

## Introduction to the Woodworth Article

ELSEWHERE in this issue I stated that the Ken Holt series had major impacts on my thinking. One example of such impact is the conclusion I reached about fingerprints, as set out in the article following this introduction.

The seed for this article was planted by Sam Epstein in a Ken Holt book, THE RIDDLE OF THE STONE ELEPHANT, which I first read as a child in 1956. As most readers of this magazine will immediately agree, fingerprinting is thought to be an exact science, and the use of fingerprints in identification is a frequent theme in many mystery and adventure stories.

However, in the Ken Holt book just mentioned, there's a slight murmur of caution, but frankly I doubt if anyone but me noticed it.

In a chapter called "Whose Fingerprint?," Ken Holt and Sandy Allen want to identify the person who tore out a key section of the only remaining old issue in the back files of a smalltown newspaper. After deciding that the fingerprints of the culpable person are in the dust of a window ledge in the old newspaper office, they photograph those prints and those of several other people, and take them in to a large city where they hope that someone with Global News Service may be able to make a proper comparison. Their newspaperman contact refers them to a cop, a detective captain who specializes in such evidence. Now, the following passage touches on the matter very, very subtly, but from the first moment I ever read it, it seemed to me that the author was murmuring, so faintly you almost couldn't hear, that maybe fingerprints weren't quite as cut and dried a form of identification as everyone else would have us think. Here's the passage from the book:

"Two different prints on this one," Steiner grunted as he used the magnifying glass ... "Hmmm." He looked even more carefully as the boys moved closer. "One of them..."

"Does it match?" Ken asked ..."

Close enough to warrant a better inspection." Steiner crossed the room with Banner and the two boys close behind him. On a table near the far wall stood a projector into which he slid both negatives ...

Reaching behind the projector to a switch on the wall, Steiner turned off the room lights and then flicked the switch of the projector. A rectangle of light appeared on the far wall where a screen was fastened. Steiner manipulated the controls, and the negatives were moved around until a thumbprint from the windowsill was directly

beside a thumbprint from the cigarette case. Then he focused the machine until the images were clear and distinct and almost two feet tall.

"Look the same to me," Sandy said... For almost a minute Steiner studied the two prints. He walked forward and looked at them closely, keeping to one side to stay out of the beam of light. When he turned, he was shaking his head.

"No. They're not the same."

This, I remember thinking, is extraordinary. The two fingerprints are so close to identical that only after considerable examination of images blown up to TWO FEET in height — can this expert finally declare that they came from two different human beings.

I thought: What if the expert wanted to believe that they came from the same person?

I thought: What if Sandy Allen, who thought they looked identical, was on a jury deciding the fate of someone who was accused on this basis?

As years passed, I paid more attention to the subject of fingerprints. A radio station I worked at for a long time regularly received a slick newsletter called the "FBI Law Enforcement Bulletin," and every issue contained a feature on hard-to-classify fingerprints. I pored over this material.

As decades passed, I picked up here and there in used bookstores, several volumes relating to criminology and fingerprinting. The more I studied this material, the more convinced I became that while it was probably true that no two persons anywhere in the world had ABSOLUTELY IDENTICAL prints, in real-life situations where there were partial prints, or blurry prints, or exceedingly faint prints, it might well be the case that prints from a crime scene would appear to match those of some defendant. By this time, I may as well say, I had lost every shred of confidence in the objectivity and even the basic human decency of most police officers and prosecutors; and I could now all too easily imagine how some utterly innocent person could be convicted following arguments that his fingerprints matched some pictures in a police crime file.

The article following this introduction is the result of this rather long cogitation (I read the Ken Holt book in 1956 and a few times thereafter, and wrote the article in 1997).

At the time of writing it, I believed I was the only person anyplace who had doubts about this supposedly exact science. However, following publication of my article, at least a few people started to pay attention, and my article got reprinted in another magazine. Then, late last year, an article in "Lingua Franca, a Review of Academic Life" covered this exact subject; it was called "The Myth of Fingerprints: A Forensic Science Stands Trial," and was written by Simon Cole, who hit most of the same points I did, omitting only the reproducibility of fingerprints. Cole was backed up,

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amazingly enough, by Harvard University, which has published his book: "Suspect Identities: A History of Fingerprinting and Criminal Identification" (Harvard University Press.)

