The Representation of Autistic Spectrum Disorder in Fictional Film and Television from 2000 to 2013

Leigh E. Scott

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Abstract

This thesis focuses on the portrayals of autism and Asperger's in film and television in the fourteen year period between 2000 and October 2013. As diagnoses of the condition have grown in this time, so too have the number of popular media presentations of autistic spectrum disorder, which could influence the general population's perceptions (Green, Garst, & Brock, 2004). While *Rain Man* (Levinson, 1988) still has an impact on popular perspectives and representations of autism, the examination of contemporary media is critical to understanding the characterisations of the disorder in the current period and the perceptions potentially affected by them.

This thesis aims to provide a comprehensive examination of trends in the depiction of the condition in movies and television and how these portrayals have changed over time. A qualitative and quantitative, longitudinal process was implemented through a category system and applied to a total of fifty motion pictures and television series. The category system collected data related to audience reach, character demographics, educational and workplace inclusion, relationships, commonly portrayed traits, standard narratives of texts containing autistic spectrum disorder, and character agency.

The representation of autism and Asperger's was found to be varied. The was no single characterisation of those on the spectrum, although white, middle class, males with Asperger's were the most commonly shown. A shift toward educational and workplace inclusion was observed, although the perpetuation of some stereotypes noted in earlier research and/or deriving from *Rain Man*, like speech patterns and special interests, was also noted. Additionally, there was a movement away from standard narratives depicting characters on the spectrum with little agency and spectacular skills, and toward depictions focusing on complex characters with ASD. These results are indicative of a shift in fictional, visual media to represent autism and Asperger's in a more sympathetic way.

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Chapter 1: Introduction

The study of Autism spectrum disorders was a new field for me at the start of this thesis. I come from a literary and film criticism background at an American university. As I moved through my university education, the son of a close family friend was being evaluated for autism. Although he is not on the spectrum, his evaluation alerted me to the disorder in everyday life, most notably the emphasis the media has placed on autism and Asperger's. The combination of media portrayals becoming more high profile and the growing awareness of the disorder within my social circles suggested the need to critically evaluate the media containing autism within my academic framework.

Autism spectrum disorders (ASD) have been portrayed for many years in fictional media in various forms. The condition was introduced to mainstream cultural consciousness and started a trend of representations in 1988 with the release of Rain Man (Levinson), the first major motion picture depicting autism (Murray, 2008). Since the beginning of the new millennium, the subject of autism has become more frequently touched upon than in previous years, both in research and in fictional media, which can be linked to the rise in diagnoses in children from 1:250 reported in 2000 (CDC 2000) to 1:88 (Baio, 2012) in 2012 in the United States. This rise in diagnoses can be connected to the constantly broadening interpretation of the diagnostic criteria for ASDs (Wing, 1996), despite Asperger's removal as a diagnosis in 2013. Since 2000, autism support groups for those on the spectrum and their families have become more commonplace and socially accepted and educational inclusion has become more prevalent, likely associated with the broadening terms. While the number of individuals with autism has increased in films and on television, mirroring this growing number of diagnoses, little research has been done on how fictional visual media represents the expanding population of individuals on the spectrum, especially on texts produced since 2000, with key critical works limited to Mark Osteen's 2007 and Stuart Murray's 2008 books.

The impact these representations might have on perception is critical to understanding current cultural attitudes toward ASD. Because fictional media has the power to affect (Green, Garst, & Brock, 2005) and reflect perceptions, research about autism's portrayal in film and TV may demonstrate changing trends in representation and could indicate the level of acceptance and understanding of autism in the general public. Since the way in which educators and school peers think about ASD influences the success of inclusion (Humphrey, 2008, 42), the depiction of the disorder in fictional media could both impact the public's understanding of the educational inclusion of those on the spectrum.

The following research examines how fictional visual media represents autism, as inspired by the following research questions.

- How are autism and Asperger's represented in film and television?
- How has this portrayal changed since 2000?

Finding patterns among the representations through the above questions and discussing the meaning of these patterns is critical to comprehending the contemporary cultural context of the condition. In addressing these questions, this thesis engaged with a variety of critical theories, creating a theoretical framework for the research. The most significant theories used were disability studies (Linton, 1998; Garland-Thomson, 2002), literary disability studies (Murray, 2008), film studies (King, 2002), television studies (Ellis, 2004), general literary theory, New Criticism (Staiger, 1992), and gender studies (Mulvey, 1975). Informed by these theories, this thesis aims to describe how autism and Asperger's have been portraved in media between 2000 and 2013, how these portrayals have changed in this period, and how the representations of the condition influence and reflect perception. It will also examine the differences in the key themes, portrayals of stereotypes, the creation of 'othered' characters, and gauge the amount of agency characters possess. The ways in which these portrayals may impact a modern audience's views the condition will also be discussed. The ideas that the public holds about ASD are not only important in terms of knowledge, but also because they have the potential to affect

how well individuals on the spectrum are incorporated into not only mainstream schools, and society in general.

The following chapters focus on the answers to the above questions. The second chapter contains a literature review, defining and contextualising autism, examining links between inclusion and perception, and discussing the critical framework that has already examined autism in film and television. The methodology is described in the third chapter, including describing the use of a descriptive and interpretive category system and shot analysis to examination the individual motion pictures and television series and how each category changed over time. Chapter four, the results, presents the findings of the analysis of each film and television programme. The discussion, in the fifth and final chapter, explores the meanings and potential implications of the results and draws conclusions on the research. It analyses the portrayals, potential perceptions, and the educational and occupational inclusion of characters in film and television with the condition, and how these elements have changed over time.

Chapter 2: Literature Review

Understanding Autism

Definition

Autism is a lifelong spectrum disorder that affects the social, communicative, and behavioural development of individuals from very early in life. Autism and developmental disabilities that resemble it, like Asperger's Syndrome (AS) and Rett's Disorder, were often termed autistic spectrum disorders for ease of understanding (Wing, 1996), though the term was not used diagnostically until the release of DSM-V in 2013. Its release included the new designation and the removal of Asperger's as a diagnosis. Autism and ASDs are traditionally diagnosed based on the following 'triad' of impairments, as coined by Wing and Gould (1979): communication, socialisation, and rigidity of thought and patterns of behaviour. Individuals with ASDs are also likely to have the following traits: sensory sensitivity, poor motor skills, learning disabilities, and/or aggressive behaviour (SIGN, 2007). As a 'spectrum' disorder, autism spectrum disorders have a wide diagnostic range; the diagnosis encompasses people who are able to care for themselves and maintain lives similar to their neurotypical peers to those who cannot speak or otherwise communicate in a typical manner and require full-time care. Asperger's Syndrome, or simply Asperger's, is a form of autism that is characterised by less communicative difficulty, typical development for the first few years of life, lack of empathy, intense absorption in special interests, and average or above average levels of intelligence (Klin, Volkmar, & Sparrow, 2000). ASD will often be used to indicate all forms and severities of autism in the rest of the thesis. The term Asperger's Syndrome, although it has been removed from the DSM-V, the current diagnostic manual in the USA, will be used to indicate an individual with a mild form of autism as the majority of the texts analysed were produced before the changes were either proposed or put into place. The terms 'high-functioning,' indicating an individual with more impairment than Asperger's, and 'classical autism,' a person with significant disability, will also

be used, although they are not and never have been diagnostic terms, in order to more clearly indicate where an individual lies on the spectrum.

Characteristics

As research on the representation of autism and Asperger's in fictional media, further explanation of the characteristics of these two disorders is critical to understanding what autism *is*, rather than just how the media portrays it. The triad of impairments mentioned above indicates the basic characteristics of both autism and Asperger's and serves as a simple outline for diagnostic criteria. The *Diagnostic and Statistical Manual* (DSM) of the American Psychiatric Association (Fifth Edition, 2013) and the *International Statistical Classification of Diseases and Related Health Problems* (ICD) of the World Health Organisation (Tenth Edition, 1992) currently put forth the diagnostic criteria for autism and Asperger's in the United States and Europe, respectively. The characteristics an individual displays that the DSM IV (American Psychiatric Association, 2000), the version used for this thesis due to the production dates of the texts analysed, and ICD-10 use to make a diagnosis are discussed in the following descriptions of autism and Asperger's.

The diagnosis of autism requires the presence of certain behaviours and a notable lack of others. The presence of social impairment is one of these criteria. An individual who has been diagnosed with autism is likely to exhibit poor nonverbal communication, for instance a notable lack of eye contact or odd gesturing; an unusually low level of peer relationships for his/her age group, in spite of opportunity to develop them; a lack of behaviour indicating the desire to share enjoyment, interests, or successes with others; a lack of seeking or giving comfort with or to other people; and/or the lack of 'socio-emotional reciprocity' (Cumine, Dunlop, & Stevenson, 2010b). Communication difficulties are also integral to a diagnosis of autism. Individuals with autism are likely to have a delay in development or total lack of speech; impaired conversation skills, like the inability to begin or perpetuate conversation; stereotyped or repetitive language; irregular pitch, stress, rate, rhythm, or intonation when speaking; and/or a lack of imaginative play

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as appropriate for an individual's developmental stage. Individuals with autism also typically display repetitive, stereotyped patterns of behaviour, interests, and activities (Volkmar, Paul, Klin, & Cohen, 2005, p. 22). These behaviours include obsessive preoccupation with patterns of interest, seemingly unbending observation of routines and rituals that have no function, attachments to atypical objects, occupation with parts or nonfunctional elements of objects, anxiety caused by changes in small, nonfunctional aspects of their surroundings, and/or 'repetitive motor mannerisms,' like hand flapping (Cumine, Dunlop & Stevenson, 2010b). Due to the spectrum nature of autism, these characteristics manifest themselves differently, both in terms of behaviour and (dis)ability, in every individual. In cases of 'classic' autism, individuals would frequently require full-time care, while those considered 'high functioning' might require minimal to no care as adults.

Asperger's syndrome, as a disorder on the autistic spectrum, has characteristics very similar to autism, though individuals with Asperger's have a lesser degree of disability. In both the social interaction and repeated behaviours or interests aspects, the diagnostic criteria for Asperger's remain the same as for autism in DSM IV and ICD-10 (Cumine, Dunlop & Stevenson, 2010a,b). Asperger's is distinguished from autism by its lack of 'clinically significant,' both the DSM IV and ICD 10 use this term, delay in language or cognitive development (Fitzgerald & Corvin, 2001). Children with Asperger's are typically able to use single words by age 2 and phrases by 3. Their 'self-help skills, adaptive behaviour (other than social interaction), and curiosity about the environment' (American Psychiatric Association, DSM IV, 2000) are generally typical. The ICD-10 adds that children with Asperger's may have some delay in motor coordination development, clumsiness, or singular 'special skills, often related to abnormal preoccupations,' but these are not requirements for diagnosis (1992). Due to the less severe impairment caused by Asperger's, individuals with this diagnosis are more likely to lead lives without support than those diagnosed with autism.

Additionally, those on the spectrum, whether they have an autism or Asperger's diagnosis, are likely to have coexisting clinical disorders. The number and type of comorbidities vary, including psychiatric, neurological, and other developmental disorders, like language disorder, oppositional defiant disorder (ODD), general anxiety disorder, depression and epilepsy, to name a few (Levy et al., 2010). Between seventy (Leyfer et al., 2006) and eighty (Levy et al., 2010) percent of individuals on the spectrum have at least one comorbid psychiatric disorder, including those specifically labeled developmental. The most prevalent mental health disorders include specific phobias [about 44% (Levy, 2006)], ADHD [(21% (Levy et al., 2010) to 30.7% (Leyfer et al., 2006)], OCD, [2% (Levy et al., 2006) to 37.2% (Leyfer et al., 2006)], and depression, ranging from 10.1% with a major depressive episode (Leyfer et al., 2006) to 1.1% with a clinical diagnosis (Levy et al. 2010). While coexisting diagnoses are not necessary characteristics of the condition, because they appear in the majority of the population of those on the spectrum, their discussion is necessary for the full picture of autism and Asperger's.

Prevalence

The numbers of diagnoses of autism, Asperger's, and other pervasive developmental disorders have increased throughout the period the diagnostic labelling of the conditions. The earliest estimates come from Victor Lotter's 1966 study, which indicated that the prevalence of traditional autism, the disorder described by Kanner, was approximately 4.5 in 10,000 children (Lotter, 1966). In 1993, research conducted by Stephan Ehlers and Christopher Gillberg studying children with social or educational problems in mainstream schools in Göteborg borough, Sweden indicated that about 5 in 10,000 children had classical autism and, in contrast, 36 in 10,000 children had Asperger's.

More recently, however, figures have become significantly higher and differ widely by nation.¹ A study by Gillian Baird, et al.(2006) estimates that 116 in 10,000, rounded to 1 in 100, children in the United Kingdom are on the autistic spectrum. In 2009, a study done by Simon Baron-Cohen, et al. in UK schools

¹ Because this study focuses on fictional works about autism primarily written or filmed in the United States and the United Kingdom, only figures from those two countries are included.

suggested a prevalence of 157 per 10,000, closer to 1 in 64 than 1 in 100. In the United States, research published by the Centers for Disease Control and Prevention (Baio, 2012) indicates that 1 in 88 children may have an autistic spectrum disorder. In 2013, a CDC survey of parents suggests that as many as 1 in 50 children may be on the autistic spectrum (Blumberg, 2013). This most recent set of figures does not replace the official 1 in 88 statistic in the US, but suggests that the 2012 findings might be an underestimate. These numbers seem to indicate a surge in the number of children with autism, potential evidence for an epidemic. Lorna Wing, however, suggests that these statistical variations are simply a reflection of changing diagnostic requirements and not an actual increase in individuals with the characteristics of an ASD (Wing, 1996). While none of the studies on prevalence are comprehensive, their results are important to noting the commonness of the disorder, potentially determining the cause of ASD, and helping researchers obtain funding for further studies about ASD.

The prevalence of ASD varies by gender, though by exactly how much is unknown. Ehlers and Gillberg found that four times as many boys are on the autistic spectrum as girls (1993), but more recently a CDC study found that boys are almost five times more likely to have ASD (Rice, 2009). This ratio, however, could be much smaller or far larger as various studies have found the male to female ratio to be anywhere from 2:1 to 16:1 (Gould & Smith, 2011), though the number of boys is always significantly higher than girls. The apparently higher number of boys diagnosed has been connected to differing presentation of symptoms in girls (Gould & Smith, 2011), but some have commented that the relatively limited amount of data about girls on the spectrum makes it difficult to determine the exact cause of the differing diagnostic statistics between genders (Bazelon, 2007). Though there has been an increase of data collected about girls and women with autism or Asperger's in recent years, no concrete conclusions have been drawn on either the total number of girls on the spectrum or why their numbers may be lower than boys with ASD.

Historical Context

Autism was first named and described by Leo Kanner in his 1943 paper, 'Autistic Disturbances of Affective Contact.' Kanner described autism as a disorder characterised by a lack of social connection with people, unvarying, repetitive behaviours and schedules, a lack of or notably abnormal speech, obsession with objects, and significant rote memory or visuospacial acuity in contradiction with learning disabilities (Kanner, 1943). A year later, Hans Asperger, an Austrian paediatrician, described a syndrome similar to but distinct from Kanner's condition (Wing, 1996). His paper, "'Autistic Psychopathy' in Childhood," validated Kanner's findings and identified a second potential disorder. Asperger's findings were, however, written in German and largely overlooked due to the language of publication, even in German-speaking nations, until some fifty years later when Uta Frith translated his paper into English (Frith, 1991).

Wing (1996) indicates that although the classification of autism as a disorder is only officially seventy years old, behaviour consistent with a diagnosis of autism was recorded in both scientific and fictional literature long before 1943. Psychologists and psychiatrists, like Michael Fitzgerald (2001), have posthumously diagnosed historical figures, like Wolfgang Amadeus Mozart, with autism or Asperger's, indicating ASD's existence historically. As such, autism cannot be considered a 'modern' disorder; however, Kanner's recognition of autism as a disorder in the 1940s is indicative of the changing social and conversational expectations of children living in developed, industrialised cultures in the middle of the twentieth century (Nadesan, 2007).

In the 1950s and 1960s, theories about the causes of autism became the focus of scrutiny and research. The subject was contested largely due to Bruno Bethlehem's description of the 'refrigerator mother' in a number of publications, most notably *The Empty Fortress: Infantile Autism and the Birth of the Self* (1967). He portrayed the disorder as one caused by cold and distant parenting rather than a disorder with a physiological or neurological basis. Wing notes that while this explanation of the condition's causes was dispelled by a number of researchers in the 1960s, the myth still persists in a small portion of professionals and the general public today (1996).

In the 1970s and 1980s, several studies changed the classification of autism. Israel Kolvin determined that autism is separate from childhood schizophrenia (Kolvin, 1971), the condition with which autism was grouped in diagnostic manuals at that time, and has a biological basis (Kolvin, Ounsted, & Roth, 1971). Lorna Wing and Judith Gould's Camberwell 1979 study of teenagers with developmental disabilities led to the broadening of the requirements for a diagnosis, as did the work of others including Sir Michael Rutter's 1978 discussion of the condition's diagnosis and definition. Many of the individuals Wing and Gould worked with had some of the diagnostic features of Kanner's autism, but did not fit this diagnosis exactly, indicating that the definition of autism needed to be expanded to include individuals that deviated from the original diagnostic criteria. In the late 1970s and early 1980s, the idea of autism as a spectrum disorder was formulated and promoted by Wing and Gould (1979). Wing also published a summary of Asperger's findings in 1981 (Wing, 1981), further indicating the condition's wide parameters. Throughout the 1970s and 1980s, the number of individuals diagnosed with autism grew. Both the ICD and DSM diagnostic systems also began to group autism as 'pervasive developmental disorders,' in 1972 and 1980, respectively, rather than categorising autism as a subgroup of schizophrenia, which implied both a false relationship between the two conditions and incorrect, negative associations with autism.

The 1990s and early 2000s brought a significant change to the diagnosis of autism. Largely thanks to Uta Frith's 1991 translation of Asperger's paper, Asperger's Syndrome was added to the DSM IV in 1994 and the ICD-10 in 1993. Autism has continued to be at the centre of numerous studies, popular representations, and controversies since the start of the new millennium. These contentious issues range from allegations of MMR vaccines causing autism to indications of mass murderers being on the autistic spectrum; the Virginia Tech shooter, Seung-Hui Cho, was falsely deemed autistic (Murray, 2008, pp. 28) and the Sandy Hook shooter, Adam Lanza, is thought to have had autism (Muskal, 2013). In 2013, the DSM-V removed the diagnosis of Asperger's and broadened the definition of autism to encompass individuals with the characteristics of both Asperger's and autism.

Autism in Contemporary Society

Due to the relative newness of the classification of the disorder and the steady increase in the number of diagnoses, autism has become a high profile disability. It is the subject of numerous academic works, from PhD dissertations to major studies done by governmental bodies, like the CDC studies mentioned above. The differing cultural experiences of ASD have been examined as well (Grinker & Cho, 2013), intensifying the idea of the disorder as one based around societal expectations of behaviour. Since the release of *Rain Man* (Levinson)—a film about Charlie Babbit and his brother Raymond, a savant with autism—in 1988, autism has become a popular subject in both fictional and factual media, inspiring many films² and news stories (Murray, 2008). Many organisations exist to raise awareness of the disorder and funds for research; most prominent among them in the United States are Autism Speaks and the Autism Society and in the United Kingdom The National Autistic Society and Scottish Autism. Support groups for caregivers and individuals on the spectrum have become more common in recent years and resources have become widely available through the internet.

