Experts

The effective use of exhibits and demonstrative evidence to help them do a better job testifying

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1. INTRODUCTION

Experts require effective exhibits because expert testimony requires explanation. The entire premise of expert testimony is the expert presents some information to the jurors that is beyond their ken; therefore, exhibits and experts must work together. The trial lawyer must know the law of evidence with regard to exhibits, must know the role the pretrial conference plays in getting documents admitted, must be able to make strategic choices in the way the exhibits are created, and must see and contest the impermissible choices the opponents may make in the creation of their exhibits. Finally, the lawyer must know strategies for using, displaying, and handling exhibits in openings, examinations of witnesses, and closing arguments.

The purpose of expert testimony is to help the jurors understand a process like the conversion of gasoline into energy to move a car, a relationship like that between a tainted vaccine and the disease it causes, or a phenomenon like an avalanche in the Rocky Mountains. The jurors must find the expert to be credible and must understand at least the structure of the methodology the expert has employed; then they can rely on the expert's testimony. The jurors do not have to be trained so they can independently replicate the experts studies, experiments, or clinical investigations, but on the other hand, the expert testimony cannot remain Edgar Degas' "conversation of specialists," where one understands nothing. Therefore, exhibits for use with experts must be especially helpful, especially interesting, and especially memorable.

2. EXHIBITS AND EVIDENTIARY FOUNDATION - ILLUSTRATIVE OR SUMMARY EXHIBITS

Even before trial, an expert has a head start in preparing exhibits to support her testimony. Essential portions of the expert's report should provide themes for illustrative or summary visual exhibits. Yet, while the expert's report may be required in discovery, it is unlikely to be exciting. It contains more information than the jury needs to remember because it is intended:

(1) to reveal all of the expert's bases and opinions,

(2) to serve as a vehicle for pretrial discovery, and

(3) to provide a basis for the court's rulings on admissibility of the expert's testimony.

However, an outline of the report will provide a list of its most important points; from that list, the attorney can probably identify essential opinions and bases, which will suggest interesting graphic exhibits of their own. If this outline approach does not suggest effective exhibits, create a new list of high-level opinions with the expert and brainstorm on ways to visualize them.

Getting the exhibit in evidence depends on what kind of exhibit it is. The foundation for illustrative exhibits with experts is merely that the exhibits will assist the expert in giving her testimony. When counsel reaches the appropriate point in the expert's direct examination, he should ask the expert, "Have you prepared any exhibits to help you explain this to us?" (Notice the phrase is "to us," not "to the jury." To avoid separating

himself from the jury or suggesting that he is better informed than they, the attorney should not ask the expert, "Can you explain this to the jury?") For variety, the attorney may also ask, "Can you show us what you mean?" or "Is there some way we can see that?" or any other question that cues his expert it is time for pictures.

Some lawyers make the mistake of trying to admit exhibits as summaries. The evidentiary hurdle for summaries is higher than for illustrative exhibits. Summaries, or charts, are only permitted for efficiency purposes and where the underlying data is voluminous; it must indeed save the court time and not mislead the court. Also TRE 1006, which deals with summaries, requires originals or duplicates be made available to the opposition at a reasonable time and place. If the opponent offers a computer simulation as a summary, TRE 1006 is a way for counsel to argue his opponent be required to turn it over to him well in advance of trial and in a format (computer language or otherwise) his expert can read and change. Of course, the opponent may contest there is free riding on his expert's work. (It may have cost thousands of dollars to make the simulation, but once in a system, it can be easily manipulated by simply changing a few key pieces of data.) Yet, fairness and the requisite opportunity to attempt to rebut the factual assumptions the computer simulation employs may require the early exchange of the simulation. If the court has been made to have concern that a proponent of a computer simulation has not been given a chance to rebut it, then the court may reject it.

3. HEARSAY

Another tool for opposing exhibits is contained in evidence rules concerning hearsay. Exceptions to the rules that exclude hearsay in exhibits or otherwise are contained in TRE 803 and 804, and they are construed strictly and conservatively. Since the codification of the Federal Rules of Evidence, no new exceptions have been created in the federal system, and the existing exceptions have consistently been interpreted to reject expansion. In general, the courts have proclaimed the exceptions will be strictly construed so that circumstances, which come close to satisfying an exception, will not be approved under that exception or under the "catch-all" exception now contained in TRE 807 (previously TRE 803(24) and 804(b)(5)). There is a genuine concern that these exceptions be kept within their traditional bounds, or they will swallow the rule. The catch-all exception, especially, is intended to allow courts to exercise discretion when faced with circumstances beyond the contemplation of the drafters of the original rules—not for circumstances which come close to satisfying an established exception, but which fail for technical reasons. (To take advantage of the 807 exception, the proponent needs to give the opponent notice at pretrial that he will use 807 as a basis for the admissibility of the proffered evidence.)

Exhibits used with experts often present hearsay problems because they present, summarize, or utilize out-of-court statements. (Of course, if the statements are non-hearsay party admissions, there is no problem.) While exhibits may be specially prepared

and offered as summaries of complex or voluminous underlying data or material—accounting, economic and scientific graphs, or video demonstrations and recreations being prime examples—the summary exhibit incorporates all the hearsay deficiencies contained within the underlying data. However, the attorney cannot eliminate hearsay problems merely by incorporating the data into another exhibit. As a corollary, when evaluating an opponent's exhibits, consider the foundation for all data underlying summary exhibits.

The attorney's evaluation starts with TRE 703: "If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence." The first level of response to a hearsay objection is to say an expert may rely on hearsay. Still, in presenting hearsay in an illustrative exhibit, counsel's opponent may object that the exhibit gives hearsay too much emphasis or is misleading to the jury and should be excluded under TRE 403 because it presents the hearsay as an established fact. In opposing an expert exhibit on the basis that it contains this kind of hearsay, the opponent should at least get a limiting instruction from the court that specified data on the exhibit is only there to help the jury know the facts upon which this expert relied to reach her particular opinion; that these facts are contested, and the expert's exhibit is not itself evidence of these facts. In presenting an expert's illustrative exhibit which contains hearsay, a safe exhibit should not represent the hearsay evidence as fact, but instead, it should clearly represent the evidence under the

heading, "reasons" or "bases." (Revisions to Rule 703 would preclude displaying "inadmissible bases" to the jury; it remains to be seen whether courts will exercise discretion to allow explanation of inadmissible bases, by exhibit or otherwise, if that is necessary to avoid confusion about the expert's opinions.)

