Original Article

The Evolution of Crime Scene Reconstruction from Proto-analysis to Holistic Analysis: A Court Case that Assisted in this Evolution

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Abstract: In 1992 a double murder in El Paso County, Colorado took the lives of Kermode and Pamela Jordan. Physical evidence strongly implicated one juvenile, but failed to establish guilt for his juvenile accomplice. The statements by both boys were ruled inadmissible, which led the District Attorney to pursue a crime scene analysis and reconstruction expert to explain to the jury that one attacker could not accomplish all of the events that took place during the crime.

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Proto-analysis in the title of this article comes from the Greek root word "protos" which means the first or earliest or original. This article considers how Crime Scene Reconstruction (CSR) has evolved from its earliest stages to present day in its ability to present a credible foundation that will withstand a court voir dire challenge. Crime scene reconstruction has also moved from, in the early days, analyzing small specific points to now doing holistic analysis of the entire incident.

"The Association for Crime Scene Reconstruction (ACSR) began in [September 18,] 1991 with a group of professionals in Oklahoma and Texas who investigated crime scenes and performed forensic analyses and comparisons on evidence from crime scenes. These professionals saw a need for an organization that would encompass an understanding of the whole crime scene and the necessity of reconstructing that scene in order to better understand the elements of the crime and to recognize and preserve evidence." [1]

The above paragraph is the short history given on the ACSR webpage. However, there is more to our history than that listed above. We had an idea of the type of organization we hoped would evolve in forming this organization. A court case in El Paso County, Colorado greatly assisted in guiding and identifying where improvement was needed in the CSR discipline.

The case from Woodland Park, Colorado was the homicide of Pamela & Kermode Jordan that occurred on December 17, 1992, a little over a year after ACSR was formed. The arrested juvenile suspects were
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Jacob Ind, the natural son of Pamela Jordan and stepson of Kermode, and Jacob's friend Gabriel Adams. Jacob hired Gabriel to kill Jacob's parents (see figures 1 & 2).



The physical evidence from the scene easily pointed to Gabriel's part in the killing, but from an evidence standpoint, Jacob's participation was not provable and required CSR analysis in order to implicate more than one attacker. The lack of evidence for Jacob's trial was not a problem at first. Both juveniles made statements to police, school officials and friends. Gabriel's statement strongly implicated Jacob's participation in the killings and the scene physical evidence supported his statements.

The prosecuting attorney felt he had an easy case for prosecution as both defendants gave statements implicating each other. However, the court judge made a decision that would change the easy prosecution case to a "what do we do now" for Jacob's case.

Due to on-going juvenile rights violations by some of the local law enforcement officers, the Judge decided to make this case a benchmark case to correct the ongoing juvenile rights violations. She issued an order that any statements that came from either of the two juveniles could not be used at either trial. Further, if either side used the juvenile's statements, to police or anyone else, in front of the jury, she would declare an instant mistrial. This decision did not alter how Gabriel's trial would be conducted, as there was a wealth of physical evidence that established his involvement, but it greatly hampered the ability to prosecute Jacob.

As this author had previously testified as a crime scene reconstruction expert for this prosecuting attorney, he was contacted to do a scene analysis. It was hoped that this analysis might overcome the lack of physical evidence that implicated Jacob's part in the killings and establish if one attacker could reasonably accomplish all of the events that occurred during this double murder.

Figure 1: Kermode & ▶ Pamela Jordan in master bedroom as found by investigators.

Figure 2: Gunshot from ▶ inside bathroom with entry and exit through bedroom wall. This physical evidence assisted in establishing the actions required more than one attacker. The prosecuting attorney decided to take Gabriel to trial first as his was the best physical evidence case. This is where the cases got interesting. The attorney for Jacob sat in Gabriel's entire trial. He then did his homework preparing a strong challenge to CSR testimony and reconstruction as an accepted discipline.

When Jacob's trial started his attorney requested a voir dire hearing. To say I was not properly prepared for this challenge is an understatement. I believe I answered some of the challenge questions very well, but many others did not. Some of the questions included: What is the accepted CSR methodology? What laws, theories, and principles direct an analysis and offer a foundation for court acceptance? Where is this discipline accepted outside of a judicial setting? What treatises had been written on this discipline and what were the names of the authors? What specific training did I have on reconstruction? Thanks to this challenge and CSR's evolution I can now answer all of these questions. However, this did not help at the time of my first voir dire hearing. The author had no knowledge of prior voir dire hearings that challenged CSR specifically as an accepted forensic discipline.

The judge made a ruling based on my testimony from the first trial, that she believed I would assist the trier of fact (the jury) in understanding what the crime scene evidence had to say about the crime. So, based on assisting the jury, I was allowed to testify at Jacob's trial.

My testimony did not directly implicate Jacob, but did show that one attacker could not have accomplished all the events that took place in the bedroom and bathroom. The crime had multiple scenes, multiple weapons, multiple victims and multiple (more than one) attackers. Before this case I had primarily analyzed the major events that might assist in understanding some important aspect of the crime. This case was one of the first that I did a complete analysis of all identified events and event segments or a holistic analysis.

