CROSS-EXAMINATION OF DAMAGES EXPERTS IN CONSTRUCTION CASES:

Application of the Hippocratic Oath and Other Suggestions for the Novice and the Maven

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Overview

Dueling damages experts invariably provide testimony in large and complex construction cases whether presented to a jury, a judge, or a panel of arbitrators. As one federal judge observed, “construction cases are driven by detail and are expert dependent.” The testimony of damages experts can be instrumental in determining the amount of an award, if any, and whether “victory” is real or Pyrrhic. Indeed, in some construction cases, the principal issue may be “damages” and a damages expert may be a crucial, if not featured, witness in the presentation of the case. For example, in a termination for convenience case, the central issue may be how much is owed the contractor, meaning success is defined by whether the contractor obtains a larger or a smaller award as there may be no prospect of a zero dollar award. Because of the important role of expert testimony in construction cases, lawyers must develop the skill and judgment to be able to effectively cross-examine both technical experts and damages experts.

But cross-examination of an expert witness can be one of the most challenging aspects of a construction case precisely because those witnesses have specialized training and expertise that most examining attorneys lack. Moreover, seasoned damages experts often have far more experience in the courtroom or in arbitration hearings than the typical attorney called upon to litigate a construction dispute. Many attorneys feel uneasy when required to cross-examine

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professional witnesses. Attorneys need not be paralyzed by trepidation. As discussed below, there are approaches to examining damages experts in construction cases that can enhance the effectiveness of any cross-examination. At the very least, there are pitfalls that can be learned and attorneys can be prepared to avoid those pitfalls when cross-examining a damages expert.

Who are these damages experts in construction cases? Forensic accountants, economists, or others with financial or construction management backgrounds may be proffered as experts to quantify damages. They regularly employ seemingly complex formulae like the Eichleay formula to calculate extended home office overhead as a component of delay damages or present total cost or modified total cost claims based on detailed review of contractor estimates, job cost reports and other financial and technical information. Lost productivity experts may testify about damages attributed to the large number of change orders and base their opinions and analysis upon industry publications or studies. The ubiquitous scheduling expert who testifies in virtually every delay case as to whether the critical path of a project was delayed, the duration of the delay, and who is responsible for the delay, may support the basis of the damages expert’s opinions or pull double duty serving as the quantifier of “damages.” In any event, the

2 The so-called Eichleay formula takes its name from a decision of the Armed Services Board of Contract Appeals decided more than fifty years ago. Eichleay Corp., 60-2 BCA ¶ 2688 (ASBCA 1960). The admissibility of experts in any given case depends on the specifics of the case, the nature of the preferred expert testimony, and the rules applied to determine the admissibility of expert testimony. In particular, some jurisdictions follow the Daubert approach while others follow the Kelly-Frye approach. Compare Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 592-93 (1993) (setting forth the “Daubert” factors for the admissibility of expert testimony on scientific matters) and Kumho Tire Co. v. Carmichael, 526 U.S. 137, 140 (1999) (applying Daubert factors to determine admissibility of all expert testimony even beyond “scientific” issues) with Frye v. United States, 293 F. 1013 (Fed. Cir. 1923) (expert opinion must be based on principles that have gained general acceptance in a particular field) and People v. Kelly, 17 Cal. 3d 24 (1976).

3 Amelco Elec. v. City of Thousand Oaks, 27 Cal. 4th 228, 243 (2002) (identifying four elements that must be established to support a total cost claim); Thalle Constr. Co. v. Whiting-Turner Contracting Co., 39 F. 3d 412, 418-19 (2d Cir. 1994) (modified total cost claim upheld where the contractor’s “claim should not be defeated solely because of the complexity of the project and the vast number of delays make determination of damages difficult).

explanation of calculations made by damages experts, the reading of job cost reports, and the seeming impenetrability of some scheduling analyses do not preclude the average construction lawyer from doing a focused and effective cross-examination that scores points and advances his or her client’s case.

Although the cross-examination tips suggested below can be quite useful, they can be most effectively employed when the dynamic nature of cross-examination is understood in the context of the forum in which a matter is being adjudicated. Cross-examination does not occur in the sterile environment of a laboratory. Jurors fighting the tedium that sometimes dominates construction cases look forward to cross-examination—and though it is bound to be less exciting in real life than the “confessions” that jurors (and even judges) have seen in movies and on TV—cross-examination is expected to be more riveting than the direct examination. Because of their status as paid witnesses, jurors are more inclined to be skeptical, even critical, of expert witnesses. Juror perceptions of experts differ from those of fact witnesses. Yes, judges and arbitrators differ from jurors but, as with jurors, the best attorneys understand the differences in expectations when it comes to cross-examination of experts versus fact witnesses and look to meet those expectations and not compound the tedium.

For this reason, after discussing a number of specific cross-examination tips, the second part of this paper discusses how some of those tips might be applied when cross-examining a damages expert to bring out the drama and decrease the amount of trauma that jurors, judges, and arbitrators experience during trial or arbitration. Drama and trauma? Drama is what jurors are looking for from cross—they want the facts and they want a few sparks. Trauma refers to the fact that most jurors find trials to be incredibly boring and painfully inefficient. The strategies an examiner uses to make cross feel more “eventful” and less dull may differ depending on the
forum—whether arbitration, bench trial, or jury trial. While each of these communication situations requires some tweaking in approach, there are similarities in terms of what makes a cross sizzle and what makes it fizzle. Although the focus is on juries as the main audience in front of which cross-examination takes place, most, if not all, of the principles discussed below will generally apply to all expert cross-examination, regardless of the forum.

