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## Anime, Manga, and the Etiology of Autism



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### Historical Overview

The origins of Anime and Manga are difficult to pinpoint. According to some historians, the earliest form of sequential art in Japan emerged in twelfth-century Buddhist scrolls, the most famous of which were created by a monk named Bishop Toba (Brenner 2007). These scrolls were originally created to express religious messages and folklorish narratives. Largely unknown by the general body of society, they soon made their way into popular culture. This form of art went through a series of changes over the next few centuries, eventually entering the scope of entertainment. Illustrators sought to present cartoons in the same fashion, leading to the birth of modern day comics.

The term “Manga” was coined by artist Hokusai Katsuhika in the nineteenth century, which literally means “whimsical pictures” or “sketches.” Bound books with intricate storylines were soon produced and sold by the thousands. However, the content within the books was considered to be adult in nature and was therefore

banned by the Tokugawa regime (Horbinski 2015). The era of modern Anime and Manga would soon be ushered in by the forces of globalization. With Japan’s historically isolated nature dwindling, the advent of modern technology would completely change the trajectory of Anime and Manga.

The arrival of US Commodore Matthew Perry on Japanese shores catalyzed drastic changes in Japan, with a brutal internal struggle between traditional isolationists and those who embraced the West overtaking the entire country. Eventually, Japan would succumb to the influx of the Western way of living, struggling to update its society with technological advances among other changes. Japanese artists were fascinated by Western forms of art, and eventually created a hybrid that took the form of modern day Manga magazines. The initial forms of Manga magazines were either politically oriented or meant for children. By the middle of the twentieth century, a new genre emerged. Adult Manga comics captivated the entire industry, with explicit representations of crime, sex, and violence. As a result, the more innocent renditions of Manga comics lost business and dwindled in their prevalence.

The development of Anime and Manga snowballed quickly, with comics progressing into television shows, movies, and trading cards. The most significant changes, however, were arguably seen in the fanbase of the genre. Previously aimed at a politically inclined audience as well as children, Anime and Manga morphed into

something of a lifestyle for its fans – of all ages, especially adults. One interesting phenomenon in particular is that of cosplay, a play on the words “costume” and “play.” The past few decades have seen cosplay fans gather from all over the world, spending inconceivable monies on intricate costumes and, in some cases, plastic surgery, to resemble their favorite Anime and Manga characters (Winge 2006). These subcommunities of the general Anime genre have experienced significant stigmatization in popular culture.

Among the main factors stigmatizing Anime and Manga fanbase is the reality that the overwhelming majority of amateur Manga artists focus on producing homoerotic and other sexually explicit depictions. As a result, the fanbase became subject to significant controversy in the 1990s (Kinsella 1998). Further, the sheer obsession that Anime and Manga fans hold for their genre of interest is seemingly beyond any other fanbase. With other forms of entertainment typically remaining in the realm of a hobby, Anime and Manga seemed to have a tendency to categorically consume fans. Drastic changes in behavior, dress, speech, lifestyle, spending habits, and other intimately characteristic facets of individuality are not uncommon among fans of Anime and Manga. Anime and Manga fans call themselves “Otaku,” more commonly known with a more general term: “Hikikomori.” Otaku refers to, usually male, Japanese fans between ages 18 and 40 that fanatically and compulsively consume Anime and Manga products (Azuma 2009). Originally a group of social outcasts bonding over a shared interest, the Otakus now represent a massive portion of the commercial market in Japan.

Of the peculiarities of this demographic is the tendency of psychological uniformity among many of the fans. There exists a surprisingly common set of characteristics among a large portion of Otakus. Researchers have found that there seems to be a surprising association between individuals with autism spectrum disorder (ASD) and the Otaku demographic. While Otakus are often not officially diagnosed as autistic, the culture surrounding Anime and Manga has been called “autism-friendly” (Cowen 2010). The link between Anime, Manga, and ASD begs the question: should this raise any concerns?

## Current Research

The affinity that patients with autism spectrum disorder (ASD) have for Anime and Manga products is not an unknown phenomenon to clinical psychologists and therapists. A study carried out with 91 randomized adolescents with ASD found that among the most often visited websites by the subjects fell into the category of anime (Kuo et al. 2013). In fact, this was the second most commonly explored activity among the participants. This is a peculiar pattern, given that individuals with ASD typically exhibit extremely restricted interests (Koegel et al. 2015). High school students with ASD have also been found to gravitate towards only a handful of interests, one of which is the anime fandom (Wolf et al. 2009).

ASD symptoms in adults present in a fairly consistent manner. Common behaviors include preference for social isolation, stunted communication skills, compulsive behavior, difficulty recognizing verbal cues, restriction to either obsession or passiveness towards things, and highly animated approaches to social settings that may include aggression or overly indifferent behavior (*Mayo Clinic*). These behaviors are not alien to the average Otaku. In fact, the characteristics of Otakus are not much different from the manner in which higher functioning individuals with ASD are described in the West (VanBergeijk 2010).

A study focusing on the Hikikomori (a general term encompassing Otaku) subset of individuals found that about 20% of their Hikikomori patients could be diagnosed with pervasive developmental disorders, or PDD (Tateno et al. 2012). Diagnosis of PDD typically takes place once qualitative impairment in social interaction and restricted and compulsive patterns of behavior and interests are observed in a patient. This is commonly seen in Hikikomori and Otaku. Thus, diagnosis of PDD, especially ASD, should be seriously considered in Hikikomori and Otaku patients. The reality is that ASD is only known by the symptoms exhibited in individuals that have it. There is no biological or genetic factor that has yet been clearly identified by the scientific community (Rozema 2015). This limits our understanding of ASD significantly. Consequently, the etiology of

ASD is still unexplored territory. Because the Otaku community heavily exhibits symptoms of autism, a potential environmental etiology must be considered (Vuković 2014).

## Future Directions

Why individuals with ASD love Anime and Manga is largely unexplored territory. Robert Rozema mentions that it is estimated that 1 in 68 children fall on the autism spectrum (Rozema 2015). With such a high prevalence, it is important to study the behavioral patterns of this demographic to achieve a firmer understanding of both ASD and the effects of Anime and Manga on a sociological and pathological level. Furthermore, researchers much approach the topic with an open mind, ready to reexamine previously held conceptions about ASD.

The etiology of ASD is still a topic of debate and scarce research. As mentioned, an Otaku is virtually indistinguishable from a high functioning individual with ASD. It is not inconceivable that the captivating tendencies of Anime and Manga produce individuals that operationally fall on the autism spectrum. In other words, they may not traditionally have ASD as we understand it, but they have grown to develop the same symptoms by way of their fanatical obsession with Anime and Manga products. The umbrella that is ASD, understood to develop in the earliest stages of childhood, must perhaps be expanded to accommodate those adults that develop the same behavioral characteristics later on.

Additionally, the phenomenon of Otaku culture is viewed by many to be a pathological epidemic that is crippling an entire generation. The erosion of social skills, restriction of interests, and displaying of obsessive behaviors are all detriments to the mechanics of day-to-day life. Given the rapidly expanding market for Anime and Manga products as well as the proliferating fanbase, sociologists must allocate efforts towards studying the societal effects of Otaku culture on

the development of youth. If the development of the fanbase in the West is towards the same trajectory as Japan, the impacts would be immense in the academic system, the corporate world, the fields of social work and therapy, as well as the structure of society as a whole. The relationship between Anime, Manga, and Autism is one of massive potential in understanding the etiology of ASD and perhaps curbing a looming social epidemic.

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