

ART TO ZOO

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“HELLO, AMERICA!” Radio Broadcasting in the Years Before Television

Hello, America! Welcome, each of you out there, to an era now passed . . . a time when people rich and poor, young and old, in cities and country, shared heartwarming stories, corny jokes, catchy tunes, important news, people's views . . . by gathering around an amazing new invention . . . the radio.

If you lived in the 1920s, 1930s, or 1940s, you would almost surely have listened too. And as you turned the dial, there were *so many* types of programs to choose from—a variety show? a soap opera? a ball game? a symphony? an adaptation of a popular movie?

Whatever it was, as you listened you soon began to feel that each speaker was talking just to you. Very likely, you dimmed the lights or closed your eyes, to heighten the sensation that what you were hearing was happening right in the room with you. You enjoyed giving your imagination full play to paint its pictures of what the radio voices and sounds were suggesting. For you, and millions of other listeners around the country, radio was a totally absorbing world.

Now, back in 1986, you can make the excitement of these early years of radio come alive for your students. As they experience the fun and variety of old radio shows, they will learn a lot about what it was like to be an American in the first half of this century. And they will also learn about the impact that a communications medium can have, as they trace how radio—probably more than any other invention in the 20th century—transformed America's consciousness of itself, giving to all Americans, in all parts of the country no matter how remote, the sense that they belonged to the same community. Finally, your students will apply what they have learned as *listeners* by becoming *writers*, as they create and produce their own radio shows. When they have finished, they can sit back like listeners in the Golden Age of Radio, and enjoy their productions.

The following section provides background on the history of radio broadcasting, programs, and audiences.

The 1920s: Prosperity and a New Medium

On the evening of November 2, 1920, station KDKA (Pittsburgh) transmitted what most people consider the first professional radio broadcast—coverage of the Harding-Cox presidential election returns.

No more than a few hundred people heard the broadcast, since only scattered radio amateurs then owned receiving equipment. But soon people were crowding into department stores and electrical supply shops from coast to coast to buy receivers before the supply ran out. The radio craze had hit.

Two years later, listeners in a million homes were tuning in on nearly six hundred stations nationwide. Night after night, these new radio fans put on their headphones and fiddled with the dials, straining to hear over the cracklings and poppings of static, trying to pull in stations from farther and farther away.

By 1925, Americans were spending more than twice as much money on radio products as on sporting goods. Most newspapers were running daily radio schedules. Dozens of radio fan magazines were being published. And people were humming songs like “Tune in on L-O-V-E.”

Why did radio catch on so fast and so powerfully? What was it about this new medium that exercised such an appeal?

Of course, the radio was a new gadget—that was part of its fun. But its strongest excitement surged from a different source: as a listener turned the dials and tuned in on voices from cities scattered around the country . . . Newark . . . Detroit . . . Chicago . . . he felt his life breaking its confines and being made larger. It is hard now to imagine how fragmented the country still was in the earliest years of this century. Each region had its own way of speaking, of cooking, of socializing, of doing business. The lives of country people were poles apart from the lives of people in cities. But radio brought the same messages to all Americans, and at the same time, making listeners everywhere part of a single, gigantic, complex, exciting present moment that was the present moment of the whole country.

But despite its popularity, radio still had kinks to be worked out. The timing of programs was erratic, sound quality poor, interruptions and production mishaps frequent. If a soprano hit too high a note, she was likely to blow out a transmitter tube. Dogs wandered into studios accidentally and barked on the air. One tenor's performance was interrupted when a bug entered an open window and flew into his mouth. Such accidents were common. Studio procedures were still makeshift.

Performers in these early days of radio were not paid. At most, a station might offer a ride to and from the studio, and perhaps present a bouquet to a lady. Yet professional entertainers were willing to perform just for the publicity; and amateurs lined up outside studios, waiting for a chance to go on the air. The newness of radio broadcasting gave it an exhilarating improvisational quality.

Broadcasters in those early years didn't spend much time worrying about the subtleties of programming content—their main concern was simply to fill up air time. Music occupied over 60 percent of it; news, sports announcements, and lectures on domestic subjects occupied most of the rest. But stations were also experimenting with new kinds of programs. In the early 1920s, listeners heard a number of on-the-air firsts: the first college football game, the first debate, the first church service, the first comedy show, the first drama, the first stock market report, the first World

Series. By the mid-1920s they had heard, in rough form, many of the types of programs that radio would air for its next thirty years.

Radio Takes Shape

By 1927, the radio audience had grown to 25 million listeners. Several interrelated developments that occurred around this time expanded the audience still further, and gave them new reasons for listening.

Improvements in equipment. Between 1925 and 1927, many stations increased transmitter power so that their signals could be heard over wider areas. Larger studios were built—some big enough to accommodate entire orchestras. Better microphones came into use as well as upgraded listeners' equipment.