At the end of my testimony, the judge excused me to travel back to Oklahoma City and then said, "The court will take a 15 minute recess." She leaned in my direction and said, "Captain Bevel, may I see you in my chambers?" At this point I was wondering what I had done wrong that she wanted to counsel me about? The judge informed me that had she not known what my testimony was going to be from the first trial on Gabriel, she might not have allowed my testimony in Jacob's. She advised me that, "you reconstruction folks need to get your act together, do research on the defense's questions and be prepared for the next voir dire challenge."

She was absolutely right and her challenge gave ACSR a direction on how to evolve to become a better discipline. Ross M. Gardner and I began research in earnest and quickly found that this was not a new discipline. In fact, CSR has a longer history than fingerprint identification use in courts of law. Many before us in multiple disciplines had identified applicable laws, principles and methodologies. All of us, "you reconstruction folks" needed to do was get our act together.

Trial Conclusion

Both Jacob Ind and Gabriel Adams were convicted of the murders of Pam and Kermode Jordan and received long prison terms. Needless to say, CSR, as an accepted discipline, was one of the areas of the lengthy appeals process. The appellant court in Colorado has held up the convictions in both trials and in so doing recognized CSR as an accepted discipline. However, the primary area the court looked to was the questions of whether the testimony would assist the trier of fact with little said on the laws, principles, theories and methodology that form the foundation of CSR. If all of these areas had been challenged in the first trial I likely would not have testified in either trial. Sometimes we get a second chance to get it right. When a second chance happens, we should take full advantage, do our homework, be prepared, and get it right!

Crime Scene Reconstruction's Long and Rich History

Thanks to many papers and texts written before and conference presentations, CSR has an answer for all of the questions raised on my first true CSR voir dire. Some of these writings include: Hans Gross in the late 1800s, Edward Oscar Heinrich in the mid 1900s, Luke May who wrote Scientific Murder Investigation in 1933, Henry T. F. Rhodes who wrote Clues and Crime in 1933, Charles O'Hara who wrote Fundamentals of Criminal Investigation in 1965, W. Jerry Chisum and Joseph Rynearson who wrote Evidence and Crime Scene Reconstruction in 1984, James W. Osterburg wrote Criminal Investigation: A Method for Reconstructing the Past in 1992, W. Jerry Chisum and Brent Turvey who wrote Crime Reconstruction in 2007, Tom Bevel and Ross M. Gardner wrote Bloodstain Pattern Analysis: With an Introduction to Crime Scene Reconstruction in 1997, now in its Third Edition, and Ross M. Gardner and Tom Bevel who wrote Practical Crime Scene Analysis and Reconstruction in 2009. A study of these writings will provide answers to all of the voir dire challenge questions that may be raised at trial.

As you can see there is a wealth of published information that is available in support of our discipline. The ultimate test within the scientific community is that our analysis should always be observable, testable, and repeatable by other CSR experts. If we provide our opinions and the foundations that support our opinions in a report, then our opinions are observable, testable, and repeatable. If the opposing expert is in disagreement they likewise should have to explain the foundation upon which they base their opinion.

Certification for Crime Scene Reconstruction

From mid 2008 to 2010 the International Association for Identification (IAI) created a certification for Crime Scene Reconstruction, which is another step forward to court recognition for CSR. ACSR offers a program to reimburse the testing application fee of \$150.00 for any active member who takes and passes the IAI CSR Certification test provided their agency will not pay the testing fee. ACSR Librarian Tom Adair has the three required texts needed for study to take the certification test. By contacting Tom Adair at sof32@comcast.net you can check out all three books. Once again, ACSR continues to evolve in support of the members and the reconstruction discipline. All you have to do is take advantage of the program by checking out the books, reading them and taking the certification test. Details on the testing process can be found by going to www.theiai.org and clicking on the certification links on the left hand column and then clicking on the link to "Crime Scene Certifications" and next go to the center right of this page which reads "Crime Scene Reconstruction Certification."

The move from a proto-analysis to a holistic analysis in CSR is ongoing, just as many other disciplines have different components that are refined through trial and error. Similarly, CSR continues to evolve and improve in the many different facets of our discipline. The recent addition of CSR Certification within the IAI is a step in this direction. When qualifying for court, I am now able to state, "I am Board Certified in Crime Scene Reconstruction." This goes a long way toward credibility, acceptance and recognition by the courts.

CSR Standardization Committee

An additional move forward was the establishment of CSR Standardization Committee by current ACSR President Charles S. DeFrance. This committee is co-chaired by Ross M. Gardner and Tom Bevel with the following committee members: Tom Adair, Guy Pierce, Tom Brady, Ludwig Benner and Mike Haag. The CSR Standardization Committee's goals are to identify terms that are accepted, recognized, and used in the CSR discipline. By identifying and publishing these terms further standardization of the discipline will result. As anyone can see, CSR is anything but a static discipline as it is continuing to evolve into a more holistic discipline. Another committee formed by President DeFrance is the Shooting Reconstruction Standardization Committee, a CSR sub-discipline. This committee is also identifying terms used specific to Shooting Reconstruction. ACSR has an annual conference to discuss, debate, and present relevant information to CSR as part of our organization's "evolution." These are exciting times to be a member of ACSR and the CSR discipline.

References

1. Association for Crime Scene Reconstruction. Web. May 2011.



