

# *Visual Persuasion*

Making the Most of Your Evidence at Trial

## **1. WHAT IS AND CAN BE USED TO VISUALLY PERSUADE JURIES?**

- a. Real or original evidence
  - i. The object itself
    - (1) Weapon
    - (2) Drugs/paraphernalia
    - (3) Stolen item
    - (4) etc.
  
- b. Demonstrative Evidence
  - i. Item of evidence not historically connected to the case but aids the fact finder by illustrating some relevant point.
    - (1) Charts
      - (a) Fingerprint comparison
      - (b) DNA comparison
    - (2) Diagrams
      - (a) Crime scene
      - (b) Sex crimes
    - (3) Photos of the crime scene
    - (4) Models
    - (5) Traffic stop videos
    - (6) Time Lines
    - (7) Organizational charts
    - (8) Summaries
    - (9) Etc.
  
- c. Documentary Evidence
  - i. Writings or recordings that may or may not have played a role in the case.
  - ii. Offered to prove their contents.
    - (1) D's written statement
    - (2) Copies of prior convictions
    - (3) Death certificates
    - (4) Etc.

## **2. WHY USE VISUALS?**

- a. Perception and Retention

- i. Picture is worth 1,000 words
  - ii. Seeing is believing
  - iii. We receive 90% of our knowledge from visual sensory impressions.
  - iv. We remember 85-90% of what we see and less than 15% of what we hear.
    - (1) Sonya Hamlin, *What Makes Juries Listen* 87 (Glasser Legal Works 1998)
  - v. Visual aids help the speaker by giving emphasis to the specific points the speaker wishes to be understood.
  - vi. Visuals help the jury by providing interesting stimulus which compels them to listen, pay closer attention; switch from audio learning to visual.
  - vii. Helps the prosecutor use movement, hand gestures, etc. which can further assist the connection with the jury.
- b. How Today's Jurors Learn
    - i. Sound bites
    - ii. Short segments
    - iii. Not used to listening to testimony over long periods of time
  - c. Technology
    - i. Digital photographs, videos, presentation software
      - (1) All make dramatic visual presentations that will engage the jurors and help them retain key information.
  - d. Successful Advocacy
    - i. Creative use of visuals is successful advocacy.
    - ii. Breathes life into your case.
  - e. Repetition, Highlighting and Details
    - i. Use of exhibits; diagrams, photos, actual items, provide an opportunity to repeat testimony and do so in greater detail.
    - ii. Gives the prosecutor a means of highlighting and focusing attention on important aspects of the case.
  - f. Creative Evidence
    - i. You create the visual evidence.
    - ii. Your imagination is the only limitation, provided you stay within the rules of evidence.
  - g. A trial attorney who does not use demonstrative exhibits during trial is at a great disadvantage because chances are the other side will effectively use them. Demonstrative exhibits help to bring the case alive and keeps the jury interested and focused on what is being presented. Demonstrative exhibits should be used

anytime the opportunity arises.

### 3. WHEN TO USE VISUALS?

- a. When *CAN* visuals be used?
  - i. At virtually every stage of the trial.
    - (1) From jury selection to closing argument.
    - (2) If the prosecutor can describe it case law supports using a visual to show it.
    - (3) “Trial counsel’s opening statements should be expanded to encourage use of visual aids and demonstrative evidence.”
      - (a) *Helping Juries Handle Complex Cases*, David V. Strawn and G. Thomas Munsterman, Judicature, Volume 65, Nos. 8-9, Page 446.
- b. When *SHOULD* visuals be used?
  - i. Complex subject matter
    - (1) Use to simplify where able
  - ii. Main Point of Case/Theme
    - (1) If it supports your theme
    - (2) Accentuate your theme
  - iii. Point out weaknesses in defendant’s case
    - (1) Show D’s testimony is factually impossible
- c. When *SHOULDN’T* visuals be used?
  - i. “Using visual aids during a trial is not risk free. You could overuse them, use something that your adversary turns against you, fumble with machines that do not work, use models that break as you are using them, and many other pitfalls. These are some of the reasons why visual aids must be carefully thought out and effectively produced. If your planning eliminates the negative aspects, the overall effectiveness of using visual aids could be tremendous.”
    - (1) James Rasicott, *Winning Jury Trials* 197 (AB Publications 1990).
  - ii. “Three universal pitfalls of demonstrative evidence are: (1) overuse; (2) failure to deliver the message; and (3) poor presentation. Alone or in combination these problems can have a ripple effect on the entire case.”
    - (1) Gary Christy, “A Storybook Approach”, *Trial* 70 (Sept 1994).

