EVIDENTIARY AND ETHICAL CONSIDERATIONS OF TECHNOLOGICALLY PRESENTED EVIDENCE

By: Michael J. Warshauer and Lyle Griffin Warshauer

I. Introduction

Our job as advocates is to present to jurors the facts they need to know in order to reach a decision favorable to our cause. Effective teaching skills include the use of presentation skills - demonstrative and illustrative - necessary to educate a jury as to why our client should win. At one time, demonstrative or illustrative evidence included photographs, models, diagrams, charts, toys and any number of other "tangible" items used to illustrate or demonstrate a point. Today, those methods are almost archaic. Now, people live in an age of "virtual reality," and that extends into the courtroom where jurors hear and see evidence presented. There is no doubt that to be truly effective in today's world, trial lawyers need to utilize the technology that is becoming almost commonplace in peoples' lives to advocate the cause presented in court. While using computers in the courtroom is still very foreign to some lawyers, most agree that technology will enable the average practitioner to be substantially more productive and will actually improve the quality of the legal product without increased difficulty.[1]

Unfortunately, the laws that govern the conduct of a trial, including the admissibility of evidence, are not truly equipped to address many of the concerns that technological evidence raises.[2] However, in order to use high tech evidence effectively,

the proponent of the evidence must nevertheless be able to substantiate its use or admission based on the applicable rules and ethical constraints.

Although there are clearly some gray areas, technologically presented evidence at trial is typically utilized as demonstrative, rather than real evidence. Thus, it is not usually tendered as evidence; rather the technology is used to assist in presenting admissible evidence, such as the testimony of a witness or physical evidence that will be offered in trial. Things get tricky, however, when the demonstration becomes the focus of the case and effectively usurps the role of the witness or overpowers the real evidence it is based upon. For example, a PowerPoint presentation can be used to assist in the direct examination of an expert witness. The flow of the testimony is aided by the question and answer format and the jury can easily follow along. But if the answer appears on screen before the witness utters his response to the question, a leading objection would seem appropriate. Another common example is the use of digital photographs. Because they can be easily manipulated, authentication questions are sure to arise.

The use of technological evidence is still relatively new, so there is little legal authority to guide us. However, an understanding of the basic tenets of demonstrative or illustrative evidence, as well as the rules of evidence in general that are applicable to state and federal courts, is helpful in keeping within the ethical bounds of the law.

II. What is Demonstrative Evidence?

In its most basic form, demonstrative evidence is defined as "that evidence addressed directly to the senses without intervention of testimony. Such evidence is concerned with real objects which illustrate some verbal testimony and has no probative value in itself."[3] Demonstrative evidence is either "real" or "demonstrative."[4] For example, a photograph of a broken tool is demonstrative evidence, and the actual broken

tool is real evidence. Both the photograph and the actual tool are usually admissible. This is not to say that all forms of demonstrative evidence are, or should be, admitted into evidence for the jury. The question of admissibility turns on the purpose of the demonstrative evidence and the goal of the attorney who prepares and uses it.

When desired, "[p]roperly introduced documentary and demonstrative evidence goes out with the jury when it retires for deliberation."[5] The rule is that testimony, even when in the form of a deposition transcript, is not evidence that goes out with the jury because:

> "it is not proper to let the jury have transcripts of former testimony, depositions, written dying declarations, or confessions in the jury room, because these forms of 'testimony' should not be unduly emphasized by giving the jury an opportunity to read them one or more times, whereas oral testimony from the stand is heard only once."[6]

Nevertheless, while the deposition transcript cannot go out with the jury, that same testimony, through the use of video technology, can be presented in a way that enables the jury to read the testimony in a larger than life fashion. The limitation relating to certain materials going out with the jury, a limitation designed to prevent undue emphasis, applies only to what the jury has in the jury room and not what it sees in the courtroom.[7] Often an opponent to the admission of demonstrative evidence will argue that the evidence should be excluded because it is a continuing witness in the jury room. While this objection is widely sustained as to oral testimony, it is not valid as to medical illustrations used to illustrate testimony (even where the illustrations have been thoroughly discussed by a witness). These kinds of exhibits should be allowed to go out with the jury.[8] It naturally follows that the video presentation should be allowed on the same grounds.

