lives of human beings. As long as the connection is made in a deep way, and as long as the experience evoked by the commercial is not in conflict with the experience of the product, purchase is possible, or probable. At the moment, agencies could skirt an end run right around the FTC by producing commercials that get to the heart of the human use of products. People take aspirin because they need relief from a headache, not because it has monodyocycolate in it. People enjoy soup for much simpler reasons than the Heinz commercials would lead one to believe. Eating Heinz soup does not give one the feeling that he is part of a 102-piece band riding on top of a gargantuan can of Heinz soup. Commercials that do not connect and resonate with real-life experiences build an incredibility gap for everyone who uses the medium.

From the FTC point of view, "telling the truth" should be the least important social concern. If electronic communication deals with effects, then government agencies responsible for safeguarding public well-being should concern themselves with understanding the effects of a commercial, and preventing those effects that are not in the public interest. A recent television commercial for children's aspirin was 100 percent truthful by the most rigid FTC standard, but the *effect* of the commercial was to make children feel that aspirin is something to take when they want to have a good time. The commercial clearly demonstrates that truth is a print ethic, not a standard for ethical behavior in electronic communication. In addition, the influence of electronic media on print advertising (particularly the substitution of photographic techniques for copy to achieve an effect) raises the question of whether truth is any longer an issue in magazine or newspaper ads.

At present, we have no generally agreed-upon social values and/or rules that can be readily applied in judging whether the effects of electronic communication are beneficial, acceptable, or harmful. Our print-based conception of electronic media prevents us from making social decisions based on a correct understanding of our new communication environment.

TOWARD A RESONANCE THEORY OF COMMUNICATION

In discussing electronically based communication processes, it is very helpful to use auditory terms. Words like *feedback . . . reverberation . . . tuning . . . overload . . . regeneration . . . fading* describe many of the characteristics of social behavior in relation to electronic media. Similarly, the elements of electronic auditory systems serve as useful analogies for social communication problems. In a public address system, for example, too much output produces feedback. This "fed back" sound becomes reamplified until the system overloads, producing distortion. Someone using such a system must learn to control the output and anticipate feedback. In mass communication, we experience a parallel problem. The interaction of program output with audience feedback can easily produce an information overload.

These analogies suggest a new theory of electronic communication, based on the patterning of information inherent in auditory communication. Transportation theory assumes that communication is difficult to achieve and that a message encounters resistance at each step in its movement across space, over a period of time. In our electronic communication environment, it is no longer meaningful to assume that communication is a low-efficiency process, or that messages must be pushed across a vast chasm in order to be received and understood. The space between phoning from one room in a house to another room in the same house is equivalent to the space between a caller in New York talking to someone in London. In both instances, space has no effect on the flow of information. Similarly, time is no longer relevant when communication takes place at electronic speed, and editing of film, sound, and video tape replaces the linear sequence of events *in time* with events juxtaposed in a time relationship established by the communicator.

In formulating a new theory of communication, it is valuable to build on Ray Birdwhistell's finding that a state of communication is nearly always present in our environment. This state

of communication is like an electric circuit that is always turned on. The juice is present in the line, and our problem is to make the current behave in such a way as to achieve the desired effect. Today, there is a nearly constant flow of information at all times. Indeed, one has to expend considerable effort hypothesizing a situation in our culture in which communication does not regularly occur. We take in electronically mediated auditory and visual information as part of our life process. It is part of our immediate physical surround, and we sit in it, absorbing information constantly. The vital question to be posed in formulating a new theory of communication is: What are the characteristics of the process whereby we organize, store, and act upon the patterned information that is constantly flowing into our brain? Further, given these processes, how do we tune communication to achieve the desired effect for someone creating a message?

