Intuition and Expertise
In Handwriting Analysis
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Intuition is the apparent ability to acquire knowledge without <u>inference</u> or the use of reason. "The word 'intuition' comes from the Latin word 'intueri', which is often roughly translated as meaning 'to look inside' or 'to contemplate'." Intuition provides us with <u>beliefs</u> that we cannot necessarily justify. Intuitions occur spontaneously, without reflection or pause. Naturalistic decision-making is the basis of the current practices in handwriting analysis (HWA). The task of HWA is to develop expertise by the use of those activities involving intuitive judgments by 'looking inside' the graphic features of a person's handwriting.

The chess grand master displays the unusual ability to appreciate the dynamics of complex positions and rapidly judge an approach to play as promising or fruitless. Brought into play are repertoire of thousands and hundreds of thousands of complex patterns based upon pattern recognition. They identify good moves when they recognize and execute an appropriate pattern of play without having to calculate all of the possible probabilities that are available. Decades of dedicated play are necessary to form the playing patterns contemplated and used. Intuition is the recognition of patterns stored in memory.

Identifying the perceptual and experiential cues that HW analysts use to make their judgments is difficult for the expert HW analysts to articulate and teach others. Many of these cues and patterns upon which the judgments based require the identification of the requisite HW characteristics needed to develop rationales for their use. The process of identification are founded in real world experiences of the HW analysts with the persons whose HW they examine. The relationship between a person and the environment in which they live and work, i.e. the ecological, real world interactions, is the work involved in the analysis of a person's handwriting characteristics and the personality patterns, which produce the judgments. These relations are complex and difficult to explain, define, or measure.

Research in HWA is made more difficult by the absence of optimal criteria used to evaluate and judge or validate the HW analyst's findings. The criteria for judging expertise are based on a history of successful outcomes rather than on quantitative performances. This requires peer review procedures where known experts evaluate the studies presented by HW analysts doing the research. The performance

judgments of different professionals define a consensus.

Expertise is a consensus reflecting successful performances looked upon as 'objective', repeatable, believable, and true. Shanteau (1992) said, "Experts are operationally defined as those who have been recognized within their profession as having the necessary skills and abilities to perform at the highest level" (p. 255). The performance of an expert employs an automatic, effortless process that brings promising solutions to mind and a deliberate activity in which the execution of the possible solutions are mentally simulated in a process of progressive deepening, extending, and anchoring of the meaning of a HW graphic perception associated with a particular emotion or motivational state, emotion, or behavior.

Intuitive judgments are automatic, effortless, coming to mind without the immediate critical scrutiny to justify a judgment originating from memory. They are associated with experience and manifest skills, which explore the cues that guide such judgments and conditions for the acquisition of the skills. Skilled intuitions will develop where teachers of know expertise are available to the HW neonate with sufficient regularity needed to convey the knowledge of the relevant cues and their association to known judgments. There follows-on the necessity for the person learning HWA to have the opportunity to extensively practice these skills (Ericsson, et al, (2006).

Skilled judges are not always aware of the cues that guide them. True experts know when they do not know. The determination of whether or not a judgment is correct depends upon knowing the situation surrounding the HW samples collection. Knowledge of the individuals' life circumstances and the ways the HW graphically projects the facts of the person's life determines the correctness of the HW judgments. The relations between the graphical cues and the behaviors of the person's are the sine qua non of HWA.

Good HWA skills will not develop with poor and inaccurate knowledge of the situation out of which the HW arose. Accidentally correct judgments lead to over-confidence and the illusion of skills not present. The limits of true expertise is problematic, hard to determine, and often impossible to delimit. Good teachers are hard to find, no kidding.

The comments above are based upon a paper by David Kahneman and Gary Klein (2009). Conditions of Intuitive Expertise: A Failure to Disagree. American Psychologist, Vol. 64, No. 6, 5615-526.

Shanteau, J. (1992). Competence in experts: The role of task characteristics. Organizational Behavior and Human Decision Processes, 53, 252-262.

## On the Other Hand

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The article Intuition and Expertise in Handwriting Analysis in the October-December Vanguard indicated, "Experts are operationally defined as those who have been recognized within their profession as having the necessary skills and abilities to perform at the highest level." Intuition is further defined by Simon (1992) as, "....nothing more and nothing less than recognition (p. 155)". This refers to the expert access to information stored in memory.