"Materials used for illustration may often be introduced in evidence, but need not be actually introduced."[9] Regardless of whether demonstrative evidence is tendered into evidence or merely used to educate the jury, the first and foremost rule for using it is that it must be relevant. "The aids must, of course, produce the desired result. If they don't fit into the case theme like a hand in a glove, they should not be used."[10] Demonstrative evidence, like all evidence, must be relevant or it will be excluded.[11] Because a particular piece of demonstrative evidence is not going to be tendered into evidence does not eliminate the need for relevance – in other words, it must illuminate some important principal in the case.

Additionally, while the lawyer is certainly going to be involved in preparing the demonstration, demonstrative evidence cannot be utilized without proper supporting testimony. A witness must testify that the illustrative evidence fairly and accurately represents, depicts or explains the real evidence in all material respects.[12] This foundation is just as essential in using technologically generated demonstrative evidence, but is easily accomplished with basic foundation questions.

Care should be taken to insure that the demonstrative evidence, while relevant, is not unfairly prejudicial and, most importantly, that it is accurate. Inaccurate demonstrative evidence will not only be useless, whether admissible or not, but will, most importantly, ruin the credibility of the lawyer and the witness through whom the evidence is offered. As part of the presentation of a case, a misleading item of demonstrative evidence can be devastating to the side who offers it.

Fortunately for Georgia lawyers, the courts in this state have been liberal in allowing the use of demonstrative evidence. As early as 1881, the Georgia Supreme Court recognized the benefits of allowing models and drawings to be used at trial to illustrate issues in a trial.[13] While models and drawings are commonly considered

demonstrative evidence, trial lawyers are in no way limited to physical items. Courts have approved a physical demonstration by a witness of the effect of an injury,[14] as well as sounds.[15] Of course, diagrams, drawings and sketches[16] (diagrams and sketches can be used even if the diagram or sketch is not admissible into evidence),[17] and photographs[18] are also proper forms of demonstrative evidence. In fact, in certain situations usually involving such things as bank cameras, a photograph can almost be self-authenticating.[19] Taking it one step further, because these diagrams, drawings, photographs and the like often serve to provide the foundation for technologically presented evidence, if the underlying evidence can be authenticated, so too can the technologically produced evidence if it is deemed a reasonable reproduction of those items.

Demonstrative evidence is often used during opening and closing argument. O.C.G.A. §9-10-183 provides that:

> "In the trial of any civil action, counsel for either party shall be permitted to use a blackboard and models or similar devices in connection with his argument to the jury for the purpose of illustrating his contentions with respect to the issues which are to be decided by the jury, provided that counsel shall not in writing present any argument that could not properly be made orally."

A. Laying A Proper Foundation For Demonstrative Evidence

For most demonstrative evidence a basic foundation must be laid before the evidence can be shown to the jury or admitted into evidence.

> The foundational requisites for demonstrative proof are not as stringent as those for substantive evidence. This makes sense once the concept of derivative relevance for demonstrative exhibits is understood. With substantive evidence, the rules of evidence require various foundational

> safeguards as to authenticity, genuineness, personal knowledge, and the like before allowing the evidence to be admitted. That is because a piece of substantive proof directly helps resolve an issue of consequence in the trial.
>
> . . .
>
> A piece of demonstrative proof, however, only helps clarify substantive proof that is otherwise admissible. The main foundational elements necessary for the use of demonstrative proof are that (1) the demonstrative exhibit relate to a piece of admissible substantive proof and fairly and accurately reflect that substantive proof, and (2) the demonstrative proof aid the trier of fact in understanding or in evaluating the related substantive evidence.
>
> . . .
>
> Long, complicated foundations should usually not be necessary. Evidentiary concern as to the reliability, genuineness, and trustworthiness of evidence presented to a jury needs to be focused on the testimony or other substantive evidence that the demonstrative exhibit illustrates, rather than on the demonstrative exhibit itself.[20]

As noted above, laying a foundation is usually fairly simple and can be accomplished with three or four basic questions.[21]

Keep in mind that most evidentiary rulings, including those relating to the use of demonstrative evidence, are in the discretion of the trial judge.[22] Accordingly, a presentation that is very costly and time consuming to produce may be excluded if the court finds it does not meet basic prerequisites for relevance and fairness. While the proponent of the evidence has to weigh the advantage of maintaining some degree of

surprise, it may be beneficial to seek court approval before incurring significant expense on demonstrative aids. With more and more technologically presented visual evidence being used at trial, it is likely that technologically produced evidence, even if merely intended for demonstrative purposes, will be the subject of motions in limine – both by the proponent and opponent.