Most significantly for this thesis, academic inclusion of students with autism and Asperger's has become more common in recent years. Internationally, the UN Convention of the Rights of Persons with Disabilities (2006) asserts that all nations who agree to uphold the resolution 'ensure an inclusive education system at all levels' and that students 'receive the support required (sic), within the general educational system' (Article 24). This convention has been formally ratified by many UN nation states, including the UK. Legislation within the United Kingdom, including the Special Educational Needs and Disability Act (2001) and, most recently, the Equality Act 2010, encourages inclusion of all students in mainstream

² See Appendix A for a list of texts

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classrooms. There has been extensive political debate about the implementation of inclusion, and the continuation of such debates suggests, in England and Wales, the blanket policies of inclusion are not yet running smoothly. The Standards in Scotland's Schools etc. Act 2000 and Scotland's Education (Additional Support for Learning) (2004) and the latter's 2009 amendment, set out to provide education for all children in mainstream schools and classrooms unless there is an established reason for an alternative. They provide the legal framework to ensure that every child who needs support, permanently or temporarily, has access to the additional support required. The Scottish Government has set up further educational guidelines for unique student need. Getting It Right For Every Child (GIRFEC) (2006), which connects the school, the child, and his or her family to give the child what he or she needs for academic success, and the Curriculum for Excellence, which outlines four visions of student success, including ensuring all students are active participants in schools, have had a large have an impact on inclusion.

In the United States, the federal government has little direct control over education; each state has authority over its own educational systems, requirements, regulations, and assessments. There are, however, pieces of federal legislation that have had a large affect the inclusion rights of students in all fifty states. The Individuals with Disabilities Act (amended 2004) is the most encompassing piece of federal law that impacts special educational needs in the United States (US Dept. of Ed., 2008). The *No Child Left Behind Act of 2001* (2002) also addresses issues of inclusion, such as ensuring that students with disabilities are achieving at levels similar to their typical peers. How federal legislation is put into practice, though, varies from state to state, as each state issues its own assessments and has its own achievement benchmarks. In New York, the state with the US's largest public school system for example, the state focuses its educational inclusion programmes on meeting the criteria for the above federal legislation. It sets out different pathways for students with disability, including separate pathways for high school graduation, transitions between levels of school and the post-educational world, and ensuring

that each student is in the least restrictive (i.e, most inclusive with typical students) environment appropriate for each individual.

While a child with classic autism would likely still be placed in a special needs classroom or school in either nation, those who have higher functioning autism or Asperger's and have no or less severe learning difficulties are often placed in traditional classrooms with neurotypical peers. In 2001, just under seventy percent of school-aged children on the autistic spectrum were included in mainstream schools (Keen & Ward, 2004). The legislative changes regarding inclusion allow those on the autistic spectrum to socially interact with children who do not have their handicaps, theoretically allowing the child on the spectrum to improve his or her social and communication skills in addition to opening up equal levels of education for those with a developmental disability. The success of fully including students on the spectrum in terms of presence, participation, acceptance, and achievement, despite the large numbers in mainstream schools and legal requirements, is often modest and requires significant modification to teaching strategies in order to achieve positive affects (Humphrey, 2008).

Additionally, as ASD becomes an older disorder, the outcomes for adults on the spectrum and their families have been increasingly studied. The majority of lower functioning individuals, those with learning and other intellectual disabilities, have steady IQs throughout life and show increased language skills as they age (Howlin, Savage, Moss, Tempier, & Rutter, 2014). Those who are higher functioning, in some contrast to those with lower IQs, have limited abilities to lead 'typical' adult lives. Howlin, Goode, Hutton, and Rutter (2004) note that only twenty-two percent of individuals had very good or good adult outcomes, indicating that very few lived independently, had close friends, or permanent employment. More recent research suggests that these outcomes might be improving, with fifty percent achieving very good or good status (Farley et al., 2009). Farley's 2009 study indicates that just over half held full or part-time employment, 19% of surveyed adults on the spectrum had maintained long-term romantic relationships, and just over a quarter were considered to need low levels of outside care. A report by Redman, Downie, Rennison, and Batten suggests the limits of employment, though, noting only 15% of individuals on the spectrum have full-time employment (2009). All three studies suggest the significant struggles for individuals on the spectrum in adulthood, despite the push for early intervention and successful inclusion, in the workplace and education. In addition to the outcomes of individuals on the spectrum, the effect of the condition on families has also been described. Families lose significant amounts of money, £1,000-£2,500 each year for an individual's lifetime in lost wages alone, due to caring for a family member on the spectrum (Knapp, Romeo, & Beecham, 2009, pp. 327, 328, & 331). There is evidence that mothers with children on the spectrum have more physical health problems than mothers with typically developing children (Allik, Larsson, & Smedje, 2006) and parents with a child with ASD have higher levels of stress (Baker-Ericzén, Brookman-Frazee, & Stahmer, 2005), though this may be primarily correlated with emotional and behavioural problems, rather than a diagnosis with a pervasive developmental disorder (Herring et al., 2006). Calls for more support for individuals with ASD and their families, including early interventions (Baker-Ericz6n, Brookman-Frazee, & Stahmer, 2005), more family support (Brown, MacAdam-Crisp, Wang, & Iarocci, 2006), job schemes (Mavranezouli et al, 2013), and better inclusion practices (Humphrey, 2008), have grown more common as the picture of outcomes for those on the spectrum and their families becomes increasingly complex.

The Medical Model and Disability Studies Perspective

The above definition and descriptions of autism and its history are, notably, engaging with the medical definition of autism. The included selection of research focuses on major findings and trends within the relatively brief medical history of ASD to provide a clear explanation of the condition under examination in this thesis, rather than engaging with the complex and nuanced discourse about autism in disability studies. The definition issued by the DSM-IV provides a more clearly established idea of what autism is than one arguing the validity of such a definition.

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In order to define and analyse stereotypes and behaviour associated with the condition as seen in films and television programmes, the more clear definition provided by the medical model is essential for the work in this thesis.

The medical model does, however, neglect the social construction of ASD and highlights its behavioural deficits compared with neurotypicality. As Mallet and Runswick-Cole (2012) indicate, autism is difficult to concretely expound. Even in the medical field, autism is not clearly defined, as it has multiple categories, a spectrum, and diagnostic labels that seem to overlap. They go further and claim that defining autism medically has been big business to the academy (pp. 40), which profits from a condition exploited in the media as a spectacle (Murray, 2006) while carrying the authority of experts. The disability studies perspective, on the other hand, is more successful in labelling what individuals with ASD can do, without fiscal returns or grandiose displays of difference from which the medical model profits. Through the act of disabling people based upon differences and perceived deficits, the medical model presents individuals on the spectrum as inherently less than typical humans. The disability studies model frames the behaviours associated with the condition as different, not less worthy, ways of being human. The two models are, therefore, at odds with one another. Although both seek to provide identity to those labeled as having autism, the approaches differ greatly. This thesis takes into consideration the commonly noted behaviours associated with ASD without assigning value or judgement to the difference the medical model portrays, regardless of whether or not this difference is socially created or biologically encoded.

The deficits the medical model suggests, though, engage with a theory of the creation of identity in African American studies, that of identifying. Stuart Hall argues, *"difference" matters because it is essential to meaning--without it, meaning could not exist*" (emphasis original, pp. 234). Identity is formed by difference; we know what something is by what it is not as much as by the qualities that define it. The deficits put forth by the medical community help to create an identity of autism through establishing difference to identify those with ASD. While thinking about

autism through difference is not always a fair assessment of the condition and the individuals it affects, as disability studies approaches often argue, it opens the door to engagement with ASD. The differences of individuals on the spectrum are, as demonstrated in films like *Rain Man* (Levinson, 1988), the basis for mainstream recognition and understanding of autism. The description of ASD in the authoritative medical definition is required to establish a clear discussion of the set of social and linguistic behaviours known as autism in this thesis due to its focus on a field that defines people by difference, despite the difficulties this definition imposes.

Inclusion and Perception

Ability to Influence: Perception and Inclusion

Inclusion practices are largely based on the perceptions of the society in which they exist; "Focusing on Inclusion and the Education (Additional Support for Learning) (Scotland) (2004)," a paper produced by Learning and Teaching Scotland in 2006, notes that legislation alone is not enough to enhance inclusion practices. It goes on to say, 'Whether or not Scotland becomes a more inclusive society will depend significantly on the values that its people hold and their ability to translate these values into their everyday lives' (Learning and Teaching Scotland, 2006, pp. 1). This principle can be applied to any nation or school system. As inclusion becomes more prevalent in mainstream schools, it can be argued that its acceptance will increase because adults are more likely to have been exposed to people who are different in the classroom as children. Many people in contemporary culture, though, may have had little or no interaction with developmentally disabled individuals in any context and have little on which to base their understanding of ASD. This is the case with autism and especially Asperger's, as it did not appear in diagnostic material until 1994 (Wing, 1996). This suggests those older than about twenty-five would not have been aware of peers with more high-functioning autism, if, in fact, these individuals were included in their mainstream classrooms and activities at all.

Development of Perception Through Fictional Media

Media may be the only source of contact an individual has with autism, which is significant due to the importance of media contemporarily. Otto F. Wahl asserts in Media Madness: Public Images of Mental Illness (1995) that knowledge about mental illnesses, like ASD, does not come from 'professional journals ... newsletters or educational campaigns of mental health organizations' (pp. 3) for the average person. He/she may have some 'academic experience,' but '[i]t is far more likely that the public's knowledge of mental illness,' and, in turn, autism, 'comes from sources closer to home, sources to which we are all exposed on a daily basisnamely mass media' (Wahl, 1995, pp. 3). This average individual spends a significant amount of leisure time interacting with the mass media. A 2011 TV Licensing poll in the USA indicated that the average person spent 25 hours per week in front of the television in 2001 and 28 hours a week watching TV in 2010 (BBC, 2011). In the United States, on prime time television alone (generally between 20:00 and 23:00), numerous fictional, news, and reality programmes have featured a character with a mental health problem since 2000. Many popular shows incorporate a character with some variety of mental illness into a single episode across the English-speaking world, with millions of viewers watching each popular episode. While the amount of time people spend in movie theatres is less than the amount of time they spend watching television, films are still able to reach mass audiences internationally. Reach and applicability make fictional mass media powerful.

Fictional narratives in general 'can be a powerful tool for shaping attitudes and opinions' (Green, Garst, & Brock, 2004). Beyond Green, Garst, and Brock's 2004 examination of whether fiction informs perception and the boundaries with which this is constrained, fictional media has a history of influencing how people think about a subject. In the United States, the novel set the precedent for media influence at least as early as the Civil War. Harriet Beecher Stowe's novel *Uncle Tom's Cabin* (1852) significantly affected the abolitionist movement, causing outrage over the treatment of slaves in the South. In reference to the Civil War, Abraham Lincoln is rumoured to have said to Stowe, "So you are the little woman who wrote the book that started the great war!" Later in Western history, A Short Film About Killing (Kiezlowski, 1988), a film about the random murder of a taxi driver, the subsequent hanging of his killer and a defence attorney's disillusionment with the legal system, sparked changes in governmental policy. The film is given credit for bringing about the end of the death penalty in Poland, due to its graphic, morally charged presentation of capital punishment (Malcom, 2000). In 2013, the film Lincoln (Spielberg, 2012), a fictional adaptation of President Abraham Lincoln's struggle to end both slavery and the Civil War, inspired two academics to research the Thirteenth Amendment, which constitutionally abolished slavery in the US. They discovered that Mississippi had not formally ratified the amendment, though it had attempted to do so 18 years before, prompting Mississippi to ratify the Thirteenth Amendment and the ban on slavery nearly 150 years after it was added to the US Constitution (Blume, 2013). Fictional media's ability to impact social movement and legislation is indicative of the potential for film and television to inform people's knowledge and attitudes about autism and educational inclusion.

How Fictional Media Influences Perception

Because fictional media is a constant presence in the everyday lives of most people in the US and UK, the opinions and representations put forth by films and television programmes are nearly unavoidable. This is especially significant because '[w]hen the public has no direct experience with a disability, narrative representations of that disability provide powerful, memorable definitions' (Baker, 230). Fictional media's constant presence in everyday life and portrayal of little known subjects help it to have an impact on the way in which people think about those subjects.

Fictional visual media employ various tactics to hold the attention of an audience and manipulate how they feel about each character and situation within the work. Because film and television have different resources at their disposal, different methods of time restraints and different fiscal pressures, for example, their methods of influence will be discussed separately as well as compared. Ultimately, the content and style of each text has the capacity to influence audience perception in an individualised manner using the following techniques.

In order to fully understand how a film or program affects the way one interprets meaning, though, it is critical to have a basic understanding of how they are put together technically. Motion pictures and television programming can be broken down into shots, the recording of a moment from one point of view at one time and the basic unit of a movie (Bowen, Thompson 2009b). Shots are connected by edits or cuts, the splicing of shots together to form a cohesive narrative (Bowen, Thompson, 2009a). Although it is also heard and, originally, written, the visual elements are generally the most important portions of a movie because of the potential effect on perception, as they visually inform the audience's perspective.

Film

Financial considerations and the method of assembling a movie give every shot in a film a high level of intentionality. Commercial filmmaking, the category into which all of the films discussed in this work fall, is highly profit-driven and very choreographed, due to fiscal constraint and artistic concerns. A lack of government funding in the United States intensifies fiscal pressures for American filmmakers. Studio films, movies produced by companies like Paramount, are expected to turn large profits to sustain the company, while independent films, which frequently have a number of different investment sources, must pay those investors back or face a more difficult time finding funding for the next independent project the filmmakers have (Schamus, 1998). The fiscal concerns of filmmaking give validity to a certain level of intent in the creation of meaning within films. 'The socio-economic organisation of the film industry ... largely determin[es] the films that are made, their values, [and] their aesthetics' (Kochberg, 2012, 37). The high expense of shooting, editing, producing, and marketing a film makes it critical for investors to recoup their funding, but, as with any investment, it is preferable to make as much money as possible on a film project. Each element of a shot is highly planned and

executed as precisely as possible to achieve maximum impact for minimum investment and high profit margins. Finances impact the artistic creation and intent of a film because of their effect on intent.

In addition, films are constrained by their length. A feature film has an industry average of ninety to one hundred twenty minutes in length (Bakker, 2005, 27), though motion pictures stray above or below this average relatively frequently. The average duration places restrictions on how much a single film can cover successfully.

Classically, films cover a single story arc, telling 'a coherent and characterbased story throughout the course of the film' (King, 2002, pp. 179). Characters grow, or do not grow, within a motion picture, generally by overcoming or failing to overcome the well-documented flaws presented at the beginning of the film. The growth, or lack of growth, a character shows within a motion picture impacts an audience's perceptions of that character. The time and fiscal restrictions of commercial cinema contribute to a movie's capacity for demonstrated character change.

Distribution of film, while growing increasingly complex, traditionally occurs in a movie theatre (King, 2002). Regardless of a shift toward home viewing of films, internet competition, and the advent of the made-for-TV movie, box office success is still critically important to the overall commercial success of Hollywood films (King, 2002, pp. 73), indicating the importance of box office gross sales figures for an estimation of the approximate size of an audience. Generally, if a film does not do well at the box office, it will not do well in aftermarkets, limiting the number of people who view it in total. Seeing a film in the cinema causes people to watch more intently (King, 2002, pp. 238) and, therefore, absorb more information being put across by a movie. While films are now most often watched at home in an environment with more potential distractions (King, 2002, pp. 224), its ability to cross spheres of entertainment indicates the power of the motion picture's influence.

Television

Television uses many of the same techniques as film to influence the way in which the audience thinks about a character. It has similar fiscal constraints dictating production choices, though there are several notable differences in TV financing procedure that influence production. Television shows are often funded by a network rather than independent, outside sources, largely due to the complex nature of distribution and purchase prices of prepackaged work (Ellis, 2004, pp. 281). Although many programmes do have public funding, most notably anything produced by the BBC, for series on traditional cable channels, maximising profits requires advertising, which in turn requires the maintenance of a large audience to entice advertisers to pay more for slots (Dunnett, 1990, pp. 29). While these are certainly not the only finance constraints placed on television, the above financing points highlight critical aspects of production.

As in film, the length is important to influencing the way an audience thinks about a subject and character. Unlike a feature length film, a television programme has the ability to continuously affect perceptions because of the higher total amount of time in a complete series run than a single film. Even a series with a twenty-seven minute average runtime that gets cancelled before the end of its first season would most likely total more than two hours worth of programming. An audience member could spend significant amounts of time watching a show's characters, impacting perceptions of those characters over a longer stretch of time than film. TV series can become long-running cultural icons in ways that films cannot. Friends (Bright, 1994), a television programme following the lives of six friends living in New York City, developed a huge following, with 52.5 million people tuned in for the finale (Carter, 2004). It was internationally syndicated and continues to show on reruns globally. Even wildly popular films do not have this potential for staying power and viewership because there is only one item to show, rather than hundreds of episodes. Although Friends' ten-year run is uncommon, its ability to come into millions of homes once a week for a decade, and every day nearly ten years later in reruns, demonstrates the potential television has for affecting perception. The additional

amount of time a TV programme has allows it to address and establish patterns of daily life and interaction between characters allowing it to cement ideas about groups in a manner film cannot.

Television programmes also display multiple story lines within a single episode and, most importantly, throughout a season or entire series. In *Friends*, for instance, Monica (Courtney Cox) and Chandler (Matthew Perry) have separate plot lines in most episodes, but there is an ongoing plot about their romantic relationship and marriage that began at the end of season four. The ability to show characters in multiple stories and scenarios influences perception by allowing them to potentially behave differently over a single season or entire series. Every time a character is placed in a new situation, the audience sees what this character can or cannot do, influencing the audience's perceptions of this character and, potentially, the minority group (be it ethnicity or disability status) into which the character falls.

Unlike film, television is distributed in people's homes nearly exclusively. As such, the primary access point for television programming is in the daily lives of its viewers. As noted above, this gives a programme long-term access to an individual's life, even when shows run for as little as a single season. As described by John Ellis (1992), television viewing can be characterised by a 'glance,' a quick look at the television, and is produced to reflect this anticipated lack of unbroken attention by going less into depth than a film, with its captive audience, would.

Commonalities between Film and Television

In both fictional media types discussed in this thesis, dialogue is crucial to representation and gained perception. Dialogue presents how and what characters think and explicitly tells the audience what it knows about a character. The way in which a character speaks could have a big impact on how the audience views this character as it can be indicative of intelligence, education, region of origin, and general competence. As significant is the dialogue about a character and what is said in front of the character, but not directly to them. In *Rain Man* (Levinson, 1988), for example, Raymond Babbit is often spoken to and about like a child, contributing to

the representation of Ray as childlike. Dialogue has the ability to define a character, interpret his or her actions, and describe how he or she should be treated.

