Modern Technology in the Courtroom: Possibilities and Implications

Fredric I. Lederer

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Modern Technology in the Courtroom: Possibilities and Implications

By Fredric I. Lederer

The technological revolution has reached the courtroom. To the traditional wood-panelled, flag-displaying, somber seat of justice have come live remote first appearances and arraignments, computerized legal research, real-time transcripts, video records of trial, presentation of evidence via television and computer, and at least the possibility of live televised witness testimony -- to name but a few technological innovations. See, e.g., Rorie Sherman, Virtual Venues, THE NAT'L L. J., January 10, 1994, at 1. Few courtrooms have more than one or two of these developments at present, but the future is clear; the remainder -- and more -- are soon to arrive. The question, then, must be, What are the possibilities and implications of these technological solutions? In fact, are these really "solutions," or may they prove to cause larger problems than they purport to resolve?

Live Remote First Appearances And Arraignments

By informal estimate, between 160 and 200 courtrooms now use two-way live, televised remote first appearance and arraignment equipment. In the usual arrangement, the defendant appears from a special location in the jail. Able to see and hear the judge, who can hear and see the defendant, the first appearance or arraignment proceeds just as if it occurred in the courtroom. Increasingly, such appearances are expressly authorized by state statute, e.g., Virginia Code § 19.2-3.1. (A similar amendment to the Federal Rules of Criminal Procedure has been proposed.) Remote appearances minimize delays inherent in prisoner transfer, effect large cost savings through the elimination of transportation and security costs, and reduce escape and assault risks.

Remote first appearances and arraignments do not violate the sixth amendment confrontation clause, as no confrontation is involved and there does not appear to be any due process right to an in-court appearance. This does not mean, however, that no legal or practical problems exist.

The primary legal problem inherent in remote arraignment is the legal right to adequate defense representation and the lawyer's ethical duty to provide zealous representation. Except in some locations where two defense counsel are involved (with one in each location), in remote appearances defense counsel may be located either with the defendant at the jail or in court with the judge. Convenience and comfort alone may impel court attendance. Proper representation would include interview of the client and initial advice before the arraignment and adequate representation during arraignment. If counsel is with the defendant for both there is no problem. What, however, if counsel chooses to be in court? In practice in such a case, counsel ordinarily advises the defendant before arraignment and appears in court during arraignment. Yet, experience indicates that represented defendants may need to consult with counsel during the arraignment and, even with counsel present, may make unintentional incriminating admissions. Some courts have secure telephone lines for such communications. They are, however, inconvenient to use and surely more noticeable than an unobtrusive nudge with foot or elbow. The disparity between standing next to one's client and having to interrupt the client from a remote location with subsequent private (and privileged) communication does not create a legal or ethical problem, although it may present the appearance of inadequate interest in the client. Failure to interview and properly advise one's client before appearance should surely violate one's ethical duty, however, and would likely constitute ineffective assistance of counsel depending upon the consequences.

There are those, however, who assert that the only people who will appear remotely for arraignment, which is customarily within the defendant's choice, will be those who are unable to afford retained counsel or who cannot be released on bail or personal recognizance. These would likely be the indigent and in some jurisdictions could well prove to be predominantly minority members. This suggests an equal protection challenge based on wealth or race or both. Even if this unintentional result should occur, it is unlikely that a challenge would lie. There is no reason at present to believe that remote appearance, particularly one that is based on consent, is itself damaging in any way. Certainly, it should not be prejudicial in terms of result. Consequently, remote arraignment per se
should not present legal problems. Should remote arraignment result in, however, a sharp difference by race or economic status in those who appear remotely ands those who appear in court, a question of public policy may well be presented.

Computerized Legal Research in the Courtroom

All lawyers and judges are now familiar with the use of computerized legal research, notably Lexis and WestLaw. The presence of on-line research at the judge's bench and counsel tables presents no legal problem whatsoever. Pragmatically, the ability to "shepardize" a case or call it up instantaneously may make counsel more careful in their in-court citation and assertions of legal authority. Judicial use of such research on the bench runs the risk of greatly increasing counsels' stress levels, however, and significant use in the courtroom by anyone may delay the proceedings.

