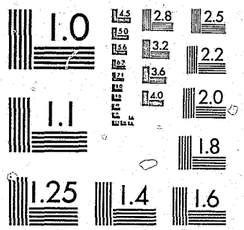

FJC Staff Paper

THE POTENTIAL FOR VIDEO TECHNOLOGY IN THE COURTS

Federal Judicial Center

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THE POTENTIAL FOR VIDEO TECHNOLOGY IN THE COURTS

By Joseph L. Ebersole

Federal Judicial Center
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The increasing use of video technology in the courtroom to present testimony and other evidence has generated claims for the new technology as the solution to court delay. This possibly extravagant optimism has been more than countered by many attorneys who view the possible elimination of live testimony from trials with a feeling approaching horror, as well as both judges and attorneys who fear that video will lead to a circus atmosphere in the courtroom.

As we would be with any technology, we must be careful to use video prudently. Neither blind optimism, which sees a panacea in every new development, nor the fearful pessimism that foresees the downfall of our system of justice, represent a reasoned response to the introduction of this new technology. We need, instead, to carefully assess the actual and potential consequences of video technology in order to move toward policy guidelines for carefully defined and considered use.

Although court trials will undoubtedly be televised within this decade, major video use in the immediate future will probably be limited to playback at trial of prerecorded testimony, lineups, and various types of demonstrative evidence, such as the operation of a machine, a view of the scene of a crime, or the like. Because of my interest in court administration, after briefly reviewing the types of use in the courts I will focus on those applications that show some promise of increasing our judicial system's effectiveness.

Uses of Video Technology in the Courts

Television broadcasting of a trial. Broadcasting trials by television is clearly proscribed in federal courts. At its March, 1962 meeting, the Judicial Conference of the United States condemned photographing in federal courtrooms or their environs in connection with any judicial proceeding. The Conference also voted to extend the policy of rule 53 of the Federal Rules of Criminal Procedure to television broadcasting. In 1965, the Conference reaffirmed this position, and the Supreme Court, in Estes v. Texas,[1] approved the policy of rule 53 and grounded it in constitutional law.

Videotaping a trial. Recording judicial proceedings via video technology, even without any intention of broadcasting, is also clearly proscribed in federal courts. The proscription for state courts is not as clear. Canon 3 of the May, 1972 proposed final draft of the new Code of Judicial Conduct allows a judge to authorize videotaping "for the presentation of evidence, for the perpetuation of a record or for other purposes of judicial administration."[2] In fact, trials in several states have already been videotaped. Each of these instances seems to fall within the exceptions allowed by proposed canon 3.

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1. 381 U.S. 532 (1965).

2. Canon 3.A.(7)(a) and, where recognized educational institutions want videotapes of trials exclusively for instructional use, canon 3.A.(7)(c).

Videotaping testimony and depositions. Testimony can be prerecorded in order to present a videotape at trial instead of having a witness appear. To date, most videotaping of this type has been solely for presentation at trial via television monitors, which are viewed by the trier of fact. An example is a trial conducted by Judge James L. McCrystal of the Court of Common Pleas in Erie County, Ohio.[3]

In other instances, depositions are videotaped both for purposes of discovery and to see how a witness reacts. This has the further advantage that the testimony is available on video in case the witness is unavailable for trial. In the past, unavailability of a witness has required that a transcript of the witness's deposition be read in open court in lieu of the witness's actual appearance.

Presentation of testimony via videotaping will have a significant, immediate impact, in that it will begin to blur the traditional distinction between "live" presentation of testimony by the witness and presentation via previously recorded testimony. In civil trials, there is no barrier under rule 30(b)(4) to videotaping depositions in federal courts, and in fact, there is infrequent but growing use of videotaped depositions in both federal and state courts. The use of prerecorded, videotaped testimony in criminal trials poses the problems of definition of the right of con-

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3. See McCrystal, Ohio's First Video Tape Trial: The Judge's Critique, The Ohio Bar, Jan. 3, 1972, at 1.

frontation and the limitation of federal criminal rule 15 and its state analogues. As to the taking of depositions by videotape, the change allowing videotaping under the federal civil rules becomes applicable in criminal cases under rule 15(d) of the Federal Rules of Criminal Procedure.

