

Autism Spectrum Disorder in Popular Media: Storied Reflections of Societal Views

Christina Belcher

Redeemer University College

Kimberly Maich

Brock University

Abstract

This article explores how storied representations of characters with Autism Spectrum Disorder (ASD) are typified in a world that is increasingly influenced by popular media. Twenty commercially published children's picture books, popular novels, mainstream television programs, and popular movies from 2006-2012 were selected using purposive, maximum variation sampling and analyzed through Krippendorff's six-step approach to social content analysis. From this 20-unit sample, results show that television characters with ASD tend to be portrayed as intellectually stimulating geniuses who make us aspire to be like them; movies tend to show those with ASD as heroes, conquering seemingly impossible odds; novels tend to present ASD in a complex, authentic context of family and community, rife with everyday problems; picture books appear to be moving towards a clinical presentation of ASD. Common cross-categorical themes portray scientific, clinical, and/or savant-like traits that tend to glamourize challenges inherent to ASD.

Keywords: Autism Spectrum Disorder, popular media, perceptions, societal views

Christina Belcher (Ph.D., O.C.T.) is a Professor in the Department of Education at Redeemer University College. Her research interests include higher education, worldview, literacy, and technology.
E-mail: cbelcher@redeemer.ca

Kimberly Maich (Ph.D., O.C.T.) teaches special education in the Department of Teacher Education at Brock University, and is an affiliated faculty member at Brock's Centre for Applied Disability Studies. Her research focuses on special education, including Autism Spectrum Disorders, Applied Behaviour Analysis, social skills, assistive technology, and early childhood education.
E-mail: kmaich@brocku.ca

Introduction

With today's ease of access to mass media through its relatively low cost, wide availability, and intense propagation in our homes, schools, and communities, information about socially constructed topics such as society, culture, and human nature is often transmitted through such venues. However, its inherent intent to convey information and influence its consumers on a wide scale is not without concerns, including potentially widespread biases, which must be navigated with careful attention and great care. One area where many such everyday consumers of mass media garner information is that related to the area of diversity, exceptionality, and disability: that which is perceived as "different" from a perceived societal norm. The area of what is colloquially referenced simply as *autism* but is more formally known as *Autism Spectrum Disorder* (ASD) is no stranger to media-bound references in the past and at present. From decades ago *Rain Man* references to today's multiplicity of characterizations found in television shows, movie productions, novels, and a range of children's picture books, portrayals of ASD are implicitly and explicitly found in mass media.

Journalist Furlong is one who recently noticed the rising prevalence characters with Asperger's Disorder—a former subtype of ASD—on television shows and wondered is this a "new, popular character quirk, or is it a sign of society's efforts to embrace and personify a disorder that has become more and more prevalent?" (Furlong, 2013, para. 1). Draaisma (2009) described many media-based portrayals of ASD as misrepresentative, even apt to do harm; however, the public appears to prefer these stereotypical, fictional examples. Similarly, Kanner and Asperger, pioneers in the field of ASD (Lyons & Fitzgerald, 2007), communicated an "essence of autism" (p. 1475). Though case examples to further clinical understanding, they explained the "'Zusammenklang' or Gestalt of the child—his voice, face, body, language, intonation, gestures, gaze, expression and diction" (p. 1475). Perhaps popular media is doing the same for the everyday viewer in a stereotypical manner. Draaisma (2009) reflected that:

There is a strange discrepancy between the research that their directors, script writers and actor put in when they make a film featuring autistic persons and the actual characters they come up with ... they all want an *absolutely* sincere and truthful rendition of autism; what they come up with is an autistic character with freak-like savant skills, unlike anything resembling a normal autistic person. (p. 1478)

Much as Dyches, Prater, and Leininger (2009) emphasized, each book that has characters with disabilities should be evaluated by "the values [they promote] as expressed in the portrayal of the character with disabilities" (p. 305), the purpose of this paper is to systematically explore how storied representations of characters with Autism Spectrum Disorder (or characteristics of Autism Spectrum Disorder) are typified in a world that is becoming increasingly influenced by popular media.

With the intervention of media, how children with Autism Spectrum Disorder are perceived in the school setting begins long before they physically enter classrooms. School community members often have firm, preconceived perceptions about students with Autism Spectrum Disorder emerging from the "socially storied representations" they have virtually or socially experienced. Much of this cyclical "knowledge," perhaps more aptly described as perspective, is rooted in popular media (Sarrett, 2011).

Within a medical model or a clinical approach to exceptionality, qualified professionals utilize the weighty *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) (American Psychiatric Association, 2013) to categorize individual problems leading to a diagnosis. In this context, ASD is now presented as an umbrella term, which used to be three separate diagnoses (Boutot & Smith Myles, 2010). This is one of many modifications in its elastic terminology since Leo Kanner's first published case studies of Autism Spectrum Disorder or what was then known as autism in *Autistic Disturbances of Affective Contact* (1943). The diagnosis of Autism Spectrum Disorder means that clinicians have assessed problems with social communication, repetitive, restricted behaviours, and sensory issues as present and significant (American Psychological Association, 2013; Moran, 2013). With more detail, this means that a diagnostic team sees:

... deficits in social-emotional reciprocity, deficits in nonverbal communicative behaviors used for social interaction, and deficits in developing maintaining and understanding relationships. In addition, they must show at least two types of repetitive patterns of behavior including stereotyped or repetitive motor movements, insistence on sameness or inflexible adherence to routines, highly restricted, fixated interests or hyper reactivity to sensory input, or unusual interest in sensory aspects of the environment. (Autism Speaks, 2013, para.5).

Here, the representation, reality, and "mediated frames" in which Autism Spectrum Disorder (ASD) is presented to the general public are considered. In so doing, how each form of media has non-neutral and embedded particularities that affect our perceptions of reality and identification with those who have ASD are presented. Within the framework of social content analysis, a storied method of analyzing text, media, and the social-emotional components essential for mean-making across a particular subject, the following literature review extends these relational themes.

Literature Review

Each type of media is inherently structured with its own framework for mean-making. Movies, for example, are linked to affective memories of entertainment, and not necessarily serious reflection. Novels allow for reflection, pause, and re-reading, and may often evoke memories of schooling and study. Television is often linked to memories of family and the home, as being "invited" in to our social classrooms after recess, or shared before bedtime as harbingers of love, security, and sleep. Each past encounter with media affects engagement and perception of information presented as content.

