

# THE IDENTIFIER

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## IN THE NEWS

### USPS teams up with FBI to provide biometrics at 100 post offices

By Jory Heckman @jheckmanWFED of the Federal News Network November 2, 2020

The Postal Service is looking to make the most of its massive delivery network by expanding its list of services to include digital fingerprint services. Two years ago the USPS teamed up with the FBI to provide digital fingerprinting services at more than 100 post offices across the country for anyone applying for a visa, adopting a child, or applying for jobs working with children.

The program began on September 26, 2018, when USPS piloted the program at two post offices in Washington, D.C. Since then, the program has been growing rapidly, and has attracted more than 57,000 customers.

USPS started offering its fingerprint services internally to help process the employees it hires annually. Before USPS digitized its fingerprinting process, local post offices and processing facilities required new hires to get fingerprinted at nearby police stations.

USPS has processed nearly half a million fingerprints since moving to a digital platform. The huge benefit of this service is that USPS operates 31,000 post offices, and 99% of the U.S. lives within 10 miles of their nearest post office.

<https://www.fbi.gov/services/cjis/cjis-link/pilot-program-allows-electronic-fingerprint-submission-for-idhscs-at-select-post-offices> - <https://federalnewsnetwork.com/big-data/2020/11/usps-teams-up-with-fbi-to-provide-biometrics-at-100-post-offices/>

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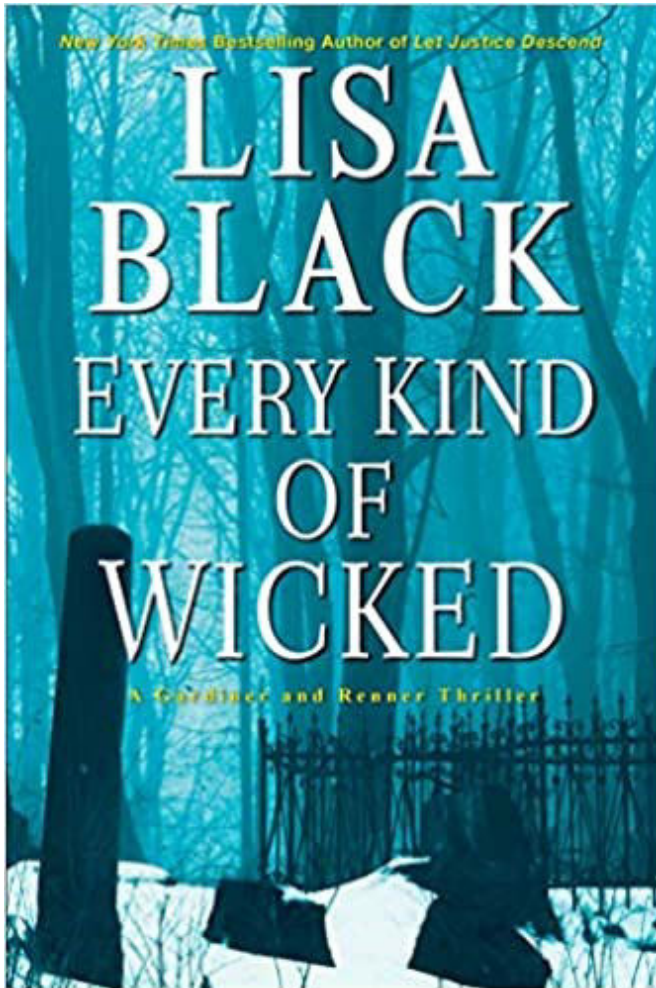