In applying cross-examination tips to the real world, remember that the main goals of cross-examination, from a jury psychology standpoint, are to focus on what is meaningful, memorable, and has been missed or is missing in the case at hand. These ingredients lead jurors to make sense of your case, to remember the important distinctions between your case and that of your opponent, and to see through the opinions, reports and hypotheticals that are unique to expert witness testimony. While each case is different, jurors have expressed many similar opinions in a myriad of focus group and mock trial research settings, as well as in post-trial interviews in actual trials, about what is and what is not important to them in cross-examination of experts. With that in mind, the following cross-examination tips and suggestions are offered based on what the authors have seen inside and outside the “courtroom.”

Part 1. The Catalogue of Cross-Examination Tips

A. Preliminary Considerations

Any expert cross-examination must be planned in light of the forum in which the matter is to be adjudicated. For construction cases, the two most frequent settings for a binding adjudication of a dispute are the courtroom or the arbitration hearing room. These settings and

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5 There are a number of other settings in which damages experts may testify or make presentations and be subject to full, limited or no cross-examination. These settings range from mediations, contractual or statutory non-binding arbitrations, judicial references, various types of administrative hearings usually on public works projects, to dispute review boards (“DRBs”). DRBs are a form of specialized dispute resolution developed for use in the construction industry where attorneys typically (but not always) are not allowed to directly examine witnesses but parties may request that the DRB members ask certain questions of the presenting experts. See, e.g., D. McMillan & R. Rubin,
the rules applicable to both differ significantly and influence the tools available to prepare for
cross-examination, the nature of the direct examination that is subject to cross-examination, the
ground rules concerning the cross-examination, and who will be assessing the cross-examination.

**Expert Reports:** The forum may determine whether you will receive an expert witness report setting forth the expert’s opinions to be presented to the finder of fact and the basis for those opinions. An expert report provided in advance of trial testimony (or deposition) may become one of the centerpieces for the expert’s testimony and the preparation for cross-examination. Identifying changes between an expert’s report and actual trial testimony and false assumptions in the report may be integral to a cross-examination plan.6

In federal court, a party who is offering expert testimony must provide a written report containing “all opinions to be expressed” and indicating the “basis and reasons” for each such opinion.7 Whether expert reports are required in state court depends on the jurisdiction as not all states require that testifying experts prepare written reports.8 Likewise, in arbitration, a formal expert report may or may not be required depending on the rules of the arbitral forum and what is agreed upon by the parties and the panel. In all events, an attorney needs to know whether expert reports will be required or otherwise provided and be prepared to evaluate the expert’s report as part of the cross-examination plan. Your own expert should review the opposing expert’s report and help identify weaknesses and potential points for cross-examination.

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6 Prior draft reports can be useful in cross-examination as well. Prior drafts may be discoverable under the applicable law. The Federal Rules of Civil Procedure were changed effective December 1, 2010 making drafts of a retained expert’s report not discoverable. FRCP 26.

7 FRCP 26(a)(2)(B).

8 In California, for example, parties are required to provide expert witness disclosures that provide “a brief narrative statement of the general substance of the testimony that the expert is expected to give” but preparation of an expert report is not required. Cal. Code Civ. Proc. § 2034.260(c)(2). Many experts nonetheless prepare reports in California just as they do in federal practice and such reports are subject to exchange. Id
**Expert Depositions:** Planning for the cross-examination of an expert needs to be part of the case plan from the outset of the case. Expert discovery may set the table for much of cross-examination. In addition to an expert report, the rules of the forum may allow for deposition of experts. This is certainly the case in federal court and state courts. In the arbitration setting, whether there are expert depositions depends on the arbitration agreement, the rules of the arbitral forum, the applicable law, and where allowed, are frequently by permission of the panel. In international arbitrations as well as domestic arbitrations, it is not unusual for there not to be expert depositions, thus leaving attorneys to cross-examine experts without the benefit of a prior deposition. This can be quite fun and interesting when approached properly.

If there is to be a deposition, proper preparation and game planning is required to obtain the greatest value out of the deposition process. Expert deposition tips are beyond the scope of this discussion. By way of example, you will want to decide whether to videotape the expert deposition, you will want to exhaust the expert’s opinions so you have a basis to attempt to exclude new opinions not expressed at the depositions, establish the basis for the expert’s opinions so that you are armed to more effectively prepare for trial, and establish the foundation for any motions in limine to exclude or limit the scope of the expert’s testimony. Although there are special considerations for depositions, several of the tips discussed below have some application in the deposition setting. The biggest difference is that there is no penalty for asking questions at a deposition; at trial, asking the wrong question or failing to control the expert on cross-examination can result in the expert hurting your case before the trier of fact.