### 4. ADMITTING THE VISUAL EVIDENCE

- a. Preliminary fact determination
  - i. URE 104(a). Judge decides preliminary questions concerning admissibility of evidence

- ii. Factors judge uses in determining admissibility
    - (1) URE 104(a). Judge not bound by the rules of evidence in determining admissibility of evidence, except those relating to privilege.
    - (2) URE 104( c). Hearing on Evidentiary Question
      - (a) Hearings on the admissibility of evidence questions shall be conducted outside the hearing of the jury when:
        - (i) The admissibility of *confessions* is being decided; or
        - (ii) When the *interests of justice* so require (i.e. the judge needs to consider hearsay to decide whether to admit an exhibit); or;
        - (iii) When the *defendant is a witness* and the defendant requests it.
  - iii. URE 104(b). Order of Proof
    - (1) The judge has discretion to admit evidence subject to further proof.
      - (a) i.e. admitting expert testimony comparing a fiber sample taken from the defendant's person (Ex 1) with another piece of fiber (Ex 2), on condition that the prosecutor later establish that Ex 2 was trace evidence removed from the body of the deceased victim.
- b. Applicable Rules of Evidence
- i. Generally
    - (1) Real, documentary or demonstrative evidence is usually admissible if it is relevant, authentic and identified, passes the URE 403 test, and is otherwise admissible.
  - ii. Relevancy
    - (1) URE 402. Relevant evidence is admissible and irrelevant evidence is inadmissible, except as otherwise provided by the Constitution, court rules of Utah statute. Evidence is relevant if:
      - (a) It is *material* (is of consequence to an issue in the lawsuit) AND;
      - (b) It would make the *existence of a fact more or less probable* than without the evidence. URE 401
  - iii. Authentication and Identification
    - (1) Before an exhibit is admissible, it must be shown to be authentic and identified.

- (2) Exhibit Not Self-Authenticating
  - (a) URE 901(a). Before real, demonstrative or documentary evidence is admissible, it must be proven to be properly identified or authenticated by “*evidence sufficient to support a finding that the matter in question is what its proponent claims.*”
    - (i) Extrinsic evidence must be provided to prove identify and authentication.
  - (b) URE 901(b) Illustrations (not exhaustive list)
    - (i) Testimony of witness with knowledge.
    - (ii) Nonexpert opinion on handwriting; based on familiarity not acquired for litigation.
    - (iii) Telephone conversations
    - (iv) Public records and reports
    - (v) Etc.
  
- (3) Self-authenticating Exhibits
  - (a) URE 902. No extrinsic evidence of authenticity must be provided.
    - (i) Domestic public documents; under seal, not under seal.
    - (ii) Certified copies of public records.
    - (iii) Official publications; books, pamphlets, newspapers, periodicals
    - (iv) Trade inscriptions
    - (v) Commercial paper
    - (vi) Etc.
  
- iv. Unfairly prejudicial
  - (1) URE 403: Although relevant, evidence may be excluded if:
    - (a) It’s probative value is *substantially* outweighed
    - (b) By the danger of *unfair* prejudice
      - (i) “...Utah R.Evid. 403 is an ‘inclusionary’ rule. It presumes the admission of all relevant evidence except where the evidence has ‘an unusual propensity to unfairly prejudice, inflame, or mislead the jury.’” *State v. Lindgren*, 910 P2d. 1268, 1272 (Utah App. 1996)
  
  - (2) URE 403 does not provide grounds for suppressing evidence because it is “too good” or too powerful.”
    - (a) Beware though, of evidence that “appeals to jury’s

sympathies, arouses a sense of horror, provides the instinct to punish or otherwise may cause the jury to base its decision on something other than the established propositions of the case.” *Id.*

- v. Inadmissible for Other Reasons
  - (1) While relevant and authentic an exhibit may be inadmissible for other reasons such as it is (1) hearsay, (2) violates a privilege, (3) confusion of the issues, (4) misleading the jury, (5) undue delay, waste of time or needless presentation of cumulative evidence, etc.

## 5. HAVE A PURPOSE FOR THE EXHIBIT

- a. Visual/demonstrative evidence should advance the case, not distract.
- b. Three basic purposes that visual/demonstrative exhibits serve:
  - i. Visuals that Emphasize
  - ii. Visuals that Associate
  - iii. Visuals that Organize
- c. Emphasize
  - i. To give emphasis to some point that is at issue.
    - (1) Distance: use some type of measuring device
    - (2) Diagrams: enlarge to show detail of injuries
- d. Associate
  - i. Demonstrate the relationship between different pieces of evidence.
    - (1) Overhead map paired with street view from Google Earth.
    - (2) Trajectory path of bullet paired with where bullet jackets were found.
- e. Organize
  - i. Bring together multiple sources of information.
    - (1) Elements chart with supporting evidence from various witnesses.
    - (2) Time lines
    - (3) Relationship charts

## 6. HOW TO PREPARE EVIDENCE

- a. Gather the Evidence
  - i. Examining Evidence currently in existence.
    - (1) Visit the evidence room.