Real-Time Transcripts In The Courtroom

Court reporter transcription using real-time, computer-based, equipment can yield an approximately 99 percent accurate transcript that can be displayed on a computer monitor in front of judge and counsel and concurrently printed. Because this is simply a speedier variation of traditional court reporting, it presents no legal questions. Pragmatically, for judges and counsel who do not need perfect transcripts (which usually require some reporter editing because of the nature of the technology), it should greatly enhance the speed in which transcripts are available. The technology does present a novel possibility, however. Because real-time produces an electronic transcript, which can be transmitted by modem, it permits those outside the courtroom to review the transcript in real-time. Although this may have great interest for some partners and associates of firms involved in a case, it may also be of service to appellate courts faced with last minute death penalty litigation.

Video Records

Video records of trial have proven attractive because of their inexpensive nature. Kentucky in particular has made widespread use of them. Because of the importance placed on witness demeanor in fact finding, our appellate courts defer to the trial judge's credibility determinations in bench trials. See, e.g., FED. R. CIV. P. 52. Video records, with their ability to present voice intonations, facial gestures, and body language may abrogate the need for such deference, unless, of course, deference serves interests such as finality to a greater degree than has previously been acknowledged. Interestingly, in one study of the Kentucky courts, the National Center for State Courts determined that when using video records, "the Court of Appeals is somewhat less inclined to reverse the original trial court factual determinations." James A. Maher, Do Video Transcripts Affect the Scope of Appellate Review? An Evaluation in the Kentucky Court of Appeals (National Center for State Courts, 1990).

Video records also could affect both the quality of judging and lawyering. Lawyers have often complained about judges who through voice or body language have suggested their views of witness credibility or the strength of a case. Judges, on the other hand, have sometimes complained about inappropriate counsel behavior, behavior which was inherently difficult to substantiate on a written record and which thus might dissuade the judge from holding counsel in contempt. Given a sufficiently comprehensive camera and recording installation, video records would present these matters accurately to an appellate court.

The difficulty with video records has not been legal in scope but practical. The bulk of the records, the need for a player and television to use them, and the difficulty in finding the right spot on the record, all coupled with the inherent need to review videotape in real-time, has made them unpopular with many judges. Coupling video records with electronically searchable (likely real-time) transcripts, which are synchronized with the records, makes video records eminently useful, albeit not as substitutes for a traditional record.

Evidence and Argument Presentations via Television and Computer

Charts, photographs, models, and the like have been used routinely in courts. Technology has complicated matters by permitting the use of what may be particularly persuasive, and perhaps prejudicial evidence.

The purpose for which information is used in the courtroom determines its legal propriety. Diagrams used during closing argument to show a jury an advocate's view of the case are held to a far less demanding standard than diagrams offered in court as substantive evidence; i.e., summaries of voluminous records. See, e.g., FED. R.
Perhaps the most famous, or infamous, example of the use of technology in argument occurred in Standard Chartered PLC v. Price Waterhouse, a high-stakes 1993 Arizona case. In this $17,000 video, scenes from 'A Night to Remember,' a 1968 British movie about the sinking of the Titanic, are alternated with information and graphics about how Price Waterhouse's faulty audit financially sunk an investment by the British bank, Standard Chartered PLC. Rorie Sherman, And Now, The Power Of Tape; Videos are being used to argue the case and not just demonstrate the facts. NAT'L L.J. February 8, 1993 at 1. Although at least some jurors subsequently claimed that the tape had not been decisive in their large verdict for plaintiff (subsequently overturned by the judge), the defense claimed that use of the tape was prejudicial error. Although courts have never been troubled by extraordinarily persuasive advocates, the use of technology-based persuasion does present some risk. We know that carefully crafted television advertising can be particularly persuasive. Are the same risks present in television arguments that have always been present, or is there something new?

These concerns take on increased weight in the use of sophisticated computer animations. Assuming that animations, when used as evidence, are properly admitted. See, e.g., PAUL C. GIANNELLI & EDWARD J. IMWINKELRIED, SCIENTIFIC EVIDENCE 515 (2d ed. 1993) ("[w]hen the proponent offers testimony based on mathematical model, the proponent must identify the formulae programmed into the model and demonstrate that the formulae satisfy [the relevant standard]" the weight that a jury in particular may give them is potentially troubling). One should contrast a somewhat mundane "reenactment" of an automobile accident with a "Jurassic Park" quality production that is so lifelike that one must constantly strive to remember that this is not actual footage of the event. The former should cause no legal problems. The latter would also certainly run a foul of rules such as Federal Rule of Evidence 403 (the judge may declare inadmissible otherwise admissible evidence the probative value of which "is substantially outweighed by the danger of unfair prejudice").

