Does Autism Represent the Next Stage of Human Evolution?

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Abstract

A number of specialists in the field of autism spectrum disorders would firmly answer "yes" to the question of whether autism could represent the next stage of human evolution. The supporters of this idea specifically refer to those individuals who are part of the spectrum, but without the intellectual deterioration component (without mental retardation), even though there is no well-defined and demonstrated theory for this hypothesis. Many people with autism have exceptional memory skills, high acuity in senses such as sight, taste, smell, and a highly developed level of understanding.

Incorporating some of these skills into societies would have played a vital role in the general development of humanity by transmitting discoveries made by such people to their communities. This rationale is suggested in an anthropological report published in Time and Mind academic journal by a team of researchers from the University of York (Spikins, Wright, & Hodgson, 2016).

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I. INTRODUCTION

Meilleur, Jelenic, and Mottron (2015) conducted a study on a sample of over 250 ASD (Autism Spectrum Disorder) persons, and found that over 60 percent of them have special endowments. Another research project put forward by Iossifov and collegues (2014) shows that autism associated with intellectual impairment accounts for about 30 percent of cases diagnosed with autism today. Intellectual impairment usually requires organized social support and derives from brain damage (e.g. tuberous sclerosis, fragile X syndrome, etc.)

Juan Enriquez Cabot, founder of the Life Science Project at Harvard Business School, scientist, author, and businessman, amazed the crowds of 2009 TED conferences when he introduced the idea that the next stage of human evolution could be Homo Evolutis. The first place to see the evolutionary pressure is the brain, due to the massive increase of inputs and plasticity of this organ, says Juan Enriquez Cabot. The first proof to corroborate the supposition would be represented by the incidence of autism in recent years.

The latest research which was published in April 2018 by the CDC shows that the current ratio is 1 in 59 children in the US with autism, an increase from the previous ratio of 1 to 68 children (Centers for Disease Control and Prevention - CDC, 2018).

Walter Zahorodny, a pediatrician and autistic researcher, is amazed at this rising ratio, and dismisses the idea that it is only determined by the fact that diagnosing autism has gotten better over time. Thomas Frazier, Coordinator of Autism Speaks, estimates that this growth is a significant one. This report specifies that there are variations among populations from different cultures. The percentage was historically higher by 20-30 percent among the white population than in the African-American one, and by 50-70 percent higher than in the Hispanic population. Now, however, these percentages have also changed: diagnosis among the white population is only 7 percent higher than in the African-American population and 22 percent higher than the Hispanic one. Furthermore, there are more men diagnosed with ASD than women, but this report also reflects a downward trend (CDC, 2018).

Juan Enriquez Cabot states that the brain's reaction is adaptive and that it reacts in a hyperactive and hyperplastic manner, thus creating individuals that will embody these features, and this disorder - is still - just one of the transformations. Others are particularly intelligent individuals who can recall everything they see in life, people with synaesthesia or schizophrenia. In current times, we are able to accumulate on a daily basis as much information as our ancestors accumulated over the course of a lifetime, and in these circumstances, from the need to process data, we may witness rapid brain development. The answer to the central question of the article is expected to be delivered by extensive research in neuroscience.

Juan Enriquez Cabot talks about the "sexy nerds" of our times, people who are over-qualified in computer programming, a very well-paid field, as well as other detail-oriented jobs, are geographically concentrated, and generally find partners with similar minds. Thus, the matching pairing hypothesis of these similar genes that support each other in these structures appears (Cabot, 2009). So, according to Cabot, we are going through a transition, as a species, we evolve into Homo Evolutis, which is a: hominid aware of its environment, but also a hominid that begins directly and deliberately to control the evolution of its own species, bacteria, plants, of animals. And I think the change is of such magnitude that your grandchildren and your great-grandchildren will be a species very different from you (Cabot, TED 2009).

Another ASD pillar that has long researched Asperger's Syndrome (DSM 5) is Tony Attwood, psychologist and professor. He believes that "out of the box" thought processes that come from individuals with autistic spectrum disorders will solve the great problems of mankind (Attwood, 2006). Attwood is believed to be the first clinician psychologist who presented Asperger Syndrome not as a problem to be corrected, but as a gift, genius ability, displayed by a lot of inventors and artists throughout history.

In turn, Simon Baron-Cohen, professor of developmental psychopathology at Cambridge University, launched the idea that Asperger syndrome, the autism spectrum disorder, would be "the extreme form of the male brain".

II. WHAT ARE THE AUTISM SPECTRUM DISORDERS?

According to DSM 5 autism spectrum disorders (ASD) consists of persistent shortcomings in social communication and interaction which can occur in many different contexts, which manifests through scarcity in socio-emotional reciprocity, deficiencies in nonverbal communication behaviors used in social interactions, deficiencies in the development, maintenance and understanding of relationships, restrictive models, repetitive patterns of behavior, interests or activities. As of DSM 5, Asperger syndrome is also considered to be part of ASD.

TSA is an umbrella term that covers a very wide spectrum of disorders, from mentally retarded individuals to those with an intelligence rate well above the normal limit (high functional autism). At this point, some specialists distinguish between high functioning autism and Asperger's syndrome, but Tony Attwood advocates their overlapping because the only notable difference between the two is that those diagnosed with Asperger syndrome have not encountered problems in verbal language the normal age stage (Attwood, 2006). All these delineations - Asperger syndrome, deficient or highly functional autism - make the spectrum

confusing and difficult. And yet, Asperger's syndrome has become a much more acceptable label, while autism has remained a significant disorder for those who have not been treated in any way. Depending on the case, Asperger syndrome autism would consist of sensory hypersensitivity, idiosyncratic language processing and communication, difficulties in emotional reciprocity, fixed routines, and rigidity of interests.