Dialogue contributes to what is possibly the most important device used in fictional media to impact perception of characters, plot and plot details. 'Narrative in fact seems to hold a special place among literary forms [and thereby other media forms]...because of its potential for summary and retransmission' (Brooks, 1984, pp. 4). Plot's importance is enhanced by its depiction of what a character does in general, and is contributed to by dialogue and other details that make up individual aspects of a film or series. The plot is the basis of narrative film and television. It is what propels the text forward and the audience to consider watching (Brooks, 1984, pp. xiii), indicating its significance to creating and enhancing meaning for an audience.

Additionally, genre can impact how people think about characters portrayed in a film or television programme. Genres have a specific set of expected components, which act as a near guarantee for a marketable audience and attract different demographics, making it an important aspect of how films influence perception (King, 2002, pp. 118-119). Because genres often represent minority groups differently, like the portrayal of Native Americans in Westerns compared to their depictions in any other genre (King, 2002, pp. 125), the impressions gained from different genres both in film and on television vary.

Apart from the basic narrative concerns, the depiction of themes, a recurring idea in a work, and the related presentation of characters are important to the creation of expectation and perception. Contemporary Hollywood cinema, which includes the majority of those films that will be analysed in this thesis, tends to take on themes of 'contentious ideological-political issues: projecting differences onto individuals [and] reconciling th[os]e individuals, thus evading while appearing to reconcile the issues themselves' (King, 2002 pp. 209). King places these in the context of race relations and action films, demonstrating the characters overcoming racist misconceptions and ignoring societal ones. Themes can be transferred to different social frames, like gender, sexual orientation, class, and disability, and other film and television genres.

The portrayal of social and political issues can be put into perspective by the demographics portrayed Hollywood by films and television shows, which typically portray white, heterosexual, male characters. According to a recent UCLA study reviewed by the major film industry publication *Variety*, minorities as lead actors are underrepresented 3:1 in film and television, a factor of about one-third less than their population representation, and rises to 7:1 in television comedy and drama (McNary, 2014).

The technical, cinematographic aspects, however, also affects how audiences think about a film or programme and to whom the audience most relates. Shot composition is especially powerful in terms of an audience's psychological perspective of a film or programme. Directors employ perspective shots, or point of view shots that record exactly what the character would be seeing, to influence perception (Bowen & Thompson, 2009a pp. 189). Perspective shots show what a character sees in order to demonstrate how he or she might view something, build identification with a character, create tension in a scene by showing the main character through the eyes of another character, or show how significant a person, place, or thing might be to a character. According to a feminist critique of the film industry by Laura Mulvey, the 'use of subjective camera from the point of view of the male protagonist draw[s] the spectators deeply into his position' (1975, pp.12). This is indicative of the power a perspective shot has to move the audience to relate to any character, especially prominent ones, in film and television. While they are most frequently used for the main character or important supporting characters, perspective shots from the point of view of minor characters are used as well.

Point of view shots are generally either over the shoulder shots or are created by editing associations and eye line matches³. Over the shoulder shots include just the back of the shoulder and head; in a traditional news interview, for instance, when the interviewee is responding, the reporter's shoulder and back of head are visible,

³ A shot of the character looking at something is followed by a shot of an object, person, or location that matches the eye line and direction the character is looking. The shot of the character can be before, after, or at both ends of the shot of the object.

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connecting the audience to the interviewer's perspective by looking over his or her shoulder. A point of view shot 'asks the viewer to share the experience along with the character in the story' (Bowen & Thompson, 2009b, pp.189). An editing association perspective shot is also frequently used when the character is looking at something significant. A shot of the character, then a shot of the object (or location or other physical thing) from the same location as the character, and, typically, a shot back to the character make up this kind of point of view shot. Association perspective shots require a near eye line match, a shot from the same general height and location of a character's eyes, indicates what the character sees (Bowen & Thompson, 2009a, pp. 185). Eye line matches are frequently seen in the traditional shot-reverse shot sequence of conversation scenes as well, indicating what both members of a conversation would see. The audience sees the character on the right when he or she speaks and then the character on the left speaking or reacting from the line of the first character. Perspective shots further an audience's identification with a character as you see the world of the text through his or her 'lens' rather than the lens of the passive observer.

Perspective shots are especially important because of what they can do for a character's agency; they have the ability to give the character authority over what is important to the film. Not only do these shots demonstrate what a character sees, they also help the audience discover why an object or movement is being shown or understand that the person, place, or thing will be critical. For characters with autism, a shot of something as simple as a sparkly necklace, like in *Rain Man* (Levinson, 1988), gives the audience an explanation for behaviour, demonstrates the individual with autism's capacity to be interested in things outside himself or herself, and allows the character to assert his or her presence in and importance to the film or show. A shot from the autistic point of view allows for the character with autism's perspective to participate in the manipulation of the audience's perceptions of autism. Although television tends to use fewer perspective shots than film, most likely due to time constraints in each episode and, frequently, a greater number of story arcs and
characters in each show, they are equally important to both types of fictional visual media.

While the intent of filmmakers and television producers is important to many of the above facets of production and has been argued for earlier in the literature review, what can be extrapolated from the text itself, regardless of the initial intent, is also critical. A work's potential and ability to become something other than what was intended, especially in terms of its plot devices, is widely noted. In application of the literary theory New Criticism to film, examining the work without taking into account the intent of the creator when discussing textual meaning is crucial to understanding a text's broader implications (Staiger, 1992, pp. 23). A film or show's meaning outside of intent accounts for the multiplicity of perspectives about a single element of a text, like the presence or lack of presence of racism in Mark Twain's *The Adventures of Huckleberry Finn*. While intent behind a work is important, it is equally critical to examine a piece without this thought process.

Ultimately, films and television both reflect and influence cultural perceptions. Marie Gillespie describes the media's influence on creating cultural and ethnic identity, both in terms of what it presents as norms and the communal activity of watching with a community that is not currently present (1995). She states that the media has helped in 'constructing and defining, contesting and reconstituting' ethnicities (Gillespie, 1995, pp. 11). So too does it reflect the social expectations of the world in which we live, as illustrated by Laura Mulvey's 1975 examination of the portrayal of women in film through the lens of a traditionally patriarchal society. Although these creations and manifestations of society are not explicitly discussed in film and television, their inclusion is key to understanding the creation of perception due to film and television viewing.

Contemporary Critiques of Autism in Fictional Media

The Lack of Developmental Disabilities in Disability Studies

Autism's representation in media is discussed infrequently, even in disability studies. Disability studies is an academic area of criticism and thought that serves to examine the meaning made from the variation in 'human behaviour, appearance, functioning, sensory acuity, and cognitive processing' (Linton, 1998). While this thesis and many critical works referenced describe ASD in the disability studies context, there is a noted lack of discussion of cognitive and developmental disabilities in general in the cultural and media aspects of disability studies. As Lucy Burke states in the introduction of an issue of the *Journal of Literary Disability* focused on cognitive disability, 'forms of cognitive disability have received comparatively little critical attention in the field' compared to physical disabilities (2008, pp. i). The distinct lack of the examination of developmental disabilities within disability studies has also been noted by Mark Osteen (2007), Stuart Murray (2008), and Majia Holmer Nadesan (2007).

Novels and Films

The articles, papers, and books that make up the majority of the critical context for this thesis deal extensively with novels and films. As such, many of the ideas referenced in the thesis are about novels rather than specifically to films and television; these points can be applied across fiction and not simply literary fiction. There is a sizeable amount of criticism about *The Curious Incident of the Dog in the Night-Time* (Hadon, 2003) and other novels portraying ASD, which discusses theories about autism in fictional media that is relatable to both film and television in addition to its literature. Because fiction, especially film and television (as filmed fictional forms of media for the mass public), use many of the same techniques in creating stories, it is possible to use criticism that relates only to one of the two varieties. Films too, especially those like *Rain Main* (Levinson, 1988), have been analysed by many; this work, because of its fictional subject and the similarities between the two media types, has also been applied to television.

Texts Pre-2006

The vast majority of films and television programming discussed in the various critical pieces that examine autism, and disability in general, in media have looked at films made before 2006. The larger number of the texts examined in these books and papers date from before 2000. While many do include later films and television shows, Murray (2007 & 2008) and Ellis (2010) for example, there is a far greater amount of scholarship on earlier work. The films of the late 1980s, like *Rain Man*, and the 1990s, like *Cube* (Natali, 1997) have been analysed by multiple academics, largely falling into the topics and categories described in the paragraphs that follow, while later films are largely neglected.

Narrative Devices

It has been argued that ASD is used as a tool for the narrative; it is a means to an end rather than a character trait. People with ASD rarely get their own narrative, but often serve to highlight facets of the neurotypical characters' personalities, either to compliment the neurotypical's behaviour or as a contrast to it (Ellis, 2010). Murray describes characters with autism as having a function in the films that he analyses in "Hollywood and the Fascination of Autism" (2007). He claims that when autism is used as a reflection on family life it is used to contribute to Hollywood's creation of 'normative narratives of social relations' (Murray, 2007, 253).

Standard Narratives

This idea of 'normative narratives' contributes to the argument that the kinds of stories in which a character with autism can exist are limited. Mark Osteen describes the story arc in parent memoirs in the introduction to *Autism and Representation*, categorising many as works that could be titled '*How I Saved My Child from Autism and Became a Better Person*' (2007, pp. 19). He sets the stage for the idea that certain narrative 'types' are common in works that involve ASD, a theme common in the chapters in his book. In "Recognizing Jake: Contending with Formulaic and Spectacularized Representations of Autism in Film," Anthony D. Baker (2007) describes the formula for films that include a character with autism in eight plot points. He applies his analysis directly to six feature films from multiple genres, which all follow this pattern, to illustrate his critique of films representing the condition. "No Search, No subject? Autism and the American Conversion Narrative" by James T. Fisher (2007), a discussion largely about autism in nonfiction literature, describes the popularity of the recovery narrative in nonfiction and connects this trend to the representation of autism at large. Fisher's indication of the family context of these works of nonfiction is similar to the discussion of families in both Baker and Murray's work, suggesting the prevalence of family based narratives. The discussions of the representation of autism often include standardisation.

Stereotyped Characters with ASD

There is a relative consensus among those who have researched autism in fiction that the characters on the spectrum are heavily stereotyped. These stereotypes include the savant and the superhuman, to name the two most frequently described. LaCreanna Young focuses on the portrayal of a specific set of stereotypes in "Awareness with Accuracy: An Analysis of the Representation of Autism in Film and Television" (2012). Draasima (2009) discusses multiple perspectives on the stereotypes of autism in popular culture, including the idea that all people on the spectrum are savants and, in distinct opposition to this thought, the idea that everyone is somewhat autistic. He goes on to suggest that, 'the images and stereotypes constructed by novels and movies may eclipse those of experts, be they psychiatrists, paediatricians or autistics' (Draaisma, 2009, pp. 1479). While individual academics present slightly varying ideas of exact stereotypes, the overwhelming majority of critical discussions include at least a comment of their presentation in fictional media.

Idiots, Savants, and Compensation

Murray (2008) describes the history of the idiot character as being unequivocally linked to the modern representation of the autistic character, especially in film and television (pp. 83). Murray traces this line back as far as Charles Dickens's *Barnaby Rudge* (1841) and suggests that although the distance between the idiot and the savant may be increasing, the history is noteworthy (Murray, 2008, pp. 83).

The savant has become a major area of discussion in the field of autism's representation. '*Rain Man* also initiated the Savant and Yardstick stereotypes that ... still dominate cinematic depictions of autism. Such films select one or two characteristics (usually savant memory or math skills and echolalia) and erect them into one-dimensional portraits of the autist' (Osteen, 2007, pp. 31). Osteen reinforces the theme of stereotypes and conveys the commonness of savants with autism in popular media. One of Baker's key plot points for films that involve characters with ASD is 'Endow the Autistic Character with Savant Skills or Superhuman Powers.' He notes that characters on the spectrum are only valuable because of their special skills, without which they lose agency and importance, a concept echoed by Murray (2008). Draaisma points out, in discussion with the preceding two works, 'the stereotype of autistic persons being savants is without doubt one of the most striking discrepancies between the expert's view and the general view of autism' (2009, pp. 1478).

Critiques of savantism in media describe savant or superhuman skills as being compensatory for the lack of social acuity (Murray, 2008, pp.66). It allows for texts to take away portions of a typical personality and insert a fascinating skill, which can be looked as the possession of said skill requiring the removal of some typical function. By giving a character the ability to calculate mathematical equations at superhuman speed, for instance, his or her ability to understand social conversation is be taken away to ensure that no feelings of inadequacy abound in the neurotypical audience or characters.

The Creation of a Spectacle

The image of the savant or superhuman on the spectrum gives way to the idea of the 'spectacularisation' of autism in critical work. In existing research on autism in fiction, the concept of characters with autism existing to create a point of spectacle within a work is described as being extremely common. 'Hollywood narratives indulge in a fascination with the purportedly exceptional skills of the autist' (Murray, 2006 pp. 30-31). Baker further claims that if you '[r]emove the savant or supernatural power, the film loses its plot, and the autistic character loses his or her raison d'etre' (2007, pp. 235). The spectacle of the abilities tied to a character's autism becomes the only reason he or she is in the film, rather than the character existing to support narrative.

Connections to Rain Man

Few of the critical texts do not mention *Rain Man* (Levinson, 1988) in some capacity. The film itself is the first major portrayal of autism and received four Academy Awards, in addition to many other wins and nominations, indicating its status at the time. Murray describes it as a foundational text, an 'autism event,' because it achieved the status of a sociological document describing the condition (2008, pp.12-13) rather than simply a film containing the condition. *Rain Man*'s impact can be traced through other academic work, from the very idea of films post-*Rain Man* to its connection with the portrayal of savantism, mathematics genius, and spectacle in films and television shows that were produced after it (Murray, 2008, pp. 84-87). *Rain Man* presents the audience with a number of features associated with ASD in later texts including the following features: a male, a savant, a standard narrative within a family, notable staring, stereotyped and rigid behaviour, slow speech, echolalia, repetition of famous lines (most notably of a comedy sketch), and stiff movement. These behaviours and characteristics are described as being seen in films and programmes today, nearly a quarter century later.

Visualising Autism

The visual component and the gaze are crucial to films and television as fictional visual media types, along with their portrayal of autism. Laura Mulvey (1975) suggests that the erotic male gaze used in cinema affects the spectator's view of a film and the characters within it; it ties the audience to the male protagonist and sexualises the female counterpart. This idea of the gaze of the camera on a traditionally 'othered' group, women in Mulvey's case, can be applied to those with developmental disabilities as well. They are subjected to the gaze of the 'normal' majority audience. Further, because autism is not a disorder that necessarily causes physical symptoms, visual media can have difficulty literally showing the disorder, thereby making the character on the spectrum physically notable. Murray points to the tendencies of films to use a 'physical eruption' to create this 'obvious behavioural difference' (Murray, 2007, pp. 246). Jennifer C. Serrett (2011) mirrors this point; she notes that autism must be made into a condition of physical difference in popular images of ASD, 'even though it is not' (pp. 144). Characters with autism are described as both notably staring in the work and being the subject of the audience's gaze as a means of segregating them within a text.

Othering and Victimisation

Catherine J. Kudlick describes the history of disability studies in "Disability History: Why We Need Another 'Other'" (2003) and suggests that the portrayal of those with disability as being socially different appears repeatedly in Western portrayals. Individuals with autism are often treated as others and victims in narratives. As Baker (2007), Murray (2006 & 2008), and Young (2012) point out, spectacularisation and victimisation set the characters with ASD apart from the typical characters in the film; they are in effect 'othered.'

The othering and victimisation of characters on the spectrum effectively strips them of their power. The focus research has placed on the exploitation of individuals with ASD indicates the lack of power and agency these characters are given in their fictional narratives. The analysis of characters as spectacularised, victimised, othered, and stereotyped suggests that they impacted by the narrative rather than making an impact.

A Family Affair and Male Childhood

This othered character, as both Murray (2008) and Young (2012) note, is on average a male child. The impact of films and shows typically dealing with minors often leads them to be placed within family units. Murray describes autism and Asperger's as being placed within the context of the family unit the majority of the time. He links this association with families to early research on autism dating back to Kanner's profiles of the parents of the children in his initial study. The trend of focusing on dysfunctional or split families harkens back to Bettlehiem's idea that parents cause autism by failing to interact appropriately (Murray, 2008, pp. 173). In contrast, Baker describes the family as either lacking a strong bond with the character (notably the child) with autism or being removed from the film's plot, which adds to the character's vulnerability (Baker, 2007, pp. 237). While the family in focus may become broken up during the film, programme, or novel he describes, frequently the only person or people the character with ASD has any relationship with are those biologically related to him or her or those who replace the figures in his or her nuclear family. Serrett (2011) also comments on fragmentation of families within narratives that contain autism, connecting the real-world focus on the detrimental aspects of ASD to a marriage to the portrayal of broken families in film. She suggests that people on the spectrum are presented as being less than whole, which is reflected in their family structures (Serrett, 2011, pp. 145).

Autistic Presence

Often, when a character is not identified as being on the autistic spectrum, he or she has characteristics of someone on the autistic spectrum. According to Stewart Murray, autistic presence can be found in many texts, regardless of whether ASD is identified by said text (2008). It allows for the features of the condition to be identified as autistic in nature without actually identifying a character as having

ASD. The concept of autistic presence suggests that the existence of the characteristics of autism in a text is the requirement necessary to indicate that autism in some form exists in a work. This idea of presence, however, can also be linked to what is *not* present in a text. Murray points out that, '[t]he disabled are talked *about* a lot but rarely conversed *with*' (Murray, 2008, pp. 60), indicating their physical presence but nothing further in works that portray autism and disability. In "Hollywood and the Fascination of Autism," he points out Hollywood's 'need' for autistic presence in films because of its prevalence in society and the narratives that are possible to create using this disorder (Murray, 2007, pp. 253).

Genre

The genre of a film or television programme has some impact on the representation of ASD, much like the effect genre has on the anticipated plot elements in a film or television programme as noted in the above discussion of film and television's affect on perception. As Murray states, 'the comforts of genre, its familiarities, save the 'enigmatic' space autism creates from being too threatening' (2006, pp. 30). He notes that there are no films that would be generically considered "disability films" and points to traditional genres as 'containing the potential excess of autistic presence' (2008, pp. 122).

Changing Representations

In her 2012 dissertation, LaCreanna Young alludes to the changing nature of stereotyping in contemporary media away from the stereotypes found in earlier productions. In "Autism and Aspergers in Popular Australian Cinema Post 2000," Katie Ellis (2010) suggests that a shift from minor characters to major ones can be seen occurring in more recent films, like *Mary and Max* (Elliot, 2009). Leslie Felperin, a writer for the Guardian, contributes her opinion to changing representations by suggesting that characters with ASD are now 'proper protagonists' who are not solely defined by their condition (2011). Bates points to the growth of autistic spectrum diagnoses and interest in the condition in general for

what he sees as 'an increase in more complete and accurate depictions' of ASD (2010, pp. 47).