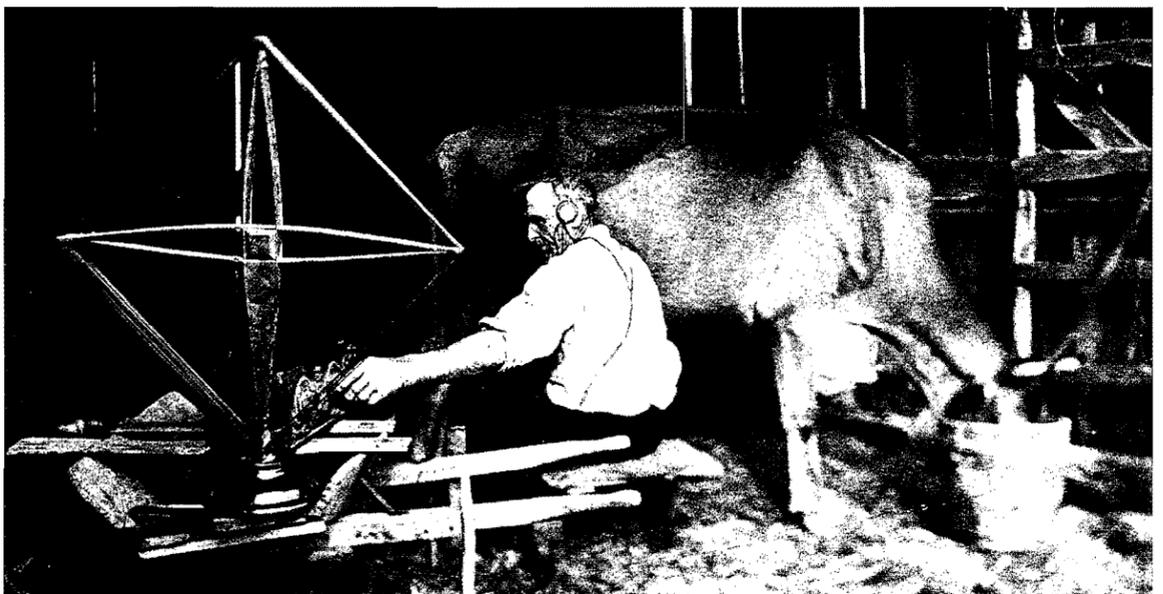
Government regulation. In 1922, when the radio boom began, all stations were expected to operate at the same frequency.* Initially they voluntarily agreed to avoid interference with each other. But as more and more stations took to the airwaves, stations became less cooperative; some tried to escape interference by operating slightly above or below their assigned frequency. The federal government lacked the regulatory power to prevent these infringements, so listeners could never count on hearing their programs.

Finally, in 1927, the Federal Radio Commission** was established and took steps to eliminate interference. Government intervention in broadcasting remained limited, however. Despite pressures from groups seeking a noncommercial, educational role for radio, the medium continued to focus increasingly on appealing to a mass consumer audience.

Advertising. To understand the role that advertising played in early radio, it helps to consider social and economic aspects of the 1920s. It was time of exuberance and prosperity in the United States—a time of fads, quick money schemes, optimism, and faith in technology. American manufacturers were now able, for the first time in our history, to produce more goods than people needed. This result of a booming economy

*Frequency means the number of complete waves transmitted in one second. Waves of different frequencies can travel along the same lines, or even cross each other, without mixing. For this reason many radio stations can broadcast in the same area, as long as they are operating at different frequencies. But if more than one station operates at the same place at the same frequency, their broadcasts will interfere with each other, making it impossible for listeners to hear either broadcast clearly.

**Replaced in 1934 by the Federal Communications Commission, which still regulates broadcasting today.



A farmer, in 1923, turns to adjust the radio before milking his cow; the large square object is the antenna. Radio played an important role in lessening the isolation of people in rural areas. (Library of Congress)



(National Museum of American History)

left manufacturers with a new problem: how to sell surplus goods. To solve this problem, they turned to advertising to encourage consumers to want more things.

Radio was perfectly suited to this purpose. It offered a large and growing audience who were open to new products (if they weren't, they wouldn't have bought a radio). These listeners couldn't skip a radio commercial the way they could skip a magazine or newspaper advertisement, unless they were willing to risk missing part of their show. And radio advertising was uniquely persuasive in that it fostered the illusion that the announcer reading a commercial was a friend giving personal advice.

Radio broadcasters were hungry for the money that advertising could bring in. Performers were no longer willing to go on the air for free, and it had become apparent that broadcasters needed to find a way to cover the sizable costs of running a station. America chose to finance broadcasting by selling air time.

The commercialization of radio profoundly influenced its program content. Advertisers did not buy just a minute or two of air time; they sponsored entire shows and exerted tremendous control over them. In fact, by the early 1930s, the majority of sponsored shows were actually produced, not by the station or network, but by the advertising agencies themselves. (The relationship between sponsor and show was so close that commercials occasionally even became part of the program itself. A standard joke on the popular comedy *Fibber McGee and Molly* was the arrival of Johnson Wax salesman Harlow Wilcox. He knocked at their door as just another person in their stream of visitors, but no matter what the conversation had been about before his arrival, Wilcox somehow managed to turn it to floor wax within a few moments, and then struggled to promote his product over the continuing action around him.)

Because the goal of the sponsor was to sell as much of his product as possible, he wanted as many people as possible to hear his commercials. This meant sponsoring shows designed to attract the largest listening audience. Thus, shows were designed to express themes and attitudes attractive to the majority of the country's population, and to avoid controversy that was likely to drive away listeners, and hence to reduce the number of potential buyers. The result of this simple economic logic was to create programming that reminded listeners of the sameness among them, and that played down alienating differences.

Networks. In November 1926, the first formal network, or chain of stations linked by telephone lines, was formed—the National Broadcasting Company (NBC). The next year, it was joined by the Columbia Broadcasting System (CBS). The networks spread quickly over larger areas, and in December 1928, regular coast-to-coast service was inaugurated, making broadcasting national. Now listeners all over the country could pick up the same programs, hear the same performers, laugh at the same jokes. The networks gave the country a simultaneously shared present moment, on an ongoing basis.

The 1930s: The Great Depression and the New Deal

America's prosperity ended abruptly with the stock market crash of 1929. The depression swept over the country, leaving between 12 million and 13 million people out of work. President Franklin Delano Roosevelt's New Deal economic programs, starting in early 1933, gave the country some relief and helped raise morale, but not until World War II did the American economy regain real momentum.

Ironically, radio gained from the depression. It was a means of entertainment suited to the period—a one-time investment that would yield fresh amusement year after year. People who had to give up a car and furniture that they had bought on credit still managed to make the payments on their radio. It was too important a part of their life to let go.

As Americans around the country turned increasingly to radio as a distraction from the collapse of the economic system, radio underwent an upsurge in quality and polish. Broadcasters began to draw on the first-class talents of out-of-work vaudeville entertainers, movie actors, and nightclub performers. Advertisers,

seeing the size of the audience, increasingly moved out of other media into radio. The public loved radio, and believed in it.