III. What is Technologically Produced Evidence?

Usually, when we are talking about the type of technology used in the courtroom, we are referring to computer generated visual evidence. This is "information which has been generated by a computer and produced in a visual format,"[23] and can be categorized as either a computer simulation or a computer animation. A computer simulation is created by a program that uses predetermined mathematical figures to calculate or model the results from data that is entered into the computer. An example of computer simulation is an automobile accident reconstruction in which known data, such as the length of skid marks, the weight and position of the vehicles, and damage to the vehicles, is put into the computer. The computer then calculates the estimated speed and direction of the vehicles at impact. A simulation does not necessarily produce any graphics, but may just calculate outcome. A computer animation consists of computer generated pictures that are intended to accurately depict an event, which is usually controlled by computer simulated data.[24] Both computer animation and simulation may be referred to as "forensic animation."[25]

It seems that a week never goes by without getting an advertisement from someone or another who claims to be a computer simulation expert. Not all computer simulation "experts" are indeed experts. Computer simulation generally costs more than ten thousand dollars and extreme care must be taken to use it wisely. Jurors are aware of the manipulations that can be accomplished through the use of computer animations.

When using this kind of demonstrative evidence be sure that a good projection system is available and in working order.

Recreation efforts are also effective demonstrative evidence. However, these, like computer simulations, are expensive and credibility is essential. To insure credibility of any filmed recreation it is essential to keep the "out takes" and insure that they are available in the courtroom should the cross-examiner want to see them. The jury's assumption of what the destroyed "out takes" showed is vastly more damaging than any reality.

A less expensive alternative to live action film or computer simulation is the simple storyboard. This is a series of drawings or photographs that are similar to a comic strip in that they show action one frame at a time. These too can be expensively drawn or created from a series of photographs that are simply mounted in chronological order. Using a computer, the images can be scanned in and presented in an efficient and professional manner.

In some very practical ways electronic or technical evidence is unique: it can be created, altered, stored, copied, and moved with unprecedented ease, which creates both problems and opportunities for advocates. Because the evidence is created by computer, with information input by counsel or others advocating the cause of a litigant, it is easy to see why some see computer generated visual evidence as controversial. One commentator described it as "one of the most dangerous types of evidence because of the computer's ability to package . . . erroneous or misleading data in an extremely persuasive format."[26] Unfortunately, although it may be intended only for demonstrative purposes, and therefore not identified as documentary evidence to be offered at the trial in pretrial disclosures, technologically produced evidence may be excluded based on

unfair surprise as well as prejudicial effect. For example, an Illinois federal court excluded evidence of this sort based upon the following:

> We believe that computer animation evidence, by reason of its being in a format that represents the latest rage and wrinkle in video communications and entertainment, may well have an undue detrimental effect on other more reliable and trustworthy direct-type evidence. We conclude this evidence has been untimely brought into the case, and thus should be excluded. We also find this evidence as being excludable under Fed. R. Evid. 403 by reasons of its great potential for being misleading and prejudicial.[27]

While modern courts have come to see the benefit in technologically produced evidence and are allowing it to be utilized quite frequently, a concern for its potentially exaggerated effect remains. As one judge explained:

> A two-minute video, if well made, will make a greater impression on the minds and emotions of jurors than the world's best expert. Once jurors see the video, the images will be graven on their minds. In fact, opponents of videotapes argue that a jury will never be able to evaluate intellectual criticism of a video's validity, no matter how devastating the cross-examination of the sponsoring expert. The familiar power of television will shoulder everything else aside. The very value of using the videotape – its ability to empress and explain - is thus the source of the most persuasive argument against its use.[28]

Despite these concerns, we can expect the use of technologically produced evidence to be used in virtually any type of case. It is of particular value in situations

where the event is difficult to visualize or where the event cannot be physically reproduced in another form, i.e. there is no "real" evidence. Additionally, it is particularly helpful when the issues are technical and non-experts may have difficulty understanding the proof. In such cases, the evidence can be used in conjunction with the experts' testimony in such a way that it merely complements what is offered by other admissible evidence.