Videotaping improves the method of presenting evidence and reduces trial time in those cases where jurors might otherwise have to be transported to the scene. For example, in Carson v. Burlington Northern, Inc.,[4] the use of videotape was allowed, to take the deposition of the plaintiff.

Videotaping confessions and lineups. Videotaping of confessions and lineups is increasing. In an Eighth Circuit case, the majority, in upholding the use of a defendant's videotaped confession, which was shown to the jury at his trial, stated that such videotaping is "protection for the accused" and "an advancement in the field of criminal procedure and a protection of defendant's rights." They suggested that "to the extent possible, all statements of defendants should be so preserved."[5]

Reducing Delay in the Courts

From the point of view of court administration, some of the most exciting possibilities lie in the

4. 52 F.R.D. 492 (1971).

5. Hendricks v. Swenson, 456 F.2d 503, 506 (8th Cir. 1972).

potential of video technology for reducing delay in the courts. Where the unavailability of a witness would otherwise result in delay of a trial, the court can, under modern rules, order videotaping of testimony for presentation at the trial. Videotaped testimony should reduce the length of trials, because there will be no interruption while a judge rules on admissibility and no delays caused by waiting for the next witness.

Reducing appellate delays. In the appellate process, a significant portion of time is consumed in preparing the transcript for the record on appeal. Many writers have suggested that videotape--of either the trial itself or of the testimony and charge for presentation to the jury--results in an instant record. Although this is true in fact, I question whether videotape will be generally useful for courts of appeals. In those cases where the only issue requiring a trial transcript involves a specific five- or ten-minute portion of the trial, videotaping might be worthwhile (especially if demeanor is important to the issue), but a typed transcript of the relevant portion, which would require minimal typing time, might suffice. Furthermore, I question whether attorneys would be satisfied with only a videotape record. Attorneys generally want to review the total record; few lawyers would spend precious hours reviewing a videotape when a transcript could be read in a fraction of the time.

Where testimony is both videotaped and stenographically transcribed prior to trial, an instant record does exist (except for the jury charge). Where this

procedure is followed, at least a month would be saved in the appellate process.

Courts that now use audio recording for perpetuating a record (for instance, the State of Alaska) should find that videotaping trials will reduce the time required for preparation of transcripts. Typing from an audio recording is much slower than typing from stenographic notes or a court reporter's dictated notes. It is well known that perception is enhanced when more than one sensory modality can be employed. A transcriber would be able to type both faster and more accurately from videotape, and problems of voice identification would be greatly reduced, resulting in less delay.

Videotape inventories of "ready" cases. We are all familiar with calendar breakdowns caused by the problems of trying to get witnesses and prepared attorneys together so a trial can proceed. Sometimes so many cases are continued on a given day that a judge may not be able to conduct a trial. If instead there were always a number of cases in which opening argument, testimony, summary, and charge were videotaped, delays caused by calendar breakdowns would be eliminated. There would always be cases ready for trial. Perhaps it would make more sense to have "videotape trial days," when only videotaped cases would be heard. This would reduce the number of days attorneys would have to travel to courts to "wait their turn," and would vastly improve court administration.

Reducing delay caused by engaged counsel. Many

trials are delayed because one or both of the attorneys are engaged in another court when a judge wants to start a trial. In civil cases especially, we should consider whether this condition might not justify an order for videotaped testimony and argument. Here again, video technology would give the court a greater degree of control over its calendars.

Reducing judge time for seminars. Courts today are concerned about reducing the time judges have to spend on activities not directly related to decision making. Although the example below is rather narrow, it does illustrate several ways in which video technology can save time for judges in activities other than case work.

Each year, the Federal Judicial Center conducts approximately fifty seminars for the federal courts. Judges are often members of the seminar faculty, and have to take time away from the bench to perform this function. The Center now has video equipment that will be used, where appropriate, to tape faculty members' lectures for playback at the seminars. The recording can be made in the judge's chambers, thus saving several days of the judge's time for each seminar conducted. The tapes will also be available to judges who wish to brush up on a given subject at their own convenience.

