



A64 Lateral Thinking in Crime Scene Investigation

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After attending this presentation, attendees will understand the nature of lateral thinking and its application to crime scene investigation.

This presentation will impact the forensic community by improving the investigative techniques of the crime scene community.

All forensic science examinations require logical thinking, creative thinking, and judgment. The latter two, however, are required at a much higher degree in crime scene investigation than in the usual crime laboratory examinations. Typically, judgment in crime scene investigation requires assessing alternate theories of the crime. Generation and development of these theories requires creative thinking. Once generated, the case theories are eliminated or confirmed using logical reasoning and empirical testing via the scientific method. The problem is these plausible theories have to be generated during emotionally draining investigations and within restricted time periods. Affirmative techniques for generating theories are needed rather than leaving that aspect to chance. A technique proposed for generating creative ideas called lateral thinking has been incorporated in some sectors of the forensic science community but is largely unknown in the majority.

The term lateral thinking was coined in 1970 by Edward De Bono to describe an approach to overcome some of the tendencies of the mind towards confirmation bias. Similar terms for the approach are "thinking outside the box," "generating alternative theories" and "contrary thinking." The value in the approach is not in its definition, however, but in its application. Published techniques for improving lateral thinking, however, are often in the abstract, obviously do not include crime scene investigation examples, and, in many cases, are irrelevant or seem to be inappropriate. Many of these mechanisms are techniques commonly used by crime scene investigators albeit with different names. And, some of the inappropriate seeming techniques may actually be of value.

The basic principle of crime scene investigation is that of evidential reasoning. The difficulty with drawing a conclusion via evidential reasoning is usually blamed on a lack of information. However, sometimes the real difficulty may be that another idea is in the way. Focusing on the origin of the bullet may cause one to miss the value of the fact it has a flat, smooth nose and thus is a ricochet. A third difficulty is that a psychological block develops when a solution is too smooth and clear. The homicide staged as a "locked door" suicide is an example in which the generation of alternative theories may be especially difficult because there seems to be no need for an additional theory if the criminal has done his job well.

Notwithstanding that logic has been taught for centuries, most crime scene investigators still have trouble applying it in a particular case and especially have trouble explaining their reasoning. Consequently, they subconsciously allow confirmation bias to occur and resist changing their minds during the investigation. The value of multiple theories is that one begins with the plausible solutions and one is more likely to keep an open mind until the conclusion. Having methodically eliminated all plausible alternative theories but one, the investigator can better defend the surviving conclusion. The technique of creating and using a theory testing chart exemplifies a straightforward, methodical example of the use of lateral thinking that is useful in not only conducting an investigation but also in explaining one's conclusions.

Illustrative cases are presented as examples in which lateral thinking proved to be of value.

Creative Thinking, Judgment, Investigation