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A Proposal To Amend Rule 30(b) of the Federal Rules of Civil Procedure: Cross-Disciplinary and Empirical Evidence Supporting Presumptive Use of Video To Record Depositions

Cover Page Footnote

The authors wish to thank Professor Michael A. Berch for his insightful comments on the Article and suggestions regarding the proposed deposition rule; Dr. Scott Giesel for his helpful comments on the text; Ms. Brenda McDaniels, coordinator of continuing legal education for the State Bar of Arizon, for allowing us to conduct the survey at State Bar CLE programs; and Dr. Jennie Gorrell for her assistance on the statistical analysis of the questionnaire data.

A PROPOSAL TO AMEND RULE 30(b) OF THE FEDERAL RULES OF CIVIL PROCEDURE: CROSS-DISCIPLINARY AND EMPIRICAL EVIDENCE SUPPORTING PRESUMPTIVE USE OF VIDEO TO RECORD DEPOSITIONS

REBECCA WHITE BERCH*

Introduction

WHENEVER spoken words are transcribed, some part of the communication is lost, because speakers use more than words to communicate: they rely upon a shared understanding of the metacommunicative frame in which the utterance is made. In addition to spoken words, this frame is indicated by paralinguistic features such as pitch, rhythm and intonation, as well as visual features such as head nods, hand gestures and posture.

The Federal Rules of Civil Procedure⁴ and some state rules of procedure⁵ now permit audio or video recording of depositions, rather than requiring that depositions be taken and transcribed by certified stenographers. When debating whether to allow video or audio recording of depositions, the Committee on Rules of Practice⁶ was primarily concerned

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- 1. Cf. G. Bateson, Steps to an Ecology of Mind 177-93 (1972) (people rely upon nonverbal cues to convey abstract signals).
- 2. Gumperz calls these "contextualization cues." See J. Gumperz, Discourse Strategies 131 (1982).
- 3. See Givens, Posture is Power, 8 Barrister 15, 15 (Spring 1981). Givens describes kinesic communication as bodily communication that is "largely outside of [the viewer's] self-awareness." Id. Kinesic communication is considered a communicative system that functions along with language to produce a more complete communication. See C. Ferguson & S. Heath, Language in the USA 530 (1981).
 - 4. See Fed. R. Civ. P. 30(b).
- 5. See Ariz. R. Civ. P. 30(b); Haw. R. Civ. P. 30(b); Wyo. R. Civ. P. 30. Although the California and New York deposition acts do not parallel the Federal Rules, their basic features resemble Federal Rule 30. See Cal. Civ. Proc. Code § 2019; N.Y. Civ. Prac. L. & R. §§ 3106-3117.
- 6. The committee is formally known as the Committee on Rules of Practice and Procedure of the Judicial Conference of the United States. See Note, Nonstenographic

that video- and audiotaped depositions might not be as accurate and trustworthy as stenographically transcribed depositions.⁷ This concern, however, conflicts with the findings of linguists, sociologists, psychologists, anthropologists and communications specialists, which indicate that many communicative features are lost when spoken words are written down.⁸

When people speak, they communicate not only information but images of themselves.⁹ These images are often at least as important as

Means of Recording Depositions: The Aging of Federal Rule of Civil Procedure 30(b)(4), 5 Rev. of Litigation 379, 382 (1986) (authored by A. Lawrence Schechter).

7. See Preliminary Draft of Proposed Amendments to Rules of Civil Procedure for the United States District Courts Relating to Deposition and Discovery, 43 F.R.D. 211, 244 (1967); Fed. R. Civ. P. 30(b)(4) (1970) (amended 1980), advisory committee's note.

Commentators and courts feared that videotaped depositions would either distort or enhance testimony. In addition, they feared that the use of video cameras might create a "theatrical atmosphere" during the deposition. See, e.g., Underwood, The Videotape Deposition: Using Modern Technology for Effective Discovery (Part 2), 31 Prac. Law. 65, 66 (1985) (noting that the problems of videotape depositions, which include "theatrical atmosphere," are much greater than those recorded on audio-tape).

8. See infra notes 65-119 and accompanying text. Courts and lawyers are not unaware of this phenomenon. For instance, the deferential "clearly erroneous" standard of appellate review historically relied upon the trier of fact's ability to observe the demeanor of witnesses. See United States v. Brown, 900 F.2d 1098, 1101 (7th Cir. 1990); United States v. Royer, 895 F.2d 28, 29 (1st Cir. 1990); United States v. Tavolacci, 895 F.2d 1423, 1429 (D.C. Cir. 1990); Fed. R. Civ. P. 52(a).

In 1908, the Supreme Court of Missouri stressed the importance of the opportunity to see and assess witnesses:

Here there was a maze of testimony affecting the credibility of some of the witnesses on both sides; there were currents and cross-currents in it sharply affecting the probability and the improbability of the stories told on the stand. . . . [D]eference should be given to the trial [judge]. He sees and hears much we cannot see and hear. We well know there are things of pith that cannot be preserved in or shown by the written page of a bill of exceptions. Truth does not always stalk boldly forth naked, but modest withal, in a printed abstract in a court of last resort. She oft hides in nooks and crannies visible only to the mind's eye of the judge who tries the case. To him appears the furtive glance, the blush of conscious shame, the hesitation, the sincere or the flippant or sneering tone, the heat, the calmness, the yawn, the sigh, the candor or lack of it, the scant or full realization of the solemnity of an oath, the carriage and mien. The brazen face of the liar, the glibness of the schooled witness in reciting a lesson, or the itching over eagerness of the swift witness, as well as [the] honest face of the truthful one, are alone seen by him. In short, one witness may give testimony that reads in print, here, as if falling from the lips of an angel of light and yet not a soul who heard it [at trial] believed a word of it.

Creamer v. Bivert, 214 Mo. 473, 479-80, 113 S.W. 1118, 1120-21 (1908) (emphasis added).

9. See, e.g., R. Martineau, Fundamentals of Modern Appellate Advocacy 182 (1985) ("[W]e communicate as much with our bodies as with our voices."); Scollon & Scollon, Face in Interethnic Communication in R. Scollon & S. Scollon, Narrative, Literacy and Face in Interethnic Communication 158 (1981) ("Communicative style naturally includes much more than speech. . . . [B]ody movement, placement and rhythm are central aspects of communicative style."); R. Wardhaugh, An Introduction to Sociolinguistics 251 (1986) ("How we say something is at least as important as what we say; in fact, the content and the form are quite inseparable, being but two facets of the same object.").

Aron, Fast and Klein discredit as "extravagant" reports that "90 percent of all com-

the substance of the communication; in many cases, they can be more important than the lexical content. Indeed, the sociolinguist's definition of speech includes not only the speaker's lexical and syntactic choices—items that can be stenographically transcribed—but also the paralinguistic features—items that cannot be captured by stenographic transcription. Other specialists would add kinesics, or "body language," to the definition of speech. 11

These expanded definitions of speech imply that when lawyers rely solely upon stenographic transcription of depositions, they elevate the importance of the words and word order (the lexical and syntactic aspects of speech) over the communicative importance of the form (the visual and paralinguistic aspects of speech). The absence of non-verbal communicative features from a deposition increases the likelihood that the deposition does not accurately represent the deponent's communication. In short, the fear of the Committee on Rules and Practice that audio- or videorecorded depositions would not be accurate and trustworthy has obscured the truth: audio- and videotaped depositions are inherently more accurate and trustworthy than stenographically recorded depositions.

Recognizing this accuracy advantage, this Article proposes that the Federal Rules of Civil Procedure be amended to create a presumption in favor of videotaped depositions. The party opposing the use of video could successfully rebut this presumption by making a particularized showing convincing the court that video should not be used.

Several factors support routine videotaping of depositions: (1) video more accurately represents deponents' communication;¹² (2) American courts prefer live testimony,¹³ and video clearly satisfies the judicial preference for live testimony better than stenographic recording does; (3) video increases jurors' retention of deposition testimony;¹⁴ (4) lawyers who have participated in video depositions support a change in Rule

munication is nonverbal." R. Aron, J. Fast & R. Klein, Trial Communication Skills 429 (1986). They report that "the generally accepted figure among most scientists who have researched the field carefully runs to 60 per cent for nonverbal and 40 per cent for verbal." *Id.* Regardless what percentage one assigns to the portion of communication that is made without words, at least some, if not a large portion, of what a speaker conveys is communicated through features that cannot be recorded by a stenographer. *See infra* note 67 (Mehrabian's analysis of communication as 93% nonverbal).

^{10.} For example, Deborah Tannen defines speech as the use of language in all its "phonological, lexical, syntactic, prosodic, and rhythmic variety." D. Tannen, Conversational Style: Analyzing Talk Among Friends 9 (1984).

^{11.} See R. Harrison, Beyond Words: An Introduction to Nonverbal Communication 70 (1974).

^{12.} See infra Part II.

^{13.} See, e.g., Maryland v. Craig, 110 S. Ct. 3157, 3165 (1990) (Supreme Court reaffirmed preference for live testimony, although recognizing that public policy considerations may supersede this preference). The hearsay rules also demonstrate the legal system's preference for live, in-court testimony. See Fed. R. Evid. 801-806.

^{14.} See infra notes 144-149 and accompanying text.

30;¹⁵ and (5) little would be lost by the experiment: a stenographic transcript can always be made from a video-recorded deposition. If a deposition is stenographically transcribed in the first instance, however, the deponent's paralinguistic and visual communication is lost forever.

I. BACKGROUND

A. Depositions

Depositions are usually "reported" by court reporters, who stenographically record and later transcribe the proceedings. The rules governing the scheduling and taking of depositions commonly provide that, upon motion by a party or upon stipulation of all parties, depositions may be recorded in other ways, such as by audio or video recording.¹⁶

Most lawyers still prefer to have court reporters transcribe depositions rather than using audio or video recording. ¹⁷ Few lawyers, however, acknowledge an important reason for this preference: because stenographic recording fails to record the paralinguistic messages, ¹⁸ visual cues ¹⁹ or metacommunicative frame ²⁰ in which the deposition occurs, it allows lawyers to conceal unfavorable aspects of the deposition testimony. Thus, a lawyer may be able to shield from the jury an unpresentable witness—for example, one whose physical unattractiveness or hostility renders him unlikely to be an effective witness. ²¹

15. See infra notes 194-202 and accompanying text.

16. See Fed. R. Civ. P. 30(b); Ariz. R. Civ. P. 30(b); Cal. Civ. Proc. Code § 2019(c).

17. Whether audio or video recording is less costly than stenographic recording of depositions is a subject of debate. Commentators have found that the cost of video recording exceeds the cost of stenographic recording—at least in instances in which the video recording is also stenographically transcribed. See, e.g., Rypinski, Videotaping Depositions, 17 Haw. B.J. 67, 67 (1982) (noting that videotape is a relatively cumbersome way of storing and distributing information); Note, supra note 6, at 385-88 (noting that costs of videotaped depositions exceed stenographic recording).

However, videotaped depositions may be less expensive than stenography when the total cost of the litigation is evaluated. For example, unlike a stenographic deposition, a videotape presentation of an expert witness is a viable alternative to his or her live presentation at trial. The costs of presenting expert testimony by videotape are less than the costs of presenting the expert in person because much of the "testimony" time for which expert witnesses are paid is spent travelling to court and waiting in the halls. Many of these costs would be eliminated by employing a video deposition to present the testimony, thus affording a cost savings not available if only stenographic recording were available. See id. at 385-88.

Additionally, because video depositions are normally edited pre-trial, the costs generated by attorney arguments in the courtroom over objections are avoided. As a result, time and money at trial are saved. Moreover, judge, jury and counsel time is used more efficiently and flexibly because the jury need not wait while counsel haggle over evidentiary objections. Additionally, in a case involving multiple defendants, a videotape used for one defendant's trial may be cost-effectively reemployed in a subsequent trial. See infra note 157 and accompanying text.

18. For a discussion of paralinguistic cues see *infra* notes 102-109 and accompanying text.

- 19. See id.
- 20. See D. Tannen, supra note 10, at 24 (citing J. Gumperz, supra note 2).
- 21. The reasons lawyers take depositions may reveal why some lawyers hesitate to

B. History of Rule 30

Rule 30 of the Federal Rules of Civil Procedure governs the taking of depositions in civil proceedings in federal court.²² Most states' rules governing depositions parallel the federal rule, or deviate from it only slightly.23

From 1938 to 1970, the federal rule governing deposition practice provided that, unless the parties agreed otherwise, depositions could only be taken stenographically by a certified court reporter.²⁴ Because few parties would agree, nonstenographic depositions were rarely taken.²⁵ Courts reasoned that, absent the deponent's agreement, they did not have the authority to require him to submit to a nonstenographically recorded deposition.²⁶

In 1970, after rejecting an amendment to the deposition rule that would have allowed videotaping depositions on "notice only,"²⁷ the

embrace video technology. Depositions serve several purposes: (1) to obtain information that may lead to further factual exploration; (2) to obtain admissions for impeachment; (3) to commit a witness to a particular version of the facts; (4) to perpetuate testimony in case the deponent cannot or will not be available for trial; (5) to "preview" the witness's jury appeal; (6) to demonstrate to the opposition either the strength of one's case or the prowess of one's attorney, and (7) to substitute for testimony at trial regardless of the witness's availability. See M. Berch & R. Berch, Introduction to Legal Method and Process 114-15 (1985). Whether one elects to use stenographic, audio or video recording may depend not only upon the perceived value of the different technologies, but upon the intended use of the deposition.

22. See Fed. R. Civ. P. 1.

23. See, e.g., Ala. R. Civ. P. 30(b)(4) (similar but more concise); Ariz. R. Civ. P. 30(b) (nearly identical); Idaho R. Civ. P. 30 (b)(4) (stenography must accompany videotape); Ky. R. Civ. P. 30.02(4) (nearly identical); Utah R. Civ. P. 30(b)(4) (nearly identical); W. Va. R. Civ. P. 30(b)(4) (similar); Wyo. R. Civ. P. 30(b)(4) (identical but requiring simultaneous stenography).

See Fed. R. Civ. P. 30(c) (1970) (amended 1980).

25. See United States Steel Corp. v. United States, 43 F.R.D. 447, 451 (S.D.N.Y. 1968); Galley v. Pennsylvania R.R., 30 F.R.D. 556, 557 (S.D.N.Y. 1962).

In Galley, when the deponents appeared for the taking of the depositions, the moving party tried to have the depositions taken by tape recorder instead of by a stenographer. The deponents refused to proceed. The court, citing Rule 30(c), denied plaintiff's motion to direct the defendant to submit its employees to audiotaped depositions, holding that

[t]his Court has no power to change the provisions of the Rules of Civil Procedure. Whether the rule should be amended to allow recording devices to be used in connection with the taking of depositions is a matter of policy which cannot be decided by this Court. The Court is bound by the rule. Galley, 30 F.R.D. at 557.

The court in *United States Steel* reached a similar conclusion. In that case, the moving

party's notice of deposition specified that the deposition would be both videotaped and recorded by the usual stenographic method. Ruling upon the deponent's motion to preclude the use of the videotape recorder, the court held that "[t]here is no provision in Rule 30(c) for use of a tape recorder or video tape recorder. The deposition must be recorded stenographically and transcribed unless the parties agree otherwise." United States Steel Corp., 43 F.R.D. at 451 (citing Galley, 30 F.R.D. 556).

26. See United States Steel, 43 F.R.D. at 451; Galley, 30 F.R.D. at 557.

27. The amendment was proposed in 1967. See Committee on Rules of Practice and Procedure of the Judicial Conference of the United States, Preliminary Draft of Proposed Rules Committee proposed a new rule that permitted a party to obtain a court order authorizing deposition recording by other than stenographic means. The Committee's notes reveal that the Committee supported the proposed rule because it believed that nonstenographic procedures would be less expensive for litigants, on the because it believed that the newer methods would provide more of the communicative content of the deponent's testimony. In fact, the comments to the proposed amendment reveal that the Committee viewed nonstenographic methods as less accurate than stenographic transcription. Noting that most nonstenographic methods of recording are not wholly reliable, the Committee's notes instruct courts to provide safeguards when granting an order permitting their use:

In order to facilitate less expensive procedures, provision is made for the recording of testimony by other than stenographic means—e.g., by mechanical, electronic, or photographic means. Because these methods give rise to problems of accuracy and trustworthiness, the party taking the deposition is required to apply for a court order. The order is to specify how the testimony is to be recorded, preserved, and filed, and it may contain whatever additional safeguards the court deems necessary.³⁰

Under the proposed rule, courts must first decide whether to allow nonstenographic depositions to be taken, and then order procedural safeguards to ensure reliability.³¹ This procedure indicates that concern for cost reduction in discovery is to be balanced against assurances of accuracy and trustworthiness through appropriate safeguards—even if those safeguards increase the cost of discovery. This amendment was approved and governed until the rule was amended again in 1980.³²

In the early 1970s, courts were skeptical of video technology's reliability, concerned about the consequences of equipment failure, and suspicious of the potential misuse of video by unscrupulous or overzealous attorneys. One commentator noted that videotapes "can be doctored, sound can be difficult to identify, there may be electronically inaudible voices, background noise may cause interference, it can be difficult to

Amendments to Rules of Civil Procedure for the United States District Courts Relating to Deposition and Discovery, 43 F.R.D. 211, 239-40 (1967).

The court may upon motion order that the testimony at a deposition be recorded by other than stenographic means, in which event the order shall 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. If the order is made, a party may nevertheless arrange to have a stenographic transcription made at his own expense.

