

Paul Rosenthal,¹ Ph.D.

Nature of Jury Response to the Expert Witness

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SYNOPSIS: Communications to jurors entail not only *primary* content—the subject matter of the testimony—designated as the *message*, but also *secondary* content emanating from the witnesses as sources, from peripheral aspects of the message itself, and from the environment of the trial—designated as the *paramessage*. Interviews with jurors after a trial involving extensive expert testimony to introduce a new technology for identification evidence, popularly referred to as "voiceprinting," found they responded mainly to the paramessage. The general implication is that when confronted with complex or confusing testimony, expert or otherwise, jurors will shift their focus to observable characteristics of the sources of the information, or to other ancillary elements of the situation, and will be guided in their response by information and inferences derived from such data.

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My participation in this symposium stems from a long-standing interest in the subject of persuasion. I have always been fascinated by the communication process that is specifically designed to influence human behavior, belief, and action. While it may seem a somewhat remote approach, I want to start with an example from a political context. Briefly I want to discuss a theory of persuasion I have evolved over a 20-year study, then apply it to a particular case that I observed, and finally, I would like to make one or two comments about modern mass media and the courts.

My first major study was of the 1960 Presidential campaign and I found that a large percentage of the American electorate did not really understand the issues in the campaign. They did not understand gross national product, free floating exchange rates, and inverse ratios of economic deprivation. The diction and jargon used by the major Presidential candidates was often unintelligible and failed to communicate any real information to the mass electorate. The net effect of the 1960 campaign was that the winner of the Presidency, John Kennedy, persuaded about 8 to 10% more voters than did Richard Nixon during the campaign period and the content of the issues did not seem to make any difference in what was going on persuasively.

In a face to face communication there is a large quantity of information, some of which we traditionally designate as the *message*—the verbal component that is the subject of the communication. There is also a large, but extremely difficult to catalog, quantity of information

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¹ Chairman of Communications Studies Program, University of California, Los Angeles.

that I call the *paramessage*. This is verbal and nonverbal information emanating from the source and the environment that is peripheral to the subject matter of the communication. When the content of the message is meaningful, the message can drive the persuasive process. But for one reason or another that content is not always meaningful, and when it is not the focus of attention shifts away from the message to the paramessage. If you study the communication carefully, you usually can discern whether the focus has been on the paramessage, on these peripheral kinds of information, or on the central content of the communication—the message. If there has been a persuasive effect, it can often be traced to the latter or to the former.

In 1960 John Kennedy did not convince more people that his economic and foreign policies and social programs were better than those of Richard Nixon. What he did do was convince the majority of the persuadable voters that he was a more interesting, more attractive, and more knowledgeable individual than his opponent, and this made the difference in the outcome of the election.

As I began to examine other kinds of communications, I found this phenomenon to be broadly applicable. In 1966 I had occasion to become interested in a particular legal controversy because it seemed to be a very good case to further investigate this theory. The case was the Watts Voiceprint trial: the first attempt in California to introduce what is called “voicegram” or “voiceprint” evidence. If you are not familiar with the technique, it is a process whereby a sound spectrograph produces on electrosensitive paper a series of shadings that are sometimes intense, sometimes very light, and often vague in definition. These images represent specific sound features of a voice and the theory behind voice identification is that no two voices are absolutely alike. If you can identify graphically the peculiar sounds of an unknown voice and you can match them with a known voice, you can thereby identify the source.

In this trial, the entire case hinged on the identification of the voice of the defendant. There was an audio tape that contained admissions of arson committed during the Watts riots; however, the tape was made by CBS News and when the identity of the source was requested, CBS refused to provide it. The prosecution enlisted the aid of a voiceprint expert who made spectrograms from a known exemplar tape recording of the defendant’s voice that could not be introduced into evidence for other reasons, and compared them with spectrograms of the unknown voice on the tape. He concluded they were the same, and the prosecution then sought to introduce the voiceprint expert and the voiceprint testimony as a means of identifying the voice on the CBS tape. The trial was originally expected to last two or three weeks; it went almost seven and the bulk of the time was spent hearing expert testimony on the validity of voiceprint identification.

The usual test for the introduction of evidence by a new technology is whether or not it has achieved general acceptance in the scientific community of which it is a part. One of the difficulties in the Voiceprint case was that nobody quite knew to what field the technique properly belonged, and a large number of experts from different disciplines, for example, physics, linguistics, phonetics, and so forth were called to testify—three for the prosecution and seven for the defense. The judge made a critical error in the case. He should have ruled on the basis of all the testimony whether the technology had achieved acceptance in the scientific community, but he did not. Instead, he admitted the voiceprint evidence and let the jury make that decision. This was later found to be reversible error and the conviction was overturned on appeal.

The admission of the evidence, however, allowed me to question the jurors afterwards as to how they reacted to all of this highly technical testimony. I interviewed eight members of the jury and what I learned reinforced the conclusion I had reached in studying political communications. I asked each member of the jury which witness impressed him or her the most and one witness continually emerged as the most effective in the entire case. He was from Stanford University, was extremely articulate, his hair was short and trim, he wore glasses and a brown business suit, and presented himself in a very conservative and positive way. What struck me

about the jury's reaction to this witness was the universal perception that he was "a real scientist." "Some of the others looked like hippies." "This guy was a real scientist . . . I could tell," were typical comments.