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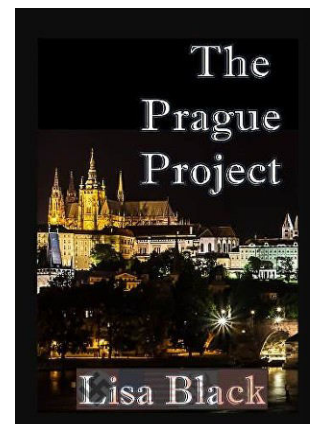
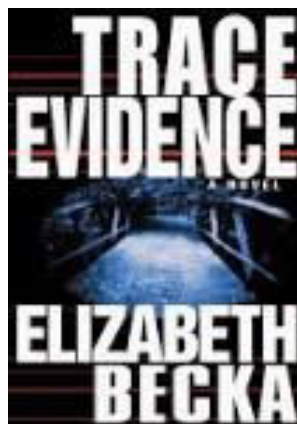
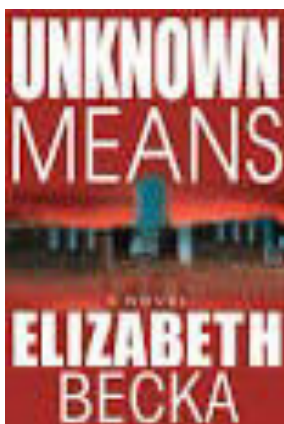


SC Division of the  
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## Fun Reads



Lisa Black is a latent print analyst and certified crime scene investigator for the Cape Coral Police Department. She was formerly with the Coroner's Office in Cleveland, Ohio. She has lectured students and officers, has testified as an expert witness over forty times and is a member of the American Academy of Forensic Scientists. Her first two books are under the pen name of Elizabeth Becka. The books are about a female forensic scientist and include real life forensic experience!

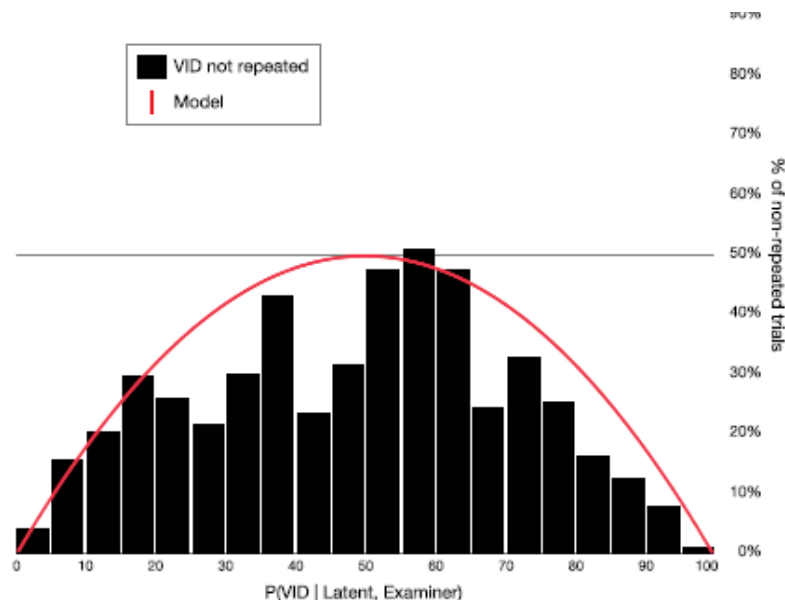


## New Latent Print Research Publication:

**“Why do latent fingerprint examiners differ in their conclusions?”** Forensic Science International 320, Nov 2020. by Hicklin RA, Ulery BT, Ausdemore M, & Buscaglia J. <https://doi.org/10.1016/j.forsciint.2020.110542>

Forensic latent print examiners are vital to criminal cases, however the accuracy of their conclusions, the ability to reproduce these conclusions, are also vital. Most difference in conclusions do not involve errors per se, but are disagreements regarding whether the information in the fingerprints being compared is sufficient to differentiate between value vs. no value, identification vs. inconclusive, or exclusion vs. inconclusive. This article attempts to answer the question, why do examiners reach different conclusions on the same comparisons? The authors attributed the differences to several factors:

- Image effects – quality of the print
- Examiner effects – what the examiner considers sufficient basis for making conclusions
- Borderline decisions using categorical conclusion scales – the authors determined that when examiners are forced to make categorical decisions near their thresholds, they are often inconsistent.
- Granularity of categorical conclusion scales – reproducibility is affected by the specific conclusion scale used. Three level scale vs. a seven level scale.