Exhibits can be useful in a number of additional evidentiary situations, even where the exhibit will not actually be entered into evidence. An exhibit may be used to impeach an expert, or to refresh recollection, or as past recollection recorded; in such uses, it is read to the expert and into the record, but the document itself is not received or provided to the jury during their deliberations. The concept is identical for all exhibits intended to refresh memory or to stand in place of a witness's testimony (and for learned treatises under TRE 803(18), which may supplement or contradict an expert's testimony). Since the material is essentially being offered either as a substitute for or in contrast to the expert's testimony, it is received orally, just like the expert's testimony, so the jury is not led to place inappropriate weight on a testimonial substitute merely because it is on paper. (Note again that as an illustrative aid to that oral testimony, an overhead or other presentation might be shown to the jury and again in closing argument, but it will not be received into evidence.) Another basis for admissibility of exhibits during expert testimony is if they merely present market reports or commercial publications (stock data from the Wall Street Journal) that meet the admissibility requirements of TRE 803(17).

Knowledge concerning the rule of completeness is also vital to respond to the opponent's use of proffered exhibits, especially as to parts of the expert's report or deposition, which may be offered to impeach the expert. If part of the expert's report or deposition is accepted into evidence, the opposing lawyer may (at the judge's discretion) offer other portions which the jury, in fairness, should consider at the same time. TRE 106, the "rule of completeness," is intended to prevent an advocate from misleading the jury by presenting only a portion of an exhibit. The proper functioning of the rule permits the opponent to request the court to authorize the admission of additional portions at the same time, so the jury has the complete context. In practice, courts often respond to such requests by stating, "Well, you have cross-examination." Of course, the opponent had cross-examination without TRE 106, so such a ruling completely defeats the important purpose of the rule. If the document in question is a formal deposition, the attorney may also cite Fed. R. Civ. P. 32(a)(4) to provide additional comfort and guidance to the court.

4. FOUNDATIONS FOR SPECIFIC EXHIBITS

a. PHOTOGRAPHS

A photograph is admissible into evidence that it fairly and accurately depicts a relevant scene at a relevant time. The focus in analyzing the foundation for photographic evidence is whether the relevant view seen by the expert is fairly and accurately depicted in the photograph. Therefore, it does not matter whether the exhibit was photographed (or recorded by whatever process) at a relevant time (anymore than a chart prepared for an

accountant's testimony must have been prepared at the same time the sales and revenues were earned).

b. FROM PHOTOGRAPHS TO MOVIES TO COMPUTER GRAPHICS

If the individual "frame" of a graphic exhibit is fair and accurate, whether there are thousands that comprise a motion picture, or one that comprises a still photograph, the exhibit is admissible unless there is something about the motion—perhaps the speed—that renders the series unfair (under TRE 403) even though the individual frames, taken one at a time would not be. For example, a videotape of a plane crash, when played at normal speed, accurately shows the events; if the tape were shown at slow speed; however, it might give the appearance the pilot had more time to control the plane and to avoid the accident than was the actual case. Similarly, any cropping of photographs, stills, or movies might place undue emphasis upon certain portions of the picture or scene just as omitting portions of a document might result in an unfair or incomplete understanding of the document because if the attorney does not see everything relevant in the picture, he may think the missing thing was not there. When an expert has testified a depiction is fair and accurate, the burden of proving lack of foundation shifts to the opponent, who must present evidence that the depiction is unfair itself or has been presented or altered in some unfair way.

As a matter of evidence and trial procedure, the attorney needs to know that where the admissibility of a photograph, movie, or computer simulation is opposed on the basis

that the expert lacks a foundation for testifying that it is relevant. For example, an expert may be vague in establishing that she had a similar view, or that the actors and their actions were similar to the parties involved or cannot say the facts entered in the mathematical model used to create the computer simulation are relevant to anything at issue in the case, and then the admissibility question is handled under TRE 104(b). The relevancy is conditioned on a fact, and the proponent only needs to provide evidence that would support a finding that the expert had the perspective to say the photo, movie, or computer simulation is fair and accurate in order for it to be admissible. The rest of the challenge goes to weight. Determinations of preliminary matters regarding admissibility shall be conducted out of the hearing of the jury when interests of justice require it. TRE 104(c).

This is not to say the court will be comfortable in admitting computer simulations as readily as it admits photos. It is very hard to cross-examine a movie or computer simulation once the jury has seen it. Some lawyers would go so far as to say counsel can only counteract a memorable movie or computer simulation with one of his own—where he shows the jury what the event would look like by importing his own facts and perspective. Some courts agree the movie or computer simulation may be too powerful and will not let in a computer simulation or movie unless the court is convinced of its accuracy and reliability. (They seem to analyze a computer simulation like an expert opinion on cause and effect, based on a mathematical model, or like a *Daubert v. Merrell*

Dow problem.) Remember that in *Daubert*, the court acts as a gatekeeper, determining as a foundational matter whether the model controls all the important variables and has been subjected to other tests of relevance and reliability of scientific modeling.

Other courts treat movies and computer simulations like photos. They hear arguments that refer to four rules. TRE 403 (evidence that is unduly prejudicial and misleading to the jury is excluded) is one of the main rules of discussion along with TRE 102 (the rules are to be construed to secure fairness, eliminate unjustifiable expense and delay, and promote the growth of the law of evidence to the end that the truth may be ascertained), TRE 104(b) (evidence conditioned upon a showing sufficient to support a finding), and finally, TRE 611(a) (provides that the court shall exercise reasonable control over the mode and order of interrogating experts and presenting evidence so as to make the interrogation and presentation effective to ascertain the truth and avoid needless consumption of time). Under TRE 611(a), if a picture is admissible because it avoids needless consumption of time, then a computer simulation should also be admissible. And many courts do appreciate technology that produces substantial time savings in trials.

Videotapes require the same foundation as standard motion pictures. The technology employed in making the record, in creating the visual exhibit, is not an element of the foundation itself, but it may be relevant in persuading the court the depiction is not fair and accurate because the process was subject to abuse—and was, in fact, abused. Therefore, unless there is some showing that videotapes can be more easily

altered than normal photographic motion pictures, the analysis of admissibility will be the same for either technology. If there is a challenge to admissibility based on a claim of alteration, then differences in the ability to alter the pictures would be relevant. (Videotapes that incorporate computer simulations raise a deeper analysis. Because the computer simulation can be so easily manipulated once the mathematical data has ben entered, the court does have a cause to be more skeptical of the entire video. See the discussion below.)