In electronically mediated human communication, the function of a communicator is to achieve a state of resonance with the person receiving visual and auditory stimuli from television, radio, records, etc. Decoding symbolic forms such as pennants, drums, lantern signals, or written words is no longer our most significant problem. Words transform experience into symbolic forms. They extract meaning from perception in a manner prescribed by the structure of the language, code this meaning symbolically, and store it in the brain. But the brain does not store everything in this way. Many of our experiences with electronic media are coded and stored in the same way that they are perceived. Since they do not undergo a symbolic transformation, the original experience is more directly available to us when it is recalled. Also, since the experience is not stored in a symbolic form, it cannot be retrieved by symbolic cues. It must be evoked by a stimulus that is coded in the same way as the stored information is coded.

The critical task is to design our package of stimuli so that it resonates with information already stored within an individual and thereby induces the desired learning or behavioral effect. Resonance takes place when the stimuli put into our

communication evoke *meaning* in a listener or viewer. That which we put into the communication has no meaning in itself. The meaning of our communication is what a listener or viewer *gets out* of his experience with the communicator's stimuli. The listener's or viewer's brain is an indispensable component of the total communication system. His life experiences, as well as his expectations of the stimuli he is receiving, interact with the communicator's output in determining the meaning of the communication.

A listener or viewer brings far more information to the communication event than a communicator can put into his program, commercial, or message. The communicator's problem, then, is not to get stimuli across, or even to package his stimuli so they can be understood and absorbed. Rather, he must deeply understand the kinds of information and experiences stored in his audience, the patterning of this information, and the interactive resonance process whereby stimuli evoke this stored information.

The resonance principle is not totally new or unique to electronic communication. It has always been an element in painting, music, sculpture, and, to a limited degree, even in print. However, resonance is now a more *operational* principle for creating communication because much of the material stored in the brains of an audience is also stored in the brain of a communicator—by virtue of our shared media environment. Also, the *process* of evoking information is quite different today. It is much like the difference between riding a motorcycle under or over ninety miles per hour. Under ninety miles per hour, a driver should turn into a skid. Over ninety miles per hour, he should turn out with the skid. The physical forces working on a skidding motorcycle are reversed as the cycle crosses this speed barrier, so the driver has to reverse his behavior to pull out of the skid. Similarly, in communicating at electronic speed, we no longer direct information into an audience, but try to evoke stored information out of them, in a patterned way.

MEMORY AND RECALL

How does memory differ from recall? Well, if you ask people to listen to a story, then repeat what they *remember* for someone else, the result may resemble the following grapevine experiment. In this experiment, each person received instructions that he would be told a story, and then asked to repeat it for someone who had not heard it.

The story as told by the experimenter to the first subject:

> There was an old man who bought a dog. He took him out to a friend's house by a lake to see if the dog knew any tricks. At the lake he picked up a stick and threw it onto the water. The dog ran across the field and out on the lake, but instead of swimming he walked across the water, picked up the stick, and brought it back to the old man. The old man turned to his friend and said, "Now what do you think of that?" The friend said, "How much did you pay for that dog?" "Five dollars," replied the old man. "Well," said the friend, "you got a real gypping. You bought a dog that can't even swim."

The story as repeated by subject No. *4*, after it had been retold by three previous subjects:

> What I heard about the dog was that he couldn't swim. But I think he did a good thing, whatever he did. And I love animals above grown old people. Grown people like me and other neighbors of mine always exaggerate, and I detest people when they are liars to themselves. I, once in my life was told by my mother and father, never say anything wrong about other children. If you can't play with them just leave them alone.

The memory process introduces new *errors* at each stage of repeating the story, which cumulatively leads to total distortion. This form of learning (i.e., hearing a story, memorizing it, and repeating it for someone) is not very accurate or efficient. It is subject to the interpretation of each listener, and therefore the introduction of *noise* into the original message content (e.g., the fourth subject in the experiment used the opportunity of telling the story, to relate something that was on her mind at that moment). Too, the ability to understand and repeat a message varies greatly within a population.

Memory is not the only mental process available for learning. If I were to tell several people, in a variety of listening contexts, "Because you met me, you'll be different for the rest of your _____," and ask them to fill in the last word, the similarity of their responses would be very high. In this instance, I would be structuring the communication environment to evoke a *recall* mechanism in the listener. My stimulus does not introduce new information. Rather, it resonates with information already within the listener and available for recall. Thus there is less chance for a listener to interpret it incorrectly or respond with the wrong word. Furthermore, this type of recall is the fastest function of the brain, while conscious memory is the slowest.

