



## Jurisprudence Section - 2012

### **E10 Bringing the Complex Crime Scene Into the Courtroom: Using Animation and Still Illustrations to Simplify Testimony in Criminal and Civil Litigation**

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After attending this presentation, attendees will understand the use of moving diagrams and still illustrations in the courtroom.

This presentation will impact the forensic science community by showing how a complex crime scene can be explained meaningfully to jurors through the use of demonstrative aids in the form of moving diagrams and still illustrations.

Drawings (illustrations) in cave dwellings date back to historic periods and have demonstrated many sequential events to help the observer understand the occurrence(s). These illustrations have provided us insight into the ancient world, the Renaissance period, and into the Twenty-First Century where illustrations have been animated beyond cartoonish figures into realistic people and places. The use of moving diagrams (animation) and illustrations (art) is not that common, but is becoming more so, and is highly dependent upon the accuracy of the event to be explained.

Demonstrative aides (moving diagrams/illustrative art) in jury trials are, by their very nature, a method to help juries understand what occurred during an event, be it criminal or civil.

Sometimes the event involves multiple parties or actions and necessitates more of an explanation of the facts beyond what photographs, physical evidence, charts or graphs can do. Development of animation and illustrations help the expert witness better explain the case to the triers of fact.

This presentation will show how to go about reconstruction of several officer-involved shootings and a homicide. Because of the complexity of the events, moving diagrams (animation) of each scene are digitally created representing what actually occurred. The re-creation is based upon facts from reports, photos, and detailed documentation from each scene. The accuracy of the animation/illustration is important to withstand the scrutiny of opposition motions to suppress.

The cases used as examples can be used in a variety of expert disciplines to simplify what may sound complex if only verbally presented from the witness stand. Some of the examples are in real time, accomplished by time clocks on the viewer's screen and with voice transmissions built into the diagram, such as radio calls to dispatchers. Examples involving airplane disasters, motor vehicle collisions, industry accidents, and miscellaneous cases will be shown where both illustrations and moving diagrams are used.

Some of the examples have animated figures built into the actual scene photographs of buildings, vehicles, blood patterns, and physical evidence at the scene. Some walk the viewer through a living body.

Often, moving diagrams (animation) are not as valuable a tool as an artist's rendition and illustration of the event. Illustrations also involve the development of stills based upon measurements and facts for the visual re-creation. For example, the wound path of a bullet through the body on its destructive path through vital organs could best be described in one or several artistic poses in still frames.

When to use animation and/or illustrations, along with the cost of producing the rendition will be discussed. Some renditions become very expensive.

Additional areas to be covered will be suppression motions that are often encountered from opposing counsel. Also discussed will be what happens when both sides produce moving diagrams, both quite different from each other. When two moving diagrams are presented, the one likely to survive the court's scrutiny will be the one most accurately portrayed. There can be no guesswork in the final product.

**Animated Scenes, Still Illustrations, Demonstrative Aids**