Unresolved Points of Scholarship

The critical contexts of gender studies and African American studies, in discussing minority and "other" characters, and of disability studies and film studies related to autism specifically establishes a supportive framework for further needed research, but it does not encapsulate the entirety of academic knowledge needed on ASD in fictional texts. What has been largely neglected by academics is the fictional work that has been produced since 2000, and especially since 2006. The academic texts also almost entirely omit television programming, except for the occasional mention of one series or the analysis of a single episode.

The lack of research on current texts containing ASD indicates a lack of knowledge about how the landscape of autism and Asperger's in contemporary fictional visual media has changed. Presently, how stereotypes have changed and are changing is unknown. Current research on autism in film and television does not focus on the idea of change over time, although K. Ellis's analysis of ASD in post 2000 Australian films (2010) does suggest this change as a concluding point. Although *Rain Man*, the foundational text for autism and Asperger's in fictional media, is now twenty-five years old, a period during which huge changes have occurred socially and in mental health, a comprehensive analysis on how the representation of ASD has changed since the start of this millennium has yet to be completed.

While agency is discussed in some critical work about ASD, how much power a character possesses is not the focus. The focus is, rather, on how little agency a character has been given and what he or she cannot do. What agency the characters do have, what it looks like, and where it is applied, though, have been largely neglected. As much as agency is dependent upon interaction with others, it is notable that scholarship on the nature of relationships people with ASD create in films and television is also incomplete. Many scholars have discussed familial

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connections in great depth, but friendship and romantic relationships have largely remained unexamined. A discussion of agency and relationship building is critical to understanding how much media display the abilities of those with autism, something important to people's perceptions on what kinds of social connections people with autism or Asperger's can make and what kind of tasks and situations in which they are able to be successful.

As representation can have large has an impact on the way people think about conditions like autism, knowing how the condition is represented gives an indication of what the general public knows about ASD. Further knowledge about how relationships, agency, change over time, and the examination of current texts could provide invaluable insight into the perceptions that influence perceptions that impact educational and cultural inclusion.

The information that has yet to be collected has inspired the following research questions.

- How are autism and Asperger's represented in film and television?
 - Does the media show multiple 'types' of autism or choose a single presentation? Does this typical depiction, if it exists, show 'average' cases of autism or exceptional cases?
 - Who is the target audience of autism focused media? Does this audience change how the disorder is shown?
 - Are there key differences between autism's portrayal in film and television?
 - What kinds of relationships are developed in media representations of autism and how are they portrayed? What kinds of relationships are absent?
 - How much agency does the character with autism have? How does this agency manifest itself?
 - Is the character diagnosed with ASD and where on the spectrum does he or she fall?

- What major characteristics of autism are depicted in each film or programme?
- Who are the fictional people that have autism in terms of demographics?
- Are the characters in these films and programmes educationally (or otherwise) included?
- Does the film or program demonstrate a predictable narrative
 'type' (family narrative, personal growth narrative, recovery narrative, bildungsroman)?
- How has this portrayal changed since 2000?

Chapter 3: Methodology

Design

The thesis focused on feature length films and television programmes, the primary fictional visual media varieties, which portray ASD. This longitudinal analysis covered thirteen years of texts, from 2000, the start of the new millennium, to October 2013. The textual analysis was comprehensive and large scale, analysing nearly all of the films and television shows identified portraying ASD released in the United States, United Kingdom, Canada, and Australia, from 2000 to 2013. The texts were explored using a mixed methods approach; both qualitative analysis and quantitative analysis were employed. Each work was analysed by a single individual using a descriptive and interpretive category system that recorded the basic descriptive information about each text and the characters with ASD in them, and gathered interpretive insight on each film or TV show. Quantitative data was compiled based on groupings from objective viewing, the qualitative information, and, to demonstrate a character's agency, perspective shot analysis, the frequency of shots from a characters point of view and at what that character was looking. The compiled and analysed data was compared between texts within each media type and then patterns from film and television were contrasted with each other. In this way, the research questions presented above were addressed.

Philosophical Approach and Justification of Design

An interpretive stance was taken in collecting and analysing data in order to discover how autism is represented in fictional visual media. Films and television programmes do not explicitly tell us how they are trying to represent ASD; rather, they contain a character that acts the part of an individual with autism or Asperger's. Because of the lack of a clear description of what the text is attempting to depict, it is essential to interpret what they do show in order to understand the overall commentary made by each work on autism or Asperger's. Each piece of fictional media was analysed from the perspective of an observing adult—in this case a

representative of the general public from the West that shares cultural understanding with the filmmakers with knowledge of both filmmaking and autism. Like in other film and television criticism, and the literary theory that supports much of this work, the observer perspective allowed the analysis to take on minimal bias and be presented in a formal, scholarly manner. The research only contained English language films from the United States, the United Kingdom, Canada, and Australia and was conducted by an English-speaking American. As there was nothing lost in cultural or linguistic translation the likelihood of the research having missed critical information or insight is limited.

Although interpreting film and television in the thesis writer's language and cultural perspective restricted misinterpretation, personal background may always influence the interpretation of text. The ideologies and capital "D" Discourses (Gee, 2008) associated with each facet of being a white, neurotypical, heterosexual, American, middle-class female, may have influenced the perspective of the research. The categories created to analyse each film or programme help to eliminate the majority of the influence of these characteristics, but ultimately the data reflects the interpretation of one researcher. Public perception in an absolute sense is not surveyed. The thesis rather looks at what the current portrayal of autism has become in order to decipher the way that society as a whole sees and interprets ASD through stereotypes potentially created (Dyer, 1999). The design of the research does not seek to identify what the general audience infers, but to identify the representation of ASD and the potential impact on general perception, based on the analysis of a single individual.

In order to most effectively answer the research questions, the above design and philosophical approach were used to analyse fictional films and television shows produced since 2000. The major types of visual media, films and television, were used in order to cover a broad cross section of individuals in Western nations, as most individuals in contemporary, developed countries access popular media on a regular basis. According to Andries Van den Broek's "Leisure Across Europe: Comparing 14 Populations, Conveying 1 Pattern" (2002) in the early 1990s, 92% of surveyed Europeans had spent time in the past week watching television. Films and

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television programmes are equally important mediums for this thesis because their ability to have an impact on is roughly the same; both have wide audience bases and fictitious narratives conveyed through the use of moving image. In addition, the differences between the two in modes of distribution and character development, as discussed in the literature review, indicated that there could be a difference in the representation of ASD in the two types.

In order to track the potential changes in contemporary film and television's representations of autism and Asperger's, this thesis used a longitudinal method. This method was decided upon to capture whether perspectives in contemporary film and television have changed in the thirteen years the thesis examines. A longitudinal approach allowed the thesis 'to make inferences' about connections in findings collected from different periods time (Cohen, Manion, & Morrison, 2011, 266). Although it does not take the more conventional longitudinal approach of 'data collection on at least two (and often more) occasions' from the same subject or subjects (Bryman, 2012, 63), it does focus on the change over time aspect central to longitudinal research. Individual texts from across the period were used to demonstrate this potential change. The ability to document the potential changes in ASD's representation over a relatively short time span would provide insight into how perceptions of the disorder have changed since the beginning of the new millennium, a period in which the number of autism diagnoses has been on the rise, medical insight has been gained, and legislative changes made. In addition, the higher profile potentially garnered for the condition by the above differences and the possible cultural changes associated with them, as noted in the literature review, could impact autism's representation in films and television. Analysis looking at change over time was necessary to properly gauge trends and consider certain 'causal inferences' (Bryman, 2012, 63) related to year of production.

The films and TV programmes used in this thesis were assessed qualitatively in order to analyse the depiction of characters with ASD and the potential perceptions gained from these depictions. Because this thesis focused on understanding how perceptions could be influenced by fictional visual media,

'exploring and understanding the meaning individuals or groups ascribe to a social or human problem' (Creswell, 2009, 4) through qualitative research was essential. As there are no figures to directly interpret or initially collect in the texts, qualitative analysis was necessary to gain insight on how ASD is represented in films and television programmes. A systematic, comprehensive category system was use to collect qualitative data, guaranteeing that the qualitative analysis of the movies and shows had a consistent focus throughout all texts and both types. In order to determine the 'sensationalism' of the representation of autism or Asperger's in film and television, for example, assessment and interpretation of the behaviour of characters in each text were preformed qualitatively using this category system. The format of fictional visual media, moving pictures and dialogue that describe a character and tell a narrative story, requires data extraction that a qualitative method of analysis provides because 'the researcher [makes] interpretations of the meaning of the data' (Creswell, 2009, 4). Character development comes with no explanation; a text cannot just be seen and relevant data gleaned with no qualitative thinking and analysis. The qualitative perspective used for this thesis allowed it to move 'deeper into understanding the data ... [and make] an interpretation of the larger meaning of the data' (Creswell, 2009, 183).

A quantitative analysis of the findings was performed in order to numerically demonstrate the qualitative results and provide a clear evaluation from which to draw conclusions. Breaking the thesis's results down quantitatively was important to make the insight gained more tangible. In addition to the qualitative analysis of the data collected in the category system, these results were quantitatively analysed based on the number of films and television shows that fell into different categories and subcategories. In this way, 'the qualitative addresses the process while the quantitative, the outcomes' (Creswell, 15, 2009). The addition of numerical analysis strengthens the meaning of the results by giving concrete data that can be compared and related to other research, which would not be possible with qualitative data alone. The quantitative analysis of shots in films and television, i.e. the number of shots from a character's perspective, help to demonstrate agency and character

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perspective in an objective, systematic manner. These measures of perspective also allow consistency across texts, as they are much less subjective than traditional, qualitative film and literary analysis alone. Both qualitative and quantitative analyses were used in order to gain the most valuable information from the data collected as, in this case, 'there is more insight to be gained from the combination of both qualitative and quantitative research than either form by itself' (Creswell, 203, 2009).

Based on the limited nature of earlier scholarship on the subject of ASD in fictional, visual media, the interpretive stance on the combination of longitudinal, qualitative, and quantitative research was the most effective means of gathering information. Because this research focuses on the goal of discovering how ASD is represented in film and television and how this representation might affect perception, a different method would have been less successful. Another project may have chosen to interview individuals closely associated with a film or show to gain firsthand insight on the intended representation, due to the interview's ability to gather an array of thorough information. Though the ability to establish 'the perspective of the [individual] being interviewed' (Bryman, 2012, pp. 492) could be useful, this does not provide resolutions to the research questions. A questionnaire about an individual's perceptions of autism and films and television would reach large numbers of people and prove a link between perceptions about ASD and the texts that present it, but this would provide known information. Fiction does influence perception (Green, Garst, & Brock, 2004). While interviews can allow for a deeper understanding of perception than other methods of data collection like surveys (Cohen, Manion, & Morrison, 2011), and a questionnaire could provide 'descriptive, inferential, explanatory [information]... [and one also] ascertains correlations' (Cohen, Manion, & Morrison, 2007, pp. 206), these methods would not have successfully answered how autism is represented in fictional, visual media. Without research like this thesis to back an interview or questionnaire, formulating questions would have been more difficult and interpreting answers would have been less meaningful. Because not every part of a representation or people's interpretations of a portrayal are intended (Staiger, 1992), interpretive research based

on textual analysis provides more clarity and detail than other forms of investigation due to the little research conducted on this topic. A comprehensive, systematic analysis of autism in film and television like this thesis was the only way to successfully capture a complete picture of how ASD is represented in film and TV and how this representation could impact perception.

'Participants' and Identification of Texts

Fictional films and television shows that contain a representation of ASD comprised the texts for examination. The fictional works listed in the table below were the paper's only participants. These were identified using various online databases and sources and through references in other critical work, though an initial entry point used exclusively the researcher's knowledge of films and television and word of mouth. Several of the films and shows were found in the critical work of other academics and sources they cited in their publications. In addition, internet searches provided a large number of the texts used in this thesis.

Inclusion Criteria

The films and television shows in this paper were selected based on a limited number of criteria. Works included were exclusively fictitious and had to be released between 1 January 2000 and 1 October 2013. They had to be English language productions made in the United States, the United Kingdom, Canada, or Australia, as mentioned in the thesis's design. Because different cultures think about autism differently (Grinker & Cho, 2013), including why it exists, it was important to use media from the culture understood by the researcher, in this case, Western society. All of the texts had to contain a representation of autism, Asperger's, or other autistic spectrum disorder. Texts were included even if they did not define a character as having ASD, if the representation of the disorder was deemed sufficiently clear in any character in the text. All movies and television shows had to be possible to access.

Inclusion Criteria for Films

- 1. Fictional, narrative structure
- 2. Feature length (generally considered a film of 80 minutes or more)
- Public releases, including wide release (released in many theatres on one day), limited release (released in selected cinemas in one day), film festivals (released only at film festivals), television premieres (made for TV films), and home entertainment release (straight to DVD or other platform)

Films had to be fictional narratives and feature length in order to be accessible to the average person. In addition, this selection allowed for more uniform analysis across films as a whole and against television, as different varieties of film have different methods of production of meaning than fictional, narrative films and television. Films had to have a public release to guarantee that they were accessible to the public, even in a small capacity. Although many of the films that were analysed have a limited audience, and therefore less ability to impact perception of the public as a whole, they were included because they contribute to how autism is represented in film as a medium. Because this thesis is focused on perception as well as representation, audience size was separated into three segments—large, small and medium—and discussed, though it did not create exclusions.

Inclusion Criteria for Television Shows

- 1. Fictional
- 2. Carried by the network beyond the pilot episode
- 3. For programmes with recurring characters with ASD, only the first episode in which he or she appears, the last episode he/she appears, and a limited number of episodes in which this character is featured
- For programmes with a limited number of episodes (one-five) depicting a character or characters with ASD, the total number of episodes that contain said character

 Must have aired on television or a popular online platform (e.g. Netflix or Hulu)

Television programmes needed to be fictional and have lasted beyond the pilot episode. For programmes with a main character or a recurring supporting character with ASD, the episodes that were selected indicate a cross section of how autism or Asperger's was represented in a particular show; they were the episodes that defined the condition's appearance, highlighted the character with ASD (and therefore made many implicit suggestions about the disorder), and would demonstrate the growth, or lack of growth, the character with ASD had within his or her run in the programme. The shows that were important to a programme's representation of autism or Asperger's were determined based upon episode summaries or a preliminary viewing of episodes or seasons in question. For programmes with a limited number of episodes (one to five) depicting a character on the autistic spectrum, all and only those episodes with the character on the spectrum were analysed. To ensure that shows were available to the general public, programmes must have aired either on television or a popular online platform (like Netflix or Hulu).

Exclusion Criteria

Film Exclusions

- 1. Short films
- 2. Student motion pictures
- 3. Amateur movies
- 4. Avante garde films
- 5. Movies with exclusively online releases
- 6. Films without narrative structure

Short films, student motion pictures, amateur movies, avante garde films, movies with exclusively online releases, and films without narrative structure were excluded primarily due to their inaccessibility. In addition, these films would likely have many vastly different forms and methods of influencing perception than a traditional film or television show, making them difficult to compare and potentially skewing the results that the commercial films provided.

Television Exclusions

1. Shows made for small, unpopular online platforms

Television programmes specifically made for online platforms were excluded because of the difficulties of access.

Other Exclusions

Video games, still photographs, and graphic novels were also excluded. Video games have also been excluded as they are an interactive, multiple outcome form of visual media. Further, they were not included due to the lack of a consistent portrayal for every user and the difficulty a researcher could have to reproduce or precisely describe these portrayals and the route used to find these portrayals. The sheer number of still photographs that likely contain an individual with ASD was too high to consider including them in this thesis. Graphic novels were excluded because of the small sample size, lack of access, and their differing methods of meaning production.

Fictional Texts

In total, this resulted in the use of fifty texts, counting each television show once, regardless of the number of seasons or episodes analysed. Any films or television shows missed would be relatively minor in popularity making them significantly less likely to impact perception than those works the thesis did cover. The texts used have been placed into the table below by media type in chronological order of release for easy identification and reference.

List of Texts

Table 1

| Texts portraying | characters | with ASD |
|------------------|------------|----------|
|------------------|------------|----------|

| Television Programmes | |
|--|--|
| Touch (2012-2013) | |
| Saving Hope (2012-2013) | |
| Hawaii 5-0 (2012) | |
| Alphas (2011-present) | |
| South Park (2011) | |
| Parenthood (2010-present) | |
| Fringe (2010-2012) | |
| Community (2009-present) | |
| Skins (2009-2010) | |
| Arthur (2009) | |
| Bones (2009) | |
| Grey's Anatomy (2008-2009) | |
| Degrassi: The Next Generation (2008-2013) | |
| NUMB3RS (2008) | |
| Lewis (2008) | |
| Waterloo Road (2007-2010) | |
| Big Bang Theory (2007-present) | |
| <i>Eureka</i> (2006-2012) | |
| Boston Legal (2005-2008) | |
| House (2006) | |
| <i>Scrubs</i> (2005) | |
| <i>ReGenesis</i> (2004-2008) | |
| A Touch Frost (2003) | |
| Law & Order: Criminal Intent (2003) | |
| | |
| | |
| | |

Materials

Category System

The works of fictional media used in this thesis were analysed based upon a descriptive and interpretive system of categories in order to capture the

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characterisation of the individuals on the autistic spectrum in these works. The system was composed of themes from the literature review, covering topics of demographics, inclusion, relationships, commonly portrayed traits, and narrative features and split into descriptive and interpretive types. The descriptive categories were the following: year of production, gender, diagnosis, age, race, social class, employment, audience size and demographics, genre, inclusion, physical demonstrations of ASD, mental health, special interests, speech, diagnostic characteristics, common portrayals, parents and family, familial status, relationships, and sexual orientation. The interpretive categories aim to make clear important facts about texts, without initial interpretation. The interpretive categories aim to make clear important facts about texts, without initial interpretation. The interpretive categories and analysis of each text to explain patterns and indicate how the complex, multivariable categories and issues within texts were being portrayed.

While the category system in use was designed specifically for this thesis, the idea has its basis in disability studies. Rosemarie Garland-Thomson's work uses four taxonomies of staring to categorise photographic work containing disability (Garland-Thomson, 2002). These taxonomies often work within the same image to describe and analyse points about a photograph's cultural meaning. Earlier scholarship on autism in fictional media characterising set themes in ASD's portrayal, like those by Murray (2008), Baker (2007), and Osteen (2007) as mentioned in the literature review, further influenced its design. The overarching categories used in the system did not emerge from the data; they surfaced based on the key understandings from the literature review's focus on topics like demographics, families, and sensationalism. While the categories allowed for focus on key themes from the critical context, they were open enough to include subcategories that emerged from the data collected.

Additionally, the category system used primarily addressed the medical definition of ASD in its categorisation of characters. It was created largely based on what Goodley and Runswick-Cole label the 'autism cannon' (2012, pp. 55); it

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collects information based on autism as a biological condition with a medical and psychological diagnosis. Using the medical model of autism allowed this thesis to have a clear focus of research. The 'stereotypes propagated' and 'social position categories' (below), though, draw from the social oppression model (Goodley and Runswick-Cole, 2012, pp. 56), noting the social expectations 'geared to, built for and by, and controlled by non-disabled people' (Swain et al., 2003, as cited in Goodley and Runswick-Cole, 2012, pp. 56). A tension within this thesis's use of the disability studies framework exists because of the use of both of these modes of analysis. Using the autism cannon was necessary for clarity, while the use of the social oppression model allows for the empathetic treatment of autism in this thesis.