North America has become a multi-modal learning society in an age where social divisions are becoming non-existent (Postman, 1995). When McLuhan (1964) considered that we become what *we behold*, and as we shape our tools and our tools shape us, he could not have foreseen how much this insight would currently apply. In a culture saturated with media, there is more to "behold" than ever before; however, more than mere beholding is at stake. As we find ourselves living within a visually saturated society, Postman (1995) reminds us to be fully aware of media in order to prevent the folly of merely thinking with our eyes. Visual re-presentation in movies and television has become a truth unto itself: Young (2012) acknowledges that this burgeoning effect "has more impact on a mass audience regarding disabilities than research" (p.

4). Visual media tends to educate through stereotyping, providing a limited perception of the whole and commercial success, in many ways, outpaces authenticity (Draaisma, 2009).

Characters portrayed across venues of media that appeal to the eye and emotion (e.g., movies), and to the mind and reflection (e.g., literature) differ in significant ways; ways that society at large should be aware of in order to critique their representations. Even while considering other factors (e.g., audience size, budget), which affect foundational media decision-making, tangential to these “outsider” perceptions, the lone, authentic voice of “insider” reality is seldom considered in critique. In the area of cross-media analysis, these differences become more apparent. Wahl, again, explains this succinctly:

The reach of scientific and professional communities ... are no match for the oft inaccurate and demeaning stereotypes the public encounters in films, novels, plays, newspapers and magazines. These portrayals, more than any other, shape and determine public perception of human difference. (as cited in Sarrett, 2001, p. 142)

Cross-media reflection and cultural positioning, in contrast, consider not only what the media are “selling” in their characterizations, but what is unsaid. For example, Smith’s (2005; 2006) recent work from a social ethnographic perspective suggests that the voices from “within” an experience provide a lens that differs from an objective one, drawing attention to the ways in which life and work cannot be separated. In other words, the experience in the everyday life in a particular context provides a different lens of mean-making that does not separate what the person does or thinks from the rest of that person’s daily life. For example, a book is chosen by an individual, who makes connections from that book to a character or life experience. The reader is cognizant that the life portrayed in the text are worthy of reflection, howbeit different in experience. But the reader may make text-to-life connections, as well, which flow from how characters and events have been pictured in the mind of the reader. Individual reflection and pace is essential. Television and movies, for example, beckon to a shared “view” of an experience as spectator(s). The characters in our midst within the context of our own household represent virtual albeit visual voices and experiences with an emotional effect. The viewer is drawn into the movie, but not in ways that necessarily allow the same type of reflection. Movies tend to be scored on “appeal” of an audience, not on the reflection they may cause after the movie ends. Entertainment and social enjoyment is essential. As Smith has stated, our lens needs to shift because our viewing context has moved from considering our own reflective voices as part of storying and mean-making to experiencing virtually embodied voices that give little time for reflection during the viewing experience.

It is important to note that though literary-based portrayals of disability are starting to become more accessible (Curwood, 2013) there is a minimal social content analysis research from a multimedia perspective involving recent, storied representations of characters with disability (Prater, 2003). In a wider examination of related topical literature, Dolos, Moses and Wolberg (2012) used content analysis to engage the topic of deafness as disability, noting that illustrations in children’s picture books do not represent deaf characters from a cultural perspective, but rather from a clinical perspective, as having a disability that should be fixed. In a similar study of on disability, Hodkinson (2012) examined how disability was portrayed in electronic media using proto-text analysis and concluded that media contained a limited picture of disability, one contextualized again within a medical deficit model. Hodkinson (2012) concluded that inclusive education must confront inaccuracies of exclusion inherent in mediated

resources for primary aged children. The above studies would suggest that care needs to be given to the portrayal and selection of disabilities in literature, echoing Prater's (2003) conclusions.

Furthermore, Poling and Hupp (2008) conducted a content analysis to examine death in children's picture books across biological, sociological, and emotional components. They recommend using picture books in bibliotherapy for bereaved children, concluding that picture books provide a venue for engaging bereavement in the emotional domain. Similar work by Belcher (2008) considered suffering, trauma, and social perspectives in picture books historically as providing an emotional, cultural, and worldview platform for introducing students to various topics of concern, pinpointing how change in perception occurs "over time". Belcher and Maich (2010) have supported the conclusions of Poling and Hupp (2008) on the significance of story for children "as a tool for empathy, information, and problem-solving" (para. 5). Dedeoglu, Ulusoy, and Lamme (2011) also carried out a content analysis involving the interplay between text and illustrations connected with poverty in children's literature, noting that "children's visions of themselves, the world and their place in the world have been greatly impacted by literature" (p.37). This impact, once again, was of a socio-emotional nature. Socio-emotional aspects of care and self-awareness in mediated depictions of characters with ASD are minimal, and are not geared to assisting children in finding their place in the world; but rather situate them most frequently in a family or school environment where an environment is provided for them.

With a wide lens on disability, Dyches, Prater and Heath (2010) used trend analysis—a subtype of content analysis—to examine how Newbery Award winning books portrayed disability from 1975 to 2009. Similarly, Dyches, Prater, and Jenson (2006) examined the presence of prominent characters with disabilities in the 276 Caldecott Medal-winning books between 1938 and 2005, and found 11, which is low in accordance with the percentage of children with ASD predicted in the schooling population at the time. Specific to ASD, Belcher and Maich (2010) examined 23 texts across eight criteria in a content analysis of ASD in children's picture books. From these criteria, the books were analysed as to their social impact and educational thrust. They concluded that few books allowed the students represented in the stories to find themselves in the larger fabric of life outside of home or school, and therefore, did not provide readers with non-stereotypical skills for social inclusion. In some cases, it appeared that the picture books functioned as self-therapy for parents/authors. Maich and Belcher (2012) consider steps for the "intentional" use of story as part of a process of peer awareness in inclusive classrooms via storied representations of characters with ASD.

Bond (2013) explored physical disability in children's television programming, engaging how media's portrayal of physical disability may affect the attitudes of children toward those who have disabilities. When present (though infrequent), characters were older—usually white males—attractive, not central to the plot or program, usually in a wheelchair or using a cane, and were accepted the same way as characters depicted without disabilities. Bond thinks such programming could be effectively used by policymakers toward inclusivity for those with disability; however, it may be a good example of an unrealistic portrayal of what television wants viewers to believe; perhaps, that disability is "no big deal anyway".