Most advertisers are unaware of the relation between recall and our electronic information environment, and therefore depend almost entirely on memory to communicate information about a product.

ADVERTISING RESEARCH

Most advertising research follows logically, and incorrectly, from the advertisers' obsolete approach to learning. Advertising agencies have a central interest in whether people remember commercials they hear on radio or see and hear on television, and they are constantly evaluating their commercials by testing people's memory of them. A common testing situation involves a group of women who are paid to watch commercials projected in a theater environment. After viewing the commercials, they fill out questionnaires that measure their recollection of details or absorption of product image. The truth-

fulness and honesty of the responses cannot be verified, nor can they accurately measure the degree to which a respondent is capable or incapable of self-reporting his or her reactions. Furthermore, the researchers narrowly focus their questions on a subject's recollection of commercial *content,* which they consider the essence of what makes a message effective. *Content* is synonymous with scripted visuals, actor dialogue, and announcer copy (in essence, what the creator tried to *put into* the commercial). No effort is made to test the effects of camerawork, sound design, information stored in a viewer that might resonate with the commercial stimuli, or the critical elements in a listening or viewing situation that will give the commercial meaning (in essence, what a person *gets out* of the commercial). For example, when the station is about to break for a commercial, the announcer will say, "A report about the war coming right up." We then see two or three commercials before hearing about the war. This is a self-defeating practice, first because it makes the commercial an *interruption* of news, and second, because the commercial prevents those who might have a personal interest in the war from hearing it immediately.

Advertising researchers are not able to control situation variables, whether it is the programming before or after a commercial, the time of day when a spot is run, or the elements in a listener's home that will affect what he gets out of the commercial stimuli. One agency, worried about the artificial qualities of theater testing in relation to home viewing, attempted to simulate a *natural* listening environment by asking women to view commercials in a trailer parked near a shopping center.

This type of testing is of little value, primarily because it is directed toward measuring what a viewer remembers in relation to a commercial, not how people are affected by a commercial message in their home environment where they actually view it or the store environment where the actual purchase

will take place. Advertisers are testing in the same way my daughter is tested in the fourth grade. Both the commercial viewer and the fourth-grader are shown visual information or are asked to listen to some comments, and are subsequently quizzed in a formal manner about what they remember. The form of learning being measured has no direct relation to behavior. Social behavior, whether it takes the form of buying a product, developing friendships, or rioting, is determined by a much greater store of experiences in our brain than is available to conscious remembering. Certain stimuli, in the proper context, can recall experiences that we could never remember at will.

Ad agencies generally use a transportation theory of communications. They are trying to get information across to people, to sink it into their brains. And they use research to measure what they have implanted in a person's mind. What ad agencies seek to measure after they have produced a commercial, I need to know, in my commercial work, before I start. I do not care what number of people *remember* or *get* the message. I am concerned with how people are affected by the stimuli.

