

Sherlock Holmes' Ability of the Mind and its Timeless Appeal

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Abstract

Intellectuals, academicians, and critics alike do not miss the opportunity to tackle Sherlock Holmes's proficiency as one-of-a-kind consulting detective created in the stories of the Scottish writer, Sir Arthur Conan Doyle (1859-1930). A closer look into Doyle's literary works points to the path of the author's visionary outlook, in terms of Holmes' philosophy and investigation methods, which this paper argues, resonate with the core technology of the modern era. Central to the theme surrounding the Holmesian doctrine, this research takes inspiration from the "ability of the mind" context with reference to the literary detective, Sherlock Holmes. The main objective is to elucidate that Holmes' philosophy is not an outdated proposition. It is very much in circulation in modern investigation methods and applies to basic technological principles as well. Hence, its appeal is still relevant and connected to our lives today. In order to support the discourse and argument revolving Holmes' philosophy, this paper adopts an analytical method that relies on contextual reference and textual inferences by comparing it with the contemporary narrative in terms of the emerging technology in today's digital era. To provide Holmes' worldwide fans with a deeper reading of his stories, this paper is not meant to present a thematic analysis of Doyle's literary productions; rather it is a careful examination of Holmes' mind. With a focus on Sherlock's "ability of the mind," the central hypothesis is approached by drawing analogies between his detective methods and the basic principles of computers and core technologies. In so doing, this research proves that Holmesian philosophy is still affecting a basic, yet forms a significant part of our lives in the twenty-first century.

Keywords: Sherlock Holmes; Sir Arthur Conan Doyle; crime fiction; Holmesian philosophy; solving mysteries; mind attic; machine learning; artificial intelligence; human-machine interaction; the ability of the mind, literary detective; investigation methods.

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INTRODUCTION

Sherlock Holmes is not the first literary detective, as many preceded him like C. Auguste Dupin in Edgar Allan's stories and Monsieur Lecoq, created by the French writer Émile Gaboriau, yet he is the most enduring of his brethren. Being listed as "the most portrayed literary human character in film and television" by the Guinness World Records in 2012 is not surprising at all. Claire Burgess describes the fictional detective by asserting that, "This Guinness World Records title reflects his enduring appeal and demonstrates that his detective talents are as compelling today as they were 125 years ago" [18].

Between 1887 and 1924, which is widely referred to as the Golden Age of Crime Fiction, sixty narratives were written by Sir Arthur Conan Doyle about the fictional detective and Watson, Holmes' side-kick and chronicler. *The Canon* consists of four novels

and fifty-six short stories over the course of forty years [39]. Without the slightest doubt, Holmes commands huge followers, a wide range of fans around the globe and his popularity is observed across all fields: prints, media, television series, comic books, video games, fan clubs, and films [5]. Sherlock Holmes' recurrent appearance in these media beats well-known characters like Hamlet. This raises some pertinent questions. What is the importance attached to Sherlock Holmes and his popularity that make him different from any other fictional characters? With a span of 133 years since his creation, does Sherlock Holmes still relate to our modern life? If so, what are the relevance and impact of Holmes' philosophical doctrine today? To arrive at these answers, it is only prudent to understand Holmes's way-of-life, philosophy, and methods which are central to the premise of this research.

At the onset, it is notable to observe how modern computers and core technologies such as computer machines, the Internet search engine, data science, and Artificial Intelligence (AI) are catching up quite progressively. Thus, redefining the context of our social and cultural emergence in today's digital era. A closer look into these cultural progressions makes us realise that they shape our lives in one way or another. Today, the use of computers and other related tools, for instance, is not limited to compute data only or simplify the way we communicate across the realms of time and space. However, their reach and impact have been quite exponential to the point where social and cultural norms are being increasingly reinvented, thus, redefining the way of life, as we know it. Software, hardware, the Internet search engine, and other computer-aided tools have evolved in such a way that, it has become increasingly difficult or even impossible to think of life without them [42]. We have reached a stage where human-machine interaction has redefined calculus, decision making, reasoning, communication, etc., where human intervention is least. Rightly, an article in *The Guardian* poignantly points to such cultural assimilation of human-machine interaction that is entwined. Yet, it would be unforgiving if we rely too much on them. Nonetheless, today's machines and their attributes are 'human-like' - not human minds yet. This is because computers and their programming principles can reason, react, and behave by adapting to the logic, language, and learning process; similar to humans when arriving at solutions to life's query. These characteristics, if not all, trace their origin to the human mind [7]. Similarly, Sherlock Holmes' philosophical doctrine that relies on his "computer-like brain" approach to solve crimes and mysteries put to test the human-machine interaction [41], apart from the application of modern investigation methods. Therefore, to measure its relevance and its impact to today's life scenario and cultural assimilation, an analysis of the literary conjunction is drawn in terms of the Holmesian philosophy and analogies from Sherlock Holmes' stories are discussed in the following sections.