In short, animations and other forms of computer displayed evidence and arguments ordinarily present no new legal problems to the courts, which is not to say that they are any more trouble free than their low technology alternatives. They may, for example, implicate substantial scientific evidence concerns when based on novel scientific or engineering theories. As technology advances and "Hollywood" quality becomes possible, the potential prejudicial impact of some evidence or argument may be such as to mandate exclusion from trial.

One last matter is unavoidable in this area -- cost. Current computer technology makes fairly sophisticated graphics and animations either inexpensive (especially when amortizing hardware and software over a number of cases) or at least potentially so. High quality, unique, computer work that must accurately reflect a myriad of specific facts and conditions, however, can come at a staggering cost, as might production quality videotapes. Thus far, the legal system has not prohibited parties from use of expensive counsel, experts, or evidence, even though disparity of result may flow from disparity of resources. This would appear a poor location to begin to apply an "excessive expense" rule. It would be imprudent to ignore its effects, generally, however, and the possible financial consequences in criminal cases in particular. As computer animations and the like increasingly penetrate criminal practice, counsel for indigents can be expected to request the resources to use such technology. If it is to be denied, yet permitted for those who can pay for it, questions of equal protection must surely arise if the presentations prove to be particularly effective.

Remote Appearances By Counsel And Witnesses

Two-way communications equipment makes it easily possible for counsel to appear for motion arguments and the like by live television. The problem is not particularly one of technology but of cost, and cost is likely to diminish in the future. No legal objection appears unless local statute or rule prohibits such appearances. Once trial is reached, however, other matters may apply such as the criminal defendant's right to be present at trial.

The technology now exists not only for remote lawyer appearances but also for remote live witness testimony. See, e.g., In re San Juan Dupont Plaza Hotel Fire Litigation, 129 F.R.D. 424 (D. Puerto Rico 1990) (order establishing procedures to receive remote satellite television testimony). Substantial financial and time savings are likely if trial witnesses, especially expert witnesses, could appear remotely by television. In the criminal area, the use of two-way live television raises substantial confrontation questions. The Supreme Court has clearly held that the federal right to confrontation does not absolutely require a face-to-face in person confrontation in all cases. It has even sustained the constitutionality in one child abuse case, in special circumstances, of one-way television. Maryland v. Craig, 497 U.S. 836 (1990). Whether, and to what extent, the Court would permit two-way live remote
testimony absent extraordinary circumstance is unclear. Quite possibly, the legality of such use, and perhaps the legality of civil trial testimony, may depend upon where the witness testifies from (whether from a courtroom or less legalistic setting), the formalities attendant on the testimony, and the technology used (i.e., would off-camera witness prompting be visible?). Even if legally admissible, we do not yet know the answer to a critical practical question, To what extent, if at all, is remote testimony more of less persuasive than in-court testimony?

Conclusion

Technology is here to stay. Although it's hard to predict its consequences to courts and courtrooms, we can be confident of only one thing -- there will be effects and they must be intelligently managed. Technology is not an end in itself; it must be a solution or help or it ought not to be used. Some technological solutions may well bring new legal problems, and technology is likely to cause changes in day-to-day litigation. More probably, however, new technology will simply present new versions of old problems and old solutions, and we ought not to let new packaging unnecessarily alarm us.

Biographical Information

This biographical information may date from as far back as 1994. Please keep in mind that it may no longer be accurate.

Fredric I. Lederer

Frederic Lederer is chancellor professor of law at the College of William & Mary's School of Law and founder and director of the Courtroom 21 Project, which includes the world's most technologically advanced trial and appellate courtroom. Prior to joining the William & Mary faculty, Mr. Lederer served as a member of the United States Army's Judge Advocate General's Corps. He also has served as prosecutor, defense counsel and trial judge. Mr. Lederer's areas of specialization include evidence, trial practice, criminal procedure, military law and legal technology. He has written numerous books and articles as well as two law-related educational television series.