- (a) Ensure it's all there.
      - (b) Compare with police report.
    - (2) Visit the crime scene.
  - ii. Initial Evidence Evaluation
    - (1) Is it relevant?
    - (2) Can it be authenticated?
    - (3) Does its probative value outweigh any unfair prejudice?
    - (4) Any other objections?
  - iii. Initial Persuasiveness Evaluation
    - (1) What impact will the evidence have on the trier of fact?
    - (2) Show to other prosecutors, secretaries, support staff, etc. to evaluate and gage their reaction.
  - iv. Creation of the Visuals
    - (1) What significant aspects of the case need to be persuasively presented?
    - (2) What is complex and needs to be simplified?
    - (3) What is missing?
  - v. Working with an Expert
    - (1) Work closely with your experts in developing demonstrative evidence.
    - (2) Many experts are creative people with a teacher's sense of how to present complicated information in a simple and intelligible way. Both you and the expert should think of ways to supplement testimony with something tangible.
      - (a) i.e. Fingerprint examiner using an enlargement of known and unknown prints to point out the whorls and peaks of a print; or
      - (b) Forensic pathologist using a skeleton to show in three dimensions how and where the victim was injured.
- b. Placement
    - i. Where will the evidence have the most impact?
    - ii. Can it be used more than once?
      - (1) Beware of overuse.
  - c. Stipulation from Opposing Counsel
    - i. Show to opposing counsel prior to trial

- ii. Get stipulation, if possible
- d. Legal Research and Motions in Limine
  - i. In complex cases or where evidence is contested, do your research ahead of time and prepare your motions.
- e. Be Prepared with your Foundation
  - i. Legal research
  - ii. Prepare questions in advance
  - iii. Model foundations
    - (1) *Evidentiary Foundations*, Second Edition, Edward J. Imwinkelried - The Michie Co., The Bobs Merrill Co., Inc.
    - (2) *Trial Techniques - Predicate Questions*, Second Edition (1998) NDAA, 99 Canal Center plaza, Suite 500 Alexandria, VA 22314
    - (3) *Am Jur*, Proof of Facts
    - (4) Other attorneys
    - (5) Trial transcripts
- f. Organizing the Exhibits List
  - i. Smooth, logical flow
  - ii. Ensure they're all on your list
  - iii. Pre-mark your exhibits
    - (1) Coordinate with court clerk
  - iv. Before resting, double check your list and with the clerk to make sure they've been admitted.

## 7. REAL EVIDENCE

- a. What is it?
  - i. "This type of evidence includes all phenomena which can convey a relevant firsthand sense impression to the trier of fact, as opposed to those which serve merely to report the secondhand sense impressions of others."
    - (1) McCormick, *Evidence* pgs. 391 (4<sup>th</sup> Ed. 1992).
  - ii. Weapons, drugs, writings, clothing, etc.
- b. "Seeing is believing."
  - i. Appeals directly to the senses of the trier of fact.
  - ii. Possesses an immediacy and reality which gives it a particularly persuasive effect.
- c. Admissibility
  - i. See above
  - ii. Probative v. prejudicial

- iii. Judicial discretion
  - (1) “It is generally viewed as appropriate to accord the trial judge broad discretion in ruling upon the admissibility of many types of demonstrative evidence.”
    - (a) McCormick, *Evidence* pgs. 391 (4<sup>th</sup> Ed. 1992).
- iv. Foundation
  - (1) Item with a unique, one-of-a-kind characteristic; readily identifiable
    - (a) The object has a unique characteristic;
    - (b) The witness observed the characteristic on a previous occasion;
    - (c) The witness identifies the exhibit as the object;
    - (d) The witness rest the identification on his or her present recognition of the characteristic;
    - (e) The item is in the same condition as it was when he or she initially received the object.
  - (2) Other items, lacking in unique, one-of-a-kind characteristics. Items that require chain of custody verification.
    - (a) Witness received the item at a certain time and place;
    - (b) Witness safeguarded the item and what steps were taken to safeguard;
    - (c) Item was transferred to evidence custodian, lab for testing, etc.
    - (d) Item appears to be in the same condition as when initially received it and safeguarded it.
  - (3) *Evidentiary Foundations* at 66, 67.

