



Why Trial Attorneys Need to Know Computer “Animations” vs. “Simulations” for Evidence

May 24th, 2011



Picture yourself in court getting ready to present a first-rate animation created by a professional litigation graphics company. The opposing counsel jumps up to say, “Your honor, we object to this animation since there is no foundation that it’s identical to what happened, it will confuse the jury, and it does not meet the scientific evidence requirements for admissibility.” How should you respond?

The answer is fairly clear as long as you know the difference between a computer “animation” and a computer “simulation.” A simulation is much more difficult to get into evidence than an animation. This post will describe the difference between the two and why it matters to your case. Additionally, I created a downloadable brief on the subject to provide more legal support regarding these issues.

Animation or Simulation?

The basic difference is this: If the presentation is used simply to illustrate an expert’s or witness’s description of what happened, that’s an animation and it’s considered demonstrative evidence only; i.e. it shows real evidence, but is not evidence itself. However, if an expert has to rely on a computer model or program to tell him or her what happened, that’s a simulation, and it’s “real evidence” that requires all the levels of foundation and acceptance of methods used by the expert to create the simulation before it can be admitted into evidence.

Animations Show the Expert Opinion

Under both California and Federal law, it is much easier to obtain permission to show an animation to the jury if the sole purpose of the animation is to explain a witness’s testimony in the same way a witness would be allowed to draw on butcher paper in court.

Clearly, a well-done computer animation has the potential to affect and impress a jury more than drawing on butcher paper, but the concept is the same. Rather than take a great deal of time for an expert to verbally explain a theory, an animation (like a drawing) shows the theory, usually in less time than it would take to describe it orally.

The main case in California to address the use of computer animations as demonstrative evidence is *People v. Hood* (1997) 53 CA4th 965, where the court allowed computer animation to explain



the expert's theories. However, it should be remembered that courts always have the discretion to evaluate evidence under Evid. Code § 352, to make sure it is not more prejudicial than probative, and such decisions are very difficult to overturn on appeal.

Simulations Are the Expert Opinion

Imagine a complex case involving a railroad car that overturns in a canyon and lets out a toxic cloud that rail workers and neighbors are exposed to, and some people on or near the rail car get sick while others do not. Further imagine that the rail company, in defending the suit, hires a battery of experts who create a complicated computer model to show the wind disbursement of the toxic chemicals through the canyon to try to prove that the plaintiff could not have been harmed; they create a computer-generated visualization of the canyon, the plume and the plaintiff's location, and they use it to calculate levels of toxins at the various locations. Absent the expert having created this elaborate computer model, the expert actually would have no opinion of whether the plaintiff was exposed to excessive levels of toxic chemicals or not.

In California, Sections 720 and 801 of the California Evidence Code control the admission of expert opinion. (See *People v. Leahy* (1994), 8 Cal.4th 587, 598.) Under §801 and *People v. Kelly* (1976) 17 Cal.3d 24 (Kelly/Frye test), the admissibility of the evidence will turn on whether it is "generally accepted by experts in the field." Since the simulation itself is the basis of an expert opinion, such simulation would be required to meet the standard that all such testing and simulating was done in a manner that is generally accepted in the relevant field of science.

In Federal Court such a simulation is required to meet the strict requirements of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, (1993) 509 U.S. 579, 589. The Supreme Court interpreted Federal Rule of Evidence 702 and found that "the trial judge must ensure that any and all scientific testimony or evidence is not only relevant, but reliable." The Court gave numerous factors that a party had to meet before any such scientific evidence could be allowed in court.

This strict rule regarding the use of computer simulations actually makes a great deal of sense. If the witnesses is really testifying that she has an opinion because the computer told her how it happened, it becomes absolutely key to know what information was put in the computer and how it was calculated, and whether this method of data collection and calculation is accepted; otherwise, a jury could easily be fooled by the patina of scientific credibility of the computer model.

Conclusion

If you are looking to get an animation before the jury, ask yourself these key questions:

(1) Is it intended to be for demonstrative purposes only (i.e. showing real evidence but not evidence itself)?



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(2) Is the animation used simply to illustrate the already-established opinion of an expert or witness, rather than forming the basis of their opinion?

(3) Will showing it enhance the jury's understanding of a complex issue?

If the answer is yes to all questions, you have a good chance of showing it to the jury as demonstrative evidence. However, if the intent is to provide the expert an answer to a relevant question of the case by simulating some action, the much higher standard of Daubert and Kelly/Fry will be applied, and the chance is much higher it will be excluded.

Morgan Smith is the owner of Cogent Legal, a legal graphics and consulting firm that helps attorneys present their cases in the most clear, compelling and tactical way to achieve maximum results. Cogent Legal integrates the legal expertise of a successful trial attorney with the creative and technical talent of a design firm.