In many respects, technological evidence, like any other form of evidence, must pass a variety of traditional admissibility tests. However, it is not very clear whether admitting computer generated evidence requires a "best evidence" analysis, an authentication process, a hearsay examination, or all of the above. Proponents of this type of evidence, as well as the courts overseeing its use, have sometimes mixed, matched and grouped these ideas together by referring simply to the "reliability" or "trustworthiness" of computer generated evidence; rather than critically examining the reliability of the evidence in all aspects.

IV. Admissibility of Technologically Produced Evidence

There are three broad categories where high tech demonstrative evidence exhibits have been used: (1) as evidence; (2) as an aid to the jury (for illustrative purposes only); and (3) as part of argument.[29] Technological proof may be admitted into evidence either through the common law approach to the use of demonstrative evidence or through the Federal (or applicable state) Rules of Evidence. The latter approach takes into consideration not only relevancy - balancing the evidence's probative value versus prejudicial effect, but also concerns the more complicated standards for the admission of novel scientific evidence. Most courts seem to agree that if technologically produced evidence meets the qualifications of a scientific experiment in the hands of an expert or satisfies traditional evidentiary rules it can actually be admitted into evidence. High-tech

evidence that is merely "illustrative" for the jury is, surprisingly, more controversial. If the evidence tends to suggest what really happened, but is based upon the trial lawyer's theory of the case rather than upon accepted scientific principles, there is a significant risk that the technological evidence will be excluded so as not to mislead the jury.

Regardless of whether the evidence is offered as real or merely demonstrative, the proper foundation must be laid for its use or admission. Specifically, the proponent may need to establish the following: (1) the accuracy and reliability of the original source data, including all formulas, calculations, and assumptions used in defining and analyzing the data; (2) the accuracy o the source data entered into the computer; (3) the reliability and capability of the computer hardware and software; (4) the process of software used for the computer graphics; (5) the method used to produce the graphics in court; and (6) the accuracy and reliability of the final presentation.

A. Common Law Standards

Demonstrative evidence is not defined in the Federal Rules of Evidence or the Georgia Civil Practice Act.[30] It is a common law concept that gives judges a great deal of discretion in deciding whether to allow the evidence. Because courts have not yet set uniform rules for the use of technologically presented evidence, trial courts will have even broader discretion in determining what is appropriate.[31]

Generally, courts find that to be admissible, demonstrative evidence must be relevant to the case or defense and helpful to the trier of fact. Subcategories of demonstrative evidence in the technical arena have developed, including reenactments and experimental evidence, both of which usually involve an expert's illustration of a principle or theory at issue.

In ruling on demonstrative evidence, the court will consider whether the computer generated visual evidence is sufficiently similar to the actual event that is being

demonstrated or simulated. A higher similarity standard will likely be applied to a reenactment because it purports to be the actual event and may be the only evidence, other than the expert's opinion (which is essentially presented visually in the reenactment), of the event.

The simplest way to introduce technologically produced evidence of this sort is to offer it only as demonstrative evidence. However, when the computer generated evidence forms the basis for an expert's opinion, it is no longer merely demonstrative, and the evidence must satisfy the applicable evidentiary rules.

B. Rules of Evidence

Obviously, Georgia has its own evidentiary rules that may or may not comport with other states' rules of evidence or the federal rules. Some of the basic principles of Georgia law as it pertains to the use of demonstrative evidence are discussed above. For the purpose of this discussion, we will refer primarily to the Federal Rules of Evidence, as they tend to be more stringent and because the use of scientific evidence has been most closely scrutinized in relation to the federal rules.

In order for computer generated visual evidence to be admitted as *substantive* evidence, the Federal Rules of Evidence impose several requirements. The evidence must be authenticated, it must be relevant, it must pass the hearsay rule, and it must pass the requirements for expert opinion as declared by the Supreme Court.