Proposed Amendments to the Federal Rules of Civil Procedure Relating to Discovery, 48 F.R.D. 487, 509-10 (1970).

^{28.} The proposed rule read as follows:

^{29.} See id. at 514 (subdivision (b)(4)).

^{30.} Id. (emphasis added).

^{31.} See id.

^{32.} See infra notes 44-49 and accompanying text.

locate a segment of testimony, and unknown or undetected mechanical failures can cause the loss of testimony."³³ These complaints, however, involve the technical aspects of the recording. The use of technologically advanced equipment and proper safeguards should ensure the reliability and accuracy of videotaped depositions.³⁴

Traditional stenography involves the interposition of human "recorders" and therefore has its own shortcomings: "A human listens to the testimony, a human records the testimony, a human dictates, and a human then types the testimony."³⁵ The margin for error in such cases equals or exceeds the margin for error in nonstenographic recordings.³⁶ Further, like videotaped testimony, stenographic testimony is also susceptible to "doctoring."

C. Judicial Acceptance of Video Testimony

For several years after the passage of the 1970 amendments, courts struggled to create workable standards to ensure accurate and trustworthy nonstenographic depositions.³⁷ Despite disagreement over what constituted reliable safeguards,³⁸ courts began to exhibit positive attitudes

- 33. R. Haydock & D. Herr, Discovery Practice 213 (2d ed. 1988). New technologies have made it easier to doctor photographs, too. See Alter, When Photographs Lie, Newsweek, July 30, 1990, at 44; see also Tearney, Videotaped Depositions Become Sophisticated—But Watch for Glitches, Nat'l L.J., Feb. 18, 1991, at 29-30 (discussing need to guard against unfair tactics used in video depositions).
- 34. The only court that has considered the matter rejected the possibility that attorneys would alter deposition tapes. See Marlboro Prods. Corp. v. North Am. Philips Corp., 55 F.R.D. 487, 489 (S.D.N.Y. 1972). In Marlboro, the court stated that it was "comfortable, until or unless unimagined experience teaches otherwise, in assuming members of our bar will not be doctoring tapes." Id.
 - 35. R. Haydock & D. Herr, supra note 33, at 213.
 - 36. See id. (citing Marlboro Prods., 55 F.R.D. at 489).
- 37. In 1975, the National Center for State Courts undertook a study comparing the relative impact on jury decision making between videotaped depositions and live trial testimony. See D. Donaldson & D. Suplee, Deposition Handbook: Strategies, Tactics and Mechanics 516 (1988). That study concluded that more extensive research was needed. See id. In 1977, the Center for State Courts published a manual containing information on selected court uses of videotape technology. See Audio-Video Technology and the Courts: Guide for Court Managers, Publication No. R0034, National Center for State Courts, 1977. The manual suggested that the courts "establish uniform procedures for videotaping to . . . ensure a quality recording." Id. at 33. It also suggested rules to help guarantee the accuracy and trustworthiness of the videotape record. See id. at 41-45.
- In 1978, the National Conference of Commissioners on Uniform State Laws approved the Uniform Audio-Visual Deposition Act. See Historical Note to Uniform Audio-Visual Deposition Act §§ 1-10, 12 U.L.A. 10 (Supp. 1991). Only North Dakota and Virginia, however, have enacted it. Neither state has any reported decisions construing the Act.
- 38. Some courts require concurrent stenographic recording. See Marlboro Prods. Corp. v. North Am. Philips Corp., 55 F.R.D. 487, 489 (S.D.N.Y. 1972); Kiraly v. Berkel, Inc., 122 F.R.D. 186, 188 (E.D. Pa. 1988); Rice's Toyota World, Inc. v. Southeast Toyota Distribs., 114 F.R.D. 647, 652 (M.D.N.C. 1987); Roberts v. Homelite Div. of Textron, Inc., 109 F.R.D. 664, 668-69 (N.D. Ind. 1986); Farahmand v. Local Properties, Inc., 88 F.R.D. 80, 84 (N.D. Ga. 1980). Others impose conditions on such factors as use of zoom lenses and quality of tape. See, e.g., United States v. LaFatch, 382 F. Supp. 630,

toward the new technology. For example, one court declared that videotaped depositions would reduce the tedium caused by the reading of depositions at trial.³⁹ Another noted that "[f]or jurors to see as well as hear the events surrounding an alleged confession or incriminating statement is a forward step in the search for the truth."⁴⁰

The judicial climate toward nonstenographic depositions warmed dramatically in the mid-1970s. One court observed that a "court should not be like an ostrich, sticking its head in the sand and being oblivious to advances in technology which can aid in the judicial process." The judiciary's exposure to video technology led both to increased confidence in its trustworthiness and to an appreciation of its advantages.

Increasingly, courts recognized that videotaped depositions were preferable to stenographic depositions in certain situations, such as when an essential witness was outside the court's subpoena power or was likely to be unavailable to testify at trial.⁴² Several courts stated that in such circumstances, videotaped depositions give fact finders greater insight than stenographic transcripts can because videotape allows them "to observe the witness' demeanor and manner of testifying."

[g]iven the 'high risk' of plaintiff's unavailability at trial, the question is how to preserve his testimony. Defendants ask that plaintiff's deposition be taken by ordinary stenographic methods. However, this would deprive the court and any jury which might be impaneled of the opportunity to judge the demeanor of the deponent.

Id.

43. In re Daniels, 69 F.R.D. at 581; see In re Agent Orange, 28 Fed. R. Serv. 2d at 995; United States v. LaFatch, 382 F. Supp. 630, 633 (N.D. Ohio 1974).

As the use of video depositions spread, so did concerns about abuse of discovery. See Amendments to the Federal Rules of Civil Procedure, 85 F.R.D. 521, 526-27 (1980) (advisory committee notes to Rule 26). In response to these concerns, courts increasingly ordered specific safeguards. In In re "Agent Orange" Prod. Liab. Litig., 96 F.R.D. 587 (E.D.N.Y. 1983), for example, the court required that "[a]ny deposition by videotape shall, insofar as possible, take place in a neutral setting. No deposition shall be taken in a hospital or sick room unless the physician . . . states . . . that the plaintiff cannot be moved to a neutral setting by virtue of his physical incapacity." Id. at 592.

Although Rule 30 does not require courts to issue specific safeguards, the rule does authorize courts to include in orders or stipulations for videotaped depositions "provisions to assure that the recorded testimony will be accurate and trustworthy." Amendments to the Federal Rules of Civil Procedure, 85 F.R.D. 521, 527-28 (1980) (Rule 30). As a result, courts have begun to impose safeguards on video depositions, such as staging, photographic technique, and background restrictions. See, e.g., LaFatch, 382 F. Supp. at

^{631 (}N.D. Ohio 1974) (restricting camera view to include only head and shoulders of hospitalized victim to minimize prejudice); Tsesmelys v. Dublin Truck Leasing Corp., 78 F.R.D. 181, 186 (E.D. Tenn. 1976) (requiring tape to comply with certain quality standards).

^{39.} See Carson v. Burlington N. Inc., 52 F.R.D. 492, 493 (D. Neb. 1971) (quoting 8 A. Wright & C. Miller, Federal Practice and Procedure 426 (1970)).

^{40.} Hendricks v. Swenson, 456 F.2d 503, 507 (8th Cir. 1972).

^{41.} In re Daniels, 69 F.R.D. 579, 581 (N.D. Ga. 1975).

^{42.} For example, one court held that preserving the testimony and demeanor of a terminally ill person was an unusual circumstance that justified granting a nonstenographic deposition. See In re "Agent Orange" Prod. Liab. Litig., 28 Fed. R. Serv. 2d (Callaghan) 993, 995 (E.D.N.Y. 1980). The court stated that

In 1977, the Advisory Committee began planning a new set of revisions to the Federal Rules of Civil Procedure.⁴⁴ As in 1967, the suggestion was made to eliminate Rule 30's requirement that a party seeking a videotaped deposition obtain a court order, allowing instead nonstenographic depositions upon notice by the scheduling party. The Advisory Committee Notes to the proposed rule imply that reliability was no longer of great concern to the Committee, and that courts should routinely authorize nonstenographic means for taking depositions. The Committee seemed to accept that nonstenographic depositions had become so reliable that they should be permitted as a matter of right:

The present rule requires an order of court before testimony at a deposition may be taken by non-stenographic means. The proposed amendment permits testimony to be taken by non-stenographic means as a matter of course, subject to the right of an opposing party or a witness to seek a court order requiring that the testimony be taken by stenographic means. . . . The amendment assumes that, given the reliability of modern electronic recording, the parties will normally agree to that method. 45

The Committee's final recommendation rejected the idea that the use of nonstenographic methods should be allowed as a matter of course, but, nonetheless, did encourage the use of video depositions.⁴⁶ The Committee made explicit a matter that had been implicit in the previous rules, namely that the parties could stipulate that depositions be taken by nonstenographic means.⁴⁷ The revised rule also reveals that the Committee's earlier concerns for accuracy and trustworthiness were still very strong; the revision contained several requirements designed to ensure a reliable record.⁴⁸ The 1980 amendment, which disallows video depositions as a matter of right, was identical to the rule proposed in the revised draft, as were the Advisory Committee Notes.⁴⁹

^{631 (}N.D. Ohio 1974) (placing restrictions on videotaping of hospitalized witness); In re Agent Orange, 96 F.R.D. at 592 (videotape depositions must take place in a "neutral setting"). Still, the most commonly imposed safeguard is to have concurrent stenographic and nonstenographic recording of depositions. See Moncrief v. Fecken-Kipfel America, Inc., No. 88-4930 (E.D. Pa. 1988) (WESTLAW, 1988 WL 68088); Kiraly v. Berkel, Inc., 122 F.R.D. 186, 188 (E.D. Pa. 1988); Rice's Toyota World, Inc. v. Southeast Toyota Distribs., 114 F.R.D. 647, 652 (M.D.N.C. 1987); Roberts v. Homelite Div. of Textron, Inc., 109 F.R.D. 664, 668 (N.D. Ind. 1986); SFM Corp. v. Sundstrand Corp., No. 82-C-4933 (N.D. Ill. 1984) (LEXIS, Genfed library, Dist file).

^{44.} See Note, supra note 6, at 393-94.

^{45.} Committee on Rules of Practice and Procedure of the Judicial Conference of the United States, *Preliminary Draft of Proposed Amendments to the Federal Rules of Civil Procedure*, 77 F.R.D. 613, 639-40 (1978).

^{46.} See Committee on Rules of Practice and Procedure of the Judicial Conference of the United States, Revised Preliminary Draft of Proposed Amendments to the Federal Rules of Civil Procedure, 80 F.R.D. 323, 337 (1979) (advisory committee note).

^{47.} See id.

^{48.} See id. at 334.

^{49.} See Amendments to the Federal Rules of Civil Procedure, 85 F.R.D. 521, 527-29 (1980) (Rule 30 and advisory committee note).

In the ten years since Rule 30(b)(4) was amended, courts have increasingly permitted depositions by nonstenographic means.⁵⁰ Familiarity with videotape has given courts more confidence in the technological reliability of the medium, as well as an appreciation that videotape depositions are advantageous in presenting demeanor evidence to jurors.

D. The Proposed Rule

The present Rule 30⁵¹ neither mandates nor prefers the use of video. Instead, it creates a presumption in favor of stenographic recording.⁵²

50. See Mishkin v. Peat, Marwick, Mitchell & Co., No. 86-4301 (S.D.N.Y. Oct. 25, 1988) (1988 U.S. Dist. LEXIS, 11896); Rice's Toyota World, Inc. v. Southeast Toyota Distribs., 114 F.R.D. 647, 650-51 (M.D.N.C. 1987); SFM Corp. v. Sundstrand Corp., No. 82-C-4933 (N.D. Ill. Feb. 1, 1984) (LEXIS, Genfed library, Dist file); In re A.H. Robins Co., "Dalkon Shield" IUD Prod. Liab. Litig., 575 F. Supp. 718, 720 (D. Kan. 1983); In re "Agent Orange" Prod. Liab. Litig., 96 F.R.D. 587, 590-91 (E.D.N.Y. 1983); Lucien v. McLennand, 95 F.R.D. 525, 526 (N.D. Ill. 1982); Keil v. Eli Lilly & Co., 30 Fed. R. Serv. 2d (Callaghan) 679, 679 (E.D. Mich. 1980); Farahmand v. Local Properties, Inc., 88 F.R.D. 80, 83-84 (N.D. Ga. 1980); In re "Agent Orange" Prod. Liab. Litig., 28 Fed. R. Serv. 2d (Callaghan) 993, 995 (E.D.N.Y. 1980).

Courts are not unaware of the potential shock value of video, see Shulruff, On Trial: A Videotape of a Disabled Girl's Day, N.Y. Times, Jan. 4, 1991, at B14, cols. 3-6, and have disallowed video depositions where they appeared more inflammatory than instructive. See Marsee v. United States Tobacco Co., 866 F.2d 319, 321-22 (10th Cir. 1989).

- 51. For reference, sections (b)(1) and (b)(4) of Rule 30 provide as follows:
- (b) Notice of Examination: General Requirements; Special Notice; Non-Stenographic Recording; Production of Documents and Things; Deposition of Organization; Deposition by Telephone.
- (1) A party desiring to take the deposition of any person upon oral examination shall give reasonable notice in writing to every other party to the action. The notice shall state the time and place for taking the deposition and the name and address of each person to be examined, if known, and, if the name is not known, a general description sufficient to identify the person or the particular class or group to which the person belongs. If a subpoena duces tecum is to be served on the person to be examined, the designation of the materials to be produced as set forth in the subpoena shall be attached to or included in the notice.
- (4) The parties may stipulate in writing or the court may upon motion order that the testimony at a deposition be recorded by other than stenographic means. The stipulation or order shall designate the person before whom the deposition shall be taken, 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. A party may arrange to have a stenographic transcription made at the party's own expense. Any objections under subdivision (c), any changes made by the witness, the witness' signature identifying the deposition as the witness' own or the statement of the officer that is required if the witness does not sign, as provided in subdivision (e), and the certification of the officer required by subdivision (f) shall be set forth in a writing to accompany a deposition recorded by non-stenographic means.

Fed. R. Civ. P. 30(b)(1), (b)(4).

The substance of sections 30(a), (d), (e) and (f) is not affected by the analysis in this Article. Section 30(c) is modified only slightly.

52. Apparently, the drafters of Rule 30(b)(4) simply equated the recording of depositions with stenographic recording, as evidenced by the fact that the word "stenographic" does not appear in Rule 30 until subsection (b)(4), the provision setting forth the require-

The increasing use of video depositions, the findings of communications and linguistics researchers,⁵³ and the beliefs and attitudes of practicing attorneys,⁵⁴ however, suggest that Rule 30 should be amended to create a presumption in favor of video recording.

The proposed rule is easily fashioned by building on the foundation of the existing Rule 30. First, the preferred manner of recording depositions would be set forth clearly in the title to section (b). The new title would read as follows:

(b) Notice of Examination: General Requirements; Special Notice; Nonstenographic Recording; Stenographic Recording; Production of Documents and Things; Deposition of Organization; Deposition by Telephone.

By adapting the first sentence of the existing section 30(b)(4) and making it the first line of the proposed section 30(b)(1), the proposed rule would make explicit the manner of taking depositions and the preference for video recording. Section 30(b)(1) would thus read: "The testimony at a deposition shall be video recorded. A party may arrange to have a stenographic transcription made at the party's own expense."

Sections (b)(2) to (b)(4) of the proposed rule would parallel existing sections (b)(1) to (b)(3). Proposed section (b)(5) would be used, as section (b)(4) currently is, to set forth the terms upon which alternative stenographic recording will be allowed. The new section (b)(5) would thus read: "The parties may stipulate in writing or the court may upon motion order that the testimony at a deposition be recorded by stenographic means rather than or in addition to video recording."

Subsections (b)(6) to (b)(8) of the proposed rule would parallel subsections (b)(5) to (b)(7) of the present rule. Section 30(c) would remain largely unchanged; the third and fourth sentences, however, would be amended to reflect the presumption that depositions should be recorded by video.⁵⁵ Section 30(d) would remain unchanged.

The procedures in section 30(e) for signing the deposition would require modification to reflect the fact that a deponent cannot sign a video deposition in the same way that he can sign a stenographic deposition. Under the revised rule, the deponent would verify the accuracy of the

ments for obtaining nonstenographic depositions. The word "non-stenographic" does, of course, appear in the title of section 30(b).

^{53.} See infra Part II.

^{54.} See infra Part IV.

^{55.} The proposed Rule 30(c) would thus read:

Examination and cross-examination of witnesses may proceed as permitted at the trial under the provisions of the Federal Rules of Evidence. The officer before whom the deposition is to be taken shall put the witness on oath and shall personally, or by someone acting under the officer's direction and in the officer's presence, record the testimony of the witness. The testimony shall be recorded by video recording or by any other means ordered in accordance with subdivision (b)(5) of this rule. All objections made at the time of the examination. . . .

deposition and confirm it as his own by signing a statement that would accompany the videotape of the deposition. In that statement, the witness could make and explain any desired changes to the deposition. As with the written statements that now accompany stenographic depositions, the witness would be permitted to waive signing.⁵⁶

The overall effect of the proposed Rule 30 would be to shift the presumption from stenographic recording to video recording of depositions. The remainder of the Article defends this change of preference.