I had talked with this witness and the defense attorney during the course of the trial and at one point the attorney expressed some concern that his testimony was overburdened with technical language and was going over the heads of the jurors. The witness commented that he thought that would probably help rather than hurt his effectiveness, and he was right. After the trial I asked the jurors a series of questions to see whether they had understood the basic technology of voiceprint identification. I asked if they knew what a formant or a frequency response was and whether they had understood the argument about the theoretical dot (the size of the point of electrical contact on the electrosensitive paper).

As it turned out, the jury comprehended very little about the technical aspects of voiceprint identification. Much of the testimony was simply too complex or too confusing and the jury responded in the same way as the voters in the 1960 Presidential campaign. Not really understanding the "message," they shifted their focus to something they could understand—the obvious personal and professional attributes of the witnesses themselves. What happened in the Voiceprint trial was a microcosm of what had happened in the larger political context and it convinced me that merely analyzing the message is not a realistic way of assessing what is influencing people, particularly when the communication involves technical experts and technical knowledge that is not easily translatable into terms that a jury can be made to understand. Then it is the manner of presentation rather than the matter presented that seems to make the difference.

Obviously, this does not apply to all expert testimony. Doubtlessly many of you are familiar with the ballistics tests in which bullets are rotated and you can see the markings match up perfectly or fingerprint overlays where you can see the exact match, pore for pore, break for break. That kind of graphically precise evidence can be made very clear to a jury. The problem with voiceprint evidence was that it did not have that kind of precision or specificity, and that can also be a problem in other fields, for example, psychiatry. In those instances, it becomes the personal characteristics, the peripheral information, that makes the difference. When you begin to catalogue this kind of peripheral data you are discussing factors such as fluency, vocal inflection, appearance, and the like. Some jurors reacted negatively to what they perceived as a "hippy" orientation of some very distinguished university faculty members. They thought that was not the way scientists ought to appear. The attitude or manner or confidence a witness projects is also part of this paramessage. Voiceprint jurors commented on what they saw as a "fussy" quality of one of the witnesses and they did not think it helped the case. They did not have much confidence in him.

There are other characteristics like this and they are situation specific. It is impossible to say what will be operative in every case but if you examine a particular configuration of persuasive communication, you can begin to unravel the factors that made it effective as well as those that operated adversely. Peripheral information can emanate from the source and also from the message itself, not what is being said but ancillary aspects such as the order of ideas, the clarity of organization, and the specificity of the information. Some witnesses chose to be deliberately general. The one who was seen as the most scientific was inordinately specific. The more detailed he became, the less the jury understood, but they were impressed that he was being so specific and they appreciated the comprehensiveness of his knowledge. So there are characteristics of what is being said, peripheral characteristics, that can either inure the jurors to the persuasive effect or divert them from it.

Finally, there is information in the environment. My fellow panelist Thomas Miller has alluded to a study in which the judge's nods or seeming nonverbal cues made a difference in the ways in which juries reacted to witnesses. In the Voiceprint trial there were similar occurrences. For instance, at one point the judge obviously was not being very attentive and the jurors could see that and take cues from him. There was one incident that was less passive. A

defense witness was sitting in the audience section while the prosecution witnesses were testifying and in the course of the presentation was exhibiting facial expressions of disapproval. Finally, the judge stopped the proceedings and said "I'm going to admonish you to cease shaking your head or making any kind of bodily facial suggestion as to the testimony of the witness. You are giving evidence to the jury, and when you want to give evidence to the jury you do it from the stand, you don't do it from the audience." But the fact is that is not always that easy to control that sort of peripheral information in the environment and jurors do look around and pick up cues from the reactions of others. When the "superstar" witness was testifying, there was a rapt attention by the audience. Everybody in the courtroom listened intently and the jurors were aware of that, too.

A live face to face communication is the closest analogy to what goes on in courts most of the time. However, a new element is being introduced which my fellow panelist, Godfrey Isaac, has already referred to as "trial by cinematography," and it is something that needs to be attended to with great care and caution. Those of us interested in communications study the mass media because they are the means by which this society comes to understand much of the rest of the world. I have been in broadcasting studios when documentaries and theatrical shows were being edited and you cannot help but be impressed with the knowledge that these people have about the use of film and videotape. The angle of a camera, the choice of what it will show, and the editing can dramatically affect the character of the information that is transmitted and the way it is received. There is no greater potential for the credible distortion of reality than in the film technique and it is something that I am not sure the courts are totally sensitive to. The idea of putting a video camera on a witness and letting it run seems to be a reasonable procedure, but the fact is that the angle or proximity of that camera, whether it comes up very tight or pulls back, and whether it moves or does not move can make a difference in the impact of the testimony. The medium can alter significantly the character of the information. It is part of the paramessage and must always be considered.

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Address requests for reprints or additional information to
 Dr. Paul Rosenthal
 Communication Studies Program, RH 232
 University of California, Los Angeles
 Los Angeles, CA 90024