: mistakes can be corrected; frequent use of outdoor scenes gives better natural lighting; colors can be planned in terms of TV reception conditions; more white and light areas are included, which increase the clarity of reproduction on receiver screens.

## EXERCISES AND TELEVISION ASSIGNMENTS

1. Visit a nearby television station. Make a sketch of the floor plans, showing the relationship of studios to control rooms, storage space, facilities department, offices, projection room, etc. What are the advantages and disadvantages of the layout?
2. Note the type and placement of equipment, as well as camera and microphone facilities.
3. Find out the facilities for scenery, special effects, and projection.
4. Permission usually can be obtained to observe a live production. Make a list of the people, aside from talent, who work during the production. Identify the floor manager, audio engineer, video engineer, director, grips, etc. Where do they work? How do they keep in communication with each other? Make a list of the
people who must have worked on the program but whom you do not see.
5. Watch a television program on a receiver. Try to keep track of the camera work in relationship to the action. For example, "Susan is crying-camera dollies in toward her" or "Jack paces to the other end of the room-camera, medium shot, trucks with him. Camera cuts to two-shot, close-up, of Jack and Susan." Write a report in which you try to diagnose the reasons for the camera work. Why did one camera dolly in on Susan instead of cutting in? Why did the camera truck with Jack instead of panning with him? Why was the two-shot of Jack and Susan cut in instead of faded? Reasons of emphasis, continuity, pace, or mood may govern each shot, or there may be no apparent reason for the changes. How would you have done it?
6. Choose a one-act stage play and plan the camera work for it. Make a sketch of the area in which you might stage it. Assume that you are to work with two cameras. Mark the script with camera directions including directions for the camera which is not in use; for example, while camera \#l is on one shot, \#2 must be getting into position and framed for the next shot. (You may assume certain conditions: i.e., camera \#l has three lenses of varying size, and is mounted on an ordinary dolly; camera \#2 is mounted on a crane, etc.)
7. Hand in copy including a list of the visual aids you would use in a five-minute televised talk.
8. Arrange scenery with an opening representing the television screen. The opening must, of course, be large enough so the audience can see the speaker from the waist up. Talks may be given in this setting.
9. Prepare copy, including titles and other visual material, for the first five minutes of a televised play. This may be given with a simple stage setting, aided by the audience's imagination and an introductory talk explaining how it would be done in the television studio.
10. Listen to a televised play and report on the work of the performers and the producer or director.

READINGS
Abbot, Waldo, Handbook of Broadcasting, rev. ed., McGraw-Hill Book Company, 1950, chap. 19.

Allan, Douglas, How to Write for Television, E. P. Dutton \& Company, 1946.
Bettinger, Hoyland, Television Techniques, Harper \& Brothers, 1947.
Chester, Giraud, and Garrison, Garnet, Radio and Television, Apple-ton-Century-Crofts, 1950, chaps. 16, 26.
"Court of Current Issues Television Program, The," Education on the Air, 1950, Ohio State University Press, pp. 75-110.
Dunlap, O. E., Jr., Dunlap's Radio and Television Almanac, Harper \& Brothers, 1951.
Eddy, William C., Television: the Eyes of Tomorrow, Prentice-Hall, Inc., 1945.
Gorham, Maurice, Television, The Macmillan Company, 1950.
Hubbell, Richard W., Television Programming and Production, Murray Hill Books, 1945.
Poole, Lynn, Science via Television, The Johns Hopkins University Press, 1950.
Royal, John (editor), Television Production Problems, McGraw-Hill Book Company, 1948.
Sposa, Louis A., Television Primer of Production and Direction, McGraw-Hill Book Company, 1947.
Willis, Edgar E., Foundations in Broadcasting, Oxford University Press, 1951, chaps. 15-16.

## chapter 22

## USING THE VOICE EFFECTIVELY

IIN FACE-TO-FACE communication we get and give impressions both from what we see and what we hear. In broadcasting we are limited to what we can convey with voice, music, and sound effects. We rely on our imaginations to set the stage, costume the characters, and visualize the speakers. For many people and for many programs, inability to see the performers is relatively unimportant. For others, however, seeing is believing. We go to see a movie; we stay at home to hear a radio program.

Good speaking for radio is fundamentally good speaking adapted to the requirements of the medium. Similarly, good reading and acting for radio are adaptations of good reading and acting on the visible stage. We consider here only the ways in which these basic vocal skills should be adapted for broadcasting.

> PRINCIPLES OF EFFECTIVE DELIVERY

Any succession of sounds has four characteristics: quality, force, pitch, and time.

Quality refers both to the pleasantness or unpleasantness of tones and their capacity to express emotions. Force means volume or loudness. Pitch is the frequency of vibrations. Time includes the duration of sounds and the rate at which words are uttered.
"Quality is an almost wholly emotional matter; force, a little less so; while in time the balance seems to be in favor of the intellectual . . . pitch is the most useful for indicating those fine distinctions which are the essence of the intellectual processes." ${ }^{1}$

In the following paragraphs we summarize advice that applies to various types of broadcasts:

- AVOID MONOTONY. For the speaker, reader, or actor, monotony ranks high among the seven deadly sins. The listener will not and probably cannot pay attention very long to an unvaried pattern, even of pleasant sounds. What would an audience do if a pianist repeated a few notes with the same force and tempo for five or ten minutes? What would you do if you were confronted with a solid page of small type, without capital letters, punctuation, or subheadings? Monotony of quality, pitch, and force results from too little or too much continuous muscular tension. Low tensions may be caused by weakness, laziness, or indifference; high, by stage fright or other extreme emotions. "In the matter of tempo," Weaver says, "the besetting weakness of speakers is a uniform deliberateness that makes everything seem just as important as everything else." The habit of speaking monotonously often continues after the original cause has vanished. All speakers should make continued efforts to avoid monotony by variations in their use of the four vocal elements.
- W ATCH YOUR PRONUNCIATION. Spoken words are sounds which in various ways have come to have meaning.

[^55]Laymen are likely to assume that there is one correct way of making these sounds and that it can be determined by consulting a dictionary. But if they travel, they find that some words are pronounced differently in different areas. These variations are called dialects. Moreover, when we compare the most recent dictionary with one published fifty years ago, we find that styles of pronunciation change, though not as rapidly as styles of dress. The makers of dictionaries do not assume authority on pronunciation. As Dr. John Kenyon, pronunciation editor of Webster's New International Dictionary, says, "A pronunciation becomes correct when it is in actual use by a sufficient number of cultivated people." ${ }^{2}$ This dictionary includes a list "of over 1100 words that are differently pronounced by different authorities." Thus, a pronunciation may be regarded as correct in one region and incorrect in another; incorrect in one generation, and correct in the next. There is, however, general agreement on the correctness and incorrectness of a great many pronunciations. Weaver ${ }^{3}$ lists twenty-eight "common errors to be avoided."

Those who appear before radio and television microphones will, of course, want to avoid the "common errors." If they are participating in a local program, they may use approved regional pronunciation. If the program is on a national network, they should use a pronunciation that offends none, even though it does not please all. NBC employees are instructed to follow the NBC Handbook of Pronunciation, compiled by James F. Bender (Thomas Y. Crowell Co., 1944). Another valuable guide is W. Cabell Greet's, World Words: Recommended Pronunciations (Columbia University Press, 1944).

Important persons who have secretaries write their speeches for them should take warning from the following incident. The governor of a state, reading a secretary-written speech over a major network, said "a-loom-nee" for

[^56]"alumni," "REsearch" for "research," "orIGin" for "origin," "testing for rabbis" for "testing for rabies," "dismember knowledge" for "disseminate knowledge," and "eliminate rackets" for "eliminate rickets." This must constitute some kind of a record for a ten-minute talk.

- WATCH YOUR DICTION. Fully as important as correct pronunciation of words is the manner in which they are blended in spoken sentences. This is a function of diction, which, according to the American College Dictionary, "refers chiefly to the choice of words, their arrangement, and the force, accuracy, and distinctness with which they are used: the speaker was distinguished for his excellent diction."4 An alternative meaning is "the degree of distinctness with which speech sounds are uttered."

In their zeal to pronounce words correctly and distinctly, amateurs are inclined to overdo the matter. On this point Greet says:

Particularly in these days of radio we must recognize that unstressed and therefore reduced vowels are a respectable and essential element in the English language. No broadcaster is so tedious, annoying, and difficult to understand as he who "overpronounces," stressing syllables and preserving vowels that are neglected in idiomatic and correct English speech. ${ }^{5}$

There are types or styles of diction appropiate for different occasions. Colloquial diction is properly used in animated conversation, whether in the living room or at the microphone. It should be just as correct in pronunciation and in the choice and articulation of words as the formal diction used by good speakers in speaking or reading to large audiences. However, formal diction requires greater force, a slower rate, and more clear-cut pauses between word groups than are needed or desired in conversation.

[^57]Stage diction was imported along with the theater from England, a country with many local dialects. To avoid the ludicrous situation that would arise if actors from different localities used their native dialects, theater directors required all actors to adopt a standard pronunciation and diction. Since most of the important theaters were in London or thereabouts, the speech of the cultured South Englander became the standard stage diction for other than character parts. This diction, with slight concessions in the direction of American speech, is generally accepted as standard for our professional theater.

- DO YOU REALLY MEAN What YOU SAY? This question is not cynical or impertinent. After all, announcers must read commercials for products they do not like, containing statements they do not like. And in the program announcements they must read the same statements over and over again. Actors have a similar problem. They must create characters who most of the time talk as though they mean what they say. Speakers, on the other hand, have little excuse for saying things they do not believe. However, a good many, especially those who read their speeches, give that impression by almost perfect monotony. Words and sentences look equally important on the page, and readers have nothing like the musical score to direct variations in quality, force, pitch, or rate. Moreover, in writing their speeches speakers often use clichés and stilted language that they would not think of using in conversation with friends.

Effective oral communication focuses the listener's attention on "thought units," not on series of separate words. "In purposeful speech," says Bassett, "words are combined in groups according to the ideas and images the speaker wishes to communicate. Without clear thinking, there can be no accurate grouping, and without clear grouping, no clear expression of thought. . . . The groups are separated from
each other by pause and change of pitch. Furthermore, all words within each group are usually merged and blended by uninterrupted utterance." ${ }^{\text {® }}$

## THE ANNOUNCER'S DELIVERY

In 1928-1929 leaders in the broadcasting industry became "diction conscious." They employed language specialists to set pronunciation standards and established courses to teach announcers to use standard diction. Diction awards were offered to encourage precision and "correctness." These prizes were soon discontinued because announcers began to love the beauty of their voices.

- STYLES IN ANNOUNCING. Five styles of announcing have been prominent at one time or another during our thirty years of broadcasting.

The first major "school" emphasized precise diction, pearshaped vowels, and formality. This method developed partly because it could be more easily understood in the days of less efficient microphones and receivers. Currently, and quite naturally, serious musical programs are announced in this "purist" style. Indeed, most straight announcing remains fairly formal.

The second style became popular in the 1930's, with the growth of radio advertising. Announcers were told to "punch" their commercial copy-and they did. The characteristics of this style are an increase in volume, a staccato pronunciation, and a proclamatory manner. Its original purpose was to get attention for commercials, but its effectiveness was weakened when nearly all advertising copy was read in this way. In 1950, a few national programs and many station announcers used this technique.

A third trend, dominant in the early 1940's, emphasized the conversational manner. Writers on broadcasting have always urged this approach but it had been little used. The
${ }^{6}$ Lee Emerson Bassett, A Handbook of Oral Reading, Houghton Miffin Company, 1917, p. 30. conversational style is characterized by normal volume, underplayed emphasis, and the language of direct talk. The purpose is to sound "sincere" and "natural."

An obvious use of the conversational manner is the "chummy," intimate style. At its best it sounds friendly and helpful; at its worst it sounds like wheedling. Most common on daytime serials, it has found its way, along with singing commercials, into almost every type of program. As with other styles, it loses effectiveness if surrounding broadcasts also use it.

During the late 1940's there was a growth in "personality" announcing. Two conditions produced this trend. One was that radio commercials were getting a good deal of criticism and some listeners were ready to smile on an announcer who treated his sponsor facetiously. The other was the growth of disk-jockey programs in which announcers have considerable freedom in ad-libbing. The result was a wide variety of personality approaches; sponsors and products were "kidded," slang was given preference over good English, and the boys tried to out do each other in being clever. Arthur Godfrey was a factor in the growth of this school. His planned chaos and orderly disorder were misunderstood by imitators, who seemed to feel that advance copy, careful planning, and overall unity were not necessary. Nearly every station now sports a disk jockey of the personality school, and nearly all of them have their largest followings among teen-age listeners.

In television, announcers generally use a modified formal style for straight announcing and commercial copy; they read off-camera while the product is shown on the screen. The conversational approach predominates for commercials in which the announcer is seen. All traditional styles are acceptable and useful, depending on the kind of program and the intended audience.

- STANDARDS IN ANNOUNCING. As far as pronunciation and diction are concerned, the announcer's goal is to
speak idiomatic English without giving the impression that he is wearing a high hat. Americanized pronunciations are usually recommended for familiar foreign names. Pronunciations of strange names and faraway places are spelled out on news bulletins. The native pronunciation is often used with enough modification to make the name understandable to listeners.

Local stations often find that they must use local pronunciations to avoid negative criticism, even when the local way is not recommended by any dictionary. Some examples are: coupon (kyoo-pon), route (rowt), detail (DE-tale) and finance (FI-nance).

Announcers often adjust their pronunciation and diction to the type of program, as an actor shifts his dialect for different character roles. On some rural programs, for example, local pronunciations are encouraged, while on the same stations standard diction is demanded of the announcer on recorded symphonic programs. Announcers who can speak only a regional dialect do well to look for work only in that region.

Announcers with pleasant vocal quality are, of course, preferred, but those with poor quality may succeed if they sound enthusiastic and sincere. A moderate normal pitch is best. In any case, variations in pitch, called inflections, are important. The announcer raises his pitch to ask questions, uses downward inflections to express finality. He sustains the pitch at the end of some phrases to indicate that the sentence isn't finished, or lowers it after others for emphasis. Meaningful variation is the goal. A series of downward inflections makes the announcement sound like a series of unrelated sentences. Too many upward inflections give an air of uncertainty and a nervous, jerky style. The student announcer should plan his inflection pattern by marking his scripts with symbols to guide him during the broadcast.

The announcer's rate of speaking depends on his reaction time and the tempo of the broadcasts. Sports announcers may
speak 200 words a minute at exciting moments. The usual rate varies from 140 to 170 words a minute. BBC announcers have a standard rate of 125 words a minute. Commercials are usually read more rapidly than program continuity. To get the number of words required by the sponsor within the time limits, especially in spot announcements, commercials are often "thrown away" too rapidly for full effectiveness.

Emphasis is achieved by "punching" the important words and phrases. This can be done by increasing the volume, slowing the rate, varying the inflection, or by any combination of these techniques. A good announcer picks out the words which need emphasis. Sometimes they are underlined or written in capital letters to show him how the sponsor or script writer thinks a commercial should be read. In nearly all announcements, titles and proper names need some degree of emphasis. In commercials, sometimes the adjective is most important, sometimes the noun, sometimes the price. The words to be emphasized depend on the purpose or central idea of the advertisement.

- ANNOUNCING FOR TELEVISION. These are three ways of reading announcements on television:

The first, and still too common, is the straight announcement with the camera focused on the announcer while he delivers what is really a radio commercial. It is assumed that his appearance adds convincingness to the sales message. He keeps his eyes toward the camera and seems to be looking at the audience. His manner tends toward the conversational approach. Usually he has memorized the copy, but is sometimes permitted to use his own words if he extemporizes readily. A few stations use blackboards on which key words or phrases are written as cues. Less successfully, some stations permit the use of typewritten copy below camera level, so the announcer can glance at it occasionally.

A second common type of TV announcing is done from
script by an unseen announcer as the screen shows title slides, merchandise, or a silent film advertising the product. The announcer watches a monitor screen to get his cues; his script is carefully marked to show what words accompany each picture.