Sherlock Holmes' Philosophy of the "Brain attic"

Often times, critics have apprised that Sherlock Holmes' greatness lies in the ability of his mind [32]. Some went to the extent of describing him as a life-like literary figure, a mental specialist, a fictional consulting detective with a mix of both the logical and fantastic mental faculty that possess the power of observation and deductive reasoning [36]. His creator, Sir Arthur Conan Doyle, once described him saying that, "Holmes is as inhuman as a Babbage calculating machine and just about as likely to fall in love" [38]. It is no wonder then that Holmes' "computer-like brain" impressed many critics as he "could spin trifles into elegantly logical webs of inference about human events" [40] (p. 212). This influence exceeded the critics reaching out to his audience across all ages as Sherlock's brain encourages them to admire and

comprehend the complexities and marvel of his mental process [32] (p. 51).

In *A Study in Scarlet* (1887), Doyle's novel that witnessed the first appearance of Sherlock Holmes, the detective describes a man's brain, as "*a little empty attic, and you have to stock it with such furniture as you choose.... It is a mistake to think that little room has elastic walls and can distend to any extent....It is of the highest importance, therefore, not to have useless facts elbowing out the useful one*" [12] (pp. 17-18). In this context, Maria Konnikova compares Holmes' "computer-like brain" with his own philosophy of the "brain attic." The attic, she declares,

"Can be broken down, roughly speaking into two components: structure and contents. The attic's structure is how our mind works: how it taken in [and processes] information. How it sorts it and stores for the future. How it may choose to integrate it or not with the content that are already in the attic space. Unlike a physical attic, the structure of the brain attic is not altogether fixed. It can expand, albeit not indefinitely, or it can contract, depending on how we use it" [23].

Andy Andrew in his book titled *The Bottom of the Pool: Thinking beyond Your Boundaries to Achieve Extraordinary Results* provides a broader description of the "brain attic" in relation to the ability of the mind. The author states that, "there is an extremely high possibility that one can create a place of quite, deep thoughts and of greater understanding and higher level of concentration to arrive at things and see whatever one aspire for and to direct the mind." In the same manner, Holmes' describes the "brain attic" as his "mind palace" - a catalogue that stores information drawn from past experiences which he resorts to while solving mysteries in order to deduce, analyse, interpret and predict outcomes [1] (pp. 80-81.)

Oftentimes, it has been acclaimed by critics that Sherlock's "brain attic" resembles a computer storage device that expands when data is acquired and contract when data is lost [32] (p. 50). A further explanation is provided by the crime solver when he once said to Watson,

"A fool takes in all the lumber of every sort that he comes across, so that the knowledge which might be useful to him gets crowded out or at best is jumbled up with lot of other thing, so that he has a difficulty in laying his hand upon it. Now the skilled workman is very careful indeed as to what he takes into his brain-attic. He will have nothing but the tools which may help him in doing his work, but of these he has a large assortment, and all in the most perfect order" [12] (p. 15).

In all his stories, Holmes applies this principle to himself. Like a “skilful workman,” he stores in his own “brain attic” what is important and useful for him in solving mysteries excluding anything otherwise. In *A Study in Scarlet*, Watson was surprised that Holmes ignored the fact that the earth revolves around the sun. Holmes’ assurance to Watson is that he will do whatever it is going to take in order to help him forget it since during the moment of investigation it does not constitute a priority [12]. It is quite brilliant to observe that the detective’s mind works like computer simulation [28], and somewhat similar to a GPS device by memorising all streets of London. Holmes’ searches within seconds for any place in his mental map while pursuing taxis. This encyclopaedic memory resembles today’s digital maps; accurate and easy to access [2]. In *The Red-Headed League* (1891), Holmes seems contended with himself and expressed happiness with his amazing mental memory saying: “*It is a hobby of mine to have an exact knowledge of London*” [15].