Throughout these examples of published content analyses, the storied representations provided share two commonalities: (a) they impacted the affective domain of readers and viewers, and (b) they heralded to adult perceptions of story and what story is desired to achieve "on behalf of children". The storied representations of those with ASD in picture books and novels have perhaps shifted in audience and intent, currently being surpassed by storied

representations in movies and television, as well as in information gleaned via Google (Carr 2008, 2010). But have movies and television produced the same kind of story?

Young's (2012) work examined mediated storied representations of characters with ASD in light of what they repeatedly "suggest" reality to be. Young (2012) concluded that since movies serve to reflect reality, misrepresentations can have a major impact on the behaviours and attitudes of audiences towards those with disabilities. Recent publications by Carr (2010) and Turkle (2011) also recognized the positive and negative aspects of media and technology on perception and acquisition of social skills. Notably absent from this conversation, however, is investigation into the growing emergence in popular press revealing a "pecking order" regarding what popular press considers someone on the ASD spectrum to "be." For example, such representations may appear to focus on what might be referred as the "higher functioning," perceived by some as a "metaphoric construct of 'mental retardation'" (Gilling, 2012, p. 35) or as synonymous with Asperger's Disorder or simply "Asperger's" (Griffin, Griffin, Fitch, Albera, & Gingras, 2006), which is statistically rare (Gilling, 2012). Questions also arise regarding the absence of reality portrayed, how it is perceived, and how it is explained by movie-makers, producers, and authors of literature across various ages and stages of life. In qualitatively investigating the social content of how storied representations unfold over time, this study adds to the awareness of social and current representation of disability, through an exploration of how storied representations of characters with ASD are typified in a world that is becoming increasingly influenced by popular media.

In summary, each type of media linking to perceptions of ASD comes framed with its own frame for mean-making. Socio-emotional identification and mean-making are not the same, and differ in accordance with the media experience; experience that does not always assist those with ASD in finding their place in life. However, this does not obscure the fact that mediated representations of those with ASD do have an effect; an effect we may currently be ignoring, yet need to understand.

Methodology

Social Content Analysis

All media involves narrative or story of some type. Social content analysis provides a means of examining such literary or storied narratives, including: "literary metaphors, symbols, themes, figures of expression, styles, genre differences and intended audiences" (Krippendorff, 1989, p. 406). The benefits of social content analysis are its consideration of text, media, and society as a means of promoting thoughtful exposure to social phenomena, ideas, attitudes, and worldviews to consumers of research such as those in academic and/or educational domains, and increasingly, the general public. Krippendorff (1989) notes that "analyses of the demographic, socioeconomic, ethnic and professional characteristics of the population of characters yielded considerable biases when compared with corresponding audience characteristics" (p. 404). This interesting interface between *storied representations* and *reality* is significant, placing content analysis as integral to social research on a broad scale. Consequently, Krippendorff's (1989) steps to social content analysis frame this qualitative exploration.

(1) Design. The design phase is where context, source, and analytic constructs are defined from which later inferences can be drawn and analysis can be accomplished (Krippendorff, 1989). In this case, the context is popular media (e.g., novels and picture books),

the sources encompass common transmission of mass media (e.g., theatres and television); and, the analytic construct is the sociologically-based storied reflections of societal views (i.e., portrayal of characters with ASD).

(2) Unitizing. Unitizing defines and identifies units of analysis for sampling (Krippendorff, 1989). In the case of this study, sampling units were defined as commercially-published children's picture books, popular novels, mainstream television, and popular movies, and recording units focused on social constructs (e.g., values transmitted).

(3) Sampling. This study utilized samples providing representation across four categories of media providing balance and organization to related symbolic phenomena (i.e., theme) under investigation. Twenty of the above noted sampling units—five units each—were derived from a seven year span of time (2006-2012) including either characters with ASD and/or characters with characteristics of ASD, an appropriate size for a qualitative perspective (Teddlie & Yu, 2007). Samples were purposively chosen “based on specific purposes associated with answering a research study's questions” (Teddlie & Yu, 2007, p. 77) which “for the important information they can provide that cannot be gotten as well from other choices” (p. 77) utilizing expert judgment with the goal of comparability. More specifically, maximum variation sampling was utilized, for “comparisons or contrasts” (Teddlie & Yu, 2007, p. 81) in social portrayal, from an informal sampling frame (e.g., library listings).

(4) Coding. Each sampling unit was coded according to emergent themes within each of these literary sociologically-based literary constructs: what is given value; its audience focus; the social setting; any central issues; how characters are re/presented; and any labels used. These categories frame key points of focus for cultural understanding, allowing the effect and representation between different media to be seen from a broader perspective. This is important to this study as it examines storied representations across media, and follows the broad scope from Maich and Belcher (2010).

(5) Drawing Inferences. Krippendorff (1989) emphasises this phase as the most important step. Attention is paid across all media, examining how storied representations of ASD are typified, indicating what the source attends to, values, and embodies in attitudes and perceptions. Inferences cannot be separated from validation. Here, Young's (2012) methodology of viewing a movie artifact more than five times informed the methodology integrated across visual media. For example, instead of viewing only one episode of a television series, reflective analysis encompassed viewing across a variety of episodes in order to get a larger picture of ASD portrayal. In the case of movies, which are a contained artifact bound in time for one viewing, multiple viewings were implemented in part or whole.

(6) Validation. Validation may emerge from what cannot be seen directly in content analysis (Krippendorff, 1989). Validation here flowed from the pursuit of examining how storied representations ASD are typified, what may be assumed or stereotyped, and how this relates to reality.

Using these steps of social content analysis, varied media types are shown to contain themes that illuminate understanding of and contrast with the reality and portrayal of ASD central to this study. Emergent themes within and across boundaries of media typology include: exposed versus implied ASD (e.g. characteristics, diagnoses), clinical depictions of ASD versus disability as eccentricity (e.g., everyday families), and stereotypical portrayals (e.g., high functioning, highly skilled “superheroes”).