Photographs and movies of a re-enactment are not inadmissible simply because they portray a re-enactment; if they are "fair and accurate" and the scene is relevant, they are admissible. In other words, if there is evidence that the signing of the Declaration of Independence looked "just like" it looks in a photograph or movie and the scene is relevant to the case, it will be admissible. This rule flows from the basic evidentiary requirement that recorded evidence be a fair depiction—if the expert can testify that the re-enactment is relevant. For example, the actors in the movie—those who are portraying the participants in the events at suit—are not themselves vouching for the accuracy of their actions or the resulting scene; that is dependent upon the testimony of the sponsoring expert as to the "fairness and accuracy" of the depiction. The analysis of a computer re-enactment is conceptually a bit more difficult often because there is no one who can testify directly as to the fairness and accuracy of the scene shown. For example, a computer recreation may be used to show the locations and movements of all the

vehicles relevant to a traffic accident, perhaps from an overhead perspective unavailable to any person at the time of the accident. Here, the "fairness and accuracy" of the computer recreation depends upon the testimony of the expert, normally an expert who is familiar with or participated in the preparation of the re-enactment. If that expert can identify bases for the computer inputs, and she (or another expert) is able to testify to the reliability of the methodology (the computer programs) used to generate the recreation from that data, then the fairness and accuracy of the computer generated evidence will have been established. By way of analogy, testimony can be accepted that acid added to a basic solution results in the combination of hydrogen ions (H-) with hydroxl ions (OH+), forming neutral water and releasing hydrogen gas, even though the chemist does not actually see the interaction between the molecules and their electrons. The key to admissibility is the demonstration of the reliability of the methodology employed in creating the exhibit, as was emphasized for the expert's methodology overall by the Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals*. Again, the court seems to reason if the methodology—here, the computer program—is shown to be reliable, if the data input is shown to be reliable, and if the scene is relevant, then the visual recreation or reenactment will be admissible, even though no human being had ever actually seen the events depicted.

Computer generated simulations or reenactments are admissible if they are fair and accurate depictions, but the possibility of improper manipulation (because of computer

technology) will have to be met. Because the technology is now available to alter photographs and videotapes at a very fine level (that is, by changing individual pixels, the small elements which form the picture when combined in groups of hundreds of thousands), the proponent of the visual evidence certainly should recognize the skepticism the jury or court may feel toward important visual evidence. While the jury does not have the opportunity to rule on accepting the evidence into the record, it certainly decides whether to accept the evidence into its deliberations. Such concerns may persuade the proponent to ask at least a few questions to the expert to demonstrate there has been no tampering. As a matter of presentation, these questions should be in the form of, "Has anyone had an opportunity to manipulate either the data or the program?" rather than, "How do you know that the data is accurate or was accurately manipulated?" because the latter formulation presents too direct a challenge to the testimony of the proponent's own expert.

Anyone who viewed the actual scene at a relevant time can testify to the fairness and accuracy of the visual evidence. There is no requirement that the foundational witness be a party to the lawsuit or the party's expert; alternatively, it is not necessary that the witness be uninvolved in the lawsuit. The only requirement for a foundational witness is she must have been able to perceive the relevant scene at a relevant time (or in the case of computer generated evidence, she must have the competence to testify to the reliability of the program and data used). The attorney should test the foundational witness's

competence to lay the foundation for visual evidence in the same way he tests her ability to testify directly to the scene which she saw. If she can say, "Then I saw the plane crash on the runway," she should also be allowed to say, "This picture of a plane crash fairly and accurately shows the angle that the plane hit the runway."

In the computer context, if the foundational expert would be allowed to testify that, in her opinion, the processes would have certain results, then she will also be allowed to testify that a visual exhibit showing those results is fair and accurate. For example, if the actual scene was not witnessed (or could not be witnessed—for example, the scene is a view of the inside of an operating nuclear reactor), foundation testimony will need to include technical testimony to connect the data input with the graphic output, using reliable methodology (consistent with *Daubert v. Merrell Dow*). Statistical calculations performed by computer, DNA comparisons shown on charts, or chemical analyses displayed in summary charts all have to be founded on testimony as to the reliability of the methodology used to manipulate and display the data.

Again, the use of illustrative aids to testimony may be an attempt to evade these foundation requirements for the admissibility of certain exhibits. Exhibits, which are intended merely to illustrate an expert's testimony, are as admissible as that testimony—and no more. If an expert presents an exhibit to "show what she is talking about," like a graph or sketch or diagram, and her testimony is then excluded or rejected, the illustrative exhibit must likewise be excluded or rejected. "Illustrative" exhibits have

no substantive probative value of their own but derive their probative value entirely from the testimony they illustrate. "Demonstrative" exhibits, in contrast, normally have independent substantive value (for example, a demonstration of the effect of mixing two chemicals provides information to the trier-of-fact, which may be used to support findings). Demonstrative exhibits may be solely demonstrative, they may be illustrative and substantive, but they are never merely illustrative.

Exhibits divulged or obtained as part of mandatory "voluntary" disclosures are supposed to relate to the "issues" in the case. This rule sounds direct enough to cause few problems, but it is not. First of all, it leaves to the judgment of the disclosing attorney the decision as to what "relates" to what. Second, the question of what are the issues is complicated, even without interposing an advocate's biased judgment because matters are technically put "in issue" by the pleadings—complaint and answer—and the answer may not yet have been filed. As a result, the initial disclosures by the attorneys are likely to be incomplete and give rise to time consuming challenges—or more likely, the opponents may try to bury each other in discovery as broad as that which occurred before the disclosure procedure was adopted.

Nevertheless, admissions are contained in discovery productions: the act of returning an exhibit in response to a document request, an interrogatory, or an initial voluntary disclosure constitutes an admission regarding portions of the foundation for the exhibit. For example, if a document request calls for the production of "all documents

that show profits earned between May 1995 and May 1996," then the return of twelve documents constitutes a party admission of two facts: the twelve documents are relevant to profits in that period, and the opposing party has no access to any other documents, which are relevant to profits during that time. Therefore, in discovery the attorney should never ask for "documents sufficient to show" because he does not obtain the benefit of this second party admission.

Parties will often provide documents in response to an interrogatory, as they are allowed to do by the rules. That response constitutes an admission that those documents answer the interrogatory, i.e., they are relevant to the subject. Exhibits, which are provided in an initial voluntary disclosure, are—at the least—admitted to be relevant to the issues; technically, they are admitted to be all of the documents that the party has that are relevant to the issues, but it is likely to be very difficult to persuade a court to apply the language of the voluntary disclosure rule quite so strictly.

5. THE ROLE OF THE PRETRIAL CONFERENCE

Typical pretrial standing orders, or local rules, require exhibits to be identified, exchanged, and offered by the final pre-trial conference. Most judges nowadays do not want to take trial time to hear argument about foundation for exhibits; they, therefore, require exchange and objection to occur prior to trial, and they will not hear objections later that could have been made at pretrial. Objections based on relevance and the various policies embodied in TRE 403—such as cumulativeness, confusion, unfair prejudice, and

waste of time—will often be deferred until trial because the judge feels she needs the advantage of context to make a proper ruling. They should nevertheless be stated pretrial, so they are not waived.