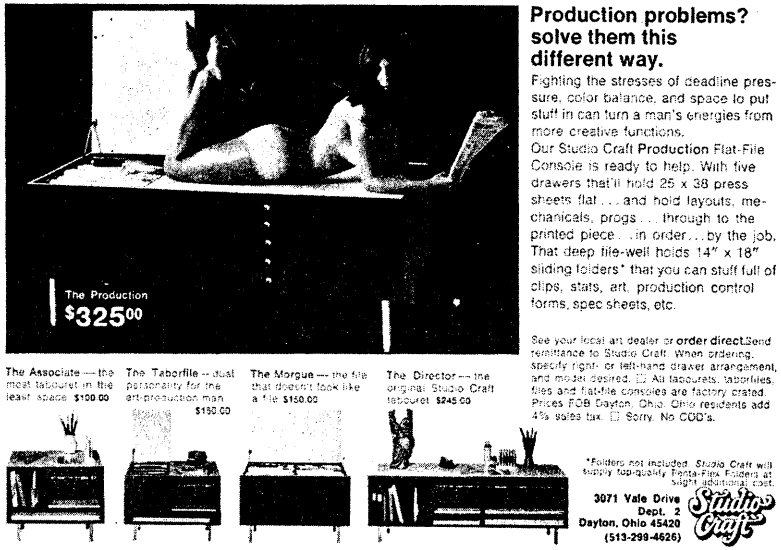
INFORMATION AVAILABLE FOR RECALL

The total amount of information imprinted or coded within our brains is huge, and the associations that can be generated by evoked recall are very deep. Information available for recall includes everything we have experienced, whether we consciously remember it or not. This total body of stored material is always with us, and it surrounds and absorbs each new learning experience. Furthermore, it is instantly recallable when cued by the appropriate stimulus.

The evoked recall process is similar to the experience of seeing an automobile accident. In witnessing an accident, you hear the squeal of brakes, the crash of the car, and possibly

see a person bleeding. At a later time, should you hear the squeal of brakes you may also recall many of the sights, sounds, feelings, and associations you experienced earlier. You will recall the event instantly, and this recall will form part of the context that gives meaning to the present stimulus. In the same way, if the advertiser evokes human feelings and human experiences in relation to a product in a commercial, the next time we see the product in a store, there is a good chance it will evoke the associations experienced with the commercial.

An important qualification should be entered here. In a commercial context, one cannot develop unbelievable associations between a product and real-life situations and expect to evoke past experiences in a viewer or listener that will support the attachment of the product to those experiences. That is, a viewer has no past experience of feeling like a king because he likes the taste of margarine, or having women attempt to seduce him when he changed hair tonics. An advertiser's research should deeply explore the *actual* experiences people



have with products in real-life situations, and structure stimuli in the commercials in such a way that the real-life experience will be evoked by the product when the consumer encounters it in a store.

If you are selling a kitchen drain cleaner, the advertising effort might involve building an association in the listener's mind between the *real* annoyance of a stopped-up sink and the *real* relief of unclogging it, in the context of using the product. If the commercial is effective, seeing the product in a store will evoke the consumer's feelings about clogged sinks and thereby generate a purchase of the product, to correct his or her stopped-up sink problem at home. The association could be made by having a woman, not necessarily a real housewife, reacting to a stopped-up sink in a *believable* way (believability is more important than reality). I am not talking about a "Josephine the plumber" type. If the advertiser can render a deep commercial on the feelings of a believable woman after she unstopped a sink that had been troubling her for several days, a real experience is created for the listener or viewer, and it will be stored permanently in his or her brain. When the consumer sees the product in the store, whether he or she consciously remembers it or not, the product may evoke the experience of the commercial. If that experience was meaningful, and there is a need, the consumer is likely to buy the product. Furthermore, if the consumer's expectation is then fulfilled by experience with the product, you have a customer who will come back again.

Advertising typically attempts to influence the consumer by *teaching* him the name of a product and hoping he will remember it when he goes to the store. But if we make a deep attachment to the product in the commercial, there is no need to depend on their remembering the name of the product. Seeing the product in the store should evoke the association attached to the product in the commercial. As the drugstore owner quoted previously said, "It strikes you."

Sometimes commercials inadvertently use a primitive version

of the process I am describing. These commercials do not utilize the real-life associations people have with the product. Rather, they create slogans or "unique selling propositions" to achieve a *name identification* effect. Given no other reason to buy product X as opposed to product Y, this vague feeling of familiarity with the name or slogan may be sufficient to induce purchasing product X. Endless repetition of a commercial may produce a similar effect. That is, while the ad content attempts to make the product unique, the running of the ad makes the product commonplace and environmental.

If one approaches a commercial from the base I am outlining, the role of *testing* becomes one of measuring people's behavior in the store. It is irrelevant to study whether people remember a product after seeing a commercial. The researcher could better concern himself with consumer action and reaction when he or she sees the product on display.