In the third type, the announcer is a real salesman. He may display or demonstrate merchandise. He may point out the features of an electrical appliance or he may have to drink the sponsor's beverage and look as though he likes it. As with all salesmen, he becomes a cross between a speaker and an actor. For a commercial plugging television sets the announcer may be seated in a tastefully furnished living room. As he talks he goes to the television set and talks about its merits.

Radio announcers often find difficulty in adjusting to the visual medium. Aspiring TV announcers should get experience in acting as well as in reading and speaking.

## THE SPEAKER'S DELIVERY

Much of what we have said about the announcer's delivery also applies to speakers and will not be repeated here.

Speakers on radio and TV may be classified in three groups: (1) staff members who appear regularly on station or network schedules-newscasters, farm directors, book reviewers; (2) those who broadcast regularly as an incidental part of their profession: ministers, teachers, county agricultural or home demonstration agents, and organization representatives; (3) those who speak occasionally-candidates for office, city officials, and guest speakers on special programs.

In offering advice on the speaker's delivery we should distinguish between studio talks resembling person-to-person communication and speeches delivered to an audience and overheard by the radio listener. Studio talks, made famous by the late president Franklin D. Roosevelt's "Fireside Chats," are essentially one side of a conversation carried on
with listeners in living rooms, kitchens, or cars. Listeners expect a "platform" delivery when they listen to speeches given at national conventions, public hearings, sessions of the United Nations, or the President's message to Congress. Given against a background of cheers, jeers, shouts, applause, and miscellaneous crowd noises, these speeches are part of a great drama. But in studio talks, the listener doesn't like to be addressed as though he were a public meeting.

We must admit, however, that some successful speakers do not speak conversationally in studio talks. Gabriel Heatter and H. V. Kaltenborn can hardly be classed as conversational news commentators. Listeners have tuned in by the million to high-pitched, hysterical sounding Walter Winchell and to the pulpit-like utterances of W. J. Cameron. But for most speakers, on most topics, most listeners prefer informal diction and the conversational manner for person-to-person talks.

One of the occasional speaker's first questions is "How fast should I talk?" Our first answer, true enough but not very helpful to the questioner, is that his rate should depend on his reaction time, the content of his speech, and his purpose in presenting it. There is, however, some experimental data on the subject. Cantril and Allport ${ }^{7}$ investigated the optimum speed, as measured by listener preferences, for theoretical material, argument, factual exposition, directions, news, and narrative. They found the best rate for theoretical material to be 110 to 130 words per minute; for argument, $140-170$; for factual exposition, $120-140$; for directions, $90-115$; for news, 120-140; and for narrative, 120-150 words per minute. These findings are helpful but still rather indefinite as far as our inquiring speaker is concerned. He should read aloud to find how much he can read comfortably and meaningfully in five or ten minutes.

We should remember that these "optimum speeds" are

[^58]averages. The speaker who delivers 150 words each minute for ten minutes is producing at least one kind of monotony. He should vary his rate to suit the different types of material in his speech as one effective means of holding attention. If he doesn't have different kinds of material in a ten-minute speech, he probably has a poor speech. And any talk which requires a uniformly slow delivery in an attempt to make the ideas clear is poorly written and shouldn't be given at any rate.

- TELEVISED SPEECHES. The advice we have given to radio speakers seemingly applies here. When the viewer tunes in a telecast of a public meeting, he knows he is seeing and hearing a program designed for someone else. He feels as though he were somehow present at a show where the performers and the audience are both on the stage. Indeed, the producer often maintains this illusion by showing long shots of the audience and close-up views of listeners at various points during the speech.

For studio presentations, the televiewer wants the speaker to talk and act as though he had dropped in for a friendly chat and had left his script at home. In these situations overacting is just as bad as a dead-pan appearance; the vocal energy and inflections needed to carry the meaning to the folks in the second balcony sound overdone and artificial. Studio speakers and participants in televised discussions should speak as they would in animated conversations with interesting people on important topics. The person who "bores you to death" at the club, would, given the chance, inflict the same punishment on the television audience.

Those who participate in televised conversation or discussions and those who give lecture demonstrations should have facility in extemporaneous speaking. How can you get the illusion of spontaneous conversation when you see speakers reading from scripts? How can the lecturer use visual aids or perform demonstrations effectively if he is closely tied to his script?

At the risk of repeating the obvious, we summarize our advice to announcers and participants on talk programs. Sound interested in what you are saying. The effect of sincerity is gained by animated, vigorous speech. Speak as you talk, not as you read. Think of your ideas, not of the commas and periods. Think of your listeners, not of the manuscript. Use facial expression and gestures. Your radio listeners will hear them reflected in your voice. You expect a singer to practice even though he knows how to sing and has sung the song many times. Why not follow his example?

## THE ACTOR'S DELIVERY

In the first section of this chapter we discussed the general principles of effective delivery. Here we apply these principles to the vocal problems confronting the actor at the radio microphone or before the television camera.

- ACTING FOR RADIO. Amateurs often assume that acting before a microphone is easier than acting on the stage. The radio actor need not bother with costume or make-up; rehearsal time is short; and best of all, he does not have to memorize his lines. But there is another side to the story. The radio actor does not have costume and stage settings to aid in his characterization and to help him remember the characters to whom he speaks. The closeness of the microphone carries any vocal error to the most distant listener. The radio actor may have to appear in two or three different shows a day to support himself in the style to which he hopes to become accustomed. The stage actor may play the same part for months, perhaps years. The radio actor must be good at extemporaneous reading; rehearsals are hurried affairs with little time for thoughtful analysis of characters or trying different ways of reading lines.

The stage play runs two hours or more; the radio version runs sometimes an hour, usually thirty minutes. The stage play often has ten-minute intervals between acts; scenes in radio plays change rapidly, often requiring the actor to change moods almost from one minute to the next. Only when radio plays are recorded does the actor have the opportunity to hear himself as listeners hear him. If the director feels the acting is bad he can destroy the recording and order a new one. Radio acting is downright hard work. Val Gielgud, British actor and program director at the BBC , insists that it is more tiring than acting before audiences. He says that absolute silence while others are acting, close attention to the director, the attempt to coördinate his lines with sound, music and other voices, and the subduing influence of sound-absorbent studio walls combine to make radio acting difficult.

The broadcast play is essentially a director's performance. The actor does not have the opportunity to develop his conception of the characters that the theater actor enjoys. He is simply part of what everyone hopes will be a harmonious combination of voices, music, and sound effects, in which the director sets the pace, times the action, and gives the cues for the rise and fall of the emotions.

We summarize here the advice that in our experience the radio actor most frequently needs:

1. Watch your microphone placement. Some actors get their best vocal quality by speaking directly into the microphone at the distance of a few inches; others achieve it by speaking at an angle across the face of certain types of microphones. But these instances are seemingly not governed by general rules. After the director has told you where to stand, the control board operator will take care of ordinary changes in volume. He will, however, need your help for sudden changes. For shouts or screams of moderate volume you may be directed to turn and walk in a semicircle toward a dead side of a bi-directional microphone. For "all-out" shouts or
cries you may need to go to the farthest corner of the studio. If you are supposed to be speaking from a door or window, stand back several feet and raise your voice to address the speaker at the microphone. To whisper, just whisper into the microphone.

In crowd scenes, do not try to talk more loudly than the crowd. Lines spoken in an ordinary tone near the microphone will be heard over the mumbling or shouting of the crowd stationed in different parts of the studio. If you are playing two roles, use a different microphone position for each character.
2. Watch your cues. Unless you are interrupting a speaker, start speaking as the person to whom you are talking finishes his last word. Don't wait for him to finish and then get ready to speak. Speak as though you were hearing the other actor's line for the first time. If you are interrupting someone, start speaking while he is still talking. If his lines are well written, the last few words are not important. But don't be afraid of meaningful pauses.
3. Cultivate the energy and aliveness of good conversation. Your voice is the product of your age, sex, health, environment, and emotional attitude. It is a delicate reflection of your physical movements and posture. Therefore, stand firmly to express determination; let your shoulders sag if you are supposed to be discouraged; smile if you want to sound gay.

To convey the idea of physical effort, as in lifting a heavy object, strain your muscles as you speak. To get the breathless effect of running, run up and down in place. If you are supposed to be walking past the microphone, walk as you speak your lines. Perform as much as you can of the action that would take place on the stage, but do it on a miniature scale.
4. Visualize the character you are portraying. In serial programs, a character becomes known by the repetition of habits, mannerisms, and ways of speaking. For single-unit shows actors are usually cast according to type. This means
that the actor "just naturally" sounds like the director's idea of the character. Only experienced actors can portray a wide variety of characters within the limited rehearsal time.

Assuming you are an amateur, your first step is to visualize the character you are assigned. These are usually broad types with little opportunity to show subtle personality differences. You should probably begin by mastering one strong character type. Then, by studying the vocal qualities and mannerisms which suggest different types, you can develop other stock characterizations.
5. Study ways of expressing emotions. Emotions are obviously expressed by changes in one or more of the vocal elements: quality, force, pitch, or time. The elocutionists of an earlier generation attempted to formulate rules for registering each emotion. We now believe that, within limits set by the meaning and mood of the play and the actor's personality, there are various correct ways of expressing emotions. Anger, for example, is usually accompanied by muscular tension which raises the pitch, increases the loudness, and affects vocal quality. But sometimes an angry person speaks rapidly with clipped articulation; sometimes he speaks slowly with an obvious effort at self-control; sometimes he shouts; sometimes he speaks in a tense stage whisper.
6. Techniques are not enough. Radio actors often fall into the habit of relying on techniques, or "tricks of the trade," rather than on the fundamentals of good acting. The good actor gives his prime attention to the meanings of the words and their relationship to each other. He remembers that he is voicing an idea to someone; he may be responding to what the other person has said; he is probably trying to get a further response. He must understand, and try to portray, the author's meaning, mood, and emotion.
7. Microphone manners. Remain seated, following the script until it is nearly time for your lines. Get to your position without bumping into someone or passing between the microphone and an actor who is reading his lines. After your part is finished, you should usually stay in position until actors have read any lines that are directed to you. Do not handle any equipment, including the microphone. Ask the engineer to do it. And of course don't rattle your script, or do anything that may distract the attention of actors who are on stage.

- ACTING FOR TELEVISION. Television provides most of the theater's visual aids, but at the same time introduces new problems. It gives the actor the advantages of costume and stage settings but greatly limits his movements. In the televised play, scenes are developed in logical sequence; in the movies, scenes are photographed in bits and seldom in the order in which they appear in the final production. Once the TV play begins it must continue without interruption. The actor cannot be prompted from the wings or memorize his part in bits, as in making motion pictures. Theater actors, especially those with stock company experience, are usually chosen for TV plays in preference to radio actors.

The television actor must work within a very limited space, and cannot use movement or gestures as freely as he would like. For close shots action must be underplayed. Facial expressions that are appropriate in the theater look absurd if they almost fill the television screen. For long shots, however, the situation is reversed: the actor must exaggerate his gesture and facial expressions. The effect is somewhat like that of the old silent movies with sound added. This is necessary for clarity of meaning because the audience is at a distance from a fairly small picture.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Have four or five students present, with introductory statements and comments, recorded examples of different announcing styles.
2. Have another group read commercials as they would be delivered
by well-known announcers who use different styles of announcing.
3. Audition five or six class members for announcer for a specified program or series. Have each participant read a one-minute announcement he has rehearsed and two that he must read at sight. If possible, have an announcer or program manager choose the winner and give the reasons for his choice. Class members should compare their judgments with his.
4. Play to the class recorded excerpts of newscasts, commentaries, and talks. Class members should judge and discuss the delivery on the basis of advice given in this chapter.
5. If recordings are available, arrange a program of six-minute illustrated talks for a general audience on "Outstanding Radio Speeches." The talk should include information about the speaker and the occasion, together with comments on delivery.
6. Conduct a pronunciation contest. As each contestant comes to the microphone, hand him a card containing a word that is frequently mispronounced. He should first pronounce the word and then use it correctly in a sentence.
7. Have the class listen to a recorded episode in a serial program and note the vocal techniques used to create characterizations.
8. Have two casts broadcast the first six or eight minutes of a radio play. The class should decide which actor did better at creating the characters, and what vocal elements were used.
9. Divide the class into production groups and have each group broadcast a play written for radio.
10. If television is available, have the class study and compare examples of radio and television acting.

## READINGS

Barnouw, Erik, Handbook of Radio Production, D. C. Heath and Company, 1949, part 3.
Chester, Giraud, and Garrison, Garnet, Radio and Television, Apple-ton-Century-Crofts, 1950, chaps. 17, 29.
Crews, Albert, Radio Production Directing, Houghton Mifflin Company, 1944, chap. 12.
Duerr, Edwin, Radio and Television Acting, Rinehart and Co., 1950.
Gould, S. B., and Dimond, S. A., Training the Local Announcer, Longmans, Green and Company, 1950, chaps. 3, 4.
Henneke, Ben G., Radio Announcer's Handbook, Rinehart and Co., 1947. ing, McGraw-Hill Book Company, 1944.
Kaplan, Milton, Radio and Poetry, Columbia University Press, 1949, chap. 7.
Kingson, Walter, and Cowgill, Rome, Radio Drama: Acting and Production, Rinehart and Co., 1950.
Sposa, Louis A., Television Primer of Production and Direction, McGraw-Hill Book Company, 1947.
White, Melvin R., Microphone Technique for Radio Actors, Northwestern Press, 1950.
Willis, Edgar E., Foundations in Broadcasting, Oxford University Press, 1951, chap. 11.

## part five .....

## EVALUATING THE

PROGRAM

## chapter 23

## METHODS OF AUDIENCE MEASUREMENT

EVERYONE engaged in selling, planning, writing, and producing radio and television programs needs to have as much information as he can get about the size and composition of the audience. The public speaker knows how many came to hear him and, if he has some skill in extemporaneous speaking, can adapt his talk to his listeners' information and interests. The radio speaker sometimes alternates between wondering whether anyone is listening and imagining that he is talking to millions of eager listeners. Newspaper and mag. azine publishers adjust advertising rates to the number of paid subscribers. Some of them make continuing studies of their "audiences," gathering data on such items as the age, sex, education, and economic status of their readers. Advertising agencies have devised means of testing the relative attention value of advertisements.
Comparable data is needed for radio and television programs. In this chapter we describe the methods now used to
get at least partial answers to three basic questions: (1) How many can listen? (2) How many are listening? (3) Who are listening and what do they like?

## HOW MANY CAN LISTEN?

When broadcasting was new, listeners with headphones were more interested in the fact that they could hear than in what they heard. They sent cards to the station saying, "Program coming in fine." When the novelty of hearing distant stations wore off and the number of such communications lessened, station managers taxed their ingenuity to get letters from distant listeners. They spotted sources of station mail on maps, which they used as evidence of the station's service area. We now know that these maps are likely to include areas where the station cannot be heard and others where it can only be heard occasionally. When sources of station mail are recorded for five or six months, maps may be helpful in locating areas where the station has the most listeners.

The answer to the question, "How many can listen?" is now determined by electrical measurements. The FCC states that a minimum signal strength of .5 millivolts is necessary for reliable listening, especially in cities where radio must compete with other high frequency electronic devices. Fairly reliable service in rural areas and villages requires a signal strength of .25 mv . These minimum signal strengths fix the limits of the station's primary and secondary service areas.

The possible audience for a station's programs is limited by the number of receiving sets in the service area and further by the people who can be free to listen. One research agency conducting telephone surveys reports that in January someone answered the telephone at 80 percent of the homes called during evening hours, as compared with 67 percent of those called in July. During the daytime the percentages were 72 in January and 68 in July. These homes constitute what Hooper calls the "available audience," those who could presumably
listen if they so desired. These percentages do not include the considerable number who may listen on their car radios.