Results and Discussion

Exploration of this topic made it clear that society is captivated by culture; especially, how culture is portrayed through media. Many binary opposites appear in an exploration like this, such as love of media, dislike of deception, love of character, and dislike of inaccuracy of portrayal. In this project, five examples (2006-2012) for each of four storied representations depicted in four types of media (i.e., picture books, novels, television, and movies) were analyzed. Simultaneously being mindful that no story can encompass all of lived experience, these selections were made to “indicate what experiences we give more meaning to” (Gilling, 2012, p. 37). In examining how storied representations of characters with ASD are typified, emerging themes are noted within each media type.

Television

The *Globe and Mail* reported that, “it’s clear that some of the challenges faced by the autistic population have captured the imagination of TV writers, who are increasingly penning eccentric characters whose quirks would seem to align with typical characteristics of ASD” (Patch, 2012, para. 5). Recent television shows exemplify this comment, such as *Criminal Minds*, *Bones*, *The Big Bang Theory*, *Grey’s Anatomy*, and *Parenthood* which all feature characters with ASD or traits of ASD that propagate such views. Each of these shows has been produced for more than three years, indicating a faithful following and viewing stability. This is representative of cultural change. In the 1950s, viewers encountered characters—who in the majority of ways—were just like their audiences: post WWII and family-oriented (Belcher, 2010). Current storied representations, however, favor a view of humanity not necessarily “just like us”, but rather exceptional and worthy of awe in ways unfamiliar to us.

In these five examples, some such featured characters are “exposed” outright (*Criminal Minds*, *Grey’s Anatomy*, *Parenthood*), and some are assumed, incognito (*Bones*, *The Big Bang Theory*), fitting a virtual representation of how others believe a person with ASD “should” be viewed. In *Criminal Minds*, for example, the portrayal of Dr. Spencer Reid—a talented profiler who spends his time assisting in the capture of violent and/or serial killers—is forthright about the portrayal of ASD traits. His special status is recognized; however, this recognition may provide both correct and incorrect messages. On their Wikipedia site, a common go-to internet site for popular media, it is stated quite appropriately that “as is characteristic of people with Asperger's, Reid is socially awkward” (Wikipedia, 2012b, para. 9; Stichter et al., 2010). In contrast, it also specifies that:

Gubler stated in an interview in the show's second season “[Reid]’s an eccentric genius, with hints of schizophrenia and minor autism, Asperger's Syndrome. Reid is 24, 25 years old with three Ph.D.s and one can not [sic] usually achieve that without some form of autism.” (para. 9)

In this statement, a number of incorrect assumptions are shared. First, there is a disregard for the differential diagnosis of Schizophrenia and Asperger’s Disorder. In other words, if a diagnosis of Asperger’s Disorder is made, then the criteria for Schizophrenia cannot be met (Centre for Disease Control & Prevention, 2009). Second, there is no “minor” ASD exists. Third and most nonsensically, is the claim that scholarly achievement is necessarily and absolutely

heralded by the presence of an ASD. Draaisma (2009) would label this creating a fuzziness or normalization around ASD or a “‘in a sense we are all autistic’ stereotype” (p. 1478). In *Bones*, based on a mystery series, Dr. Temperance Brennan (forensic anthropologist), also has a scientific bent. Similar to Reid, she has multiple doctorates and is socially awkward, often misinterpreting social cues and conversations; she also has emotional issues, social issues, and a literal nature (IMDb, 2012b). Her character is representative of someone with Asperger’s, according to the criteria of Snedden (2010) and Young (2012), although this “diagnosis” has never been confirmed outright. A similarity based on character portrayal can be made regarding the character Dr. Sheldon Cooper, on *The Big Bang Theory*, portrayed as a verbally articulate theoretical physicist who exhibits comically-portrayed difficulties with socially successful interactions (Wikipedia, 2012a). Lastly, *Grey’s Anatomy*, a serial around the professional careers of medical professionals briefly included a new character, Dr. Mary McDonnell (2012), a cardiac surgeon with self-confessed Asperger’s.

Here, we have five storied representations of highly schooled characters: very well educated individuals who have excelled academically and have reached levels of admiration from their colleagues or classmates. All four adult characters are experts in their fields of science—but it could be questioned that they are presented as being perhaps much more “superior” due to their “dis”abilities than “normal.” Perceptions of “special skills” alongside ASD have existed since the recognition of Asperger’s Disorder in 1943 (Vital, Ronal, Wallace, & Happé, 2009), and are also termed “islets of ability,” “savant skills,” (p. 1093) or “splinter skills” (p. 1095). However, although such unique skills do exist in individuals with ASD, this occurs less than 10 percent of the time and is hypothesized to be related to the cognitive style ASD (e.g., restricted interests, focus on detail) (Vital et al., 2009). In the realm of televised characters, this appears more as a one-to-one ratio, unless, of course, the viewer chooses to humorously see all well-educated people as being “ab-normative” in character.

All five of these televised characters display eccentric behaviours and exhibit social awkwardness; however, the viewer is more likely to see them as brilliant experts—as gifted—especially when portrayed as a child, like Max in *Parenthood*. These five these characters are portrayed as lovingly eccentric rather than clinically diagnosed, even when a diagnosis is evident (Winegardner, 2010). All five are viewed as inspirational and exceptional, without the reality of exceptionally challenging behaviours, except when presented in a comical manner. In other words, the discomfort of meltdowns, tantrums, or significant socially embarrassing behaviours are rarely viewed. One single example contrary to this representation occurred in *Grey’s Anatomy* when a sensory situation occurred, necessitating tight hugging of surgeon Mary McDonnell as a calming technique. This is a rare occurrence and not necessarily viewed as a positive turn by ASD advocates or those living with ASD publishing reactions in the blogosphere (Soraya, 2009). All five televised characters here are portrayed as intellectually stimulating geniuses who make us aspire to be like them; to be “special,” perhaps, rather than averagely abled. As affirmed in the *Globe and Mail*, television is currently favoring programs and featuring eccentric characters whose so-named “quirks” are similar to characteristics in those with ASD.