II. EVIDENCE SUPPORTING PRESUMPTIVE USE OF VIDEO TO RECORD DEPOSITIONS

Stenographic recording of depositions cannot capture, and thus fails to relate to a jury, a wide range of "communication" that is expressed nonverbally or through nonlexical vocalization. Generally, communication consists of both "verbal communication" and "nonverbal communication." Verbal communication refers to the words themselves—that is, the lexical items—separate from the manner in which the words are spoken.⁵⁷ Nonverbal communication is an umbrella term that encompasses all informative communication, excluding spoken words. Nonverbal communication is further divided into the fields of kinesics,⁵⁸ which covers communicative body movement, and paralanguage,⁵⁹ which covers communicative vocalization other than words.⁶⁰

56. Proposed section 30(e) would read as follows:

When the deposition is complete, the deposition shall be submitted to the witness for examination and shall be viewed or examined by the witness, unless the witness waives such viewing or examination. Any changes in form or substance that the witness desires to make, along with a statement of the reasons given by the witness for making them, shall be set forth in a writing to accompany the deposition. The witness shall then sign a statement identifying the deposition as the witness's own, unless the parties by stipulation waive the signing or the witness is ill or cannot be found or refuses to sign the statement. If the statement is not signed by the witness within 30 days of its submission to the witness, the officer shall sign it and write on the statement the fact of the waiver, illness or absence of the witness or the fact of the refusal to sign, together with the reason, if any, given therefor; and the deposition may then be used as fully as though the statement were signed, unless on a motion to suppress under Rule 32(d)(4). . . .

- 57. See Andersen, Nonverbal Immediacy in Interpersonal Communication, in Multichannel Integrations of Nonverbal Behavior 10 (A. Siegman & S. Feldstein, eds. 1985).
 - 58. See generally R. Harrison, supra note 11, at 70-71 (discussing basics of kinesics).
- 59. See, e.g., Andersen, supra note 57, at 10 (discussing basics of paralanguage); R. Harrison, supra note 11, at 104-105 (same).
- 60. Paralanguage includes (i) voice patterns, such as range, resonance, tempo, lip control, and articulation control; (ii) vocal qualifiers such as intensity, pitch, extent and shift of topics; (iii) vocal characterizers such as whispering, laughing or yelling; and (iv) vocal aggregates such as pauses or nonfluencies such as "uh." See R. Harrison, supra note 11, at 105-108. Paralanguage also includes (i) facial expressions such as smiles, frowns or other facial muscle contractions; (ii) eye behavior such as squinting, looking away or blinking; and (iii) head nods. See id. at 118-19.

Many researchers have examined eye behavior. Andersen's work, for example, focuses on "oculesics," the study of nonverbal messages emanating from the eyes. Andersen

This Article uses the following terms to describe communicative behavior: verbal communication, paralinguistic communication and visual communication.⁶¹ "Verbal communication" will refer to the words—that is, the lexical items—spoken. "Paralinguistic communication" will encompass the variety of subtle vocal cues that punctuate the verbal stream⁶²—that is, cues that the juror hears but that have no linguistic meaning by themselves.⁶³ Finally, "visual communication" will include body and muscle movement, posture and body orientation.⁶⁴

notes that oculesics is "often considered part of the kinesic system, but such abundant research is now available on visual interaction that oculesics" deserves separate treatment. Andersen, *supra* note 57, at 8. Key includes eye behavior, facial expressions and head nods within kinesics. See M. Key, Paralanguage and Kinesics 10-11 (1975).

There are other ways to classify nonverbal communication cues. For example, Mehrabian designates the categories verbal (content), nonverbal and vocal. See A. Mehrabian, Nonverbal Communication 1-2 (1972). He narrows the definition of nonverbal behavior to those actions that are distinct from speech-facial expressions, hand and arm gestures, postures and various types of body movement. See id. at 1. Mehrabian also distinguishes nonverbal behavior from paralinguistic phenomena, which include frequency and intensity of speech, pauses, rate, duration, and inconsistent combinations of verbal and paralinguistic components, such as occurs in sarcasm. See id. at 1-2. Ekman and Friesen propose five major categories of nonverbal behavior: emblem, illustrator, affect display, regulator and adaptor. See Ekman & Friesen, The Repertoire of Nonverbal Behavior: Categories, Origins, Usage, and Coding, 1 Semiotica 49, 62-92 (1969). Key employs only three categories of communicative behavior: language, paralanguage and kinesics. See M. Key, Paralanguage and Kinesics 9, 24 (1975). She defines paralanguage as all the extra-speech sounds produced by articulation of the vocal apparatus or noticeable lack of sound-for example, hesitation. See id. at 10. In Key's definition, paralanguage includes all vocalizations and prosodic features of the voice. See id. at 24.

Together, these studies demonstrate the conflicting uses of the terminology describing nonverbal communication.

- 61. This terminology is loosely based upon that used in a doctoral dissertation by J. Hocking, Detecting Deceptive Communication from Verbal, Visual, and Paralinguistic Cues: An Exploratory Experiment, Mich. St. U. 8-11 (1976) (unpublished doctoral dissertation).
 - 62. See M. Key, supra note 60, at 10.
- 63. Paralinguistic cues include (i) voice characteristics such as volume, pitch change, tempo or rate of speech, and extent (whether speech is drawn out or clipped); (ii) nonverbal vocalizations such as pauses or yawns; (iii) speech fillers such as "uh-huh," "ah" and "hmmm," and (iv) voice quality (whether the voice is shrill, smooth, shaky or gravelly). Paralinguistic communication also covers prosodic features such as intonation patterns and word, phrase or sentence-level stress. See generally J. Lyons, 1 Semantics 58-59 (1977) (discussing verbal and nonverbal signals). Paralanguage thus focuses on how something is said, not what is said. See M. Knapp, Nonverbal Communication in Human Interaction 18 (2d ed. 1978). Audiotape would record paralinguistic features but not visual features.
- 64. Visual communication is often referred to as kinesics, or, more popularly, "body language." For the purposes of this study, this communicative channel will be expanded to include (i) physical appearance, which includes such features as physiology, hairstyle and dress; (ii) proxemics, which concerns the use of personal distance in communication, see Peskin, Nonverbal Communication in the Courtroom: Proxemics, 3 Trial Dipl. J. 8, 8 (Spring 1980); and (iii) haptics, which concerns the use of touch in communication, see L. Smith & L. Malandro, Courtroom Communication Strategies 301 (1985).

A. Visual and Paralinguistic Communication Missing from Stenographic Depositions

"[A]ll behavior is communication." But, paradoxically for a profession that deals in communication and persuasion, legal education provides attorneys with little information about communication behaviors. It is even less concerned with applying those behaviors in legal practice. The law is preoccupied with words. By ignoring interdisciplinary evidence regarding communication, legal education fails to prepare new lawyers for the real world—a world in which one commentator has estimated that as much as 93% of witness, juror, judge and attorney communication may be revealed by cues other than words. 67

Attorneys too have failed to acknowledge the implications of studies on paralinguistic and visual communications and have been reluctant to incorporate the findings of these studies into contemporary legal practice. As witnesses interact with attorneys, judges and jurors in depositions or at trial, they continually emit messages through a number of channels, all of which enable the listener to form an opinion about the message and the message bearer. Two types of courtroom messages—paralinguistic and visual—are communicated nonlexically, separate and distinct from the words themselves, and thus escape stenographic transcription. Communication is not limited to words, but includes the total behavior of people in the communication interaction. Therefore, paralinguistic and visual channels are also important in communicating with jurors; in some cases they are perhaps even more important than the verbal channel.

^{65.} B. Lewis & F. Pucelik, Magic Demystified 29 (1982); see also Peskin, supra note 64, at 8 ("It is impossible for an individual not to communicate, even if he chooses to remain silent.").

^{66.} Noting this weakness in our legal system, F. Lee Bailey stated: "we are sadly lacking in any demonstrable expertise in communication in a business where effective communicating is the *sine qua non* of the system." F. Lee Bailey, *quoted in* K. Taylor, R. Buchanan & D. Strawn, Communication Strategies for Trial Attorneys 10 (1984).

^{67.} See A. Mehrabian, supra note 60, at 108. Mehrabian analyzes communication as follows: communication = 7% verbal (words) + 38% vocal (paralinguistic) + 55% facial cues = total impact of message. Subtracting the "words" in Mehrabian's formula, 93% of the total impact of the message is communicated by visual and paralinguistic features—features that stenographically recorded depositions do not capture. See id.

Other estimates of the percentage of nonverbal communication are somewhat lower. For example, Birdwhistell estimates that 65 to 70% of communication is nonlexical. See R. Birdwhistell, Kinesics and Context 197 (1970); see also R. Aron, J. Fast & R. Klein, supra note 9, at 429 (generally accepted percentage of nonverbal component of total communication is 60%). But see Hocking, supra note 61, at 120 (suggesting that for accurately detecting deceptive communication, the verbal component is more important than the nonverbal).

^{68.} Our empirical study indicates that attorneys use video primarily as a substitute for an absent witness, and do not employ video strategically to enhance or detract from a witness's credibility. See infra note 202, Table 4.

^{69.} See G. Laborde, Influencing with Integrity: Management Skills for Communication and Negotiation 129-30 (1983).

^{70.} Philosophers have pondered the importance of nonverbal communication. Socra-

Both intentional and unintentional posture shifts, changes in facial expression, gestures, body tension, body position and body orientation cues reveal a witness's emotions, attitudes and predispositions.⁷¹ Manipulation of jewelry, clothing or other objects also sends visual messages about a witness's credibility,⁷² as do clothing style, quality, and cleanliness.⁷³ Indeed, communication occurs even when a witness is silent during the deposition. Consider, for example, the effect of a long pause before answering a question.

Most people form an opinion on credibility within the first few minutes of seeing someone.⁷⁴ While observing the way in which a witness responds to questions, a juror receives cues⁷⁵ about that witness's confidence, competence and trustworthiness. These cues relate directly to the impressions the juror forms about that witness's credibility and confidence, and hence his persuasiveness.⁷⁶

Several studies have focused on the extent to which the juror's percep-

tes, Solomon and Homer were astute observers of visual cues. Socrates, who relied upon the visual and paralinguistic cues that accompanied the speech to reveal the true speaker, stated "Speak, that I may see thee!" M. Key, supra note 60, at 41 (quoting Socrates). Solomon noted of a speaker: "He winketh with his eyes, he speaketh with his feet, he teacheth with his fingers." Proverbs 6:13.

71. See, e.g., Mehrabian, Nonverbal Betrayal of Feeling, 5 J. Experimental Res. Personality 64, 70-73 (1971) (discussing posture and position); R. Birdwhistell, supra note 67, at 80 (discussing aspects of body motion that can be interpreted as language); Tearney, supra note 33, at 28, col. 3 ("[a] nervous tic, odd facial expression or lack of expression can convey as much of an impression as the actual words of the deponent's testimony").

72. See, e.g., R. Matlon, Communication in the Legal Process 45 (1988) (deceivers tend to manipulate objects more than nondeceivers).

73. A uniform, for example, can affect the perceived credibility of a witness.

74. See J. Elsea, The Four-Minute Sell 7 (1984) (citing L. Zunin & N. Zunin, Contact: The First Four Minutes (1972)).

75. People often rely on "folk wisdoms" to evaluate whether someone is lying. For example, common lore dictates that those who look away from the hearer or who twist their hands are not being honest. See infra note 94 and accompanying text.

76. See Tearney, supra note 33, at 28, col. 3; see, e.g., Witness Credibility: An Application of Psychological Data, For the Defense, Oct. 1981, at 18 (discussing how nonverbal cues affect perceptions of credibility); Miller & Burgoon, Factors Affecting Assessments of Witness Credibility, in The Psychology of the Courtroom 176-77 (N. Kerr & R. Bray, eds. 1982) (nonverbal cues may affect witness credibility).

Judges also are influenced by paralinguistic and visual cues. For example, one appellate court observed:

"The judge before whom the cause was tried heard the testimony, observed the appearance and bearing of the witnesses and their manner of testifying, and was much better qualified to pass upon the credibility and weight of their testimony than this court can be. There are many comparatively trifling appearances and incidents, lights and shadows, which are not preserved in the record, which may well have affected the mind of the judge as well as the jury in forming opinions of the weight of the evidence, the character and credibility of the witnesses, and of the very right and justice of the case. These considerations cannot be ignored in determining whether the judge exercised a reasonable discretion or abused his discretion in granting or refusing a motion for a new trial."

Coppo v. Van Wieringen, 36 Wash. 2d 120, 123-24; 217 P.2d 294, 297 (1950) (quoting McLimans v. City of Lancaster, 57 Wis. 297, 299, 15 N.W. 194, 195 (1883)).

tions of other factors have influenced the perception of a witness's truthfulness. For example, after reviewing 150 hours of videotaped trials in North Carolina, William O'Barr and his associates discovered that the degree of power exhibited by a witness's speaking style directly affected the juror's perceptions of that witness's credibility.⁷⁷

Finders of fact are permitted to rely on demeanor evidence—paralinguistic and visual cues—to determine a witness's credibility.⁷⁸ One case in which the defendant claimed that the plaintiff's unusual behavior prevented the jury from making a rational decision illustrates the importance of visual and paralinguistic cues:

[The witness] appeared nervous. He was a difficult witness to examine; he hesitated for some period of time on some questions; closed his eyes, and incessantly tapped with his foot while seated in the witness chair. . . . At one time . . . he became hysterical, rose in his chair, shouted and cried.⁷⁹

Before the advent of video depositions, had this witness been unable to appear at trial, an attorney could have simply read this deposition to the jury during the trial. The jury would not have seen the hesitation, eye closing, toe tapping, shouting and crying. The jury's assessment of the witness's credibility might have been quite different had they seen him testify.

1. The Impact of Visual and Paralinguistic Communication on Witness Credibility

Visual communication affecting a witness's credibility is conveyed to jurors in a variety of ways from different parts of the body. For example, a witness's face is a fertile source of visual communication cues. Studies of deception show that smiling behavior differs between those who tell the truth and those who lie. There does not appear to be a consensus on how smiling relates to deception, however. At least one author concluded that witnesses who lie tend to smile more. Other studies conclude the opposite. Head nodding also provides valuable

^{77.} See W. O'Barr, Linguistic Evidence: Language, Power, and Strategy in the Courtroom 113-14 (1982).

^{78.} Federal Rule of Civil Procedure 52(a) has historically required that appellate courts defer to the trial court's ability to observe the demeanor of witnesses. The rule requires that the appellate court not overrule a trial judge's finding of fact unless the trial judge's decision was "clearly erroneous." See Fed. R. Civ. P. 52(a). In deciding issues of law, an appellate court may overturn a trial judge's decision if it would have decided the issue differently in the first instance. See Pullman-Standard v. Swint, 456 U.S. 273, 287-90 (1982); United States v. Mississippi Valley Co., 364 U.S. 520, 526 (1961); Creamer v. Bivert, 214 Mo. 473, 480, 113 S.W. 1118, 1120 (1908).

^{79.} Bartholomew v. Universe Tankships, Inc., 168 F. Supp. 153, 159 (S.D.N.Y. 1957), aff'd, 263 F.2d 437 (2d Cir.), cert. denied, 359 U.S. 1000 (1959).

^{80.} See Mehrabian, supra note 71, at 73.

^{81.} See McClintock & Hunt, Nonverbal Indicators of Affect and Deception in an Interview Setting, 5 J. of Applied Soc. Psychology 54, 63-4 (1975); Miller & Burgoon, supra note 76, at 176-77.

communication cues. Affirmative head nodding is associated with open and honest witnesses.⁸²

Eyes also play a leading role in communication.⁸³ Western cultural bias fosters the notion that honest, credible witnesses can "look you in the eye" when responding to questions.⁸⁴ As a result, many jurors believe that a witness who looks away while speaking is lying.⁸⁵ Research on the subject, however, suggests that the reverse may be true. One study reported that sophisticated witnesses tend to look more steadily at the receiver when lying than when telling the truth.⁸⁶

Other optical movements, such as blinking and pupillary change, vary between truth telling and deception.⁸⁷ For example, liars may blink more often than truth tellers,⁸⁸ and pupils may dilate suddenly during deception.⁸⁹ Because it is largely involuntary, eye behavior is only minimally susceptible to witness control;⁹⁰ therefore, it might prove a trustworthy clue to witness deception. Jurors, however, would seldom be able to see such a clue.

Hand movements also provide valuable communication cues. Lying

^{82.} See, e.g., R. Aron, J. Fast & R. Klein, supra note 9, at 85-86 (discussing the "feedback effect" of affirmative head nods).

Jurors should not rely too heavily on facial cues, however, because witnesses are generally aware of their expressions and can disguise those cues by controlling their facial expressions. See Fugita, Hogrebe & Wexley, Perceptions of Deception: Perceived Expertise in Detecting Deception, Successfulness of Deception and Nonverbal Cues, 6 Personality & Soc. Psychology Bull. 637, 641-42 (1980); see also Zuckerman & Driver, Telling Lies: Verbal and Nonverbal Correlates of Deception, in Multichannel Integrations of Nonverbal Behavior 130 (A. Siegman & S. Feldstein eds. 1985) (discussing finding that verbal cues are more likely to disclose deception than nonverbal cues).

The 1960 Nixon/Kennedy debate provides an interesting example of the power of communicative evidence from the face. Many who watched the debate believe that lexically, Richard Nixon prevailed in the debate. John F. Kennedy, however, charmed his audience and won the election. See Harrison, supra note 11, at 172-75.