This category system enabled a higher level of uniformity of analysis, as it insured each text was interpreted using the same criteria. Each category gives a basis for the analysis of the characterisation of the individuals on the spectrum and focuses on determining key themes, like stereotyping, the created and perceived characteristics of a minority group (Dryer, 1999) in film and television and how 'othered' these characters were. The descriptive, interpretive categories provide a system through which texts can be compared not only within a single media variety, but also comparisons of individual texts from across media types. The system also enabled the creation of more consistent sets of data for film and television as groups, as the same parameters were applied to every text, facilitating the display and discussion of the findings as a whole across the two kinds of media.

The texts were first grouped by media type for the principle investigations by category. The two types were then compared with each other by differences and similarities in the categories. A description of the categories follows:

• Year Released

 Indicates in what year each text was released, or in the case of television, the years new episodes were being aired containing the character with ASD.

•Each text was placed into all applicable years in which new material was released, from 2000 to 2013.

Demographics. These categories allowed for examination of trends within film and television about demographics and comparisons to real world statistics.

• Gender:

•Gender described whether a character on the spectrum was **male** or **female**.

•Films and shows were placed into subcategories as applicable to the gender of each character with ASD in the work.

• Diagnosis:

•The diagnosis category established where a character was on the autistic spectrum.

•The subcategories described a character's placement on the spectrum, without necessarily being linked to official diagnosis. They were:

- High-functioning autism
- Classical autism
- Asperger's
- Undiagnosed, for those who did not have an identified disorder

The characters who were not explicitly diagnosed were placed in both the undiagnosed subcategory and the diagnostic subcategory that fitted their characterisation to demonstrate the range portrayed in films and television. Those in the undiagnosed subcategory were placed into the other subcategories based on either published material related to the text or clear indications of placement, notably social understanding, empathy, and communicative ability.

• Age:

•Indicated the general age of a character.

•They were placed into the subcategories **adult**, **child**, **adolescent**, or

both adult and child. Each text was placed in only one subcategory.
Children were those under twelve, adolescents were roughly between twelve and eighteen, and adult those over eighteen.

• Race:

•Race indicated the racial profile of a character on the spectrum based on skin colour.

•The subcategories were **white**, **black**, and **'other**,' the appropriate racial designations from standard demographic collection surveys. Asian/ Pacific Islander, Native American, and non-white Hispanic were not included because no characters fit these groupings. Each text was placed into only one subcategory for clarity. One character in television was excluded as he was a racially ambiguous rabbit.

• Social Class:

•Placed characters into the socioeconomic group that best described them

- •The subcategories were **upper class**, **middle class**, and **working class**. Each character with ASD was placed into the applicable class designation, indicating multiple possible placements for each film with multiple characters on the spectrum.
- •Characters were placed in groups based on demonstrated class markers like size and location of property and profession (or those of their parents).

Viewership. These categories indicated what age groups were targeted and how roughly many people would have their perceptions influenced by which texts. These categories were key to determining whether different audience groups or genres treated the depiction of autism consistently or in a contrasting manner.

• Target Audience

OIndicated who was watching each text.

•Each work was placed into one of the following: **adult**, **child**, or **adolescent audience** based on content of each text.

• Audience Size:

•Audience size indicated how large the viewing audience was for each text.

oTexts were grouped into small, moderate, or large audience sizes and

placed in only one subcategory.

Estimates of box office gross in films from IMDb and the number of viewers or popularity in television determined subcategory classification. For shows, the number of seasons that were produced, the network on which it aired, and/or its time slot indicate popularity, as gathered on IMDb or in various trade publications. A show that ran on FOX in the USA at 8 pm on Thursday for three seasons, for instance, would be gauged to have a large audience because it aired on a major American network during primetime for several years, indicating that the network had success with the show.

• Genre:

 Grouped films and shows by major, contemporary Hollywood film and television types.

•Each film or show was placed into one of the following genre subcategories: comedy, drama, 'dramady' (a drama/comedy combination), romance, thriller/horror/action, science fiction, or children and family.

• The designations were based on the plot and content of the text and were classified in the most applicable genre in order to draw more concrete conclusions about patterns in the portrayal of autism in specific genres.

Inclusion and Employment. These categories aimed to track potential change in the number of individuals included in films and on television and discover the general rate of educational and workplace inclusion in fictional visual media

• Inclusion:

- •Noted whether or not characters with ASD are included in mainstream schools and workplaces in films and television.
- oIts subcategories were educational inclusion, workplace inclusion, included in both spaces, not included, and unknown. Each text was placed in the applicable subcategory.

•Classification was based on demonstrated inclusionary practices.

Individuals shown in professions that would require mainstream educational inclusion, like doctors, were placed into included in education and workplace. Those with less skilled professions were placed only in workplace inclusion, as no educational inclusion could be assumed. Those who were subcategorised as not included were explicitly placed into special educational needs programmes.

• Employment:

•Described whether the adult characters on the spectrum were employed or unemployed

 Texts were placed in either employed or unemployed subcategories.
 Though some characters were unemployed for portions of works, characters were considered employed if they held a job during most or part of a film or show.

Behaviour and Characteristics. These categories indicate the frequency of certain portrayals and indicate the creation of stereotypes. While many of these categories have subcategories developed from the collected data, the categories themselves were concerns highlighted by the literature review.

• Physical Demonstration of ASD:

 Indicated whether a character had what Murray deemed a 'physical eruption' (Murray, 2007, pp. 246) attributable only to ASD despite its status as a developmental disorder, rather than a condition with physical manifestations.

Movies and shows were placed in either no demonstration or physical demonstration subcategories, with those in the physical demonstration subcategory also being placed in the aggressive outburst subcategory if their behaviour was deemed hostile as well.

 Physical demonstrations were outward behaviours such as obvious, long term rocking or stimming, tantrum throwing, or pushing, yelling, or otherwise (over)reacting to a situation due to their ASD, either through lack of social understanding or aversions associated with an individual's condition.

• Mental Health:

- •Indicates the portrayal of the mental health problems that are often diagnosed along with ASD, as indicated in the literature review.
- •Obsessive-compulsive disorder (OCD), depression, anxiety, 'other' conditions, or none make up the subcategories in this group. Each film and television programme was placed in the each category that fit the traits of their respective characters with ASD.
- ○As none of these behaviours were explicitly diagnosed, the subcategorisation was fully based upon obvious characteristics of the above conditions. For OCD, characters had to demonstrate compulsive, disruptive rituals. Depression was based on a character's long-term, severe despondency and feelings of hopelessness. Anxiety was classified based on described or demonstrated aversions or phobias beyond general stress.

• Special Interests:

 Determines if characters display special interests and/or skills and if those portrayed fall into a set.

- •Each text was placed into one of the main subcategories, no special interests or special interests. For those depicting special interests, they could also be categorised into <u>science/maths</u> and/or <u>art</u> as special interests.
- Texts were placed into either major subcategory based on a character's extreme preference for and/or knowledge of a subject or subjects.

• Speech:

 Analyses the speech characteristics of characters on the spectrum.
 Subcategories were slow and stilted speech, rapid speech with odd inflection, little to no speech, and no marked categorical difference in speech. Each film or show was placed into a single subcategory describing the character's speech markers. A character's speech was marked by inflection, speed/pacing, tone, and ability, not by word choice. Those characters in the no marked categorical difference subcategory may have had speech similar to that of a neurotypical or different, but not in a marked way, a limitation of this category.

Diagnostic Characteristics:

- Texts were in this category were marked by portraying traits linked to the diagnosis of ASD, based upon the triad of impairment and other attributes of autism and Asperger's as described in the DSM-IV, DSM-V, and ICD 10.
- The subcategories emerged through gathered data, which included literalness (the lack of social context of language) and rigid schedules.
- Classification was based upon notable, demonstrated occurrences of characteristics linked to ASD, for instance taking something literally or requiring a set schedule.

Common Portrayals:

Based on narrative elements commonly seen in films and on television that describe both character features and elements of the narrative.
The subcategories, like diagnostic characteristics, emerged from the information collected. Subcategories, which included demonstrated need for care and breakthrough connections, were created based upon a demonstration of the described behaviour or characteristic. Each work was placed into the total number of subcategories which described it.

Family and Relationships. These categories indicate common portrayals of family life and extrafamilial relationships. While the first of these categories has subcategories developed from the collected data, the 'parents and family' itself was a concern highlighted by the literature review.

• Parents and Family:

- •The complications of a character with ASD's family, those of their parents and siblings, were noted in this category.
- •These subcategories also emerged from the collected data and included characters on the spectrum being the **cause of marital or familial problems**, and characters with ASD that came from **nontraditional families** (like divorced parents, single parents, or were being raised by someone other than a biological parent).
- Works were placed into these subcategories based on explicit, demonstrated issues within family dynamics. These dynamics were often discussed by characters or were observed based on parental marital status. Films and shows not portraying families were not included, unless stated information about the character's family relevant to subcategorisation.

• Familial Status:

- •Identified the adult characters who were married and/or had children based on demonstrated family connections
- •The subcategories were **married**, **children**, and **too young for either**. Films and shows were placed into all applicable subcategories.

• Relationships:

- •Notes the relationships characters on the spectrum developed during the work.
- •Each text was placed into he following relevant subcategories: **familial relationships**, **romantic relationships**, **friendships**, or **other** relationships.
- •The success of romantic relationships was also evaluated in this category, comparing the total number **portrayed** with the total number that **failed**. Because other researchers, Murray (2008) and Baker (2007) in particular, noted the prevalence of familial relationships, this category specifically made note of extrafamilial

relationships, most notably friendships and romantic relationships, to determine what other kinds of relationships were shown.

•Texts were placed into these subcategories based on demonstrations and of the specific kind of relationship, regardless of the depth with which that relationship was described in a work.

• Sexual Orientation:

•Established the sexual orientation of characters on the spectrum, which elaborated on the romantic relationships subcategory.

•The subcategories were **heterosexual**, **homosexual**, **no orientation apparent**, or **too young for expressed orientation**.

•Characters were evaluated for expression of preference, either through a current or past romantic relationship or the desire to have one. Those who demonstrated no desire to participate in romance or had no opportunity to express orientation were placed into no expressed orientation. Children were placed into the too young subcategory.

Narrative Devices. The following identify patterns within the texts and demonstrate how narratives revolving around autism spectrum disorders may focus on common formulas and themes.

• Narrative Type:

oIdentifies the standard narratives in which works fall.

•Texts were placed into the following narrative type subcategories: **family narrative**, which contained characters who were shown predominantly within a family context (see Murray, 2008 and Baker, 2007); **personal growth narrative** of a neurotypical character, films or shows that showed the growth of someone without autism (see Osteen, 2007, pp.19); **recovery narratives**, which contained characters on the spectrum who show vast improvement in their disorder during the text (see Fisher, 2007); **bildungsroman**, showing the growth of a character on the spectrum through a journey of some kind; or **uncategorised**, texts that didn't fit into set types. While most of the narrative types can be linked directly to research on autism in film and television, the bildungsroman type was included because it is a common literary genre in books containing characters nearing or in young adulthood, an age range where many characters on the spectrum in film and television fall. The context in which the character on the spectrum was placed in a work determined its narrative type. As suggested in the description of each subcategory above, the character with the most importance to a text and his/her actions determined its narrative type. This category indicates on whom the narrative focuses, the character with autism or a neurotypical character.

• Sensationalism:

 Provided a scalar measure of the sensational portrayals of ASD in fictional media.

Films and television programmes were measured as having high,
 moderate, or low levels of sensationalism.

•A sensational film or show would contain a character with ASD that has extraordinary skills and/or completes a seemingly impossible task, like being a savant who can count multiple decks of cards, while the moderately sensational texts would contain characters who had more incredible skills than their neurotypical counterparts. A nonsensational text would contain a character on the spectrum who is not possessive of fantastic character traits (though may be out of the ordinary, as most fictional work features noteworthy characters).

• Agency:

- •Examined at the character with autism's ability or capacity to act or exert power over his/her actions and/or conditions. It was a basic assessment of how much power a character on the autistic spectrum has in their daily lives.
- A character was judged to have been represented with high, if he/she was depicted as making meaningful decisions for him/herself throughout a text; moderate, which was assessed if characters made

some decisions, but they were either small or only included one significant choice; or **low** levels of agency if they did have demonstrated choice-making.

• Every work, though, was different; as such, a qualitative description of the character's (or characters') agency will be provided for each.

Shot Analysis System

In addition to the category system, the texts were examined through shot analysis. Each film and either the single episode or a sample episode of a television show that contained either supporting or main characters on the spectrum had point of view shots examined. The specific television episodes selected for analysis were those in which the character with ASD was featured, to ensure among the highest numbers of perspective shots for this character. This process counted the total number of shots from the perspective of a character with autism or Asperger's who was either a main or supporting character. Two films and a quarter of television shows were not analysed for point of view shots due to the lack of importance the character with ASD had to the overarching narrative. Because a shot is only from one point of view at one time, (Bowen & Thompson, 2009b), each individual segment, regardless of speed or relative consistency of image, was counted. Shot analysis was broken down into the following groups:

- Number of shots: the total number of shots in each work
- Frequency of shots per thirty minutes: the total number of shots average in thirty minutes of the work. This allows for comparison of texts of different lengths.
- Number of shots of objects: the total number of shots of objects in a text.
- Number of shots of people: the total number of shots of people, including faces in a text.
- Number of shots of other things: the total number of shots of other things in a work, like animals, landscapes, or segmented parts of a person, like hands.

Perspective shots were analysed to describe characters with ASD's depictions in texts and further examine their levels of agency. Because point of view shots are one method film and television use to influence perception (Mulvey, 1975), analysing the breakdown of shots from the point of view of a character with ASD was critical to understanding how a text portrays an individual on the autistic spectrum. Most importantly, the shot analysis provided information about at what a character with the disorder was looking. Because each work has a different style and different number of main and/or supporting characters, along with being varied in length, comparing the numbers of shots alone would lead to flawed results. Since what a character sees affects his or her portrayal in a text and adds to what the audience knows about that character, analysing this information could lead to insights about the character with ASD and the potential perceptions that are not explicitly created by a work.

Text Review Template

The categories, shot analysis, and any other notes or information points were placed onto a text review template. This template was created to ensure that each film or television programme was reviewed in a consistent manner. Each text was evaluated using this template in order to have detailed notes and basic information readily available for analysis. The text review template provided a way to make certain that each text had all the portions of the category system applied to it. In addition, the template supplied a space to record all the data collected in an easily accessible and reproducible manner.

Film and Programme Review Template

Title:

Director/Author/Producer:

Year(s):

Country:

Genre:

Character and demographics:

Age: Gender: Race: Social Class:

Target Audience:

Estimates of numbers reached:

Narrative Type (if any):

General rating of agency:

Diagnosis:

Sensationalism:

Characteristics of ASD:

- Communication:
- Social Interaction:
- **Rigidity of Thought**:
- Compulsive Focus:
- Sensory Sensitivity:
- Motor Skills:
- Aggression:
- **Other**: (Physical demonstrations, mental health problems, special interests, speech, other notable characteristics)

Stereotypes Propagated:

Notes on Relationships and Sexual Orientation:

Social Position: Married/children:

Mental Health: Employment: Family portrayals:

Notes on Inclusion:

Number of Shots from Character's Perspective:

Other Notes:
Procedure—Data Collection

Technique

The films and television shows were initially selected based upon the inclusion and exclusion criteria, as discussed above. A basic category system, with descriptive and interpretive categories, was then created. Analysis began by viewing a random sampling of texts in order to get a sense of any general trends across fictional, visual media, which led to the final, nuanced version of the complete category system. After watching these examples of films and television programmes, the final version of the text review template was produced. Because of accessibility challenges, the analysis and watching of film and television were interspersed in random order. Following viewing each individual work, quantitative and qualitative information about each of the films and shows viewed was recorded on a text review sheet. Each text was viewed two to three times, once for general category system information and at least once for perspective shot analysis.

Ethical Considerations

Because the thesis covers only publicly released works, there was no need to consult an ethics committee based on texts used in this thesis. The quotations used faithfully represent the intentions of the speaker and/or any supplemental material used for support in this thesis. The method is valid, reliable, and ensures minimal researcher bias. All sources were checked for authenticity and everything produced is, to the highest degree of certainty, authentic and true. The ethics follow the guidelines set out by the University of Strathclyde. The subject of representing autism, on the other hand, does have ethical implications, from terminology to how the discussion has been composed. As a subject that 'frame[s] an engagement with the definition and limits of meaningful life and personhood' (Burke, iii), this thesis attempts to handle the topic of autism in film and television sympathetically and fairly to ensure the highest ethical standards.

Chapter 4: Results

Analysis Procedure

Obtaining Results

The data is based upon the observations from the descriptive and interpretive categories. The same set of categories and their respective subcategories was applied to both film and television. The results compilation began with the quantitative analysis of category results. Each text was examined to determine how it would fit within a category and then placed within the appropriate subcategory, created by the category parameters. In gender, for example, each work was placed within either the male or female grouping (or, in one film with two characters with ASD of each gender, both) to determine the numbers of characters of each gender. The results of the categories were additionally described qualitatively.

The films and television shows were analysed based on the data collected from published information about each movie and programme and watching each text. For the quantitative analysis, each film and television show was placed in a table noting the appropriate subcategory for each applicable category in the category system. The numbers collected from this process stand separately from and help to form the base for much of the qualitative data analysis. The qualitative results are based on occurrences difficult to demonstrate in numbers, like agency and the other interpretive categories; these results describe how a representation was presented rather than a numerical count of what was shown.

Although many of the categories are descriptive and, therefore, relatively objective, decisions had to be made about where to place a film or show if it fit into multiple subcategories or did not meet any of the subcategory requirements. Each text was placed in the appropriate categories to properly indicate the element depicted, rather than the characteristics of each individual character. If multiple characters in a text were in the same subcategory, for instance, it was not counted twice; if these characters fit in different subcategories, the text was placed in both to indicate all represented features. When texts did not squarely fit into a category or

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subcategory, provisions were made to place the text in the subcategory it most closely resembled, place the text in multiple groups, or expand the subcategories. In genre, for example, movies and programmes were placed into the single subcategory that best described it even when it could have been in several, while in narrative type some works were placed into multiple subcategories to accurately indicate how often these common narratives were shown.

Because the categories were designed to be flexible, many subcategories emerged from the data collected on the text review template, as noted in the method. The scaled system used to evaluate sensationalism and agency, which did not have the descriptive behavioural markers appropriate for more specific subcategorisation, included the addition of 'moderate' in order to separate texts into groupings that had the most common traits. These scalar subcategories were mutually exclusive. Diagnostic characteristics, common portrayals, and parents and family had subcategories entirely based on the data collected and were grouped accordingly. Because these subcategories were created from data, they are themselves results and noted in their respective categories. Due to the interpretive nature the method of this thesis, the decisions made on how to place a text in the subcategories could have affect the reproducibility of the results. Because the interpretive results have explicit rationale for the decisions made, research using these guidelines should have similar findings. The adaptability of categories to contain appropriately encompassing subcategories enabled the results to fully detail the representations of ASD in film and television.