Listening in the Golden Age of Radio

The period from the early 1930s until around 1950 is often called the Golden Age of Radio. At that time, radio programming was at least as diverse as television programming is today, and as central to the nation's consciousness.

Who listened? What did they listen to?

Breakfast shows. The early morning audience was not clearly defined; the time slot was not a favorite with sponsors. The shows reflected this: they were loosely structured and chatty, with a little something for everyone. Listeners might tune in on *The Breakfast Club*, with its folksy humor and its four "calls to breakfast" (complete with whoops, drum rolls, a trumpet fanfare, and a "march around the breakfast table"), or join one of several husband-and-wife teams as they chatted about the doings of the day.

Women's shows. The daytime airwaves belonged to housewives and were filled with tears. The soap operas—so called because they were sponsored by soaps and other household products—were despised by critics, but half of the housewives in America tuned in regularly, and wept as unbelievably virtuous heroines struggled against one obstacle after another on their road to fulfillment. Yet, despite the tribulations of their heroines, the soap operas offered an essentially optimistic message. Against the pessimism and confusion of the depression, they proclaimed that virtue and hard work would eventually triumph. They offered escape, hope—and even role models.

Children's programs. Around suppertime, the Lone Ranger rode into earshot. In the earlier years of radio, shows for children had consisted mostly of storytelling. But in the Golden Age of Radio, the shows children liked best were adventure shows, most of which ran as 15-minute serials late in the day—shows like *The Lone Ranger*; *Little Orphan Annie*; *Jack Armstrong, All-American Boy*; and *The Green Hornet*.

Comedy. In the evening, families all over the country gathered around their living room radios to listen to their favorite shows together. Many of these top programs were comedy.

The Jack Benny Show is a good example. For twenty years, the ritual end of the weekend was listening to Jack Benny on Sunday night. Everyone knew the show's characters; and Jack Benny's quirks, as he had built them up on the show, were national jokes—his vanity, his refusal to admit to being over 39 years old, his terrible violin playing, his stinginess. The vault that he was supposed to have built because of his fear of being robbed was good for a whole series of ongoing jokes: the sounds of all the locks that had to be opened to enter it; the polar bear named Carmichael who lived in the basement where the vault was located, and who had once eaten a gas man; the old guard who had been living in the vault so long that he had completely lost touch with the outside.

These kinds of running gags were common on radio, and are an indication of how much favorite shows were part of the listeners' lives. A running gag draws its humor from repetition. The audience laughs at it more each time it recurs, the way people in a family laugh with affection when a family member displays some silly foible that is typical of him.

These shows were so much part of their listeners' lives, in fact, that one kind of radio humor was based on deliberately blurring the line between the program

and reality. Gracie Allen's lost brother is an example. This extended joke began on *Burns and Allen*, when Gracie discussed with George Burns how she was looking for her brother, whom she had lost. From there, the joke moved out onto the airwaves at large. In the days that followed, Gracie was heard breaking in on various shows on different networks, claiming to be looking for her brother. The radio audience loved it; they never knew where they would hear her next. (Only her real brother, a shy accountant, did not enjoy the gag; he went into hiding until the national fad for Gracie-Allen's-brother jokes died out.)

Like most other radio programming, radio comedy was directed at a mass audience and turned on easily recognizable types of people and situations. Listeners laughing at these shows were laughing at themselves—and at the craziness of the world they had to contend with. The humor put their problems into perspective by reminding them that other people around the nation were dealing with similar difficulties.

Drama and suspense shows. The show that proved beyond a doubt the hold that radio had come to have on its audience—and probably the most famous radio show ever aired—was *The Mercury Theatre on the Air* production of *War of the Worlds*, on Halloween night 1938. Orson Welles directed this play about an invasion from Mars as if it were live news coverage of a real event. Thousands of people who tuned in too late to hear the opening credits believed that Martians really had landed in New Jersey, and that a cloud of poison gas was spreading over the East Coast. Countless people fled their homes and ran in terror through the streets, pressing wet cloths to their faces to protect themselves from the gas. Telephone lines were jammed with calls. People on rooftops in Boston thought the reddish glow in the sky was New York City burning.

Of course, most suspense shows did not lead to mass hysteria. Most provided just the right amount of scariness to be fun, and to draw big audiences year after year. They framed their thrills in reassuringly familiar trademark openings (like the creaking door of *The Inner Sanctum*, or the thirteen opening notes of *The Whistler's* melody) and closings (like *The Shadow's* words at the end of each show, "The weed of crime bears bitter fruit. Crime does not pay. The Shadow knows!").

Turning the radio dial. Radio tried to provide something for everyone, to attract a maximum number of listeners. Quiz shows were a popular offering, like *Dr. I.Q.*, *the Mental Banker*, who threw silver dollars to those members of the studio audience who could answer his fast-paced questions; or *The Quiz Kids*, which pitted a group of high-IQ youngsters against adult experts.

There were also variety shows, sports coverage, and all kinds of music, from the NBC Symphony Orchestra to *Your Hit Parade*. There was *Major Bowes' Original Amateur Hour*, with its wheel of fortune ("around and around she goes, and where she stops



A Chicago father and daughter tune in to the evening news. (Library of Congress)



This nurse in a remote part of New Mexico during World War II depends almost entirely on her radio for news of the outside world. (Library of Congress)

nobody knows"); giveaway shows like *Pot o' Gold* and *Queen for a Day*; and talk shows like *Life Begins at 80*, or its counterpart, *Juvenile Jury*.

And there were hard-to-categorize shows like *Dunninger*, *the Mentalist*, who claimed to read minds over the radio, and *You Are There*, on which a team of news reporters covered reconstructed historical events like the destruction of Pompeii and the assassination of Julius Caesar.

News. Besides providing all these kinds of entertainment, radio covered the news. Many of radio's most memorable broadcasts originated as news coverage: Charles A. Lindbergh's arrival in Washington after his solo transatlantic flight; the explosion of the airship *Hindenburg* before the horrified eyes of the radio reporter routinely sent to cover its arrival; the abdication of the former Duke of Windsor; President Roosevelt's Day of Infamy speech after Pearl Harbor.

