The Sign Of The Four      by Arthur Conan Doyle      Chapter 1      The Science of Deduction

1. Sherlock Holmes took his bottle from the corner of the mantelpiece, and his hypodermic syringe from its neat morocco case. With his long, white, nervous fingers he adjusted the delicate needle and rolled back his left shirt cuff. For some little time his eyes rested thoughtfully upon the sinewy forearm and wrist, all dotted and scarred with innumerable puncture marks. Finally, he thrust the sharp point home, pressed down the tiny piston, and sank back into the velvet lined armchair with a long sigh of satisfaction. Three times a day for many months

I had witnessed this performance, but custom had not reconciled my mind to it. On the contrary, from day to day I had become more irritable at the sight, and my conscience swelled nightly within me at the thought that

I had lacked the courage to protest. Again and again I had registered a vow that I should deliver my soul upon the subject; but there was that in the cool, nonchalant air of my companion which made him the last man with whom

2. one would care to take anything approaching to a liberty. His great powers, his masterly manner, and the experience which I had of his many extraordinary qualities, all made me diffident and backward in crossing him. Yet upon that afternoon, whether it was the Beaune which I had taken with my lunch or the additional exasperation produced by the extreme deliberation of his manner, I suddenly felt that I could hold out no longer. Which is it today, I asked, morphine or cocaine? He raised his eyes languidly from the old black letter volume which he had opened. It is cocaine, he said, a seven per cent solution. Would you care to try it? No, indeed, I answered brusquely. My constitution has not got over the Afghan campaign yet.

I cannot afford to throw any extra strain upon it. He smiled at my vehemence. Perhaps you are right, Watson, he said. I suppose that its influence is physically a bad one. I find it, however, so transcendentally stimulating and clarifying to the mind that its secondary action is a matter of small moment. But consider! I said earnestly. Count the cost! Your brain may, as you say, be roused and excited, but it is a pathological and morbid process which involves

3. increased tissue change and may at least leave a permanent weakness. You know, too, what a black reaction comes upon you. Surely the game is hardly worth the candle. Why should you, for a mere passing pleasure, risk the loss of those great powers with which you have been endowed? Remember that I speak not only as one comrade to another but as a medical man to one for whose constitution he is to some extent answerable. He did not seem offended. On the contrary, he put his finger tips together, and leaned his elbows on the arms of his chair, like one who has a relish for conversation. My mind, he said, rebels at stagnation. Give me problems, give me work, give me the most abstruse cryptogram, or the most intricate analysis, and I am in my own proper atmosphere. I can dispense then with artificial stimulants. But I abhor the dull routine of existence, I crave for mental exaltation.

That is why I have chosen my own particular profession, or rather created it, for I am the only one in the world. The only unofficial detective? I said, raising my eyebrows. The only unofficial consulting detective, he answered.

4. I am the last and highest court of appeal in detection. When Gregson, or Lestrade, or Athelney Jones are out of their depth—which, by the way, is their normal state—the matter is laid before me. I examine the data, as an expert, and pronounce a specialist’s opinion. I claim no credit in such cases. My name figures in no newspaper. The work itself, the pleasure of finding a field for my peculiar powers, is my highest reward. But you have yourself had some experience of my methods of work in the Jefferson Hope case. Yes, indeed, said I cordially. I was never so struck by anything in my life. I even embodied it in a small brochure, with the somewhat fantastic title of 'A Study in Scarlet.' He shook his head sadly.

I glanced over it, said he. Honestly, I cannot congratulate you upon it. Detection is, or ought to be, an exact science and should be treated in the same cold and unemotional manner. You have attempted to tinge it with romanticism, which produces much the same effect as if you worked a love story or an elopement into the fifth proposition of Euclid. But the romance was there, I remonstrated. I could not tamper with the facts. Some facts should be suppressed,

5. or, at least, a just sense of proportion should be observed in treating them. The only point in the case which deserved mention was the curious analytical reasoning from effects to causes, by which I succeeded in unravelling it. I was annoyed at this criticism of a work which had been specially designed to please him. I confess, too, that I was irritated by the egotism which seemed to demand that every line of my pamphlet should be devoted to his own special doings. More than once during the years that I had lived with him in Baker Street I had observed that a small vanity underlay my companion's quiet and didactic manner. I made no remark however, but sat nursing my wounded leg. I had had a Jezail bullet through it some time before, and though it did not prevent me from walking it ached wearily at every change of the weather.