Witnesses, the Forgotten People

Michael Ash, in making an impassioned plea for

better treatment of witnesses in criminal courts, claims that witnesses are "more abused, more aggrieved, more neglected, and more unfairly treated than ever before." For many, the experience is "dreary, time-wasting, depressing, exhausting, confusing, frustrating, numbing, and seemingly endless."[6]

One study has indicated that five witnesses are subpoenaed needlessly for every one that is subpoenaed for trial;[7] the witnesses' time is wasted four out of five times. It is not surprising that many witnesses have a general disaffection for our judicial system.

Video technology has a great potential for reducing what amounts to abuse of witnesses. It is not uncommon for a witness to testify eight or more separate times, in pretrial proceedings and at trial, about the same facts. If there were "waste" appearances at any of these proceedings, the witness could have to report to the court thirty or forty times. But if it were possible to record the witness's testimony on videotape (including cross-examination), the number of appearances could be drastically reduced, and many witnesses would only have to appear once--for videotaping.

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6. Ash, On Witnesses: A Radical Critique of Criminal Court Procedures, 48 Notre Dame Lawyer 386, 388, 390 (1972).

7. Id. at 391-92, describing weekly statistics collected by the office of the District Attorney of Wayne County (Detroit and suburbs), Michigan, from Jan. 10 to Mar. 17, 1972.

This suggestion raises many questions, but we should explore every possibility of making more exceptions to federal criminal rule 15 and related state rules. Perhaps we should consider whether the concept of "rights of witnesses" should be developed. A witness has no practical means of preventing or obtaining redress for being unnecessarily or even frivolously subpoenaed. In fact, we should consider whether witnesses should not have a "right" to have their testimony videotaped.

We could start with videotaping perfunctory testimony in criminal cases. That would include, for example, testimony to establish "nonconsent" and "no authority" elements of crimes. Such testimony is sometimes stipulated to by the defense. Videotaping such testimony would probably greatly increase stipulations, and, where stipulations were refused, would reduce costs to the government and inconvenience to the witnesses. Other types of testimony that might be candidates for videotaping include identification of business records, identification of physical objects, chain-of-custody testimony, and expert testimony.

Many problems lurk between the lines of these suggestions, but attempts at innovation should start now. A major step forward may be taken in a project that the National Center for State Courts is to launch this year. It will involve observing the operation of video technology in criminal courts, to evaluate and clarify the relevant constitutional and procedural issues. The Center will establish field applications

designed to explore and resolve those aspects of video recording that might infringe upon individual rights or violate rules of procedure. Another objective of the project is to establish a library of information on court-related uses of video recording, and make this material available to all courts.

Other Potential Uses of Video Technology

Traversing distance. Since picturephone videos can be displayed on large screens, we should consider using picturephones for oral argument in cases where attorneys are located some distance from the appellate court. The picturephone could also be used for contemporaneous testimony at trial, especially for witnesses who live far from the trial site. It may also be possible to videotape depositions using picturephones. For example, the witness would "appear" on the picturephone, and his responses could be videotaped by focusing the camera on the picturephone. The picturephone could also be used for pretrial conferences; the judge and the attorneys, in their respective chambers and offices, could resolve problems in a conference call.

Pretrial appellate review. It has been suggested that if all testimony and the charge were videotaped, the review process might be completed before the tape is shown to a jury. Thus the case would not be tried until all the trial judges' rulings had been reviewed, and a jury would be called only when the tape was

legally correct.[8]

Research. Several years ago, a fracas ensued after a jury room was "bugged" as part of a research project on the jury system. Videotape will make it possible to research many facets of our trial system by showing the tapes to experimental juries and studying how these juries function.

The Need for Standards

The need for minimal standards covering applications of video technology is already recognized. Some areas that are or perhaps should be covered by such standards are discussed below.

Equipment. Interchangeability of equipment is a must. Courts must be able to play back, on one manufacturer's equipment, a videotape that was recorded on another manufacturer's machine. Although this was a major problem in the past, in 1969, the Electronics Industries Association of Japan promulgated specifications for recording characteristics of half-inch videotape recording equipment. These specifications have been adopted as the standard in Ohio courts.

Since Japanese manufacturers presently provide most of the professional-quality, half-inch recorders available in this country, standardized equipment is widely available here. I understand that American manufac-

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8. Brennan, Justice and Technology--1997, 50 Mich. St. B.J. 150 (1971).

turers provide equipment that is compatible with the Japanese specifications, but I cannot cite any specific models.