And broadcast journalism did not just report events. It evolved its own special ways of investigating them—news interviews, panel discussions, and documentaries. News commentators like H.V. Kaltenborn and Walter Winchell, who blended reporting and editorializing in a way unique to radio, became authorities. In the late 1930s, when the world seemed to be running out of control, when to economic disasters at home was added the growing threat of war abroad—worried listeners around the country turned increasingly to commentators to explain and interpret events.

Radio brought the voices of politicians, too, directly into millions of American homes. No politician was better at using radio than Franklin Roosevelt—"a real pro," radio veterans called him. On March 12, 1933, two months after he was inaugurated, he gave the first of his Fireside Chats, broadcast speeches designed to explain and gain support for his New Deal programs. Roosevelt spoke to his nationwide audience of citizens as if he were chatting with friends. His relaxed, intimate tone made maximum use of radio's ability to make each listener feel that the voice coming in over the airwaves was speaking to him alone.

World War II

Radio's power to unite was most evident—and most deliberately put to use—during World War II. Here was a very different kind of national crisis from the depression, and this difference was reflected in the role radio played for its listeners. The causes of the depression had been economic forces mysterious to most citizens. Even the experts couldn't agree on how to bring the situation back to normal. There seemed to be nothing for the average person to do but wait the situation out: radio's role was to distract him while he waited.

But through the 1930s, events abroad were creating a new kind of crisis—one in which the enemy was identifiable and external. Here was the kind of enemy you could take action against. To do so effectively, you needed information: radio focused more and more on providing that information.

Increasingly in the late 1930s, news bulletins were interrupting entertainment programs. One such bulletin, on Sunday afternoon, December 7, 1941, announced that Pearl Harbor had been bombed. The next day, with a record 60 million Americans listening on their radios, Roosevelt asked Congress to declare war.

World War II has been called a "radio war." Radio's daily on-the-spot coverage made faraway battles real to listeners on the "home front," and offered them guidelines on how to help: buy war bonds, plant victory gardens, donate blood, eliminate waste, stop rumors, double up in cars, collect scrap. Such urgings not only directed resources toward the war effort, but created a sense of national unity, by fostering in individuals all around the country the conviction that every person—wherever they lived, whatever their job—could make an important contribution to the national struggle.

World War II marked the peak of radio's role as a national unifying force. Many people had high hopes that radio would educate people in the complexities of the postwar world. They did not realize that radio's role as the primary means of national communication was about to come to an end.

Epilogue: Radio in the Age of Television

In the late 1940s television, which had been broadcast on a limited basis for almost twenty years, began to develop rapidly. In just a few years, most of radio's biggest advertisers, stars, and shows—and its audience—deserted for the newer medium.

At first it seemed that radio was dead. But eventually it did recover, by changing. It stopped broadcasting a wide range of shows, and began to transmit almost nothing but prerecorded music and the news. Stations became truly local, and each station began targeting its programming at a narrowly defined audience. Advertisers found that this specialization paid. It allowed them to market directly to the segment of the population most likely to buy their product. And

radio advertising cost a fraction of comparable time on television.

This new kind of radio has been very successful. Four out of five Americans tune in every day. But they listen differently now than they used to back in the Golden Age. People now use radio mostly to get the latest headlines and to set a mood as they go about their business. They listen while they do other things—drive, finish their homework, fix dinner. And they usually listen alone.

In a few years new technology will probably make it possible for radio to become even more oriented to individuals. The future listener may be able to program his radio to play only the selections he chooses from a station's menu of offerings.

Meanwhile, in contrast to this trend, a few shows have appeared that encourage people to stop what they are doing, sit down, and listen with attention, maybe even to share the program with other listeners. *A Prairie Home Companion* is a show like that. Another is *Kids America*,* an early evening show for kids that is so entertaining that many parents are tuning in with their children. If you turn to the *Pull-Out Page*, you can learn more about *Kids America* and see some pictures of how it is broadcast. Maybe you can even pick it up on your own radio—and do some of yesterday's kind of listening today.

*Produced by WNYC in New York, distributed by American Public Radio, and made possible by a major grant from the Corporation for Public Broadcasting.

Lesson Plan

Once you are familiar with the historical background of radio, you are ready to develop a teaching approach in line with your curriculum objectives. The approach that follows uses radio as a stimulus for the practice of listening and writing skills.**

The lesson plan outlined here proceeds in three steps: in the first, the children familiarize themselves with radio broadcasting in the years before television; in the second, they write their own radio scripts; in the third, they produce their scripts.

Step 1 Tuning in on Radio

To introduce the topic, ask the children about their own radio experiences. How many of them listen to the radio? Why do they listen? For fun? To learn things? Do they have favorite shows? What is it about these programs that makes them fun to listen to?

Now explain that radio, as the children usually listen to it, is a form of *mass communication*—or a way of getting information out to many people (radio can also be used for *point-to-point communication*, with information going out to an individual or a limited group of individuals, but we will not be concerned with this use here.)

Ask the children if they can think of other forms of mass communication (newspapers, books, magazines, movies, television).

Explain that radio began to be used for mass communication in 1920. Up to that time, the printed word had been the only means of sending messages to a large, scattered audience. Have the children discuss how radio differs from the printed word as a means of mass communication (it is much faster; it reaches its entire audience at virtually the same time; it relies on sound). You may want to point out that television, which is a further development of radio technology, was not available on a large scale for mass communication until after World War II.

Drawing on the information in *How Radio Messages Travel* on this page, explain to the class why radio listeners are able to hear a broadcast at virtually the same moment that it is sent. Point out that this means that no matter how widely scattered the listeners are they will all hear the broadcast at the same time.