**Other Formal Discovery:** When planning for the cross-examination of an expert, it may be helpful to obtain the expert’s file on the project, including all the documents and information considered by the expert and relied upon by the expert in formulating his or her opinions in
advance of cross-examination. Parties are obligated in many settings by statute, court rules, or court orders to exchange such information about experts. Whether in court or in arbitration, make sure that you have been provided everything that was to be exchanged prior to cross-examination (or the deposition). Information not provided to an expert or not considered by the expert can be the basis for effective cross-examination. Experts ordinarily must provide invoices and time sheets showing the amount of time spent on a project. These records can be woven into an examination as appropriate to show that an expert spent too little time on a project to have formed independent opinions and is serving as a mouthpiece for the opposing side. Or the invoices could show that the expert spent inordinate time on the project looking to flyspeck everything your client did to build a claim based on highly technical “gotcha” issues. Unless you obtain this information, you will not be able to assess whether and how to incorporate such information into your examination plan.

Another formal tool that can be employed, especially in litigation, is a subpoena to the opposing party’s designated experts seeking their file and other information. If the other side employs such a tactic, you may need to as well in order to level the playing field. In one case, the author was able to obtain the library of prior reports prepared by a very well known expert on projects over a twenty year period. The opposing side had sought to quash the subpoena. Based on special circumstance that may not exist in most cases, the court ordered the expert to produce more than fifty prior reports. This information proved to be a treasure trove and was instrumental in undercutting the expert. Many practitioners do not think about the use of subpoenas on experts but this tool should be considered as part of an overall discovery plan and strategy in dealing with experts in any case.
Informal Information Gathering: In addition to formal discovery, information should be gathered on the expert outside the formal discovery process. Internet searches can be conducted that frequently reveal interesting information that can be used. The prior publications of the expert and informal papers should be collected. Similarly, prior reports and transcripts of deposition and testimony from prior cases can be collected. A good checklist is the expert’s list of prior cases where the expert has testified in court or arbitrations. These lists are required to be provided in federal court and certain other jurisdictions. And the expert’s own resume may be a good starting point. Check and verify the expert’s credentials. It is not just college football coaches who exaggerate their qualifications. All of this is time consuming and should be started early in the process.

Be creative in obtaining information on an expert that you will need to cross examine. Some avenues may not be productive. Transcripts of prior testimony may not exist; some prior reports may be subject to a confidentiality order; prior arbitration proceedings may be confidential. But the available information can be gathered in many ways. A public record act request could be sent to a public agency seeking the reports of the expert prepared on a prior case. The size of the case, the nature of the case, and available time and resources, need to be considered in formulating a plan to collect information that can be used in cross-examination.

Know Your Audience: To effectively plan cross-examination, knowledge of the audience is important. In a trial setting, the approach needs to be adjusted whether it is a bench trial or jury trial. Many judges have standing rules on conducting trials that give insight into the latitude afforded counsel on cross-examination. One judge before whom counsel tried a case had a written guideline notifying counsel that the court considered any question that began with “Isn’t it true . . .” or “Isn’t it correct . . .” to be improperly argumentative. Of course, most
judges would permit that type of question on cross examination, especially of an expert. Regardless, the point is that counsel should know their judge and how he or she conducts proceedings. These types of judge-specific rules can typically be obtained by inquiring of the courtroom clerk. If you have not appeared before the judge who will be conducting the proceeding, it can be helpful to attend a day of trial in another case to see how the judge handles examination or at least inquire of other attorneys who have appeared before the judge.

Obtaining similar information about the arbitrators and the chair of a multi-arbitrator panel can facilitate effective examination. At the preliminary conference with the arbitrators, you can ask how the arbitrators prefer to have cross examination conducted and how they wish to have objections handled. Of course, most arbitrators are not bashful about advising counsel about how the panel would like to see the proceeding conducted.

In terms of knowing your audience and the rules of how the evidence will be admitted, it is critical to know whether direct expert testimony will be submitted in writing, whether the report will serve in lieu of direct or will be supplemented with limited direct, or whether expert testimony will be fully put on through traditional direct examination. It is not unusual in bench trials for some direct testimony to be submitted by declaration and it is quite common in domestic and international arbitration to have direct testimony submitted in this fashion. The cross-examination plan should be formulated in light of how the direct is to be presented.

**Demonstrative Exhibits Used On Direct:** In many settings, counsel is entitled to review demonstrative exhibits prior to their use. They may be covered in a pretrial order of a court or arbitration panel allowing for review the morning of the day the witness is to testify or there might be a required advance exchange of anticipated demonstratives at an earlier time. Counsel should insist on review of demonstratives before they are utilized. This is important
with experts. Experts frequently testify on direct using power point slides or other demonstrative exhibits that summarize or illustrate key findings or portions of their report. Counsel should review those in advance to confirm that they are not objectionable or do not stray beyond the permissible scope of the expert’s testimony. Counsel then has time to think about how the cross-examination plan might be adjusted in light of the demonstrative exhibits to be used by the expert on direct.

B. Specific Cross-Examination Tips

The following specific tips may assist when preparing to cross examine an expert. Some of the suggestions may appear banal. The first three tips are provided to help attorneys manage the intimidation factor and to come up with an effective and manageable approach to cross examination. “Have a plan.” “Less is more.” “First do no harm.” The first is obvious but it is surprising how many cross examinations appear to plod along like a forced march more likely to break the spirit of the jury than the expert witness! The second is not as obvious but extremely important. The third admonition is worth the price of admission to any training session on cross examination. Aside from these general tips, some specific tips are offered on approaches to attacking a damages expert.

1. Have a Plan and be Prepared. The stress level associated with cross examination of an expert is inversely related to the level of advance preparation. Yes, this is painfully obvious. But it is equally painful when counsel waits until the last minute to prepare a coherent cross examination plan. Not good for the health of one’s heart!

