



Aspects of Crime Scene Preservation and Testing the Accuracy of Forensic & Criminalistic Evidence Assertions

n our two previous articles featured in PI Magazine -- "Forensics Role in the Investigative Process" (vol. 20, issue 172, 2020) and "Criminalistics:The New Financial Frontier for Private Investigators" (vol. 21, issue 178, 2021) -- on forensics and criminalistics, we addressed how private investigative sleuths should apply select forensic and criminalistic strategies in their investigative practice. This article will focus on crime scene preservation and testing the accuracy and/or inaccuracy of forensic and criminalistic strategies.

THE BIRTH OF FORENSICS

History shows us that private detectives have been using forensic and criminalistic strategies from the very beginning. In Scotland around 1660, watchmen and constables were private citizens hired by local townships to protect life and property and investigate crimes in progress. In 1877, a French child was born who has been named the father of the forensic sciences and criminology.

That child, Edmond Lockard, while studying medicine became interested in the legal application (criminal and civil) and the science that could aid in solving criminal cases. He went on to publish over 40 pieces of work, the most famous being his seven-volume series (Treaty of Criminalistics).

In the 1850's, Pinkerton's in the United States emerged to fill an investigative void and became the largest private National Detective Agency hired as risk managers, investigators, and security officers. Riding the galloping horse of progress, criminologists have moved from fingerprint identification to DNA tagging, tire / foot printing, and fabric pattern deciphering. Astute investigative sleuths know that the path forward is to not discard yesterday's tools but to add them to today's toolkit and embrace and own the Now!

WHY FORENSIC STRATEGIES MATTER

One prime example of why forensic science needs to be part of today's investigative process is exemplified by the disadvantages associated with eyewitness evidence. Oftentimes eyewitnesses are fallible, and investigators instinctively know that testing the accuracy of assertions is the fulcrum upon which successful prosecution is constructed. There are a variety of factors that affect eyewitness testimony including: vision, physical and psychological stress, recollection, hearing, perception, bias and/ or prejudice to name a few. These and other factors can support skewed recollection, leading to unreliable testimony.

Competent investigative sleuths know the investigator's cardinal rule: "Trust but always Verify." Many law enforcement agencies and private investigative entities fully support the application and use of these new forensic and criminalistic tools and are teaching today's new generation of criminologists how to apply them. One of the authors was an instructor for Daytona State College and knows firsthand that the Florida Department of Law Enforcement's curriculum supports the use of criminalistic approaches.

VALIDATING EVIDENCE

Utilizing forensics including class & individual evidence does help validate testimonial evidence. Forensics evidence helps support a strong founda-

tion for meeting the burden of proof necessary to achieve conviction. In our article "Forensics Role in the Investigative Process," we discussed the value and difference between: CLASS and INDIVIDUAL evidence. It is important to note that individual evidence has a greater value than class evidence in that this type of evidence helps to put a suspect at the scene of the crime; and is usually irrefutable. Both class and individual evidence are helpful in both criminal and non-criminal cases.

PRESERVING THE CRIME SCENE

What does a PI need to know about preserving a crime scene and supporting the proper protocol for forensic evaluation by a CSI? The Father of the Forensic Sciences was the French criminologist Locard who gave us a blueprint to follow when preserving a crime/civil scene. Edmond Locard in the late 1800's created a handbook of principles and processes to preserve, collect and evaluate evidence. Locard's exchange principle is still taught in all accredited crime scene universities and is used today at all criminal and crime scenes. The exchange principle states: "wherever one steps, whatever one touches, whatever one leaves at the crime scene is evidence the crime scene is altered." That means evidence may have been removed through contact or non-evidence may have been deposited. This is like the Hippocratic oath of CSI: DO NO HARM. Crime scenes (civil & criminal) are consistently inconsistent because of geography, weather, and a dozen other attributes. In addition, there are primary, secondary, and multiple crime scenes (macroscopic crime scenes) you may have to deal with. The most effective method of preserving a crime scene is to first, take your time, second, be observant, and third, be methodical.

CRIME SCENE PRESERVATION STEPS

Step 1. Scan the scene--preliminary crime scene survey (take notes).

Step 2. Identify the area of the crime scene. It is always better to establish a larger scene that needed. You can always reduce the scene boundaries when new information allows.

Step 3. Secure the crime scene with tape, physical barriers, etc.

Preservation is key. Possible negative contingencies can be weather, heat, wind, rain. Be prepared.

Step 4. Develop one path for leaving and/or entering the scene that will provide the best preservation and still allow access.

Step 5. Develop a plan of action and assign personnel if needed.