On December 16, 2000, The Economist in London, in its section on Science and Technology, published a similar indictment of the fingerprint. The article notes that the subjectivity (Sandy Allen says the prints match; Capt. Steiner says they don't) "...puts fingerprinting on shaky theoretical ground." The publication goes on:

"And two other things make the situation worse in practice. The first is that fingerprints found at crime scenes tend to be incomplete. What are being compared are not whole prints, but mere fragments... The second difficulty is that most fingerprint evidence found at the scene of a crime is 'latent'. In other words, it requires treatment ... to make it visible enough to work with — and even then, it is often indistinct. How valid it is to compare such 'filtered' evidence with the clean crisp prints obtained from suspects in controlled conditions is another unexplored question..."

Worse yet, from my point of view, is the fact brought out in another article I've seen just now, that in cases where a print is found at a scene but is incomplete, "computer enhancement" is often used to "RESTORE" the missing sections! Good god! The computer invents a print and compares it to yours!

Further problems with fingerprints, in my estimation, lie with the elastic deformation inherent in the fleshy pads of fingers — or in the materials the prints are deposited on. Suppose your signature, written on a stretched piece of rubber, was compared to the same signature on a sheet of paper; how much resemblance would there be? With prints, such comparisons are often not science at all, but opinion. The Lingua Franca article relates how the FBI's Stephen Meagher, a supervisor fingerprint specialist, in February of 1999 tried to discredit a challenge to fingerprint identification by sending two prints to FBI labs in all 50 states. The fingerprint EX-PERTS at the labs were to identify the prints and, presumably, all come up with the same result. They didn't. SEVEN of the laboratories couldn't agree that one of the prints matched, and five of them couldn't agree that the other did.

(So then the FBI sent ENLARGEMENTS of the disputed prints back to the recalcitrant labs, and "suggested" that the technicians take another look. The FBI supervisor ordered them to "test your prior conclusions against these enlarged photographs with the marked characteristics," and he'd conveniently drawn arrows pointing to where people were supposed to find a resemblance. Not surprisingly, under this sort of pressure, the labs all then decided they agreed with their supervisor.)

Whether my article sparked this firestorm of criticism of fingerprints, or whether these other writers independently had been thinking along the same lines, is something I don't know. I do know that my own piece was first, and if my criticisms of this "science" had something to do with focusing some others' thought on the topic, I'm very, very glad indeed. And, appropriately for this present issue devoted to Sam Epstein's writing, I therefore want to signal the tip he gave me long ago that started at least my speculations in this direction.

I imagine that Sam had pondered the possibility of prints' seeming identical when they were not, and in writing the passage in the Ken Holt story he drew slightly on that prior speculation to create a realistic scene, as opposed to some Stratemeyer Syndicate cartoon in which prints are treated like words on a sign, where any old person can look at them and know in a second if they match some others. In short, he packed REAL THOUGHT into the book; and this is only one of dozens, possibly hundreds of places, where a murmured word gave rise to decades of pondering in my own mind. The article that follows is just a single result.

And remember: a book just published by Harvard University now expresses these same views. [Ed. note. The book is Suspect Identities: A History of Fingerprint and Criminal Identification by Simon A. Cole, published by Harvard University Press, 2001, 369 pages.]

\* Mr. Woodworth is a writer and printer living in Tucson, Arizona. This article originally appeared in a publication edited by Mr. Woodworth: The Mystery and Adventure Series Review, No. 34, Summer 2001. The address is: The Mystery and Adventure Series Review, PO Box 3012, Tucson, AZ 85702.

## AEG AEG

These two proofs (prints) from hard metal type appear quite different. However, both were printed from the same three pieces of metal - only the amount of pressure against the paper differed. What if the fingerprints of Bill Doakers and Sally Jones differ from each other by an equivalent amount?