The simultaneity of radio broadcasting had very important social and cultural effects. To heighten the children's awareness of these effects, have them create individual lists of all the ways they can think of that life would be different if there were no radio or television. Then have them share their answers in a class discussion. With some help from you, the children should come up with answers similar to the following:

- People wouldn't know the news until longer after it happened.
- People in isolated areas would learn the news later than people in cities.
- People in different parts of the country would have fewer shared experiences and therefore have less in common.
- In case of a sudden emergency it would be much slower and more difficult to warn people or to give them instructions about what to do.
- Many kinds of jobs would not exist: no one would manufacture radio or television sets or parts, or

**You could, of course, also adapt the materials for use in a social studies unit on the 20th century.

How Radio Messages Travel

Sending a radio message involves sound waves and radio waves. *Sound waves* create pressure changes in the air that make your eardrums vibrate; when this happens, you hear a sound. In air, sound waves travel 1,087 feet per second. *Radio waves* are electrical, and have nothing to do with air pressure; you can't hear radio waves, because they don't make the air move. They travel at the speed of light, 186,000 miles per second.

When an announcer in a radio studio says, "Hello, America!" his voice travels as sound waves through the air into a *microphone*. The microphone converts these sound vibrations into corresponding vibrations in an electrical current. Then the electrical current travels to a *transmitter*, where it is combined with *carrier waves*, which are radio waves that will "carry" the information in the sound to the listener at the speed of light.

At the other end, the antenna of the listener's radio picks up these incoming radio waves. His radio changes them in such a way that they make the loudspeaker vibrate, causing sound waves in the air in front of the radio. When these sound waves reach the listener's ears, he hears the announcer saying, "Hello, America!"

broadcast equipment, or car radios; no one would be employed repairing radio or television sets; there would be no announcers, no disk jockeys, no sound engineers; radio- and television-related publications would disappear, and the television page would vanish from the newspaper; jobs related to radio and television advertising would cease to exist.

- People who were housebound could not entertain themselves with radio or television.
- Records couldn't become popular so fast. Different ways would have to be found to market them.
- How politicians looked and sounded would matter less. Political campaigns would have to be run differently.

Now you are ready to draw on the historical background materials from page 1 to describe for the class how radio developed, the kinds of programs it carried, and the role it played in its listeners' lives.

If possible, play tapes or records of old radio shows. Such recordings are available at many libraries and record stores. They can also be ordered by mail; two companies that offer an extensive line of such recordings are listed on page 4 of this issue of ART TO ZOO, under Other Resources. A good way to present this material is to use excerpts from these recordings as "illustrations" for your historical presentation. Ideally, make the recordings available for the children to hear in full, either at home or during a free period at school.

As the children listen, encourage them to discuss their reactions to what they hear. Do the jokes still seem funny? Can they imagine the same type of show being on television now? What differences do they notice between what they are hearing and what they hear on similar television shows? Do girls and women sound the same now? Does the level of violence seem different?

To wind up this step, assign as homework interviewing someone who is old enough to have listened to radio in its Golden Age (anyone 45 or older is a likely candidate). Did the interviewees listen to the radio regularly? Did they listen alone or with other people? To what kinds of programs did they listen? What were the programs like? Have each child write a short paper on what he or she found out.

Step 2 Writing a Radio Script

Tell the students that now, working in small production teams, they are going to write and produce their own radio shows—for a real audience! Explain that they will be recording their shows on tape so they can play them for kids from other classes. (Suggestions on how you might arrange for their program to be aired are given at the end of this Lesson Plan.)

Remind the class that broadcasters in the 1920s, 1930s, and 1940s designed their programs to appeal to the widest possible audience. In writing their scripts, the children should do the same thing. They should think of their school as the broadcasters thought of the country, and try to create shows that will be fun for as many kinds of listeners as possible—in other words, for kids from different grades, with different backgrounds and interests, for both boys and girls.

Writing with Sound

Before the teams are formed and writing begins, you will want to give the students some pointers on what is special about writing for radio.

continued on page 4

Writing for radio is writing for a "blind" audience. This means that scripts require sound effects and music to do many of the things that words and layout do in printed publications:

Sound as a marker. Sound can be used the same way as are paragraphs and headings in a written text, to help signal changing subjects or shifting scenes.

Sound to create emotional tone. Imagine a radio scene in which two people are walking down a street. How different that scene seems if it is accompanied by ominous background music rather than a cheerful tune. Like music, sound effects can set the tone. In scary shows, for example, the creaking door, the howling dog, and the muffled scream all create atmosphere.

Sound to give information. Two acquaintances approach each other in the hall in a radio play. As they meet, there is a silence, then a gasp, and one of the people cries out, "Now you know how I feel about you!" What has happened? It would be hard to tell only from the actor's reading of the line. But if instead of the silence there had been the sound of a slap, or a kiss, or a gunshot, or a mocking laugh—then the audience would have been able to follow what was going on.

You may also want to point out that another difference between radio and television is *how much more radio leaves to the imagination*. Remind the children that this means that they need to be sure that any essential qualities of the characters or settings are indicated clearly in the dialogue. If it is important to know that a character is very fat, for example, that must be clear from what is said.

What a Radio Script Looks Like

The children's scripts should be typed, if possible. A simple format is to double space between speeches, music cues, and sound effects. Everything except the actual words to be spoken by the actors is in capital letters, like this:

ELLIE: This is the life! A rainy night outside, we're cozy inside, and Jack Benny starts in ten minutes. I'll just . . .

(THE DOORBELL RINGS.)

RAY: Who could that be?

ELLIE: Probably just the paperboy.

(DOORBELL RINGS AGAIN.)

RAY: I'll get it. . . . (RECEDING FOOTSTEPS, FADING)

ELLIE: (CALLING) If it's the paperboy, his money's on the hall table.

RAY: (OFF MIKE, CALLING) It's not the paperboy. It's Gracie Allen. She wants to know if we've seen her brother.

Down to Work

When the children have thought about these aspects of radio scripting, they are ready to begin. Divide the class into production teams of 6 to 8 people. Give each team a production schedule that spells out when the main steps—outline, finished script, rehearsals, final taping—need to be finished.