In general, at this stage of development, half-inch tape equipment is a better choice for the legal profession than one-inch tape equipment; it is cheaper, and the quality level is acceptable.

It may be advisable to promulgate standards requiring "time-line" information (to prevent tampering) on the videotape, using an internal clock pulse. The same result could be achieved, however, without incorporating an internal clock pulse in the equipment, merely by placing a clock directly behind the witness, thus including it in the video record.

One can never be certain that a good recording is being made unless the recorder has a playback head adjacent to the recording head. This allows monitor display of the picture and sound being recorded. The picture and sound lag a fraction of a second behind the actual event. The monitoring screen faces the operator, who uses an earphone for the audio portion. We should consider whether video equipment standards for courts should include such a requirement, since this is the only way to assure quality recording.

Accuracy of the record. Under federal civil rule 30(b)(4), an order permitting nonstenographic transcription must designate the manner of recording, preserving, and filing the deposition, and may include other provisions "to assure that the recorded testimony will be accurate and trustworthy." Since large variations in methods may emerge, we need to develop some suggested standards for such orders. For example, swearing of the witness should be recorded. At the end of taped testimony, the video operator could appear and identify himself on the record to certify that the recording was supervised and is complete. The operator could also be required to take an oath that he would accurately record the proceeding, in a trustworthy manner. Thereafter, integrity can be maintained by requiring that the original tape be filed in the court.

Security and storage. Videotapes should be stored in a controlled-access room, and procedures for logging, indexing, and checkout should be established. Standards governing the environmental conditions for tape storage already exist. The temperature should be 70 ± 5 degrees Fahrenheit, and the humidity should be 50 ± 5 percent. External magnetic influences are not a major concern. A small magnet will not affect a tape unless it physically contacts the tape; even large industrial electrical magnets cannot alter the recording unless they are within two feet of the tape.

Editing. Standards for editing should be developed. One type of editing is the "interpretation" of the recording that is caused by the camera angle, the lighting, the coverage or scope of the picture (video technicians usually refer to this as "picture composition"), and the like. If only one camera is used for a deposition, should the attorneys and witness all be in the picture? Should the camera record the witness only? Or should the cameraman always focus on the

person speaking? If more than one camera is used, is a split-screen presentation desirable?

Picture composition can affect the credibility of the witness. The potential problems are more serious if two or more cameras are used. If a split-screen--or "key"--presentation is used, there is a greater chance of problems. For example, if the equipment operator "wipes" a camera on the wrong side of the screen, it will make the witness appear to be looking in another direction when he is answering the attorney.

Jurors may unconsciously compare prerecorded testimony to network production. Variations from this standard can jolt the perception of some people and possibly affect their impressions of a witness. This would tend to happen more with camera buffs or people who have a refined artistic sense. If problems were to develop in this area, an attorney might want to use this sensibility as the basis for a challenge in voir dire.

One way to handle this potential problem is to require equipment operators to complete a closed-circuit-television training course. This would not seem unreasonable, since court reporters have to be certified. Certification of operators would result in more uniforms standards of picture composition and production.

Editing considerations are more complicated if the trial itself is being videotaped for the record. In an experiment conducted in the Ingham County Courthouse in Mason, Michigan, three cameras were mounted above and

behind the jury box (on the assumption that the best record would be from the jury's point of view). Two of the cameras were rotatable and had zoom lenses. The cameramen operating these two cameras could affect picture composition with zooms and "pans." The third camera was set to provide a fixed, full view of the courtroom. A technician in a separate room selected the camera view to be recorded. If one assumes a record of this type would be used for appellate review, there is a potentially serious problem--the cameramen and the technician have the power to knowingly or unknowingly alter the appearance of the trial on the videotape record. Therefore, serious thought should be given to standards for camera placement, focusing, use of zoom lenses, and selection of the view to be recorded.