Some obvious reminders here. Know the themes of your case and how you plan to reinforce them with your cross-examination of the expert. Have clearly defined objectives. Prepare a usable cross-examination outline. For key topic areas, think about developing actual
lines of questions that allow you to control the witness. The outline should have references to the trial exhibits you plan to use, new exhibits that are to be marked, and any prior testimony from the deposition or direct that you will use for impeachment. If you are a relatively inexperienced attorney, ask to see the cross examination outline and binder of a more experienced attorney. Develop a system that works for you. But develop a system. All of the points discussed above in Part 1A, Preliminary Considerations, are points to be worked into your plan and approach and many of these points are long lead items that are developed and executed months (and in some cases years) before the actual examination of experts at trial.

Without a plan and without a suitable level of preparation, it will be difficult to control a capable and experienced expert witness. The goals of your examination will become less likely to be met. You as an attorney may lose credibility before the judge or the jury and your case may suffer if your performance suffers because your examination drifts without a plan. Failure in cross-examination of a witness can be very painful and demoralizing. Success in cross examination of a skilled expert can be quite gratifying and be critical to the outcome of a case. In fact, when armed with a plan and prepared to execute, the examination of an expert can be quite fun (and the best attorneys usually enjoy what they do). Although President Richard Nixon suffered serious shortcomings, the following admonition concerning crisis response is apropos to cross examination: “The ability to be cool, confident, and decisive in crisis is not an inherited characteristic but is the direct result of how well the individual has prepared himself [or herself] for the battle.” ⁹ So too with cross-examination. Preparation is word one.

2. **Less Can Be More.** One of the biggest mistakes made by inexperienced (and many experienced) trial lawyers is to try to accomplish too much during cross-examination. Examining counsel need not take on every point made by an expert. Especially in a jury trial, a

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⁹ Leonard Roy Frank, Quotationary at 641 (1998)
few well chosen points that undermine the expert’s credibility, expertise, or the reliability of the analysis or highlight bias may suffice. If you have an expert who will be rebutting the positions asserted by your opponent’s expert, you can leave much of the heavy lifting to your expert who can explain the fallacies of the opposing expert’s positions. You can then focus on more limited, persuasive points. Recognizing that selected cross-examination may be more effective and sufficient may reduce the stress of preparation and make the cross-examination plan more manageable.

In one case handled by the author, the opposing side’s damages expert made a big point about the failure of the contractor to consistently code costs reflected on the job cost reports and the lack of mathematical (if not scientific) precision in the financial records relied upon by the contractor in asserting its damages claim. In some cases, this can be problematic for a contractor’s damages claim. In this case, however, a short and simple cross examination sufficed to undermine the damages expert without even going into the details of the expert’s analysis. In essence, the cross established that the expert had spent hundreds of hours preparing his analysis, carefully checked his computations, then highlighted a significant mathematical error in the expert’s own damages calculation that inured to his client’s benefit. It was enough that the expert who had been highly critical of the precise accuracy of records maintained by the contractor in the crunch to actually build a project did not even live up to his own standards when performing a forensic (less frenetic) analysis of damages. Examination short. Damage done. Mission accomplished.

Put another way, the best lawyers are able to pick their spots when cross examining an expert. Three to five notable points clearly developed in cross examination may be worth more

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10 See, e.g., Sunshine Constr. & Eng’g, Inc. v. United States, 64 Fed. Cl. 346, 371 (2005) (government’s expert explained why plaintiff’s approach to “measuring lost productivity was not recognized as an accepted approach by his peers or by any trade association”).
than a day and half of rambling cross examination. Judgment needs to be developed and
exercised in deciding what to pursue and what to leave for attack by your expert or in argument.

Time for cross-examination varies; frequently, cross-examination of the expert will be
much shorter than the direct. Occasionally, the cross-examination will take as much time as the
direct and in limited circumstances it may take longer. Usually, a long cross examination means
it is not going well or the expert is so bad that you are able to lead him or her around by the nose
and destroy the other side’s case. When developing the cross examination plan for an expert,
remember that less can be more.

3. **The Hippocratic Oath and The Examination of Damages Experts.** “As to
diseases, make a habit of two things: to help, or at least do no harm.”\(^{11}\) In its shortened and
colloquial version, the Hippocratic Oath is often boiled down to the statement: “First do no
harm.” These are words to live by when preparing and conducting cross examination of a
damages expert or any witness. This principle needs to be considered and reflected in all aspects
of the examination outline.

How does an attorney harm the client’s case when examining an adverse expert witness?
The single biggest mistake is allowing the cross-examination to become a continuation of the
direct examination – a cross that unintentionally reinforces the opposing party’s themes,
enhances the credibility of the expert, and allows the expert to spring the many traps planted for
the cross-examiner. Many cross-examinations just make things worse. The examining attorney
never gains control of the witness. Worse yet, the cross-examiner continues to flail away
determined to “win” or “make his or her points.” The cross-examiner slavishly proceeds through
a twenty page cross-examination outline with the expert conceding nothing and demonstrating

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\(^{11}\) Leonard Roy Frank, Quotationary at 600 (1998). The quote in the text is ascribed to Hippocrates, the Greek
physician who lived between 460 and 377 B.C. A fuller version of this has become known as the Hippocratic or
physicians’ oath, with the concept of “first do no harm” embedded within the so-called “oath.” *Id.*
the reasonableness of all of the opposing side’s position. Ouch! Great experts can do this to an average and even to great attorney, but only if the examiner allows the expert to do so. You can pull the plug. Let your expert highlight the fallacies and false assumptions of the other side’s expert. You do not have to ask all of the questions on your twenty page outline. Do not allow the cross examination of the expert to become a continuation or embellishment of the direct.