Shot analysis, an objective collection of data, also had notable difficulties. Each shot was a different length, leading to difficulties in counting those shown rapidly. Those shots which passed too quickly to be identified after three watchings, for instance many shown in rapid succession in character's memories, were not counted. Two films had to be excluded from the subcategories number of shots of objects, number of shots of people and number of shots of other things due to a lack of information. Although an objective measure, it is possible that a shot was missed because the analysis was done by a human. This likely margin of error is insignificant to the overall results as it would be minimal.

The texts were grouped by media type (film and television programmes) for the principle investigations. Results are presented in the following sequence, once for film and then again for television: year, gender, diagnosis, age, race, social class, target audience, audience size, genre, inclusion, employment, physical demonstration of ASD, mental health, special interests, speech, diagnostic characteristics, common portrayals, family, familial status, relationships, sexual orientation, narrative type, sensationalism, agency, and shot analysis. The results for film are presented first, followed by the results for television including comparisons with film results. The key findings end the chapter.

Results

The results are broken down by media type, by films and then television programmes. Each type has results broken down by category, how these categories interact, and by shot analysis. The noteworthy similarities between results for film and television are compared in the data for television.

Films

A total of twenty-six films were analysed using the descriptive and interpretive category system. They are as follows shown from most to least recent: Table 2

Titles of motion pictures that include a character with ASD

| The Story of Luke (2012) | Dear John (2010) | If You Could Say It In Words (2008) | The United States of Leland (2003) |
|--|------------------------------|--|------------------------------------|
| Joyful Noise (2012) | Burning Bright (2010) | P.S. I Love You (2007) | Punch-Drunk Love (2002) |
| Salmon Fishing in the Yemen (2011) | Quantum Apocalypse (2010) | After Thomas (2006) | Rose Red (2002) |
| Extremely Loud & Incredibly Close (2011) | Mary and Max (2009) | Snow Cake (2006) | I Am Sam (2001) |

| Fly Away (2011) | Adam (2009) | Breaking and Entering (2006) | Bless the Child (2000) |
|-------------------------------|--------------------------|---------------------------------|------------------------|
| A Mile in His Shoes (2011) | The Black Balloon (2008) | Mozart and the Whale (2005) | |
| Temple Grandin (2010) | Dustbin Baby (2008) | Somersault (2004) | |

Years of Films Released Portraying ASD



Figure 1. Number of films including a character with ASD by year of release

In 2000 and 2001, one film featuring a character on the spectrum was produced. Two film with characters with ASD premiered in 2002. For the years 2003, 2004, and 2005, one film portraying autism or Asperger's was released each year. In 2006, there were three movies launched containing ASD, though in 2007 the number dipped to one. 2008 had three films released depicting the condition, though there were just two in 2009. 2010 and 2011 are the years with the most films, with four released per annum featuring a character on the spectrum. The number drops to two in 2012 and, as of the end of September, in 2013 no films had been publicly distributed with characters with ASD. Although the number of films grew during the period, it was not a linear increase.

Demographics



The majority of characters with ASD in films are males, at seventy percent of those represented. The remaining thirty percent of the characters are female. These figures include *Mozart and the Whale* (Naess, 2005) being placed in both subcategories because it includes both a male and female character. The number of females in films stays relatively static, with about one film a year being produced.



Diagnosis in Films Portraying ASD

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Films with undiagnosed characters were placed in both the undiagnosed subcategory and the subcategory matching their place on the spectrum. There were seven films containing characters considered to have high functioning autism, including two films also placed in the undiagnosed subcategory, I Am Sam (Nelson, 2001) and Dear John (Hallstöm, 2010). Dear John contains two characters with high functioning autism, only one of whom was undiagnosed. As both characters could be categorised as occupying a similar location on the spectrum, the film was counted in the high functioning subcategory only once. Six characters were grouped under classical autism, which included one film with an undiagnosed character, The United States of Leland (Hoge, 2003). There were thirteen movies with characters with Asperger's, with five who were undiagnosed. Although Mozart and the Whale (Naess, 2005) contained two main characters on the spectrum, the film was counted once because both characters have Asperger's. Unlike most of the films, If You Could Say It In Words (Gray, 2008) contains a character who is undiagnosed in the context of the film, but is described in the promotional material of the film as having undiagnosed Asperger's, identifying his second subcategory placement in Asperger's.





While the number of characters per year with classical autism remains relatively consistent throughout the fourteen year period, its representation proportionally decreases after 2006. There is only one film with high-functioning autism before 2006, about the midpoint, but in 2006 there are two films growing to four after 2006. Asperger's shows a nearly steady increase of portrayals since about 2005, peaking at three in one year in 2011. Undiagnosed characters, on the other hand, go down in number and proportion after 2006, with half the number in the second seven years as in the first.



Age of Characters on the Spectrum in Films

Figure 5. Proportions of films portraying characters with ASD of different age groups

Forty-six percent of films contained only adult characters on the spectrum. One film, *Dear John* (Hallstöm, 2010), contained both an adult and a child with ASD, accounting for four percent of movies analysed. When taking *Dear John* into account, 50% of films contained an adult on the spectrum and thirty-six contained a child. Forty-six percent contained only a minor with ASD; nineteen percent had an adolescent character on the spectrum and thirty-one percent contained only a younger child.



Figure 6. Change over time of ages of characters on the spectrum portrayed in film by number released per year

The portrayals of adult characters with autism and Asperger's is largely reflective of the general increase in the number of films made. The proportion of children on the spectrum portrayed in films, even taking into account *Dear John* (Hallstöm, 2010), decreased notably after 2006, both in terms of numbers and as a proportion. The depiction of adolescents on the spectrum, however, does not begin to occur until 2008, nine years into the scope of this thesis, after which time they become a more common feature.



Race of Characters with Autism or Asperger's in Film

Figure 7: Numbers of characters with ASD of difference races in film

Two films of twenty-six, or seven percent, contain characters with ASD who are black. The other twenty-four, or 93% of the films analysed, represent white characters on the spectrum. Although a few of the characters are ethnically Jewish, like Max in *Mary and Max* (Elliot, 2009), for the purposes of this thesis they are considered racially white. As with adolescents, movies do not begin to depict black characters until 2008, but they continued to be rare.



Social Class of Characters on the Spectrum in Films

The supermajority of characters, twenty-two films or eighty-five percent, belong to the middle class. Fifteen percent, or four, of the characters are working class and just one character, or four percent, is upper class. Because the boy and man in *Dear John* (Hallstöm, 2010) have different socioeconomic status, upper class and working class respectively, this film has been placed in both subcategories. The first characters in the working class appeared in 2008 and the only upper class character was not shown until 2010.

Demographics: Summary

Characters were primarily male, middle class, and white with Asperger's syndrome. There was an even number of characters under eighteen and those above.

While males held a large majority, females were not uncommon in films. Based on the above results, no single characterisation was created.



Varied Viewership



The target audience for films was exclusively adults. Although there was a single animated picture, it was not produced for the under fifteen age demographic. While some would qualify as family films, like *A Mile in His Shoes* (Dear, 2011), ultimately the films viewed for the thesis aimed to appeal more to adults than children, even those that are designated 'family films.' While the specific demographics within the adult subcategory varied slightly, films such as *Burning Bright* (Brooks, 2010) were intended for young adult males rather than older adult females, the target audience and individuals who make up the audience can be simply summarised into adults. As there are no films in any target audience other than adult, there was no change over time.

Figure 9. Target audience of films containing a character with ASD



Audience Size of Films Portraying Characters on the Spectrum

Figure 10. Audience size of films that portray a character on the Autistic Spectrum The largest number of films, forty-four percent, had a small audience, or grossed under \$500,000 (USD). Twenty-four percent of films, or six, with a character with autism were moderate in audience size, earning between \$500,000 and \$10 million (USD). Thirty-two percent of films, eight in total, had large audiences, taking in over \$10 million (USD). *After Thomas* (Shore, 2006) had no available

information regarding earnings and, therefore, was not included in the audience size category.

The first films from 2000-2013 featuring characters on the spectrum have large audiences, but they become less common for several years and then resurface in 2010. The first medium-sized audience for a movie is in 2006 and stays present, with a few dips through the rest of the period. Small motion pictures, however, increase in number throughout the period, largely mirroring the total number of films per year.



Genre of Films Containing a Character with ASD

Eight percent, or two films, were comedies, *Mary and Max* (Elliot, 2009) and *Joyful Noise* (Graff, 2012). Most of the motion pictures analysed were dramas, thirteen, or forty-six percent, of the twenty-six movies. Drama included films like *The United States of Leland* (Hoge, 2003). 'Dramady' motion pictures, or comedy dramas, made up eight percent, just *Salmon Fishing in the Yemen* (Hallstöm, 2011) and *The Story of Luke* (Mayo, 2012). Twenty-three percent of the movies were romance films, which included both 'romcoms,' romantic comedies like *Punch-Drunk Love* (Anderson, 2002), and romantic dramas, like *Dear John* (Hallstöm, 2010). The thriller/horror/action subcategory contained fifteen percent of the films. It included three genre types because of the difficulty of discerning between the three and all four films fall under at least two of the three genre designations, like *Rose Red* (Baxley, 2002), which is both a horror and a thriller. There were no science fiction or children and family films.

Figure 11: Genre of Films the contain characters with ASD



Figure 12. Change over time of genres in film portraying characters on the spectrum by number released per year

Drama maintains its status as one of the most popular genres throughout the period. While thriller/horror/action has the same number before and after 2006, two in both halves, it proportionally decreases in the later period. The first comedy film was released in 2009 and the second not until 2012. Dramady does not appear until 2011, late on the timeline. Four of the six romance films with a character on the spectrum were released in 2007 or later. The diversity of genre increases as the numbers of movies increase.

Varied Viewership: Summary

All films were targeted to adult audiences, the majority of which were not widely seen or distributed. Motion pictures with characters on the spectrum are primarily in the drama genre, though other genres become more common later in the period.

Shift Toward Inclusion

Inclusion of Characters with ASD in Films



Figure 13. Inclusion status of characters with ASD in film

Fifty-seven percent of characters on the spectrum were included. The two largest subcategories, though, contained opposite depictions of inclusion. Characters who were both academically and professionally included make up twenty-seven percent of movies, as did films that showed characters who were not included at all. Fifteen percent, or four, of the motion pictures represented a character only included in school and fifteen percent contained a character only included at work. Because of the content of films or the prominence of the character nineteen percent of characters on the spectrum have an unknown incorporation into either school and/or work. *Dear John* (Hallstöm, 2010) was placed in both unknown for Alan, the boy's inclusion status, and both work and school, for John's father.



Figure 14. Change over time of inclusion status of characters with ASD in films by number released per year

While the number of characters who are either not included or have an unknown level of inclusion has remained numerically similar throughout the period, the number of those who are included in some regard has notably increased since 2006, when the first child included educationally and adult included only in the workplace were shown.



Employment of Characters with ASD in Films

Figure 15. Employment status of adult characters with ASD in film

Thirteen films in total, fifty-percent of movies use in this thesis, contained adult characters on the autistic spectrum and could be analysed for this category. Of those films, the rate of employment was eighty-five percent, or eleven of thirteen films. Only two films, or fifteen percent, included an unemployed adult, *I Am Sam* (Nelson, 2001) and *Quantum Apocalypse* (Jones, 2010). While most films represent characters as consistently having a job, several also portray the difficulties an individual with autism or Asperger's might have getting or keeping a job, such as *The Story of Luke* (Mayo, 2012) and *Mary and Max* (Elliot, 2009). The two unemployed characters fall at opposite ends of this thesis's timeline.

Shift Toward Inclusion: Summary

Creating Stereotypes

Characters on the spectrum are likely to be included and adult characters were nearly always employed. An increase in the number of characters included was noted as time passed.



Physical Demonstrations of ASD of Characters on the Spectrum in Films

Figure 16. Physical demonstrations of ASD by characters on the spectrum in film

ASD physically manifests itself in eighteen, or sixty-nine percent, of motion pictures. For instance, in Adam (Mayer, 2009), Adam uncontrollably lashes out at his girlfriend due to his extreme aversion to lying, which the movie links to his Asperger's. In several films, including After Thomas (Shore, 2006), Burning Bright (Brooks, 2010), and Fly Away (Grillo, 2011), the characters have physical tantrums at inappropriate levels for the characters' ages, which are only explicable because of their ASD. Of those eighteen films with physical demonstrations, nine, or fifty percent, portray aggressive outbursts. These include Adam throwing objects in Adam, Mandy in Fly Away striking her mother, and Max in Mary and Max (Elliot, 2009) shoving a homeless man for littering. Thirty-one percent of films do not include this visual representation, though most of these characters with ASD are not main characters. In Joyful Noise (Graff, 2012), for example, Walter Hill, the individual with Asperger's, is a supporting character who has no visible symptoms of ASD. Salmon Fishing in the Yemen (Hallstöm, 2011) contains the only main character in this category, though he only has Murray's 'autistic presence' rather than a clear or official diagnosis.



Figure 17. Change over time of representations of physical demonstrations of ASD by characters in film by number released per year

Although the number of visible demonstrations and aggressive outbursts goes up over the period, in numbers, the percentage of films in the first half is markedly higher than that of the second. The numbers of films without demonstrations increases in number and percentage in the second half of the period, indicating that fewer films are depicting physical outbursts attributable to ASD.



Mental Health of Characters with ASD in Films

Figure 18: Comorbid mental health problems in characters with ASD

Eight films had characters that demonstrated mental health problems outside of their ASD. Two, *Dear John* (Hallstöm, 2010) and *Snow Cake* (Evans, 2006), had characters on the spectrum who exhibited behaviours consistent with OCD. Characteristics associated with depression were displayed in four movies with characters on the spectrum, *Punch-Drunk Love* (Anderson, 2002), *If You Could Say It In Words* (Gray, 2008), *Extremely Loud & Incredibly Close* (Daldry, 2011), and *Fly Away* (Grillo, 2011). Two films, *Extremely Loud & Incredibly Close* and *Mary and Max* (Elliot, 2009), have characters with ASD who also have anxiety. Oskar in *Extremely Loud & Incredibly Close*, for instance, has a soliloquy about the very long list of thing that induce anxiety. In addition, two films contain representations of characters on the spectrum with other mental health conditions. In *Mary and Max*, Max shows symptoms of an overeating disorder, linked to his anxiety. Donald from *Mozart and the Whale* (Naess, 2005) has hoarding tendencies associated with his fear of change, rather than the typical OCD. Twenty films contained characters on the spectrum with no other mental disorders, including *Dear John* and *Mozart and the* *Whale*, which have been grouped in two subcategories because one of the two characters in each film does not have another mental health problem.

Mental health problems outside of autism occur only occasionally before 2006, with one film in OCD, depression, and 'other' respectively. Anxiety first appears in 2009. Although showing mental health problems in tandem with ASD is not common, it less uncommon since 2006 than in or before that year.



Special Interests of Characters with ASD in Films

Of twenty-six films, only six did not portray a special interest or skill. They were as follows: *Bless the Child* (Russell, 2000), *Punch-Drunk Love* (Anderson, 2002), *The United States of Leland* (Hoge, 2003), *P.S. I Love You* (LaGravenese, 2007), *Burning Bright* (Brooks, 2010) and *Extremely Loud & Incredibly Close* (Daldry, 2011). Twenty films, or seventy-seven percent, contained characters that exhibited intense interests or skills in one area, ranging from trains to computer science to gymnastics. Of these films, four (twenty percent) showed special interest or skill in science and/or maths, *Mozart and the Whale* (Naess, 2005), *Adam* (Mayer, 2009), *Quantum Apocalypse* (Jones, 2010), and *Temple Grandin* (Jackson, 2010). Two films, *Mozart and the Whale* and *If You Could Say It In Words* (Gray, 2008), portrayed characters with artistic interest and skill. While the number of characters

Figure 19. Special interests of characters with ASD in film

without remained the same in the first and second halves of the period, they make up a proportionally smaller number in the second half. As such, the number of portrayals of special interests has significantly increased since 2000. Although the number of special interests falling into stereotypical varieties, math/science and art, also increase, they make up a smaller portion of the topics of interests in the later years the thesis covers.



Speech of Characters with ASD in Films

There were notable trends in speech patterns portrayed in films, with sixtyfive percent of them presenting noticeable speech patterns. Nineteen percent, or five films, contained characters who spoke in a slow, stilted manner, often characterised by stumbling over words or stuttering. Fifteen percent, on the other hand, or four films, had speech distinguished by rapidity and unusual tone and inflection. Thirtyone percent of films, or eight, portrayed characters with little to no speech at all. The largest single group, though had no marked difference in speech, containing thirtyfive percent of films. Although all periods have films from each category, a decline in proportion of films with rapid speech and very little or no speech in the latter half is evident. There is, on the other hand, an increase in characters with slow speech and no marked speech throughout the period.

Figure 20. Speech patterns of characters with ASD in film



Diagnostic Characteristics of Characters with ASD in Films

Figure 21. Diagnostic characteristics of characters on the spectrum in film

Films used diagnostic criteria to characterise individuals on the autistic spectrum in sixty-nine percent of portrayals. Seventeen films represented at least one of the five subcategories and many films were represented in multiple subcategories, like Snow Cake (Evans, 2006), which was in four of the five groupings. Only eight motion pictures, or thirty-one percent, did not demonstrate any of these traits. Four films, Temple Grandin (Jackson, 2010), Snow Cake, Mozart and the Whale (Naess, 2005), and Somersault (Shortland, 2004), contained characters who were very literal. Characters in nine films, or about thirty-five percent, had rigid schedules and habits, including Adam (Mayer, 2009), Breaking and Entering (Minghella, 2006), and I Am Sam (Nelson, 2001). About thirty-one percent of movies (eight total) portrayed characters on the spectrum with sensory sensitivity, which included If You Could Say It In Words (Gray, 2008) and After Thomas (Shore, 2006). There was a noted lack of eye contact in six films, or twenty-three percent, such as Burning Bright (Brooks, 2010) and Somersault. Characters with ASD had physical stiffness in five of the films, about nineteen percent, The Story of Luke (Mayo, 2012) and After Thomas, for example. Although the general numbers in each subcategory are similar for both halves, there is some variation. The number of portrayals of literalness and a lack of

eye contract has decreased, while the representations of rigidly sticking to schedules, sensory sensitivity, and physical stiffness are on the rise.