Another type of editing is that which occurs after recording of a deposition. After the judge has ruled on objections, the inadmissable testimony should be deleted. There are a number of ways to do this. One is to note on the counter where inadmissible testimony starts and stops, then have the operator skip over this portion when the tape is played. Another is to have the operator turn the video and audio amplitude to zero for this testimony. A third possibility is to prepare a separate, edited tape with the inadmissible testimony excluded. The master tape would be preserved intact for purposes of review on appeal. (It is open to question whether this is necessary if a stenographic transcript of the deposition is also prepared.) There

may be problems with quality if the latter method is used, since there may be a loss in picture quality when a tape is duplicated. A difference in quality would be apparent if a 24-inch screen were used in the monitors viewed by the jury, but if 10- or 12-inch screens were used, the difference would usually not be discernible.

With sophisticated editing equipment, an attorney would be able to change the sequence of the testimony. Since this is a possibility, future standards should deal with this issue. I see no problems regarding an attorney's right to edit his videotaped opening argument or summation, which would be analogous to revising one's notes. In fact, this would give the attorney a valuable tool for recording, refining, and possibly reducing the length of an argument to make it more effective. The first tape could be reviewed by associates (or by a media consultant), who could help by suggesting changes. This presents the possibility that the attorney of the future will be a producer and a director, creating a masterpiece of finely edited argument for each trial.

Makeup and lighting. As to makeup, the best standard may be prohibition. The dissent in Hendricks v. Swenson[9] cited Zettl's Television Production Handbook[10] in stating that "In order to present even a normal

9. 456 F.2d 503 (8th Cir. 1972).

10. H. Zettl, Television Production Handbook 369-387 (2d ed. 1968).

appearance on video tape, most persons must be made up and otherwise prepared."[11] The majority emphasized that makeup could result in alteration of evidence by hiding certain physical characteristics. They went on to state that the evidence and the parties should be presented as they are. Although we can expect further debate on this subject, it does not appear necessary to use makeup to get a true picture, nor is special lighting required. Although scars or blemishes can be emphasized or deemphasized by different types of lighting, the potential problem created by that fact would probably be eliminated if operators were certified. Since most prerecorded testimony will involve very little movement, special studio lighting is not required. This is not to say that minimal standards should not be developed to cover the amount and type of lighting.

Costs

Video recording of testimonial evidence ordinarily will involve only two or three speakers and will be recorded under good conditions. Equipment requirements are minimal: in the simplest case, a camera, microphone, and video recorder are adequate. It is estimated that this simple system, with two monitors for playback, would cost approximately $1,700. Electronic

11. 456 F.2d at 508.

editing equipment would add about $300 to this amount. A second camera and microphone and a suitable switcher and mixer would cost another $800. A special-effects generator, which wold allow a split-screen picture of both attorney and witness, would cost from $300 to $600. A typical good-quality, half-inch recording tape capable of recording for one hour costs from $25 to $40.

In the Midwest, where court applications of video technology are increasing rapidly, private firms offer estimates of their charges for deposition videotaping. One such firm, Video Record, Inc. (Ohio), would charge $119 (including the cost of the tape) for a one-hour videotaped deposition recorded on location. Each subsequent hour would cost $94. In comparison, the firm puts the cost for the traditional, reporter-prepared transcript of an on-location deposition at about $86.50 for one hour; subsequent hours would cost approximately $60 each. If the deposition were videotaped in the firm's studio, the first hour would cost $70 and each subsequent hour, $64; if the deposition were recorded by a traditional reporter at the firm's office, each hour would cost about $65. A videotape deposition would appear to cost somewhat more than a traditional one, but the videotape is reusable, and the tape cost is slightly more than the difference noted.

Another firm, Video Deposition Services, Inc., charges $125 for the first hour and $50 for each additional hour. This firm is located in Minnesota, where a transcript is also required for a deposition.

Thus, where transcripts are also prepared, the costs of depositions would be doubled. Since deposition recording costs vary greatly around the courtry, and since pricing schedules involve other factors, any conclusions about relative costs have to be tentative.

The decision to prerecord testimony on videotape will normally not be based on recording cost alone. Obviously, there are many intangible and indirect costs and benefits, which will vary with each case and each witness. If there is a vast increase in videotape use, we can expect to see serious questions raised about its possible effect on the costs of litigation and the method by which these potentially increased costs should be allocated. If a court has recorders and monitors available, the parties will not have to supply their own equipment for playback of testimony at a trial. If a court also has a camera and thus the ability to provide videotaping services, there is the possibility of encroachment on private enterprise if court personnel and equipment are used for prerecording testimony. As you know, several companies provide videotaping services, and a number of court reporters own videotape equipment and provide such services. It is not certain that there will be a problem, nor is an answer apparent at this time. Nevertheless, since the costs of litigation are involved, we should seriously explore the alternatives.