# Crime Scene Reconstruction: Beginning the Process

Written by Douglas A. Young,

**THIRTY YEARS AGO**, when I began my career in the forensic field, I often wondered how the senior crime scene investigators were able to construct such complicated and sizable cases in a way that seemed so methodically seamless. The enormous amount of evidence and information was neatly compartmentalized and flowed effortlessly as the cases were presented in court. As my career as a CSI progressed and my education, training, and experience expanded, I learned that my early mentors were using a systematic and methodical process that I would later come to know as Crime Scene Reconstruction. I quickly realized that in order to become an expert in crime scene analysis and reconstruction, my focus on the science required a wider scope. My interest and desire to learn more about the reconstructive process and to immerse myself in the subject only became increasingly intensified. I found myself wanting to reconstruct every scene I investigated – a daunting task to say the least, even for the most experienced crime scene analyst.

In this article, I will attempt to ease your fears of the complications and stresses in reconstruction by sharing some of my experiences and expertise, and by simplifying the information in a way that is beneficial to both new analysts and seasoned CSIs. Reconstruction of major cases not only demands a systematic and methodical approach, but also bears the requirement of passing judicial muster. One of the judicial questions always asked is, Was the method used scientifically valid? The methodology used in crime scene reconstruction is the Scientific Method.

## Crime Scene Reconstruction : continued

This methodology allows the analyst a systematic, structured approach to analyzing an occurrence by:

- defining a question
- forming hypotheses about an occurrence
- collecting data surrounding the occurrence
- conducting test/experimentation/analysis
- stating a conclusion regarding the occurrence

The Scientific Method helps the reconstructionist be more objective and reduce assumptions and bias. The structured approach allows for maintaining focus and being more effective. As analysts investigate an occurrence, they use the data found within to drive the conclusion and, as they refine the data, the conclusion is refined.

Objective data, evidence, and information drive an investigation from the beginning. An officer's or investigator's education, training, and experience all affect whether they may recognize something as probative within a scene. As reconstructionists, we must ask ourselves how we can help hone an officer's or an investigator's evidence-recognition skill set so that they can gather data in an investigation that results in a final reconstruction product that is the very best that it can be. We must always support our conclusions with evidence, be critical thinkers, and refuse to accept any evidence or conclusion without sufficient proof (Chisum & Turvey 2011).

At the onset of a case, the reconstructionist needs to understand that he or she will be faced with a large volume of information. This information or data may come from the crime scene, forensic reports, photographs, or a myriad of other sources. The task of organizing and filtering this information may seem overwhelming. What is done with all of this objective data? Whenever possible, this information must be placed into a framework that allows for organization and establishment of the event's chronology. While reconstructionists have varying methods for the organization of their thoughts and observations (Postit notes, 3x5 index cards, dry-erase boards, etc.), it is always important to remember that the goal of reconstruction is the same: breaking down complex problems and information into their component parts. No matter how this information is organized, one theme rings true – the use of flowcharting. Flowcharting provides the investigation with an organized, concise overview of data points, and helps the investigators, the judge, and the jury understand the data and chronology associated with a specific case.

Crime scene reconstruction requires investigators to “explain complex phenomena in areas where different theoretical laws and sets of causes intersect” (Nordby 1999). The reconstructionist is challenged to answer very complex questions in the face of large amounts of data. To demonstrate the intricacies of this statement, the analogy of assembling a 1,000-piece jigsaw puzzle comes to mind. Each piece of the puzzle is a piece of data. Each piece tells us something about the whole.

## Crime Scene Reconstruction : continued

However, not every piece always tells us something that we need or want to know about the question. We must consider the whole – every single piece of the puzzle – all the while remaining objective. We must also synthesize the incoming information in the pursuit of explaining the questions posed to us.