1. Authentication

Technologically presented evidence must be authenticated or identified under Federal Rule 901(b)(9). The Rule states that authentication "is satisfied by evidence sufficient to support a finding that the mater in question is what its proponent claims." The Rule further provides that if the evidence involves a particular method or procedure, additional evidence must be submitted that describes the "process or system used to

produce a result and shows that the process or system produces an accurate result." Computer generated evidence can be authenticated by establishing the accuracy and reliability of the computer hardware and software and then establishing the reliability of the system's ultimate product.

2. Relevance

It goes without saying that all evidence must be relevant to be admissible.[32] Relevant evidence is defined as "evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence."[33] Relevant evidence is generally admissible "if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time or needless presentation of cumulative evidence."[34] Most objections to computer generated visual evidence are based on Rule 403. In order to overcome such an objection, it must be demonstrated that the evidence is accurate and fair – it is not misleading nor does it distort the truth. Additionally, the proponent will need to argue that while complete, the evidence is not overly long or duplicative. Certainly, another important consideration is that presenting the evidence to the jury cannot disrupt the proceedings. Finally, the evidence should be shown only once to avoid an unfair prejudice objection. This last requirement will not likely apply to the use of computer-generated evidence during argument;[35] however, the other requirements should be taken into consideration in the context of closing argument as well.

3. Hearsay

Hearsay is defined as a "statement, other than one made by the declarant while testifying at the trial or hearing, offered in evidence to prove the truth of the matter asserted."[36] The Federal Rules define a "statement" as "(1) an oral or written assertion or

(2) nonverbal conduct of a person, if it is intended by the person as an assertion."[37] The "declarant" is defined simply as "a person who makes a statement."[38] Hearsay is not admissible unless the evidence fits within an exception to the general rule. It is easy to see why computer generated visual evidence will be subject to hearsay objections. The "declarant" is the individual, perhaps a computer expert, who entered data into the computer. The "statement" or "assertion" is what is created by the computer, which is intended to convey the truth about a material issue. As such, the evidence is an out-of-court statement by a declarant offered for the truth of the matter asserted.

Computer generated demonstrative evidence does not fit into any of the enumerated exceptions; however, it may be offered if it satisfies the requirements of the language of Rules 803(24) and 804(b)(5) – referred to as the "catchall" exception. These Rules provide for the admission of hearsay evidence if the evidence has the "equivalent circumstantial guarantees of trustworthiness" and are is not unfair to the opponent. To qualify under the "catchall exception" the following conditions must be satisfied: (1) the evidence must be probative of a material fact; (2) it must be more probative than any other evidence that is reasonably attainable; (3) the purposes of the rules and the interests of justice must best be served by allowing admission; and (4) the proponent of the evidence must give the opponent sufficient notice.[39] If the proffered evidence raises an objection, the proponent bears the burden of showing that the evidence satisfies the conditions for "equivalent circumstantial guarantees of trustworthiness."

In the alternative, the proponent could argue that the technologically presented evidence is similar to a hypothetical question posed to the expert, which is permitted under Fed. R. Evid. 702. If this method is utilized, the evidence is offered as a response to the hypothetical and merely illustrates the expert's opinion; therefore, it is not substantive evidence.

4. Expert Opinion

To the extent that the computer-generated evidence is deemed expert opinion, it must pass the expert testimony requirements of Rules of Evidence 702, 703 and 705.

Rule 702 allows qualified experts to testify and express their opinions about a scientific, technical, or other specialized area if that testimony is helpful to the trier of fact or resolves a fact in issue. Rule 703 requires that the facts or data relied upon by the expert be "of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject;" however, the evidence need not be independently admissible. Finally, Rule 705 states that experts do not have to disclose the underlying facts or data upon which their opinions are based unless required by the court. Additionally, the expert may testify about the "ultimate issue to be decided by the trier of fact" under Rule 704(a).

While the Rules appear to allow a great deal of latitude for expert testimony and opinions, recent interpretations of the Federal Rules by the Supreme Court have made the use of scientific evidence much more difficult.[40] Before assuming that the evidence is admissible pursuant to the Rules, a thorough understanding of the restrictions imposed by the Court is essential.

V. Miscellaneous Procedural Issues

There are a few matters to consider when preparing for trial in a case that will involve a high tech presentation.