^{83. &}quot;He speaketh not; and yet there lies [a] conversation in his eyes." Henry Wadsworth Longfellow, *quoted in M. Knapp*, Essentials of Nonverbal Communication 182 (1980).

^{84.} See Fehr & Exline, Social Visual Interaction: A Conceptual and Literature Review in Nonverbal Behavior and Communication, 225, 287 (A. Siegman & S. Feldstein eds. 2d ed. 1987). Establishing eye contact correlates positively with juror perceptions of honesty.

^{85.} See B. Lewis & F. Pucelik, supra note 65, at 62.

^{86.} See Fehr & Exline, supra note 84, at 287; Fridlund, Ekman & Oster, Facial Expressions of Emotion: Review of Literature, 1970-1983, in Nonverbal Behavior and Communication 287 (A. Siegman & S. Feldstein eds. 2d ed. 1987). This suggests that lying witnesses are aware of this cultural bias and attempt to compensate for it. In fact, Ekman and Friesen note that the eyes and head provide the least accurate clues to deception. See Ekman & Friesen, Nonverbal Leakage and Clues to Deception, 32 Psychiatry: J. For the Study of Interpersonal Processes 88, 98-99 (1969).

^{87.} See Fridlund, Ekman & Oster, supra note 86, at 287; Zuckerman & Driver, supra note 82, at 132.

^{88.} See Zuckerman & Driver, supra note 82, at 132.

^{89.} See id.

^{90.} See M. Roberts, Trial Psychology: Communication and Persuasion in the Court-room 235 (1987).

witnesses tend to use more rapid hand movements to make "adaptor gestures," such as touching the face and other body parts, than do witnesses who tell the truth. Nose touching, according to a 1977 work, correlates strongly with deceit. Witnesses who lie also tend to manipulate objects such as jewelry or clothing more frequently than do witnesses who tell the truth. A lying witness, however, tends to use fewer "illustrator" or other gestures that reinforce verbal communication. The ability to control hand movement more readily may account for fewer illustrative gestures.

There is no consensus on the reliability of visual communication emanating from the legs and feet. A live witness's legs, however, are usually shielded from the jury by the witness stand, and in most video depositions the witness's legs and feet are not included in the video screen. Thus, although leg and foot movement may be inconsistent indicators of deception, video depositions communicate a message that is neither more nor less accurate than that conveyed by stenographic depositions.

Of greater significance to the study of video depositions is the literature surrounding posture and body orientation. Studies show that lying witnesses shift posture more often than truthful communicators.⁹⁷ Seated body orientation, although susceptible to some control,⁹⁸ is one of the communication cues least controlled by witnesses. Liars tend to lean

^{91.} See M. Knapp, supra note 83, at 140; Zuckerman & Driver, supra note 82, at 133; R. Harrison, supra note 11, at 188. Truth tellers tend to make illustrator gestures, which illustrate and punctuate statements, as opposed to adaptor gestures, which are unrelated to the content of the speech.

^{92.} See D. Morris, Manwatching: A Field Guide to Human Behavior 110 (1977).

^{93.} See R. Matlon, supra note 72, at 45.

^{94.} See Knapp, Hart & Dennis, An Exploration of Deception as a Communication Construct, 1 Hum. Comm. Res. 15, 16-17 (1974) (summarizing conclusions of other researchers).

^{95.} For example, hands can be hidden behind the back. See M. Knapp, Nonverbal Communication in Human Interaction 104 (1972). But cf. D. Druckman, R. Rozelle & J. Baxter, Nonverbal Communication: Survey, Theory, and Research 164 (1982) ("[D]eceivers who often fidgeted with objects felt that they were more in control of their enactments.").

^{96.} Ekman and Friesen, for example, find legs and feet the richest sources of nonverbal deception cues. See Ekman & Friesen, supra note 86, at 94. They note that, while legs and feet are the worst information senders because they can send only a few types of signals, legs and feet are most apt to leak deception cues. See id. at 96. Their study found that deceptive witnesses use more leg and foot movements than facial or head cues. See id. at 100-03. Mehrabian, on the other hand, found fewer foot movements and no change in leg movements for deceptive witnesses in one experiment, and no change for either foot or leg movement in two others. See Mehrabian, supra note 80, at 72. Knapp also found no significant difference between the leg movements of liars and truth tellers. See Knapp, Hart, & Dennis, supra note 94, at 25.

^{97.} See, e.g., Ekman & Friesen, Detecting Deception from the Body or Face, 29 J. Personality & Social Psychology 288, 292-94 (1974) (a body can reveal how a person actually feels when she is attempting to mask facial expressions); McClintock & Hunt, supra note 81, at 65 (postural shifts reveal lying of "interviewees" rather than witnesses).

^{98.} See M. Roberts, supra note 90, at 235.

forward less.⁹⁹ In addition, a deceitful witness's body tends to angle away from his audience.¹⁰⁰ Thus, a truthful witness can be expected to face the questioning attorney directly.

A witness' orientation to a questioning attorney, however, could be misinterpreted on videotape if the attorney sits to one side of the camera. If the witness responds to the camera, jurors may intuit that he is avoiding the attorney and may attribute that avoidance to deceit. To prevent such misinterpretation, informed attorneys or technicians can station the video camera so that both the witness and the questioning attorney are in view. ¹⁰¹ Then, if the witness elects to look away, the jury can use that visual data to evaluate his credibility.

Paralinguistic cues are not words and thus are not recorded by stenographic transcription. Paralinguistic cues, however, can be even better predictors of deception than are visual cues. ¹⁰² Several paralinguistic patterns are characteristic of deceptive speech. For example, deceptive communications tend to be higher pitched and shorter than truthful communications. ¹⁰³ Deceptive speech also contains more disfluencies, such as filler words and hesitations. ¹⁰⁴ Hesitation cues such as "um," "ah" or "uh" are particularly indicative of deception. ¹⁰⁵

^{99.} See Mehrabian, supra note 80, at 72-73. This may be because the witnesses are trying to remember rather than to relate.

^{100.} See M. Knapp, supra note 83, at 140. But see L. Smith & L. Malandro, supra note 64, at 268 (a slight angling away from the questioner may indicate credibility for powerful witnesses).

^{101.} See Tearney, supra note 33, at 29, cols. 3-4.

^{102.} See Siegman, Expressive Correlates of Affective States and Traits, in Multichannel Integrations of Nonverbal Behavior 37, 43 (A. Siegman & S. Feldstein eds. 1985).

A witness's anxiety may manifest itself paralinguistically in a number of ways that undermine his credibility. For example, he may take longer to respond, speak more slowly, pause more frequently or pause for longer times. See L. Smith and L. Malandro, supra note 64, at 301; W. O'Barr, supra note 77, at 32 (citing A. Morrill, Trial Diplomacy 34-39 (1971)); cf. R. Matlon, supra note 72, at 147 (an anxious person talks noticeably faster than a relaxed one). Note, however, that even an honest witness can be anxious.

^{103.} See Siegman, The Telltale Voice: Nonverbal Messages of Verbal Communication, in Nonverbal Behavior and Communication 351, 391 (A. Siegman & S. Feldstein eds. 2d ed. 1987).

Pitch level also affects perceived credibility. The higher the witness's pitch, the less credible he is perceived. See Apple, Streeter & Krauss, Effects of Pitch and Speech Rate on Personal Attributions, 37 J. Personality & Soc. Psychology 715, 720 (1979); L. Smith and L. Malandro, supra note 64, at 136-37. A witness with a very high-pitched voice, who may be judged less credible by jurors, might be best presented through a stenographic transcript.

^{104.} See, e.g., D. Druckman, R. Rozelle & J. Baxter, supra note 95, at 170 (deceptive responses more hesitant); L. Smith and L. Malandro, supra note 67, at 301 (deceptive speech has more disfluencies). Vocal disfluencies increase under stress and negatively affect witness credibility. Some of the more common disfluencies witnesses exhibit are hesitation cues, such as "uh" or "um," stuttering, repeating words or phrases, see R. Matlon, supra note 72, at 147, switching to a more "pompous" or "hypercorrect" manner of speaking, see W. O'Barr, supra note 77, at 83, or speaking in unfinished sentences.

^{105.} One researcher found that hesitation cues were "more strongly associated... with lying than any other nonverbal cue except pupil dilation." R. Matlon, supra note 72, at 148.

Speaking rates also vary as a function of veracity. Deceptive speech tends to be slower than truthful communication, and a liar will generally wait longer before responding to a question. On the other hand, increased volume, faster and more fluent speech, and greater overall intonation enhance witness credibility. As a rule, "narrative answers are more persuasive than fragmented ones." Witnesses who are aware of paralinguistic communication can control it to some extent, although not as readily as they can control their facial communication.

The visual and paralinguistic cues discussed above are unavailable on a stenographic deposition. This information is available to the jury only when depositions are videotaped. Visual and paralinguistic cues are subject to varying interpretation, and an untrained juror may not accurately interpret a particular nonverbal cue. Indeed, this potential danger may suggest that jurors should not be permitted to see witnesses testify. The American judicial system, however, has rejected this notion. American common law and rules of evidence in most jurisdictions require deference to the decisions of factfinders who have had the opportunity to see and hear both visual and paralinguistic evidence. The American judicial system prefers that the trier of fact receive and interpret visual and paralinguistic evidence for itself. Videotaped depositions are but a natural extension of this preference.

2. Interaction Between Visual and Paralinguistic Cues and Verbal Communication

Paralinguistic, verbal and visual communications interact in two ways to affect a juror's perception of credibility. First, the visual and paralinguistic cues may be harmonious or congruent with the witness's words. 111 Congruence fosters effective, persuasive communication. 112 If congruence exists, a videotaped deposition captures the enhancing cues. A stenographic transcription, however, excludes them.

Conversely, a witness's visual and paralinguistic cues may differ from or contradict her words. ¹¹³ Incongruent communication cues can undermine a witness's credibility and persuasiveness. ¹¹⁴ In cases in which ver-

114. See id.

^{106.} See Siegman, supra note 103, at 392.

^{107.} See R. Matlon, supra note 72, at 221.

^{108.} W. O'Barr, supra note 77, at 32.

^{109.} See Siegman, supra note 102, at 44.

^{110.} See, e.g., Maryland v. Craig, 110 S. Ct. 3157, 3163 (1990) (reliability ensured by physical presence, oath, cross-examination and observation of demeanor by trier of fact); Fed. R. Evid. 801 (hearsay); Fed. R. Civ. P. 52(a) (requiring that "[f]indings of fact . . . shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge the credibility of the witnesses").

^{111.} See G. Laborde, supra note 69, at 192; cf. R. Bandler & J. Grinder, Frogs into Princes 157 (1979) (discussing inharmonious clues).

^{112.} See G. Laborde, supra note 69, at 192. The legal system should recognize the synergistic effect of presenting the full array of communicative cues to the finder of fact.

^{113.} See id. at 186.

bal and visual cues conflict, jurors tend to disregard the verbal communication and instead rely upon the paralinguistic and visual cues. Thus, visual and paralinguistic cues play an important role in situations where there is incongruence between a witness's words and her nonverbal communication.

Consider, for example, a deposition in which the prosecutor asks the following question of a criminal defendant and receives the following answer:

Q: When the police arrived at your door and announced that they wanted to search the premises, you granted them permission to enter, did you not?

A: Yeah, sure.

If the answer is volunteered affirmatively, in a strong, sure tone, the answer may well mean "yes." And that is the interpretation that a jury who receives only the stenographic transcript will give the testimony. If, however, the defendant hesitates, scoffs, gives a slight negative shake of his head, and answers in a sarcastic or falling tone, the jury might well infer that "yeah, sure" means "no." The jury evaluating this testimony from only a stenographic record will be denied the communicative features from which it could determine the true communicative intent of the defendant's response. 116

Because a witness's visual and paralinguistic communicative cues are generally involuntary and operate at relatively low levels of awareness, ¹¹⁷ they are largely unedited. Conversely, witnesses constantly monitor and manipulate lexical items in their efforts to impress jurors positively. Experts agree that witnesses cannot control all visual and paralinguistic responses. ¹¹⁸ Because the conscious mind is limited, ¹¹⁹ witnesses exhibit, yet do not notice, subtle communicative behavioral changes. A deceptive witness, therefore, becomes particularly vulnerable to sending unintended messages.

^{115.} Cf. A. Mehrabian, Silent Messages 43 (1971) (referring to people, not jurors). Consider also a situation where a person stands up and yells in a sharp voice: "I am not upset with you at all!" Picking up the nonverbal cues such as the tone, facial expression, and overall posture of the speaker, the receiver of the message is likely to interpret this to mean exactly the opposite.

^{116.} See, e.g., A. Mehrabian, supra note 115, at 41 (It is "very difficult, unless we have some audio-video record, to identify and to cope with nonverbal expressions of hostility that are cloaked by simultaneous verbal expressions to which we cannot legitimately take exception."); Mehrabian, supra note 80, at 73 (discussing nonverbal behavior as means of inferring a person's feelings).

^{117.} See R. Harrison, supra note 11, at 111, 183.

^{118.} See, e.g., Fridlund, Ekman & Oster, Facial Expressions of Emotion: Review of Literature, 1970-1983, in Nonverbal Behavior and Communication 143, 184-85 (A. Siegman & S. Feldstein eds. 1987) (discussing how smiles intentionally reveal emotions); Zuckerman & Driver, supra note 82, at 132 (unintentional facial expressions may reveal speaker's attempt at deception).

^{119.} See R. Bandler & J. Grinder, supra note 111, at 157.

B. The Ability of Jurors to Detect Deceitful Utterances

Many studies have examined the ability to detect deception by observing visual and paralinguistic cues. ¹²⁰ Certain behavioral cues indicate to jurors that a witness is deceptive. ¹²¹ According to Louis Nizer, jurors may not find entirely credible a witness who (1) scissors his legs when asked certain questions, (2) looks at the ceiling, or (3) passes his hands over his mouth before answering questions in a certain area, as if to say, "I wish I didn't have to say what I am about to say." ¹²²

Certain cues to deception are more salient than others. The most accurate cues are those least likely to be controlled.¹²³ Thus, body behaviors reveal deceptive communication cues more reliably than do words or facial expressions, largely because witnesses can better control their words and facial behaviors.¹²⁴

Researchers have found that the ability to detect deceptive communication accurately varies widely. Some people have a sophisticated

120. See, e.g., Hocking, supra note 64, at 11 (analyzing "behavioral correlates of lying"); Ekman & Friesen, supra note 97, at 288 (more accurate judgments can be made from body movements than from facial expression); McClintock & Hunt, supra note 81, at 55 (studying nonverbal behavior to assess deception and emotional status); Knapp, Hart & Dennis, supra note 94, at 16-17 (determining which verbal and nonverbal behaviors are characteristics of deception).

Ekman and Friesen's seminal work demonstrated the existence of deception cues—those specific verbal, paralinguistic and visual behaviors that indicate that what is being said is false. See Ekman & Friesen, supra note 97, at 288. They also demonstrated the companion concept of leakage—that is, even though the witness may attempt to camouflage his true feelings, evidence of lying leaks out paralinguistically and visually in ways that a witness cannot control and of which he is most likely unaware. See id. at 297.

Deception, which may take the form of distortion, misrepresentation or outright lying, is a concern in the legal arena because factfinders must detect deception if they are to reach informed conclusions. Deceptive witnesses can withhold or distort factual information. They can also advocate a position directly opposite of their true beliefs or attitudes. See Knapp, Hart & Dennis, supra note 94, at 18 & n.7, 27.

121. See generally Depaulo, Zuckerman & Rosenthal, Humans as Lie Detectors, 30 J. Comm. 129, 135-36 (1980) (listing a variety of nonverbal cues that have been shown to correlate with deception).

122. L. Nizer, The Implosion Conspiracy 7-8 (1973).

123. See M. Roberts, supra note 90, at 234-35; Zuckerman & Driver, supra note 82, at 129. Studies of deceptive behaviors have found that the verbal content of speech differs between witnesses who lie and those who tell the truth. Those who lie generally use fewer factual statements, past references and total words. They also tend to make more disparaging statements. See Knapp, Hart & Dennis, supra note 94, at 16-17. These verbal indicators of deception are available in both videotape and stenographic depositions. Verbal content, however, tends to be controllable by the witness, and therefore is not a particularly good predictor of deception. Cf. Zuckerman & Driver, supra note 82, at 130 (referring to people rather than "witnesses").

124. A hierarchy of deception cue leakage, formulated by Ekman and Friesen, places feet and legs at the top of the scale as the richest sources of deception information, followed by the hands, with the witness's face the least likely to provide reliable information. See Ekman & Friesen, supra note 86, at 99-100. Apparently, the body is a more fertile and accurate source of cues than the face when the deceiver is trying to conceal emotional responses, see M. Roberts, supra note 90, at 234-35, while the face reveals more when the deception involves factual statements. See Hocking, supra note 61, at 123-24.

125. See, e.g., Siegman, supra note 103, at 391-92 (giving reasons for differences in

"third eye" ¹²⁶ that enables them to detect and interpret nonverbal cues accurately. Others are less perceptive. Gender, ethnic, socio-economic and occupational differences also exist in the ability to detect communication cues. ¹²⁷

Although it is enticing to extrapolate from the non-verbal deception research to the legal process, many qualifications exist. For example, deception studies show that hearers do not necessarily interpret paralinguistic and visual cues correctly. Only a few discrete visual communications, such as the "thumbs-up" sign, the "OK" sign and the "shh" motion; a few postures; and facial expressions such as anger, disgust and surprise, have independently recognized meanings in our culture. Most paralinguistic and visual cues have "no specific, accurate, or universal meaning." Because jurors or attorneys cannot definitely know the meaning of a witness's visual communications, they can only make well-informed inferential judgments. Moreover, in a courtroom setting, jurors lack familiarity with the witness they are called upon to evaluate, and thus may not be able to determine whether the cues re-

accuracy of detection of deception in several studies). Implications for the correlation between ability to detect communication cues in videotaped transcripts and jury selection exist, but are not the focus of this study.