## HOW MANY ARE LISTENING?

The station staff wants to know how many listen regularly to their station, and how many listen to each program series. This information must come from those living in the station's listening area. Getting information from everyone would be expensive; fortunately, it is not necessary. Those who conduct opinion polls and listener surveys have proved that reasonably accurate data can be obtained by polling a carefully selected sample of the population. Whan's survey ${ }^{1}$ is based on interviews with one of each seventy-nine urban families in the state, one of each eighty-three village families, and one of each sixty-nine farm families. The 1947 nation-wide poll of the public's attitude toward radio, conducted by the National Opinion Research Center, now located at the University of Chicago, was based on interviews with 3529 individuals. ${ }^{2}$ The study of Kate Smith's war bond drive included lengthy interviews with 100 persons and shorter interviews with 978 others "representing a carefully selected cross section of Greater New York population." ${ }^{3}$ Much of the information reported in Cantril's The Invasion from Mars," "was derived from detailed interviews of 135 persons, of whom over 100 were selected because "they were known to have been upset by the broadcast."

In many cases, the size of the sample is less important than is the method of selection. The Literary Digest poll predicting the election of Alfred Landon failed because the sample was chosen from telephone directories and lists of automobile

[^59]owners. In that election, those who had neither cars nor telephones were more likely to vote the Democratic ticket. Increasing the size of this sample would not have corrected the error. The sample should represent each significant group in the population in its proper proportions.

Most available sampling methods are used in measuring radio audiences. Those who conduct telephone surveys select names at random from telephone directories; their conclusions do not, without further investigation, apply to nontelephone homes. In his Iowa survey, Whan used a stratified random method to get a balanced sample of rural, village, and homes.

Block or area sampling is more accurate, more difficult to plan, and more expensive to execute. This method was used in the 1951 radio and television survey of two Wisconsin counties. Maps were prepared showing all the households in the counties. The households were divided into blocks or areas, each containing from twenty to forty families. The areas to be surveyed, the households, and the member of the family to be interviewed in each area were chosen by using a table of random numbers. Interviewers made two callbacks if necessary to get the interviews. One commercial polling agency estimates the cost of this method, including the advance planning and evaluating the results, at five or six dollars per completed interview.

In quota sampling, the polling agency assigns each field worker a number of persons to be interviewed in each category of the sample. For example, he might be told to interview so many men and so many women, so many laborers and so many white collar workers, so many in each social and economic group.

The quota method places a great responsibility on the field worker. He must select those to be interviewed with little help from the central office. This method is less expensive than block sampling, but it may also be less accurate. The choice
of sampling method for each survey should depend on the amount of time and money available and on the type of information sought. Sometimes a combination of methods is advisable.
Methods of gathering information from samples of listeners include mail questionnaires, coincidental telephone surveys, personal interviews of different lengths, and listener diaries. Station mail is analyzed for listener reaction to programs.

## - measuring the station'S Regular Listeners.

 Radio listeners, like everyone else, are creatures of habit. Many tune their receivers to the nearest station, or the one with the most volume, and listen to whatever programs it broadcasts. These folks correspond to the newspaper's regular subscribers.In the spring of 1949, the Broadcast Measurement Bureau undertook to find out how many listen regularly to every station in the country. The BMB says that this is the only survey that "can claim a cross section of each county by economic and cultural levels, ly geography, and by the size of the community." ${ }^{5}$ Over a million questionnaires were mailed to what was hoped would be a representative sample of American homes. Recipients were asked to indicate the stations they listened to regularly, (1) one or more days or nights a week, (2) three to seven days or nights a week, and (3) six to seven days or nights a week. The results, "derived from over 350,000 returned ballots-the largest sample in the history of advertising," were divulged only to those subscribing to the service.

This survey cost over a million dollars, which many thought too much for too little. The critics raised two objections: (1) that those who listen to a station one day a week should not be counted as regular listeners; (2) that returns from mail

[^60] section of the radio audience, since some groups-those with little formal education, for example-are less likely to respond than others. The large size of the sample does not correct this situation.

More accurate data on a station's regular listeners can be gathered by interviewing properly selected samples of those living in the station's service areas. Whan's interviewers asked these questions in the 1950 Iowa survey:
To what five radio stations does the family listen regularly during the daytime?
To which one of these stations does the family listen most during the daytime?
To what five stations does the family listen regularly after 6:00 at nighttime?
To which one of these stations does the family listen most at night?
Comparable questions are included in the 1951 survey of two Wisconsin counties. Those who keep listener diaries, described later, report the station to which they listen.

- MEASURING THE NUMBER OF LISTENERS TO SPECIFIC PROGRAMS. The widely publicized Hooper ratings are based on coincidental telephone surveys. A battery of in. terviewers call numbers chosen at random from urban telephone directories. If someone answers, the interviewer identifies herself and asks, "Were you listening to your radio just now?" If the answer is "Yes," the interviewer asks: "To what program were you listening, please?" "To what station?" and one of the following: "What product is being advertised?" or "How many men, women, and children are listening?"

The Hooper agency summarizes the data from the telephone interviews under these captions:

1. "Available Homes," the percentage of calls attempted where someone answered the telephone and was presumably available for listening
2. "Sets in Use," the percentage of calls attempted where the radio was turned on and someone was presumably listening
3. "Program Rating," the percentage of calls attempted where someone was listening to that program
4. "Share of Audience," the percentage of "sets in use" where someone was listening to that program
5. "Average Ratings," an average of program ratings for daytime or evening broadcasts
6. "Sponsor Identification Analyses," the percentage of those listening to a program who know the sponsor
7. "Audience Composition Analysis," the average number of men, women and children "per listening set" for each show

The program rating is used in estimating the number of listeners. Assume that our broadcast has a program rating of ten, that there are 100,000 sets in the station's service area, and that the average number of listeners per set is two. We could then predict that 10,000 homes are tuned to our program, and that we have 20,000 listeners.

Critics of coincidental telephone surveys point out that they are based on an unbalanced sample. Nontelephone homes are not represented at all, and only those rural homes with telephones listed in the city directory are included in the sample. The method is admittedly best suited to large metropolitan areas where it can be supplemented by occasional surveys of nontelephone homes. This is perhaps the reason that prompted Hooper's sale of the national network rating business to the A. C. Nielsen Company.

The Nielsen Company now publishes a National Radio Index and a National Television Index. The sample includes "homes of all types-farm homes as well as city homes, nonphone homes as well as phone homes-in correct proportions. . . . All radio listening and television viewing in these typical homes is continuously measured by means of an electrical recording instrument known as the Nielsen Audimeter. ${ }^{,{ }^{6}}$ This

[^61] device records when the set is turned on and off and when the listener dials from one station to another, but it does not tell how many are listening. It does, however, have the distinct advantage of providing the data for comparing radio and television listening in various types of homes. Nelson reports these variations in radio listening:

During early 1950 small town and rural homes listened about 9 percent more than their brothers in metropolitan areas; lower income homes about 13 percent more than upper income homes; large families ( 5 members and over) about 33 percent more than small families (1-2 members); homes with young housewives about 27 percent more than homes with no housewives; homes with older children ( $10-15$ years) about one-third more than homes without children; homes [whose members had] only a grammar or high school education listened $20 \%$ more than homes where one member or more had a college education.

Listener Diaries are used to measure, among other things, the audience for specific programs. The diary consists of a single sheet for each day, divided into ninety-six quarter-hour periods. Someone in the family checks whether the radio is on or off for each period. When the set is turned on, the listener writes in the call letters of the station and records the number of men, women, and children who are listening.

As is true of other methods, the value of the results depends on the care in selecting the sample. The Columbia Broadcasting System, in 1943, employed a professional polling agency to "obtain names and addresses of typical families, preclassified by income and size of family." ${ }^{7}$ The CBS research staff sent letters to these people, describing the project, soliciting their cooperation. They enclosed instructions, a four-day supply of diaries and stamped envelopes with the request that each diary be mailed within twenty-four hours. Three more to cover the week were sent two or three days later, with "a small merchandise premium for coöperation."
${ }^{7}$ John K. Churchill, Education on the Air, 1943, Ohio State University Press, pp. 335-339.

Over 42 percent of those invited returned all seven diaries, from which the research director drew a balanced sample representing "radio fans" and "nonfans," large and small families, urban and rural homes. "The listener diary technique," says Churchill, "is practically unlimited in its opportunity for furnishing detailed analysis of radio audiences."

In his 1950 survey of Iowa radio listeners, Whan gathered listener diaries covering two days from 930 families of the 9110 interviewed. The diary families represented a balanced sample. There were no significant differences in the results obtained by the two methods. We should note, however, that his diarists were selected by personal interviews rather than by mail.

Roslow found that the average number of listeners per set ranged from a low of 119 per 100 homes for 10:0011:00 A.м. to a high of 203 for 7:00-8:00 P.м. Monday through Friday. ${ }^{8}$

At the present time, the competition for listeners between radio and television is a matter of major concern. Nelson wrote in 1950, "When television comes into the home, radio listening declines during both day and evening hours, but the evening losses are about five times greater than daytime losses." Summers reported that in Columbus, Ohio, "evening radio listening in television homes had virtually disappeared . . ." They agree that the hours spent in television viewing decrease somewhat after the novelty has worn off. Nelson says that radio listening in 1949 averaged 5 percent lower than in 1948 when the "average listening per home per day" was 4.4 hours. Early in 1951, CBS announced a 10 percent reduction in network advertising rates.

The popular radio programs, however, continue to have sizable audiences. This is indicated by comparing the program Hooper ratings for February, 1950, with the American

[^62]Research Bureau's ratings for April, 1951, as shown in the accompanying table. ${ }^{9}$ The differences between the two methods of rating do not, we believe, invalidate the comparison.

| Program | Hooper Rating, 1950 | ARB, 1951 |
| :--- | :---: | :---: |
| Aldrich Family | 10.8 | 11.7 |
| Amos and Andy | 15.9 | 16. |
| Arthur Godfrey | 5.5 | 12.1 |
| Big Town | 16. | 11.4 |
| Bing Crosby | 17.3 | 12.7 |
| Charley McCarthy | 17.4 | 15.4 |
| Fibber McGee and Molly | 19.8 | 15.1 |
| Great Gildersleeve | 14.1 | 11.6 |
| Bob Hope | 17. | 13.8 |
| Mr. District Attorney | 14.9 | 12.4 |

That Procter and Gamble remain convinced of the value of daytime radio advertising is indicated by the fact that in February, 1951, they spent $\$ 1,481,138$ for radio network time, in addition to program costs.

## WHO ARE LISTENING?

Information about listeners and what they like may be gained from station mail, telephone surveys, listener diaries, personal interviews of various length, and the Nielsen Audimeter. In addition, the Program Analyzer and the "Schwerin Method" give sample audiences the opportunity to register, minute by minute, their opinion of test programs. Some information about listener interests and tastes is included in earlier chapters and will not be repeated here.

Some of this information can be gained from station mail. A few hundred letters criticizing a program will cause consternation in the offices of the sponsor and the FCC. Unfortunately, people who like a program are less likely to write about it. However, R. K. Maneval, research associate of the NBC, says that letters from listeners are "still a highly useful

[^63]source of data for those who decide what is to go on the air. ${ }^{110}$ In 1951 the Wisconsin Radio Council needed to know who were listening to its FM stations. In response to a request for this information, about 1300 cards and letters were received from forty-two counties and 125 post office addresses. Many of the writers told who they were as well as why they liked the programs.

Telephone surveys frequently ask the number of men, women, and children who are listening. One such survey found that the average number of women listeners "per program per set" range from 1.82 to 1.39 ; the average for men was from .10 to .91 ; for children, from .10 to .80 . With few exceptions, women constitute the largest part of the audience for any program. From a telephone survey of more than 3500 homes in Columbus, Ohio, Summers found that "in more than 82 percent of the cases, radio listening during daytime hours was carried on as a sort of 'secondary' activity. . . . Only about 18 percent of all listening represented what might be called 'leisure-time' use of radio."11

Information about the composition of the radio audience may be gathered by listener diaries. Sandage ${ }^{12}$ conducted such a study in which 664 persons, representing a balanced sample of homes in Champaign County, Illinois, kept diaries for seven days in November, 1946. University faculty and students were not included. He found wide variations in the listening audience throughout the day. For example, at 6:00 A.m. 4 percent of men living in the cities, 5 percent of those living in villages, and 22 percent of those on farms were listening. For women, the percentages were 33 and 21, respectively. At noon, 9 percent of city men listened, compared with 15 percent of the villagers and 36 percent of those living

[^64] tened, compared with 23 percent of villagers and 5 percent of farmers. At 7:00 P.m., 23 percent of urban women listened, compared with 23 percent of villagers and 37 percent of those living on farms.

With regard to program preferences, Sandage found that more farm than urban women listened to religious programs, soap operas, western music, amateur shows, and discussion programs. The reverse was true of classical music, serious drama, and sophisticated comedies. Jack Benny, Charley McCarthy, and Fred Allen had twice as many urban listeners as rural. About half of all farm listening (men and women) was to WLS-WENR. "Hymns of all Churches," "Farm Commentary," "Barn Dance," "My True Story," and "Lum and Abner" had high ratings among farm women. Only 6 percent of urban women, compared with 31 percent of farm women, listened to "Lum and Aloner."

Personal interviews, varying in length from brief public opinion polls to the full hour interviews used by Cantril, Merton, and others, are the most accurate, and the most expensive method of gathering data on listener preferences and taste. The National Research Center's 1947 survey of 3529 persons is perhaps the most thorough opinion poll oll radio. ${ }^{13}$ In addition to the findings cited in earlier chapters, the following items indicate listener attitudes and tastes:

32 percent were in favor of radio advertising
35 percent did not particularly mind it
22 percent will put up with it
37 percent prefer singing commercials
43 percent prefer straight commercials
14 percent think radio is doing an excellent job
56 percent think it is doing a good job
18 percent think it is doing a fair job ${ }^{14}$

[^65]The accompanying table shows the percentages of those who prefer entertainment programs (Column E) and of those who want more serious programs (Column S) classified according to age and education.

| Age in Years | College |  | High School |  | Grade School |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | E | S | E | S | E | S |
|  | 25 | 31 | 30 | 14 | 42 | 12 |
| $30-29$ | 17 | 33 | 29 | 16 | 31 | 16 |
| 50 and over | 16 | 29 | 21 | 18 | 25 | 18 |

In September, 1949, the American Institute of Public Opinion conducted a national poll on attitudes toward giveaway programs, with these results (the figures are percentages) :

1. How often do you, yourself, listen to radio giveaway programs? Often, 22; once in a while, 29; very seldom, 32 ; never, 17.
2. What do you think of the giveaway programs on the whole? (Asked of the 83 percent who listened).
Interesting, 53; not interesting, 25; no opinion, 5.
3. Do you think radio giveaway programs should be continued, or should they be done away with? (Asked of all interviewed).

The answers to this question, classified according to the amount of formal education, are summarized in this table:

| Education | Continue | Abolish | No Opinion |
| :--- | :---: | :---: | :---: |
| College | 40 | 38 | 22 |
| lligh School | 54 | 24 | 22 |
| Grade School | 49 | 27 | 24 |

This example shows how polls can gather opinions on current topics and how questions are worded to avoid suggesting an answer.

Reporting on the surveys conducted by Pulse, Inc., Ros-
low ${ }^{15}$ seeks "to correct or at least modify" the impression that radio listeners are predominantly women. Men constitute 55 percent of those who listen from midnight to 6:00 A.M., and 58 percent of out-of-home listeners.

The interview method has been used repeatedly in studying daytime serials. Herzog ${ }^{16}$ says that at least 20 million women, representing "a cross section of almost half of all American women," are regular listeners. Her conclusions are based on various studies, including intensive as well as briefer interviews.

Differences between listeners and nonlisteners are less than one might expect. Interviewers found "little difference, if any," in psychological traits, amount of reading, or amount of social participation in community groups. However, lis. teners read more mystery novels, and fewer historical novels, than do nonlisteners. There is some evidence that listening to serials decreases with the amount of formal education. But the greatest difference is that serial fans are also radio fans. They listen more hours during the evening as well as more hours during the day.

One study, based on 100 intensive interviews, found that serial listeners experienced "three major types of gratification." Some seem to enjoy the serials "as a means of emotional release"; others like the "opportunities for wishful thinking"; still others value the information and advice contained in the serials.