Due to the fact that most individuals who fall under this spectrum do not have mental deficiency, there is a trend among specialists to consider this disorder as neuropathy, a condition in which individuals have been born with great sensitivity that can be viewed rather as a gift, and not as a deficiency. The limiting symptoms of autism are conventionally described as brain development disorder in a form that creates difficulties in communication and often in social interactions. But their cognitive and also physical capacities cannot always be manifested, because of sensory sensitivities that might be elevated because of the surrounding environment. Once this is corrected, their endowments have the opportunity to speak for themselves. The causes, however, are not yet clearly specified. The genetic, physiological and environmental factors are invoked as risk factors.

In regard to genetic transmission, over one hundred genes that could represent the foundation of ASD have been invoked so far. Natural selection works on an individual level rather than on the entire species, however if the group of individuals carrying such genetic baggage becomes very large, and genetic information will be advantageous in adapting to the environment, gifted individuals will be in much greater numbers than those who nowadays fall into the category of neurotype (normal) in the following generations.

Individuals who fall within the spectrum of autistic disorders usually have a medium or above average intelligence but lack their social skills and find it difficult to read non-verbal language. In spite of their communication deficits, which many manage to compensate for through their advantages and greater skills in the area of cognitive and sensory abilities, they are now able to achieve a human connection that is essential for reproduction and the further transmission of genetic material.

People who fall into ASD (Autistic Spectrum Disorder) may have specific or obsessive interests. These interests can include weather, dinosaurs, geology, history and countless other areas. Their interest in these subjects is hyperfocused, so they appeal it is much more intense and takes up a longer period of time than any other person. Hundreds of years ago, the likelihood of reproduction of individuals with an ASD was much lower.

A very intelligent but socially strange person would probably be living in a university or a monastery where he would have built a telescope, for example, or discovered gravity. The chances of attending a party and meeting a partner were rather low. Given that the interests of individuals in those times did not explicitly address scientific discoveries, a party would have

probably seemed to be just a gathering of people that did not spark any interest for the ASD individual.

However, once the Industrial Revolution began, there seemed to be a slight improvement in terms of attractiveness of the opposite sex towards these peculiar individuals: they become a little more interesting also because there is greater general awareness towards the social role that their activities represent – and nowadays, this desirability is much higher.

During the Industrial Revolution, these individuals can be found in large geographic settlements, such as New York or Philadelphia, for example, where they manage to get in touch with each other, forming small groups that are beginning to induce women's attention.

For instance, Benjamin Franklin and Thomas Jefferson are both "suspected" of having had Asperger's syndrome (*aspergertestsite.com*, nd). The two were friends and one discovered electricity while the other was writing the draft of the Declaration of Independence and ultimately became one of the founding fathers of the American state. Common passions had brought them close, and together they have done excellent work for the benefit of the world.

But how strange could they be? For example, Jefferson was an economist and went bankrupt, even though he was an architect he never finished his house, he would walk around the city in his slippers, would carry a bird on his shoulder and usually muttered his speeches. In spite of this, he was frequently invited to parties, he met women and he had children. The same goes for his friend, Franklin. Accordingly, their DNA was forwarded.

III. ABOUT THE FUTURE

In the 2000s, the list of prominent figures with Asperger syndrome features Bill Gates, the owner of Microsoft, Steve Wozniack, who first invented the Apple computer, or Mark Zuckerberg, founder of Facebook. They are also invited to numerous parties, spend time within the most influential circles of the world and they are, surely, very desirable as partners. Other millions of individuals like them, men or women, can meet their partners and pass on their DNA to their children.

In fact, the first name that was given to Asperger syndrome, closest to today's diagnosis, seems to be Silicon Valley Syndrome. Silicon Valley culture had begun to adapt to the high concentration of people with autistic features before the term Asperger syndrome had been invented. Author Jean Hollands even wrote a book with practical tips for women on how to approach "high tech" relationships, as she put it. She described a "separate race of men", with a strong propensity for science and technology, who loved to use and experiment with all sorts of devices, who could not easily interpret emotional clues; had almost no friends in outside the

professional circle, treated life according to literal criteria, rigorous logic, and tried to solve intimate problems by "seeking to gather data" (Silberstein, p. 210). In the increasingly sophisticated era of computers, this selection principle is likely to make its presence more and more evident.

Who are the partners which these peculiar and intelligent men establish relationships with? Specialists say their partners are very social and very intelligent women. They fall in love with the minds of those individuals who know so many interesting things about diverse areas ranging from dinosaurs to computers and politics. They might even seem silly for their partners, because they tend to be governed by rules, yet their tie is crooked and their hair is messy. Their partner will straighten their tie and remind them the names of the people who they will be interacting with. The partner is usually a thoughtful person, usually a teacher, nurse, social worker or psychologist. What could be the result of these couplings in 15-20 generations? Optimists say their offspring may have the best of both worlds.

Psychologist Frank Gaskill calls the brains of these atypical people "spicy minds". He uses the lemon water metaphor to explain spectrum variation: an individual with ASD is like a glass of lemon water. Being a very broad spectrum, "the more lemon is in the water, the more the autism that person has". At the bottom is the person considered "normal" today, and at the upper level, that with strong autism. Therefore, he recommends that when we think about peculiarity when we think about autism, that is, something in addition to normal.

There is a popular joke circulating in the media that individuals with Asperger syndrome are about to take over the world. Gaskill claims the real joke is that they have already done so, but they have not told us yet. Their power and number will increase as the products that they create are on the rise, and their knowledge seems to be increasingly demanded by the necessities of living on earth (for now).

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