How does one avoid this nightmarish scenario? Three steps: (1) Effective questions that allow for control of the witness. (2) Sequencing questions, lines of questions, or subject matters. (3) Having an exit plan. Fundamentally, cross-examination is a battle for control. Since a lawyer controls the questions, a lawyer should not lose control even with a weak judge who allows an expert to give speeches in response to questions on cross examination – but more on that below.

There are certain lines of questions that come with little or no risk and do not allow an expert to take control of the examination. For example, asking the expert to reconfirm key assumptions or facts upon which an opinion is based that may not prove to be true can be highlighted for the judge or jury. With your expert, percipient witnesses, documents and argument, you can then undercut the basis of the expert’s opinion. The fact that the expert charged for his or her services and the amount of those fees can always be elicited. In short, there are safe lines of examination. Establishing that the damages expert is relying on the opinion of others can be effective since, if those foundation opinions fall, then the damages expert’s opinions may fall as well and it may be that the opinions of other technical experts are more vulnerable to attack. Know where to access those “safe harbor” lines of questioning that pose little risk. Be prepared to shift in the event cross examination starts to disintegrate.
Thus, have in mind an exit plan. If the examination is to be cut short, how can this be achieved without you looking like you are ceding the battle to the expert? You want to have a plan of retreat and you want to execute that plan without anyone knowing that you are retreating. Roll out the safe harbors. End with a line or line of questions that puts you in control, sets up your expert to challenge the assumptions of the expert you are examining. Try to have a plan that allows you to conclude with style even when the witness is winning. The exit plan allows you to conclude in control, accomplishing some modest objectives, and without the jury knowing that you have been beaten by this witness. The worst position is to have the examination end with a five minute pregnant pause as you stumble around for something meaningful to end by announcing to the judge (and the jury) you have nothing further.

Cross examination means that you need to be flexible. Plan for the unexpected. Do not become wedded to the outline just because you invested a week creating it. Be prepared to jettison it. Be flexible and prepared to shift to the exit plan. Preparation will allow you to adjust and respond.

What to do about the judge who does not cut off the expert who gives speeches in response to every question you ask but never really answers the question? Aside from moving to strike answers as non-responsive and trying to have the judge control the witness, you need to be prepared. One strategy is to ask the combative expert some simple and straightforward questions that allow the jury to understand that the expert is simply an advocate arguing the case for his or her client. This is risky but in the right circumstances this can be effective. The second strategy is to curtail the scope of the examination, obtain the admissions on the basis for the expert’s opinions as quickly and as painlessly as possible so they can be attacked through other means, and then shift to the safe harbor questions and implement the exit strategy.
In many courts, whether a bench trial or jury trial, and in some arbitrations, counsel is on the clock. The judge may set aside a maximum amount of time for trial. Cross-examination counts against the party who is doing the cross-examination. Under these circumstances, the last thing you want is an out of control cross-examination that consumes the limited time to present your case. This is your client’s time. You do not want the opposition’s expert to continue the direct in your cross-examination on your clock. Remember: First do no harm. Your cross-examination should not be the vehicle for the opposing party’s expert to continue to sell the opposing party’s case.

4. **Assumptions Of The Expert.** One of the most important areas of cross-examination is clearly identifying the assumptions or basis for the opinions of the expert. This is important because proving the assumptions to be false undercuts the expert’s opinion. A fair amount of time can be spent on this.

For example, if the expert is testifying to the total cost method for quantifying damages, you need to understand the elements for prevailing on a total cost claim and determine which elements are to be attacked. To recover based on a total cost claim, the contractor must show four elements: “(1) the impracticability of proving actual losses directly; (2) the plaintiff’s bid was reasonable; (3) its actual costs were reasonable; and (4) it was not responsible for the added costs.”12 The examiner would want to confirm each of these points and may want to attack in particular the reasonableness of the bid. The examiner would want to confirm that the expert agrees that in order for the total cost method to be appropriate that the bid must be reasonable. Then confirm that the expert found the bid to be reasonable. Questions could be asked to establish that the expert is aware of no bid busts and reviewed the record for such items. This is all set up. If there are internal memoranda that show that entire scopes were missed and

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corresponding labor and material for such omitted scope were not included in the bid, you can show them to the expert or simply have your expert testify to such items.

As part of establishing the assumptions of the expert’s opinions, you may want to elicit concessions that, if the assumptions were not true, then the expert’s opinion would change. It is nice to get the admission from the mouth of the expert himself or herself and to use that in closing argument. If the expert admits that changed assumptions would impact the expert’s conclusions in your client’s favor, this can be very useful.