This model, the recognition model, relies upon two conditions constituting the basis of intuition. The first is that the environment must provide valid cues to the nature and the situation analyzed, i.e. the analyst must have information concerning the handwriting sample's origin and writer. The second condition is the associations within and between the handwriting (HW), characteristics must be available for analysis. The individual's HW sample and the behavioral cues arising out of the person's life situation are associated with each other. Skilled intuitions develop out of situations, which yield sufficient associations between the known behaviors of a person and their HW characteristics. Long term, relevant, and consistently true statements in a HW analysis are possible only with thorough knowledge of the environment in which the individual lives on a daily basis Living a long life where the person doing the living reflects upon, catalogues, and analyses their experiences is vital to being capable of assessing another person's reactions, thinking, feelings, and expectations. The handwriting itself provides the spring board off of which the HW analyst dives into the person's life through the evidence provided in the handwriting samples as well as the comparison of the handwriting imbedded in the matrices of age, gender, education, occupation, and legal status. [how does a hw analyst get this info? I rarely ever meet my clients. Or am I reading too much into your statement? Do you just mean info like age, gender, handedness, medical condition?]. Without this information base and the analyst's personal life experience with the lives and living of human beings no credible statements, concerning the environment and HW are possible. This is the critical weak point in HW analysis intuitions.

The Heuristics and Biases (HB) approach to science argues that there is an inherent

conflict in the intuitive/expertise approach to HW interpretation (Gilovich, et al, 2002). The inconsistencies in informal intuitive judgments are a major source of error. Various judges render differing conclusions using the same HW samples. The judges used inconsistent rules and associations throughout their individual analyses. This observation is termed 'boot-strapping (Goldberg 1970). Judgments based upon statistically grounded rules for interpretation in Goldberg's first study gave more valid interpretations than when applying the same clinically derived rules inconsistently in the second sample of his study. This inconsistency illuminated the analyst's tendency to become comfortable with his or her own style of interpretation while ignoring large gaps (noise) in the available information whose relevancy could not be determined.

This nosiness involves too much irrelevant or confusing information of human experience impacts and fractures the association between the HW sample and the facts of a person's life situation. The resulting judgments are flawed.

Definitions and rules form the basis of statistical associations between a person's life situation and their behaviors with the characteristics of their HW. The control coming out of the laboratory approach to investigations limits the impact of the noise mentioned above to some degree or another. There are errors in statistics, which in themselves lead to errors in judgments, however, the range of error, and the magnitude of error is better controlled. The outstanding limitation in this approach is the at times marked limitations placed the quantity and quality on the judgments and the interpretations allowed when following the established rules, which follow on these statistical restrictions. The analytical product falls short of the requirements imbedded in the analytic pursuit, is incomplete, descriptively sparse, and many times an unsatisfactory endeavor.

The Heuristic and Biases (HB) criticism of the Intuitive Field Based Ecological Approach to HW Interpretation recommends the replacement of informal, intuitive judgments with statistical algorithms, which are a systematic problem-solving procedure, especially an established, recursive computational procedure for solving a problem in a finite number of steps. This approach ignores the vital context in which the HW occurred. There is no doubt in the writer's mind that studies in handwriting analysis need to investigate the relations between the ecological factors of an individual's life and their handwriting using statistical methods. This remains a hope for the future.

The conflict between the intuitive and heuristic-biases groups is humorous as both sides ignore their inadequacies, systematic errors, and at times stubborn refusal to come together and solve or at least mitigate their differences. They have yet to combine their best efforts in the service of either science or the common good for

people. The fusion of both approaches remains an accomplishment for the future.

Gilovich, T., Griffin, D., & Kahneman, D. (Eds.) (2002) Heuristics and biases. The psychology of intuitive judgment. New York: Cambridge University Press.

Goldberg, L.R. (1970), Man, versus model of man. A rationale, plus some evidence for a method of improving on clinical inferences. Psychological Bulletin, 73, 422-432.

Simon, H.A. (1992). What is the explanation of behavior? Psychological Science, 3, 150-161.