IN RETROSPECT

The great detective

The Memoirs of Sherlock Holmes: The Adventure of Silver Blaze
by Arthur Conan Doyle
G. Newnes: 1894

Richard Gregory

Nostalgia precedes memory. We experience this paradox in the Sherlock Holmes stories by Arthur Conan Doyle. They certainly transport me to the London of hansom cabs and dark cobbled streets, a world that vanished a generation before my eyes opened — indeed before I had eyes, or an I, to accept and solve the problems of seeing. The eye is the detector, the brain the great detective, reading clues from the eyes and the other senses.

The importance of small but significant clues for seeing was suggested to me years ago by Sherlock Holmes. It soon extended to science, my father being an astronomer, and it then steered my experiments on visual perception for half a century. My father measured the distances to stars. I tried to measure and understand distortions of visual space. Eyes cannot signal the presence of objects to the brain, but only shapes and colours and movements, as clues to what objects are like and what they can do. Surely perceptions are hypotheses of what might be out there — the closest we can get to reality.

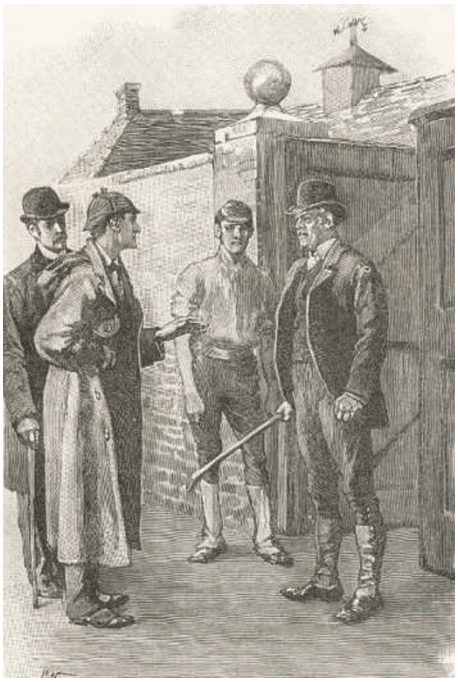
Clues tend to be small and inconspicuous, but may actually be nothing at all. For Silver Blaze, a racehorse stolen from his stable at night in *The Memoirs of Sherlock Holmes*, it was nothing that gave the game away:

"Is there any other point to which you would wish to draw my attention?"
"To the curious incident of the dog in the night-time."
"The dog did nothing in the night-time."
"That was the curious incident," remarked Sherlock Holmes.

A nothing can be a clue for seeing, as when a nearby object is inferred from the gap it makes in the background. Surprising gaps can evoke illusions of familiar objects. This is very different from the tradition of needing physical stimuli to evoke responses and perceptions. A surprising non-event, or non-object, may revise the brain's hypothesis, changing our perception.

Appreciating a clue depends on its context, either in time and place or within a theory. In the pockets of the Silver Blaze suspect were found a collection of seemingly ordinary objects. Which of these were clues for finding out who was the Silver Blaze villain? Some of them were hard to accept as significant without the context of a theory.

At first, only an ivory-handled knife with a delicate, inflexible blade stood out as significant, as it was an unusual object. It was an important clue, but so too were some ordinary matches and a candle. On Holmes' working theory, they pointed to the villain nobbling the horse, with a delicate operation that was practised in the dark on nearby sheep. Holmes confessed that this was a long shot:



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"It struck me that so astute a man as Straker would not undertake this delicate tendon-nicking without a little practice. What could he practice on? My eyes fell on the sheep..."

When the clues were explained to the owner of Silver Blaze, he could see:

"I have been blind!" cried the Colonel. "Of course, that was why he needed the candle and struck the match."

For events, or non-events, to be clues, knowledge and imagination are needed. If someone is said to be 'clueless', this does not mean there are no clues, but that the knowledge and imagination to appreciate them are lacking. We see this in the contrasting character of the police officer, Inspector Gregory (no relation!).

"Inspector Gregory, to whom the case has been committed, is an extremely competent officer. Were he but gifted with imagination he might rise to great heights in his profession," said Holmes. "It is the one quality which Gregory lacks."

The inspector had checked the surrounding ground for tracks of the horse but found none. Holmes and Watson checked again, and Holmes soon found what they sought:

The track of a horse was plainly outlined in the soft earth in front of him, and the shoe which he took from his pocket exactly fitted the impression. "See the value of imagination," said Holmes. "It is the one quality which Gregory lacks. We imagined what might have happened, and acted upon the supposition, and find ourselves to be justified. Let us proceed."

Holmes' imagination was effective, being based on knowledge. His assistant Dr Watson makes explicit Holmes' inferences, or makes them conscious:

"There was no wind that night, I understand," said Holmes.
"None; but very heavy rain."
"In that case the overcoat was not blown against the furze bush, but placed there."

Holmes' inferences jump beyond the evidence to dangerous hypotheses. Misleading murder clues have hanged innocent men, and misleading visual clues produce illusions. Yet jumping beyond the evidence is essential for discovery and invention. Sherlock Holmes and science are both justified, even though sometimes inevitably wrong.

We started with a paradox: nostalgia can precede memory. For writers such as Conan Doyle who can take us far away and to a time long gone, the solution is simple — we see with their eyes. But after a pipe or two, Holmes might have said: "Not quite so simple, Watson. Eyes can detect only the features of the here and now, as clues for the 'great detective' to infer the world of objects as hypotheses that we accept as reality." Watson would have replied: "You mean, the brain is a Sherlock Holmes machine."

Then, smiling gently, Watson asks: "What is consciousness?" Lifting his violin to play unearthly music, Holmes might have replied: "I haven't a clue."

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