The first step for each team is to choose the kind of show they are going to create. You may want to make a list on the chalkboard of the kinds of programs they may choose from (comedies, suspense shows, soap operas, adventure serials, quiz shows, etc.) Tell them that their finished show should run 5 to 10 minutes, including two brief commercials for their show's (imaginary) sponsor—one at the beginning and another at the end.

Once the team has selected the type of program they are going to create, they need to set to work to produce an outline. Then they will write the script. As they begin writing, you may want to remind them that the way a written piece *looks* is often quite different from the way it *sounds*. They should, at frequent intervals, "test-read" out loud what they have written, to see how it sounds and how long it takes.

Step 3 Producing a Show

When the scripts are finished, the teams will be ready to produce their shows. Tell the children that they will be creating the sound effects at the same time the actors are reading their lines, just as shows were put together in the early years of radio. But they will be tape-recording their productions so other teams and outside audiences can listen to them.

To begin, each team should divide up tasks: they will need actors, music and sound effects people, and someone to handle the sound engineering (to place and operate the tape recorder.)

While the actors are rehearsing, the sound people should be working out the music and sound effects (the materials on sound effects on the *Pull-Out Page* can help them get started). As soon as possible, the actors and sound effects people should rehearse to-

gether, and the team should tape this rehearsal, listen to it, and decide what changes are necessary. (This, like many of the activities in this production, provides excellent practice in critical listening.)

This stage will probably involve much more work than the children have anticipated, since unforeseen problems (such as inaudible dialogue, incomprehensible sound effects, and timing problems) are almost sure to arise. The production schedule should allot enough time for the children to experiment with different ways to improve their production. **THEY SHOULD ALWAYS TAPE THE RESULTS** so they can hear how the show will actually sound and can compare different approaches in a realistic way.



Hanne Brown listens to her radio on a visit to Washington, D.C., summer 1986. It was the invention of the transistor in 1947 that allowed manufacturers to get rid of the bulky tubes inside radios, and begin producing sets that were dramatically smaller than ever before. (Laura Scott)

Finally, when the children are satisfied (within the time limits of the production schedule) with their show, they should make a final tape of it.

Then give the teams a chance to hear each others' tapes, and to comment on them. If possible, schedule a revision session when each team has a chance to make changes in its production, based on the feedback it has received from other teams.

Now the children are ready to play their tapes for outsiders. The most exciting way is to organize a "radio hour" when the shows are aired to the whole school, over the school's intercom system if possible, or at an assembly. If it is impracticable to set up such a large-scale audience, then arrange with another teacher or teachers to trade classes, or to have your classes meet together for a period, so the teams can play their shows to guest listeners. However you do it, remember that the more real this "radio hour" is, and the more you can play it up in advance to the children, the more exciting the radio show project is likely to seem to them—and the livelier their shows are likely to be!

Did You Know That the Smithsonian Has Its Own Radio Program?

It's called *Radio Smithsonian*, and it's a radio magazine about the Smithsonian's activities. The show can be a good source of topics to use in your teaching.

To find out whether *Radio Smithsonian* is aired in your area, write to *Radio Smithsonian*, National Museum of American History Room BB40, Smithsonian Institution, Washington, D.C. 20560. Or call (202) 357-1935.

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Other Resources

Tapes and records of old radio shows are available, at modest prices, from:

- Radiola
Box C
Sandy Hook, CT 06482
- Adventures in Cassettes
P.O. Box 11041
Minneapolis, MN 55411

Both companies will send a free catalogue upon request.

- The Museum of Broadcasting
1 East 53rd Street
New York, NY 10022
(212) 752-7684

This is a museum devoted entirely to radio and television.

The Wyeths: A Family Portrait

This one-hour *Smithsonian World* special focusing on artist N. C. Wyeth and his five remarkable children will play on PBS stations on Wednesday, November 19 (check newspapers for local listing).

Correction:

The photo credit for the picture of the Massachusetts family on page 3 of our April 1986 issue should have read "Lancaster Historical Commission."

We are especially grateful to the following individuals for their help in the preparation of this issue of ART TO ZOO:

Carol Bergman, Lifesounds production company

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PULL-OUT PAGE



(Library of Congress)

HOW KIDS LISTENED

These boys are probably catching an episode of their favorite radio show. They might be listening to *Superman*, or *Hop Harrigan*, or *Captain Midnight*. Adventure shows like these of the 1940s told exciting stories. Many also offered kids a chance to send away for special prizes. For just a dime and the seal from a jar of Ovaltine, for example, you could join Captain Midnight's Secret Squadrons—and get a decoder badge that taught you to decipher the secret message at the end of each program. Then you weren't just a listener, you were part of the show!

KIDS AMERICA—A RADIO SHOW SHAPED BY KIDS

Have you ever been a guest at one of Marcy's parties? Or thought you'd found a word so hard to spell that it might stump the Duke of Words? Or helped Z-KNØW the Alien figure out where on earth he was? If you've done any of these things, the chances are you've listened to *Kids America*, the only daily live radio show for kids now broadcast nationwide.

What happens on the air on *Kids America* depends on what the kids who call in to the show say. And a lot of kids call in—about 6,000 every day.

Many people work together to produce *Kids America*. The pictures on these pages give you an idea of what a few of them do and what the *Kids America* studio looks like.

If you would like to be on the *Kids America* mailing list, write: *Kids America*, % Office of Elementary and Secondary Education, Arts and Industries Building 1163, Smithsonian Institution, Washington, D.C. 20560.