Motions in limine are used to get advance rulings of admissibility, as well as advance rulings of inadmissibility. Under *Daubert*, when it is difficult to forecast in advance whether a particular judge will find a foundation to be adequate for an expert's testimony, a request for an in limine ruling may be essential, and that request should include the expert's exhibits also. The presentation supporting that request for a ruling may include live testimony under the procedures of TRE 104(c). It is a common misunderstanding, based on a mistranslation of the phrase "in limine" (which means "at the threshold" of the court room or chambers or trial), that such motions are only useful "to limit" the evidence. If the lawyer has an exhibit where he anticipates a challenge, and it is sufficiently important to the flow of his case that he does not want to wait until trial to find out whether it is going to be admitted, he should ask for an in limine ruling. Of course, if the court has scheduled an "exhibit day" during the pretrial sessions, the lawyer can obtain his ruling at that time. However, there are judges who prefer to postpone routine exhibit rulings until they come up at trial. When the lawyer is in front of one of these judges, a request for in limine rulings on important exhibits is appropriate.

6. STAYING ORGANIZED DURING THE PRETRIAL

Use an "exhibit book" or "trial notebook" during pretrial and trial arguments on the expert's and all of the attorney's exhibits. For the exhibit day, if counsel is dealing with 200 to 300 exhibits, he should put copies in one or two notebooks in numerical order. Note with care which exhibits the expert needs to have admitted in order for her to be able to refer to them as a basis of her opinion. If the opponent has conceded the admissibility of the exhibit, counsel should indicate it at the top in some bright color. For those exhibits for which admissibility has not been conceded, write "OPRAH" vertically at the top of the first page of each exhibit. OPRAH stands for Original Writings, Privilege, Relevance, Authentication, and Hearsay. Then the lawyer should consider how he would respond to any objection on any of those elements of foundation, and he should make a note opposite the element.

Objections to exhibits made and overruled at pretrial should be renewed at trial. Unless the judge states on the record or in a written order that she will not allow exhibit offers to be renewed at trial if she has sustained an objection to the exhibit during pretrial, the offering attorney should renew the exhibit offer at trial. An offer or objection might be stated when the jury is out, during a bench conference, or in the morning or evening housekeeping session, but it should be in the presence of the reporter so it is on the record. It is true some judges get testy about attorneys restating objections or offers that the judge thought were completely and properly handled at pretrial; if the judge seems

perturbed, the attorney should explain he is concerned about having adequate record and does not in tend to re-argue the ruling but is just making certain to the appellate court his position is not waived.

If the offer in evidence is not explicitly limited, then it is general. There are times when an exhibit is offered for a limited purpose, such as showing that a statement has been made, regardless of its truth, thereby avoiding a hearsay objection. If that is the proponent's purpose, then she should say, "Your Honor, we offer Plaintiff's Exhibit 13 in evidence for the limited purpose of showing the store claimed to offer 50 percent off on the gas barbecue grills that day." When such a limited offer is made, the jury will normally be instructed, in this example, that they are to consider the exhibit only to show the statement was made, not for the truth of the statement itself. The attorney should remember to record any limited admissibility ruling the court makes, so he can guard against the general offer and the impermissible general use by the opponent.

7. THE LAWYER AS PROTECTOR OF FAIRNESS: EDIT AND CRITIQUE EXPERTS' EXHIBITS

Counsel should guard against misleading icons in his graphics and in his opponent's graphics. Misleading icons are symbols that unfairly exaggerate relevant information in a graphic; therefore, they are cause for rejection: an oil barrel graphic that doubles in height and width to show a doubling in oil imports from one year to the next is

misleading because doubling both dimensions gives the "doubled" icon four times the area of the undoubled icon. The visual impact can be enormously misleading.

Counsel should guard against misleading labels in his graphics and in his opponent's graphics. Misleading labels can exaggerate the extent of change or difference. As an example, a graph showing yearly sales volumes (and perhaps even entitled "Yearly Sales Volumes") is misleading if the last amount shown is for less than a year (a problem that can be thought of as an "apple orange problem"). On a much more subtle level, a bar graph showing growth in profits from $10 million to $13 million will show the second bar as 1.3 times as high as the first, but if the Y-axis is labeled to begin at $9 million, the first bar will be one unit high (showing $1 million over the baseline), and the second bar will be four units high, or four times the height of the first.

Graphics that are misleading because of icon, label, axis/baseline, "apple orange," or other problems are likely to be excluded under TRE 403. Once proper objection is made, misleading graphics will be rejected until they are corrected; therefore, if the error is not discovered or disclosed until trial, there may be no opportunity to correct the problem and the evidence may be lost. Of course, if there is some reason to believe the error was known but objection was withheld intentionally, the court might find waiver of the objection.

The lawyer should be careful that his graphics do not distract or detract from the seriousness and credibility of the evidence. Just as the attorney would not dress his key

expert in a yellow suit with a clown tie, he should keep his backgrounds professional, and pick font size and colors that match or "go with" the evidence.

On the other hand, experiment with different displays, changing variables and axes until the desired emphasis and message are achieved. Just as witnesses can be instructed to speak up to help the jury understand and better hear their point, graphics that contain information about multiple variables often do not provide sufficient emphasis to the data on the particular variable that is most important, such as the illegal profit, the white blood cell count, or the decline in garbage tonnage. Simplify the display by eliminating variables that are not relevant or significantly explanatory. Try different colors (or a single color against black and white "other" data). The lawyer should not be satisfied with the exhibit until a layperson, looking at it for the first time, is able to state the point he wants to make with the data he is relying upon. Graphic evidence must have immediate visual impact to be effective.

Adjust the expert's mode of presenting data and numbers so the important numbers and comparisons will stand out. To show comparisons such as differences over time, growth, or response to variables, present a graphic exhibit that displays the two conditions side by side. If the changes are displayed in a series of graphics so the jurors do not see them simultaneously, they must rely on their memories for the quantity and even location (from 1,573 to 1,945; this row, that column, that door, this window, or right lung, lower lobe). This is the problem described by master graphic philosopher Edward

Tufte of Yale as "one damn thing after another." Instead, display the before and after (or healthy and sick or unmodified and modified) views on the same graphic, at the same time, side by side, with the differences colored, highlighted, or circled so they appear visually.

Do not mistake "big exhibits" for "graphic evidence." A blowup of a document, especially of a text document, is merely a big text document; it does not tell a story visually. Pictures, charts, graphs, tapes, or computer animations make effective visual exhibits if they produce an immediate reaction in the viewer that supports the theme of the case. To cite an extreme example, an accounting worksheet or table, filled with rows and columns of numbers, has little visual impact (unless the theme is boredom), but if the final number in the far right column, bottom row, stands out because it is written $15,000,000, then the viewer's immediate reaction to the exhibit is that somebody lost a lot of money. Having isolated the elements needed to promote visual impact, the attorney should ask why the other elements are necessary—all those other rows and columns of numbers have become nothing more than background. Perhaps they should be dimmed, as computer programs do with commands that are unnecessary or unavailable at a particular time.