This can be illustrated by the following scenario. Assume that a contractor is seeking to recover damages for delay. One element may be material escalation. The contractor’s damages expert could be asked to confirm the assumption that an inflation factor was applied to the material prices due to the delay in performance using some sort of price index. The owner’s attorney might seek to have the expert admit that this escalation factor for delay was applied to all materials. The expert may be vulnerable to a crisp cross examination that shows with documents: (1) actual invoices for materials are below the bid price; (2) the contractor had locked in prices prior to the delay and that those prices were honored; and (3) the same materials purchased earlier in the project were actually more expensive than materials purchased later in the project. All of this may serve in the proper circumstances to greatly damage the expert’s credibility and opinions.

If an expert has made a number of assumptions at the request of counsel or based on instructions from his client, these should be noted and trumpeted. If these assumptions prove false, not only are the affected opinions damaged but the overall credibility of the expert is damaged as the expert is painted as a mouthpiece for the client.
5. **Methodology.** Cross-examination should clearly establish the methodology employed by the expert. Even if you do not directly attack the reasonableness of the methodology, you can have your expert do so. You can look for prior testimony or writings of the expert where he or she was critical of the methodology. For example, if the lost productivity expert of the contractor is using the MCAA inefficiency factors, you want to highlight prior projects, writings, testimony, or reports where he or she argued that the factors were not appropriate or overstated lost productivity.

Similarly, if your expert is using a certain methodology (e.g., the measured mile approach), you may be able to establish that the opposing expert has used that methodology in prior matters. This may validate the methodology employed by your expert and bolster the reasonableness of his or her opinions.

6. **Errors and Mistakes by the Expert.** As noted above, errors may be found in the expert’s own analysis or charts. Mathematical errors by damages experts and imbedded errors in computations that are not visible can be effectively highlighted on cross examination. Getting an expert to acknowledge errors and mistakes in their own analysis can be devastating to the expert’s credibility.\(^{13}\)

In a recent termination case tried by the author, the contractor had been terminated because a key subcontractor had been terminated by the contractor and the subcontractor had not been replaced after much delay. When the contractor finally submitted a proposal from the replacement subcontractor, it showed completion of the project long after any acceptable date. At trial, the contractor’s delay expert attempted to show that the schedule submitted showing the

\(^{13}\) *See, e.g.*, J.H. Parker Constr. Co. v. United States, No. 07-183C, 2009 BL 235539 at 24 (Fed. Cl. Oct. 30, 2009) (expert who testified in support of contractor’s total cost claims was not credible in part because on cross examination the expert “conceded that he had made a significant mathematical error” in assessing the reasonableness of the contractor’s bid).
late date was not being properly considered by the owner in making the termination decision. In essence, the contractor’s expert testified that when the schedule was properly considered the work would be completed based on the expert’s restatement of the schedule not using late completion dates. There was one problem. In the rush to complete this chart for rebuttal testimony, the expert inadvertently failed to include about 20% of the total hours that were budgeted. Needless to say, when this mistake was pointed out, an otherwise very credible and effective expert’s testimony was sapped of any vitality. This shortcoming in this last minute rebuttal exhibit was identified by the owner’s expert during a break in the examination, which highlights the importance of keeping your expert around even after he or she is done testifying.

7. **Confirm Assumptions Made By Your Expert.** There may be certain assumptions that are made by your expert that can be confirmed through the examination of an adverse expert. This reduces the range of issues and may enhance the credibility of your expert. This is also good fodder for closing argument.

8. **Failure to Consider Facts and Evidence.** One effective approach can be to establish that the expert did not consider all of the pertinent information. In a large case, many times experts are not given access to all of the documents or their file only includes a subset of the documents or those given by counsel. Likewise, the expert may not have reviewed all seventy depositions in the case, including key testimony by certain witnesses. Asking about what witnesses said or certain key documents and whether they were reviewed can illustrate that the expert’s review was far more limited than would appear from the direct examination, cannot be relied upon, and would change were such facts considered.

9. **Scope of Expertise.** Many experts are well qualified and highly educated. However, they may be stretching in terms of their qualifications. Sometimes opposing counsel
may try to have one expert serve as a universal expert on a wide array of subjects so as to limit
costs or the number of experts involved. Counsel will want to highlight the areas in which the
expert does not have real qualifications as this goes to the expert’s credibility and potential bias
where the expert is stretching to help the client on matters beyond his or her core expertise.

10. **Hypothetical Questions.** The hypothetical question is an appropriate question
for an expert. Some hypothetical questions end up in endless argument with the expert over
clarification of assumptions and qualifications. This can become a distraction. In the right
circumstances, a carefully crafted hypothetical question can be devastating or bring into sharp
focus how the expert’s opinion might change if the facts are different than assumed by the
expert. This is a technique to test the expert’s opinion and the assumptions (a concept discussed
more generally above). A well crafted hypothetical will usually be thought through in advance
of the examination and not on the fly.

Where an expert is using the measured mile approach to establish delay or lost
productivity, hypothetical questions can be used to illustrate how the outcome changes when
different assumptions are used. If an expert uses the month of May for the measured mile
because that has the highest level of productivity on the project, you can set the table for an
argument that the lost productivity is overstated through a hypothetical question that assumes
different rates of work that are in keeping with the contractor’s estimate that are lower than the
measured mile, other unimpacted portions of the work that have lower rates of progress, or other
projects performed by the contractor that never achieved the rates claimed in the measured mile.