The function of advertising is to give the consumer materials and associations that he can recall in purchasing situations. A commercial should attach those meaningful associations that will be evoked by the stimulus of seeing the product in a store. Store design, package design, and marketing strategies should provide a context that is most likely to induce evoked recall. Effective advertising must encompass this total process.

DESIGNING A COMMERCIAL

Those of us who create commercials are in the business of structuring recall. When audience recall is effectively structured, the audience becomes an active part of the communication process.

> One of the major changes that has come into the world with the electronic environment as a total surround is that the audience becomes a work force instead of being target for campaigns.
>
> Marshall McLuhan
> Personal recording

When the audience is viewed as a work force in the communication process, the experiences and attitudes people bring to a viewing or listening situation become active elements in our advertising effort. Under these conditions, we know that the content of media includes far more than the visual and auditory information in the commercial itself. The wealth of stored information contained within the brains of members of the audience interacts with the stimuli presented by the advertiser in creating the total content of the commercial. It is for this reason the old Salem commercial could leave out the final phrase in their jingle, "You can take Salem out of the country, but . . .", once it had saturated our information environment. The audience served as a work force for the commercial and filled in the final phrase.

As the media speed up the information flow in our society and allow everyone to share the same information, the ability to *participate by feedback* on the part of an audience is increased. In an amazingly short time, the average viewer will recognize a new commercial campaign, identify the variations among different commercials within the campaign, and develop responses (often, puns or caricatures of an actor's voice) to specific lines or situations in the spot. Indeed, most commercials *burn into* the public's mind long before they are taken off the air:

> I'm in my store and I see customers all day long. After Walter Cronkite's had the news on the night before and has given us a sensational story, the customers will tell me about it. They do have the details, they have them correctly.
>
> Still, the same news agents who put on the Walter Cronkite news show turn around and give these same people who can get the story *once* very effectively, these same news people will give us a commercial over and over again, forty times the same commercial. I don't understand how they think we have one kind of mind for the news and another kind for commercials.
>
> Liquor store owner

For a commercial designer, this speedup in rate of absorption (and indignation when they notice a commercial being repeated over and over) has many practical implications. After running a sixty-second commercial a few times, we can easily substitute a designed-down thirty-second version of the spot with minimal loss in effect. Also, we can take a campaign that has been running for some time and design a new campaign with pieces from the old. This can evoke the audience's experience with the old campaign as well as build new associations with the product. For example, I have redesigned old Coke spots into a totally new campaign. In some of these spots, the word "Coke" was not even mentioned, yet the attachment of the commercial associations to the product was quite deep.

More fundamentally, the liquor store owner's comment suggests that a properly designed commercial need only be run a sufficient number of times to reach the intended audience *once*. It may be run over a long period, since new groups of people will encounter the problem or develop a need for the product as time goes on, but within any fixed period of time they need to see an effective commercial only once.

Suppose, for example, that you are about to buy a car and are having trouble making a decision. If, during this period, you see a commercial that touches deeply on the problem you are experiencing, you will be inclined to resonate with it. By tuning into your problem, the commercial will induce deep participation and generate positive feedback. Viewing the commercial once can accomplish this, and multiple viewings will not significantly strengthen the effect.

THE MEDIA ENVIRONMENT FOR COMMERCIALS

Because electronic media are part of our environment, we do not consciously perceive them as a *mediating* factor in the flow of information. We are so involved with electronic media

that we are not aware of their effect upon us. If you ask people how specific media function in their daily lives, you find they are most accurate in reporting on those media with which they are *least* involved. For example, they will tend to report most accurately concerning newspapers and magazines. They begin to lose accuracy in reporting on television as it functions in their environment, and they fall off completely with radio. Media research shows that only 2 percent of the population are consciously aware of radio as a vital source of information in their lives—about the same percentage who, when questioned, report *air* as one of the ingredients they consume in life. A few statistics suggest at least the scope of our involvement with radio: There are 320 million radios in the United States. The average household has 4.9 sets. Eighty million cars are equipped with radios. We spend over two hundred million dollars each year on transistor radio batteries.