Even enlarged exhibits, which are pictures, are not effective if the relevant details are lost among other items in the scene. By direct analogy to the accounting worksheet discussed above, a pictorial scene may contain the relevant information other items in the

scene. To avoid any charges of unfairness or tampering, present the enlarged picture without enhancement, and then present alongside the original an enhancement that circles the relevant item and dims the remaining scene, or circles the relevant item and "calls it out" with an arrow to an enlargement of that portion to the side—or which in some other way attracts attention to the important component and leaves the remainder as background. The advantage presented by visual exhibits is they provide the opportunity to reinforce particular information through the eyes of the viewer.

8. OPPOSING GRAPHIC EVIDENCE AT THE PRETRIAL CONFERENCE

When opposing graphic evidence, look for changes in scale or perspective which might exaggerate or unduly emphasize the point being made. Remember the magician's trick: stacking objects one in front of another creates the illusion they are close to each other, and there is little or no space between them to hide things, where things may have, in reality, been hidden. Also, even a graphic can be tilted to cause the jury to see some things more easily than others. For example, does the graphic present a "bird's eye view," which no one had and suggests the defendant could see all the danger points without obstruction?

When opposing, look carefully at the labels used on exhibits, and consider the appropriateness of the label to the particular use at trial. Do the labels argue? Not allowed on opening. Do they lead? Not allowed on direct examination. Do the labels

mischaracterize? Not allowed on direct or cross. Do the labels represent as evidence things not entered into evidence? Not allowed on closing.

The attorney should look at his opponent's method of emphasis in the exhibits. Do words or data contained in the exhibit shout at the jury? The exhibits should only be allowed to "speak" to the jury, analogous to limits a court would put on the way experts speak on the stand. After all, the jurors are instructed to take the evidence as a whole and presenters should not be allowed to unduly emphasize one part of the evidence over all the rest. Advertisers know how to do this; the opposing expert may also. Especially check for boxes with black text on bright yellow or orange background (like yield signs), which may unduly emphasize some information in a document over its context.

At pretrial, in limine, if not before, counsel wants to know what his opponent will be using in opening. If the opposing expert has created some super graphic or computer simulation as illustrative evidence, she may attempt to use the computer simulation in opening, which could be devastating to the proponent's case. The attorney wants to see ahead of time not only all of his opponent's charts and exhibits, but also anything that moves or has animation. Remember, once the jury sees a scene or reenactment—either on a board, on a screen, or in a box (TV)—it will be very hard for them to unlearn it. The attorney should insist on previewing any animation, so he can object if the foundation is in doubt. (Remember to use TRE 611 (the court controls the mode of the presentation of evidence) and TRE 1006 (if the computer simulation is offered as a summary) to insure

the court recognizes its obligation to insure counsel has been given a fair chance to see, understand, and respond to the underlying data.)

9. HANDLING DOCUMENTS AT TRIAL: DANCING WITH DOCUMENTS

The attorney should let the judge know what he is about to do. Assuming the documents have been premarked, as is the case in most courts, there is no need to get the court reporter to mark a document separately. The memory trigger for handling documents can start with "Your Honor, I have in my hand a document that has been premarked for identification as Exhibit 13." The judge then can look at her list of documents and learn what is coming.

Make the "three step exhibit circuit" when presenting an item of evidence at trial. When the attorney is ready to present an exhibit to the expert, he should open his folder of copies of that exhibit and take three copies in hand. He should ask the court for permission to approach the expert (if he has not presented documents to this expert before and if he is allowed to leave the lectern). First, on his way to the expert, the attorney should place one copy on opposing counsel's table saying, "Counsel" audibly so it is apparent to all that he has given him a copy. Second, he should say, "Your Honor, would you like a copy?" Third, he should hand the expert a copy saying, "Mr. Hobart, I'm handing you Plaintiff's Exhibit 13 for identification." The first step prevents opposing counsel from interrupting the attorney's examination about the exhibit by asking for time to find his copy or by insisting he needs to compare his copy with the one the expert is

using. The second step makes certain the judge is following the examination with her copy of the document; if the judge has her copy, she'll say, "Thank you." If the judge does not have her copy, she will take one from counsel and say, "Thank you." The third step makes it clear in the record that the expert has a copy of this particular exhibit in front of her, without the need for any artificial statements such as, "Your Honor, I would like the record to reflect that I am handing the expert ..."

Have the expert lay the foundation for the exhibit before asking questions about its contents and substance. Until the court has ruled upon whether there is a proper basis for admitting the exhibit in evidence, its substance and content should not be put into the record or discussed in front of the jury. Of course, with some exhibits reference to the contents is necessary in a limited way in order to identify the contents as relevant. For example, a photograph of the accident scene would have to be identified by someone as a fair and accurate depiction of the relevant scene at a relevant time. Testimony on the contents beyond that would be inappropriate until the exhibit is received, so the expert should not be asked before receipt, "Is that how the plaintiff's body looked as it protruded through the windshield of the defendant's truck?"

Offer the exhibit in evidence before asking questions about its contents and substance. After the attorney has completed the foundation for the exhibit, he should say, "Your Honor, I offer Plaintiff's Exhibit 13 in evidence." Nothing more complex is required. It is not necessary to say, "Your Honor, we move the admission of Plaintiff's

Exhibit 13," or anything to that effect. The simple "I offer" is sufficient. In olden times or in very formal jurisdictions counsel sometimes says, "I offer Plaintiff's Exhibit 13 for identification in evidence and ask that the identifying mark be stricken," but since there is no real possibility of ambiguity as to what is happening, this is mostly excess verbiage.

During direct examination, the lawyer should bring his expert off the stand so she can work with visual exhibits. Getting the expert out of her chair in the witness box allows her to move around, to talk with more animation, and to teach the jurors more naturally. On direct examination, use visual exhibits to provide an opportunity for the expert witness to come down and interact. Say, "Your Honor, may the witness come down to use an exhibit in explaining this point?" Schedule the use of exhibits for times when attention and energy in the jury box (or on the bench) may be low: midmorning, right before lunch, late afternoon. Counsel should make sure he rehearses with the expert so she does not inadvertently get in the way of the exhibit or misuse it.

In contrast, during cross-examination keep the opposing expert in her seat and resist her attempts to get in front of the jury with an exhibit. On cross-examination, the attorney should watch for attempts by the well-prepared opposing expert to maneuver him into letting her come down and explain something with visual exhibits. Beware the opposing expert who says on cross-examination, "Well, counsel, if I could just come down and show you what I mean on an exhibit I used earlier," or "Counsel, it might help the jury and judge if I just showed them a diagram that I have in my exhibit case."

Respond to those requests with something like, "Let's just talk about this point for a moment, and then we can decide if we need the exhibit," or "Let me ask something else here, and then perhaps we'll come back to that area if we have time." Of course, whether counsel actually does come back to that area later depends upon a host of factors; chief among those factors is whether he ever wants to come back to that area.