Co-host Larry Orfaly on the air. (Liza Vicini, *Kids America*)



Engineer David Nolan running the audio board for the broadcast, so the show will be easy on the listeners' ears. (Liza Vicini, *Kids America*)



Kids America phone volunteers talking to children who are calling in. The volunteer on the right is writing the name, grade, and home location of a caller who is about to go on the air. In a moment, the volunteer will hold the paper up to the window in front of her. The *Kids America* staff person in the studio on the other side of the glass can then read the paper, so as to know a little about the caller. (Liza Vicini, *Kids America*)



Dr. Rita Book (whose real name is Betsy Hass) "prescribing" the right book to meet a caller's needs. (Liza Vicini, *Kids America*)

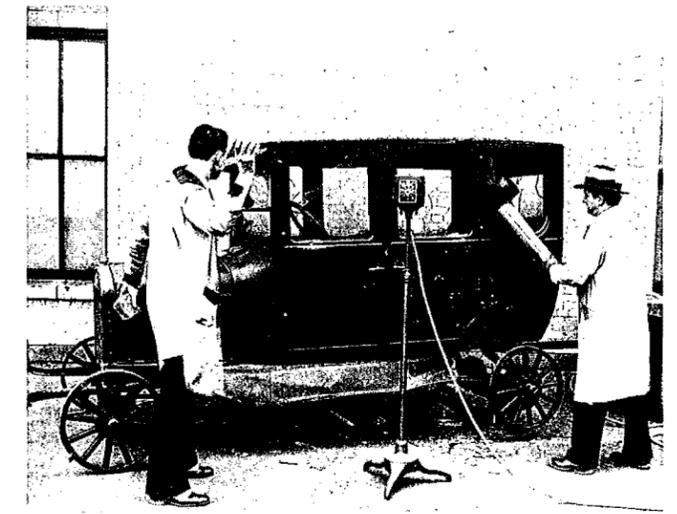
MAKING PICTURES FOR YOUR EARS

As soon as radio character Fibber McGee moved toward his closet, people listening to the show began to laugh. They knew what lay behind that closet door: a towering pile of junk. When Fibber opened the door, old shoes, trays, picture albums, skates, tin cans, pie plates, and countless other things would come crashing down.

This crash, a running joke on the show, was the creation of the program's sound effects man, Frank Pittman. He made listeners see Fibber McGee's closet in their mind's eye—a closet that was famous, but that didn't really exist.

Fifteen years earlier, when radio was just beginning, there were no sound effects—and shows were duller. But by the 1930s, when Fibber began opening the door to his pretend closet, sound effects had become an important part of radio programs.

As they worked, sound effects people had to be sure that the sounds they made were easy for the audience to recognize and that their timing was just right. They had to be sure that the sounds were soft enough so they wouldn't startle listeners, or make it hard for them to hear the actors' words. They also had to be sure that the sounds fit the mood of the show. For example, a drink poured by a murderer on a suspense show should sound different from a drink poured by a clown.



Some sounds were impossible to create in the studio. In such cases, the sound effects people would record the sound outside. Then they would play the recording at the right time later, while the show was being broadcast. What are they recording here? (Library of Congress)



Actresses Lurene Tuttle and Rosalind Russell stage a fight to the death in a 1945 episode of the radio show *Suspense*. At the end of their struggle, Russell will plunge to her death through a stair railing. The sound man stands behind the women, ready to imitate the sound of the wooden railing breaking. (Library of Congress)

For funny shows, the sound person exaggerated. He might pour a clown's drink slowly into a paper cup dispenser (which is four or five times as tall as a glass), so the pouring sound would go on and on, making listeners laugh.

Broadcasts at that time were not taped ahead and then played later, as most programs are now.

Shows in the 1930s were performed live. The sound effects people stood near the actors and the mike, and made their sounds at the right places in the script. Their sounds—and the actors' voices—went out over the airwaves, and the audience heard them right away. If any mistakes were made, the audience heard *them* too.

WHAT WAS THAT I HEARD?

Can you guess what real-life sound each of these effects is imitating?
(Draw a line connecting each pair.)

Crinkle thin, stiff paper

Blow air through a straw into a container of water

Repeatedly shake an umbrella open and closed

Snap fingers

Slide one block of wood against another

Swish a lightweight cane through the air

Hit a pumpkin with a strong piece of wood

Trickle uncooked rice onto a metal cookie sheet

Crush small wooden boxes

Hail

An arrow speeding past

Furniture breaking

A person being hit on the head

A light switch

A bird's wings flapping

Fire

A window opening

A babbling brook



(Biblioteca del Congreso)

COMO ESCUCHABAN LOS NIÑOS

Traducido por Ricardo Inestroza, Ed. D.

Estos muchachos están probablemente escuchando un episodio de su programa de radio favorito. Tal vez están escuchando *Superman* o *Hop Harrigan*, o *El Capitán Medianoche* (*Captain Midnight*). Programas de aventuras como estos de los 1940s contaban historias emocionantes. Muchos programas ofrecían la oportunidad de obtener premios también. Por solo diez centavos y una etiqueta de Ovaltine por ejemplo, uno podía pertenecer a los Escuadrones Secretos del Capitán Medianoche—y recibir una tarjeta especial que permitía descifrar el mensaje secreto al final de cada programa. De esa manera no solo era un oyente pero también parte del programa.

NIÑOS AMÉRICA (KIDS AMERICA)—UN PROGRAMA DE RADIO INFLUENCIADO POR NIÑOS

¿Te han invitado alguna vez a una de las fiestas de Marcy? o ¿Creído que has encontrado una palabra tan difícil de deletrear que confunda al Duque de las Palabras? o ¿Ayudado a Z-KNØW, el personaje de otro mundo a averiguar donde estaba? Si has hecho cualquiera de estas cosas, probablemente has escuchado *Niños América*, el único programa de radio para niños transmitido diaria y actualmente, a nivel nacional, en vivo.

Lo que pasa en el aire en *Niños América* depende de lo que dicen los niños que llaman al programa. Y muchos niños llaman—como 6,000 cada día.

Mucha gente trabaja junta para producir *Niños América*. Las fotografías en esta páginas te darán una idea de lo que algunas de estas personas hacen y también de como es el estudio de *Niños América*.

Si quisieras estar en la lista de correo de *Niños América*, y averiguar si *Niños América* es transmitido cerca de tí, escribe a: *Niños América*, % Office of Elementary and Secondary Education, Arts and Industries Building 1163, Smithsonian Institution, Washington, D.C. 20560.