The data obtained from the Nielsen Audimeter can be analyzed to show listener preferences. For example:

Comedy-variety evening shows have their largest preference in medium sized cities, among middle and upper income families of three or four members, where the age of the housewife is under forty, and some member of the family has a college education.

[^66]Quiz and audience-participation daytime programs are most frequently preferred in medium sized cities, in middle and upper income families of one or two members having a high school education, where there are no children and the wife is over forty years old.

## WHAT DO LISTENERS LIKE ABOUT SPECIFIC PROGRAMS?

The most frequently used methods for measuring what listeners like or dislike about programs are the Program Analyzer, ${ }^{17}$ developed by Frank Stanton while he was director of research for CBS, and the "Schwerin Method" used by NBC.

The CBS Program Analyzers are in two sizes-"Little Annie" and "Big Annie." For "Little Annie," ten to fifteen people are invited to the research studio. Each person is provided with a switch with a green and a red push button and told to keep the green button pressed down as long as he likes what he hears; to keep the red button pressed down as long as he dislikes what he hears; and to press neither button when he feels indifferent. "Little Annie" has a recording device consisting of a moving tape and twenty capillary pens, each connected electrically with an individual's push buttons. These pens record the second-by-second reactions of each listener. After the listeners have reacted to the program, they fill out a questionnaire and are interviewed by a member of the research staff. The procedure is repeated until a cross section of 75 to 100 listeners have reacted to the program.
"Big Annie" can record the attitudes of as many as 100 listeners at once, but does not permit analysis of individual reactions. It has two synchronized recording units; one totals and records the "like" reactions, the other, the "dislike" reactions.

The "Schwerin Method" is a less expensive, and probably less accurate, way of getting audience reactions to different
${ }^{17} \mathrm{~J}$. Hallonquist and J. G. Peatman, in Education on the Air, 1947, Ohio State University Press, pp. 463-474.
parts of a program. Listeners are provided with a reaction sheet with lines numbered one, two, three, etc., and three columns headed "Like," "Neutral," or "Dislike." On signal, they check their reaction to what is going on every twenty or thirty seconds. After the program, the listeners discuss what they have heard.

Both methods produce data that may be used for one or more of these purposes: to pretest new programs; to see whether programs are losing their appeal; to discover the show's strong and weak points; to get reactions to commercials; to determine the limits of good taste; to find out what kind of people like what kind of programs. ${ }^{18}$

Other devices for measuring listeners' likes and dislikes include the Wolfe Programeter, which resembles the Program Analyzer; the Walker Gag Meter, used to record the frequency, duration, and volume of laughter; ${ }^{19}$ and the Lawton "PGR," (psycho-galvanometer reactor) which measures the listener's emotional reactions to programs. ${ }^{20}$

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Arrange a series of four-minute talks, designed for a general listening audience, on such topics as these:
a. "Is your radio turned on, please?"
b. Have you a Nielsen Audimeter in your home?
c. How do they know a million are listening?
d. How can the sponsor tell he is getting his money's worth?
e. What do they mean by sampling?
f. Who listens most, and when?
g. The invasion from Mars
h. How many can listen to your station?
2. The class may organize and conduct a coincidental telephone survey. A committee of three or four should make the plans and ${ }^{18}$ See R. K. Maneval, Education on the Air, 1950, Ohio State University Press, p. 403-404.
${ }^{19}$ Charles H. Wolfe, Modern Radio Advertising, Funk \& Wagnalls Company, 1949, pp. 200-201.
${ }^{20}$ Sherman P. Lawton, Education on the Air, 1947, Ohio State University Press, pp. 494-496.
explain the procedure in a symposium which may be "broadcast" to the class. Each class member should make fifteen or twenty calls, arranged so as not to overtax the local telephone system. The committee should summarize and report the results to the class.
3. Appoint a committee of five to organize and conduct a personal interview survey that goes beyond the four questions used in Hooper ratings. The group should broadcast a symposium on such matters as the wording of questions and the interviewer's manner of asking them.
4. Following this broadcast members of the class should conduct five or six interviews, following instructions given by the planning committee. These interviews should be limited to nontelephone and rural homes whose telephones are not included in the city system. The results can then be compared with those of the telephone survey.
5. The teacher will provide you with forms used in the listener-diary method of measuring listening habits. Students may ask their parents and three or four neighbors to keep diaries for Sunday, and Tuesday or Wednesday. The students should indicate on the diaries such items as stations that can be heard in the area, number in the family, and the husband's business. A committee of three should study the results and report them to the class.
6. Assume that the class is interested in broadcasting a series of programs over a local station. A group should be appointed to prepare and record a sample broadcast. The group can then use the Schwerin method of getting listener reactions from members of various community organizations.
7. A group of four or five may present a fifteen-minute discussion program on trends in radio programming. Information may be obtained from such sources as the Broadcasting Yearbook, and the radio sections of newspapers. The group may, for example, compare current program types with those popular five years earlier. This may be prepared for broadcasting from a local station.
8. Class members may conduct interviews or discussions on such questions as these:
a. How accurate are these methods of audience measurement?
b. Why were national Hooper ratings discontinued?
c. What happened to the Broadcast Measurement Bureau?
d. Why don't more people listen to high-quality programs?
e. What about those who say, "I never listen to the radio"?

## READINGS

Beville, H. M., Jr., "The ABCD's of Radio Audiences," in Mass Communications, Wilbur Schramm (editor), University of Illinois Press, 1949, pp. 413-424.
Borneman, Ernest, "The Public Opinion Myth," Harper's Magazine, July, 1947, pp. 30-40.
Chappell, M. N., and Hooper, C. E., Radio Audience Measurement, Stephen Daye, 1944.
Harper, Marion J., "Some Factors in Radio Measurement," Advertising and Selling, December, 1945.
Lazarsfeld, Paul F., and Kendall, Patricia L., Radio Listening in America, Prentice-Hall, Inc., 1948, chaps. 2, 3.
Lazarsfeld, Paul F., and Stanton, F. N., (editors), Communications Research, 1948-1949, Harper \& Brothers, parts II, IV.
Lazarsfeld, Paul F., and Stanton, Frank N. (editors), Radio Research, 1942-1943, Duell, Sloan, and Pearce, part 4.
Likert, Rensis, "Measuring the Sales Influence of a Radio Program," Journal of Applied Psychology, April, 1936, pp. 175-182.
Mickelson, Siegfried, "Notes on an Experiment in Surveying Radio Listening,"Journalism Quarterly, March, 1943, pp. 45-49.
Ogle, M. B., Public Opinion and Political Dynamics, Houghton Mifflin Company, 1951, chap. 13.
Payne, Stanley L., The Art of Asking Questions, Princeton University Press, 1951.
Silvey, Robert, "Methods of Viewer Research Employed by the BBC," Public Opinion Quarterly, Spring, 1951, pp. 89-104.
Wilson, Elmo C., "The Listening Audience," in Communications in Modern Society, Wilbur Schramm (editor), University of Illinois Press, 1948, pp. 117-125.
Wolfe, Charles H., Modern Radio Advertising, Funk \& Wagnalls Company, 1949, chaps. 4, 5.

## chapter 24

## THE EFFECTS OF



$W_{\text {E }}$E HAVE described, in the preceding chapter, the ways of measuring the size and nature of radio and television audiences. Here we consider the results of listening. Does the sponsored program increase the sale of the advertiser's product? Are public-service announcements effective? What methods are used to measure the less tangible results of listening? Can sustaining programs, for example, convey accurate information, develop appreciation of good music and literature, or build desirable attitudes? What are the results of school broadcasts?

It is much easier to raise these questions than to answer them. The effect of a program depends on many factors, among them the quality of the broadcast and the needs or interests of the audience. Stock market quotations and football scores interest some and bore others. A lecture on psychosomatic medicine does not hold the attention of teen-agers. The studies here reported represent, both in methods and in 475
results, the growing body of research on the effects of listening to various types of programs.

## APPEALS FOR IMMEDIATE ACTION

Advertisers have considerable evidence to support their contention that listening to a program tends to result in the desired action. In 1933 Stanton compared visual and oral presentations of advertising copy. Eight fictitious advertisements were presented in printed booklets to eighty students, and over a public address system to a comparable group. The effectiveness of the two methods was measured by memory of commodity and trade names in pure recall, aided recall, and recognition tests conducted one, seven, and twenty-one days after the presentation. Stanton concluded that "the auditory method of presentation is superior on each testing for all three types of tests." ${ }^{11}$

A few years ago, the Columbia Broadcasting System employed a professional research organization to interview a carefully selected sample of listeners to all of the network's evening sponsored programs. The interviewers asked whether the interviewees listened to the programs and, if so, how often. They then asked what brands of various products were used at the time. In general, the data supported the conclusion, "The more they listen, the more they buy the sponsor's product."

In an undated pamphlet, "Let's Look at Radio Together," the National Broadcasting System describes the response to premium offers. An advertiser offered a pancake turner with each purchase of a product retailing for thirty-four cents. The campaign included sixteen announcements, the last four devoted to explaining the shortage of pancake turners. The advertiser's sales increased 116 percent during the brief campaign and a month later were 71 percent above what he had

[^67]regarded as normal. Another company offered a cake pan with each purchase of two packages of flour selling at twentynine cents a package. Eleven announcements were broadcast, the last three explaining the shortage of premiums. During the six weeks of the offer, the sales were 41 percent more than for the preceding year. These results, admittedly unusual, indicate that radio messages can produce almost immediate results when the listeners feel they are getting something useful.
Radio public service announcements proved effective in World War II. The OWI set up, among others, the Network Allocation Plan which provided for "an average of three messages a week on more than a hundred programs with the highest audience ratings. ${ }^{22}$ A different topic was presented each week. In April, 1942, before the Allocation Plan was in operation, the Department of the Interior arranged for "Buy Your Coal Now" announcements on twenty-eight network shows. The country's normal coal production in April was about $7,000,000$ tons a week. During the week of the campaign, production jumped to $11,275,000$ tons, and for two succeeding weeks to $11,500,000$ tons. The Coal Industry War Council said that there had never been such a wave of coal buying in early spring.

Other campaigns were equally successful. The Army Signal Corps credited network announcements with increasing applications for enlistment 1000 percent. Paul F. Warburg said that the radio campaign produced "a capacity number of candidates for glider school after previous efforts by both Army and CAA had failed." The OWI was assigned to recruit student nurses. Siepmann writes that "only four days after the concentrated radio drive began . . . the National Nursing Council had received over 3000 letters from applicants." One week later an additional 4000 applications had

[^68]been received and the rate jumped to 800 a day. These examples occurred during the first year of the war. They could be matched by later campaigns to get us to save tin cans, old paper, and waste fats, as well as to join the Red Cross and buy Victory Bonds.

Wolfe ${ }^{3}$ reports an interesting use of the Schwerin technique to compare the sales effectiveness of two versions of the same program. It was a one-man show in which the performer played the piano, sang, talked informally, and read the commercials. "The program was built around a mood . . . of nostalgic memories; the songs chosen were favorites before 1920. The program was planned for middle-aged and older women." The pretest showed that sample audiences preferred simple songs that were "old, sentimental, nostalgic," to "frivolous, humorous, flippant" tunes. The listeners criticized the informal talk and the commercials. The program was broadcast in two markets in its original form and in two comparable markets in the revised version. The "sales per advertising dollar" were twice as great in the markets receiving the revised programs.

A striking instance of mass persuasion by radio occurred on September 21, 1943, during the third war loan campaign. Kate Smith spoke briefly sixty-five times during eighteen consecutive hours. Each talk was a personal message, given in a voice "often broken, it seemed, by deep emotion," and ending with the direct appeal: "Will you buy a bond?" She said nothing about buying bonds as a sound investment or to check inflation, but talked of neighbor boys facing death in faraway places, invoking "themes of love and hate, of large hopes and desperate fears, of honor and shame."

Merton made this classification of the appeals in Kate Smith's talks: sacrifice, 50 percent; doing one's share, 16 percent; appeals to families of service men, 6 percent; "going

[^69]over the top," 12 percent; facilitation, "just step to the phone," 7 percent; references to herself, 6 per cent. ${ }^{4}$

When the eighteen-hour campaign was over, the Columbia Broadcasting System reported 39 million dollars in bond pledges. Obviously, this happy result cannot be attributed to Kate Smith's efforts alone. But when we make allowance for other persuasive factors, her achievement still seems almost incredible until we recall that her all-day campaign in the fourth bond drive secured 110 million dollars in pledges.

## THE EFFECTIVENESS OF <br> "'EDUCATIONAL" BROADCASTS

The experiments just discussed, with one important exception, measured the effectiveness of programs designed to convey information or to build attitudes on current problems.

Howell ${ }^{5}$ studied the relative effectiveness of the radio round table and the forum in providing information and changing attitudes. The subjects were fifty pairs of high-school juniors and seniors, matched as to age and intelligence. One group listened to a round table on the merits of socialized medicine and a forum on federal aid to education; the other, to a round table on federal aid and a forum on socialized medicine. The broadcasts were thirty minutes in length and approximately equal in strength of argument and quality of performance. Information and attitude tests were given before the group heard the programs, immediately thereafter, and again five weeks later.

All programs produced substantial gains in information. Scores made by those listening to the round table were significantly higher than scores made by students hearing the forum. After five weeks about half of the facts learned from the

[^70] panel persisted but to a lesser degree.

Since there was no attempt to shift attitudes in one direction, shifts either pro or con were considered desirable changes. All programs produced significant group changes in attitude, which persisted practically unchanged five weeks later. The round table and the forum were equally effective. Forty percent of the students made significant attitude changes, of which 58 percent were toward belief in the status quo; and 37 percent, toward the proposed change. These program types would obviously be poor tools for the propagandist.

Willis ${ }^{6}$ investigated the relative effectiveness of the straight talk, the complete dramatization, and the talk with dramatized illustrations in changing attitudes on three current problems. Nine fifteen-minute scripts, representing each program type for each topic, were prepared and recorded. The subjects were 526 high-school juniors and seniors and 89 University of Wisconsin students. Attitudes were tested before the programs, the day after, and two weeks later. The students also indicated their preferences among the three forms of presentation.

Willis found that "a fifteen-minute radio program can shift the attitudes of high-school and college students significantly, and this influence persists to a significant degree for at least two weeks." The three forms were equally effective in chang. ing the attitudes of college students. The dramatization was most effective for high-school students, followed, in that order, by the combined form and the talk. The shifts produced by the talk, though smaller, were still significant. The combined form was preferred by a large majority of high-school students, with the dramatization second and the talk third. The college students ranked the combined form first, the talk

[^71]second, and the dramatization third. The relation between intelligence and shift of attitude was negligible.

In 1946 Dietrich $^{7}$ published the results of his study comparing attitude changes produced by conversational and dynamic delivery of the same material. Six experienced speakers, varying in age and vocal quality, recorded a fifteen-minute commentary in each type of delivery. A total of 760 university students participated in the experiment. Attitudes were tested one week before, immediately after the broadcast, and again two weeks later. Both styles of delivery changed group attitudes significantly and the shift, though smaller, was still significant two weeks later. The conversational delivery was somewhat more effective than the dynamic; the difference, though statistically significant for the group of six speakers, was, in one or two cases, quite small. Forty-one students regarded the dynamic delivery as propaganda; only two so regarded the conversational broadcasts.
During World War II, the Research Branch of the Army's Information and Education Division studied ways of convincing service men in Europe that the war with Japan would last at least two years after VE Day. This was the judgment of the military experts at the time. Using information released by the War Department and the OWI and the standard "lefore-after" experimental design, the Research Branch made two studies measuring types of radio presentation. ${ }^{8}$

The first of these investigations sought the answer to this question: When the weight of evidence supports a proposition, is it more effective to present only the materials supporting it, or is it better to present opposing arguments?
Two radio commentaries were prepared and recorded: one, fifteen minutes in length, presented only favorable evidence; the other added four minutes of opposing evidence and argu-

[^72]ments. Eight platoons listened to the one-sided presentation, another eight to the speech including opposing materials, and eight served as the control group. The "pre-questionnaire" was given as a general War Department Survey, asking, among other questions, the soldier's estimate of the time required to defeat Japan. The "post-questionnaire" was given "to find out what the men thought of the transcription," to get suggestions for future orientation meetings, and to get their opinions on various postwar problems. The meetings were conducted by noncommissioned officers; and the men were told not to sign their names.