The hypothetical question can be an effective tool to make clear the impact of various
assumptions on the expert’s opinions and conclusions. The use of multiple hypotheticals can
educate the judge, jury, or arbitrators as to the importance of certain facts that are in dispute.
11. **Bias: Expert Fees.** There often is not a lot to be made out of this as experts on both sides are compensated. But if the other side’s expert goes first and you do not put this information in the record, you can be assured that the other side will ask your expert about their fees. There will be nothing in the record to counter any argument by the other side. So if you think you are taking the high road by not wasting time as defense counsel in not asking the plaintiff’s expert about his rates and total fees, the record may be imbalanced and result in strategic conduct during argument.

**Part 2. Making Cross-Examination Sizzle Rather Than Fizzle**

The tips set forth in Part 1 provide some ideas for how to approach the mechanics of cross-examination: how to prepare; types of questions to ask; and various techniques for asking questions. Part 2 focuses more on how to really make an impact when employing those suggestions in the courtroom setting. The focus here is on presentation – the theater aspect of the practice of law. As you consider the tips in Part 1, think about how they are employed for maximum impact in light of the considerations discussed below.

**A. Make Cross-Examination Meaningful**

**Show that the expert is biased.** The opponent’s expert is a disguised advocate and that makes him or her biased by definition. Some common ways to show bias have included, for example, showing that the opposing expert is paid for his or her services, and thus is not objective. However, this point is rarely important or meaningful to jurors given that your expert is also being paid, and everyone in the courtroom is being paid more than the jurors are—a point that does not go unnoticed. Obviously you may want to consider exploring financial bias because opposing counsel may explore that in his or her case—but it is usually enough to raise it, without the voice and facial expressions that accompanying the accusatory question. “You were
PAID, for your testimony, weren’t you Dr. Jones?!” with the obligatory, “I was paid for my time counsel, not my testimony or my opinions.” That interchange typically gets a “ho-hum” from the jury. However, if the expert has been paid an inordinate amount, or a markedly different fee than your expert or attorneys in the courtroom, that can be worth asking questions about.

Further, if the expert has a consistent relationship with the party at hand, or similar sides of the same case, it could be fruitful to point that out to the jury. “Isn’t it true that you have testified for this attorney’s firm 20 times?” If the expert is a true “hired gun” and testifies only for one side of cases, then this can also be meaningful if it is clear to jurors what that means. (Jurors think all experts are hired guns so this point can be easily lost on them.)

Establishing bias can be very persuasive, especially if jurors believe that each side is presenting equally important but contradictory points (and in essence they tell us they “cross the experts out”). Jurors may lose the substance when overwhelmed with new information at a trial, and as such focus on more peripheral cues. They pick up on the more commonsense point that the expert has failed to “fairly” evaluate both sides of the case and is coming to conclusions without a thorough and objective analysis. Many studies have shown that objectivity is the most important quality of an expert, being followed by that expert’s ability to communicate the issues (and general credibility), expertise and experience, with credentials in last place. If you can show that the expert does not have a justifiable reason for assuming certain facts over others, or disregarding certain evidence, you will have a significant advantage.

**Challenge qualifications, but make it count.** Jurors are often unimpressed with critique of an expert’s credentials. As said above, it is the least important quality of an expert to a juror, and it is often something they feel unqualified to evaluate in the context of two typically highly qualified “competing” experts. Jurors can be convinced that an expert is “less than” qualified in
a couple of ways that are meaningful to jurors. First, lack of connection to the case is often a
turn-off for jurors. If the individual testifying has a tangentially related background this gap can
leave jurors thinking that the individual is not qualified, at least in this case, to offer an opinion
that helps them. In a similar way, academics who do not spend much time in the field may be
considered to be handicapped by their “ivory tower” status. Second, perhaps the expert is
missing a particular credential that is deemed important to their profession, for example, is not
licensed in the area or does not have a standard set of letters after their name. These can be
important points. A caution is in order, however. Do not disparage the expert or make any
critique of their work history “personal.” Nothing turns jurors off more to your case than a
personal attack which is unrelated to the case (the expert was out of work for a period of time
due to illness for example, or the attorney commenting on a female expert’s pregnancy, “When
was your baby due?”).

**Great preparation makes for a great cross.** Remember to thoroughly understand the
expert’s background, experience, professional registrations and publications. As noted above,
consider issuing a subpoena for the experts’ file. Use social media to search for additional
information about your expert—many times there are contradictory articles and opinions right at
your fingertips.

**B. Make it memorable**

**Be efficient and surgical.** Be efficient—the biggest pet peeve jurors have about trials is
that they move too slowly. The faster you get to your points the more jurors will be paying
attention when you make them. Don’t wait until the end of a long cross to get to your point and
expect them to remember the admission. While foundation for questioning is important, you do
not need to consider the issues chronologically or even systematically—go for the most
important points first, then consider whether to launch into less important issues. Be surgical in your approach to questions; avoid the unimportant impeachment points. Many attorneys think that the contrast between what was said in a deposition or report and what is being said in court is earth-shattering. In reality, most of the time jurors are struggling with the awkward back and forth of questions, objections, and repeated questions so much that many of the impeachment points may get lost on them. Make sure that if you are raising contradictions that they are important and memorable, not just something that can be re-stated or clarified by the expert on the stand. Repeat answers and clarify jargon in ways that are positive for your client.