Common Portrayals of Characters with ASD in Films

Twenty-one of twenty-six films contained common characteristics and occurrences. Two films demonstrated marked improvement of the individual on the spectrum with appropriate tools. In *Bless the Child* (Russell, 2000), the care of her aunt and in *After Thomas* (Shore, 2006), the addition of a family dog significantly improved their ability to lead typical lives. The largest group of common portrayals was the character with autism's constant need for care, with eleven total films. Films in this category included *Rose Red* (Baxley, 2002), *The Black Balloon* (Down, 2008), and *A Mile In His Shoes* (Dear, 2011). Three films contained characters on the spectrum who were very good with animals, *Somersault* (Shortland, 2004), *Mozart and the Whale* (Naess, 2005), and *After Thomas*. The idea of photographic memories is depicted in two films, *Mozart and the Whale* and *Temple Grandin* (Jackson, 2010). Three characters were shown to have the inability to lie, in *Punch-Drunk Love* (Anderson, 2002), *Snow Cake* (Evans, 2006), and *Adam* (Mayer, 2009). A marked dislike of change was noted in only one film, *Mary and Max* (Elliot, 2009). Film

Figure 22. Common portrayals of characters with ASD in films

quoting also only appeared in one film, *I Am Sam* (Nelson, 2001). The portrayal of a breakthrough connection occurred in six films. For example, at the end of *Burning Bright* (Brooks, 2010), Tom, who does not seem to understand the danger of being locked in a house with a tiger throughout the film, grabs his sister's hand as they leave the house. Although he does not seem to have any bond with her before this point as more than a caretaker, the final moments of the film show them having a special moment after their ordeal.

Because of the small sample size in each subcategory, few meaningful comments on change over time can be made. The breakthrough connections subcategory has the same number of films in both halves, indicating a decrease in the proportional portrayals. The depiction of long-term need for care increased in the later half of the period.

Creating Stereotypes: Summary

Characters on the spectrum were highly likely to have a physical demonstration of the condition, a special interest, and marked speech patterns. On the other hand, they were unlikely to have mental health problems. Additionally, characters with ASD were often shown as needing care, regardless of age or ability.

Complex Relationships: Intra- and Extrafamilial



Parents and Family of Characters with ASD in Films

Figure 23. Parent and family conditions affecting characters with ASD in film

Individuals on the spectrum are members of families portraved with strife and atypical structures in eleven of twenty-six films; only eight films that show family interaction demonstrate none of these qualities. Six movies contain a character on the spectrum who seems to be the cause of familial or marital strife, typically related to their autistic behaviour. In After Thomas (Shore, 2006) and Breaking and Entering (Minghella, 2006), the behaviour of the children on the spectrum exasperates the relationship troubles of the parents and parent figures. In Rose Red (Baxley, 2002), The United States of Leland (Hoge, 2003), and The Black Balloon (Down, 2008), problems arise between neurotypical siblings, parents, and the character with ASD. In Fly Away (Grillo, 2011), Mandy's parents' divorce is credited to her father's inability to contend with the difficulties of Mandy's autism full-time. Characters with ASD are portrayed as being detrimental to the work and/ or social lives of their parents in three films. In After Thomas, Breaking and Entering, and Fly Away, the character on the spectrum is depicted as impeding one or both parents' ability to work productively and form or maintain relationships outside of the family. In eight films, families with atypical structures are shown. In Bless

the Child (Russell, 2000), *Burning Bright* (Brooks, 2010), and *The Story of Luke* (Mayo, 2012), the characters are raised by family members who are not their biological parents (an aunt, a sister, and grandparents respectively). In *Breaking and Entering, Mary and Max* (Elliot, 2009), *Dear John* (Hallstöm, 2010), and *Fly Away*, the characters were raised by divorced parents. Bea in *Breaking and Entering* was brought up by her mother and step-father, Max and Mandy were raised by their single mothers, and Alan in *Dear John* was reared by his single father.



Figure 24. Change over time in parent and family conditions affecting characters with ASD in film by number released per year

While family difficulties are apparent throughout the period, they are less common after 2006. Only two show marital or familial problems and only one shows difficulties in the work and social lives of parents seemingly caused by a character on the spectrum after 2006. Although the first nontraditional family appears in 2000, they grow significantly in popularity after the first reappearance in 2006. In addition to the growth of families with nontraditional structures, there has been a notable growth in families without problems or structural difference.



Familial Status of Characters with ASD in Films

Of the twelve films with characters of an appropriate age to be evaluated, only three portrayed characters that were or had been married. In both *Dear John* (Hallstöm, 2010) and *Salmon Fishing in the Yemen* (Hallstöm, 2011), the adult male characters with ASD had been married but were separated during all or part of the film, respectively. In *Mozart and the Whale* (Naess, 2005) the two characters with ASD are depicted as married to each other in the film's final scene. The films *Snow Cake* (Evans, 2006) and *Dear John* both feature characters with high-functioning autism who have children. Linda in *Snow Cake* and Bill in *Dear John* are only depicted with their adult children, although Linda's parents raised her daughter and Bill raised John. The portrayal of characters on the spectrum who are either married or have children does not begin to happen until 2006, but so few films fall into either or both of these categories no patterns can be observed. The majority of characters, fourteen, are too young to have either children or have been married.

Figure 25. Familial Status of characters with ASD in film



Relationships of Characters with ASD in Films

Figure 26. Relationships had by characters on the spectrum in films

The majority of films, eighteen or sixty-nine percent, feature characters on the spectrum and their relationships with a family member, generally parents or siblings. Several motion pictures show only familial relationships, including *Dear John* (Hallstöm, 2010), *Burning Bright* (Brooks, 2010), *Quantum Apocalypse* (Jones, 2010), *The Black Balloon* (Down, 2008), *After Thomas* (Shore, 2006), *Breaking and Entering* (Minghella, 2006), *Somersault* (Shortland, 2004), and *Bless the Child* (Russell, 2000).

Seven of the films, or twenty-seven percent of those analysed, contain characters with autism involved in or attempting to develop a romantic relationship. No films portrayed only a romantic relationship, nor did any show just familial and romantic relationships. Five of the seven motion pictures with romantic relationships did portray romantic relationships and friendships, though. These were *Salmon Fishing in the Yemen* (Hallstöm, 2011), *Adam* (Mayer, 2009), *If You Could Say It In Words* (Gray, 2008), *P.S. I Love You* (LaGravenese, 2007), and *Mozart and the Whale* (Naess, 2005).

Sixteen of twenty-six movies, or sixty-one percent, portray characters with ASD in friendships. *Mary and Max* (Elliot, 2009), *Dustbin Baby* (May, 2008), and *I Am Sam* (Nelson, 2001) all include characters on the spectrum who are depicted with only friend-based relationships. There are five of films that feature both friendships

and familial relationships, *Joyful Noise* (Graff, 2012), *Extremely Loud & Incredibly Close* (Daldry, 2011), *A Mile in His Shoes* (Dear, 2011), *Snow Cake* (Evans, 2006), and *The United States of Leland* (Hoge, 2003).

Two films, or eight percent, included 'other' kinds of relationships. *Temple Grandin* (Jackson, 2010) features the working relationship between Temple and the men she deals with in the cattle slaughter industry. While working relationships are depicted in other films, they are more importantly friendships for both the character with ASD and the neurotypical characters, not simply coworker relationships. *Rose Red* (Baxley, 2002) also has a relationship in other, the psychic connection between Annie and Steve, the grandson of original builders of the haunted house, which could only be categorised as 'other' due to its uniqueness.

In addition, two films fell into the three main categories. *The Story of Luke* (Mayo, 2012) and *Punch-Drunk Love* (Anderson, 2002) both portray relationships between the main character who is on the spectrum and friends, family, and potential significant others. While Luke is not successful in his pursuit of a romantic relationship, his constant desire for one, and the drive this lends the film, represent romance in this film.





Of the seven romantic relationships or attempted romances, six had failed by the end of the given film. Those films were *The Story Of Luke* (Mayo, 2012), *Salmon Fishing in the Yemen* (Hallstöm, 2011), *Adam* (Mayer, 2009), *If You Could*

Say It In Words (Gray, 2008), and *P.S. I Love You* (LaGravenese, 2007). While Dr. Alfred Jones's marriage splits up in *Salmon Fishing in the Yemen*, he does enter a second potentially successful romantic relationship by the end of the film. In *Dear John* (Hallstöm, 2010), Bill Tyree's wife leaves him long before the film begins, which places this movie in the failed relationship subcategory, but not in the portrayed relationship category because of his lack of success in romantic relationships and its status as a past event.

Familial relationships and friendships largely reflect the number of films produced per year, while 'other' kinds of relationships were intermittently portrayed. Romantic relationships, on the other hand, show growing prevalence as the years progress. This growth, though, does include the increased occurrence of failed relationships, which all take place after 2008.



Sexual Orientation of Characters with ASD in Films

Figure 28. Sexual orientation of characters on the spectrum in film There were eleven characters in movies that demonstrated heterosexuality.
These included *Fly Away* (Grillo, 2011), *P.S. I Love You* (LaGravenese, 2007), and *Punch-Drunk Love* (Anderson, 2002). No films contained characters on the spectrum who were homosexual. Seven characters do not display any variety of orientation, including *I Am Sam* (Nelson, 2001), *Snow Cake* (Evans, 2006), *Dustbin Baby* (May, 2008), *Mary and Max* (Elliot, 2009), *Quantum Apocalypse* (Jones, 2010), *Temple Grandin* (Jackson, 2010), and *Joyful Noise* (Graff, 2012). Although Linda in *Snow Cake* has a daughter, indicating heterosexual sex, she is not interested in men or women in a sexual context during the film, complicating the definition of her orientation. Nine characters, the children in motion pictures, are too young to have demonstrated orientation. Throughout the fourteen year period of analysis, demonstrated heterosexuality increased in film, although appearances of characters without apparent orientation did as well. After 2007, the majority of years had a higher proportion of identified heterosexual characters than characters without an apparent sexual orientation.

Complex Relationships: Summary

Characters with ASD are most likely to belong to a traditional family, though the margin is decreasing. Characters on the spectrum are unlikely to have a family of their own, by either getting married or having children. Most characters are shown interacting with their families and friends. Romantic relationships, as the lack of families suggests, largely fail and are uncommonly represented, though their numbers are increasing. Those that have expressed sexual orientation are primarily heterosexual, though many have no indicated preference.

Changing Narratives



Narrative Type of Films Containing Characters with ASD

In total, seventy-seven percent of films containing a character with ASD could be placed into narrative type subcategories. Three films, *Bless the Child* (Russell, 2000), *After Thomas* (Shore, 2006), and *Joyful Noise* (Graff, 2012), were placed into multiple subcategories due to multiple narrative types being key to the movie's plot and representation of ASD.

The largest portion of subcategorised films, nine or thirty-four percent, were family narratives. *Burning Bright* (Brooks, 2010), for example, follows siblings through an ordeal with a hungry Bengal tiger, placed in their house by their greedy stepfather. The character with autism in *Burning Bright* is contained by his status as a younger brother. *After Thomas* (Shore, 2006) is a movie focused on a family's effort to work with their son's autism. Kyle, the son with autism, only exists within the context of his family and his parents' fight for a higher functioning child.

The personal growth narrative subcategory contains twenty-six percent, or seven, of the total films analysed. In *A Mile in His Shoes* (Dear, 2011), a film about a young man with Asperger's who joins a minor league baseball team, the coach changes more than the player. Although Mickey, the young man with AS, does grow as a person to a small extent, ultimately the film focuses on the coach's recovery from the death of his young son and the reestablishment of his value to his team rather than Mickey's growth as a person or a player. Daniel, the man with Asperger's from *P.S. I Love You* (LaGravenese, 2007), is a supporting character in a film about a woman trying to move on after the death of her husband. He consoles and woos Holly helping her to grow, but Daniel himself remains static.

The Bildungsroman subcategory contains twenty-three percent of the analysed films. Adam in *Adam* (Mayer, 2009), for example, finds love, fights to keep love, and travels, literally and figuratively, out of his comfort zone for work in the face of loss and his Asperger's. He is prompted to action, which forces him to grow into a responsible adult. In *Joyful Noise* (Graff, 2012), a film that also falls into the family narrative and personal growth narrative subcategories, Walter grows from a boy into a young man. He goes from being socially isolated to learning to better relate to people and participate in group activities, though he is placed in the context

of his family and other characters have growth narratives, his portrayal does not become eclipsed by the other characters.

Only seven percent of films, just two movies, were classified as recovery narratives, both of which also fall into other subcategories. In *Bless the Child* (Russell, 2000), a film about a woman who saves her Christian-prophet-niece with autism, Cody, from an evil cult that kidnapped her, Cody loses almost all of her symptoms of autism essentially from the moment of her kidnap. Her communication improves drastically, she ceases rocking when uncomfortable, and she engages socially with those around her; she becomes what appears to be a neurotypical little girl who is odd because of her great powers. Kyle in *After Thomas* (Shore, 2006) almost entirely recovers after the family introduces a dog, Thomas, into his life. His speech improves, he gains empathy and compassion, both for the dog and for his family. The little boy who couldn't understand love at the beginning of the film tells his mother he loves her without prompting by the end.

Twenty-three percent of the movies did not fall into any narrative category. The films that could not be categorised into a narrative type were the following: *I Am Sam* (Nelson, 2001), *Punch-Drunk Love* (Anderson, 2002), *The United States of Leland* (Hoge, 2003), *If You Could Say It In Words* (Gray, 2008), *Mary and Max* (Elliot, 2009), and *Salmon Fishing in the Yemen* (Hallstöm, 2011). These films treated their characters with autism and Asperger's uniquely and without a standard narrative.



Figure 30. Change over time of narrative types in film by number released per year

The family and uncategorised narrative types remain steady between the two halves of the period, indicating that both have smaller proportions of the total number of films for the later half. The recovery narrative disappears after 2006. The personal growth narrative has more examples in the second half of the timeline. The bildungsroman narrative type, though, shows major increases after its first appearance in 2005, with five films since 2009.



Sensationalism of Films Containing Characters with ASD

Figure 31. Sensationalism of films with characters with ASD

Eighty-five percent of films do not contain sensational depictions of characters on the autism spectrum. Fifteen percent of movies, though, do contain a highly sensational character. This indicates that about one in six films contains a character with ASD portrayed either as a savant, psychic, or superhuman. No films were moderately sensational, as none contained characters with sensational qualities are less than highly sensational. The majority of films that have high levels of sensationalism, three out of the four total, were produced before 2006. This trend indicates not only a decline in the number of sensationalist depictions of ASD in this period, but also a sizeable increase in the number of films with low sensationalism.



Agency of Characters with ASD in Films

Although twenty-five films were grouped into three categories, the depiction of an individual character's agency was different in each film, from specific amounts of agency to the way a character's power was manifested. Because the character in *Somersault* (Shortland, 2004) was peripheral, his level of agency was impossible to determine and not used in analysis of agency, an omission nearly insignificant to the results.

Thirteen films demonstrate high levels of agency, half of the total films analysed. *Joyful Noise* (Graff, 2012), a musical about a small town competitive choir

Figure 32. Agency of characters with ASD in film

The Representation of ASD in Film and Television

and the two families trying to save it, depicts Walter, who has Asperger's, as being capable of making his own decisions at the level of a neurotypical teenager. He decides to participate in the choir as a band member, despite being pushed to sing by his family, and, when faced with a friend getting beaten up, Walter takes part in the fight with the bully to defend his friend. In *The Story of Luke* (Mayo, 2012), a film about a young man with Asperger's looking for a job and love, Luke breaks free of the expectations of his family and searches for work and a girlfriend because it is what he wants for his life. *Salmon Fishing in the Yemen* (Hallstöm, 2011), which follows Dr Alfred Jones's attempt to introduce salmon fishing to Yemen at the request of a sheik, shows Jones's agency through self determination, both within his

request of a sheik, shows Jones's agency through self determination, both within his personal life and the salmon project. In Extremely Loud & Incredibly Close (Daldry, 2011), about a boy on a journey to find meaning in his father's death in 9/11, Oskar Schell determines his own path and overcomes anxieties by going door to door alone in New York City to try to gain information about his father. Temple Grandin (Jackson, 2010) chronicles the early adult life of one of the more famous people with autism, Temple Grandin, and her involvement in the cattle industry. Her agency is demonstrated by her productivity, proactivity, and self-sufficiency in her work and personal lives. Adam (Mayer, 2009) demonstrates the title character's agency through his self-motivation in his pursuits of work and love, while breaking down his own barriers created by his rigidity of thought. He leaves his city for the first time to make a cross-country move for a job on the opposite coast. In Mary and Max (Elliot, 2009), a girl from Australia and a man with Asperger's from the New York become pen pals and relate their lives to each other through letters, despite their social difficulties. Max takes control of his life by going to group therapy for overeaters, usually having a job, and largely dealing with his own mental health problems, including getting an Asperger's diagnosis as an adult. If You Could Say It In Words (Gray, 2008), a film about Nelson, a working class artist with undiagnosed Asperger's, and his romantic relationship, demonstrates agency through Nelson's highly independent profession and ability to choose how he interacts with others, be it through art or social contact. Dustbin Baby (May, 2008), about a teenager who
The Representation of ASD in Film and Television

was found in a rubbish receptacle as an infant, demonstrates the a side character with Asperger's high agency by showing her giving advice to other girls and being an independent thinker, despite the setting in a boarding school. Daniel, a supporting character with an unnamed, though diagnosed, social disorder in P.S. I Love You (LaGravenese, 2007) lives comparably to a thirty-year-old neurotypical, with independent lifestyle marked by the constant romantic perusal of a woman. Snow Cake (Evans, 2006) is a movie about a woman with autism dealing with the death of her daughter and the relationship that develops with man driving the car in which she was killed. Linda, who has ASD, has the agency to keep a job, maintain a household, and tell others what she needs when she feels she can't do it herself. Mozart and the Whale (Naess, 2005), a love story between two people with Asperger's, shows each character demonstrating his or her own agency through their occupations, independent living situations, control over their own mental health, and decisions within their relationship. Punch-Drunk Love's (Anderson, 2002) main character, Barry, owns his own business and starts a successful romantic relationship, demonstrating the power he has in his life.

Eight films, or thirty-one percent, show moderate levels of agency through characters unable to demonstrate as much control as those in the high levels of agency subcategory. In *Fly Away* (Grillo, 2011), a film about the struggles of a mother and her daughter with classical autism, Mandy, the daughter, has little agency throughout most of the film. Her life is scheduled and aided entirely by her mother for the vast majority of the film, but in the end Mandy decides that she wants to go to the special needs boarding school, boosting her portrayed level of agency to moderate. *A Mile In His Shoes* (Dear, 2011) follows Micky, a farm boy with Asperger's, through his experience becoming a minor league baseball player. While he is successful with the team and gets to play due to his desire and skill, he is unintentionally found on his farm by a coach, lives with others required to look out for him, and is often subject to the will of others, his parents and coach included, minimising his agency. *Quantum Apocalypse* (Jones, 2010), a film about America's attempt to save the earth from a destructive meteor, features Terry as the supporting

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character with autism, or a disorder very similar to it. Although he ultimately saves the world by stopping the meteor, he is treated with a lack of credibility and is incapable of achieving this aim without the support and validation of the neurotypicals around him. He gains independence throughout the film, but, because of a time travel plot device, his developed agency is completely erased by reverting to the low agency status he held at the beginning of the movie. In The Black Balloon (Down, 2008), a film about the brother of a young man with classical autism, Charlie's agency is largely limited by the features of his classical autism. He is cognitively unable to do certain things himself, but retains the ability to do what he wants and what makes him happy, running down the street to use a neighbour's toilet or masturbating at the table because, for instance. In After Thomas (Shore, 2006), Kyle's actions are shown largely in reference to the actions of others; he seems to grow and say things because of the introduction of the dog or because of prompting by his parents rather than due to his own desire in the majority of cases, though does gain the ability to express himself better as the film progresses. In Breaking and Entering (Minghella, 2006), a film about a man who has to reevaluate his life after a run in with a young thief, the main character's teenage step-daughter with ASD Bea demonstrates her agency by choosing her activities and controlling her rigid schedule and food consumption. Bea is, however, completely dependent upon her parents; an injury caused by her climbing on piping is blamed on the step-father for not watching her, rather than crediting her for control over her actions. Rose Red (Baxley, 2002), a film about a group of psychics who waken a haunted house, gives Annie, a teenager diagnosed with autism and the most powerful psychic in the group, agency through her psychic abilities. Although she rarely speaks, she is able to have an impact on her world with her powers. Ultimately, however, Annie is subjected to the wills of others; her father dictates her normal activities and a professor manipulates her sister into taking Annie to the house. Although Annie has control over what she does, she only has it in the situations in which she is placed. I Am Sam (Nelson, 2001) is a film about developmentally disabled Sam's fight to keep custody of his daughter. In it, Ifty, a friend of Sam's with characteristics of autism, displays his agency by going

to planned activities with his friends and appearing in court without special assistance. His agency is limited because he does not appear in most of the film, nor do his actions impact the plot.