The overall effect of the two programs is shown in the accompanying table. The figures are percentages of those participating in the experiment who thought the war would last more than one and a half years after VE Day. This table

|  | Program I <br> "One Side" | Program II, <br> "Both Sides" | Control <br> Group |
| :--- | :---: | :---: | :---: |
| Before | 37 | 38 | 36 |
| After | $\frac{59}{22}$ | $\frac{59}{21}$ | $\frac{34}{-2}$ |
| Difference |  |  |  |

reveals "no advantage of one side over the other for the audience as a whole." However, it includes only those who thought it would take more than a year and a half to defeat Japan. About 20 percent more increased their estimate after hearing the transcriptions, though not to that amount.

A more detailed analysis of the evidence warrants these conclusions: (1) presenting both sides was more effective with those initially opposed to the point of view presented; (2) for those already convinced, presenting both sides was less effective; (3) better educated men changed their opinions more when both sides were presented; (4) those initially very opposed to the point of view presented altered their opinions "in the direction of the message."

The Research Branch also studied "the comparative effec-
tiveness of 'documentary' and 'commentator' radio presentations" in shifting opinions on the probable time required to defeat Japan. ${ }^{\circ}$ This investigation grew out of a difference of opinion among radio personnel about the merits of the two types of broadcasts. The majority believed that the "audience would pay closer attention to a dramatic show because of its greater interest and would therefore learn more from it." The minority argued that dramatic programs would be considered as entertainment, or that they "would be regarded as propagandistic, the musical effects being perceived as a means of influencing emotion and the use of actors . . . as evidence of the fictional and unauthentic nature of the material used." Those in charge of the programs called attention to the fact that a commentary could be written and recorded in one day with a minimum of expense, whereas a documentary "took longer to write, rehearse and produce, and involved an expensive cast of actors," musicians, and technicians.

Two script writers, one for the commentaries and one for the documentaries, used the same material and followed the same general outline, though "the writer-producer of the documentaries had a freer hand in the preparation of his program." Each writer prepared two programs. The length of the commentaries was fifteen and nineteen minutes; of the documentaries, sixteen and twenty minutes. Sixteen platoons heard one of the commentaries, eight heard one of the documentaries, and eight served as the control group. Here are the major findings:

1. Question: Was this radio program interesting to you, or was it dull and uninteresting? To this 95 percent of those listening to a commentary and 96 percent of those listening to a documentary, rated the program as "very interesting" or "fairly interesting."
2. Question: How about the length of the program you heard todaywas the program too long, too short, or about the right length? The figures are percentages:
${ }^{9}$ Ibid., pp. 130 ff.

Commentary
15 min .19 min .

Documentary 16 min . 20 min .

| "Too long" | 2 | 1 | 2 | 3 |
| :--- | ---: | ---: | ---: | ---: |
| "About right" | 66 | 76 | 52 | 67 |
| "Too short" | 31 | 21 | 45 | 28 |
| No answer | 1 | 2 | 1 | 2 |

3. The second table shows the percentage of men who increased their estimate of the time required to defeat Japan by at least six months.

|  | Control <br> Group | Com- <br> mentary | Docu- <br> mentary |
| :--- | :---: | :---: | :---: |
| No change | 63 | 45 | 42 |
| Revised estimate upward | 18 | 47 | 50 |
| Revised estimate downward | 19 | 8 | 8 |
| Net percent revising upward | -1 | 39 | 42 |

The authors conclude, from these and other data not presented here, that the outstanding findings "lie in the slightness of the difference between the effects produced by the two types of programs. Contrary to some expectations, the commentator programs were just about as interesting as the dramatic programs, and the latter were considered just about as authentic and non-propagandistic as the commentator programs. Both were about equally effective at changing estimates of the length of the war."

We should note that "captive audiences" were used in the evaluation of educational broadcasts. The students and the soldiers could not turn the dial to another program. This fact does not disprove the value of listening to programs in the classroom, but we cannot conclude from this evidence that listeners at home or in automobiles would react in the same way.

## AREA STUDIES OF BROADCASTING

The area study attempts to discover what men and women of various ages listen to voluntarily and, if possible, the effects
of this listening. The evidence is gathered by personal interviews of sufficient length to get answers to a large number of questions. The methods of selecting those to be interviewed and partial results of a few such studies are reported in preceding chapters.

In 1948 Ziebarth ${ }^{10}$ completed an interview survey of 1000 rural residents living in the primary service area of stations affiliated with the four major networks, plus an independent commercial station and an independent noncommercial station. He wanted to determine whether available programs conform to existing tastes and values, to investigate the listening habits of residents of the area, and to study their attitudes towards radio. The 1000 interviewees represented a stratified sample of rural farm and rural nonfarm residents. The evidence was gathered by trained interviewers.

As in other studies, the persons interviewed were asked to state their preferences for different program types. The table on page 486 summarizes the choices of those with different amounts of formal education. The figures are percentages.

In general those interviewed were satisfied with available radio programs. Three times as many ranked radio favorably as ranked it unfavorably. Farm people are slightly more favorable to radio than are nonfarm residents. The farm sample reports even more favorably on farm prograns than on radio in general. Those with more education tend to be more critical of radio. Among the nonfarm residents the middle educational groups provide the most "heavy" listeners (two hours or more daily) ; among the farm residents those with college education provide the most "heavy" listeners.

Those who attend the movies frequently also tend to listen to the radio more than do infrequent or nonattenders. Those under forty listen much more than those over forty. Those

[^73]| Program Type | College | High <br> School | Grade <br> School |
| :--- | :---: | :---: | :---: |
| News | 91 | 81 | 66 |
| Quiz | 65 | 59 | 37 |
| Comedians | 50 | 57 | 37 |
| Dance music | 37 | 57 | 28 |
| Old-time music | 16 | 27 | 50 |
| Farm talks | 28 | 34 | 37 |
| Complete plays | 63 | 41 | 23 |
| Semiclassical music | 69 | 43 | 19 |
| Religious music | 27 | 30 | 39 |
| Talks and discussion | 68 | 27 | 21 |
| Markets | 25 | 24 | 32 |
| Sports | 35 | 31 | 17 |
| Sermons | 12 | 22 | 27 |
| Serial programs | 15 | 24 | 19 |
| Classical music | 47 | 17 | 8 |
| Brass bands | 12 | 15 | 18 |

who read magazines somewhat regularly are more likely to be heavy listeners. About half of those interviewed "appeared to be perfectly satisfied with the number and kinds of available programs."

An area study, using the same method with a more restricted objective, was conducted by Reist and Frutchey at the Pennsylvania State College. ${ }^{11}$ The general purpose was to evaluate the effectiveness of broadcasts by agricultural and home economics extension workers.

Three counties were surveyed: Berks in the eastern part of the state, Lycoming in the central area, and Mercer in the west. At the time of the survey, two stations in Berks county were broadcasting four agricultural and four home economics programs a week; one station in Lycoming county carried three agricultural programs and one on home economics; one station in Mercer county broadcast one agricultural program and one on home economics. Such programs had been

[^74]broadcast in Berks for nineteen years, in Lycoming for ten years, and in Mercer for six. The conclusions are based on 633 interviews from 175 sub-areas in the three counties.

The number of farmers reached by agricultural broadcasts during the year is shown in the accompanying table. The percentages are based on the number of farmers in the county.

| County | $\begin{array}{c}\text { Regular Listeners } \\ \text { Number }\end{array}$ |  | $\begin{array}{c}\text { Occasional } \\ \text { Lercent } \\ \text { Lumber }\end{array}$ |  | Percent |  |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: |$)$

About 60 percent of the farmers who listen regularly to the county agent broadcasts are between thirty-five and fiftyfour years of age. The radio audiences include a good many farmers who neither belong to farm organizations nor attend meetings called by the county agent. The percentage is 24 in Berks county, 37 in Lycoming, and 18 in Mercer.

To get some indication of listener response, interviewees were asked if they had done any of the following things as a result of hearing the broadcasts: phoning the county agent, writing to him, requesting a farm visit, calling at his office, attending his meetings, attending a demonstration, or discussing suggestions made in his broadcasts. In Berks county, 48 percent of regular listeners and 33 percent of the occasional listeners said they had taken some action as a result of the broadcasts. In Lycoming county 82 percent of regular listeners and 26 percent of occasional listeners so reported. In Mercer county the percentage was fifty for regular listeners and twelve for those listening occasionally.

Professors Reist and Frutchey originally planned to ask those interviewed whether they had changed farm practices as a result of listening to the broadcasts. They decided, how-
ever, that practices are changed by the combined "influence of newspaper articles, farm magazines, meetings, demonstrations, observing the practice on other farms, together with radio broadcasts." They quote one farmer who said he could not honestly attribute six practices he had changed or adopted solely to the radio.

This conclusion should be compared with that reached by Robinson ${ }^{12}$ who conducted an interview study of Pike County, Illinois, in 1939. The interviewers asked each farmer "if he could remember any new practical ideas that he had actually tried to apply during the preceding year and where these ideas came from." About half of the farmers who had recently purchased radios said that their new practices came from the county agent, "whereas the radio accounted for only about 16 percent." Farmers who had had radios for some time "ranked radio fifth in importance, getting only 6 percent of their new ideas from it." Robinson concludes that the "facts present a strong case against radio as a means of communicating specific practical ideas. The radio is probably inefficient here because these matters require a type of [visual] explanation that radio cannot give."

We agree with those conducting the Pennsylvania study that the individual frequently cannot tell which of several stimuli caused him to stop doing this or to start doing something else. We believe, too, that Robinson does not make a clear distinction between motivation and instruction. A broadcast might convince a farmer that he should improve his pastures and refer him to the county agent for specific instructions. A program might interest a housewife in planning balanced meals and suggest that she write for a bulletin containing menus and recipes. We know, too, that radio can give fairly detailed information to listeners who want to receive it.

Robinson asked ninety-nine new-radio people whether they

[^75]could remember forming any new opinion as a result of radio listening. Of these, twenty-seven answered affirmatively, and nineteen of the twenty-seven attributed the new opinion to the U.S. Department of Agriculture's "Farm and Home Hour." "Every one of the newly formed attitudes was in approval of New Deal policies." Forty-one of the ninety-nine men interviewed, and eighteen of the ninety-three women reported that they had disagreed with some opinion they heard on the air. However, thirty-two of the men and seven of the women tuned the program out because of disagreement.

## EXERCISES AND BROADCASTING ASSIGNMENTS

1. Three or four students might interview local advertisers to see if they have evidence of quick sales from radio or television "spots." The current issues of Broadcasting-Telecasting may provide further examples. The evidence should be presented in a class broadcast.
2. Assign five or six students to produce a fifteen-minute dramatization or documentary broadcast, based on Hadley Cantril's book, The Invasion from Mars.
3. Another group might do a similar broadcast on the story of the CBS documentary unit, based on information in this book and sources listed in the bibliography.
4. A third group should produce a program on broadcasts to schools, based on direct experiences or on sources listed in the bibliography.
5. A fourth group might produce a documentary or dramatization showing how the OWI used radio in World War II.
6. Arrange a series of interviews, each explaining an objective study of the effects of a radio or television broadcast. The interviewee should speak for the person conducting the experiment.
7. Four or five class members might discuss the relative effectiveness of two program types-the talk and the dramatization, for exam-ple-in changing opinions or getting action on a current issue.
8. A committee representing the Hooperating, the Nielsen Audimeter, the head of an advertising agency, and an important sponsor discuss the best way of finding out what the sponsor is getting
for his money. Broadcast a fifteen-minute informal discussion from this group.
9. A group of three or four might use the Schwerin Method to evaluate a program and report the results to the class.
10. Each class member might report to the class or in writing the results of studies not discussed in previous assignments.
11. Have four or five class members present a ten-minute program on successful commercials. Each member should read a commer. cial, analyze it, and discuss the reasons for its effectiveness.
12. Obtain recordings of different types of programs that have high audience ratings and are therefore regarded as successful. Play them, or excerpts from them, and have the class discuss the reasons for their effectiveness.

## READINGS

Geiger, Theodore, "A Radio Test of Musical Taste," Public Opinion Quarterly, Fall, 1950, pp. 453-460.
Heron, W. T., and Ziebarth, E. W., "A Preliminary Experimental Comparison of Radio and Classroom Lectures," Speech Monographs, 1946, pp. 54-58.
Herzog, Herta, "The Effectiveness of Serious Radio," Education on the Air, 1944, Ohio State University Press, pp. 280-284.
Houseman, John, "The Men from Mars," Harper's Magazine, December, 1948, pp. 74-82.
Midgley, Ned, The Advertising and Business Side of Radio, PrenticeHall, Inc., 1948, chap. 11.
Miller, Leo R., "Some Effects of Radio Listening," Journal of Educational Psychology, 1947, pp. 105-118.
Payne, Stanley L., The Art of Asking Questions, Princeton University Press, 1951.
Riley, J. W., and others, "Some Observations on the Social Effects of Television," Public Opinion Quarterly, Summer, 1949, pp. 223-234.
Rothney, John W., and Hansen, M. H., "Evaluation of Radio Instruction in Intercultural Relations," Journal of Experimental Education, December, 1947, pp. 101-121.
Schramm, Wilbur, "The Effects of Mass Communication," Journalism Quarterly, December, 1949, pp. 397-409.
Shayon, Robert L., Television and Our Children, Longmans, Green and Company, 1951.

Waller, Judith, Radio: the Fifth Estate, rev. ed., Houghton, Miflin Company, 1950, chap. 19.
Warner, W. L., and Henry, W. E., "The Radio Daytime Serial: a Symbolic Analysis," Genetic Psychology Monographs, February, 1948, pp. 3-71.
Winslow, C. N., "Sympathetic Pennies: a Radio Case Study," Journal of Abnormal and Social Psychology, April, 1944, pp. 174-180.
Wolfe, Charles H., Modern Radio Advertising, Funk \& Wagnalls Company, 1949.

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## mmmmm GLOSSARY OF RADIO TERMS

Terms common to radio and television are generally included here and omitted in the "Glossary of Television Terms" which follows.
ad-lib: To depart from the script or to proceed without script. across the board: A program scheduled Monday through Friday at the same hour.
action: In a play, a sequence of events which creates or removes an obstacle to the solution of the plot.
$A B C$ : The American Broadcasting Company, one of the four national networks.
AFM: The American Federation of Musicians.
AFRA: The American Federation of Radio Artists.
ASCAP: The American Society of Composers, Authors, and Publishers, which holds copyrights on much of the music used in broadcasting.
amplitude modulation ( $A M$ ) : The process used in "regular" broadcasting in which speech and music are transmitted through variations in amplitude of the waves. The frequency is kept constant.
available audience: The people who are at home and presumably could be listening if they so desire.
balance: Blending different kinds of sounds to achieve proper volume relationships, such as musical background for a dramatic sequence. Also, the arrangement of musical groups to obtain a natural blending of tone.
blast: Too much volume.
board fade: Fading the program in or out by manipulating the volume controls.
boom: Long metal arm for suspending a microphone or television camera usually mounted on a dolly.
box office: A slang term for popularity: "He got a big box office on his show."
breaks: Any interruptions in the broadcast.
BMI: Broadcast Music Incorporated, an organization formed to compete with ASCAP.
cans: Receivers and headphones worn by camerman, stage manager, technical director, etc., in the studio, and by engineers on remote. carrier wave: The radio wave over which radio impulses are sent. In television two waves are utilized, one for sight and one for sound. chain break: Any commercial placed in the station identification period. It is sponsored by an advertiser who presents neither the preceding nor the following program.
channel: In radio, a specific wave length; in television, a band of frequencies.
cleared channel: A station has the exclusive use of a frequency for a large area.
clearing music: Determining whether the station has a license to broadcast the music, or getting permission to use it.
CBS: The Columbia Broadcasting System, one of the four national networks.
commercial: A program paid for by an advertiser.