On a closer look and an examination of the “brain attic” philosophy, one can say that it foreshadows the basic characteristic of Google years before its creation. Google search engine results are sorted and adjusted depending on what is contextually relevant to us. In a similar comparison with the human mind, addition and deletion of information is a never-ending process. Computers too continue to take in information to process and discard items until the very end. Therefore, the human mind is, without doubt, unique in that it has its own confines. Within those confines, it can take on any number of configurations depending on how we learn to approach it [23].

Further, the “brain attic” analogy resonates with the work of V. Srinivasa Chakravarty, who scientifically describes the existence of neurons in the brain with “tuned responses” and, when mapped methodically, helps us understand the mystery underlying the function of the brain and how information is processed [6]. In fact, there is a possibility to rewire and reconfigure the “brain attic” and all it needs is a comparatively brief treatment that uses imagination and perception. The result of such method is utilised either when solving problems or addressing people’s learning approach to help them develop or recover skills such as reading, moving, and to overcome learning disabilities [11].

What reinforces and develops Holmes’ “ability of the mind” is his outlook to life that is quite broad; resembling an all-embracing approach with an eagerness to learn from whatever life throws at him. In the majority of his great stories, Holmes is found devoting much of his time, energy and attention to learn and access whatever information is useful to his detective work and investigation methods [32] (p. 48). Obviously, his eagerness and thirst for knowledge are not solely limited to the realms of psychological

domains, but connected with all environmental details surrounding the crime scenes. “*All life is a great chain,*” he assures, “*the nature of which is known whenever we are shown a single link of it*” [12].

In *A Scandal in Bohemia* (1891), the first short story featuring the fictional detective, Holmes utters words of wisdom saying to Watson, “*You see, but you do not observe. The distinction is clear*” [13]. Similar to the naked eyes that see the rapidly changing visual stimulation inflicting our brains, every waking moment is immense. Therefore, one needs to make more sense of thousands of images that invade the brain every day by segregating them rather than just “seeing” and “observing” [19]. Here again, inferences drawn to Holmes’ reasoning relates to modern computers that function in the same way [28]. Any query that we input becomes so immense because it is sorted through thousands of images and data to pinpoint and arrive at a probable solution that is specific to the query [17]. Thereby, Holmes’ “ability of the mind,” his “brain attic” and his method of “seeing” and “observing” are the closest resemblance with the capabilities of modern computers and, consequently, functions with a “computer-like brain.”

The Holmesian philosophy of the “brain attic” and the method of “observing” “deducting” and “abducting” instead of just “seeing” are quite relevant to our life. Our “brain attic” as well should always be filtered with useful data. If one’s “brain attic” is filled with so much clutter, then it would be difficult for our brains to evaluate facts or make rational decisions. Therefore, any distractions like emotions or unnecessary details have to be kept in “the lumber-room” - a storage one may go back to if there is a need. If it happens that the “brain attic” is filled with irrelevant information, we might take longer time to make decisions or even reach an irrational conclusion based on misconstrued ideas and wrong beliefs. Hence, as a human subject, we are responsible for whatever is stored in our attics because information could be added to, deleted, or adjusted when needed [19].

Sherlock Holmes’ Detective Doctrine

The striking ability of Holmes’ mind and the uniqueness of his character are referred to in the essay published in the *Genius on Television* by Mary Ann Farkas. The author took the liberty to describe the detective as being, “the embodiment of flawless, rational, and logical problem solving, of ratiocination, of decryption, of charter that takes on something of the fantastical.....the characteristics of encyclopaedic, arcane knowledge, a seemingly-eidetic memory” [16] (pp. 162-63). Such greatness is connected with his methods of investigation that rely on deductive reasoning, valid assumptions, and true statements to draw conclusion [31] (p. 8) by introspecting the sequence correctly and rationally [20].