126. Cf. Mackey, Jury Selection: Developing The Third Eye, Pers. Inj. Ann. 880, 888 (1981) (urging attorneys to develop a "third eye" to improve jury selection skills).

127. See Burgoon, Nonverbal Signals, in Handbook of Interpersonal Communication 357 (1985).

As a group, females are better than males at decoding paralinguistic and visual cues, regardless of the witness's age or gender. See id. Ability to detect deception also improves with age. See id. at 358. As a result of continually interpreting others' words and actions as a means of coping within our society, most people develop a set of interpretation skills that they apply to interactions with unfamiliar individuals.

At least one researcher suggests that people from groups that have historically been oppressed may develop better decoding skills as survival tools. See Halberstadt, Race, Socioeconomic Status, and Nonverbal Behavior, in Multichannel Integrations of Nonverbal Behavior 260 (A. Siegman & S. Feldstein eds. 1985). Additionally, persons from particular occupations may be more perceptive than others. Those who have backgrounds in nursing, acting or the visual arts professions seem to exhibit greater decoding ability. See Hayano, Communicative Competency Among Poker Players, 30 J. Comm. 114, 115 (1980). Finally, personality differences also contribute to a person's ability to perceive deception cues. See Burgoon, supra, at 358. People with extroverted personalities enjoy greater ability to perceive deception than do introverted people. See id. at 358.

- 128. See R. Matlon, supra note 72, at 147; Miller & Burgoon, supra note 76, at 180.
- 129. See Nonverbal Behavior and Communication 6 (A. Siegman & S. Feldstein eds. 1978). Certain gestures and eye movements may differ interculturally.
 - 130. See id. at 98.
 - 131. R. Matlon, supra note 72, at 147. There are many ethnic and gender variants.
- 132. The likelihood of stereotyping is heightened in court because jurors are dealing with unknown witnesses, and the exposure to any one witness is relatively limited. See G. Miller & N. Fontes, Real Versus Reel: What's the Verdict? The Effects of Videotaped Court Materials on Juror Response 126 (1978). According to Miller and Fontes, responding subjects more accurately detected deception from those with whom they had communication, because such communication increased the subject's knowledge of the speaker's baseline lying and truthing behaviors. See id. The opportunity for interpersonal communication is lacking in witness-juror interactions. See Miller & Boster, Three

vealed in a video deposition relate to the witness's resistance to a particular question or whether they reflect a mere response to the deposition setting.¹³³

Additionally, most studies on paralinguistic and visual communication are not conducted in, and thus do not strictly apply to the judicial setting. For example, some procedures employed in deception studies manipulate lying by instructing research participants to lie or permitting them to give fictitious responses. ¹³⁴ These research participants may well behave differently from witnesses who lie to serve their own purpose. Second, deception study participants usually lie on camera or tape, rather than directly to another person. ¹³⁵ A witness's lying cues may vary significantly when she interacts directly with an attorney in a deposition setting, even when a camera is recording the exchange.

Third, nonverbal cues that accompany situational anxiety are similar to those emitted during attempts to deceive. Thus, as noted above, a juror may be unable to discriminate between a witness who is nervous and one who is lying. Finally, outright lying is probably a fairly rare occurrence in the courtroom. Much more common in court is the problem of flawed or failed recollection. Whether deception cues that accompany lying are the same as those that occur during incomplete or inaccurate testimony is unknown.

These qualifications raise the question whether it is wise to give jurors the extra communication cues that video provides. Although videotape reveals nonverbal cues that are subject to misinterpretation, in this sense video is no more misleading than live testimony. The judicial system expresses a clear preference for live testimony. Implicit in that preference is the assumed risk that such evidence might be misinterpreted. And, in terms of deposition testimony, video is still preferable to the stenographic alternative, which denies the jury all visual and paralinguistic communication cues.

Furthermore, inconsistencies, contradictions and general behavioral shifts among the three channels of observable communicative behavior

Images of the Trial: Their Implications for Psychological Research, in Psychology in the Legal Process 19, 29-30 (B. Sales ed. 1977).

^{133.} Because anxious behavior resembles deceptive behavior, jurors may be misled. What a juror perceives as a nervous twitch and attributes to lying may be part of that witness's normal behavior, or may simply indicate anxiety. See Tearney, supra note 33, at 30, col. 2; see also R. Matlon, supra note 72, at 174 (noting the need to relate nonverbal cues to baseline behavior).

Although jurors may not necessarily interpret visual and paralinguistic cues correctly, they have fairly high confidence in the decisions they make when they have had the opportunity to both see and hear a witness. See Hocking, Miller & Fontes, Videotape in the Courtroom: Witness Deception, 14 Trial 52, 52-55 (1978). If juror confidence in their decisions, and thus in the judicial system, is perceived as a virtue, then providing jurors visual and paralinguistic communication cues serves another salutary function.

^{134.} See, e.g., Hocking, supra note 61, at 27 (discussing problems with deception research; examining "role play lying" and "realistic lying").

^{135.} See id. at 49-53.

provide valuable cues from which jurors can make inferences about witness credibility. Even though many jurors probably cannot detect the very subtle behavior changes without training, some cues will leak through. Jurors generally can detect and correctly interpret those paralinguistic and visual cues that are fairly overt, ¹³⁶ at least at a greater-than-chance level. ¹³⁷

Because visual and paralinguistic cues command an important role in the total communication picture, ¹³⁸ videotape depositions should facilitate a juror's ability to detect deception. Communication experts predict that jurors should most accurately judge veracity when verbal, paralinguistic and visual information are all made available. ¹³⁹ To the extent that jurors can use any of the paralinguistic or visual data to assist them in interpreting witness testimony, that information should be made as available as possible.

III. EVIDENTIARY ADVANTAGES OF VIDEOTAPED DEPOSITIONS

Whether indicating credibility or deception, the witness's demeanor has a powerful effect on the jury's ability to process and retain information and to make decisions. Video "improve[s] the administration of justice while at the same time preserv[es] the integrity of the judicial process by insuring demeanor evidence for the triers of fact." ¹⁴⁰

Marshall McLuhan posited that the medium is the primary message in communication. Although McLuhan may overstate his case, the medium—that is, the overall communicative picture afforded by videotape—does have powerful implications for ensuring justice because it may improve or hinder juror cognition in a variety of ways.

First, videotape may enhance information processing by capturing juror attention. One drawback to stenographically transcribed depositions is their tendency to bore jurors.¹⁴² Videotaped depositions provide a

^{136.} See G. Laborde, supra note 69, at 77.

^{137.} See Boice, Observation Skills, 98 Psychological Bulletin 3 (1983).

^{138.} See supra notes 73-75 and accompanying text.

^{139.} Researchers have found nonverbal cues superior to verbal cues for communicating. See M. Roberts, supra note 90, at 160 ("The experimenters explain why nonverbal communication can supplant actual words, suggesting that the implicit communication is the more legitimate indicator of attitude."). Thus, when verbal, visual, and paralinguistic cues are all made available to jurors, accuracy in detecting deception should increase. Miller and Boster call this the "conventional wisdom regarding the efficacy of nonverbal and paralinguistic cues as data for making accurate inferences about the motives and dispositions of communicators." Miller & Boster, supra note 132, at 33. In one study, however, Miller and Boster found that overall accuracy in detecting deception was highest for subjects who read a transcript but did not see visual or hear paralinguistic cues, a result they call "perplexing and counterintuitive." See id. at 32.

^{140.} Lamb v. Globe Seaways, Inc., 516 F.2d 1352, 1357 n.3 (2d Cir. 1975) (Oakes, J., dissenting).

^{141.} See M. McLuhan, Understanding Media: The Extensions of Man 23 (2d ed. 1964).

^{142.} Hamlin posits that depositions bore jurors because (assuming one is fluent in Eng-

change of pace in the trial and thus demand more of the juror's cognitive energy to process.¹⁴³

Second, jurors also absorb and retain information better when they receive it visually.¹⁴⁴ Videotaped depositions both engage the juror's mind and keep him involved with the testimony so that he remembers it during deliberations, which may occur days, weeks, or even months after he hears the testimony. Studies indicate that when jurors see and hear evidence simultaneously, they are able to recall sixty-five percent of the testimonial evidence after a three-day interval.¹⁴⁵ If jurors hear testimony without accompanying visual cues, their recall falls dramatically to about ten percent after the same three-day period.¹⁴⁶ Because an individual juror retains only about sixty percent of all testimonial evidence, whether presented live or through other vehicles, any increase in retention level that video affects has persuasive implications for the outcome of a case.

Seeing a witness on a television may impress upon the jury some of the witness's unique features, and thus help the jury to recall her testimony better. The omnipresence of television as a primary medium of information and entertainment has conditioned jurors to expect visual reinforcement.¹⁴⁸ Finally, jurors may perceive those witnesses they see "on TV" as important people and give more weight to their testimony.¹⁴⁹

In addition to the extra-lexical evidence that videotaped depositions allow jurors to evaluate, videotape has several other advantages that support changing the Federal Rules of Civil Procedure to prefer videotaping deposition testimony.

A. Substitute for an Unavailable Witness

Witnesses are not always available to testify at trial; they may be outside the subpoena power of the court, ¹⁵⁰ or they may become ill or die. Other witnesses, such as victims of child abuse, may be exempted from appearing in the same courtroom with the person charged with

lish) it takes only 15% of the human mind to understand English. See S. Hamlin, What Makes Juries Listen 10 (1985).

^{143.} See id. at 423-26.

^{144.} See Adler, Litigation Science: Consultants Dope Out the Mysteries of Jurors for Clients Being Sued, Wall St. J., Oct. 24, 1989, at 10, col. 4 [hereinafter Litigation Science].

^{145.} See Murray, Videotaped Depositions: A New Frontier of Advocacy, in 4 M. Belli, Modern Trials 378 (2d ed. 1982).

^{146.} See id.

^{147.} See M. Roberts, supra note 90, at 69.

^{148.} The Wall Street Journal recently reported that the average American watches seven hours of television each day. There is some question, however, whether merely watching TV makes one visually sophisticated. See Litigation Science, supra note 144, at 10, col. 4.

^{149.} See G. Miller & N. Fontes, supra note 132, at 74; R. Matlon, supra note 72, at 76. 150. See, e.g., In re Daniels, 69 F.R.D. 579, 581 (N.D. Ga. 1975) (determining when taping a witness located outside a court's subpoena power is appropriate).

having abused them.¹⁵¹ An attorney faced with a witness who may be unavailable now has the choice of presenting her testimony through either a stenographic deposition or a videotaped deposition. Expert witnesses such as medical doctors¹⁵² or public officials are often unavailable because of scheduling conflicts. Although a stenographic record can substitute for their live testimony, video affords a much more accurate and interesting presentation for the jury.

B. Timing and Logical Presentation

Witness schedules and tactical considerations often require that testimony at trial be presented out of chronological sequence, which sometimes confuses jurors. Videotaped depositions provide a partial solution. They enhance a lawyer's case by facilitating presentation of evidence in a logical sequence. Portions of individual videotaped depositions, for example, may be integrated by subject matter to minimize juror confusion. At least one court has approved the use of the edited-integrated presentation technique, rather than requiring a lawyer to recall a witness to the stand a number of times. 155

Some trial lawyers keep a back-up videotaped deposition in case a wit-

^{151.} The United States Supreme Court recently stated that the sixth amendment's confrontation clause reflects a preference for "face-to-face confrontation" at trial. See Maryland v. Craig, 110 S. Ct. 3157, 3164 (1990) (citing Ohio v. Roberts, 448 U.S. 56, 63 n.6 (1980)).

In deciding that viewing the testimony of a victim of child molestation on closed circuit TV did not violate the defendant's right to confrontation, the Court took the opportunity to reflect on the constitutional basis for our system's preference for live testimony:

[&]quot;The primary object of the constitutional provision in question was to prevent depositions or ex parte affidavits, such as were sometimes admitted in civil cases, being used against the prisoner in lieu of a personal examination and cross-examination of the witness in which the accused has an opportunity, not only of testing the recollection and sifting the conscience of the witness, but of compelling him to stand face to face with the jury in order that they may look at him, and judge by his demeanor upon the stand and the manner in which he gives his testimony whether he is worthy of belief."

Craig., 110 S. Ct. at 3163 (quoting Mattox v. United States, 156 U.S. 237, 242-43 (1895)).

152. In Arizona, approximately 75% of videotaped depositions recorded by one deposition service are of medical experts. Interview with Sandra McFate, President, McFate Deposition Service, Phoenix, Arizona (Aug. 15, 1989). Such depositions often are taken in doctors' offices to maximize the convenience for the witness, to help ensure the witness's cooperation, and to enhance the expert's air of authority.

The information gleaned in the interview comports with data compiled from the survey of Arizona attorneys. Witness unavailability for trial is the leading reason that Arizona lawyers schedule videotape depositions. See infra note 202, Table 4.

^{153.} See Underwood, The Videotape Deposition: Using Modern Technology for Effective Discovery (Part I), in 31 The Practical Lawyer 61, 64 (Apr. 15, 1985). Underwood noted that "[b]y use of videotape, an expert's testimony could be fitted into the trial sequence where it logically fits in the scheme of developing proof." Id.

^{154.} See, e.g., Beard v. Mitchell, 604 F.2d 485, 503 (7th Cir. 1979) (noting that a court may permit integrated presentation of videotaped testimony, but that refusal to allow such presentation is not error).

^{155.} See id.

ness is late getting to court. A video deposition also might substitute for an available witness on occasions when timing is an important tactical consideration. For example, late in the day an attorney may decide to wait to present particularly important testimony until the next morning, when the jury is most alert, but the witness cannot come back. The witness can then be presented "live" by videotape the following morning. 156

Another advantage of video depositions is that they can be reviewed immediately after the deposition has been taken, or even during breaks at the deposition, should it become necessary. In contrast, court reporters usually require anywhere from a few hours to several weeks or months to transcribe stenographic notes. Finally, in a multi-party case, one video deposition may be used in each severed trial, thereby saving the expense of several appearances to testify to the same information.¹⁵⁷

C. Evidentiary Realism

Stenographic depositions restrict the use of visual or demonstrative evidence. Video removes this restriction and thus adds evidentiary realism. For example, models, charts, skeletons and X-rays often can be used at a video deposition as effectively as they can be in open court. This evidence can be integrated into the presentation in a way not possible in a stenographic deposition. For example, demonstrative evidence with a complex technical content that cannot be duplicated accurately becomes available on video. Video also facilitates on-location demonstrations of the operation of machinery or equipment that cannot easily be transported to the courtroom.

Using videotaped depositions for critically ill or injured witnesses can convey the witness's plight more poignantly than words alone ever could. Video has been used for this purpose on several occasions, in-

^{156.} See McElhaney, Presenting Depositions: How to Make Transcripts and Videos Come Alive, A.B.A. J., July 1, 1988, at 84-85.

^{157.} See, e.g., Tearney, supra note 33, at 29 (video depositions have become prevalent in complex litigation).

^{158.} See Joseph, Demonstrative Videotape Evidence, 22 Trial 60, 66 (June 1986). The most commonly used demonstrative aids—skeletons (to show area and dynamics of injury) and intersection charts (to illustrate how motor vehicle accidents occur)—are also readily visible to jurors through videotape.

^{159.} See Carson v. Burlington N. Inc., 52 F.R.D. 492, 492-93 (D. Neb. 1971). In Carson, the plaintiff, whose hand had been injured in a steel press, was videotaped to show the manner in which he had approached and operated the machine immediately before and at the time of his accident. The deponent was not permitted to touch the machine, however. See id.

Additionally, taking a deposition at a doctor's office may allow the doctor to use demonstrative aids that are too large to transport to the lawyer's office for a deposition or to court for a trial.

^{160.} See Shulruff, supra note 50, at B14, cols. 3-6. There is some danger of prejudice in presenting these types of depositions. Courts are aware of this risk, however, and take precautions to guard against it. See, e.g., Marsee v. United States Tobacco Co., 866 F.2d 319, 321-22 (10th Cir. 1989) (disallowing use of a videotaped deposition of person suffering from oral cancer on ground that videotape was unduly prejudicial); Joseph, supra

cluding the Agent Orange product liability litigation.¹⁶¹ Courts are aware of and do attempt to minimize the prejudice that might arise from video depositions. For example, in the deposition of a hospitalized witness, one court required that no reference be made to the witness's condition and that only her head and shoulders be filmed.¹⁶²

D. Accuracy and Justice

The legal standard for admitting a videotaped deposition is that it fairly and accurately represent the subject it purports to portray. 163 The benefits of videotaped depositions were well stated by the court in Burlington City Board of Education v. United States Mineral Products Company: 164 "In general, video depositions provide greater accuracy and trustworthiness than a stenographic deposition because the viewer can employ more of his senses in interpreting the information from the deposition." 165 Notwithstanding that the "subtleties and nuances of facial expressions [and] coloring . . . may elude [even] the most advanced technical system," 166 video is still more accurate than a stenographic transcript. Cameras and microphones become surrogate eyes and ears that allow the trier of fact to study the witness's personality and demeanor.