Movies

The task and pace of viewing in itself stimulates the viewer emotionally and visually—as entertainment—but not necessarily for the purpose of critique (Carr, 2010; Turkle, 2011). Movies, whether made for the home TV or big screen, tend to impact the affective and cognitive

appetites of the viewer. Framed purposefully as one-time experiences without an ongoing familiarity in which viewers become acclimated to character portrayal, movies represent “storied forms,” often of a biography or a novel, that portray more exaggeration than reality for the cause of entertainment. As cautioned by Carr (2010) and Turkle (2011) above, receiving the visual story provides no time to critique, discuss, reflect, or engage conversation about what may or may not be realistic or important (i.e., in the life of a person with ASD).

Temple Grandin (2010), a made for TV biographical movie depicting the life of Dr. Temple Grandin, an animal behaviourist and university professor, is a stellar example (IMDb, 2012a) of the popularity of ASD in media. Following its Primetime Emmy award—amongst many others—for its roots as a made-for-television movie, Grandin became widely known as inspirational and larger than life, leading to her being seen as one of the 100 most inspirational people (TIME Magazine, 2010). Not only does this suggest to viewers that hard work pays off professionally, but that it really pays off for exceptional people with ASD—perhaps even with celebrity and fame. However, the following movie examples are non-biographical in focus, are prominent, at minimum, award-nominated, and reference ASD. Unlike the life-like portrayal of Grandin’s professional success and personal fame, the following examples tend to exaggerate these less-than-likely life outcomes.

In *Salmon Fishing in the Yemen* (2011) Alfred Jones is the British Government’s expert in salmon fisheries and has Asperger’s Disorder. *Extremely Loud and Incredibly Close* (2011) features a nine-year-old child hero, affected by the trauma of 9/11, who exhibits some traits of ASD (e.g., inventiveness, social awkwardness, sensory issues, repetitive behaviours). *Dear John* (2010) portrays the father of the protagonist as having recognizable characteristics of Asperger’s Disorder and a firm disconnect with conventional emotional expression, contextualized by his son coping with the trauma of war. Finally, *My Name is Khan* (2010) features a Muslim man with Asperger’s Disorder who undertakes a journey to speak to the president. The plot is rife with multiple political controversies and success in the face of life-altering challenge on a large scale (e.g., environmental disaster). In all five of these movie-based examples, characters represented are high functioning and able to cope in life situations without extreme non-functional distress. All five are ASD “heroes” who conquer seemingly impossible odds in larger-than-life situations which occur in circumstances remote to typical everyday life (e.g., extreme danger); thus, viewers may be led to believe that those with ASD have heroic abilities in times of crisis, or intuitively solve problems that the average person may not. Carr (2010) and Turkle (2011) have good cause to consider the impact of emotional and visual entertainment to exaggerate perspective without critique.

Novels

Movies, television, novels, and picture books deal with story in markedly different ways. Belcher and Maich (2010) suggested that books written by authors based upon the personal experience of family members may do so as part of a therapeutic healing process. It is of interest to note that most of the following authors have a personal connection to ASD. Leisurely reading involved in the engaging a novel is more personal and less visually bombarding than that of television or movies. Books are—for the most part—carefully selected by readers. Unlike television or movies, author and reader set the purpose, pace, time frame, and critique. While engaging in a book, there is time to pause, reflect, re-read, infer, and form opinions and affections toward characters in a story. There is also opportunity for engaging in conversation as the story unfolds.

A review of current novels focusing on main characters with ASD reveals commonality and difference between storied representations. *Mockingbird* (Erskine, 2011), for example, is a juvenile novel rife with tragedy and extreme life situations. The key character, a girl with Asperger's Disorder, loses her mother to cancer, then her older confidante and defender, her brother, to a school shooting. Although it portrays the traits of ASD in a compelling way, this book still has the "superhero feeling" which movies thematically propagated.

House Rules (Picoult, 2010), on the other hand, depicts a modern-day family which includes Jacob Hunt, a teenage boy with Asperger's. In this portrayal, the character is not a superhero, nor adept at social cues. He displays a focus on one area: forensic analysis, albeit untrained. Similar to the above movies, Jacob is portrayed clever and scientific; but perhaps, more realistically portrayed as a character that grapples with dilemmas (e.g., legal matters) as a result of his difficult societal fit. Picoult narrates the effect of ASD on the family and community.

Cynthia Lord (2008) who has a son with ASD tells the story of a girl, Catherine, who has a brother (David) with ASD. In Lord's fictional account entitled *Rules*, Catherine is torn between her love for her brother and resentment of his special needs. In many ways, this book is more about Catherine than about David, and coming to grips with healing and love.

Keeping Keller (Winegar, 2008), set in the 1950s, frames a realistic view of a five-year-old child with ASD in an age when it was not socially recognized or accepted; when institutionalization was the preferred norm. Once again, social skills—or the absence of social skills—is at the heart of the book, providing a believable but conscience-probing story. Both Picoult (2010) and Winegar (2008) focus on overt behaviours as being significant and directive in the lives of those with ASD and their family members.

Lastly, *Anything But Typical* (Baskin, 2010), presents a fictional portrayal of a boy in grade six who has ASD and loves to write, but is not "neurotypical" in his ability to converse socially. He meets another aspiring writer online whom he thinks of as his girlfriend, but becomes anxious when he discovers they may actually meet face-to-face, and his ASD reality will then become known. The family situation is well contoured, showing the complexity of understanding and being understood as a dynamic in such situations. These novels focus on the peculiarities, rules, and traits evident in the everyday life of a person with ASD, relating this to family outcomes.

Graham Findley attributes the current popularity to know and understand ASD to the vaccine debate (Findlay, 2004) as well as the publication of *The Curious Incident of the Dog in the Night-time* (Haddon, 2003). *The Curious Incident of the Dog in the Night-time* is a murder mystery novel about a boy thought to have ASD. Interestingly, it is reported that the author, "is now thoroughly irritated that the word Asperger's appeared on subsequent editions of the novel, because now everyone imagines that he is an expert and he keeps getting phone calls asking him to appear at lectures" (Allfree, 2010, para. 4). Belcher and Maich would support the view that as we read writing of those with personal ties to ASD, the pictures painted in our minds tends to follow a particular trend. Books represent ASD in a complex context of family and community, rife with everyday problems complicated by issues endemic to ASD, thus engaging empathy for readers and healing expression for authors.