- continuity: Usually applied to text read by an announcer, such as introductions of musical numbers, introductions of speakers, and commercial announcements.
- continuity writer: Usually any writer of radio scripts, but most accurately applied to writers of nondramatic programs.
control room: A small room usually enclosed in glass from which the engineer and production man control the program.
coverage: Pertaining to area and markets "covered" by a radio station.
cow-catchers: Advertising messages carried just before a program and advertising some auxiliary product of the sponsor presenting the following program.
credits: The acknowledgment of sources of program material. The copy designed to acquaint the listener with the advertiser's product.
cross-fade: An overlapping of two sets of sounds; one fades in as the other fades out. Also called "segue."
cushion: Music or talk used to fill in the time when a program runs short.
cut: A deletion of material, whether spoken or musical, to fit the
prescribed time. Also, a signal to the engineer to close all microphones.
cut a disk or platter: To make a recording or transcription.
dead end: Portion of a broadcasting studio having the greatest sound absorption.
drooling: Padding a program with talk to fill the allotted time.
electrical transcription: A platter or disk, made for broadcast purposes, usually in contrast to records sold for home use.
facsimile: The process of transmitting drawings, text, or other graphic material by radio.
fade: To increase or decrease volume gradually.
FCC: Federal Communications Commission.
FTC: Federal Trade Commission which checks the accuracy of commercial copy.
feed-back: The coupling of input to output of amplifiers, either electrically or acoustically, resulting in a squeal or howl.
field intensity map: Used to establish limits of satisfactory service, measured by signal strength.
fill: Added program material.
frequency modulation ( $F M$ ): The process of transmitting sound through variations in frequency of waves with the amplitude kept constant.
gag: A joke or comedy situation. A gag show is a program made up of a succession of jokes without plot.
gismo: Something for which a more technical definition is lacking or has been forgotten by the speaker.
hiatus (summer hiatus) : Many network contracts allow an advertiser to discontinue his program for a number of weeks each summer while permitting him to keep control of the time period. The advertiser must, of course, resume in the fall.
kill: To strike out or remove.
level, or voice level: A test of a speaker's voice for tone and volume to determine proper distance from the microphone.
listening area: Area in which a station can be received with good definition.
local: A program released only through a single station.
log: An account of every minute of broadcasting. An accurate journal required by law.
MC or emcee: Master of ceremonies.
mike hog: An actor who tries to steal the show.
mix: Combining the input of two or more microphones.
mobile unit: Field equipment mounted in trucks.
modulation: The process of impressing audio or video impulses on the carrier wave for transmission.
monitor: To check the program by means of audio equipment.
mugging: Overemphasis or exaggeration of either action or wordage.
mushy: Poor sound definition.
MBS: The Mutual Broadcasting System, one of the four national networks.
network: A group of stations linked together by wire lines to broadcast the same program simultaneously.
network show: A program released simultaneously over two or more stations, connected by telephone wire, coaxial cable, or relay stations.
on the head: A program which appears to be running on schedule.
on the nose: A program which ends precisely on time.
one and one: One verse and one chorus of a musical number.
pace: Rate of delivery.
parabola: A bowl-shaped directional microphone mounting, used to pick up crowd noise, band music, etc.
patch: A temporary and removable connection on studio equipment.
peaks: A meter reading indicating high points in volume. The con-trol-room operator adjusts the dials to avoid distortion of sounds.
phonograph record: The records available in music stores. They generally have lower fidelity than do electrical transcriptions or tape recordings.
platter: A recording, either record or transcription.
provisional cut: A cut in a program planned for use in case of emergency. An attempt to facilitate timing a program in case the time allotted is unexpectedly reduced.
PA: Public address system consisting of a microphone, amplifier, and loudspeaker. The initials stand for "power amplifier."
rebate (rebate year): Many network contracts provide for an extra retroactive discount, usually $121 / 2$ percent of the gross, at the completion of fifty-two weeks of broadcasting.
relay station: Generally a radio frequency transmitter located at a remote point from the main transmitter to relay its signal to a more distant point.
rep: Station's sales representative in out of town territory.
repeater: An amplifying station used to boost the volume on long lines.
riding gain: Controlling the variations in volume. The engineer does this with the aid of a volume indicator.
schmalz: Music played in a sentimental style.
script: The text of a program, usually applied to radio plays. See also continuity.
script writer: One who prepares the text or dialogue with the accompanying directions for sound effects, musical cues, and transitions.
show: The entire program.
signature: The musical number or sound effect which regularly identifies a program.
simulcast: A combination AM radio and TV show; in other words, to broadcast a TV show at the same time that it is being televised.
sneak it in: To begin the sound effect or music very quietly and gradually increase the volume.
song plugger: A publishing firm's representative who promotes his company's songs.
spot broadcasting: The purchase of time on local radio stations, as opposed to network broadcasting. Also, "selective" advertising.
spots: Short commercial announcements.
sustaining show: A program on time which is not purchased for advertising purposes.
tag line: The final speech, or the climax speech, resolving the scene or play to its conclusion.
talk-back: Phone circuit from director to announcer on remote broadcasts: a PA (public address) system by which a director can talk to his cast.
theme: The music, sound, or talk which opens and identifies a program.
tie-in announcement: Commercial copy read by the local station announcer after a prearranged cue on the network. Also, commercials which make direct use of program material.
tight: A program which in rehearsal runs a few seconds over the allotted time and must either be cut or played rapidly.
UHF: Ultra-high frequency, normally above 300 mcs .
VHF: Very high frequency, normally between 30 and 300 mcs .
VI: Volume indicator-a delicate instrument containing a needle which indicates the volume, enabling the engineer to determine whether the "level" is too high or too low.


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## GLOSSARY OF

## TELEVISION TERMS

abstract set: A setting without definite locale, using architectural or construction units, geometrical forms, draperies, or cycloramas.
action: Any movement that takes place before camera or on film. Any movement which carries the story forward and develops the plot, as contrasted with "business."
animations: Mechanical devices including cartoon-type films which give seeming movement to inanimate subjects.
background: Any set, drape, drop, cyclorama, etc., used at back of scene.
background projection: The projection of a scene on the rear of a translucent screen to provide background for studio sets.
base: The panchromatic toning color used in television make-up.
black-out: Sometimes used to apply to a short act, but herein used to mean a complete absence of light on the screen.
blow-up: Enlargement of printed or pictorial materials to a size which the television camera can photograph effectively.
boom: Long metal arm for suspending a microphone, usually mounted on a dolly.
broads: Units or batteries of lights.
business: Incidental action in lines or movement of actors to add atmosphere and interest to the program.
busy: A setting or background that is too elaborate, or which calls attention to itself and detracts from the logical center of interest.
Camera or cue light: Red reflector light on front or top of camera which is on only when the camera is on the air.
Camera field angle: An angle of divergence from a central line to
the borders of the camera picture at various distances from the lens.
catwalks: Elevated walkways normally used for mounting equipment.
CU: Close-up shot. Narrow-angle picture.
construction units: Stock structural units and architectural or plastic pieces which may be combined in various ways to provide basic television sets.
contrast: Degree-of-brightness relationships between various elements in a picture.
cutting: The elimination of undesirable motion, film, or action.
cyclorama: A backdrop of the upstage curtain.
definition or resolution: Degree of detail in the reproduction of an image, scene, set, or background.
diorama: A miniature set to suggest large areas.
dissolve: The momentary overlapping of an image produced by one camera with that of another and the gradual elimination of the first.
dolly (noun): A four-wheeled framework on which a camera or microphone is mounted.
dolly (verb): To move the camera to the proper position.
double bank: To erect one stage setting in front of another to be used later.
dressing: Properties, decorations, etc., added to a setting to provide character or interest.
dry run: Rehearsals previous to camera rehearsals where business, lines, sets, etc., are perfected.
facsimile: The process of transmitting drawings, text, or other graphic material.
fade: To bring up or black out the television image.
flag: A large sheet used to screen off light from cameras.
flood: Single kleig light or scoop used to illuminate wide areas.
floor plan: Scaled print of studio or stage showing the location of walls, settings, doorways, furniture, working areas, etc.
floor light: Light at studio floor level used for modeling. foot candles: The unit of measurement in lighting. foundation lighting: Basic overall lighting, producing sufficient illumination to register a satisfactory electronic picture.
frame: Single complete picture in a film. Or, simply, the four sides of an image in TV. "Frame that with the window on the left."
full shot: A full-length view of actors or talent.
gelatin: A gelatinous screen used to diffuse the light.
gobo: A dark mat used to shield camera from lights.
ground row: Built, cut-out, or actual materials used to secure a more natural setting.
hard shadow: A single definite shadow, as opposed to multiple shadows.
head room: Area between the actor's head and the actual top of set. hot light: A concentrated light to emphasize features or bring out contours.
inky: An incandescent lamp.
kinescope recording: One type of film.
iris: The gradual appearance or disappearance of a picture.
key light: Overall illumination.
kill: To strike out or remove.
lens turret: Circular base attached to camera with several lens mountings so changes can be made quickly and easily.
live titles: Title material photographed directly in the studio rather than supplied from slides or film.
lose the light: Term used in directing cameras: "Move to your next position when you lose the light."
MCU: Medium close-up shot that cuts off actors or talent just above the knees.
MS: Medium shot, halfway between a CU and an LS.
mural: A photographic enlargement of a scene to give the impression that it actually exists in the studio.
oleo: A painted backdrop.
pan: To turn the camera right or left, up or down.
patch: A temporary adjustment of studio equipment.
pointillage: A painting technique to build up a plain surface.
properties: All physical materials used in a scene: furnishings, decorations, or stage properties.
provisional cut: A cut in a program planned to facilitate the timing.
resolution: See definition.
roll it: A cue to start the camera or film projector.
scoop: Multiple-lighting units in the studio.
shadowing: Paint used to simulate or exaggerate shadows.
situation: The scene and the action which accompanies it: "Catch that situation from the right, medium close."
slide: A title or picture on a single frame of 35 mm film that is projected into the camera, usually sealed between pieces of glass.
spots: Spotlighting used on TV sets or stage.
stage braces: Supports for stage flats used in erecting scenery.
superimposition: The overlapping of an image produced by one
camera with the image from another, both pictures being visible at the same time.
test pattern: Television transmission of a design, usually geometric, used to correct focusing and tuning of the image.
tilt: Slow camera movement up or down.
titles: Any titles used on a program; can be motion picture film, cards, slides, etc.
tranisparency: Illustrative or written material on a transparent surface through which background material may be seen.
truck (verb): To dolly in parallel motion with a moving figure: to follow a person walking down the street.
wings: The sides of a television set, normally off stage.

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As the title indicates, this is not a complete bibliography. With a few important exceptions it is limited to books and articles published in the last decade, and further limited to publications of special interest to those beginning to study radio and television.

The first section includes books and special issues of professional journals somewhat arbitrarily classified under these headings: The Story of Radio, Textbooks on Radio and Television, The Broadcasting Business, Government Controls, Psychology and Propaganda, Preparing the Scripts, Dramatic Programs, Announcing and Talk Programs, News Programs, Education by Radio, Program Research and Evaluation, and Books of Scripts. There is also a section on Sources of Current Information. In such classifications there is inevitably a great deal of overlapping. Some of the books contain information in various phases of broadcasting.

The second section contains articles published in popular magazines and professional journals. These references are included both for the information they contain and to indicate sources of current information.

## BOOKS

## THE STORY OF RADIO

Archer, Gleason, History of Radio to 1926, American Historical Company, 1938.
Banning, William P., Commercial Broadcasting Pioneer, Harvard University Press, 1946.
de Forest, Lee, Father of Radio, Wilcox and Follett, 1950.

Dunlap, O. E., Jr., Radio and Television Almanac, Harper \& Brothers, 1951.

Kirby, E. M., and Harris, J. W., Star Spangled Radio, Ziff-Davis Publishing Co., 1942.
Landry, Robert, This Fascinating Radio Business, Bobbs-Merrill Company, 1946.
Parker, E. C., and others, Religious Radio, Harper \& Brothers, 1948.
Saerchinger, Cesar, Hello America, Houghton Mifflin Company, 1938.
Shirer, William L., Berlin Diary, Alfred A. Knopf, Inc., 1941.
TEXTBOOKS ON RADIO AND TELEVISION
Abbot, Waldo, Handbook of Broadcasting, rev. ed., McGraw-Hill Book Company, 1950.
Bettinger, Hoyland, Television Techniques, Harper \& Brothers, 1947.
Bolen, Murray, Fundamentals of Television, Hollywood (Calif.) Radio Publishers, Inc., 1950.
Chester, Giraud, and Garrison, Garnet, Radio and Television, Apple-ton-Century-Crofts, 1950.
Hubbell, Richard, Television Programming and Production, rev. ed., Murray Hill Books, 1950.
Hutchinson, Thomas, Here is Television, Hastings House Publishers, Inc., 1948.
Poole, Lynn, Science via Television, Johns Hopkins University Press, 1950.

Tyler, Kingdon, Modern Radio, Harcourt, Brace and Company, 1944.
Waller, Judith E., Radio: the Fifth Estate, rev. ed., Houghton Mifflin Company, 1950.
Willis, Edgar E., Foundations in Broadcasting, Oxford University Press, 1951.

THE BROADCASTING BUSINESS
Careers in Television, Chicago Institute for Research, 1950.
Chase, Francis, Sound and Fury, Harper \& Brothers, 1942.
Clark, Blake, The Advertising Smoke Screen, Harper \& Brothers, 1944.
Midgley, Ned, The Advertising and Business Side of Radio, PrenticeHall, Inc., 1948.
Reinsch, J. L., Radio Station Management, Harper \& Brothers, 1948.
Sandage, Charles H., Radio Advertising for Retailers, Harvard University Press, 1945.
Seehafer, E. F., and Laemmar, J. W., Successful Radio and Television Advertising, McGraw-Hill Book Company, 1951.

Sill, Jerome, The Radio Station, George W. Stewart, Inc., 1946.
Southwell, John, Getting a Job in Television, McGraw-Hill Book Company, 1950.
Wolfe, Charles H., Modern Radio Advertising, Funk \& Wagnalls Company, 1949.

## government controls and the public interest

Bryson, Lyman, Time for Reason about Radio, George W. Stewart, Inc., 1948.
Federal Communications Commission, The Public Service Responsibility of Broadcast Licensees, Government Printing Office, 1946.
Journal of Social Issues, The, No. 3, 1947.
Robinson, Thomas P., Radio Networks and the Federal Government, Columbia University Press, 1943.
Rose, Cornelia (editor), National Policy for Radio Broadcasting, Harper \& Brothers, 1940.
Siepmann, Charles, Radio, Television and Society, Oxford University Press, 1950.
White, Llewellyn, The American Radio, University of Chicago Press, 1947.

PSYCHOLOGY AND PROPAGANDA
Cantril, Hadley, The Invasion from Mars, Princeton University Press, 1940.

Cantril, Hadley, and Allport, G. W., The Psychology of Radio, Harper \& Brothers, 1939.
Childs, H. L., and Whitton, J. B. (editors), Propaganda by Shortwave, Princeton University Press, 1942.
Dryer, Sherman, Radio in Wartime, Greenberg, Inc., 1942.
Kris, Ernst, and others, German Radio Propaganda, Oxford University Press, 1944.
Merton, Robert K., and others, Mass Persuasion, Harper \& Brothers, 1946.

Rolo, Charles J., Radio Goes to War, G. P. Putnam's Sons, 1942.

## PREPARING THE SCRIPTS

Barnouw, Erik, Handbook of Radio Writing, D. C. Heath and Company, 1947.
Cowgill, Rome, Fundamentals of Writing for Radio, Rinehart and Co., 1949.

Crews, Albert, Professional Radio Writing, Houghton Mifflin Company, 1946.
Weaver, Luther, The Technique of Radio Writing, Prentice-Hall, Inc., 1948.