At the end of the nineteenth century, when Sherlock Holmes first caught the readers' attention, detective fiction was already a popular genre, but the use of forensic science was limited. Sir Arthur Conan Doyle was able to "re-invent" it "with his use of modern forensics and Holmes' high-end deductive skills" [21] (p. 3). In the *Forensics as a Delay in Stories of Sherlock Holmes*, Frida Junker states that even now "Holmes is at the forefront of technological advancement used in the series *Sherlock*" [21] (p. 23). This BBC's series production, which was first aired in 2010, presented Sherlock Holmes as a pioneer of forensic science. Being produced again eight years later was a huge sign of its success. Although many details were added to suit the modern setting, the series kept the same influence of its major character [21]. Moreover, in both the original texts and in the adaptations that followed, Holmes' principle to first "deduce" and "observe" is vital when juxtaposed to similar scenario [27]. On the other hand, modern computers function in a way similar to Holmes's logic, "deduction," "abduction" and "observation" methods. The basic principle of any computer is that it follows a sequence model of data segregation and measurement of data takes place to arrive at a probable solution to any input query that an end-user asks for during human-machine interaction [26, 28]. As Holmes puts it clearly, "*The temptation to form premature theories upon insufficient data is the bane of our profession*" [31] (p. 9). Thereby, it is essential to avoid premature theories, pre-made assumptions and the stress that comes from having too much information [6] (p. 43). The master of reasoning holds a firm belief that one needs to approach each crime with an open mind that is free from any theory being assured without sufficient observation [22]. In fact, his strategy very much resembles what is known today as the basic principle of Crime Scene Investigation (CSI). In all his stories, Holmes is seen preserving all objects in the crime scenes, even the trivial ones, protecting them from contamination. It is worth mentioning here that Sherlock was again ahead of his time since there were not any dedicated CSI supervisors like the ones we have today. At that time, medical specialists, mostly local practitioners, were the representative of science working without any systematic or scientific way. It was not until the 1920s that specially trained officials began to appear along with police officers and photographers in order to investigate the crime scenes thoroughly [24]. To Watson, Holmes says, "*It is a practical mistake to theorize before one has data. Insensibly, one began to twist facts to suit theories, instead of theories to suit facts*" [9] (p. 43). Having the right set of data is the only probable solution while solving mysteries [30] (p. 23). Hence, logical deductions based on observation and substantiated by science are the sort of skills we need to develop and learn in our life.

Another notable Holmesian method of investigation is logic and reasoning [29]. Sherlock

Holmes's investigation techniques highly relate to his ability to make vital use of his mental faculties in the best possible manner [22]. The master of reason, as critics call him, usually makes full use of his intellect throughout the process of deductive reasoning that guides him to connect all the dots together and build a sequence of events in the right order [34]. Consequently, such strategy leads Sherlock a path to find solutions to mysterious crime scenes [28]. His hypothetical well-planned approach is notable and once convinced of a possibility, he collects relevant data to prove or discard them. Similar structured-approach refers to 'big data' analytics basic principles [34].

Furthermore, Lynnette Porter in *Sherlock Holmes for the 21st Century: Essays on New Adaptations* explains that the fundamental rule of the detective fiction genre revolves around the simple question of 'who don it' [33]. Following this rule, Holmes' way of asking the right questions, deducing on the probable cause, and reasoning led him to resolve all mysteries in his stories [13]. In the same vein, modern technology that relies on computational approach such as data indexing, encoding, etc., follows the "abduction logic." Although "abduction logic" is subjective, it provides the best explanation with some reasonable prospects involving logical sequence [26]. It is somewhat similar to Sherlock Holmes' strategy in terms of computer simulation [28]. Additionally, Sherlock's reasoning methods, also a form of "abduction," and its role in Information Society Technology (IST) that enhanced learning environment are widely recognised [29]. The application of abduction in logic programming is suitable to address variety of problems in Artificial Intelligence (AI) and other areas of computer science [10]. Moreover, the plot construction of detective-story genre in general and Sherlock Holmes' stories in particular is backward [35], and, likewise, the computational approach to query follows the same way beginning with how to determine the solution [37] (p. 24). Ahead of time, Holmes eloquently states this principle in *The Sign of Four* (1890) saying "*When you have eliminated the impossible, whatever remains, however improbable, must be the truth*" [14]. Thereby, this points to the path where it makes more sense to the debate on human-machine interaction, and what it means to be human in an era where technology has redefined the way of life in many ways [7]. The significance of this fact can be found in Holmes' novel *The Sign of Four* when Holmes says, "*While the Individual man is an insoluble puzzle; in the aggregate he becomes a mathematical certainty*" [14].

It is worth mentioning here that the basic principle of computers and core technologies is a close imitation of the sequence of Holmes' methods. In her research, titled *Why Sherlock Holmes Can't Be Replaced by an Expert System*, Rita C. Manning, declares that although artificial Intelligence (AI) is very much the talk of the day, however, much of it does not

differ from the principles of Sherlock Holmes [25]. In other words, the power of thinking machines embedded with artificial intelligence (AI) and sequential algorithm is akin to Holmes' sophisticated way of investigation, logic, and reasoning [10, 29]. Thereby, it is rightly said that Holmes' mastery over the art and skill of deductive reasoning is an essential factor that has contributed to his success in the crime investigation field [25], apart from his ability to interpret clues in such a way that helps him deduce the probable cause of occurrence [3] (p. 53). An article that appeared in *Forbes* further assured how the principles of Holmes make more sense today than any other time. The author, Priyanka Jain, states that Holmes' concepts still shape the narrative of today's digital era. While it has become increasingly impossible for working professionals to segregate from tons of available information and then choose what is useful and relevant while making decisions, yet the inception of big data and data science analytics that imitate Holmes' basic principles has made all the difference to simplify the way of life [34].