Videotaped depositions may also afford more accurate reporting of the simultaneous or overlapping speech that occurs when both attorney and client speak at the same time, ¹⁶⁷ or when more than one attorney speaks, such as when objections overlap questions. Because video is an exact recording, it resolves the artificial and inaccurate communication pattern created when the stenographer attempts to separate the simultaneous speech. Overlapping speech contains valuable credibility cues. Lawyers who talk over witnesses receive negative evaluations from jurors. ¹⁶⁸ Jurors may view attorneys who talk over witnesses as attempting to intimi-

note 158, at 63 (noting high standard for admitting taped reconstructions and reenactments).

These potentially prejudicial situations could be the subject of a motion under Section 30(b)(5) of the proposed rule.

^{161.} See In re "Agent Orange" Product Liability Litigation, 28 Fed. R. Serv. 2d (Callaghan) 993, 995 (E.D.N.Y. 1980). Here, the court allowed the use of a videotaped deposition because the witness's rapidly developing brain tumor may have disabled him from testifying in court. See id.

^{162.} See United States v. LaFatch, 382 F. Supp. 630, 631 (N.D. Ohio 1974).

^{163.} See Fed. R. Evid. 1001(2); see also Blumberg v. Dornbusch, 139 N.J. Super. 433, 439, 354 A.2d 351, 354 (Super. Ct. App. Div. 1976) (test is "whether the videotape is a fair, accurate and undistorted representation of the deposition of the witness"); People v. Higgins, 89 Misc. 2d 913, 918, 392 N.Y.S.2d 800, 803 (1977) (videotape must be "true, fair and accurate representation of the events, people, or scene depicted").

^{164. 115} F.R.D. 188 (M.D.N.C. 1987).

^{165.} Id. at 189 (emphasis added).

^{166.} L. Parker, Legal Psychology: Eyewitness Testimony, Jury Behavior 156 (1980).

^{167.} See Underwood, The Videotape Deposition: Using Modern Technology for Effective Discovery (Part I) 31 Prac. Law. 61, 68-69 (Apr. 15, 1985).

^{168.} See W. O'Barr, supra note 77, at 90-91.

date or bully the witness. As a result, the attorney could unwittingly enhance the witness's credibility when the attorney's goal may in fact be the opposite. By portraying the speech order as it actually occurred rather than creating an artificial and inaccurate separation of speech, video serves the goals of justice and accuracy.

E. The Video Medium: Persuasive or Prejudicial

One concern about the use of videotaped depositions focuses on the medium itself and its impact on the message jurors receive. At trial, the lawyer typically attempts to create a drama or story for the jurors. As sophisticated entertainment consumers, ¹⁶⁹ jurors expect it. One way to fulfill the jurors' expectation of drama is to replicate the form in which jurors typically see it—that is, on television.

The psychological effect of this communication medium has several ramifications. Commentators note that the videotape medium itself is potentially biased in favor of the taped witness.¹⁷⁰ Jurors may perceive that a witness "important" enough to be on television deserves special attention and deference.¹⁷¹ Consequently, jurors may pay more attention to testimony presented on a television monitor. On the other hand, television may magnify certain negative traits such as poor posture, stammering and hemming and hawing. A close-up shot of a witness who perspires profusely, blinks too often, or diverts her eyes before answering questions may also detract from that witness's credibility.¹⁷²

A second concern of video critics is that videotaped depositions may create a detrimental, circus-like atmosphere in the courtroom. This fear, however, is not widely held.¹⁷³ Rather than perpetuating a less-thanserious tone, videotaping seems to encourage attorneys and clients to behave in a more dignified, restrained and professional manner.¹⁷⁴ Not

^{169.} See Litigation Science, supra note 144, at 10, col. 4.

^{170.} See G. Miller & N. Fontes, supra note 132, at 74; R. Matlon, supra note 72, at 76. 171: See G. Miller & N. Fontes, supra note 132, at 74. Conversely, the television medium may undermine a witness's credibility because many television viewers are conditioned to believe that TV is not "real life." The feeling that things seen on TV may not be real may carry over to videotapes viewed in the courtroom. See Kaufman, Video in the Courtroom, 3 Calif. Law. 41, 41-42 (Oct. 1983). One way to mitigate this possible prejudice is to take the deposition in a courtroom. Seeing the witness in an official courtroom setting might offset any medium-based prejudice. This approach, however, might be misleading because although a deposition is a court-sanctioned proceeding, jurors should not be deceived into thinking that it is an actual trial. A second problem with the proposed solution is the lack of available courtrooms. One alternative is for firms or court-reporting companies to design a portion of a conference room to resemble a courtroom.

^{172.} Interview with Sandra McFate, President, McFate Deposition Services, Phoenix, Arizona, in Mormon Lake, Arizona (Aug. 15, 1989). McFate reported a deposition of a doctor whose excessive perspiration undermined his credibility.

^{173.} See Rubino v. G.D. Searle & Co., 73 Misc. 2d 447, 449-50, 340 N.Y.S.2d 574, 577 (1973). In Rubino, the court considered and rejected the "circus" objection. We have yet to find a decision in which a court has sustained the circus objection as a ground for denying the use of a videotaped deposition.

^{174.} See Kaufman, supra note 171, at 42; see also Morrill, Enter-The Video Tape

wanting jurors to perceive them as bullying witnesses or obstructing the flow of testimony, attorneys make fewer objections in video depositions. This conduct contrasts with the atmosphere in many stenographically reported depositions.

Jurors give video depositions a vote of confidence. Eighty percent of male jurors and over seventy-five percent of female jurors favor the use of video, according to a recent National Bureau of Standards study.¹⁷⁶ The majority of jurors in another study corroborated this preference, indicating that video deposition presentations were "more interesting, easier to pay attention to, more refreshing, clearer, and more stimulating" than reading or listening to someone read a transcript.¹⁷⁷

Courts are slowly realizing what scholars in other fields have believed for years: videotaped depositions, because they record both audio and visual data, are more interesting and effective than stenographically transcribed depositions. Given this data, the Federal Rules of Civil Procedure should be amended to require that all depositions be recorded by videotape, unless the opponent of the method persuades the court otherwise.

IV. ATTORNEY ATTITUDES TOWARD VIDEO DEPOSITIONS: AN EMPIRCIAL STUDY OF ARIZONA LAWYERS

A. Introduction

The video deposition literature contains little empirical information about attorneys' attitudes toward and use of video depositions. ¹⁷⁸ Some

175. See Kaufman, supra note 171, at 42; Morrill, supra note 174, at 245.

Stenographic depositions usually are not simply provided for the jurors to read. For longer passages, the lawyer wishing to present stenographic deposition testimony will have a substitute read the deponent's answers to the jury. In these situations, jurors may impute the reader's characteristics to the deponent. This transference is probably desired by the attorney, who can select a reader who is either attractive and articulate or bumbling and unappealing, depending upon the lawyer's purpose. Thus, demeanor evidence is provided to jurors—although not necessarily the demeanor of the deponent.

One attorney reported that opposing counsel objected to the inflection with which he was reading deposition answers. Opposing counsel consented to have the judge read the answers for the jury. Arguably, of course, the judge's reading imparted an aura of credibility and authority to the deponent's responses. Telephone conversation with David Henderson, Partner, Brown & Bain, Palo Alto, California (October 23, 1990).

178. For two studies of judges' and attorneys' reactions to videotaped trials, see Comment, Opening Pandora's Box: Asking Judges and Attorneys to React to the Videotape Trial, 1975 B.Y.U. L. Rev. 487 (survey of 340 trial judges and attorneys regarding their experience with and attitude toward videotaped trials) and Coleman, The Impact of Video Use on Court Function: A Summary of Current Research and Practice, Fed. Judicial

Trial, 3 J. Marshall J. of Prac. & Proc. 237, 245 (1970) (arguing that videotape will prevent circus atmosphere in videotape trials); Tearney, supra note 33, at 29-30 (noting improved behavior when attorneys are also on videotape).

^{176.} See Whitney, Seeing is Believing: The Advent of Video, The Maricopa Lawyer, July 1988, at 3, col. 4.

^{177.} Farmer, Williams, Cundick, Howell, Lee & Rooker, The Effect of the Method of Presenting Trial Testimony in Juror Decisional Processes, in Psychology in the Legal Process 59, 69-70 (B. Sales ed. 1977).

authors suggest the need for additional research and analysis of video testimony¹⁷⁹ before further expanding the use of video in the courts or amending rules of civil procedure. Studies have found that procedural barriers to using video depositions have decreased during the last two decades,¹⁸⁰ and that the use of video evidence has steadily increased in both civil and criminal practice.¹⁸¹

To obtain information about practicing attorneys' attitudes toward video depositions, we devised and conducted an empirical study of Arizona attorneys' attitudes toward video depositions and the circumstances under which they choose to use video depositions rather than stenographic depositions or live witnesses.

The empirical study provides insight into how changes in the rules governing the use of video depositions might affect practicing attorneys. Understanding the factors that influence attorneys' attitudes toward video depositions should help policymakers better comprehend these effects. It should also suggest ways to facilitate attorneys' adaption to any changes.

In addition, this study provides a basis for a realistic assessment of the future of video technology in the courts. Because lawyers are the intermediate users of video technology, ¹⁸² their attitudes toward video depositions will play a major part in determining the role of video in the judicial system, and the extent to which Rule 30 may be modified. As a 1975 study of videotape trials concluded, "[t]he fate of the videotape trial, in the final analysis, rests with the members of the legal profession. A failure to learn and respond to their opinions . . . could hinder, if not prevent altogether, the utilization of what may be a powerful new tool in judicial administration." ¹⁸³ The same is true for video depositions, tools with an even greater impact than video trials on attorneys' daily practice and on the entire adjudicative process.

Center Pub. No. FJC-R-77-9, at 4 (1977) (citing Short, Ernest and Associates and McGeorge School of Law, *Videotape Recording in the California Justice System: Impacts and Costs* 53 (Mar. 1975) (study of videotaped trials in California)).

^{179.} See Roth, Videotape in the Courts: Its Use and Potential, 3 Rutgers J. of Computers and L. 279, 300-01 (1974); see also Note, Federal Rule 30(b)(4) and the Use of Videotaped Depositions, 33 N.Y.L. Sch. L. Rev. 145, 146 (1988) (noting need for greater practical experience and guidance in the use of video depositions at trial).

^{180.} See Coleman, supra note 178, at 3.

^{181.} See Joseph, Videotape Evidence in the Courts—1985, 26 S. Tex. L.J. 453, 480 (1985). Joseph noted that

[[]t]he use of videotape evidence is becoming widespread in contemporary litigation. The creative potential is virtually limitless within the loose confines that the evidence be fair and accurate, relevant, and not unduly prejudicial. Properly used, videotape evidence can serve as a valuable tool in effectively and concisely presenting probative evidence in a familiar format for the trier of fact.

Id.; see also M. Dombroff, Dombroff on Demonstrative Evidence § 6.17, at 138 (1987) (noting that video depositions are gaining acceptance by trial bar).

^{182.} Arguably, factfinders are the end users.

^{183.} See Comment, supra note 178, at 487.

B. Goals and Methodology of the Survey

The empirical study had four goals:

- 1. To understand practicing attorneys' attitudes about video depositions in general.
- 2. To understand practicing attorneys' attitudes toward video depositions as a substitute for either a stenographic deposition or a live witness at trial.
- To determine whether attorneys' attitudes toward video depositions correlate with other factors, such as their experience with video depositions and the extent of their training in taking video depositions.
- 4. To understand why attorneys choose to use video or stenographic depositions.

We surveyed 237 attorneys, judges and paralegals¹⁸⁴ attending continuing legal education ("CLE") meetings in Phoenix and Tucson, Arizona during 1989. Respondents answered a three-part written questionnaire, ¹⁸⁵ which requested information on their background, the extent and type of their experience with video depositions, and their attitudes toward video depositions.

C. Summary of Survey Results

1. Respondent Background

Briefly, the respondents' profile is as follows: ninety-eight percent of respondents are attorneys; fewer than one percent are students, paralegals or judges. The majority of responding attorneys (92%) practice primarily in state court in Arizona. Responding attorneys spend eighty-five percent of their practice time in litigation-related work; seventy-five percent of the attorneys spend at least fifty percent of their practice time in litigation. The respondents' time in practice ranges from one month to thirty-four years, with a median of five years. Given this profile, we can conclude that our survey population consists of "litigation attorneys" with at least moderate time in practice. 186

2. Attorney Attitudes

The attitude data in the survey reveal how a population of litigation attorneys regards video depositions.¹⁸⁷ Analyzing the attitude data in

^{184.} We collected a total of 243 questionnaires, of which 237 were usable. If you desire additional information about the survey methodology or results, please contact Professor Rebecca White Berch, Arizona State University College of Law, Tempe, AZ 85287.

^{185.} See infra Appendix A (copy of questionnaire).

^{186.} The survey population of litigation attorneys has long careers ahead of them and represents a group that (l) will be affected by any changes in how video is used in the courts, and (2) will be able to affect policy decisions.

^{187.} After administering the video questionnaire, student surveyors talked informally with some of the respondents. Anecdotal comments from these attorneys revealed varied

terms of experience with and training in video depositions provides a context in which to gauge attorneys' reactions to future changes in the rules governing video depositions and illustrates potential ways to mitigate any negative consequences of these changes.

The individual attitude questions tell an interesting story. Most respondents regard stenographic depositions as cheaper (60%), easier to schedule (54%), and easier to use in court (56%) than video depositions. Furthermore, most respondents (83%) believe that attorneys must prepare differently for video depositions, and seventy-nine percent agree that attorneys are not adequately trained to use video depositions. 189

The attitude questions were then analyzed correlating whether the attorneys had participated in video depositions and whether they had training in how to take them. Attorneys who have participated in a video deposition are more likely to agree with the following attitude statements than are those who have never participated:

- 1. Attorneys have to prepare differently for video than stenographic depositions;
- 2. stenographic depositions are cheaper, easier to schedule, and easier to use in court;

and often strongly held opinions about video depositions. One attorney declared, quite simply, "I hate the damn things." Another attributed the rising costs of litigation in part to the use of unnecessary "frills" like video depositions. In contrast, one attorney, although not a proponent of video depositions, regarded them as "far superior" to the "boredom that sets in" when a stenographic deposition is read to the jury. But another attorney experienced with video depositions reported that his greatest fear was that "when the lights go down," his jurors would "sit back, close their eyes, and just drift off to sleep like they do at home watching TV." Finally, one attorney who had used video depositions in three trials noted difficulties in editing videotapes and in reviewing testimony before presentation at trial.

These largely unexplored attitudes may influence whether Rule 30 of the Federal Rules of Civil Procedure will be amended to prefer the use of videotaped depositions. These conversations are reported not as representative samples of how attorneys generally feel about video depositions, but to give a flavor of attorneys' voluntary comments to a law student administering the video deposition questionnaire.

188. See infra Appendix B.

189. The composite frequency results for the attitude questions are shown in Appendix B.

190. The attitude questions were analyzed directly, using frequency distributions and a comparison of means. We also ran cross-tabulations and Chi-Square analyses of the relationship between responses to the attitude questions and two independent variables: (1) whether respondents had experience with video depositions (as measured by the number of video depositions in which respondent had participated), and (2) whether respondents had training in how to take video depositions.

Appendix C includes cross-tabulation results for attitudes and participation in video depositions. Appendix D includes cross-tabulation results for attitudes and training in how to take a video deposition.

The cross-tabulation analysis gives some preliminary insight into factors that may influence attorney attitudes toward video depositions. The results show that training in how to take video depositions is associated with different, and generally positive, attitudes about video depositions.

- 3. deponents are less nervous with stenographic than video depositions;
- 4. video depositions are more accurate than stenographic depositions;
- 5. experts may appear more credible if video deposed in a special setting, such as a laboratory or library;
- 6. video gives the attorney more control over the order of presentation of witnesses and evidence; and
- 7. video has the potential to relieve courtroom congestion by permitting pre-recorded testimony. 191

Those same attorneys are more likely to disagree with the following:

- 1. Stenographic depositions are more authoritative than video depositions;
- 2. video depositions are more authoritative than live witnesses;
- 3. jurors view video depositions as an impersonal way to present witnesses;
- 4. video creates an improper theatrical atmosphere in the courtroom;
- 5. courts should use extreme care in granting video depositions because stenographic depositions are inherently more reliable; and
- 6. video depositions contribute to rising legal costs. 192

Interestingly, statistics for attorneys who have participated in video depositions comport with those for the respondent pool in general. They acknowledge some of the pragmatic benefits of *stenographic* depositions: that they are initially less costly, easier to schedule and easier to use in court. Attorneys who have participated also appreciate that video presents witnesses more accurately, allows greater control over the order of witnesses and reduces court congestion. Significantly, far fewer attorneys who have participated in video depositions agree that courts should impose guidelines on how to stage videotaped depositions.¹⁹³ Thus, it appears that the more lawyers work with video depositions, the more likely they are to oppose court-imposed guidelines.

The survey results also show a correlation between training and attorney attitudes. Respondents who had training in how to take video depositions are more likely to *agree* with the following statements than those who never had training:

- 1. Attorneys have to prepare differently for video than stenographic depositions;
- 2. stenographic depositions are cheaper, easier to schedule, and easier to use in court;
- 3. deponents are less nervous with stenographic than video depositions;

^{191.} See infra Appendix C.

^{192.} See id., question 17.

^{193.} See id., question 37.