Wylie, Max, Radio and Television Writing, Rinehart and Co., 1950. DRAMATIC PROGRAMS

Barnouw, Erik, Handbook of Radio Production, D. C. Heath and Company, 1949.
Batterson, John H., Movies for TV, The Macmillan Company, 1951.
Chase, Gilbert (editor), Music in Radio Broadcasting, McGraw-Hill Book Company, 1946.
Creamer, Joseph, and Hoffman, William B., Radio Sound Effects, Ziff-Davis Publishing Co., 1945.
Crews, Albert, Radio Production Directing, Houghton Mifflin Company, 1944.
Duerr, Edwin, Radio and Television Acting, Rinehart and Co., 1950.
Kaplan, Milton A., Radio and Poetry, Columbia University Press, 1949.

Kingson, Walter, and Cowgill, Rome, Radio Drama: Writing and Production, Rinehart and Co., 1950.
La Prade, Ernest, Broadcasting Music, Rinehart and Co., 1947.
Mackey, David R., Drama on the Air, Prentice-Hall, Inc., 1951.
McGill, Earle, Radio Directing, McGraw-Hill Book Company, 1940.
Skornia, H. J., Lee, Robert H., and Brewer, Fred H., Creative Broadcasting, Prentice-Hall, Inc., 1950.
Turnbull, Robert B., Radio and Television Sound Effects, Rinehart and Co., 1951.
White, M. R., Beginning Radio Production, The Northwestern Press, 1950.

## ANNOUNCING AND TALK PROGRAMS

Bender, James F., NBC Handbook of Pronunciation, rev. ed., Thomas Y. Crowell, 1951.

Gould, Samuel B., and Dimond, Sidney, Training the Local Announcer, Longmans, Green and Company, 1950.
Henneke, Ben, Radio Announcer's Handbook, Rinehart and Co., 1947.
Hoffman, William G., and Rogers, Ralph, Effective Radio Speaking, McGraw-Hill Book Company, 1944.
Keith, Alice, How to Speak and Write for Radio, Harper \& Brothers, 1944.

Overstreet, H. A., and Overstreet, Bonaro, Town Meeting Comes to Town, Harper \& Brothers, 1938.

NEWS PROGRAMS
Brooks, William F., Radio News Writing, McGraw-Hill Book Company, 1948.
Charnley, Mitchell V., News by Radio, The Macmillan Company, 1948.

INS Radio News Manual, International News Service, 1947.
Journalism Quarterly, June, 1946.
Warren, Carl, Radio News Writing and Editing, Harper \& Brothers, 1947.

White, Paul W., News on the Air, Harcourt, Brace and Company, 1947.

EDUCATION BY RADIO
Callahan, Jennie W., Radio Workshop for Children, McGraw-Hill Book Company, 1948.
Education, December, 1944, and May, 1947.
Education on the Air, proceedings of the Institute for Education by Radio, published annually since 1930 by the Ohio State University Press.
Herzberg, Max (editor), Radio and English Teaching, Appleton, Century, 1941.
Levenson, William B., Teaching through Radio, rev. ed., Rinehart and Co., 1950.
Willey, Roy D., and Young, Helen A., Radio in Elementary Education, D. C. Heath and Company, 1948.
Woelfel, Norman, and Tyler, I. Keith (editors), Radio and the School, World Book Company, 1945.

## BOOKS OF SCRIPTS

Barnouw, Erik, Radio Drama in Action, Rinehart and Co., 1945.
Bauer, William W., and Edgley, L. (comps.), Your Health Dramatized, E. P. Dutton \& Company, 1939.
Benét, Stephen Vincent, We Stand United, Rinehart and Co., 1942.
Cairns, Huntington, and others, Invilation to Learning, Random House, 1941.
Corwin, Norman, More by Corwin, Henry Holt and Company, 1944.
Corwin, Norman, Thirteen by Corwin, Henry Holt and Company, 1942.

Coulter, Douglas (editor), Columbia Workshop Plays, McGraw-Hill Book Company, 1939.
Fitelson, H. W. (editor), Theater Guild on the Air, Rinehart and Co., 1947.

Gaver, Jack, and Stanley, Dave (editors), There's Laughter in the Air, Greenberg, Inc., 1945.
Kaufman, William I., The Best Television Plays of the Year, The Merlin Press, 1951.
Liss, G. (editor), Radio's Best Plays, Greenberg, Inc., 1947.
MacLeish, Archibald, The American Story, Duell, Sloan, and Pearce, 1944.

Morris, James (editor), Radio Workshop Plays, rev. ed., H. W. Wilson Co., 1943.
Nunmacker, Francis G., The Library Broadcasts, H. W. Wilson Co., 1948.

Oboler, Arch, Oboler Omnibus, Duell, Sloan, and Pearce, 1945.
Oboler, Arch and Longstreet, Stephen (editors), Free World Theater, Random House, 1944.
Swing, Raymond G., In the Name of Sanity, Harper \& Brothers, 1946. Watson, Katherine W. (comp.), Radio Plays for Children, H. W. Wilson Co., 1947.
Weiser, Norman S. (editor), The Writer's Radio Theater, Harper \& Brothers, 1942.
Wishengrad, Morton, Eternal Light, Crown Press, 1947.
Wylie, Max (editor), Best Broadcasts for 1938-1939, McGraw-Hill Book Company. Also similar volumes for next two years.

## program Research and evaluation

Barr, A. S., Ewbank, H. L., and McCormick, T. C., Radio in the Classroom, University of Wisconsin Press, 1942.
Chappell, M. N., and Hooper, E. C., Radio Audience Measurement, Stephen Daye Publishing Co., 1945.
Lazarsfeld, Paul F., and Kendall, Patricia, Radio Listening in America, Prentice-Hall, Inc., 1948.
Lazarsfeld, Paul F., and Stanton, F. N. (editors), Communications Research, 1948-1949, Harper \& Brothers, 1949.
Lazarsfeld, Paul F., and Stanton, F. N. (editors), Radio Research, 1942-1943, Duell, Sloan, and Pearce, 1943.
Schramm, Wilbur (editor), Communications in Modern Society, University of Illinois Press, 1948.

Shayon, Robert L., Television and Our Children, Longmans, Green and Company, 1951.
Williams, Albert N., Listening, University of Denver Press, 1948.

## SOURCES OF CURRENT INFORMATION

A. C. Nielsen Company, 2101 Howard Street, Chicago 45, Illinois. Advertising Age, 100 East Ohio St., Chicago, Illinois.
Advertising and Selling, 9 East 38th Street, New York, N.Y.
American Broadcasting Company, RCA Building, 30 Rockefeller Plaza, New York 20, N.Y.
Broadcasting-Telecasting, and Broadcasting Yearbook, 870 National Press Building, Washington, D.C.
C. E. Hooper, Inc., 10 East 40th Street, New York 16, N.Y.

Columbia Broadcasting System, 485 Madison Avenue, New York 22, N.Y.

Dumont Television Network, 515 Madison Avenue, New York 22, N.Y.

Educational Radio Script and Transcription Exchange, U.S. Office of Education, Washington, D.C.
Journal of the $A E R$, Association for Education by Radio, 228 North LaSalle Street, Chicago, Illinois.
Mutual Broadcasting System, 1440 Broadway, New York 18, N.Y.
National Association of Radio and Television Broadcasters, Washing. ton, D.C.
National Broadcasting Company, 30 Rockefeller Plaza, New York 20, N.Y.

Printer's Ink, 205 East 42nd Street, New York, N.Y.
Telecast, 475 Fifth Avenue, New York, N.Y.
Television, 600 Madison Avenue, New York, N.Y.
Teleweek, 245 West 29th Street, New York, N.Y.
Unions of Radio and Television Employees, see Broadcasting Yearbook.

## ARTICLES IN MAGAZINES AND PROFESSIONAL JOURNALS

Ackerman, William C., "U.S. Radio: Record of a Decade," Public Opinion Quarterly, Fall, 1948, pp. 440-454.
Allen, Dorothea, "The British Way of Radio," Hollywood Quarterly, 1949, pp. 362-368.

Allen, Harold B., "Mass Persuasion in Radio and Journalism," Eng. lish Journal, 1949, pp. 447-453.
Andrews, John, "Poetry and the Radio," Poet Lore, Autumn, 1946, pp. 261-267.
Aylesworth, Merlin H., "Men, Mikes, and Money," Colliers, April 17, and 24, May 1 , and 8, 1948.
Bareau, Paul, "Interpreting Economic News on the Air," BBC Quarterly, Summer, 1950, pp. 90-95.
Beatty, J., "Latest Dope: Breakfast in Hollywood," American Magazine, March, 1947, pp. 32 ff.
Bevis, Joseph C., "Interviewing with Tape Recorders," Public Opinion Quarterly, Winter, 1949, pp. 629-634.
Brady, Robert, "Monopoly and the First Freedom," Hollywood Quarterly, April, 1947, pp. 225-241.
Brecher, E. M., "Whose Radio?" Atlantic Monthly, August, 1946, pp. 47-51.
Brechner, J. L., "Radio, What a Business," Saturday Evening Post, February 21, 1948, p. 24.
Carson, Saul, "Notes toward Examination of the Radio Documentary," Hollywood Quarterly, Fall, 1949, pp. 69-75.
Cassady, Ralph, Jr., and Williams, Robert M., "Radio as an Advertising Medium," Harvard Business Review, January, 1949, pp. 62-78.
Chall, Jean S., and Dial, Howard E., "Predicting Listener Understanding and Interest in Newscasts," Educational Research Bulletin, September 15, 1948, pp. 141-153.
Chester, Giraud, "How Good is British Radio?" Quarterly Journal of Speech, October, 1949, pp. 320-328.
Clark, W. R., "Radio Listening Habits of Children," Journal of Social Psychology, August, 1940, pp. 131-149.
Clucas, Lowell M., "Piercing the Iron Curtain," Yale Review, June, 1950, pp. 603-619.
"Controversy on Voice of America Project," Congressional Digest, February, 1948, pp. 41-64.
Corwin, Norman, "One World Flight," Hollywood Quarterly, 194647, pp. 280-289.
Crosby, John, "Radio and Who Makes It," Atlantic Monthly, January, 1948, pp. 23-29.
DeBoer, John J., "Children's Interests in Radio Drama," Journal of Applied Psychology," August, 1937, pp. 456-463.
DeVoto, Bernard, "On a Note of Triumph," Harper's Magazine, July, 1945, pp. 33-36.

Diamond, Milton, "The Petrillo Deal," Saturday Review of Literature, January 29, 1948, pp. 51-52.
Dunn, Anita, "Experimental Teaching in Radio Listening," English Journal, April, 1949, pp. 194-197.
Emerson, R. W., "Television's Peril to Culture," American Scholar, Spring, 1950, pp. 137-140.
Erdelyi, M., "The Relationship between Radio Plugs and Sheet Sales of Popular Music," Journal of Applied Psychology, 1940, pp. 694702.

Ernst, Morris L., "Freedom to Read, See, and Hear," Harper's Magazine, July, 1945, pp. 51-53.
Faught, Millard C., "T.V.: An Interesting Summing Up," Saturday Review of Literature, August 26, 1950, pp. 7 ff.
Frazier, George, "Bob Hope," Coronet, February, 1948, pp. 142-150.
Friedrick, C. J., and Sternberg, E., "Congress and the Control of Radio Broadcasting," Political Science Review, October, 1943, pp. 197 ff .
Geiger, Theodor, "A Radio Test of Musical Taste," Public Opinion Quarterly, Fall, 1950, pp. 453-460.
Gielgud, Val, "Radio Plays in the Age of Television," Theater Arts Monthly, February, 1937, pp. 108-112.
Goldhill, Walter A., "Censorship of Political Broadcasts," Yale Law Journal, April, 1949, pp. 787-795.
Goldsmith, Alfred N., "Television: Techniques and Applications," Harvard Business Review, March, 1950, pp. 55-79.
Graham, Robert, "Radio's Scene Shifters," Atlantic Monthly, April, 1944, pp. 111-114.
Gundlach, R. H., "How Well Do Children Identify the Sponsors?" Pedagogical Seminar, March, 1944, 111-117.
Hartwell, D., "Walter Winchell, American Phenomenon," Colliers, February 28, 1948, pp. 12 ff.
Hollenbeck, Don, "CBS Views the Press," Atlantic Monthly, September, 1948, pp. 49-51.
Hotaling, Burton J., "Facsimile Broadcasting: Problems and Possibilities," Journalism Quarterly, June, 1948, pp. 139-144.
Hudson, R. B., and Wiebe, G. D., "A Case for Listener Participation," Public Opinion Quarterly, Summer, 1948, pp. 201-208.
Hutchens, John K., "Radio Showman," Theater Arts, November, 1943, pp. 657-662.
"I Believe in Television," Catholic World, March, 1950, pp. 40-45.

Kelly, F. C., "Those Radio Announcers," Harper's Magazine, August, 1942, pp. 632 ff.
Kingson, Walter, and others, "Four Ways to Drama," Hollywood Quarterly, No. 2, 1949, pp. 109-44.
Klein, A., "The Challenge of Mass Media," Yale Review, June, 1950, pp. 675-691.
Knepper, M., "Why Broadcasting Has Failed," Forum, January and February, 1948, pp. 7-10, 78-82.
La Cerda, John, "Anyway, the Kids Like Them," Saturday Evening Post, Vol. 218, 1946, pp. 113-114.
Lehman, M., "We Must Sell America Abroad," Saturday Evening Post, November 15, 1947, pp. 26 ff.
Lunde, Anders, "The AFM and the Recording Ban," Public Opinion Quarterly, Spring, 1948, pp. 45-56.
Lyon, Donald W., "Is Educational Radio Here to Stay?" Quarterly Journal of Speech, October, 1950, pp. 355-360.
McDonald, J. W., "Education and Radio," Religious Education, 1946. pp. 295-299.
McNulty, John, "A Reporter at Large: the Jackpot," New Yorker, February 19, 1949, pp. 36 ff.
Matthews, William, "Radio Plays as Literature," Hollywood Quarterly, October, 1945, pp. 40-50.
Mencken, H. L., "Video Verbiage," New Yorker, December 11, 1948, pp. 102-105.
Morgan, R., "How to Prepare for a Writing Job in Radio," Education, May, 1947, pp. 564-567.
Morse, Arthur, "Poison on the Air," Nation, February 12, 1949, pp. 182-185.
Mulford, Montgomery, "Writing for Radio," Writers' Monthly, 1945, pp. 148 ff .
Nelson, Harold, "The Effects of Variation in Rate on the Recall of Straight Newscasts," Speech Monographs, 1948, pp. 173-180.
Novik, M. S., "Labor on the Air," American Federationist, June, 1947, pp. 819 ff.
Oliphant, H. N., "Fulton Lewis, Jr.: Man of Distinction," Harper's Magazine, 1948, pp. 76-84.
Olivier, W., "Junior Town Meeting of the Air," Saturday Evening Post, May 25, 1946, pp. 17 ff.
Palter, Ruth, "Radio's Attraction for Housewives," Hollywood Quarterly, Spring, 1948, pp. 248-257.

Preston, Mary, "Children's Reactions to Movie Horror and Radio Crime," Journal of Pediatrics, August, 1941.
Price, Wesley, "Murrow Sticks to the News," Saturday Evening Post, December 10, 1949, pp. 152 ff.
"Radio Handouts," Fortune, November, 1947.
"Revolt against Radio," Fortune, March, 1947, pp. 100-103 ff.
Riley, John W., and others, "Some Observations on the Social Effects of Television," Public Opinion Quarterly, Summer, 1949, pp. 223234.