Picture Books

Although there are not a vast number of picture books written for children on this topic, notable changes have been made in the last few years. In these later selections of picture books (2010-2012), less emphasis is put on family and the inner life of the child, and more is put on the societal acceptance and clinical observations of children with ASD (Maich & Belcher, 2012). Scientific criteria and prognosis for behavioural change can become main features. Picture books in particular have consequences when used in school settings. Storied representations in picture books, when used by teachers or parents, infer an authority or reality as they instruct children in educational settings. This gives the story more weight to the viewing audience than reading independently for interest from library shelves. As educational interest in ASD increases, so is the use of such storied representations in classrooms. An overview of picture books published from 2010 to 2012 provides a current cultural depiction of commonalities and differences in the storied representations of characters with ASD.

In *ASD and Me: Learning about High Functioning ASD* (DeMars, 2011), focus is on the clinical and behavioural aspects of ASD. We could say that child has become “thing-ified” to a diagnosis of clinical analysis that fits the label of his social life. *Russell's World: A Story for Kids about Autism* (Amenta, 2011), is written in conjunction with the American Psychological. This book furthers a clinical view by giving professional and clinical advice regarding children with ASD. *My Friend with Autism* (Bishop & Bishop, 2011), is a reproduction of an earlier story re-marketed to include an activity book. This book serves as an introduction to being a friend to someone with ASD, providing information for teachers and parents. Half of the book is a reprint of the original story; half contains coloring pictures on a CD. It includes a glossary for parents and other clinical information. *A is for "All Aboard!"* (Kluth & Kluth, 2010), written for friends living with ASD, is an alphabet book about trains that can be used by children with a special interest about trains, containing pertinent vocabulary. Even though the book appears to be written with this end in mind, it uses the popular idea of ASD as a theme appealing to the current reader market, and does not really address the child beyond the intent for the book. All four of these titles have a clinical focus on ASD.

Lastly, *David's World: A Picture Book about Living with Autism* (Mueller, 2012), provides the story of a family living with autism from the point of view of an older sibling. This book focuses on family rather than clinical analysis, like many of the novels represented here. It is touching and realistic, and seems to see beyond the perspective of the other texts in ways that note reality, predominately because it is written by a sibling about a sibling. However, this book is the only one of the five that takes this approach.

This medium is of importance because picture books often provide the first window to early learners where differences are made known socially through story. Overall, children's picture books are still being written mostly in this domain by parents of children with ASD, but appear to be moving away from being an agent of healing and coping to a clinical analysis of how to support challenging aspects of ASD.

Across Media Types

Across television, movies, novels, and picture books some similarities are evident. All media focuses on science in some way in the lives of characters represented. Even children's picture books include some non-fictional, clinical elements (e.g., including clinical diagnoses, glossaries for parents, etc.), as well as specific messages about the environment (e.g., the benefits of

knowledgeable teachers). Often, the characters exhibit savant-like traits, although in reality these are rare. So how do myth and reality connect to life in storied representations?

As society advances, changes occur. Technology is now the purveyor of the future, especially prominent in our younger, upcoming generations: the school, community and neighbourhood peers of our students with ASD. A stereotypical portrayal of persons with ASD from movies, television and novels is emerging that appears to glamorize eccentricity and devalue the ordinarily abled. Eccentricity is in and everyday ordinariness is out. Similarly, Draaisma (2009) noticed that “there are hardly any autistic characters not having savant skills” (p. 1477) and that only two presentations of ASD seem to exist either “diminished capacity or superhuman capacity, but nothing in between” (p. 1477). In many ways, persons portrayed appear to have savant characteristics or splinter skills, seen as being not only different, but heroic and in many ways more special than those in the families that support them. Although this may produce more tolerance for people of any special need including children with ASD, it may also have a negative outcome. For example, when the general public, including our school-aged children, is less realistically informed, naive judgments may occur, which in reality may be challenging on a daily basis. As Graham Findlay (2004) reflects:

Highbrow media has now begun to create the ‘super parent’ who can handle a career, family life, and a child with autism with deft aplomb. Promoting this as the norm is wandering into dangerous territory. My son’s reality—and his impact on his family—is naturally far more complicated. (p. 22)

Where are these media examples which fully disclose the negative behaviours that may arise during the challenging early years of puberty? How can children and their parents be prepared for these challenges which will likely occur at school, as well as the home and community? Movie and television dramatizations show viewers what producers want us to see, not the “reality of what we do not see”: “it is not cuddly; it is tough, challenging, stressful, and often humorous” (Findlay, 2004, p. 22).

Conclusions: Are We Becoming the Stories We Tell?

From this 20-unit sample bounded by context and time, results show that: television characters with ASD tend to be portrayed as intellectually stimulating geniuses who make us aspire to be like them; movies tend to show those with ASD as heroes, conquering seemingly impossible odds; novels tend to present ASD in a complex, authentic context of family and community, rife with everyday problems; and picture books tend to “explain” ASD with a clinical perspective. Generally, television, movies, and novels affect us outside of educational-focused settings. They entertain and have ASD as an area of interest. However, picture books appear to be moving towards a clinical presentation of ASD, and this is significant because they form part of teaching and learning away from parental or civic input when used in the classroom. Classroom, community, and/or home-based sharing of storied representations may perpetuate incorrect, stereotypical, and unrealistic notions of attributes and attitudes of characters reflecting ASD, including a glamorized or mythical view; therefore, a cautious inclusion paired with careful intentionality is suggested in their use.

Storied representations of characters with ASD colour our views between fact and fiction in the real world, similar to what Sarrett (2011) sees as the depiction of dual realities that push

and pull between persisting fundamental assumptions of ASD in a “scientific reality” (p. 143) and the emergence of positively portrayed “autistic autobiographies” (p. 142). It is important that we attend not only to the perceptions, invented or real, that are presented to us as entertainment and perhaps given a unwitting status of “truth,” but learn to attend to the essential insider knowledge that should be the dominant voice of understanding in the classroom, school, and society: the children, parents, and families that should be the main contributors of our current and future understandings (Billington, McNally, & McNally, 2000; Gilling, 2012; Sarrett, 2011). In learning from various media, we can extend or absorb valid, false, or exaggerated perspectives about realities and misrepresentation of ASD; therefore, careful choice-making and in-depth critique is essential to utilize the engaging and instructional features of mass media to develop an authentic understanding.

