

The literary hero Sherlock Holmes, his relationship with Asperger syndrome and ICT's role in literacy

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Abstract: Asperger syndrome is a severe developmental disorder characterized by major difficulties in social interaction and restricted and unusual patterns of interest and behavior. Sherlock Holmes has, through this study, been shown to be a high-functioning Asperger's individual, which can make his symptoms a little less obvious at times. His love of objective logic, his deep and persistent need for analysis, his unusual interests and mannerisms, his disregard for social norms, and his extraordinary passion are hallmarks of the syndrome. He is also occasionally stubborn when people don't understand him or his needs.

Key-words: Literature, literary hero, Sherlock Holmes , Asperger syndrome.

1. Introduction

Sherlock Holmes is one of the most special literary figures in the world. The literary hero created by Sir Arthur Conan Dole differs from other people in the way he thinks and acts. His unique thought processes, extreme behaviors, intense reactions and extraordinary mental abilities are some of the characteristics of the hero (Manola et al., 2023). These characteristics, as will be analyzed later in this article, are compatible with Autism Spectrum Disorder (ASD) (henceforth autism) and, in particular, with Asperger's syndrome.

2. Asperger Syndrome

Autism is the most recognized pervasive developmental disorder. Other diagnostic concepts with features somewhat similar to autism have been less intensively studied and their validity, apart from autism, is controversial (Chown & Hughes, 2016). One of these conditions, called Asperger's syndrome, was first described by Hans Asperger (1944), who presented a series of cases whose clinical features resembled Kanner's (1943) description of autism (e.g., problems in social interaction and communication, as well as idiosyncratic patterns of interest). However, Asperger's description differed from Kanner's, in that speech delay was less common, movement deficits were more common, onset was later, and all initial cases occurred only in boys. Asperger also suggested that similar problems could be seen in family members, particularly fathers. This syndrome was virtually unknown in the literature for many years. An important study and series of case reports by Lorna Wing (2015) increased interest in the condition and, since then, both the use of the term in clinical practice and the number of case reports and research studies have steadily increased.

Commonly described clinical features of the syndrome include (Boucher, 2017): a) lack of empathy, b) naive, inappropriate, one-sided social interaction, with little ability to form friendships and consequent social isolation, c) stilted and monotonous speech, d) poor non-verbal communication, e) strong absorption in limited topics such as weather, facts about television stations, tables or railway maps, which are learned by habit and reflect poor understanding, conveying the impression of eccentricity, and g) clumsy and poorly coordinated movements and odd posture. Although Asperger originally reported the condition only in boys, reports have now surfaced of girls displaying the syndrome, as well. However, boys are much more likely to be affected by Asperger's.

Although most children with this condition function within the normal range of intelligence, some have been reported to show mild mental retardation. The apparent onset of the condition, or at least its recognition, is probably somewhat later than autism and this may reflect the fact that language and cognitive abilities are more preserved. Asperger's tends to be a highly stable condition and the higher intellectual skills observed suggest a better long-term outcome than is typically seen in autism (Boucher, 2017).

As defined in the DSM-IV catalog (American Psychiatric Association, 2015), the provisional criteria for Asperger syndrome follow the same format and actually overlap, to some extent, with the criteria for autism. The required symptomatology is concentrated in terms of the initial, social and emotional criteria and the criteria of "restricted interests", with the addition of two common but not necessary characteristics, concerning motor deficits and individual specific skills, respectively.

A final criterion presupposes the necessary exclusion of other disorders, mainly autism or a subthreshold (or autism-like) form of autism (pervasive developmental disorder - not otherwise specified). Interestingly, the DSM-IV definition of the syndrome is offered as if having autism as a reference point. Therefore, some of the criteria actually include the absence of abnormalities in certain domains of functioning that are affected by autism (Deckers et al., 2016).

A. Qualitative impairment in social interaction, as manifested by at least two of the following: 1) marked impairment in the use of multiple nonverbal behaviors, such as eye contact, facial expression, body postures, and gestures, in order to regulate social interaction; 2) failure to develop developmentally appropriate peer relationships, 3) lack of spontaneous pursuit of shared enjoyment, interests, or successes with other people, 4) lack of social or emotional reciprocity (Mazurek et al., 2017).

B. Restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following: 1) engaging in one or more stereotyped and restricted patterns of interest that are abnormal, either in intensity or focus, 2) apparently inelastic adherence to specific, dysfunctional routines or rituals, 3) stereotyped and repetitive motor behaviors, and 4) persistent preoccupation with object segments.