The contextual component in which these pieces of data are found must also be considered. Context – that is, the circumstances that form the setting for an event and the terms in which it can be fully understood and assessed – is also needed. Each piece of evidence is considered on its own, and then as part of the whole. The reconstructionist must always consider context when a new piece of evidence or information is discovered. Without context, the importance of the evidence or information cannot be fully understood. When looking at evidence and information gathered within an investigation, not only is the contextual component important, but the reconstructionist must also look at these items in a holistic, unbiased, and generalist mindset. The reconstructionist should not be invested in the outcome of an investigation, but instead should focus on continually basing investigations and analyses on sound scientific methods and principles. The reconstructionist must recognize that biases exist, and continually guard and fight against them. Peer reviews by qualified reconstructionists and audits of the information assist in safeguarding against these biases and unsupported conclusions. Events that occur within a scene cause change. These changes occur as the result of an actor (who initiated change by their action) and an action (what the actor did) (Benner & Carey 1975). The order of actions can be recognized in three basic relationships. These relationships involve something that precedes an action, something that follows an action, and something that occurs simultaneously with an action. Every event that occurs within a scene is the result of an action and every action has a cause (Gardner & Bevel 2009). It is absolutely necessary that the reconstructionist understands the concept of this cause-and-effect relationship.

The reconstructive process begins when the first call for service in a case is initiated. The first step in the chronological process, which is initiated with this call for service, is known as **absolute chronology**. Examples of absolute chronology would be a time/date stamp on body-camera footage or a 911 call. Absolute chronology deals with specific points of time. The second chronological process is **relative chronology**. Relative chronology is synonymous with the concept of the sequencing of actions, which sometimes becomes a difficult task. Here's an example of relative chronology: I am punched in the nose, my nose begins to bleed, and it continues to drip onto the floor – creating a drip pattern. As the reconstructionist, relative chronology is used to sequence these actions. The relationships between actions help us to create a sequence:

1. Struck
2. Bleeding
3. Blood impacts floor
4. Patterns created

## Crime Scene Reconstruction : continued

As a young investigator, I was always told by the senior investigators that I needed to be able to answer the five W and one H questions (who, what, where, when, why, and how). During my career, I have found it a lot harder to answer the why question more times than not. Why is not always answerable, as it goes to a person's reasoning for committing a crime; this question cannot be supported objectively by case evidence and information. Whatever the assigned role one takes in the investigation of a case, it is imperative to use the following questions to navigate the reconstructive process:

- What is the particular evidence or information?
  - What can be learned from the particular evidence or information?
  - What relationship to the crime does the of the variable/investigative questions in the case.
- 1) Define the investigative question. Be cautious of broad investigative questions.
  - 2) Collect data to resolve the investigative question. The more refined the data, the more refined the conclusion.
  - 3) Identify variables and posit hypotheses. We are identifying a viable explanation for the investigative question as well as the counter-argument to this viable explanation.
  - 4) Make predictions about what would be found if each hypothesis were true.
  - 5) Test each hypothesis against evidence and information collected in the case. This is done in the form of "if this, then that".
  - 6) Define the conclusion and repeat the process for each variable or investigative question. This is the reconstructionist's opinion as to the best explanation to the investigative question. This opinion is based on data and evidence.

I hope that this article has not only stoked interest in the area of crime scene investigation, which I hold near and dear to my heart, but also an interest in crime scene reconstruction. Additionally, I hope the article serves as a tribute to those scientists and reconstructionists, past and present, who have— through their hard work and sacrifice— provided a collective body of knowledge from which the rest of us may draw from and build upon for years to come.

*by Douglas A. Young, the owner of Triad Forensic LLC, a small forensic training and consulting business in Longmont, Colorado. He began his law enforcement career with the Gibson County Sheriff's Department in southwestern Indiana and was a crime scene technician from 1991-1998. In December 1998, Young moved to Texas and took a job with the Austin Texas Police Department as a Senior Crime Scene Specialist. While in Texas, he became a certified in Crime Reconstruction and is currently serving as the president elect. Young started the Colorado Forensic Investigators Group.*



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