References

- Allfree, C. (2010, March 31). Mark Haddon: The curious incident of the novelist turned playwright. Retrieved from <http://www.independent.co.uk/arts-entertainment/books/features/mark-haddon-the-curious-incident-of-the-novelist-turned-playwright-1931469.html>
- American Psychiatric Association. (2013). Autism spectrum disorder. Retrieved from <http://www.dsm5.org/Documents/Autism%20Spectrum%20Disorder%20Fact%20Sheet.pdf>
- Amenta, C.A. (2011). *Russell's world: A story for kids about autism*. Washington, DC: Magination Press.
- Autism Speaks. (2013). Answers to frequently asked questions about DSM-5. Retrieved from <http://www.autismspeaks.org/dsm-5/faq>
- Baskin, N. R. (2010). *Anything but typical*. New York: Simon & Schuster Books for Young Readers.
- Belcher, C. (2008). Between the covers: Suffering, trauma and cultural perspectives in children's picture books. *Journal of Christian Education (Australian Christian Forum on Education Incorporated)*, 51(2), 41-57.
- Belcher, C. (2010). Family portrayal in children's picture books: The elephant in the room. *Teaching with Compassion, Competence, Commitment*, 3&4(2&1), 51-70.
- Belcher, C., & Maich, K. (2010). Seeing the "me" in ASD through children's picture books. *Teaching with Compassion, Competence, Commitment*, 4(2), 20-32. Retrieved from: http://www.mvnu.edu/academics/eduprofstud/education/education_journal/vol4no2/seeing.pdf
- Billington, T., McNally, B., & McNally, C. (2000). Autism: Working with parents, and discourses in experience, expertise and learning. *Educational Psychology in Practice*, 16(1), 59-68. doi: 10.1080/026673600115292
- Boutot, A., & Smith Myles, B. (2010). *Autism spectrum disorders: Foundations, characteristics, and effective strategies*. Upper Saddle River, NJ: Pearson
- Bishop, C., & Bishop, G. (2011). *My friend with autism*. Arlington, TX: Future Horizons.
- Bond, B. (2013). Physical disability on children's television programming: A content analysis. *Early Education and Development*, 24, 408-414. doi: 10.1080/10409289.2012.670871
- Carr, N. (2008, July/August). Is Google making us stupid? *The Atlantic*, 56-63. Retrieved from <http://www.theatlantic.com/magazine/archive/2008/07/is-google-making-us-stupid/306868/>

- Carr, N. (2010). *The shallows: What the internet is doing to our brains*. New York, NY: W. Norton & Company.
- Centre for Disease Control & Prevention. (2009). *Diagnostic criteria*. Retrieved from <http://www.cdc.gov/ncbddd/autism/hcp-dsm.html>
- Curwood, J. (2013). Redefining normal: A critical analysis of (dis)ability in young adult literature. *Children's Literature in Education*, 44(1), 15-28.
- Dedeoglu, H., Ulusoy, M., & Lamme, L. (2011). A content analysis of international children's picture books: Representation of poverty. *Eurasian Journal of Educational Research*, 43, 37-52.
- DeMars, T. (2011). *ASD and me: Learning about high functioning autism spectrum disorder*. Lexington, KT: Charity Press Books.
- Draaisma, D. (2009). Stereotypes of autism. *Philosophical Transactions of the Royal Society of Biological Sciences*, 364, 1475-1480. doi:10.1098/rstb.2008.0324
- Dyches, T., Prater, M. A., & Heath, M. (2010). Newbery Award Winning books 1975-2009: How do they portray disabilities? *Education and Training in Autism and Developmental Disabilities*, 45(4), 583-596
- Dyches, T. T., Prater, M., & Jenson, J. (2006). Portrayal of disabilities in Caldecott books. *Teaching Exceptional Children Plus*, 2(5), 1.
- Dyches, T. T., Prater, M. A., & Leininger, M. (2009). Juvenile literature and the portrayal of developmental disabilities. *Education and Training in Developmental Disabilities*, 44(3), 304-307.
- Erskine, K. (2011). *Mockingbird*. New York, NY: Philomel Books.
- Findlay, G. (2004). HEROES AND VILLAINS. *Community Care*, (1524), 22.
- Furlong, M. (2013, July 10). The latest trend on TV: Characters with Asperger's. Retrieved from http://www.huffingtonpost.com/maggie-furlong/aspergers-on-tv_b_3574336.html?ncid=edlinkusaolp00000003
- Golos, D., Moses, A., & Wolbers, K. (2012). Culture or disability? Examining deaf characters in children's book illustrations. *Early Childhood Education Journal*, 40, 230-249. doi: 10.1007/s10643-012-0506-0
- Gilling, J. A. (2012). 'When the powerfulness isn't so helpful': Callum's relationship with autism. *Educational & Child Psychology*, 29(2), 32-40.
- Griffin, H.C., Griffin, L.W., Fitch, C.W., Albera, V., & Gingras, H. (2006). Educational interventions for individuals with Asperger syndrome. *Intervention in School and Clinic*, 41(3), 150-155.

- Haddon, M. (2003). *The curious incident of the dog in the night-time*. Toronto: Random House Canada.
- Hodkinson, A. (2012). Inclusive education and the cultural representation of disability and disabled people within the English education system: The influence of electronic media in the primary school. *Journal of Research in Special Education Needs*, 12(4), 252-262. doi: 10.1111/j.1471-3802.2011.01208.x
- Kanner, L. (1968). Autistic disturbances of affective contact. *Acta Paedopsychiatrica: International Journal of Child & Adolescent Psychiatry*, 35(4-8), 98-136.
- Kluth, P., & Kluth, V. (2010). *A is for "All aboard!"* Baltimore, MD: Paul H. Brookes.
- IMDb. (2012a). Awards for Temple Grandin. Retrieved on August 8, 2012 from <http://www.imdb.com/title/tt1278469/awards>
- IMDb. (2012b). Dr. Temperance (Bones) Brennan. Retrieved on August 7, 2012 from <http://www.imdb.com/character/ch0027448/bio>
- Krippendorff, K. (1989). Content analysis. In E. Barnouw et al. (Ed.) *International encyclopedia of communication* (pp. 403-407). New York: Oxford University Press.
- Little Willow. (2006, April 3). Interview: Cynthia Lord. [Web log post]. Retrieved from <http://slayground.livejournal.com/72045.html>
- Lord, C. (2006). *Rules*. New York, NY: Scholastic Press.
- Lyons, V., & Fitzgerald, M. (2007). Asperger (1906-1980) and Kanner (1894-1981), the two pioneers of autism. *Journal of Autism and Developmental Disorders*, 37, 2022, 2023. doi: 10.1007/s10803-007-0383-3
- Maich, K., & Belcher, C. (2012). Using picture books to create peer awareness about autism spectrum disorders in the inclusive classroom. *Intervention in School and Clinic*, 47(4), 206-213.
- Moran, M. (2013, January 18). *DSM-5 provides new take on neurodevelopment disorders*. *Psychiatric News*. Retrieved from <http://psychnews.psychiatryonline.org/newsarticle.aspx?articleid=1558424>
- Mueller, D. (2012). *David's world: A picture book about living with autism*. New York, NY: Sky Pony Press.
- McLuhan, M. (1964). *Understanding media: The extensions of man*. New York, NY: McGraw Hill.
- Ontario Ministry of Education. (2006). *The Ontario curriculum grades 1-8: Language*. Toronto: Queen's Printer for Ontario.