## 8. PHOTOGRAPHIC EVIDENCE

- a. Still photographs
  - i. Additional Authority
    - (1) McCormick, *Evidence* pgs. 394-396 (4<sup>th</sup> Ed. 1992).
  - ii. Admissibility - Generally
    - (1) Evidence Rules
    - (2) Foundation
      - (a) Have the witness (it need not be the photographer) testify that the photograph is a fair and accurate representation of what it depicts.
        - (i) Whether photograph is sufficiently accurate is a preliminary question of fact for the trial court to decide. *State v. Bouillon*, 540 P.2d 1219, 1222

- (Ariz. 1975).
- (b) Any change of condition between time of crime and when photograph was taken must be explained. *State v. Peters*, 405 P.2d 642 (Mont. 1965); *State v. Lee*, 295 P.2d. 380, 381 (Ariz. 1956).
  - (c) Abuse of discretion. “...We also apply an abuse of discretion standard in determining whether the trial court reasonably determined the witness failed to properly authenticate the photograph pursuant to Rule 901 of the URE.” *State v. Horton*, 848 P.2d 708, 714 (Utah App. 1993).
- (3) Relevance
- (a) Examples of where photos have been found to be relevant.
    - (i) To rebut defense theory. *State v. Threat*, 407 N.W. 2d 766 (Neb. 1987) (angle of fatal shot)
    - (ii) To prove the degree of force. *Randolph v. State*, 562 So. 2d 331 (Fla. 1990)
- (4) Model Foundation Questions - Still Photographs
- (a) *Predicate Questions*
  - (b) *Evidentiary Foundations* at 71, 72
  - (c) *Proof of Facts*
- iii. Photograph of Injury
- (1) Photograph of plaintiff’s injured arm properly admitted into evidence. *Holmes v. Black River Elec. Co-op, Inc.*, 274 S.C. 252, 258, 262 S.E. 2d 875, 878 (1980).
- iv. Gory Photographs
- (1) *State v. Decorso*, 993 P.2d 837, 848 (Utah 1999)
    - (a) Although the photograph is relevant, may be unduly prejudicial
    - (b) “...unusually strong propensity to unfairly prejudice, inflame or mislead a jury...Consequently we have required a showing of unusual probative value before it is admissible under rule 403. In the absence of such a showing, the probative value of such evidence is presumed to be ‘substantially outweighed by the danger of unfair

prejudice.”

- (c) Factors that aid the court in determining whether photographs are too gruesome:
  - (i) color v. black and white
    - 1) “color is more disturbing”
  - (ii) enlargement or close-up shots are more disturbing and may give a distorted view
  - (iii) it is better if the photo was taken in relation to the crime and shows the victim as found
  - (iv) whether other details in the photo, aside from the victim, render the photo gruesome
    - 1) i.e. baby homicide where the baby bottle and toy were shown in the photo
- (2) Compare with *State v. Morales*, 587 P.2d 236 (Ariz 1978)
  - (a) Color slides of a rectum and anus of a deceased sodomy victim in a first-degree murder case where the Court held that the slides corroborated testimony that a hoe had been thrust into the victim’s rectum and showed an intent to torture.
  - (b) “Photographs having probative value are admissible in evidence whether they are in black and white or color...and may be admitted in evidence to identify the deceased, to show the location of th mortal wounds, to show how the crime was committed and to aid the jury in understanding the testimony of the witnesses...If the photographs have any bearing upon any issue in the case, they maybe received although they may have a tendency to prejudice the jury against the person who committed the offense. The discretion of the trail court will not be disturbed on appeal unless it has been clearly abused...”
- (3) See also:
  - (a) Photographs of victim’s naked limbs, sexual parts, and body displaying injuries were properly admitted. *State v. Edwards*, 81 Haw. 293, 916 P.2d 703 (1996).
  - (b) Autopsy photographs were not cumulative and probative value of them was not substantially outweighed by danger of unfair prejudice. *State v. Brantley*, 84 Haw. 112, 929

P.2d 1362 (Ct.App. 1996).

- (c) Gaping wounds in the murder victim's neck. *State v. Mohr*, 476 P.2d 857 (1970).
- (d) Dead child to show not accidental, but rather a premeditated murder by beating. *State v. Cobb*, 521 P.2d 1124, 1126 (Ariz. 1974).
- (e) Photographs to support pathologist's testimony. *State v. Zaerr*, 521 P.2d 1131, 1134 (Ariz. 1974).
- (f) Color slides show more realistically than black and white the deceased child's condition in involuntary manslaughter by malnutrition case. *State v. Swafford*, 520 P.2d 1151, 1164 (Ariz.1974).

v. Aerial Photographs

(1) Admissibility

- (a) There is no distinction between aerial and other types of still photographs with regard to admissibility. 57 A.L.R. 2d 1351, 1352.

(2) Model foundation questions

- (a) *Predicate Questions*, NDAA, pages 5-6
- (b) *9 Proof of Facts 199*, Proof no. 6

vi. Enlargements

(1) Admissibility

- (a) In general, enlargement of photographs are admissible if the normal foundation for still photographs is laid. 72 A.L.R. 2d 308.