Jurors' copies of a complicated exhibit should be distributed after the testimony about it. If the testimony about an exhibit will take a few minutes—for example, when there are several portions of the exhibit to discuss, hold the jurors' copies until the testimony is completed so they will watch the overhead or blow-up and hear the testimony. If they receive their copies too early, they will busy themselves with reviewing them and miss portions of the testimony. If the exhibit is relatively straightforward and the testimony is short, the lawyer could distribute the copies before the testimony.

Consider the advantages and disadvantages of three different display options: the evidence camera-to-screen option, the computer-to-screen option, or the computer or video recorder-to-box or monitor. The evidence camera, or "Elmo," to screen option is the most versatile display option, and the easiest to operate. It only requires the knowledge of how to turn on the camera's power, to place the exhibit (document, picture, or object) under the lens, to push the focus button, and to move the exhibit to show what the lawyer wants to show. The camera will then show a picture of the exhibit on a display screen. It also has a zoom button to allow the lawyer to focus the jury on details. This

option is a great backup if any of the other options goes wrong. As long as the lawyer has made a backup copy of his exhibits, he simply puts them under the evidence camera and turns on the machine.

A second option is the computer-to-display screen option. Many courtrooms today have projection systems that will project images from computer programs onto a large screen. PowerPoint, Corel Presentations, and other trial evidence software can access slides or files containing exhibits, pictures, and videos—with a sweep of a bar code or the click of a mouse—and, if hooked up properly to a compatible projector, project the exhibit for all the court to see. Of course, the lawyer wants to see if the details of the exhibit, simulation, and/or the size of the lettering can be seen by the jury. This requires some knowledge of the lighting of the courtroom and the projection capabilities of the projector. Regarding size of lettering, some lawyers use the following formula to determine whether an audience will be able to read the screen: D X 0.05 = H. D is the distance in feet to the farthest person in the room. H is the height in inches of letters or symbols on the screen, board, or flip chart. Thus, if the farthest person is thirty feet away from the screen, 30 x .05 = 1.5, and 1½ inches is the smallest lettering the lawyer should use. (Actually, this seems too small to the authors; we would go with 0.1 as the multiplier, arriving at three inches in this example.)

A third option is the computer/video-to-monitor. Again, depending on the number of and size of monitors in the court room, the "box" method may be the best. If the

monitors each have good sound systems (and sound is important), the monitor may be the best option. In addition, the box does give the display the look and feel of a TV newscast, which may enhance the credibility of the showing. If the judge and/or expert also have monitors, it allows them to preview and lay the foundation without premature publication to the jury.

Whatever the option, the attorney should remember these ten tips for visuals:

(1) billboard advertisers shoot for one picture and no more than seven words,

(2) use professional colors and graphic devices such as boxes and borders,

(3) avoid overly slick displays, especially if the attorney wants the jury to later handle and discuss the exhibit in the jury room,

(4) do not talk to the visual,

(5) stand alongside the visual and face the audience,

(6) the attorney should not show the visual before he begins speaking about its subject,

(7) the attorney should point to the appropriate places as he speaks, or he should reveal and cover to improve reader focus (old fashioned pointers are better than laser pointers because up to a third of the males in the courtroom cannot see red; therefore, the laser pointer is useless to them),

(8) think of the three Ts—touch, turn, and talk. (And on direct, make it the expert who is doing the Ts; if cross, opening, or closing, the attorney should do the Ts),

(9) with flip charts, do not talk and write simultaneously, and

(10) for special emphasis and drama, pause midsentence, turn, face the chart or screen, and write or reveal without speaking, then turn back and reestablish eye contact.

Counsel should try to present his exhibits (and overall story) in chronological order. The exceptions to this approach may overwhelm the rule; nevertheless, the first approach to organization of the story and the exhibits with the story should be chronological. First, chart out the story; then arrange the witnesses to cover the period of the story (with overlapping coverage); then rearrange the witnesses after determining their availability; and finally, arrange the exhibits, first chronologically and then distributed among the witnesses as necessary to permit foundations to be laid. Some courts require the exhibits to be numbered in the order in which they are offered; the only practical way to do that is to number them as they are offered (the attorney should have his backup help number the copies for opposing counsel and his files simultaneously). If the documents are prenumbered and then introduced out of numerical order, find some opportunity in opening—or at the time of the admission of the first document—to explain to the jury that the numbers have nothing to do with the importance of the document—they are just a way to keep track of sheets of paper and other items, and they should not be concerned about the number sequence.

Jurors' notebooks should contain counsel's important documents, not all his documents. If the fourteen documents that win the case are buried among 312 other documents, the jurors will not give them proper attention; in other words, the impact of the most important documents will be diluted by the presence of the other documents. During his opening statement, counsel should tell the jurors he will give them copies of

the most important documents for them to place in their own note books; then, when he does give them a document, it will come with his implicit "certificate of importance." If, at the end of the trial, his fourteen or twenty-seven documents are aligned against his opponent's 327, counsel can argue his opponent has tried to confuse the issues and the evidence, has refused to focus on the actual dispute, and has cluttered the record with irrelevancies in his documents and, undoubtedly, in his testimonial proof. If, however, the court insists all documents be placed into the juror's notebooks, counsel should ask his experts on the stand, "Which of these three documents was more important to you in coming to your conclusions? Which of these photographs did you find most useful in understanding the causes of the fire? Which of these charts provides the best summary of the performance of this industry during the 1990s?" Then in closing, counsel can recall that testimony for the jury and invite them to make a note of those more important documents.

Remember to preview and obey the sightlines in the court room when presenting visual evidence. It is very frustrating for a juror or judge to be presented with a chart, document, or photograph that is just a little bit too far away, or on too much of an angle to read easily, or is obscured by a glare from the window. Before the trial, the attorney should check out the court room sightlines at several times during the day so he can see how the light changes. Put a colleague in the jury box and another on the expert stand, and determine where to place the easel or screen to allow clear viewing. The attorney

should not block his opponent's sightlines of the exhibits, or of the jury or the expert behind the exhibits, but if there is no reasonable way to arrange the exhibits without blocking the opponent, he should explain that to the court and ask the court's permission to locate the exhibit so the jury and expert can see it, with the opposing counsel being invited to move around to the front of the exhibit to participate in the examination. The attorney wants the judge to see the exhibit also, but reasonable judges understand that the expert and the jurors come first in this choreography. If the attorney cannot work out an arrangement in which the judge can see the exhibit from her bench, then he should explain that to the judge and provide the judge with an additional copy of the exhibit, perhaps larger than previous copies, to permit her to follow the examination. Of course, if the expert is doing something to the exhibit or on the exhibit, then the choreography must allow the judge to observe the testimony. The evidence cameras, or "Elmos"—video cameras mounted vertically and aimed downward to capture an image of a document or item which then present the image on a large monitor screen—make this determination of sightlines much easier.