- 4. video depositions are more accurate than stenographic depositions;
- 5. experts may appear more credible if video deposed in a special setting, such as a laboratory or library;
- 6. attorneys prefer a live witness to either a stenographic or a video deposition;
- 7. video can reduce the possibility of a hung jury by enabling jurors to re-view testimony;
- 8. most attorneys are not adequately trained to use video depositions;
- 9. use of video depositions is likely to increase in litigation practice; and
- 10. federal and state rules should be amended to permit routine use of video depositions. 194

Those same respondents are more likely to *disagree* with the following statements:

- 1. Stenographic depositions are more authoritative than video depositions;
- 2. jurors may perceive video depositions as an impersonal way to present witnesses;
- 3. video depositions create an improper theatrical atmosphere in the courtroom;
- 4. video depositions contribute to higher legal costs; and
- 5. courts should always specify guidelines for video testimony, including rules governing camera angle, background, and other issues of "staging." ¹⁹⁵

Overall, respondents with training in video depositions are more positive about the communicative benefits of videotaped depositions. They perceive video as equally or more authoritative and less impersonal than stenographic recording. Respondents with training are also less concerned about the possible negative effects of video depositions on the court system, such as the increased costs and improper theatrical atmosphere that some have argued video could create. 196

Finally, a slight majority (53%) of respondents with training do *not* agree that court-ordered guidelines are necessary. ¹⁹⁷ Importantly, however, a clear majority of attorneys with training (72%) agrees that the federal and state rules of procedure should be changed to prefer routine use of video depositions. ¹⁹⁸

^{194.} See infra Appendix D.

^{195.} See id.

^{196.} See id., questions 17 and 32.

^{197.} See id., question 37.

^{198.} See id., question 38.

3. Use of Video Depositions

Generally, the attorneys surveyed had limited experience with video depositions. For example, although eighty attorneys responded that they had participated in a video deposition, most had participated in only three or fewer. ¹⁹⁹ Only sixty-one respondents had ever noticed a video deposition. ²⁰⁰

Video depositions were used most frequently in personal injury cases,²⁰¹ primarily when a witness was unavailable for trial.²⁰² Surprisingly few attorneys reported using video technology offensively for tacti-

199. Eighty respondents represents 32% of all respondents, but 68% of those who indicated in question 5 that they had participated in a video deposition. See infra Appendix A, question 5. Table 1 below shows the number of attorneys who had participated in various numbers of depositions.

Q. 5(a). Number of video depositions in which respondents participated

Depositions	Frequency	Valid %	Cumulative
1	19	24%	24%
2	18	23	47
3	9	11	58
4	8	10	68
5	12	15	83
6	6	8	91
7	1	1	92
8	1	1	93
10	5	6	99
40	1	1	100
	80	100%	100%

200. Those who had participated in a video deposition were also asked in what capacity they participated. See infra Appendix A, question 6. Respondents were instructed to check all of the applicable roles. As shown in Table 2 below, respondents participated in video depositions in various roles, slightly more often as the person noticing the deposition than as counsel for the deponent.

Q.6. Capacity in which respondents participated at video depositions

Capacity at Deposition	No. of Attorneys
Counsel for Deponent	49
Counsel for Non-deponent	51
Observer	43
Person Noticing Deposition	61

Those who had noticed a video deposition were then asked how often in their practice they notice them. See infra Appendix A, question 11. Eighty-one percent indicated "rarely" and 19% indicated "occasionally." No respondent indicated "frequently," a result consistent with the finding that most respondents had participated in fewer than three video depositions.

201. Table $\bar{3}$ shows the percentage of respondents who participated in videotape depositions in various types of cases.

cal or strategic reasons, such as that a witness presents herself better on tape than in person.²⁰³

Table 3

Q.7. Types of cases in which video deposition is used

Type of Case Using Video % Respor Deposition Participa	
Personal Injury	74%
Business	7.170
Litigation	39
Criminal	11
Family Law	5
Other	3

^{*} Does not add to 100% because respondents were asked to "mark all that apply." Number of respondents = 111.

Attorneys surveyed also use video depositions in business litigation, criminal cases and family law cases. The combined total for these and the "other" categories, however, is far less than the total for personal injury litigation alone. This result is consistent with information gleaned from other sources. For example, court reporter Sandra McFate observed that the vast majority of the videotape depositions she records are taken for personal injury cases. See supra note 152.

202. As shown in Table 4, witness unavailability for trial is the leading reason that video depositions are requested. Ninety-two of 103 respondents (89%) ranked "witness unavailable for trial" as the most frequent reason for using a video deposition. To appreciate the value of this result, note that the questionnaire distinguished between a witness "unable" to testify (for example, a frail or ill witness) and a witness "unavailable" to testify (for example, a witness outside the court's jurisdiction or unavailable because of scheduling conflicts). The questionnaire did not, however, ask respondents to define "unavailable," and thus some respondents may have included within it scheduling preferences as well as true "unavailability."

Table 4
Q.8. Most frequent reasons for requesting video depositions

Reason for Requesting Video Deposition	No. Respondents Ranking as No. 1 Reason
Witness unavailable for trial	92
Witness unable to testify	13
Counsel choice of trial tactics	8
Witness protection	4
Other	0

Number of respondents = 103; number of responses = 117.

These results are consistent with observations and recommendations in the literature that video offers convenience and flexibility when attorneys confront trial delays caused by witness unavailability. See Morrill, supra note 174, at 239. Many attorneys also prefer to offer testimony by video deposition rather than read a stenographic deposition to the jury because video relieves the boredom that may arise when a stenographic deposition is read. See Underwood, supra note 167, at 69.

203. Only eight respondents (less than 10%) indicated that tactical considerations

Attorneys in practice for more than five years are more likely to have participated in video depositions and to have had training in how to take video depositions than those in practice a shorter time.²⁰⁴ Attorneys with training in how to take video depositions are more likely than those without training to have participated in a video deposition,²⁰⁵ and attorneys who have participated in a video deposition are more likely to have had training than those who have never participated.²⁰⁶ Similarly, those who have noticed a video deposition are more likely to have had training.²⁰⁷

Our data do not imply that lack of training in taking video depositions causes either attorneys' infrequent use of video depositions or their clear preference for live witnesses. The attorneys' responses, however, clearly show a significant positive relationship between training and participation in video depositions.

Attorneys' attitudes toward video also correlate positively with the extent of participation and training in video depositions. Attorneys who have participated or been trained in video depositions are more likely to view video depositions positively than are attorneys who have neither participated in nor had training in taking video depositions. Most of the attorneys surveyed obtained their training in continuing legal education seminars, not in law school; thus, the depth and quality of train-

were the reason they most often chose to present witnesses by video instead of presenting them live before the jury or by stenographic transcript. See supra note 202, Table 4.

204. Twenty-nine percent of attorneys in practice more than five years had training, compared to only 11% of attorneys in practice fewer than five years. Similarly, 57% of attorneys in practice more than five years had participated in a video deposition, compared to 38% of those in practice fewer than five years.

205. Cross-tabulation analysis showed that of those attorneys with training, 77% have participated in a video deposition. Of those attorneys with no training, only 40% have participated.

206. Cross-tabulation analysis showed that among attorneys who have participated in video depositions, 33% have had training. But only seven percent of attorneys who have never participated in video depositions have training.

207. Cross-tabulation results showed that of attorneys who have noticed video depositions 89% have had training. By comparison, only 11% without training had noticed a video deposition.

208. As shown in Appendix C, most respondents (86%) who have participated in a video deposition disagree that "stenographic depositions appear more authoritative" to jurors than do video depositions. Only 58% of those who had never participated disagreed with the statement. Similarly, 84% of those who had participated in a video deposition believe that video depositions are more accurate than stenographically transcribed depositions. That figure falls to 68% among those who have never participated.

These results are somewhat low, however, given the discussion in the literature about the power of video. See M. McLuhan, supra note 141, at 268-93. Perhaps they reflect the relatively young survey population, that has grown up with video and may view it as somewhat commonplace. Bermant and his colleagues suggest that older jurors are more positive about video testimony than younger jurors. See Bermant, Chappell, Crockett, Jacoubovitch & McGuire, Juror Responses to Prerecorded Videotape Trial Presentations in California and Ohio, 26 Hastings L.J. 975, 993 (1975).

209. Overall, only 48 of the respondents (20%) had training in how to take video depositions, and most of those (37, or 77%) received their training through CLE seminars.

ing may vary widely. The results of the survey indicate that, although not a panacea for concerns about video depositions, training in taking video depositions may facilitate the transition to the use of video depositions and may assist practitioners and courts in adapting to the technology.

4. The Alleged Benefits of Video

Although attorneys with training favor using video depositions over stenographic depositions at trial, the overwhelming majority of respondents favor live witnesses over videotaped depositions.²¹⁰ Indeed, the most frequent reason for not using a video deposition was that the attorney "always prefers a live witness" to any deposition, stenographic or video.²¹¹ Most respondents, including those who had never participated in a video deposition, agree that video depositions are more accurate than stenographically transcribed depositions.²¹² In addition, most believe that jurors are more likely to retain information presented on video than

Only seven percent of respondents received video deposition training in law school. Eighty percent of the respondents plan to take training in how to take video depositions, a result consistent with the fact that 84% of all respondents, and 98% of those with training, agree that the use of video is likely to increase in all types of litigation in the future.

210. Eighty-five percent of all attorneys, see infra Appendix B, question 26, and 96% of attorneys with training, see infra Appendix D, question 26, prefer live witnesses.

211. Although 46% of all respondents have participated in video depositions, and 55% of those participating had noticed a video deposition, 85% of all respondents nonetheless indicated that they always prefer to present a live witness as opposed to presenting a witness via video deposition. Table 5 shows respondents' preference for live witnesses. This result is consistent with the results of Question 8, in which respondents listed "witness unavailability for trial" as the leading reason for using video depositions. See supra note 202, Table 4.

Table 5

Q.9. In your experience, what are the reasons for not using a video deposition instead of a live witness? Please rank order.

Reason for not Using Video Deposition	No. Respondents		
Reason	Mean Rank	As No. 1	
Always prefer live witness	1	56	
Case settled	2	23	
Deposition ultimately not needed	3	5	
Judge refused to admit video deposition	4	1	
Poor quality of video	5	1	

Number of respondents = 70.

212. Seventy-five percent of all respondents agree that video depositions are more accurate and trustworthy than stenographic depositions. See infra Appendix B, question 22. That number increases to 84% among those who have participated in a video deposition, see infra Appendix C, question 22, and 89% among those who have training in how to take video depositions, see infra Appendix D, question 22. The more experience attorneys have with video depositions, the more convinced they become of the medium's ability to record the deponent's communication accurately.

information read to them from a stenographic transcript.213

Seventy-four percent of all respondents believe that stenographic depositions make deponents less nervous than video depositions.²¹⁴ On reflection, this result comports with the observation that jurors are more likely to retain information that they see on a video screen.²¹⁵ Not surprisingly, eighty-three percent of respondents agree that the technical quality of the video is an important determinant of juror reaction.²¹⁶ This result is consistent with the finding that most respondents always use a professional video company to tape their depositions.²¹⁷ Attendees gave these responses even though most have access to video equipment and technology.²¹⁸

As a group, the respondents are divided about the impersonal nature of video depositions: forty-four percent agree and forty-five percent disagree with the statement, "Jurors are likely to feel video is an impersonal

As shown in Table 6 below, 95% of respondents indicate that they always use professional video companies to record their depositions. Thus, it is reasonable to conclude that quality of the video is *not* a major constraint on the use of video depositions. Attorneys know how to obtain or produce an adequate quality video.

Table 6

O. 12. How attorneys record video depositions that they notice.

-	<u>▼</u>	•		•			
Use Pr	ofessional Video Company-						
	• •	Always:	95%	Sometimes:	4%	Never:	1%
Use Sp	ecial Photo Techniques—						
-	•	Always:	73%	Sometimes:	14%	Never:	13%
Have v	ideo deposition simultaneo	usly transci	ribed—				
	•	Always:	97%	Sometimes:	1%	Never:	1%

Number of respondents = 76. Percentages may not add to 100% due to rounding.

^{213.} Eighty-five percent of all respondents agreed that video increases retention. See infra Appendix B, question 30. This statistic comports with the findings of communication experts. See supra notes 165-68 and accompanying text.

^{214.} See infra Appendix B, question 20.

^{215.} See supra notes 144-147 and accompanying text.

^{216.} See infra Appendix B, question 29. Video quality was discussed as a major drawback to effective use of video technology, especially in the early video literature. See, e.g., Bermant & Jacoubovitch, Fish Out of Water: A Brief Overview of Social and Psychological Concerns about Videotaped Trials, 26 Hast. L.J. 999, 1001 (1975) (comparing effectiveness of videotape presentation with live presentation of injured body part).

^{217.} As shown above in Table 5, *supra* note 211, video failure is rare. Only one respondent out of 70 cited poor video quality as a reason for not using the video at trial. The data also suggest that attorneys are aware of the negative image projected by poor quality videos, and choose not to use them.

^{218.} As summarized in Table 7 below, video technology and resources were generally available within respondents' firms. One respondent wrote the following disclaimer: "Partner's wife got one [video camera] for Christmas and couldn't work it so it's at the firm now. Does this count?" This comment, while perhaps unique, shows the limitations of data as to the mere existence of video equipment. It also highlights the need for follow-up research to determine how often and for what purposes firms actually use their video equipment and resources. More respondents had video equipment than either conference rooms equipped for video taping or technicians available in the firms to assist with video depositions. Indeed, while 33% had special conference rooms for video taping, only 14% had a video technician available in the firm.

way to present witnesses at trial."²¹⁹ Among those who have participated in video depositions, however, the sentiment changes dramatically. Sixty-two percent do not find that jurors perceive video as impersonal.²²⁰ That figure rises to seventy-seven percent among those respondents who have been trained in how to take video depositions.²²¹ The implication is that the more attorneys work with video depositions, the less impersonal they will find them. Perhaps the question actually measures the attorneys' comfort with video rather than their view of how jurors perceive witnesses presented on video.

Contrary to what the "TV effect" studies led us to expect,²²² only thirty-two percent of all respondents agree that a witness presented by video is more authoritative than a live witness.²²³ Seventy percent, however, agree that an expert witness may appear more credible if videotaped in a special setting than if testifying live in a courtroom.²²⁴ Perhaps views on authoritativeness and the impersonal nature of video are mitigated by the effects of staging.²²⁵

5. Effects of Video on the Court System

Sixty-two percent of respondents acknowledge that video depositions

Table 7

Q. 15. Type of video equipment and facilities available in respondent's firms.

Equipment/Facility	% indicating available
Video cameras	52%
Special conference room equipped to video tape	33%
Trained technicians	14%
None available	40%

No. of respondents = 226. Percentages do not add to 100% because respondents were asked to mark all that applied.

- 219. See infra Appendix B, question 27.
- 220. See infra Appendix C, question 27.
- 221. See infra Appendix D, question 27.
- 222. See G. Miller & N. Fontes, supra note 132, at 74; R. Matlon, supra note 72, at 76.
- 223. See infra Appendix B, question 23. Some caution is urged in the interpretation of these responses: 16% of the respondents, a group large enough to change the results, had "no opinion" on this question. See id.
- 224. See Tearney, supra note 33, at 29-30; infra Appendix B, question 24. Seventy-one percent of those who have participated in a video deposition agree that an expert witness's authoritativeness is enhanced if the expert is videotaped in a special setting, such as an office or laboratory. See infra Appendix C, question 24. Eighty-eight percent of those with training agreed with this assessment. See infra Appendix D, question 24. This type of staging, however, may convince the court to grant a motion under proposed Rule 30(b)(5).
- 225. This finding may bolster critics' concerns that video depositions will be used purely for theatrics; to the contrary, video proponents will contend that they have not only the right but the duty to put the best case forward for their clients.

offer the potential to reduce courtroom congestion.²²⁶ Because court congestion and delay are among the most frequent and serious complaints about our justice system, this consensus highlights an important benefit of video: if video depositions can expedite trials and thus assist in relieving court congestion, the integrity of the system is not only upheld, but fostered.

Interestingly, seventy percent of all respondents²²⁷ and eighty-four percent of respondents who have participated in a video deposition²²⁸ do not believe that video depositions introduce an improper theatrical atmosphere at trial.²²⁹ Forty-nine percent of respondents noted the need for court-ordered guidelines governing camera angle and other staging techniques.²³⁰ That percentage falls slightly to forty-five percent among respondents with training.²³¹

6. Future Use of Video

Eighty-four percent of survey respondents believe that, despite its cost,²³² the use of video will increase in all types of litigation.²³³ A full eighty percent of attorneys plan to be trained to take video depositions in the future.²³⁴ Thus, the cross-tabulated data from this study suggest that

- 227. See infra Appendix B, question 32.
- 228. See infra Appendix C, question 32.
- 229. Studies bear this out: attorneys make fewer objections at video than at stenographically recorded depositions. See Kaufman, supra note 171, at 42. In addition, attorneys and others present at video depositions seem to make efforts to appear professional, as they would in a courtroom. See id.; see also Morrill, supra note 174, at 242 (noting that video promotes decorum in the courtroom).
 - 230. See infra Appendix B, question 37.
 - 231. See infra Appendix D, question 37.
- 232. Overall, respondents are somewhat unclear about whether video depositions contribute to rising legal costs: 40% agree, 50% disagree, and 10% have no opinion. See infra Appendix B, question 34. The data indicate, however, that attorneys with experience in videotape depositions appreciate the long-run cost effectiveness of video: 59% of those who had participated in a video deposition and 60% of those who have had training in how to take video depositions disagreed that video contributes to rising legal costs. See infra Appendices C and D, question 34. Even among those who had never participated in a video deposition, 42% disagreed that video depositions add to the rising cost of litigation. See infra Appendix C, question 34.
- 233. See infra Appendix B, question 35. Among respondents with training, that figure rises to 98%. See infra Appendix D, question 35. Respondents were only moderately concerned about restrictions on the use of video depositions. Only 11% agree that courts should exercise "extreme care" when granting video depositions because stenographic depositions are more trustworthy. See infra Appendix B, question 36. This is quite a change from the articulated concerns of the Rules Committee. See supra Part I-B.