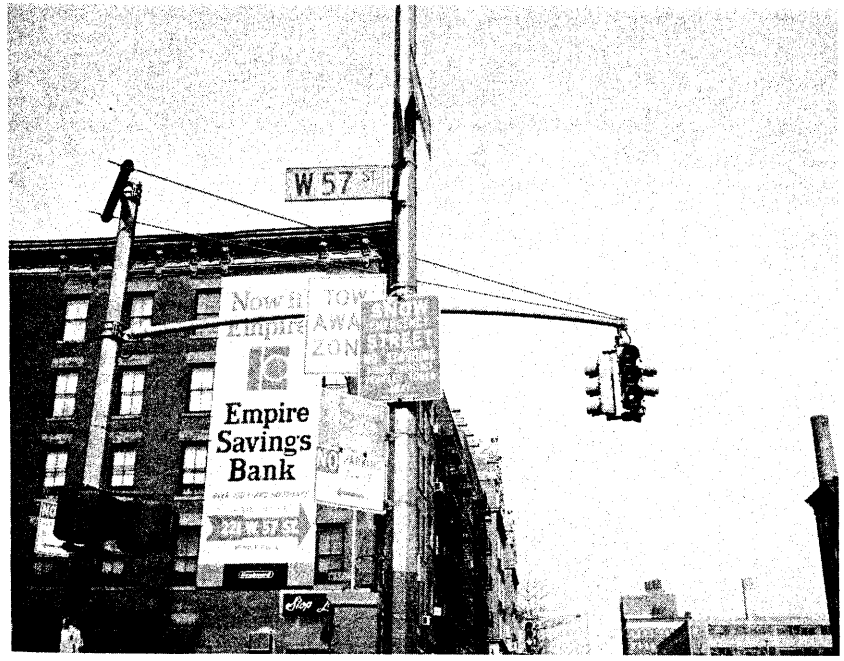
People don't *remember* radio as a source of information because they do not consciously *listen* to it. Rather, they bathe in it and sit in it. Just as we are not conscious of breathing, we

are not actively aware of radio-mediated sound in our environment. Yet we are deeply involved with radio, and we are strongly affected by radio programming that allows us to participate. Recent attitude-change research has shown that the most favorable condition for affecting someone's attitude involves a source the listener depends on or believes in, and yet one he does not actively or critically attend. Thus radio is an ideal medium for affecting attitudes through evoked recall communication.

Television serves a similar function as radio for many people, at certain times of day. Many housewives use the afternoon soap operas as a *surround* for ironing or preparing meals. And many teen-agers do their homework in a Rowan and Martin surround. Common sense would suggest that this is a very conducive environment for communication. Participation is deep, and a listener or viewer uses the medium as a companion. Yet some advertisers are wary of the growing use of electronic media as environmental surround. One advertising executive put it this way:

> Background listeners are those who really don't listen at all, but regard radio as a pleasant accompaniment to whatever they're doing. . . . The more foreground listeners radio can deliver, the better we like it. We want alert, attentive listeners—juices flowing, money out, ready to run down to the corner drugstore.

When foreground radio becomes cluttered, it moves to the background of our attention. However, if background radio contains stimuli related to a listener's life (e.g., if it mentions his name), it becomes foreground again. Advertisers have used media only as a means of putting things into people, not as a means of evoking what is already in the listener. The background listener, or the passive viewer, has a sympathetic relation to his electronic environment. Further, he has a lifetime of experiences stored within him. A commercial can provide the stimuli to regenerate those experiences, bring them into the



This photograph is cluttered *with signs for a general observer, but not someone looking for Fifty-seventh Street.*

foreground, and associate them with a product. This form of learning is harder to reject since there is no explicit message bombarding the listener. Also, the viewer or listener is more likely to retain the effects of the commercial since he does not have to remember anything. If the commercial is successful, it builds an association between the product and meaningful experiences in real life that is permanently stored and available for recall in purchasing situations.

CONSUMERISM

Advertisers could have complete control over the attacks directed against them by consumer groups. However, the ad-