A. Order Permitting use of Equipment

If the case will be tried in federal court, counsel should be aware that the equipment necessary to present the evidence has to be approved for use in the courtroom. For security reasons, the United States Marshals will not allow certain items into the courthouse without court order permitting their use. It is necessary that an order be

obtained from the Judge permitting the use of *all* computer and visual data equipment. Without an order, all efforts at putting together a major presentation will be for naught, as the equipment needed to present the evidence will be unavailable.

Similarly, counsel should be familiar with the layout of the courtroom before trial. Considerations regarding power sources, the proper placement of video screens and the like should be addressed before the trial begins in order to maintain an efficient presentation of the case.

B. Taxable Costs.

Obviously, the cost of putting together technologically presented evidence is a consideration from the very beginning. The equipment is generally quite expensive and other materials used can add up as well. If specialized support personnel are needed, the costs of their services need to be considered as well. The question then arises to what extent these expenses are recoverable as "costs" pursuant to 28 U.S.C. § 1960. Because technologically presented evidence is still relatively new, the courts have not really addressed the issue. However, one can extrapolate from cases concerning taxation of exhibit costs and deposition expenses to discern whether costs for these high-tech exhibits will be recoverable.

The only statutory provision arguable covering exhibit costs in general is Section 1920(4), which permits taxation of "[f]ees for exemplification and copies of papers necessarily obtained for use in the case." *See, e.g. Maxwell v. Hapaq-Lloyd Aktiengese Llschaft*, 862 F.2d 767, 770 (9th Cir. 1988). While *Maxwell* held that 1920(4) cover exhibits and "other illustrative materials," those materials are not fully defined. There is also authority for finding that costs of this nature are *not* taxable. "There is no statutory provision for the taxation of charts and exhibits as costs." *Johns-Masville Corp. v. Cement Asbestos Products Co*. 428 F.2d 1381, 1385 (5th Cir. 1970).

The Eleventh Circuit Court of Appeals has grappled with the variation in rulings on this issue and has held that exhibits are not to be included in recoverable costs.

> Notwithstanding this holding, *Johns-Manville* permitted taxation of exhibit costs if the prevailing party received pretrial authorization to produce the exhibits. *See id.* We must determine what effect the Supreme Court opinion in *Crawford Fitting* has on *Johns-Manville*. *Crawford Fitting*, which was issued after *Johns-Manville*, held that courts could tax costs only with statutory authorization. 482 U.S. at 445, 107 S.Ct. at 2499. Considering *Johns-Manville* in light of *Crawford Fitting,* we hold that exhibit costs are not taxable because there is no statutory authorization.

United States EEOC v. W&O, Inc., 213 F.3d 600, 622-623 (11th Cir. 2000). In a footnote, the *W&O* Court addressed the fact that its decision was contrary to the view in other Circuits and nevertheless found it sound. 213 F.3d at 623, n. 15.

The Court's ruling in *EEOC v. W&O* should not alter previous decisions finding that other technologically produced evidence can be taxed. *See, e.g. Morrison v. Reichold Chemicals, Inc.*, 97 F.3d 460, 464 (11th Cir. 1996) ("Even though 28 U.S.C. § 1920 speaks only of 'stenographic' transcription costs, the Court believes that the costs of video depositions are encompassed in that Section.") It should be noted that the costs would be taxable only if the deposition is noticed for video and no objection is posed. *Id.* Additionally, while the costs of making the video itself are taxable, a party cannot recover costs for the rental of equipment to present the deposition, nor is the fee for a videographer to play the video at trial a taxable cost. *Id.*

VI. Ethics

A review of the Canons of Ethics and the Advisory Opinions of State Disciplinary Board do not mandate or proscribe any particular conduct for the use of technologically presented evidence. However, some of the basic rules do pertain to the presentation of evidence in general, and proponents will be wise to consult the rules if any question exists as to the appropriateness of the method, form or intent of the presentation. Some of the rules that may be pertinent include the following.