As mentioned above, use of video technology may tend to blur the traditional distinction between "live" presentation of evidence by the witness and presenta-

tion of previously recorded testimony. Normally, depositons are recorded by free-lance reporters (sometimes official reporters doing free-lance work), but recording of testimony at trial is provided by the court through its official reporters. If all testimony is videotaped for presentation at trial, should it be done by court employees or by free-lancers? If by court employees, should the expenses (except for the cost of the tape) be assumed by the court? Court administrators and the bar should start analyzing the policy alternatives now. The ramifications are many and obvious, and the selection of alternatives will have a significant impact on the allocation of litigation costs.

The judges' time is the major scarce resource of the courts. Therefore, the effect of video technology on that time has to be considered. Since videotape should reduce trial time, judges' time for other cases shuld increase. Also, since it is not necessary that a judge sit on the bench during videotaped presentation of testimony, he can use this time for other purposes. These time savings must be compared with the time required to review and rule on objections prior to the trial. No empirical data is available, but present experience indicates wide variations in the time required to deal with objections. Since the judge can conduct this review at his convenience, he will have greater flexibility in the use of his time even if, on balance, videotape does not produce a net savings.

Recording trial proceedings is the most complex

application of video technology, and entails the heaviest investment in equipment. A video trial-record system with three cameras, four monitors (one to indicate the view of each camera and one showing what is being recorded), two video recorders with electronic editing capability (two recorders provide continuity of record without interrupting proceedings to change reels), and additional monitors to show prerecorded testimony to the jury, the judge, and attorneys, would cost about $8,000, or slightly more if a special-effects generator were included.

There are additional system costs for tape storage and personnel to operate the video system. The courthouse would need a controlled-environment room to meet temperature and humidity standards for tape storage. As an example of possible personnel requirements, the system referred to above would require five people to record what one court reporter presently records in stenographic form. With remotely controlled cameras and a control console, two people should be able to handle videotaping of a trial. It is difficult, at present, to make valid estimates of these peripheral costs.

Full-scale introduction of video technology in the courts (including capability of recording trial proceedings as well as testimonial evidence and depositions) would seem to save a substantial amount of time, but would cost more than existing procedures. However, it must be stressed that actual experience has been limited to single, narrow applications, and the magni-

tude of both costs and benefits cannot be accurately determined at this time.

Conclusions

The dramatic technological advances of recent years--especially those resulting in equipment miniaturization--are reflected in the changes in general attitudes toward the use of video technology in the courts. Whereas our greatest fear only several years ago concerned the "circus atmosphere" created in televising a case of the Estes type, some lawyers today are probably more fearful of just the opposite: the "sterility" that videotaped testimony might impose on a trial.

There is not sufficient evidence to prove that we should no longer worry about videotape threatening the dignity of trial proceedings. Some tests have indicated, however, that trial participants tend to act more dignified when they are aware of a video camera.[12] Even so, it is apparent that the most extensive use of video technology in the immediate future will be to prerecord testimony and present this testimony on a television monitor at the trial. Our concern should therefore be directed to the effect that videotaped argument, testimony, and charge may have on dignity and

12. Madden, Illinois Pioneers Videotaping of Trials, 55 A.B.A.J., 459 (1969).

decorum at a trial--especially as this is perceived by members of the jury.

As one might expect, Marshall McLuhan has had something to say about this topic. In Understanding Media,[13] McLuhan states that "even teachers on TV seem to be endowed by the student audiences with a charismatic or mystic character that much exceeds the feelings developed in the classroom or lecture hall. . . . The viewers feel that the teacher has a dimension almost of sacredness." Will the appearance of witnesses and attorneys on television screens in the courtroom have a similar effect, and actually increase the dignity of the judicial process?

13. M. McLuhan, Understanding Media: The Extensions of Man 336 (1964) (emphasis added).

END