Samson, N., "Corwin," Theater Arts, September, 1942, pp. 548-564. Schappe, B., "Daffy Truth or Crazy Consequences," Readers Digest, April, 1943, pp. 105-108.
Schreiber, Flora R., "A New Generation of Radio Comedians," Holly. wood Quarterly, Winter, 1947-1948, pp. 129-139.
Seldes, Gilbert, "How Dense is the Mass?" Atlantic Monthly, November, 1948, pp. 23-27.
Seldes, Gilbert, "Television-the Golden Hope," Atlantic Monthly, 1949, pp. 23-27.
Smith, B. B., "Television : There Ought to be a Law," Harper's Magazine, 1948, pp. 34-42.
Smythe, D. W., "A National Policy for Television?" Public Opinion Quarterly, Fall, 1950, pp. 461-474.
"Soap Opera," Fortune, March, 1946, pp. 118-123 ff.
Sullivan, Frank, "Clichés on the Air," Atlantic Monthly, 1941, pp. 220-222.
Sussman, Leila A., "Labor in the Radio News," Journalism Quarterly, September, 1945, pp. 207-214.
"TV: Who's Afraid?" Fortune, July, 1950, pp. 55 ff.
"Television as an Advertising Medium," U.S. Government Printing Office, 1949.
Titterton, L. M., "Radio and Its Progeny," American Scholar, 1941, pp. 498-506.
Wade, Robert, "The Television Scene," Theater Arts, August, 1950, pp. 19-21.
Warner, W. L., and Henry, W. E., "The Radio Daytime Serial: a Symbolic Analysis," Genetic Psychology Monographs, February, 1948, pp. 3-71.
Wecter, Dixon, "Hearing is Believing," Atlantic Monthly, June, July, and August, 1945.
Wells, William H., "The Mumble in the Voice of America," Harper's Magazine, January, 1951, pp. 23-28.

White, Llewellyn, "Shortcomings of Radio," Atlantic Monthly, April, 1947, pp. 64-70.
Williams, R. M., "Radio as an Advertising Medium," Harvard Business Review, 1949, pp. 62-78.
Wood, Helen, "Employment and Unemployment of Radio Artists," Monthly Labor Review, May, 1949, pp. 514-516.
Young, James, "Understanding Radio News: the Effect of Style," Journalism Quarterly, Winter, 1950, pp. 19-23.
Ziebarth, E. W.,"Radio and International Understanding," Quarterly Journal of Speech, October, 1947, pp. 328-333.


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1


[^0]:    ${ }^{1}$ A. F. Harlow, Old Wires and New Waves, D. Appleton-Century Company, 1936.

[^1]:    ${ }^{1}$ See also Broadcasting and the Bill of Rights, statements by representatives of the broadcasting industry during hearings on the White Bill, June 17-27, 1947. Published by the National Association of Broadcasters.

[^2]:    ${ }^{2}$ Joseph Tiffin, F. B. Knight, and Charles Josey, The Psychology of Normal People, D. C. Heath and Company, 1940, p. 249.
    ${ }^{3}$ D. A. Laird, "Experiments on the Physiological Costs of Noise," Journal of the National Institute of Industrial Psychologists, 1928, pp. 251-258.

[^3]:    ${ }^{4}$ John B. Whitton and John H. Herz, "Radio in International Politics," in H. S. Childs and John B. Whitton (editors), Propaganda by Short.Wave, Princeton Unịersity Press, 1942, p. 12.

[^4]:    ${ }^{1}$ National Association of Broadcasters, Employment and Wages Report No. 2.

[^5]:    ${ }^{2}$ Cameron Day, "Production Analysis," Television Magazine, June, 1949; "You, Too, Can Predict TV Costs," Sponsor, August, 1949.

[^6]:    ${ }^{3}$ Broadcasting, September 4, 1950.

[^7]:    ${ }^{1}$ Erik Barnouw, Handbook of Radio Writing, Little, Brown \& Co., 1940, pp. 325-336.

[^8]:    ${ }^{1}$ Since this chapter was written, the National Broadcasting Company has published a revision of the 1948 Working Manual of NBC Program Policies. The new version, though differing in details, does not materially change the general policies described in this chapter.

[^9]:    - CLASSIFICATION BASED ON FCC RULES. Here are the definitions of program types proposed by the FCC for use in station logs and in reports to the Commission. ${ }^{1}$
    ${ }^{1}$ Public Service Responsibility of Broadcast Licensees, 1946, pp. 56-57. 127

[^10]:    ${ }^{3}$ Paul F. Lazarsfeld and Patricia Kendall, Radio Listening in America, Prentice-Hall, Inc., 1948, pp. 25 ff.

[^11]:    ${ }^{4}$ Sara Cohen, Radio Programs for Young Children, University of Oklahoma Thesis, 1949.
    ${ }^{5}$ F. L. Whan, The 1950 Iowa Radio Audience Survey, p. 84.

[^12]:    ${ }^{10}$ Op. cit., p. 84.
    ${ }^{11}$ Op. cit., p. 136.

[^13]:    ${ }^{12}$ Op. cit., p. 52.

[^14]:    ${ }^{1}$ The Hofstra Study, National Broadcasting Company, 1950.

[^15]:    5 "Does Your TV Commercial Click?" Sponsor, October 10, 1949.
    8 "Before You Junk Your Commercial," Sponsor, January 2, 1950.

[^16]:    ${ }^{8}$ F. L. Whan, The 1947 Iowa Radio Audience Survey, Central Broadcasting Co., p. 28.

[^17]:    9 "What Agencies Would Tell Clients If They Dared," Sponsor, August 14, 1950.

[^18]:    ${ }^{1}$ Charles II. Wolfe, Modern Radio Advertising, Funk \& Wagnalls Company, 1949, p. 235.

[^19]:    ${ }^{1}$ Household Activities and Daytime Radio Listening, Ohio Radio Studies

[^20]:    ${ }^{2}$ Talks, Columbia Broadcasting System, Vol. 14, July, 1949, p. 51.
    ${ }^{3}$ lbid., p. 5.
    ${ }^{4}$ Talks, Columbia Broadcasting System, Vol. 13, April, 1948, p. 18.

[^21]:    ${ }^{6}$ Lynn Poole, Science via Television, Johns Hopkins University Press, 1950, p. 44.

[^22]:    ${ }^{5}$ Education on the Air, 1939, Ohio State University Press, pp. 18-38.
    ${ }^{6} \mathrm{~J} . \mathrm{H}$. McBurney, in a letter to the present authors.

[^23]:    ${ }^{7}$ For further examples see J. J. Auer and H. L. Ewbank, Handbook for Discussion Leaders, Harper \& Brothers, 1947, pp. 60-61.

[^24]:    - KEEPING THE DISCUSSION GOING. Since each panel member has the outline before him, the discussion is not likely to wander far off the track. The leader's main duties, in addition to those already mentioned, are to ask questions intended to clarify points for the listener, to make transitions from one point to the next, and, on rare occasions, to break up disputes between panel members.

    Here are typical examples of moderators' speeches taken

[^25]:    ${ }^{9}$ For this and following quotations, see Lyman Bryson, Time for Reason about Radio, George W. Stewart, Inc., 1948, pp. 68 ff.

[^26]:    ${ }^{10}$ Paul Lazarsfeld and Patricia Kendall, Radio Listening in America, Pren-tice-Hall, Inc., 1948, Appendix C.

[^27]:    ${ }^{3}$ Barnouw, op. cit., p. 150.

[^28]:    ${ }^{4}$ Bryson, op. cit., pp. 76-77.
    \$ Phillip Cohen, in Education on the Air, 1941, Ohio State University Press, p. 245.

[^29]:    ${ }^{6}$ Edward R. Murrow, in Education on the Air, 1947, Ohio State University Press, pp. 377-380.

[^30]:    ${ }^{7}$ Barnouw, op. cit., p. 60.

[^31]:    8 Murrow, op. cit., p. 379.
    ${ }^{9}$ Robert Saudek, in Education on the Air, 1947, Ohio State University Press, p. 374.

[^32]:    ${ }^{10}$ Leonard C. Kercher, "Social Problems on the Air," Public Opinion Quar. terly, 1947, pp. 402 ff .
    ${ }^{11}$ For complete results see, Elmo C. Wilson, "The Effectiveness of Documentary Broadcasts." Public Opinion Quarterly, 1948, pp. 19 ff .
    ${ }^{12}$ Carl Hovland, Arthur C. Lumsdaine, and Fred D. Sheffield, Experiments on Mass Communication, Yale University Press, 1949, pp. 130-141.

[^33]:    ${ }^{13}$ Barnouw, op. cit., pp. 156-157.

[^34]:    ${ }^{15}$ Ben Park, in Education on the Air, 1948, Ohio State University Press, pp. 260-265.

[^35]:    ${ }^{16}$ Ibid., p. 443.
    ${ }^{17}$ Education on the Air, 1949, Ohio State University Press, pp. 76-82.

[^36]:    ${ }^{18}$ William Salter, New Statesman and Nation, October 16, 1948.

[^37]:    ${ }^{5}$ Coulter, op. cit., pp. 63-96.
    ${ }^{6}$ Wylie, op. cit., pp. 22-42.

[^38]:    ${ }^{8}$ Val Gielgud, "The Broadcast Play," Theater Arts Monthly, November, 1930.

[^39]:    ${ }^{\bullet}$ Arch Oboler, Fourteen Radio Plays, Random House, 1940.

[^40]:    ${ }^{10}$ Katherine Best, "Perpetual Emotion," The Saturday Review of Literature, condensed in Reader's Digest, May, 1940.

[^41]:    ${ }^{11}$ Erik Barnouw, Handbook of Radio Writing, rev. ed., Little, Brown \& Co., 1947, p. 191.

[^42]:    ${ }^{12}$ Howard Rowland, "Crime and Punishment on the Air," in Education on the Air, 1942, Ohio State University Press, 1942, pp. 164-165.

[^43]:    ${ }^{1}$ Herta Herzog and Oscar Katz, quoted in Sponsor, July 3, 1950.

[^44]:    ${ }^{2}$ Variety, July 20, 1949.
    ${ }^{3}$ George Allen, "How to Build Audience Participation Programs," Broad-casting-Telecasting, April 29, 1946, p. 24.

[^45]:    1 "What Makes a Gabber Tick?" Variety, January 8, 1947.

[^46]:    ${ }^{2}$ Rudolf Flesch, The Art of Plain Talk, Harper \& Brothers, 1946.

[^47]:    ${ }^{4}$ Address at 1949 convention of National Association of Radio News Directors. 5 "Video Newscasts Reviewed," Broadcasting, June 5, 1950.
    ${ }^{6}$ E. P. Schurick, The First Quarter Century of American Broadcasting, Midland Publishing Co., 1946, chap. 5.

[^48]:    ${ }^{7}$ Radio Guide, December 1, 1939.
    ${ }^{8}$ Broadcasting, September 15, 1939.

[^49]:    ${ }^{1}$ Neville O'Neill (editor), The Advertising Agency Looks at Radio, D. Appleton and Co., p. 131.

[^50]:    ${ }^{5}$ As examples, see Rowland, Tyler, and Woelfel, Criteria for Children's Radio Programs, Federal Radio Education Committee, 1942; Martin L. Regmert, Standards for Children's Radio Programs, Illinois Education Association, 1942.

[^51]:    ${ }^{6}$ From an address at Creighton University before the Association of Women Radio Directors, 1948.

[^52]:    ${ }^{7}$ Raymond D. Cheydleur, Agricultural Programming Activities of America's 50,000-W att Stations, B.S. thesis. University of Wisconsin, 1948.

[^53]:    ${ }^{10}$ Broadcasting, Telecasting Yearbook, 1951.

[^54]:    ${ }^{3}$ World Broadcasting System Continuity, "The David Rose Show," No. 236, by permission.
    ${ }^{4}$ World Broadcasting System Continuity, "Forward America," No. 13, by permission.

[^55]:    ${ }^{1}$ Andrew T. Weaver, Speech Forms and Principles, Longmans, Green and Company, 1942, pp. 231-232.

[^56]:    ${ }^{2}$ G. and C. Merriam Company, 1950, Introduction, p. XXVI.
    ${ }^{3}$ Op. cit., pp. 276-278.

[^57]:    ${ }^{4}$ Harper \& Brothers, 1948, p. XXII.
    ${ }^{5}$ W. Cabell Greet, in The American College Dictionary, Harper \& Brothers, 1948, p. XXII.

[^58]:    ${ }^{7}$ Hadley Cantril and Gordon W. Allport, The Psychology of Radio, Harper \& Brothers, 1935, pp. 190-196.

[^59]:    ${ }^{1}$ F. L. Whan, The 1950 Iowa Radio Audience Survey, University of Wichita Press, p. 5.
    ${ }^{2}$ Paul F. Lazarsfeld and Patricia L. Kendall, Radio Listening in America, Prentice-Hall, Inc., 1948, p. 115.
    ${ }^{3}$ Robert K. Merton, et al., Mass Persuasion, Harper \& Brothers, 1946, p. 16.
    ${ }^{4}$ Hadley Cantril, The Invasion from Mars, Princeton University Press, 1940, p. XI.

[^60]:    ${ }^{5}$ Broadcast Measurement Bureau, "Study No. 2," Government Printing Office, 1949.

[^61]:    ${ }^{6}$ Everett M. Nelson, "Research and Findings of the A. C. Nielsen Company," Education on the Air, 1950, Ohio State University Press, pp. 389-394.

[^62]:    ${ }^{8}$ Sidney Roslow, "Some Facts about the Radio Public," Education on the Air, 1950, Ohio State University Press, pp. 394-400.

[^63]:    ${ }^{9}$ Broadcasting, April 30, 1951, p. 54.

[^64]:    ${ }^{10}$ Education on the Air, 1950, Ohio State University Press, p. 401.
    ${ }^{11}$ H. B. Summers, "University Contributions to Audience Research," Education on the Air, 1950, Ohio State University Press, pp. 407-412.
    ${ }^{12}$ C. H. Sandage, "Measuring the Quality of the Radio Audience," Opinion and Comment, University of Illinois Press, 1947.

[^65]:    ${ }^{13}$ See Paul F. Lazarsfeld and Patricia L. Kendall, op. cit. ${ }^{14}$ These percentages are not always based on the total sample.

[^66]:    ${ }^{15}$ Sydney Roslow, "Some Facts about the Radio Public," Education on the Air, 1950, Ohio State University Press, p. 399.
    ${ }^{16}$ Herta Herzog, Radio Research 1942-1943, Paul F. Lazarsfeld and Frank N. Stanton (editors), Duell, Sloan, and Pearce, p. 333.

[^67]:    ${ }^{1}$ Frank N. Stanton, "Memory for Advertising Copy Presented Visually vs. Orally," Journal of Applied Psychology, February, 1934, pp. 45-64.

[^68]:    ${ }^{2}$ Charles Siepmann, "American Radio in Wartime," Radio Research, 19421943, pp. 111 ff.

[^69]:    ${ }^{3}$ Charles H. Wolfe, Modern Radio Advertising, Funk \& Wagnalls Company, 1949, pp. 207-209.

[^70]:    ${ }^{4}$ Robert K. Merton and others, Mass Persuasion, Harper \& Brothers, 1946.
    ${ }^{5}$ William S. Howell, "The Relative Effectiveness of the Radio Round Table and the Radio Forum," Master's Thesis, University of Wisconsin, 1938.

[^71]:    ${ }^{6}$ Edgar E. Willis, "The Relative Effectiveness of Three Forms of Radio Presentation in Influencing Attitudes," Speech Monographs, 1940, pp. 41-47.

[^72]:    ${ }^{7}$ John E. Dietrich, "The Relative Effectiveness of Two Modes of Radio Delivery in Influencing Attitudes," Speech Monographs, 1946, pp. 58-66.
    ${ }^{8}$ Carl Hovland, Arthur Lumsdaine, and Fred Sheffield, Experiments on Mass Communication, Princeton University Press, 1949, chap. 8.

[^73]:    ${ }^{10}$ E. W. Ziebarth, "The Listening Habits and Attitudes toward Radio of Rural Residents of a Composite Service Area," Ph.D. Thesis, University of Minnesota, 1948.

[^74]:    ${ }^{11}$ H. N. Reist and F. P. Frutchey, Pennsylvania Radio Study, Agricultural Extension Service, Pennsylvania State College, undated.

[^75]:    ${ }^{12}$ William S. Robinson, in Radio Research, 1941, Paul F. Lazarsfeld and Frank N. Stanton (editors), Duell, Sloan, and Pearce.