10. CHOOSING THE MEDIUM AND THE OCCASION

The attorney should be allowed to use exhibits in opening statement if he has a good faith basis for believing they will be admitted in evidence. In some jurisdictions (Minnesota, for example), the use of visual exhibits in opening statement is generally forbidden, apparently on the theory that the jury should not be exposed to material which

has not been admitted into the record. Certainly, during the presentation of evidence, exhibits are not shown to the jury until they are offered and received in evidence; however, testimony is routinely referred to in openings, even though no expert has yet taken the stand. If the opening is indeed supposed to present a preview of the evidence, that preview should include the visual evidence as well. If there is visual evidence which presents an unusually serious danger of unfair prejudice, it could be considered on motion in limine, and the court could reject it at that time, or reserve a ruling until the foundation is heard at trial and direct that the particular exhibit not be used in the opening statement. There is no reason for a blanket rule excluding all visual exhibits from opening when rulings on particular exhibits are available.

During opening and throughout the trial, time lines are essential exhibits. Events happen in the flow of time chronologically and often can be understood only against a back ground of a time line. (Some call time lines anchors because they will anchor the jury to the key events if they can place the events when they occurred.) Time lines are not vertical lists of events with dates attached; they are horizontal calendar bars, into which events have been inserted. If the jurors are presented with a time line exhibit early in the case, they will be able to follow the flow of events more easily, and therefore will understand the facts more clearly. If counsel's version of events depends upon showing confusion, disorganization, or lack or coordination—such as where he is trying to show absence of conspiracy or plan in defending a RICO case or a failure to respond

appropriately to an emergency in prosecuting a personal injury case—then his goal would be to display many events on a time line, emphasizing the lack of chronological relevance among them. A time line exhibit created in front of the jury, event by event, invites their participation; as a result, they become invested in the exhibit and protective of it, resisting and resenting efforts by opposing counsel to dismiss it or to change it without sufficient basis.

11. THE NEXT LEVEL OF PERSUASION WITH EXHIBITS

Every exhibit has not only a legal foundation but also a persuasive foundation—a set of questions for the expert that will explain the events and persuade the jury on a key issue in the case. Often the lawyers get to the exhibit too early and miss the underlying importance of the factual context of the exhibit. For example, an exhibit may merely corroborate an important event, like a telephone call where goods were ordered. The exhibit must not "step on" the importance of the expert witness's memory of doing the test or discovering the key result. Sometimes the context is independently persuasive. For example, the attorney should not interrupt a police officer, who is describing the scene of an accident, just when she is about to tell about the condition of his client. Nor should the attorney interrupt his expert when she is about to state her causation opinion with a question like "Now Dr. Dove, did you prepare a diagram that shows the shape of molecules known to cause birth defects and the shape of Bendectin?" That will distract the jury from Dr. Dove's opinion that Bendectin caused birth defects because the lawyer

is preoccupied by the legal technicalities of admissibility. Or the lawyer may miss the chance to get a point told twice by going to the exhibit too early. If an expert can describe an event orally, with drama, then the lawyer can go back over it with more detail a second time with a document or graphic. Finally, even the technical foundation should not be rushed. If a document is a business record, let the jury in on the persuasive nature of the Federal Rules of Evidence. By asking about the importance of records to a particular business, who looks at them, and why they need the records to be accurate, the proponent will lay this "persuasive" foundation in a narrative fashion so the jury understands why business records would be accurate. The technical, by-the-rules leading questions can be asked for the benefit of the court just before the document is offered: "Was Exhibit 3 prepared in the ordinary course of business by someone with knowledge at or near the time of the events it records, and was the document kept as a part of a regularly conducted business activity?" "Yes." Again, in these situations do not go to the legal foundation until you have laid the persuasive foundation.

Do not ask to "publish" admitted documents to the jury; ask instead to be allowed to show the document or piece of evidence to the jury. This is not a big deal, just a minor quibble. Each time the attorney uses specialized, legalistic language, he reminds the jury he is a lawyer, and they are not. Since his goal is to communicate, to relate, to teach, his method should be to use language with which his audience is familiar, not language that requires constant interpretation and translation.

Observe the "do not walk and talk" rule. In the theater, when one character is delivering an important line or monologue, the other actors refrain from any activity that would distract the audience's attention; otherwise, they are guilty of "upstaging" the actor during the scene, or "walking on his lines." In court, when counsel is handling his own exhibits, he should remember this same rule. It is okay for counsel to walk and talk when he is not saying anything important—for example, when he is merely doing the exhibit circuit and delivering copies of the exhibit to the opponent, the court, and the expert. However, when counsel is asking substantive questions about an exhibit, he should stand still; when his expert is speaking about an exhibit, he should stand still; when counsel has just handed an important exhibit to the jury and he wants them to see the clarity with which it makes his point, he should stand still. Otherwise, his motion around the courtroom will make the audience think they need to watch, that something more interesting than the exhibit might be about to happen.

Magnetic cards that stick up on a whiteboard are a very effective way to present words, category titles, and essential quotes. The process of adding, subtracting, and rearranging words and phrases is neat, quick, and simple. The attorney can emphasize the subject of particular testimony, give a heading to a listing of factors, or add a picture to a speaker's words without detracting from his own performance by relying on his own poor public penmanship. The attorney can also color-code the magnetic cards, so related ideas are immediately associated with one another. In theory, Velcro stick ups should work just

as well, but they do not because they are not actually magic like magnetic cards. Magnetic tape with an adhesive back can be used to stick just about anything on a coated steel board.

With magnetic or Velcro cards or small items of real evidence, the attorney should hold them while he examines them.

The jurors look from the attorney to the expert and back while they listen to the questions and answers. Counsel presents a memorable picture if he is holding a foamboard card that reads, "Nicotine is addictive," while he questions the expert about label warnings; or a card that reads, "No reliable studies," while he cross examines on bases for expert testimony; or a piece of rusted metal from the actual building while he asks the architect questions about the adequacy of corrosion protection of the steel embedded in the foundation. In other words, the attorney should do something with his visual evidence in addition to putting it in front of the jurors' eyes. Talk about it; walk with it; handle it; hand it to the expert as she steps from the expert box, and ask her to put it up on the magnetic board or to hold it in the same position it had in the building. When that line of questioning is finished, and the attorney asks the court for two minutes to check his notes, he should ask if the document or item of real evidence can be passed to the jurors for their examination. (If the document is not already in their notebooks, that is when he could pass out copies, so his testimony is not interrupted.)

Use multiple easels to display different exhibits simultaneously. There are times when the attorney needs to show two boards, so the jury can appreciate the difference or the progression without all the gyrations of changing boards. In fact, putting a visual exhibit on easel A, then a different one on B, then a new one on A, and so on keeps the show going while allowing the audience (judge or jury) to see where they have been. If a computer graphic is projected on a screen between the two easels, then a little coordination results in a multi media tour de force.