Step 6. Establish a CSI Log for everyone entering or leaving the scene (no exceptions). Only needed authorized personnel should be allowed to enter. Step 7. If possible do not allow bystanders to take photos.

THE ABCS OF PHOTOGRAPHING THE CRIME SCENE

The following photographic photos & videos should be strongly con-

- Exterior Overall Photos/Videos Natural Perspective of applicable streets, autos with tags, people at scene, macro photo depicting the CSI scene with the surrounding area.
- Interior Overall Photos/Videos Natural Perspective of applicable, people at scene, hallways, rooms, etc. macro photo depicting the CSI scene with the surrounding area.
- Photographs/Videos of victims, subject, suspect person of interest in and outside of the crime scene.

PHOTOGRAPHIC SEQUENCING

- Exterior/Interior Overall Photo/Videos entire scene
- Outdoor/Indoor Mid-range photos show possible evidence with context of its surroundings
- Micro (closeup photos) of evidence
- Photos/Videos with ruler indicators and or markers showing size and or numbers to depict location of all evidence

PROCESSING THE CRIME SCENE

- CSI sketch (not to scale) Protocol for collecting and if processing is done in the field
- DNA collection Sample collection of fluids (blood, urine, saliva, semen, possible controlled substances, etc.). Presumptive testing is done in the field
- Fingerprinting use contrast powder, magnetic powder--common practice, iodine fuming--common practice.
- Adhesive use Cyanoacrylate (super glue)- effectively will permanently
 encapsulate the item. Small particles reagent can be used for outside
 moist surfaces. Ninhydrin can be effective to develop clear ridge prints
 on paper and porous surfaces

STEPS IN EVIDENCE COLLECTION

- 1. Always secure evidence in designated envelope, container, box, etc. -different container protocols depending on the evidence secured.
- 2. Always secure the packaging the container is housed in with crime scene evidence tape. Initial both ends of the tape and sign across the tape and the container to insure it is not tampered with.
- 3. Always store in a secure a location.
- 4. Some evidence, including DNA samples, needs to be refrigerated.

A FINAL THOUGHT

Information supports better decisions, which in turn champions positive outcomes. The value of supporting your case with forensics can be found by checking out Black's Law Dictionary definition of Forensics: "any evidence that either proves or disproves any matter in question." This article offers several forensic and criminalistic evidentiary-related strategies and several basic crime scene preservation protocols to help today's investigative sleuths do their job in this technology-driven millennium. The article stresses the importance of establishing strategic affiliations with fellow forensic experts to bolster company profits. It is our belief that the acronym CSI specialist denotes a person having both criminal and civil crime-related investigative expertise.

CONCLUSION

Without looking back, one will never know how far we have come. Crime scene management and general police work have evolved over the years, from the birth of fingerprints to the birth of DNA – it's been quite a journey indeed. No one really knows what is behind the curtain of time, so one can only imagine what new innovations are on the horizon. Smart knowledgeable crime scene technicians instinctively know that following the light to its source, not to its reflection is an important key to crime solving. The keys to success in securing a crime scene and using forensic and criminalistic formations is to continually test for accuracy and or inaccuracies - and to Trust, Believe, <u>BUT ALWAYS VERIFY!</u> **PI**



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Citations:

Resolution: New York State Legislature (Senate # 613 – Assembly # 599) - 1983

<u>Citation:</u> 98th U.S. Congress, Hon. Joseph P. Addabbo: - Congressional Record - 1984

Citation: Brooklyn Borough President: - 1990

<u>Distinguished Achievement Award:</u> Association of Certified Fraud Examiners - 1996



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John's published works include:

- 1. Fraud Magazine November/December 2013 Volume 28 the "Shutter Bug case" (\$800,000 Construction Fraud Scheme).
- 2. Demystifying the Investigative process, PI Magazine
- 3. Published study on Forensic Hypnosis & Memory Recall -NYPD
- Applying the Theory of learned Helplessness to Psychological development of Street prostitutes Thesis published work Nova University
- 5. ACFE article "The Shutter Bug Fraud case"
- 6. <u>Decrypting the Interrogation Process</u> Published in *PI Magazine_*-Mar/Apr 2020
- The Art of Non-Target Interviewing Published in PI Magazine Sep/ Oct 2020
- 8. <u>Forensics Role in the Investigative Process</u> Published in *PI Magazine* Nov/Dec 2020
- Criminalistics: The New Frontier for Private Investigators Published in PI Magazine - Nov/Dec 2021
- 10. Ethics and the Investigative Process Reputation is Wealth -Published in PI Magazine July/Aug 2022