My practice has extended recently to the Continent, said Holmes after a while, filling up his old briar root pipe. I was consulted last week by Francois le Villard, who, as you probably know, has come rather to the front lately in the French detective service. He has all the Celtic power of quick intuition but he is deficient in the wide range of exact knowledge
6. which is essential to the higher developments of his art. The case was concerned with a will and possessed some features of interest. I was able to refer him to two parallel cases, the one at Riga in 1857, and the other at St. Louis in 1871, which have suggested to him the true solution. Here is the letter which I had this morning acknowledging my assistance. He tossed over, as he spoke, a crumpled sheet of foreign notepaper. I glanced my eyes down it, catching a profusion of notes of admiration, with stray magnifiques, coup de maîtres and tours de force, all testifying to the ardent admiration of the Frenchman. Oh, he rates my assistance too highly, said Sherlock Holmes lightly. He has considerable gifts himself. He possesses two out of the three qualities necessary for the ideal detective. He has the power of observation and that of deduction. He is only wanting in knowledge, and that may come in time. He is now translating my small works into French. Your works? Oh, didn't you know? he cried, laughing. Yes, I have been guilty of several monographs. They are all upon technical subjects. Here, for example, is one 'Upon the Distinction between the Ashes of the Various Tobaccos.'

7. In it I enumerate a hundred and forty forms of cigar, cigarette, and pipe tobacco, with coloured plates illustrating the difference in the ash. It is a point which is continually turning up in criminal trials, and which is sometimes of supreme importance as a clue. If you can say definitely, for example, that some murder had been done by a man who was smoking an Indian lunkah, it obviously narrows your field of search. To the trained eye there is as much difference between the black ash of a Trichinopoly and the white fluff of bird's eye as there is between a cabbage and a potato. You have an extraordinary genius for minutiae, I remarked. I appreciate their importance. Here is my monograph upon the tracing of footsteps, with some remarks upon the uses of plaster of Paris as a preserver of impressions. Here, too, is a curious little work upon the influence of a trade upon the form of the hand, with lithotypes of the hands of slaters, sailors, cork cutters, compositors, weavers, and diamond polishers. That is a matter of great practical interest to the scientific detective especially in cases of unclaimed bodies, or in discovering the antecedents of criminals. But I weary you with my hobby. Not at all, I answered earnestly. It is of the greatest interest to me 8. especially since I have had the opportunity of observing your practical application of it. But you spoke just now of observation and deduction.

Surely the one to some extent implies the other. Why, hardly, he answered, leaning back luxuriously in his armchair and sending up thick blue wreaths from his pipe. For example, observation shows me that you have been to the Wigmore Street Post Office this morning, but deduction lets me know that when there you dispatched a telegram. Right? I said. Right on both points! But I confess that I don't see how you arrived at it. It was a sudden impulse upon my part, and I have mentioned it to no one. It is simplicity itself, he remarked, chuckling at my surprise so absurdly simple that an explanation is superfluous; and yet it may serve to define the limits of observation and of deduction.

Observation tells me that you have a little reddish mould adhering to your instep. Just opposite the Wigmore Street Office they have taken up the pavement and thrown up some earth, which lies in such a way that it is difficult to avoid treading in it in entering. The earth is of this peculiar reddish tint which is found, as far as I know, nowhere else in the neighbourhood. So much is observation. The rest is deduction. How, then, did you deduce the telegram? Why, of course I knew that you had not written a letter, since I sat opposite to you all morning. I see also in your open desk there that you have a sheet of stamps and a thick bundle of postcards. What could you go into the post office for, then, but to send a wire? Eliminate all other factors, and the one which remains must be the truth. In this case it certainly is so, I replied after a little thought. The thing, however, is, as you say, of the simplest. Would you think me impertinent if I were to put your theories to a more severe test? On the contrary, he answered, it would prevent me from taking a second dose of cocaine. I should be delighted to look into any problem which you might submit to me. I have heard you say it is difficult for a man to have any object in daily use without leaving the impress of his individuality upon it in such a way that a trained observer might read it. Now, I have here a watch which has recently come into my possession. Would you have the kindness to let me have an opinion upon the character or habits of the late owner?

