Commentary

Bodies of Knowledge

I recently attended the American Board of Forensic Document Examiners' "Paradigm Shift in Forensic Science/Daubert Symposium" held November 9 and 10, 2006 in Las Vegas, Nevada. This seminar was organized by Jan Seaman-Kelly and Derek Hammond. Congratulations to them for hosting a fine seminar that brought together a quality group of diverse speakers for those two days. We had a judge, defense appeals lawyer, firearms examiner, latent print examiners, forensic document examiners, and cognitive psychology research professors as speakers. This varied body of experts was brought together to help the examiners in each individual discipline better understand the issues within the collaborating group of forensic comparative scientists. The association of these speakers and delegates emphasizes the melding of the individual bodies of forensic comparative scientists into more of a larger united group that share interests and concerns. All the individual discipline examiners can learn from the other disciplines through collaboration of experts who share their insights, experiences, understandings, judgments, knowledge, and beliefs.

During the seminar, Dr. Itiel Dror, a cognitive psychology vision scientist and researcher, had explained that the human visual system is much more complex than the simple analogy of a camera recording detail and the brain knowing what that detail is. There is more to decision making than "I know it when I see it." Dr. Thomas Busey, also a cognitive psychology vision scientist and researcher, presented his research findings of noted differences in experts and novices, with an emphasis on experts' visual system development of configural processing. Collaborating with cognitive scientists is helping us in our understanding of perception and decision making.

While at the seminar, during a phone call home to my wife, Pammy, she challenged me to get out of the hotel after the seminar. I decided I would this time since I did not need to leave

until Saturday morning. Being in Las Vegas, there were plenty of opportunities from which to choose. As the seminar was winding down on the last day, I asked my friends and colleagues, Alice Maceo and Dr. Tom Busey, if they would like to accompany me to see "Bodies - The Exhibition" in Las Vegas. This particular type of bodies exhibition is not what you might expect in Las Vegas. A range of deceased human fetuses through adult human bodies (their organs, skeletons, circulatory system, nervous system, and other body parts) had been preserved, allowing the tissue of interest to be maintained while the surrounding tissue could be removed. See www.bodiestheexhibition.com or a variation of that exhibit at www.bodyworlds.com/index.html for detailed descriptions of these types of exhibits. After examining the preserved organs and systems of the bodies, specifically the brain and nervous system, the heart and circulatory system, kidney and renal system, and bones, my knowledge and belief of uniqueness of the patterns within nature's wondrous tapestries was reinforced. Seeing these patterns in organs and systems supported what my collaborating community of scientists have been teaching and sharing about the uniqueness of nature.

Reflecting on an early part in the tour of the exhibit, I remember having pointed out to Dr. Busey a phrase at a display that stated, if I remember it correctly, "Seeing is Knowing." He did not respond to me with any significant reaction. I wondered if he had ignored me. Upon leaving the exhibit, in the souvenir shop, high on the wall was that same statement, "Seeing is Knowing." Once again, upon pointing this out to Dr. Busey, he seemed to have ignored me once again. I figured he would have responded this second time since I had renewed my effort to get a reply. I tried not to be too puzzled.

Pondering these events, I thought of earlier visits with Dr. Busey. Having started collaborating with him in 2002, I was becoming familiar with discussions and explanations of configural processing of visual data, especially by an expert. Years ago, I had asked for a very short one- or two-sentence definition or explanation of configural processing. I still have not received those few words of information. I now know why I have not received that simple explanation of configural processing or any indication of a response about "Seeing is Knowing" from Dr. Busey. Dr. Busey also told me that after this Las Vegas seminar, he was headed to a seminar in Texas to collaborate with about 20 cognitive scientists to discuss configural process-

ing. They have relevant questions to ask and answer for each other. As I teach my forensic science students, I emphasize to them not to memorize what I teach. Know what I teach. There is more to configural processing than a one-sentence definition. There is so much more to knowledge and belief than just "seeing is knowing". As Dr. Dror said during the seminar, an expert's response of "I know it when I see it" when individualizing a latent print is not an adequate explanation. My insight was figuring out sometimes the best response is no response. I will now always remember there is more to knowing than simply seeing. There is more to knowing than a one-sentence explanation. There is more to processing visual data as an expert than a short paragraph explanation. There is so much to learn from collaborating with a variety of scientists at first-rate seminars. I was most satisfied with this resulting insight into forensic comparative science from my selection of an evening activity of observing bodies in Las Vegas. Thanks to Jan and Derek for the wonderful seminar and to my wife for encouraging me to see more of Las Vegas than the seminar hotel.

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