



### D22 Gestures: Their Linkage to Veracity and Accuracy

*Robert M. Tovar, BS\*, Chicago Police Department, Forensic Services Division, P.O. Box 4476, Chicago, IL*

The goal of this presentation is to examine how the assessment of hand and arm gestures can assist in determining the veracity and accuracy of a subject's recollection or accounts of a criminal event. This may help to provide Law Enforcement or the Forensic Behavioral Science Community a clinical and objective assessment approach to determining veracity and accuracy during criminal interviews and interrogations.

This presentation will discuss a pilot study and practical application that involve the assessment of hand and arm gestures to determine accuracy and veracity during criminal interviews and interrogations, identified by this author as "Gesticular Probing." This interviewing technique evolved from a theory suggested by Professor David McNeill, of the University of Chicago, that gestures, speech, and thought are a single integrated system, and that gestures exhibit images that cannot always be expressed by speech, as well as images the speaker thinks are concealed. McNeill further relates, "Gestures are like thoughts themselves . . . they belong, not to the outside world, but to the inside one of memory, thought, and mental images."

During the pilot study, the investigator attempted to determine the differences between deceptive and truthful subjects by (1) the prevalence of specific types of gestures (metaphoric, iconic, beats, cohesive, deictic, and other gesticular activity); (2) the presence of significant features during the three stages of gesticulation (preparation/beginning, stroke, retraction/return); and (3) the overall use of gestures during the account of a criminal event.

The pilot study had subjects view a video of a criminal event and describe what they observed while being videotaped. During the pilot study some subjects were instructed to lie about something they observed. Due to the small number of subjects used in the study, analysis of the study's findings was conducted through qualitative- observations.

The results suggested that there appears to be no significant correlation between a subject's veracity and the prevalence of particular hand or arm gestures during the subject's recollection of a criminal event. What was noticed was that observing the subject's entire sequence of gestures provided information that gave the interviewer a sense of truthfulness and/or deception. In addition, an identical hand gesture was observed in three subjects who provided spontaneous mis- information (lies). This hand gesture was a palmer side down than up just before the lie was provided by the subject and was identified by McNeill as a "presentation gesture." This particular palmer side down than up gesture was detected in slow motion and could not be easily observed in "real-time." Paul Ekman may describe such behavioral activity that an individual makes unknowingly when he/she lies as "leakages" of deception.

The "Gesticular Probing" technique was used during actual criminal investigations, probing witnesses and suspect's hand and arm gestures. The subject's gestures were assessed from a continuum (beginning to end) in which each gesture becomes more detailed than the previous during the interview/interrogation process. The subject is asked to describe and illustrate in more detail what he/she has already related to the investigator. The subject will initially display a minimum of gesticular activity and tend to display more gesticular hand and arm activity as the event is described in more detail. The interviewer will peel away at this added hand and arm gesticular activity frame-by-frame and begin to get a visual image of the subject's thoughts. The "Gesticular Probing" technique is a non-intimidating style of interviewing, minimizing gesticular influence from verbal intent by the interviewer or gesticular mirroring.

During the actual criminal investigations, the investigator was able to observe gesticular displays in real-time by subjects that tend to contradict spatial or gesticular activity that appears to be mismatch with the real circumstances of the criminal event, such as how a victim was found or how a weapon was used. The investigator also found that subject's tended to over or de-emphasizes gesticular activity when providing erroneous or inaccurate information.

The traditional observations by investigators of identifying good and bad gestures or the lying and truthful type of gestures, grouping these types of gestures into clusters to make assessments of deception and non-deception, still have value to the investigator. The "Gesticular Probing" technique does not assess what may be considered a good or bad gesture; instead, it attempts to isolate gesticular behavior from a continuum of gesticular activity that may illustrate discrepancies or information that is not in sync with the factual occurrence of a criminal event. The investigator may become a more objective inquisitor and begin to read the images of the mind as McNeill suggests.

#### **Gesticular Probing, Peeling, Frame by Frame**