- C. The disorder causes clinically significant impairment in the individual's social, occupational, or other important areas of functioning.
- D. There is no clinically significant general delay in language use (eg, single words used by age 2, communicative phrases used by age 3).
- E. There is no clinically significant age-related delay in cognitive development or the development of self-help skills, adaptive behavior (other than social interaction), and environmental curiosity in childhood.
- F. Criteria are not met for another specific pervasive developmental disorder or schizophrenia.

3. The case of Sherlock Holmes

In her work on autism and fictional characters, Sonya Freeman Loftis (2015: 23) points out that it is not possible to determine, whether or not such a character has a disorder. Furthermore, autism is a fluid signifier that operates through multiple meanings socially and culturally (Loftis, 2015), meaning that the way autism is perceived may differ across cultures, as the perception of what is considered normative also varies. In other words, the definition and perception of autism may vary in different cultures, due to the norms and values of societies that are in constant flux. Portraying autism through a fictional character can provide insight into how people on the spectrum are imagined in different cultures.

ASD seems to be fascinating to the public. Over the years, more and more attention has been given to autism in the media. The reason for this could be that autism appears as an extreme but fascinating otherness, according to Loftis (2015: 4). Berger (2006) argues that the allure of otherness stems from people's needs to define their identity. People, considering them to be the opposite of those who display 'otherness', so by meeting them, they discover more about themselves (Berger, 2006: 48).

The (re)presentation of autistic people often highlights something different about them, which can lead to them being treated more as puzzles than as human beings (Loftis, 2015: 4) Key features of ASD are difficulty with social skills and communication, limited range of interests and sensory integration problems, such as hypersensitivity to light, touch or sound. In addition, Loftis (2015) mentions poor physical condition and self-stimulatory behavior, such as pacing, as additional characteristics.

While some autistic traits can be quite dysfunctional, other aspects can also confer advantages. For example, some individuals on the spectrum have exceptional memory skills and concentration abilities (Loftis, 2015). The most frequently cited, almost stereotypical autistic characteristics of Sherlock Holmes, include his lack of social skills with other people, his obsession with crime, and his strong observational skills, which enable him to dominate with his thinking (Loftis, 2015).

In both the stories and television adaptations, Watson represents the neurotypical character, meaning he is normal compared to Sherlock Holmes. A neurotypical character refers to a character who does not exhibit autistic or neurologically atypical patterns of thought or behavior. Neurotypicals often assume that their experience of the world is, either the only one, or the only correct one. It is important to note that Watson and other neurotypical characters may help shape the viewer's perception of Holmes. In the television series and stories, the viewer perceives both Sherlock's autistic traits and Watson's neurotypical responses to those traits (Loftis, 2015). Loftis (2015) argues that Watson's default position as a neurotypical narrator reflects the assumed norm of majority perspective in society at large. Furthermore, due to the other characters' focus on Sherlock's autistic traits, as mysterious and almost alien, the viewer sees the autistic character as a puzzle that needs a neurotypical solution (Loftis, 2015). Sherlock is seen as the Other by neurotypical characters and, combined with his interest in crime, it often results in Sherlock being suspected of becoming a criminal himself. Loftis (2015) points out that Sherlock's unusual mind is a sign of criminal deviance and the reason why Holmes and his old enemy Moriarty are inextricably linked (p. 32).

Consequently, one of the possible disorders that Sherlock Holmes could have was Asperger syndrome, which is considered a category of autism. Autism causes individuals to have marked difficulties with self-referential understanding of their emotions, self-awareness and cognitive processes (Bókkon, 2013). Autistic people have natural tendencies that differ from most, which makes them socially awkward and thinking differently. Normal people think linguistically, while autistic people think 'in pictures' (Grandin, 2000: 14).

The autism spectrum is a scale of various neurological disorders that share many, if not all, symptoms. The variety of disorders ranges from mild to severe. At the milder end of the spectrum is Asperger's syndrome. It causes people to appear perfectly capable of understanding the language, but speak in an irregular manner (Alcántara et al., 2004). Those with the syndrome tend to pay close attention to detail and are extremely focused on their own interests. They can have more social and academic success compared to others. People with Asperger syndrome usually have more difficulty communicating and understanding emotions. They are often socially isolated because they have difficulty reading facial expressions and body language. They also often desire the company of others and stay close to them (Howard et al., 2006; Koegel et al., 2013).