In *Sherlock Holmes: Father of Scientific Crime and Detection*, Staton O. Berg believes that Holmes played an essential part in the development of modern investigative methods. He states that even professionals working in the field of forensic science are willing to "give credit to Sherlock Holmes both as a teacher of scientific investigative methods as well as a germinator of the ideas they later fostered into being" [4] (p. 447). Before Sherlock, resolutions of crimes depended mainly on either eyewitness accounts, voluntary or forced confessions. It is this literary detective who did not only initiate the preservation of crime scenes, but accompanied that with analysing all sorts of evidences found such as footprints, bullets, bloodstains, fingerprints, typewriters, cigar ashes, gait and handwriting. Take for example his smart use of fingerprints to solve the mystery in *The Sign of Four* (1890). It was not until 1901 - eleven years after the novel's publication - that the police in Scotland started to apply this method. What is more interesting is his comparison of the criminal's typewriter with the letters received by the victim, Mary, in *A Case of Identity* (1891) which led him eventually to the culprit. Such analysis of typewritten documents and their idiosyncrasies was a hit at that time and applied later by many. Nick Cooper in *Why Victorian Detective Methods are Still Used Today* confirms that it is forty years later when such analysis took place by The Federal Bureau of Investigation in (1932) [8].

In nine stories, Holmes resorts to analysing handwritten documents. In two famous stories *The Adventure of the Reigate Squire* (1893) and *The Adventure of the Norwood Builder* (1903), the detective could identify the gender and the relationship between characters through their handwritings. In about half of the tales, there is footprint evidence on different surfaces: mud, snow, clay, carpet, and blood. The most

famous ones are in *The Boscombe Valley Mystery* (1891) and *The Adventure of the Lion's Mane* (1926). Analysis of both handwriting and footprint caught the attention too [8, 39].

All these methods were presented years before an actual use by forensic officials. Here, questions arise: Are these methods still used today? The answer is definitely yes and this made the Holmesian Canon so enduring. Sherlock Holmes' meticulous examination of the crime scenes influenced the later adoption of more methodical detective approaches. They, indeed, become essential parcels in any detective's scientific equipment.

CONCLUSION

The previous insightful discourse on the detective's mind validates the premise that Holmes' philosophy is still relevant and forms a significant part of our lives in the twenty-first century and today's modern era. The "brain attic," and sequences between just "seeing," "observing," logic, reasoning, and his investigation methods that are used to resolve the mysteries in Arthur Conan Doyle's literary texts are not at all outdated concepts. In the infinite observation, we cannot help but to draw inspiration from the many stories of Sherlock Holmes to visualise how they fit when juxtaposed in terms of the contemporary context. The basic principles and functionality of computers and core technologies follow the same sequence similar to that of the fictional detective's doctrine. This indeed helps drive home the idea that the central hypothesis of the research reveals the strong relevance found between literature and reality. Holmes' philosophy bears remarkable similarities with a set of real-life situations. It is a testament to the novelty of his methods, and the relevance of his principles. The tendency of the Scottish writer to humanise the character of Sherlock Holmes through his thought processes tends to be more humane, and this is what makes his literary legacy and effect still inspire the narratives of the modern era.

Rightly put by Hera Pryhonen, who is with the view that detective story fluctuation happens all the time; readers need to comprehend that instability of social fabric is always there in terms of disruption. Yet, crime detective genre still clicks with the readers because one can comprehend it as "a game played according to the set of rules" [32]. Sherlock Holmes' philosophy that centres on his brilliant investigation methods, which formed the basis for pioneering modern techniques, is a subject that calls for more researches to be done not only from a literary perspective, but from a technological and forensic standpoint as well. The anti-social genius, whom his creator makes him die in 1893 in *The Adventure of the Final Problem*, was resurrected nine years later in *The Adventure of the Empty House* (1903) upon the demand of the public. This sort of a character, who takes our breath every time we read his fictional adventures must not only be imagined, but also studied and researched continuously since his relevance

to our lives is timeless. It is fair then to say that though the creator is dead, his iconic character lives on.

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