(2) Uses

- (3) Handwriting (to assist experts), footprint (match with shoe, using overlay), crime scene, etc.

vii. Posed Photographs

(1) Admissibility

- (a) Based on recollection

(i) Rule

- 1) Most cases hold that a posed photograph

based on recollection of the witness is admissible to illustrate a witness' testimony, provided a foundation is laid to the effect that the photograph shows the objects and situations as faithfully represented. 19 A.L.R. 2d 877, 880.

(ii) Application

1) Motion picture re-enactment of murder and robbery by defendant. *People v. Dabb*, 197 P.2d 1 (Cal. 1949).

2) Position of persons and objects in room where homicide occurred. *State v. Ebelsheiser*, 43 N.W. 2d 706 (Iowa 1950).

(2) Assumptions

(a) When the posed photograph goes beyond recollection of the witness and makes assumptions about things, such as the placement of objects, it usually is inadmissible. 19 A.L.R. 2d. 877, 879.

viii. Mug Shots

(1) Admissibility

(a) If using to show that defendant has a criminal history, i.e. prior bad acts, then inadmissible.

(b) However:

(c) To establish identify once it is apparent the defendant changed his appearance between the time of the crime and the time of trial. *State v. Scott*, 604 P.2d 943 (Wash. 1980).

(i) Use to refute defendant's claims that he was assaulted by police officers prior to being booked.

(d) Markings and the words "mug shot" should not be used in the jury's presence. *State v. Tate*, 444 P.2d 150 (Wash. 1968).

ix. Pre-death Pictures of Homicide Victims

(1) Admissibility

(a) If the photograph is relevant and it's probative value

outweighs the unfair prejudice. URE 403.

- (b) Pre-death photograph was admitted to prove identity. *Palmer v. State*, 451 So. 2d 500 (Fla. 1984).
- (c) The use of the “alive” photo was held harmless error, if any error. *State v. Rupe*, 683 P.2d 571 (Wash. 1984).

x. Use in Trial

(1) Making a record

- (a) When or if you mark on photos, remember to speak to the appellate court.

(2) Multiple mediums

- (a) Project on screen using presentation software.

(3) Relate photo’s to diagrams.

(4) Be selective

- (i) Do not dump massive amounts of photos into evidence.

(5) Publish to the jury

- (a) Give them time to review the photographs.

b. X-Ray Photographs

i. Admissibility

- (1) URE 901(b)(9). Evidence describing a process of system used to produce a result and showing the result or system produces an accurate result.

ii. Foundation

(1) X-Ray Technician

- (a) Qualified x-ray tech;
- (b) That a certain part of the person’s body was x-rayed at a certain time and place;
- (c) That the equipment was in good working condition;
- (d) That the correct procedures were used;
- (e) That there was a proper chain of custody, if any, in the development of the film; and
- (f) That the x-ray is the one taken of the person.

- (2) Model foundations
  - (a) *Evidentiary Foundations*, pgs. 75-77
  - (b) *Predicate Questions*, NDAA, pgs. 20-21
  - (c) *11 Proof of Facts 2d*, Section 37 (Child Abuse)

iii. Additional Authority

- (1) McCormick, *Evidence*, pages 394 (4<sup>th</sup> Ed. 1992)
- (2) *Evidentiary Foundations*, pg. 77

c. Videotape Evidence

i. Foundation

- (1) Similar foundation to that of a photograph. The witness, does not have to be the photographer, testifies that the video shows the subject with reasonable accuracy. *State v. Newman*, 484 P.2d 473 (Wn. App. 1971).
- (2) URE 901(b)(9)

ii. How to Introduce

- (1) The video and audio portions of the tape are functioning properly;
- (2) The operator is trained and competent in the use of the videotape;
- (3) The audio and visual portions of the recording are authentic and correct;
- (4) No changes, additions or deletions have been made;
- (5) The video has been properly preserved;
  
- (6) The video part is clearly visible and the audio part is understandable; and
- (7) The speakers are identified.

iii. Model Foundation Questions

- (1) *Predicate Questions*, NDAA, pgs. 57-59.

**9. DEMONSTRATIONS**

a. Courtroom Demonstrations

i. Authority

- (1) The admissibility of courtroom demonstrations rests within the sound discretion of the trial court, and such evidence should be based upon conditions and circumstances substantially like the facts that are sought to be proved. *State v. Wright*, 530 P.2d 704 (Wash. 1975); *State v. Brooks*, 16 Wn. App. 536, 540 (1977).