> EC 7-22 Respect for judicial rulings is essential to the proper administration of justice; however, a litigant or his lawyer may, in good faith and within the framework of the law, take steps to test the correctness of a ruling of a tribunal
>
> EC 7-23 The complexity of law often makes it difficult for a tribunal to be fully informed unless the lawyers in the case present the pertinent law. A tribunal that is fully informed on the applicable law is better able to make a fair and accurate determination of the matter before it. The adversary system contemplates that each lawyer will present and argue the existing law in the light most favorable to his client. . . .
>
> EC 7-25 Rules of evidence and procedure are designed to lead to just decisions and are part of the framework of the law. Thus while a lawyer may take steps in good faith and within the framework of the law to test the validity of rules, he is not justified in consciously violating such rules and he should be diligent in his efforts to guard against his unintentional violation of them. As examples, . . . a lawyer

should not make any prefatory statement before a tribunal in regard to the purported facts of the case on trial unless he believes that his statement will be supported by admissible evidence . . .

DR 7-106 Trial Conduct.

(C) In appearing in his professional capacity before a tribunal, a lawyer shall not:

(1) state or allude to any matter that he has not reasonable basis to believe is relevant to the case or that will not be supported by admissible evidence;

(2) ask any question that he has no reasonable basis to believe is relevant to the case and that is intended to degrade a witness or other person;

(3) assert his personal knowledge of the facts in issue, except when testifying as a witness.

Obviously, in order to represent your client "zealously within the bounds of the law," a lawyer has to know what the law is. That law includes the evidentiary issues addressed, albeit briefly, here. If the evidence proffered is relevant and will reasonably aid the jury in its search for the truth, there should not be any ethical constraint to offering the evidence assuming a good faith basis for doing so. As noted above, the ethical rules contemplate an advocate's right to argue that an existing rule should be extended or modified to validate the cause presented. It is unlikely that unless technologically prepared evidence is known to be false and intended to mislead it will form the basis for an ethical violation.

VII. Conclusion

The evidentiary and ethical considerations of technologically produced and presented evidence are not really any different from those of any other type of evidence. The proponent of *any* evidence should be satisfied that the evidence is relevant and admissible for the purpose intended, whether it is documentary or real evidence, whether it is offered by a witness or by way of exhibit, and whether it is novel or of a tried and true nature. However, because the use of technology can so easily manipulate or distort the truth, any proponent of technologically prepared evidence, be it offered merely as demonstrative evidence or as substantive proof, must be prepared to substantiate and validate the evidence just as is done with any evidence offered in a court of law, but perhaps with a bit more assurance.

---

[1] *See* Deborah R. Hensler & Marisa E. Reddy, "California Lawyers View the Future: A Report to the Commission on the Future of the Legal Profession and the State Bar" (1994). It should be noted that the survey addressed by this article did not define "technology."

[2] Some have argued that technologically presented evidence is really no different from other types of evidence, and is merely a natural extension of what already happens in court. *See* "Digital Justice" by Rebecca Ganzel.

[3] BLACK'S LAW DICTIONARY 432 (6th ed. 1990).

[4] See Robert D. Brain and Daniel J. Broderick, *Demonstrative Evidence, Clarifying its Role at Trial*, TRIAL, Sep. 1994 at 73 for a discussion of the technical distinction between real evidence and pure demonstrative evidence.

[5] GREEN, GEORGIA LAW OF EVIDENCE §87.1 (4th Ed. 1994)

[6] GREEN, GEORGIA LAW OF EVIDENCE §87.1 (4th Ed. 1994)

[7] *Hightower v. State,* 166 Ga. App. 744, 305 S.E.2d 372 (1983), *rev'd on other grounds*, 252 Ga. 220, 312 S.E.2d 610 (1984).

[8] *Gabbard v. State*, 233 Ga. App. 122, 503 S.E.2d 347 (1998)

[9] D. LAKE RUMSEY, AGNOR'S GEORGIA EVIDENCE §15-1 (3rd Ed. 1993

[10] Stephen D. Heninger, *Cost-Effective Demonstrative Evidence*, TRIAL, Sep. 1994 at 65.

[11] *Elder v. Stark*, 200 Ga. 452, 37 SE2d 598 (1946)

[12] *Doster v. Central of Ga. Railroad Co.*, 177 Ga. App. 393, 339 S.E.2d 619 (1985).