- Patch, N. (2012, December 27). Characters with autism getting prime spots on major TV series. *The Globe and Mail*. Retrieved from http://www.theglobeandmail.com/life/health-and-fitness/health/conditions/characters-with-autism-getting-prime-spots-on-major-tv-series/article6744446/?utm_source=Shared+Article+Sent+to+User&utm_medium=E-mail:+Newsletters+/-E-Blasts+/-etc.&utm_campaign=Shared+Web+Article+Links
- Picoult, J. (2010). *House rules*. New York, NY: Atria.
- Poling, D., & Hupp, J. (2008). Death sentences: A content analysis of children's death literature. *The Journal of Genetic Psychology, 169*(2), 165-176.
- Postman, N. (1995). *The end of education: Redefining the value of school*. New York, NY: Alfred A. Knopf.
- Prater, M. A., (2003). Learning disabilities in children's and adolescent literature: How are characters portrayed? *Learning Disability Quarterly, 26*(1), 47-62.
- Sarrett, J. C. (2011). Trapped children: Popular images of children with autism in the 1960s and 2000s. *Journal of Medical Humanities, 32*(2), 141-153. doi:10.1007/s10912-010-9135-z
- Smith, D. E. (2005). Knowing the social: An alternative design. In *Institutional ethnography: A sociology for the people* (pp. 27-45). Oxford, UK: AltaMira Press.
- Smith, D. E. (2006). *Institutional ethnography as practice*. Lanham, MD: Rowman & Littlefield.
- Snedden, R. (2010). *Explaining autism*. Mankato, MN: Black Rabbit Books.
- Soraya, L. (2009, February 10). Re: When will ABC get Asperger's right? [Web log comment]. Retrieved from <http://www.psychologytoday.com/blog/aspergers-diary/200902/when-will-abc-get-aspergers-right>
- Stichter, J. P., Herzog, M. J., Visovsky, K., Schmidt, C., Randolph, J., Schultz, T., & Gage, N. (2010). Social competence intervention for youth with Asperger Syndrome and high-functioning Autism: An initial investigation. *Journal of Autism & Other Developmental Disorders, 40*(9), 1067-1079. doi: 10.1007/s10803-010-0959-1
- Teddle, C., & Yu, Fen. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research, 1*(77), 77-100. doi: 10.1177/2345678906292430
- TIME Magazine. (2010). *The 2010 TIME 100*. Retrieved from <http://www.time.com/time/specials/packages/completelist/0,29569,1984685,00.html>
- Turkle, S. (2011). *Alone together: Why we expect more of technology and less from each other*. New York, NY: Basic Books.
- Vital, P. M., Ronald, A., Wallace, G. L., & Happé, F. (2009). Relationship between special abilities and autistic-like traits in a large population-based sample of 8-year-olds. *Journal*

of Child Psychology & Psychiatry, 50(9), 1093-1101. doi:10.1111/j.1469-7610.2009.02076.x

Wikipedia. (2012a). Sheldon Cooper. Retrieved on August 7, 2012 from http://en.wikipedia.org/wiki/Sheldon_Cooper

Wikipedia. (2012b). Spencer Reid. Retrieved on August 6, 2012 from http://en.wikipedia.org/wiki/Spencer_Reid#cite_note-6

Winegar, T. (2008). *Keeping Keller*. Springville, UT: Cedar Fort.

Winegardner, J. (2010, March 3). NBC's Parenthood brings real-life autism to TV. *The Washington Times Communities*. Retrieved on August 31, 2012 from <http://communities.washingtontimes.com/neighborhood/autism-unexpected/2010/mar/3/nbcs-parenthood-brings-real-life-autism-tv/>

Young, L.S. (2012). Awareness with accuracy: An analysis of the representation of autism in film and television. *Research Papers*. Retrieved from http://opensiuc.lib.siu.edu/gs_rp/256

Appendix

Table 1.
Current Examples of Popular Media-Based Depictions of Characters with ASD or with ASD-like Characteristics

Television* & Characters		Movies*		Novels^			Picture Books^		
Title	Character	Title	Year	Author	Year	Title	Author	Year	Abbrev. Title
<i>The Big Bang Theory</i>	Dr. Sheldon Cooper	<i>Dear John</i>	2010	Baskin	2010	<i>Anything but Typical</i>	Amenta.	2011	<i>Russell's World</i>
<i>Bones</i>	Dr. Temperance Brennan	<i>Extremely Loud and Incredibly Close</i>	2011	Erskine	2011	<i>Mockingbird</i>	Bishop & Bishop	2011	<i>My Friend with Autism</i>
<i>Criminal Minds</i>	Dr. Spencer Reid	<i>My Name is Khan</i>	2010	Lord	2006	<i>Rules</i>	DeMars	2011	<i>ASD and Me</i>
<i>Grey's Anatomy</i>	Dr. Mary McDonnell	<i>Salmon Fishing in the Yemen</i>	2011	Picoult	2010	<i>House Rules</i>	Kluth & Kluth	2010	<i>A is for "All aboard!"</i>
<i>Parenthood</i>	Max	<i>Temple Grandin</i>	2010	Winegar	2008	<i>Keeping Keller</i>	Mueller	2012	<i>David's World</i>

*Alphabetized by title

^Alphabetized by author