- ii. Model Foundation
  - (1) *Evidentiary Foundations*, pgs. 142
- b. Videotaped re-enactment
  - i. Admissibility
    - (1) Filmed re-enactment has been admitted when the conditions were similar. *Streit v. Kestel*, 161 N.E. 2d. 409 (Ohio 1959).
    - (2) A videotaped or filmed reconstruction's contents must be substantially similar to the actual incident and the trial court must preview the tape or film before ruling on its admissibility. *Lau v. Allied Whistle, Inc.* 82 Haw. 428, 922 P.2d 1041 (Ct. App. 1996).
    - (3) Compare: Crime stopper re-enactment was inadmissible. *Branch v. State*, 774 S.W. 2d. 781 1989).
    - (4) McCormick, *Evidence*, 396 (4<sup>th</sup> Ed.).

## 10. COMPUTER ANIMATION REENACTMENTS

- a. Valuable Source of Evidence
  - i. "A computer-animated reenactment (CAR) is not a new classification of evidence. Primarily it is visually enhanced demonstrative evidence that is based on other evidence previously or concurrently admitted. The related evidence might be documents or testimony by lay or expert witnesses. A CAR MAY also be so technically unique and scientifically accurate as to be admissible as independent of its demonstrative evidence.
  - ii. Today's animated products arm lawyers with litigating weapons that were barely imagined a few years ago. Powerful, affordable hardware and software and multimedia integration can deliver a product as potentially convincing as eyewitness testimony. Robert Simmons and J. Daniel Lounsbery, "Admissibility of Computer-Animated Reenactments in Federal Courts" *Trial* 78 (Sept. 1994).
- b. Computer Re-creations vs. Computer Simulations
  - i. Computer **re-creations** usually show scenes relevant to the case based on eyewitness testimony or videotapes.
    - (1) It illustrates testimony.
  - ii. However, computer **simulations** show an expert's opinion and illustrate how people or things relevant to the case act or interact based on scientific

principles and formulas.

c. Computer Animated Recreations

i. Admissibility

- (1) CAR's are demonstrative evidence used to illustrate testimony and is admissible within the court's discretion.
- (2) Authentic under URE 901
- (3) URE 401 and 402 on relevancy must be met.
- (4) URE 403 on unfairly prejudicial must also be satisfied.
- (5) *Clark v. Cantrell*, 339 S.C. 369, 529 S.E. 2d 528, 536 (S.C. 2000) set forth requirements for admissibility:
  - (a) Animation is authentic under [URE 9801];
  - (b) Relevant under [URE 401, 402]
  - (c) A fair and accurate representation of the evidence to which it relates; and
  - (d) its probative value substantially outweighs the danger of unfair prejudice, confusing the issues, or misleading the jury [URE 403]
    - (i) The Supreme Court of SC went on to encourage trial courts to give a cautionary instruction that the animation represents only a re-creation of the proponent's version of the evidence.

ii. How to:

- (1) Call animator to testify about the accuracy of the graphic images in the animation.
- (2) Eyewitness is called to testify that the recreation is substantially similar to the conditions at the time of the event and that the recreation fairly and accurately represents what happened.

d. Computer Simulations

i. Admissibility

- (1) Simulations's are demonstrative evidence used to illustrate testimony and is admissible within the court's discretion.
- (2) Authentic under URE 901
- (3) URE 401 and 402 on relevancy must be met.

- (4) URE 403 on unfairly prejudicial must also be satisfied.
- (5) URE 702 and 702 must be met
  - (a) Accurate illustration of expert's opinion
- (6) Balancing test: *Datskow v. Teledyne*, 826 F. Supp. 677, 685 (W.D.N.Y. 1993)
  - (a) The mere fact that this was an animated video with moving images does not mean that the jury would have been likely to give it more weight than it would otherwise have deserved. As one commentator has observed, 'If audio or visual presentation is calculated to assist the jury, the court should not discourage the use of it...Jurors, exposed as they are to television, the movies, and picture magazines, are fairly sophisticated. With proper instruction, the danger of their overvaluing such proof is slight.'" 1 J. Weinstein & M. Berger, Weinstein's Evidence P. 403[5] at 403-88 (1992ed). *Datskow* 826 F. Supp. At 685.
- (7) *Pierce v. Florida*, 671 So. 2d 186 (Fla. App. 1996) review granted, 677 So. 2d 841 (1996), and quashed 686 So.2d 572 (1996), remanded 718 S. 806 (1997). Vehicular homicide case where prosecution used computer animation to illustrate the opinion of an accident reconstruction expert in describing how the accident occurred. *Pierce* not only distinguishes two types of animations but also outlines the foundational requirements for demonstrative computer animation used to illustrate expert opinion.
  - (a) "...the expert uses the computer not to illustrate the expert's opinion, but to perform calculations and obtain results which form the basis of the expert opinion..."
  - (b) "In order to admit a demonstrative exhibit, illustrating an expert's opinion, such as a computer generated animation, the proponent must establish the foundation requirements necessary to introduce the expert opinion. Specifically:"
    - (i) Opinion evidence must be helpful to the trier of fact;
    - (ii) the witness must be qualified as an expert;