10. I handed him over the watch with some slight feeling of amusement in my heart, for the test was, as I thought, an impossible one, and I intended it as a lesson against the somewhat dogmatic tone which he occasionally assumed. He balanced the watch in his hand, gazed hard at the dial, opened the back, and examined the works, first with his naked eyes and then with a powerful convex lens. I could hardly keep from smiling at his crestfallen face when he finally snapped the case to and handed it back. There are hardly any data, he remarked. The watch has been recently cleaned, which robs me of my most suggestive facts. You are right, I answered. It was cleaned before being sent to me. In my heart I accused my companion of putting forward a most lame and impotent excuse to cover his failure. What data could be expect from an uncleaned watch? Though unsatisfactory, my research has not been entirely barren, he observed, staring up at the ceiling with dreamy, lack lustre eyes. Subject to your correction, I should judge that the watch belonged to your elder brother, who inherited it from your father. That you gather, no doubt,
from the H. W. upon the back? Quite so. The W. suggests your own name. The date of the watch is
11. nearly fifty years back, and the initials are as old as the watch; so it was made for the last generation. Jewellery usually descends
to the eldest son, and he is most likely to have the same name as the father. Your father has, if I remember right, been
dead many years. It has, therefore, been in the hands of your eldest brother. Right, so far, said I. Anything else?
He was a man of untidy habits very untidy and careless. He was left with good prospects, but he threw away his chances, lived for some
time in poverty with occasional short intervals of prosperity, and finally, taking to drink, he died. That is all I can gather.
I sprang from my chair and limped impatiently about the room with considerable bitterness in my heart. This is unworthy of you,
Holmes, I said. I could not have believed that you would have descended to this. You have made inquiries into the
history of my unhappy brother, and you now pretend to deduce this knowledge in some fanciful way. You cannot expect me to believe
that you have read all this from his old watch! It is unkind and, to speak plainly, has a touch of charlatanism in it.
My dear doctor, said he kindly, pray accept my apologies. Viewing the matter as an abstract problem, I had forgotten how personal and
12. painful a thing it might be to you. I assure you, however, that I never even knew that you had a brother until you handed
me the watch. Then how in the name of all that is wonderful did you get these facts? They are absolutely correct in
every particular. Ah, that is good luck. I could only say what was the balance of probability. I did not at all expect to be so
accurate. But it was not mere guesswork? No, no; I never guess. It is a shocking habit   destructive to the logical faculty.
What seems strange to you is only so because you do not follow my train of thought or observe the small facts upon which large
inferences may depend. For example, I began by stating that your brother was careless. When you observe the lower part of that
watch case you notice that it is not only dinted in two places but it is cut and marked all over from the
habit of keeping other hard objects, such as coins or keys, in the same pocket. Surely it is no great feat to assume that a man who
treats a fifty guinea watch so cavalierly must be a careless man. Neither is it a very far fetched inference that a man
who inherits one article of such value is pretty well provided for in other respects. I nodded to show that I followed his reasoning.
13. It is very customary for pawnbrokers in England, when they take a watch, to scratch the numbers of the ticket with a
pin point upon the inside of the case. It is more handy than a label as there is no risk of the number being lost or transposed.
There are no less than four such numbers visible to my lens on the inside of this case. Inference   that your brother was often at
low water. Secondary inference   that he had occasional bursts of prosperity, or he could not have redeemed the pledge.
Finally, I ask you to look at the inner plate, which contains the keyhole. Look at the thousands of scratches all round the
hole   marks where the key has slipped. What sober man's key could have scored those grooves? But you will never see a
drunkard's watch without them. He winds it at night, and he leaves these traces of his unsteady hand. Where
is the mystery in all this? It is as clear as daylight, I answered. I regret the injustice which I did you. I should
have had more faith in your marvellous faculty. May I ask whether you have any professional inquiry on foot at present? None. Hence the
cocaine.
I cannot live without brainwork. What else is there to live for? Stand at the window here. Was ever such
14. a dreary, dismal, unprofitable world? See how the yellow fog swirls down the street and drifts across the dun coloured
houses. What could be more hopelessly prosaic and material? What is the use of having powers, Doctor, when one has no field upon which
to exert them? Crime is commonplace, existence is commonplace, and no qualities save those which are commonplace have any function upon
earth.
I had opened my mouth to reply to this tirade when, with a crisp knock, our landlady entered, bearing a card upon the brass salver.
A young lady for you, sir, she said, addressing my companion. Miss Mary Morstan, he read. Hum! I have no recollection of the name.
Ask the young lady to step up, Mrs. Hudson. Don't go, Doctor. I should prefer that you remain.