Respondents do seem to be concerned, however, about abuse of video depositions; almost half (49%) agree that courts should establish guidelines for taking video depositions. See infra Appendix B, question 37. Those guidelines might include rules for camera angle, background and other staging techniques.

234. Most are aware that they must prepare themselves and their clients differently for a video deposition than for a stenographic deposition. See R. Lynn, Jury Trial Law and Practice § 7.11, at 139-40 (1986). Lynn suggests that attorneys must prepare their wit-

^{226.} See infra Appendix B, question 31. The figure increases to 74% among those who have participated in a video deposition. See infra Appendix C, question 31.

as attorneys use video and receive training in how to take video depositions, the pressure to modify Rule 30 will most likely increase.

A slight majority of the attorneys surveyed agrees that the federal and state rules should be amended to permit routine use of video depositions.²³⁵ Not surprisingly, the percentage favoring amending the rules increases to sixty-two percent among those who have participated in a video deposition,²³⁶ and to seventy-two percent among those who have training in how to take video depositions.²³⁷ These figures demonstrate that as attorneys become more comfortable with video technology through participation and training, the pressure on the judicial system to modify the rules will increase. The Committee on Rules and Practice should anticipate this need, rather than delay the inevitable.

The attorneys surveyed used video depositions conservatively and infrequently, most often when a witness would be unavailable at the time of trial, rather than tactically, as part of trial strategy or as a deliberate exploitation of the unique features of video for presenting or enhancing testimony.²³⁸ The respondents seem to want more freedom to use video,²³⁹ but, paradoxically, nearly half (49%) also want court-established guidelines to prevent abuse of video techniques.²⁴⁰

Critics or skeptics of video may take heart in these results, for they suggest that attorneys use video technology selectively, primarily in circumstances in which the trial process would be delayed because of an unavailable witness or when the attorney would have to resort to reading a stenographic deposition to the jury. Video proponents may concomitantly take solace from and be concerned with these results. The data support those who claim that video depositions can obviate unnecessary delays and inefficiency caused by scheduling conflicts. The responding

nesses more carefully, paying special attention to dress and appearance. Attorneys should also educate their clients about the propensity of the camera to exaggerate gestures, sarcasm and facial expressions. See id.

235. Fifty-six percent of the respondents agree that the federal and state rules should be changed to permit the routine use of video depositions. See infra Appendix B, question 38. The impact of this majority increases, however, when viewed in light of the fact that only 33% felt that the rules should not be changed. See id. The 11% of respondents who had "no opinion" on this subject could either widen the gap considerably or nearly balance the scales. See id. Further empirical study is needed.

The questionnaire did not ask whether the rules should be amended to create a presumption in favor of video depositions. That notion came to the authors after tabulating and reviewing the data.

- 236. See infra Appendix C, question 38.
- 237. See infra Appendix D, question 38.

238. See supra note 202, Table 4. This may be because they felt that presenting a witness by videotape is more impersonal than presenting the witness live. See, e.g., Bermant, Chappell, Crockett, Jacoubovitch, & McGuire, supra note 208, at 986-87 ("a number of" jurors noted some impersonality and made comparisons to television).

239. We infer this from the 56% of respondents who agree that court rules should be changed to allow freer use of video depositions. See infra Appendix B, question 38. This percentage increases to 62% among those who have participated in video depositions. See infra Appendix C, question 38.

240. See infra Appendix B, question 37.

attorneys, however, do not use video tactically as part of trial strategy, and thus do not fully avail themselves or their clients of the benefits of the video medium.

Conclusion

The survey results correlate with the findings in the video literature: attorneys and scholars agree that video depositions convey deponents' communications more powerfully and accurately than stenographic depositions. Attorneys, particularly those who have participated in video depositions or have been trained to take them, feel that the rules governing litigation practice should be amended to reduce the impediments to taking video depositions. Indeed, the more attorneys work with video depositions, the more likely they are to believe that the rules should be changed to keep pace with the times.

Amending the Federal Rules of Civil Procedure to create a presumption that depositions will be videotaped unless the deponent shows reasons that the deposition should not be video recorded (1) would reflect the findings of communications experts that hearers are more likely to interpret a communication correctly if they have had the opportunity to both hear the message and see the speaker and (2) would implement attorneys' beliefs and attitudes about video depositions.

A trial is supposed to be a search for the truth. Those who compare video records to stenographic records find that the video medium captures more of the deponent's communicative message for the trier of fact. This, experts contend, makes video depositions more faithful to the deponent's communicative message, and hence more accurate. Those engaged in the search for truth should prefer the more accurate representation of testimony.

Although there is concern that jurors may not correctly interpret all the paralinguistic and visual messages they receive in a videotaped deposition, jurors are no more apt to misinterpret video evidence than they are to misinterpret live testimony—and live testimony is the standard that all evidence in American courts aspires to meet.

Over the past decade, the use of videotaped evidence has increased dramatically. The Arizona lawyers surveyed overwhelmingly agree that the use of videotaped depositions will continue to become more common. This sentiment comports with the expanding use of technology in every facet of life and with the evidence amassed by communications specialists revealing that videotaped communications are becoming more commonly used, largely because they convey the deponent's communicative message more fully.

Rules of civil procedure have been slow to incorporate modern technology and to bring the benefits of video to the courtroom. This Article provides evidence that not only is the judicial system not benefitted by conservative adherence to stenographic transcription, but the courts'

truth-finding function might actually be impaired by failing to amend the rules.

Twenty years ago, Rule 30 was amended to permit video recording of depositions. Twenty years from now, legal scholars will wonder why it took so long to make the second change to prefer the use of video to record depositions in the first instance. Nothing will be lost by the experiment, and much can be gained: a stenographic transcript can always be made from a videotape. But once the visual and paralinguistic cues escape transcription, they can never be recaptured.

APPENDIX A

Part I: Background Information

	9				
1.	I work primarily as a/an:				
	Attorney Judge Para-legal Other, please explain				
2.	I practice primarily in: State court in Arizona State court in other states, including Federal district court in Arizona Federal district court in other states, including				
3.	My practice is approximately% litigation.				
4.	I have been practicing approximately years.				
	Part II: Experience with Video Depositions				
5.	Have you ever participated in a video deposition? YesNo				
	If no, please skip to question no. 14.				
	If yes, in approximately how many? How many years?				
6.	In what capacity have you participated? Please mark all that apply. Counsel for deponent Observer Other, please explain				
7.	Please indicate the kinds of case(s) in which you participated in a video deposition. Please mark all that apply. Criminal Personal injury (including med. mal., prod. liab., etc.) Corporate business litigation Family law Other, please explain				
8.	In your experience, what are the most frequent reasons for requesting video depositions? Please rank order. 1=most frequent 5=least frequent Witness unable to testify Witness not available at trial time Witness protection Counsel's choice as part of trial tactics Other, please explain				

9.	In your experience, what are the reasons for NOT using video deposition instead of a live witness? Please rank order. 1=most frequent 5=least				
	frequent Judge refused to admit the video deposition instead of the witness				
	Case settled				
	Poor quality of the video				
	Other, please explain				
10.					
	NO Skip to question 14.				
	YES Continue below.				
	a) Approx. how many video depositions have you noticed?				
	b) If opposing counsel objected to use of a video deposition, what were the grounds? Please mark all cited.				
	Expense Deponent nervousness				
	Video bias Grounds not specified				
	Other, please explain				
11.	The state of the s				
	Rarely Coccasionally Frequently				
12.	At video depositions that you notice, do you: a) use a professional video company				
	Sometimes Never Always				
	b) use special photographic techniques				
	Sometimes Never Always				
13.	Why do you choose video instead of a stenographic deposition? Please mark all that apply.				
	Greater accuracy of video depositions				
	Witness unavailable at trial & importance of jury seeing deponent				
	Witness protection				
	Enhanced credibility of deponent on video				
	Overall greater impact achievable with video than stenographic Other, please explain				
1.4	•				
14.	Have you had training in how to take video depositions? Yes No				
	a) If yes, where did you get the training? Please mark all that apply.				
	Law school Continuing legal education				
	Other, please explain				
	b) Do you plan to take training in the near future?				

15.	Please mark the types of video equipment/facilities available in your firm.				
	Video camera(s)				
	Conference room specifically set aside and equipped for videotaping				
	Trained technician to assist with video depositions None available				
	None available				
	Part III: Attitudes Towards Videotape				
	se fill in number that most closely indicates your answer to the following stions. 1= strongly agree 5= strongly disagree				
16.	Attorneys have to prepare differently to participate in a video deposition.				
17.	Stenographic depositions are less expensive than video depositions.				
18.	Stenographic depositions are easier to schedule than video depositions.				
19.	Stenographic depositions are easier to use in court than video depositions.				
20.	Stenographic depositions make deponents less nervous than video depositions.				
21.	Stenographic depositions appear more authoritative to jurors than video depositions.				
22.	Because the witness can be seen and heard, video depositions provide greater accuracy and trustworthiness than stenographic depositions.				
23.	Witnesses presented by video appear more authoritative than live witnesses.				
24.	An expert may appear more credible if videotaped in a setting such as a laboratory or library rather than merely testifying at trial.				
25.	Video depositions allow more control over the order of witnesses and evidence.				
26.	Most attorneys prefer to deal at trial with a live witness as opposed to a deposition— either a video or a stenographic deposition.				
27.	Jurors are likely to feel video is an impersonal way to present a witness.				
28.	Video can reduce the possibility of a hung jury by enabling jurors to review actual testimony.				
29.	The technical quality of the video recording may be a chief determinant of how jurors react to a video deposition.				
30.	Jurors are more likely to retain information from a video deposition than information from a stenographic deposition.				
31.	Video offers potential relief for court congestion because testimony can be pre-recorded, thereby minimizing scheduling conflicts.				

32.	Video depositions at trial tend to create an improper theatrical atmosphere.			
33.	Most attorneys are not adequately trained to use video depositions.			
34.	Use of "high tech" items like video depositions contributes to rising legal costs.			
35.	Use of video depositions is likely to increase in most types of litigation.			
36.	Courts should exercise extreme care when granting video depositions because stenographic depositions are more trustworthy.			
37.	Courts should always specify guidelines for video testimony including rules governing camera angle, background, and other issues of "staging."			
38.	Instead of requiring stipulation by the parties or court order, state and federal rules of procedure should be changed to permit routine use of video depositions.			
39.	In the space below, please share any thoughts you consider important regarding the use of video depositions.			
40.	Overall, this questionnaire was: too long about the right length			
41.	If you want to receive the survey results, please write your name and address on the reverse side of this page.			

APPENDIX B

	Attitude Questions	Composite 1	Frequ	encies	(%)
Attorn	eys Using Video Depositions	<u>A</u>	<u>D</u>	No.	N
q. 16	Attorneys have to prepare differently	83	10	7	240
q. 17	Steno deps less expensive	60	25	15	240
q. 18	Steno deps easier to schedule	54	34	12	238
q. 19	Steno deps easier to use in court	56	29	15	240
q. 33	Most attorneys not adequately trained to use video	deps 79	13	8	239
Compa	rison of (Alleged) Benefits of Video Depositions to	Stenographic	Dep	osition	<u>s</u>
q. 21	Steno deps more authoritative to jurors	12	72	16	238
q. 22	Because witness is seen and heard, video deps are n accurate and trustworthy	nore 75	17	8	240
q. 25	Video deps allow more control over order of witnes trial	ses at 52	27	21	238
q. 27	Jurors likely to feel video impersonal way to presen witnesses	t 44	45	11	240
q. 28	Video reduces possibility of hung jury	40	33	27	235
q. 29	Technical quality of video chief determinant of how react	jurors 83	10	7	238
q. 30	Jurors more likely to retain information from video	deps 85	8	7	238
q. 20	Steno deps make deponents less nervous	74	13	13	240
Comparison of (Alleged) Benefits of Video Deps to Live W		itness			
q. 23	Witnesses presented by video more authoritative the witnesses	an live 32	52	16	240
q. 24	Expert may appear more credible if videotaped in s setting rather than merely testifying at trial	pecial 70	20	10	239
q. 26	Attorneys prefer live witness	85	7	8	238
Effect of	of Video Deps on the Integrity of the Court System				
q. 31	Video provides potential relief for courtroom conge	stion 62	24	14	239
q. 32	Video deps create improper theatrical atmosphere	21	70	9	239
q. 34	Video deps contribute to rising legal costs	40	50	10	239
Video 1	Deps in the Future Judicial System				
q. 35	Use likely to increase in most types of litigation	84	7	9	239
q. 36	Courts should exercise extreme care when granting deps	video 11	80	9	237
q. 37	Courts should specify guidelines for video testimony	, 49	40	11	238
	State and federal rules should be changed to permit routine use of video depositions		33	11	222

A=Agree D=Disagree N.O.=No Opinion N=No. Respondents

All percentages are rounded to the nearest whole number.

APPENDIX C Cross Tabulation Results - Attitude Questions * (Attitudes/Participation)

	Never		
Participated	Participated	Attitude Statement	

	Tarticipated	Tarticipated	Attitude Statement
A DA NO N	91% 8% 1% 237	76% 13% 11%	q. 16 Attorneys have to prepare differently
A DA NO N	64 32 4 237	56 18 26	q. 17 Steno less expensive than video
A DA NO N	60 46 4 235	54 24 19	q. 18 Steno easier to schedule than video
A DA NO N	60 34 6 237	54 23 23	q. 19 Steno easier to use in court than video
A DA NO N	83 10 7 233	66 15 19	q. 20 Steno makes deponents less nervous
A DA NO N	4 86 10 233	20 58 22	q. 21 Steno more authoritative than video
A DA NO N	84 10 6 237	68 23 9	q. 22 Video greater accuracy than steno
A DA NO N	40 50 10 237	25 55 20	q. 23 Witness more authoritative on video than live
A DA NO N	71 19 10 236	69 21 10	q. 24 Expert more credible taped in special setting
A	67	39	q. 25 Video gives greater control over order of witnesses
DA NO N	24 9 235	31 30	
A DA NO N	28 62 10 237	58 30 12	q. 27 Jurors perceive video as impersonal

1990] <i>VID</i>			DEOTAPED DEPOSITIONS			
A DA NO N	74 13 13 236	53 32 15	q. 31 Video helps relieve court congestion			
A DA NO N	9 84 13 237	31 57 15	q. 32 Video creates theatrical atmosphere			
A DA NO N	37 59 4 236	44 42 14	q. 34 Video contributes to rising costs			
A DA NO N	38 55 7 235	59 28 13	q. 37 Courts should impose guidelines			
A DA NO N	62 26 7 215	46 40 14	q. 38 Fed. & state rules should be modified			

^{*} Chi-Square test significant at .05 level with 2 degrees of freedom for each question.

A=Agree DA=Disagree NO=No Opinion N=No. responses

APPENDIX D Cross Tabulation Results - Attitude Questions * (Attitudes/Training)

	Training	<u>No</u> Training		Attitude Statement	
A DA NO N	98% 2% 0% 233	79% 12% 9%	q. 16	Attorneys have to prepare differently	
A DA NO N	58 35 7 233	60 22 18	q. 17	Steno less expensive	
A DA NO N	54 44 2 231	54 31 15	q. 18	Steno easier to schedule	
A DA NO N	60 38 2 233	56 27 18	q. 19	Steno easier to use in court	
A	81	78	q. 33	Most attorneys not adequately trained to use video deps	
DA NO N	19 0 232	11 11			
A DA NO N	92 4 4 231	69 15 16	q. 20	Steno makes deponents less nervous	
A DA NO N	6 88 6 233	14 68 18	q. 21	Steno more authoritative than video	
A DA NO N	89 9 2 233	72 19 9	q. 22	Video greater accuracy than steno	
A DA NO N	88 8 4 233	66 22 12	q. 24	Expert more credible taped in special setting	
A DA NO N	96 0 4 232	82 9 12	q. 26	Attorneys prefer live witness	
A DA NO N	17 77 6 233	52 36 12	q. 27	Jurors perceive video as impersonal	

1990]		VIDEOTAPED DEPOSITIONS			
A DA NO N	58 22 20 228	36 35 29	q. 28	Video reduces possibility of hung jury	
A DA NO N	11 89 0 232	24 65 11	q. 32	Video creates theatrical atmosphere	
A DA NO N	40 60 0 232	46 42 11	q. 34	Video contributes to rising costs	
A DA NO N	98 2 0 232	81 9 10	q. 35	Use of video likely to increase in future	
A DA NO N	45 53 2 231	50 36 14	q. 37	Courts should establish guidelines	
A DA NO N	72 26 2 215	52 35 13	q. 38	Fed. & state rules should be modified	

^{*} Chi-Square test significant at .05 level with 2 degrees of freedom for each question.

NO=No Opinion A=Agree DA=Disagree N = No. responses