- (iii) the opinion evidence must be applied to the evidence offered at trial; and
  - (iv) pursuant to [URE403] the evidence although technically relevant, must not present a substantial danger of unfair prejudice that outweighs its probative value.
- (c) Proponent must establish that the facts or data the expert relied upon in forming the opinion expressed by the computer animation are of a type reasonably relied upon by experts in the subject are.
- (i) The facts themselves need not themselves be admissible in evidence.
  - (ii) The reasonableness of the expert’s reliance upon the facts and data may be questioned on cross-examination.
- (d) Computer animation must be a fair and accurate depiction of that which it purports to be.
- (i) *Pierce* at 190.
- (8) How to:
- (a) To lay foundation for computer simulation based on scientific theory, following criteria must be met:
    - (i) Underlying scientific theory must be valid;
    - (ii) Technique for applying the theory must be valid; and
    - (iii) The technique must have been properly applied on this occasion.
      - 1) E.X. Martin III “Using Computer Generated Demonstrative Evidence” *Trial* 88 (Sept 1994).

## 11. DIAGRAMS, MAPS, CHARTS, AND MODELS

### a. Admissibility

#### i. URE 901. Authentication is an issue.

- (1) This type of evidence is not confusable with real evidence and are admissible on the basis of testimony that they are substantially accurate representations of what the witness is describing.

- (2) Due to potential inaccuracies, the trial court must exercise its discretion. See *Jacobson v. State*, 769 P.2d 694 (Mont. 1989).
    - (3) So long as the witness points out any inaccuracies, i.e. not to scale, and the witness has been subjected to cross examination, the exhibits have come in.
      - (a) See McCormick Sec. 213
  - ii. Foundation
    - (1) How to - like photographs, have witness testify that it is a fair and accurate description of what the item represents.
  - iii. Degree of Accuracy
    - (1) When being used to illustrate testimony, it is not necessary that it be perfectly accurate or to scale. Approximate accuracy is acceptable.
      - (a) See *Rutledge v. State*, 15 P.2d 255 (Ariz 1932), *Anthony v. State*, 540 N.E. 2d 602 (Ind. 1989).
- b. Preserving the Record
  - i. Make sure to preserve an accurate record when witness is referring to something on a chart or diagram.
    - (1) Avoid phrases like, “over here,” “at this intersection,” etc.
  - ii. Give clear directions on how to mark the diagram.
    - (1) “Using this red pen, place a “D1” where you first encountered the defendant.”
- c. Diagrams
  - i. Model Foundations
    - (1) *Evidentiary Foundations*, pgs. 62-64
    - (2) Crime Scene Diagram - *Predicate Questions*, NDAA, pg 32.
  - ii. Application
    - (1) Crime Scenes
      - (a) Photographs and diagrams of crime scene properly admitted.
        - (i) *State v. Kelsey*, 331 S.C. 50, 502 S.E. 63, 76 (1998).

- (b) Use at all stages of trial.
      - (i) Photographs
      - (ii) Overlays
      - (iii) White board
  - (2) Medical Expert
    - (a) Use sketch of body to point out injuries.
- d. Charts
  - i. Demonstrative or “Pedagogical” Summary
    - (1) Chart created by prosecutor during trial properly admitted. *State v. Olson*, 579 N.W. 2d 803 (Wis. App. 1998).
      - (a) In a 2-defendant, multi-count child sexual abuse case, the prosecutor created a 2'x3' summary chart and filled it in during the trial. Half the chart was devoted to each defendant, and for each child-victim the chart had several boxes labeled with the types of sexual contact. As the victim’s testified, the prosecutor checked applicable boxes. The trial court admitted the chart into evidence and it went to the jury. Wisconsin’s appellate court cited Wisconsin’s equivalent of URE 611(a) which reads:
        - (i) The court shall exercise reasonable control over the mode and order of interrogating witnesses and presenting evidence so as to (1) make the interrogation and presentation effective for the ascertainment of the truth, (2) avoid needless consumption of time, and (3) protect witnesses from harassment or undue embarrassment.”
      - (b) The Court agreed with the trial court that over the course of an eight day trial, two defendants, ten victims, multiple charges, the jurors needed help in sorting out the complexities of who testified to what, which victim suffered which injuries, by which defendant, etc. “Although the chart...was not a summary exhibit constituting evidence...it qualified as a ‘pedagogical device’ summarizing and organizing admitted evidence under section [URE 611(a)].” *Olson* at 806.
      - (c) The Court noted that appellate courts have split on the question of whether charts should go to the jury. They held that the trial court “reasonably exercised discretion in

admitting the chart.” *Id.*

- (d) Preparation of the chart in the presence of the jury, defense and trial counsel’s presence reduced the potential for substantial inaccuracies going unnoticed or unchallenged. *Id.* at 807.