Television sets are sometimes more effective than big screen projection, and sometimes they are not. Jury analysts report jurors tend to believe what they see on television, because of their association of television with Walter Cronkite and other trusted commentators. Additionally, televisions can be seen in normal room lighting. Similarly, big screens are often associated with "Star Wars," "Indiana Jones," "Pocahontas," and other fables and fictions. On the other hand, television is very common and can become part of the background noise at home, while big screen movies promise excitement and entertainment. So, here is a guide to choosing among static boards, displays on television, and projections on a big screen:

(1) If motion is not important to the point being made, use boards on easels;

(2) If the segment depends on motion, such as a deposition or demonstration, and it is short, use the televisions because they are bright, easy on and off, and very reliable; and

(3) if the exhibit needs motion but is longer, use the big screen projection, so background distractions are reduced and the main points are clearly shown.

Remember, with any of these presentation modes, the material must be high-interest; the jury would prefer to see live cross-examination, experts defending their opinions to the death, and battles between real flesh and blood lawyers who succeed by their wits and wiles, just like on "L. A. Law," "The Practice,"and "Law and Order."

An opponent's graphics may not be altered. Counsel may not mark or edit his opponent's admitted graphic evidence or have his expert alter it. Counsel may, however, make his own copy and mark it, or overlay his opponent's original with an acetate sheet, have his expert or the opponent's expert mark the sheet, and offer the marked copy or graphic in evidence. Assuming the markings are relevant, the marked copy is as admissible as the original exhibit and should be considered by the judge or jury along with that original. There is much satisfaction by turning an opponent's graphic evidence against him by pointing out errors or inconsistencies, or by highlighting portions that support the attorney's case, especially if his expert can be enlisted in the effort.

Expert's exhibits can be attacked with the same tools used to attack expert testimony. Expert testimony can often be attacked by identifying things the expert did not do, information the expert did not consider, and assumptions the expert had to make. To the extent the expert's exhibits reflect or illustrate the opinions that suffer from these weaknesses, they may be turned to the advantage of the cross-examiner. For example, if the expert has calculated the present value of a future income stream, which requires assumptions to be made about future interest rates and inflation rates, an exhibit showing

that calculation embodies whatever assumptions the expert made about those variables. Using the expert's deposition testimony on the range of assumptions that were reasonable and the same computerized formula that generated the expert's results shown on the chart, the attorney should first have the expert "guide" him through duplicating the expert's result (displaying it side by side with the expert's own chart to show they are identical); then he should have the expert assist him in entering his chosen, reasonable alternative assumptions. The resulting chart should present the alternative assumptions next to the different results (e.g., the expert's 4.7 percent next to his $2 million, and the attorney's alternative 5.5 percent next to his $43.18). Use the opposing expert to lay the foundation for each of these additional exhibits, which are merely variations on his own, by leading him through the appropriate testimony. During such examination, it is important to emphasize through repetition that the attorney and the expert are following the same methodology as she did in creating her original exhibit.

If the attorney creates a new exhibit during expert cross-examination, he should number it and offer it in evidence. It may be merely illustrative if it has no intrinsic substantive value but merely illustrates the expert's testimony (or his cross-examination), or it may be substantive if the expert has allowed the attorney to lay the foundation for new substantive information, which is contained or displayed in the exhibit (perhaps from a "learned treatise" that the attorney has used pursuant to TRE 803(18)). Regardless of its

status, the attorney should get it numbered and admitted, even if it is for a limited purpose so he can refer to it during later examinations and closing argument.

Counsel should prepare his own expert with the ammunition to counter attempts to create new "cross-examination exhibits." He should remember to tell his expert during preparation for testimony at trial that opposing counsel may try to create new exhibits or alter the expert's own exhibits. Counsel should tell his expert that, when it is true, she can disagree with the cross-examiner's new exhibits by saying, "That's not my methodology, but I can explain further," or "That's not what I did, but I will be happy to show you my approach." The cross-examiner must rely on the hostile expert to lay the foundation for the new exhibit. Therefore, if the expert understands that, she can say, "I think your new exhibit is misleading." The court may not receive the exhibit, or the jury may not give it any weight. Of course, the expert needs to be educated that there are trigger words like "misleading, "incomplete," or "confusing," that are more effective than others in frustrating such cross-examination.

Observe the "gold and dross" rule. Many attorneys carry all documents around the courtroom as though they were as important as a brown bag lunch—papers bunched in fist, arm swinging at side, eyes on the expert or court. That is a fine way to carry an opponent's exhibit; the implicit message is the exhibit is not worth any more attention or care than that; those exhibits are the dross, the metallic impurities that are discarded during the smelting of gold. But with one's own exhibits, treat each sheet as though it was

engraved on gold foil, as though it had substantial weight, as though each time counsel looked at it he was once again impressed with its significance. Counsel should hold his exhibit in two hands as he carries it across the courtroom, or he should return it to his table or folder as though he cared about keeping it organized and undamaged. With his most important exhibits (just a few), counsel should keep his copies in envelopes and put them back into those envelopes after he asks his questions. Then, during closing argument, counsel can take them out of the envelopes again, and the jury will remember these are important.

In the closing, the attorney should review the important visual and documentary exhibits, not all the exhibits. He must avoid overwhelming the jury, especially after it has just sat through the typically overlong presentation of the entire case. Once again, the attorney should select the exhibits that make a difference, just as he selects certain testimony to emphasize. Where counsel used a series of exhibits at trial (for example, to show growth, change, or other comparisons), he should consider whether he could present the first and last exhibits in the series to help the jury remember the scope of the change or difference. Remember that merely illustrative exhibits are often excluded from the jury room; if counsel highlights those exhibits in his closing, the jury could be disappointed or confused when the illustrative exhibits are not available to them during deliberations.

With regard to PowerPoint or Corel Presentations during closing argument, remember that less is more, or it soon becomes "one damn slide after another." The technology of presentations software is seductive because it is both fun to create and because it allows the attorney to share his notes with the jury during his closing. Yet, the attorney needs to stay in touch with the jury's nonverbal cues as to interest and skepticism. If the attorney is too wedded to his prepared presentation, he is likely to lose his jury. Also, the power of the screen means the jury will likely stop paying attention to the attorney and watch the screen. They will also need time to read the screen, so he will be tempted to speak "over the top" of their reading. To avoid both the competition with the screen and the boredom of too many slides, the attorney should mix his medium. Start with talking to the jury directly, then use time lines and charts—and only a few slides of his most important pictures and documents with call-outs. And wrapping up, the attorney should turn the technology off, retake center stage, look at the jury, and talk to them. Regarding technology, less is more on closing.