Larry Orfaly, locutor adjunto, en el aire. (Liza Vicini, *Niños América*)



El ingeniero David Nolan operando los controles de la transmisión para que el programa suene bien a los oyentes. (Liza Vicini, *Niños América*)



Telefonista voluntarios de *Niños América* hablando a los niños que están llamando por teléfono. La voluntaria de la derecha está escribiendo el nombre, grado y dirección del niño a cuya voz pronto saldrá al aire. En un momento, la voluntaria va a levantar el papel enfrente de la ventana. La persona que trabaja en el estudio de *Niños América*, al otro lado del vidrio, puede así leer el papel para saber un poco sobre quen telefona. (Liza Vicini, *Niños América*)



La Dra. Rita Book (cuyo verdadero nombres es Betsy Hass) "recetando" el libro correcto que necesita la persona que llamó. (Liza Vicini, *Niños América*)

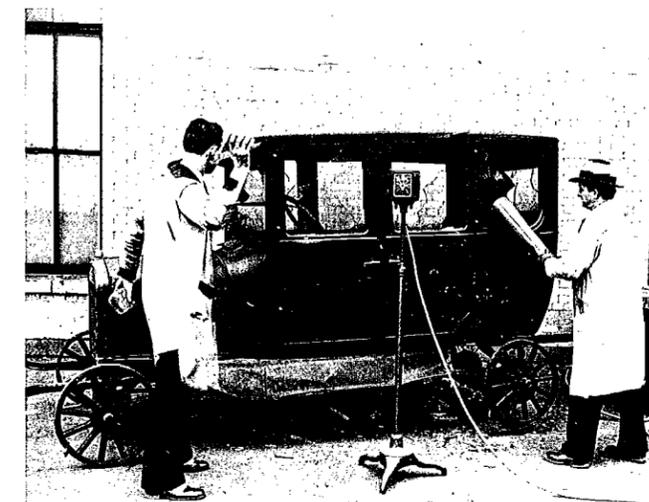
HACIENDO CUADROS PARA TUS OÍDOS

Tan pronto como el personaje de radio Fibber McGee se dirigía a su armario, los oyentes comenzaban a reír. Ellos sabían lo que había atrás de la puerta del armario: un montón de cachivaches. Cuando Fibber abría la puerta, zapatos viejos, azafates, álbumes de fotografías, patines, latas, moldes para pasteles, y un sinnúmero de otras cosas caían al suelo con estruendo.

Este estruendo, una broma común en el programa, fué creado por Frank Pittman, el hombre encargado de los sonidos especiales. El hacía que los oyentes vieran el armario de Fibber McGee en el ojo de su mente—un famoso armario que en realidad no existía.

Quince años antes, cuando la radio apenas comenzaba, no habían sonidos especiales—y los programas eran un poco aburridos. Pero en los 1930s, cuando Fibber comenzó a abrir la puerta de este armario imaginario, los sonidos especiales eran ya una parte importante de los programas de radio.

Mientras trabajaban, las personas encargadas de los sonidos especiales, tenían que asegurarse de que los sonidos que ellas producían fueran reconocidos fácilmente por los oyentes. Además, tenían que producirlos en el momento preciso, tenían que estar seguros que los sonidos fueran lo suficientemente suaves para no asustar a los oyentes ni dificultarles que oyeran las palabras de los actores. También tenían que asegurarse que los sonidos compaginaran con el humor del programa. Por ejemplo, que bebida servida por un asesino en un programa de suspenso sonaba diferente que una bebida servida por un payaso. En los programas divertidos, el encargado de los sonidos especiales exa-



Algunos efectos de sonido eran imposibles de crear en el estudio. En esos casos, la gente encargada de los sonidos especiales grababa los sonidos fuera del estudio. Después ponían la grabación en el momento apropiado, mientras se transmitía el programa. ¿Qué están grabando aquí? (Biblioteca del Congreso)



Las actrices Lurene Tuttle y Rosalind Russell actúan un pleito a muerte en un episodio del programa de Radio *Suspense*, en 1945. Al final de la pelea, la actriz Russell se caerá por la baranda y morirá. El hombre encargado de los sonidos especiales está atrás de las mujeres, listo a imitar el sonido de la baranda quebrándose. (Biblioteca del Congreso)

geraba. Vertía la bebida de un payaso muy despacio, en un cilindro donde vienen los vasitos de papel para tomar agua (estos cilindros son cuatro o cinco veces mas altos que un vaso), así que el sonido de servir una bebida duraba mucho tiempo y esto hasía reír a los oyentes.

Los programas de ese tiempo no eran grabados de antemano y transmitidos después, como la mayoría

de los programas ahora. Los programas de los 1930s eran en vivo. La gente encargada de los sonidos especiales se paraba cerca de los actores y el micrófono, y producían los sonidos en el momento apropiado, según el guión. Sus sonidos—y las voces de los actores—eran transmitidos por las ondas, y los radioescuchas oían inmediatamente. Si se cometían errores, la audiencia los oía también.

¿QUÉ FUÉ LO QUE OÍ?

¿Puedes adivinar que sonido de la vida real imita cada uno de estos efectos?
(Une cada par con una línea)

- | | |
|--|--|
| Arrugar papel tieso y delgado | Granizo |
| Soplar por una pajilla/popote dentro de un recipiente con agua | Una flecha pasando velozmente |
| Abrir y cerrar una sombrilla varias veces | Muebles quebrándose |
| Castañetear los dedos | Una persona siendo golpeada en la cabeza |
| Deslizar un bloque de madera sobre otro | Un conmutador de luz (un switch) |
| Mover rápidamente un liviano bastón en el aire | Un pájaro aleteando |
| Golpear una calabaza con un fuerte pedazo de madera | Fuego |
| Dejar caer arroz crudo en una cazuela de metal para hornear galletas | Una ventana abriéndose |
| Aplastar dos pequeñas cajas de madera | Sonido de un riachuelo |