(2) *State v. Lord*, 117 Wn. 2d. 829, 854-861 (1991)

- (a) Summary charts submitted by the prosecution can be very persuasive and powerful. Must make certain the summary is based upon and fairly represents competent evidence before the jury.
- (b) This does not preclude the fact that there may be controversy as to the evidence presented. Rather, the chart must be a substantially accurate summary of the evidence properly admitted.
- (c) Jury is free to judge the worth and weight of the evidence.
- (d) Include instruction advising the jury that the chart itself is not evidence but only an aid in evaluating the evidence.

(3) Illustrative Purposes

- (a) *Lord* distinguished between an exhibit admitted for illustrative purposes and substantive evidence.
  - (i) “When a summary or chart is used for illustrative purposes only and the jurors are instructed that the summary is not evidence, the summary should not go to the jury room. It should be utilized only during the initial presentation of testimony and/or in final argument by counsel. However, if the chart is sent with the jury, reversal is required only if, upon a review of the entire record, the court determines that the defendant was prejudiced.” (Internal citations omitted). *Id.* at 857.

ii. URE 1006 Summary Chart

- (1) “...chart submitted by the prosecution is a very persuasive and powerful tool, and must be fairly used since by its arrangement and use, it is an argument to the jury during the course of the trial.” *United States v. Conlin*, 551 F.2d 534, 538-39, (1977).

- (2) Admissibility
  - (a) “The contents of voluminous writings, recordings, or photographs which cannot conveniently be examined court may be presented in the form of a chart, summary, or calculation.”
  
- (3) Foundation
  - (a) Someone, not necessarily the creator of the chart, attests to its accuracy and explains the sources of the information summarized on the chart.
  
- (4) 1006 Chart is Evidence
  - (a) “Because summary charts are evidence Rule 1006 permits the jury to have and to hold them. *United States v. Possick*, 849 F.2d 339. The impact of those charts may well make the difference between winning and losing. In fact, having your chart in the jury room is almost as good as continuing your summation during deliberations. And it may lead to the same result.” Paul J. Fishman, *Summary Evidence*,” *Litigation* 38 (Spring 1999).
  
- (5) Additional Authority
  - (a) *United States v. Segines*, 17 F.3d 847, 854 (6<sup>th</sup> Cir. 1994)
    - (i) Summary tape of portions of underlying records in extensive wiretapping case.
  
  - (b) *United States v. Campbell*, 845 F.2d 1374, 1381 (6<sup>th</sup> Cir.) Cert. Denied, 488 U.S. 908 (1988)
    - (i) Involved a chart summarizing 36 medical files.
  
- e. Models and Duplicates
  - i. Foundation
    - (1) *Evidentiary Foundations*, pgs. 64-66
    - (2) *Tucson v. LaForge*, 445 P.2d 692 (Ariz. 1968)
      - (a) Model of large truck admissible in condemnation proceedings to explain testimony of truck driver as to how he could maneuver into loading dock.
  
  - ii. Application
    - (1) Crime Scene
      - (a) *People v. Speck*, 242 N.E. 2d 208 (1968). The defendant killed eight nurses living in a residence. The prosecution

used a full-scale model of the home with furniture and dummies representing the victims.

(2) Medical

- (a) Human skeleton model. Courts are in agreement that a model of the human body, skeleton or part thereof are admissible if the exhibit will enlighten the jury. 83 A.L.R. 2d 1097. *People v. Fitzgerald*, 29 Ca. App. 3d 296, 105 Ca. Rptr. 458 (life size mannequin to aid pathologist). *State v. Lee*, 459 N.E. 2d 910 (Ohio 1983) (anatomically correct doll to show to child victim at interview.)

(3) Replicas

(a) Stolen Property

- (i) Coil of wire that was like the one stolen by the defendant admissible as demonstrative evidence. *State v. Barrs*, 257 S.C. 193, 199, 194 S.E. 2d 708, 711 (1971)

(b) Weapons

- (i) Substitute knife allowed to be used to demonstrate how aggravated assault occurred. Original knife never recovered.
- (ii) “Demonstrative evidence may be relevant if it assists the trier of fact in understanding the nature of the crime charged or how the crime occurred...Where an original item of real evidence is unavailable, a substantially similar item may be relevant and admissible, depending upon the circumstances of the case.” (Citations omitted.) *State v. Royball*, 710 P.2d 168 (Utah 1985).
- (iii) *State v. Nelson*, 484 S.W.2d 306, 307 (1972)
- 1) “A hammer was used in making the assault, and when that hammer was not available to the State, the demonstrative exhibit was relevant to one of the issues and was helpful to the jury in determining the intent with which the assault was made.”