**Be dynamic.** Your style is important during cross examination. Jurors literally sit up and wipe their sleepy eyes when the cross begins. Fact-finders will evaluate you, but not in the ways that you may think. They are under-impressed with your knowledge of the subject matter, because unless the expert is really poor, she will know the material better than you do. They are most impressed by your ability to selectively and skillfully take apart the expert’s position and put the problems with her opinions in focus. Be energized and crisp in your questions. Jurors will expect some fireworks, and will tolerate the “necessary roughness” of a tough cross with an expert. While being appropriately respectful, use your voice, your gestures and your posture to show that you believe in your case and can help the jurors understand the weaknesses of the expert’s position. Use your power even with renowned experts, and help them to back down from the party line (which renowned experts are more likely to do to protect their reputations).

TAKE CONTROL! While jurors dismiss very evasive experts, the idea that they are leading you around instead of you leading them is not missed. Jurors will thank you for succinctness and control by remembering what you were trying to get across.
Be visual. Remember that jurors in today’s society are comfortable with visuals. Use demonstratives in your cross to show that the expert’s point is incorrect, that calculations inflate the numbers, or are simply not in keeping with the standard methods in the field. Nothing is more boring than a damages chart with a million illegible numbers. Use his or her chart and mark it up with red ink. Create a graphic that shows that the damages figures are astronomical or microscopic compared to what is the correct figure. If you can, mix media even during cross—for example, make lists of problem areas or issues with the report on a notepad, or at a minimum do that at closing.

Remember “Just the facts ma’am.” While we date ourselves using a phrase made famous by Dragnet’s Joe Friday, it is very important to remember this phrase when cross examining an expert. Turn any testimony into a factual dispute not a dispute between the experts. If what you put into the equation is the difference in opinions, then you can show jurors that your “input” is better and thus the “output” of the equation is the better choice, based on the facts. Remember the expert’s opinion is only as good as the facts and premises on which it is based. If you can show there are incorrect facts or presumptions based on acceptance of the opposing attorneys’ facts, then you can show the opinion is incorrect, or would change based on new facts or assumptions. That is deadly, again, if you can make it clear for the jurors that that would be the case.

Use your own expert to make your point. Sometimes the most memorable testimony comes from your own expert, not during cross. The old adage, “If you don’t know the answer to the question, don’t ask it” is particularly relevant to cross-examination of an expert, particularly one that is truly an expert in his or her field of expertise. Challenging the skilled opposing expert
can allow him or her to retell the opinion to the jury. Rather, your expert may be in the best position to identify and capitalize on weaknesses in the opposing expert’s testimony.

C. Make Clear What has been Missed or is Missing

Use marginal issues to create the illusion of agreement. It is often powerful to create the illusion of agreement with you, the cross-examiner, even if the issues are somewhat marginal to the case. By co-opting the expert, the fact finder will see that even the opposing expert agrees with you. Because jurors are often less familiar than arbitrators or even judges with the subject matter (although we would argue that in some areas of the law, for example patent cases, some judges may be as unfamiliar with the territory as jurors), jurors are less able to separate a critical fact from a marginal fact, and indeed are often, as noted above, so overwhelmed that they resort to peripheral considerations or other cognitive distortions such as hindsight. The tendency to want to make a story out of the facts and to use their own experiences can lead them to make issues more important, if they have a commonsense misunderstanding, “contracts can only be changed in writing” for example. Thus, blurring of marginal points and central points can be accomplished by getting agreement from the expert on marginal issues in the case, and the expert appears to be agreeing with you.

Use the report (or lack thereof) to decrease credibility. The main way to deal with a written report is to focus on the lack of consistency and to look for contradictions. First, look for potential contradictions within the expert’s prior testimony (e.g., depositions) or in prior published articles. Second, look for contradictions among experts in the field. Third, in cases in which there are multiple damage scenarios, this situation is in and of itself disturbing to jurors who want to believe there is one way to calculate damages. Arithmetic or formulas are black and white to them, so alternate scenarios or formulas are troubling. Blurring any lines between the
“right” way and the “wrong” way to do things can help jurors dismiss the opposing expert’s testimony or at least allow jurors to “cross the experts out.” Look additionally at the testimony of experts within the other side’s camp for inconsistent or contradictory testimony to show that even they don’t all agree with each other. However, in all of the above, make sure the contrasts or contradictions are clear and are meaningful to the jurors, or they won’t amount to the relevant differences you need to win the case.

If there is no report, it can be helpful to point out that a report is, in essence, missing, despite the expert having offered his or her opinion to the attorney about the case. You may want to imply that the expert lacked confidence in his or her opinion or was reluctant to put it in writing. Jurors may assume there were parts of the report that were not helpful to the case, and thus the opposing attorney discouraged a written report, even if they were allowed in this jurisdiction to choose not to offer one. You may ask, “You reviewed these records and formed an opinion, correct? And you submitted a report to the attorney containing those opinions, right? So you did not, but you submitted notes, didn’t you? You do understand that anytime you commit anything to writing relative to your opinions I am entitled to see them, right? And isn’t it true that you did not generate a report or even have written notes, because you were concerned I would have the right to see them, correct?” The expert’s credibility is damaged if they are flustered by this line of questioning, and even more so, if they adamantly argue about the lack of need for a report.

**Conclusion**

Cross-examination is an opportunity for a skilled attorney to shine light on the ways that his side and the opponent’s side disagree—and it can be accomplished so that the ways they disagree are meaningful, memorable and it is clear what has been missed in the analysis.
Increasing the drama of your cross, while making trial less painful for jurors will give you a great advantage at trial.