[13] *Augusta and Summerville Railroad Company v. Dorsey*, 68 Ga. 228 (1881)

[14] *Pidcock v. West*, 24 Ga. App. 785, 102 S.E.2d 360 (1920)

[15] *Central of Georgia Railroad v. Collins*, 232 Ga. 790, 209 SE2d 1 (1974)

[16] *Central of Georgia Railroad v. Collins*, 232 Ga. 790, 209 SE2d 1 (1974)

[17] *Long v. Serritt*, 102 Ga. App. 550, 117 SE2d 216 (1960)

[18] *Smith v. State*, 202 Ga. 851, 45 SE2d 267 (1947)

[19] O.C.G.A. § 24-4-28

[20] Robert D. Brain and Daniel J. Broderick, *Demonstrative Evidence, Clarifying its Role at Trial*, TRIAL, Sep. 1994 at 74.

[21] For a detailed discussion of how to lay a foundation for the introduction of evidence see Robert A, Falanga, Laying Foundations and Making Objections in Georgia (1988), Edward J. Imwinkleried,

Evidentiary Foundations (3rd Ed. 1995), and my favorite trial book, Michael E. McLaughlin, Admissibility of Evidence in Civil Cases (3rd Ed. 1994)

[22] *Hudson v. State*, 24 Ga. App. 668, 168 SE2d 912 (1933); *Christian Construction Co.* v. Wood, 104 Ga. App. 713, 123 SE2d 10 (1961). This is particularly true in the federal courts in which the trial court is given very broad discretion, even if his evidentiary ruling is case dispositive. *See General Electric v. Joiner*, 522 U.S. 136, 118 S.Ct. 512, (1997).

[23] Kathlynn G. Fadely, *Use of Computer-Generated Visual Evidence in Aviation Litigation: Interactive Video Comes to Court*, 55 J. AIR L. & COM. 839, 844 (1990).

[24] See David Muir, *Computer Animation: Debunking the Myths,* MASS. LAW. WKLY, March 23, 1992.

[25] Jane B. Baird, *New From the Computer: 'Cartoons' for the Courtroom Capture Jurors' Attention*, CHI. DAILY L. BULL., Sept. 8, 1993.

[26] Jerome J. Roberts, *A Practitioner's Primer on Computer-Generated Evidence*, 41 U. Chi. L. Rev. 254, 279 (1974).

[27] *Van Houten-Maynard v. ANR Pipeline Co.*, 1995 WL 317056 (N.D. Ill. 1995).

[28] Sharon Panian, Note, *Truth, Lies, and Videotape: Are Current Federal Rules of Evidence Adequate?*, 21 SW. U. L. Rev. 1199, 1214 (1992) (quoting Judge Eli Chernow of the Los Angeles Superior Court)

[29] Gary S. Fergus, "Trial by Technology: Preparation and Use of High Tech Exhibits in the Courtroom".

[30] The only mention of demonstrative evidence in the Federal Rules of Evidence is in the Advisory Committee's Notes for Rule 611(a)(1). Rule 611 states: "(a) control by court. The court shall exercise reasonable control over the mode and order of interrogating witnesses and presenting evidence so as to (1) make the interrogation and presentation effective for the ascertainment of the truth. . ." The Notes explain that this rule applies to the use of demonstrative evidence.

[31] Timothy Cerniglia, "Courts Revisit Computerized Exhibits," *National Law Journal*, Vol 16, No. 29 (March 1994).

[32] Fed. R. Evid. 402.

[33] Fed. R. Evid. 401.

[34] Fed. R. Evid. 403.

[35] "The rationale for permitting high tech exhibits as part of closing arguments is that they are no different from the analogies use by trial lawyers in making their arguments today." Gary S. Fergus, "Trial By Technology: Preparation and Use of High Tech Exhibits in the Courtroom".

[36] Fed. R. Evid. 801(c).

[37] Fed. R. Evid. 801(a).

[38] Fed. R. Evid. 801(b).

[39] Fed. R. Evid. 803(24), 804(b)(5).

[40] *See General Electric v. Joiner*, 522 U.S. 136, 118 S.Ct. 512, (1997); *Khumo Tire Ltd. v. Carmichael*, 526 U.S. 137, 119 S.Ct. 1167 (1999).