Thinking in pictures is a symptom of Asperger syndrome demonstrated by Holmes, in various stories and various television adaptations. When Holmes inspects any crime scene, he later visually recalls everything he saw. Temple Grandin, who lives with autism, explained that she thinks in photographs that are like videotapes (Grandin, 2000:14). Grandin and Holmes think similarly. Their memories and thoughts are like "videotapes" in their heads. Along with his visual memories, Holmes

can recall more information than the average person. This ability to pay greater attention to detail further supports the idea that Holmes had Asperger syndrome (Frith, 2004). Paying too much attention to one's own interests is another symptom. Holmes demonstrates this, with his extraordinary interest in the cases he tries to solve. This ability played a role in his success in solving cases that others could not (Winter-Messiers, 2007).

Asperger syndrome can run in families. Holmes' brother, Mycroft, also appears to suffer from the same disorder. In his article "Asperger's in the Holmes' Family", Eric L. Altschuler explains why his brother probably had Asperger's syndrome as well. Altschuler included a statement from Sherlock Holmes talking about his brother. Sherlock states that his brother has the neatest brain, with the greatest capacity for storing facts, more than any other man he knows. The symptoms described by Sherlock Holmes are exactly in line with Asperger's syndrome. The two brothers are both able to acquire large amounts of information related to what they like, their careers. Talking about Mycroft's brain, Sherlock Holmes says that it has the greatest capacity to store facts (Altschuler, 2013).

In her book "Inside the Mind of Sherlock Holmes", Lynnette Porter refers to the mind of Holmes. Holmes believes that his brain is empty and has plenty of room for more information. Other people simply have less room for information, which makes him smarter (Porter, 2016). Holmes believes that Mycroft also had the same type of mind capacity that allows them to learn a lot of information that interests them, which is also the case with other people with Asperger syndrome (Koegel et al., 2013).

There are, though, some characteristics of Holmes' personality that are not consistent with Asperger's syndrome. One symptom is the desire for close relationships with others (Koegel et al., 2013). Holmes sometimes showed a desire to be close to someone. However, he did not want to have a relationship with a woman or make friends, except for Dr. John Watson, his companion and biographer. Both relied on each other and rented rooms from Mrs. Hudson. In the Sherlock story "A Study in Pink", Mrs. Hudson makes an effort to take care of Holmes and tries to talk to him, but he tells her that he is busy and needs to focus on the case he is working on. Holmes shows no interest in being around her because he is always busy or thinking (Schilling, 2018).

One could argue that since Holmes does not desire to form or maintain close relationships, other than the one with Dr. Watson, he doesn't have Asperger's syndrome. Holmes also shows no difficulty remembering information from conversations, such as dates. When Holmes converses with people, he almost always remembers exactly what was said. Holmes usually remembers specific dates, sometimes even better than the average person. Also, the two Holmes siblings show no evidence of language development delay (Altschuler, 2013).

4. Conclusions

Sherlock Holmes depicts certain characteristics that correspond to the description of ASD and, more specifically, Asperger syndrome. The most important feature is that Sherlock has difficulty with social skills and communicating with other characters, which is also linked to Sherlock's rudeness. His obsessive interest in the art of crime-solving excludes almost everything else in his life, including the possibility of close and mutual relationships. Dr. Watson, his colleague, was the only person who had the privilege of sharing his personal space, with the possible exception of his brother, Mycroft.

His remarkable powers of observation, memory, associative thinking, and abstraction made him a master of his craft, but he was known to be unable to relate to people. These key features can lead to a case of Asperger's syndrome being captured/ illustrated through this character.

Finally we underline the importance of the digital technologies in education, literacy and in autism awareness domain that is very productive and successful, facilitates and improves the assessment, the intervention and the educational procedures via Mobiles which brings educational activities everywhere [25-34], various ICTs applications which are the core supporters of education [35-75], AI, STEM & ROBOTICS which raise educational procedures into new levers of performance [76-97], and games which transforms the education in a very friendly and enjoyable interaction [98-101]. Additionally, the enhancement and combination of ICTs with theories and models of metacognition, mindfulness, meditation and emotional intelligence cultivation [102-151] as well as with environmental factors and nutrition [20-24], accelerates and improves more over the educational practices and results, especially in literacy improvement and Asperger awareness.

5. References

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