Only four films, or fifteen percent contain a character on the spectrum with low levels of agency. Although Cody in Bless the Child (Russell, 2000) has powers that help to save herself and her aunt from an evil cult, she has no power in any situation she is in. Although she does take actions that her captors do not want her to, she is ultimately a victim and not an agent of her own salvation. Ryan, the character with autism, in The United States of Leland (Hoge, 2003), a film about the young man who murders Ryan, has very little agency. He is unable to do much for himself and is given next to no screen time. He is murdered in order to set him 'free' of the sadness of his life as a developmentally disabled youth and described as 'barely there' by his mother, indications of Ryan's lack of both perceived and actual ability to determine any events in his life. The two characters, Alan and Bill, on the spectrum in Dear John (Hallstöm, 2010), a film about the romantic relationship between a coed and a deployed marine, are not major characters in the film, indicating little space for demonstrated agency. Because Alan, the boy on the spectrum, is seemingly unable to make his own choices about his life and Bill, John's father, is never seen making a real decision, other than to show off his current obsession, they have low levels of agency within the context of film. The character with the lowest level of agency is Tom in Burning Bright (Brooks, 2010), a film about siblings trapped in a house with a hungry Bengal tiger by their greedy stepfather. Although Tom is in constant danger, which is often visible and present, he has no control over saving his own body. While he puts himself in dangerous situations, or ends up in them due to the temporary distraction of his sister, he is not portrayed as having a choice about this, he just does it. Most significantly, he does not attempt to save himself when the snarling tiger is inches from his face and is instead dragged to safety by his sister.



Figure 33. Change over time of agency of characters with ASD in film by number released per year

The number of characters who have low and moderate levels of agency is numerically the same in the first and second portions of the period of analysis. The rising numbers of characters with high levels of agency, though, indicate that the proportion of films which contain characters with moderate and especially low levels of agency decreases as the period gets later.

Changing Narratives: Summary

The majority of motion pictures could be placed into standard narrative types, but those focusing on the growth of a character on the spectrum are becoming increasingly popular. Films rarely portray highly sensationalised characters or characters with low levels of agency. Characters with high levels of agency are the most common and are becoming increasingly so.

Common Characterisations in Large Audience Films

While not all characters appearing in large audience films are depicted as being the same, there are traits seen in the majority of these films. As such, an individual in a major motion picture is likely to be male, middle class, white, and have Asperger's and/or undiagnosed ASD. He, as is most common, or she, as is possible, is also likely to have a physical demonstration, demonstrate friendships and familial relationships, have low levels of sensationalism, and high levels of agency. If the character is an adult, he/she is also employed and has been included at least professionally.

Shot Analysis: Connecting the Neurotypical and Autistic Gaze in Film

Shot analysis has been broken down by supporting and main characters. Side characters were not included in shot analysis because they would not have enough shots from their perspective that would be valuable or describe enough of importance for the thesis. The dashes indicate no analysis was available for these areas.

Table 3 shows the breakdown of shots for supporting characters in movies, or those who play an important role but are not the main character. Ten movies were analysed with supporting characters. Shots have been broken down into total number, frequency of shots in thirty minutes, the number of shots of objects, the number of shots of people, and the number of shots of other things, including landscapes, parts of people, and animals.

Table 3

| Supporting Characters | Number of Shots | Frequenc y of Shots per 30 min | Number of shots of Objects | Number of Shots of People | Number of shots of other things |
|------------------------------------|--------------------|---|--|--|---------------------------------------|
| Joyful Noise | 13 | ~4 | 1 | 12 | 0 |
| Fly Away | 13 | ~4 | 8 | 5 | 0 |
| A Mile in His Shoes | 110 | ~37 | 18 | 80 | 12 |
| Burning Bright | 10 | ~3 | 2 | 8 | 0 |
| Quantum Apocalypse | 27 | ~9 | 2 | 25 | 0 |
| The Black Balloon | 1 | ~0.3 | 0 | 1 | 0 |
| lf You Could Say It In Words | 90 | ~24 | 4 (his artwork) | 86 | 0 |
| P.S. I Love You | 71 | ~24 | 2 (all relating to main character) | 69 (all main, Holly/love interest) | 0 |

Shot analysis of supporting characters with ASD in films

| Supporting Characters | Number of Shots | Frequenc y of Shots per 30 min | Number of shots of Objects | Number of Shots of People | Number of shots of other things |
|--------------------------|--------------------|---|----------------------------------|---------------------------------|---------------------------------------|
| After Thomas | 22 | ~7 | 0 | 19 (mostly parents) | 3 * (one 'object' is his dog) |
| Bless the Child | 57 | ~16 | - | - | - |

Table 4 shows the breakdown of shots for main characters in films, or those who play the most important role in a motion picture. Nine films were analysed with main characters. Shots have been broken down using the same requirements as the above.

Table 4

Shot analysis of main characters with ASD in films

| Main Characters | Number of Shots | Frequency of Shots per 30 minutes | Number of shots of Objects | Number of Shots of People | Number of Shots of Other |
|--|--|--|----------------------------------|--|--------------------------------|
| Salmon Fishing in the Yemen | 189 | ~50 | 16 | 173 | 0 |
| Extremely Loud & Incredibly Close | 428 (avg based on 214 in film's first half) | ~104 | 87 (in first half) | 123 (in first half of film) | 4 |
| Temple Grandin | 353+ | ~110 | 97 | 146 | 110+ |
| Mary and Max | 70 | ~23 | 47 | 19- including 3 of himself in mirror | 4 of imaginary friend |
| Adam | 107 | ~33 | 18 | 87 | 2- both of raccoons |
| Snow Cake | 101 | ~27 | 3 | 88 (mostly Alex, though occasionally neighbors or parents) | morgue, 9 |

| Main Characters | Number of Shots | Frequency of Shots per 30 minutes | Number of shots of Objects | Number of Shots of People | Number of Shots of Other |
|--------------------------------------|--------------------|--|----------------------------------|---------------------------------|--|
| Mozart and the Whale- Donald | 246 | 82 | 82 | 161 | 3 of animals (2 of his birds, one of a whale) |
| Mozart and the Whale- Isabelle | 160 | ~53 | 17 | 137 | 6 of monkey |
| Punch- Drunk Love | 38 | ~13 | - | - | - |

The two tables above demonstrate a large variation in the number of shots both within each main and supporting character groups and when they are compared. Although many of the films seem to have very few shots from the perspective of the character with ASD, especially relative to other movies in each category, this indicates the style and content of that movie. In Punch-Drunk Love (Anderson, 2002), for example, the number of shots from Berry's perspective was limited because the film used incredibly long shots, lending fewer opportunities for true perspective shots. On the other hand, Temple in *Temple Grandin* (Jackson, 2010) had a large number of shots from her point of view largely due to rapid images from her mind being displayed as she describes remembering things. While longer films typically have more shots from the perspective of the character with ASD, the numbers per half hour vary more based on style and numbers of main characters. In Temple Grandin, for instance, there is only one main character, while in Mary and Max (Elliot, 2009) there are two who play large roles, the neurotypical character being slightly more prominent, reducing the number that could be from Max's perspective.

Except *Temple Grandin* (Jackson, 2010), all the movies demonstrate a greater number of perspective shots of people than of objects and 'other' things combined. In movies with supporting characters on the spectrum, only two films have shots of 'other' things, while in main characters grouping, only one motion picture does not have shots 'other' things. In both groups, these shots are focused primarily on animals and hands.

Shot Analysis and Agency. Ultimately, the number of shots from a given character's perspective in a movie did not indicate agency. The two supporting characters with low agency, Cody in *Bless the Child* (Russell, 2000) and Tom in *Burning Bright* (Brooks, 2010), have a median number of point of view shots and the second lowest number of point of view shots in supporting characters, respectively. The film with the lowest number of shots from the perspective of the character with ASD, *The Black Balloon* (Down, 2008) with just one shot, has a character with a moderate amount of agency. All the main characters have high levels of agency, whether they have thirty-eight shots from their perspective, like *Punch-Drunk Love* (Anderson, 2002), or over four hundred, like *Extremely Loud & Incredibly Close* (Daldry, 2011). In films, there seems to be no indicator of lower levels of agency in terms of shot analysis.

Television

A total of twenty-four television programmes portraying ASD were analysed using a descriptive and interpretive category system. The shows are the following: Table 5

| Titles o | f television | shows that | <i>contain</i> | a character | with ASD |
|----------|--------------|------------|----------------|-------------|----------|
| | | | | | |

| Law and Order: Criminal Intent (2003) | Eureka (2006-2012) | Degrassi (2008-2013) | Parenthood (2010-2013) |
|---|---------------------------------------|--------------------------|----------------------------|
| A Touch of Frost (2004) | Waterloo Road (2007-2010) | Arthur (2009) | South Park (2011) |
| REGenesis (2004-2008) | The Big Bang Theory (2007-2013) | Bones (2009) | Alphas (2011-2012) |
| Boston Legal (2005-2008) | NUMB3RS (2008) | Skins (2009-2010) | Hawaii Five-0 (2012) |
| Scrubs (2005) | Lewis (2008) | Community (2009-2013) | Touch (2012-2013) |
| House (2006) | Grey's Anatomy (2009-2009) | Fringe (2010-2012) | Saving Hope (2012-2013) |



Years of Television Shows Released Portraying ASD

Figure 34. Number of shows including a character with ASD by year containing new episodes

The total number of television series indicated on the graph per year is the total number of programmes on the air that contained a character with ASD. There were no television programmes made between 2000 and 2002. In 2003, two shows were produced that contained characters with autism in one episode each, but by 2004, the number dropped to one show. There were three shows in 2005, including one show continuing from an earlier year and one with a single episode. In 2006, there were four shows on the air, two programmes from earlier years with recur ring characters on the spectrum and one show with a single episode containing a character with ASD. In 2007, there were five shows on the air, including three from previous years. By 2008, the number had nearly doubled to nine shows on the air including all five programmes shown in 2007, two new shows with recurring characters, and two with single episodes. The number was static in 2009, with two new shows portraying recurring characters with ASD and two shows with single episodes. In 2010 the total number dipped to eight shows each year, though all eight shows had recurring characters on the spectrum. The number decreased to seven in 2011, when six programmes contained recurring characters and just one show had a single episode. The number of shows with characters on the spectrum reached its peak in 2012, with a total of ten programmes; nine of these shows had recurring characters with ASD and one was a single episode. In 2013, six shows aired before October

with characters on the spectrum, all of which had recurring characters carried on from previous years. The increase of portrayals on television is more linear that those in film, but still not constant.

Demographics



Gender of Characters with ASD in Television Series

The majority, eighty-eight percent, of the characters in television programmes with ASD are males. Of the twenty-four characters on the spectrum, twenty-one are male and only three, or thirteen percent, are female. In contrast, thirty percent of characters in films are women, more than twice the total number and percentage of total representations. The women in television do not begin to appear until 2007, four years after the first male with ASD aired during this thesis's timeline, and are consistently represented four times less than their male counterparts.

Figure 35. Gender of characters with ASD in television shows



Diagnosis of Characters with ASD in Television Series

Figure 36. Diagnosis of characters with ASD in television shows

There were four characters with high functioning autism, including one undiagnosed character who appeared in an episode of NUMB3RS (Falacci, Hueton, & Ross, 2008), although autism was suggested as an explanation for his behaviour in the episode. There were five characters with classical autism, one of whom, the character from Hawaii Five-0 (Kurtzman, et al., 2012), was undiagnosed. The remaining fifteen characters have Asperger's, four of which contained undiagnosed characters including The Big Bang Theory (Lorre, Prady, & Molaro, 2007), Community (Harmon, 2009), Fringe (Abrams, 2008), and Lewis (Plater & Reed, 2007). The understanding that these characters have AS is often based upon more than their behaviour. Abed from *Community* (Harmon, 2009), for example, is accused of having Asperger's by his friends multiple times throughout the first series, although he is not officially diagnosed. Astrid in Fringe (Abrams, 2008) acknowledges that she is different and not able to show love in the expected way. Jim Parsons, the actor who plays Sheldon in *The Big Bang Theory*, has said, '[H]e couldn't display more *facets* of [Asperger's]' (Parsons in Collins, 2009). Philip, the character with ASD from Lewis, seems to have no official diagnosis, but the police speculate more than once about him having autism. As in film, Asperger's and

undiagnosed had the largest number of characters, though television featured a comparably higher rate of classical autism than film.



Figure 37. Change over time of diagnosis of characters with ASD by number of shows with new episodes each year

The number in each of the subcategories has increased since 2000 in a manner similar to the overall number of shows per year. Undiagnosed ASD, however, has been notably high since 2007, the first year it appeared in television. This is in contrast to the results in film, where the number of undiagnosed characters has decreased since 2007.



Age of Characters with ASD in Television Series

Figure 38. Age group of characters with ASD in television programmes

Fifty percent of television shows contained an adult character with autism or Asperger's. Thirty-eight percent contained a child on the spectrum. Thirteen percent represented an adolescent with ASD. Television and film have similar numbers of characters in each age group, though television portrays slightly more adults and film slightly more adolescents.



new episodes each year

Adult characters maintain more popularity than children nearly every year from 2003 to 2013. Adolescent characters, however, are not introduced until 2007, though they maintain a notable presence on television through the end of the thesis period. This trend is nearly identical to that in film, although the introduction of an adolescent character occurs a year earlier in television.



Race of Characters with ASD in Television Series

Figure 40. Race of character with ASD in television series

The majority of characters in television programmes with ASD are white, at seventeen of twenty-four shows. There are four black characters, one from each of *Scrubs* (Lawrence, Hobert, & Zisk, 2005), *Eureka* (Paglia & Miller, 2006), *Degrassi* (Stohn & Schuyler, 2001), and *Fringe* (Abrams, 2008). There are also two characters of colour. Abed from *Community* (Harmon, 2009) is half Palestinian and half Polish. Shahir Hamza, a doctor from *Saving Hope* (Brebner & Frank, 2012), is Middle Eastern. One character, Carl from *Arthur* (Bailey, 2009), was not included in this analysis because he was a nonracial rabbit.



Figure 41. Change over time of race of characters on the spectrum by number of shows with new episodes each year

The number of characters of colour grows with the number of shows on television throughout the thesis period. In 2010 and again in 2013, for instance, there were the same number of these two groups as white characters on television. The first black character appeared two years after the first white character, significantly before film in all respects. The first black character is depicted in film in 2008, eight years after the first white character in film and three years after the first black character on television. The first character who is neither black nor white first was shown on television in 2009 and there were no such characters in film as of October 2013.



Social Class of Characters with ASD in Television Series

Figure 42. Social class of character on the spectrum

The supermajority of television characters are middle class, at eighty-three percent of programmes. Three characters, or thirteen percent, were from the working class and one character, or four percent, was from the upper class, the little boy from *Hawaii Five-0* (Kurtzman, et al., 2012). While film has more characters who are working class than television, both as a figure and a percentage of the total, television depicted the first working class character in 2007, a year earlier than film. The two visual media types both have one character who is upper class, though film portrayed its upper class character two years earlier than television.

Demographics: Summary

Characters with ASD on television are likely to be male, white, and middle class with Asperger's Syndrome, like in film. Also like movies, TV shows have an equal likelihood of portraying an adult or individual under eighteen and did not create a single characterisation.



Varied Viewership

Target Audience of Television Shows Depiciting ASD

Figure 43. Target audience of series containing characters on the spectrum

The majority of programs, twenty of twenty-four, were targeted at adults between the ages of eighteen and forty-five, the main target audience for television. One, *Arthur* (Bailey, 2009), was aimed at children. Three were directed at adolescents, *Degrassi* (Stohn & Schuyler, 2001), *Skins* (Elsely, Faber, & Pattinson, 2007), and *Waterloo Road* (Holmes & Roach, 2006). The only show aimed at children aired in 2009 and the first aimed at adolescents began to represent ASD in 2007. This is in contrast with film, which only targets adults.



Audience Size of Television Shows Depicting ASD

Figure 44. Audience size of series with characters on the spectrum

No television programmes had a small audience. They all continued for multiple seasons or were part of shows with multiple seasons, indicating an at least a million viewers per episode. Small movies, however, were the largest single grouping in film.

Thirty-three percent, or nine shows, had medium audiences. *Saving Hope* (Brebner & Frank, 2012), for example, was on American television for less than one season on NBC before being dropped, although it has maintained a large audience on CTV, a major Canadian network. *Degrassi* (Stohn & Schuyler, 2001), another television programme from Canada, did not have large viewership per episode, but because of the longevity of the show's run, both with and without the character with ASD, it can be deduced that it has been viewed by a sizeable number of people. Television had a larger number with medium audiences than did film and had its first medium-sized audience two years earlier.

Sixty-seven percent of television programmes, or fifteen shows, had large audiences. *A Touch of Frost* (Wingfields, Russell, & Harrison, 2003) had a fifteen series run and its final episode had around eight million viewers, according to the Guardian (Plunkett, 2010), indicating its large audience base. Long running shows like *The Big Bang Theory* (Lorre, Prady, & Molaro, 2007), *South Park* (Parker & Stone, 2011), *Scrubs* (Lawrence, Hobert, & Zisk, 2005), *House* (Shore, Hoselton, & Sigel, 2006), *Lewis* (Plater & Reed, 2007), and *Bones* (Hanson et al., 2009) are also included in this subcategory due to both the length of time on television and highest viewership ratings. Far more television programmes than films had large audiences. The number of high viewership television shows steadily increases throughout the period, while in film, the number stays relatively consistently low.



Genre of Television Shows Depiciting ASD

Figure 45. Genre of television shows containing a character on the spectrum

The twenty-four television programmes were broken down into seven genre subcategories. Four shows, like *Community* (Harmon, 2009), were comedies. Twelve programmes were dramas, including *Lewis* (Plater & Reed, 2007), *Touch* (Kring et al., 2012), and *Boston Legal* (Kelley, D'Elia, & Kaufer, 2004). Four series were dramadies, like *Parenthood* (Katims, 2010) and *Skins* (Elsely, Faber, & Pattinson, 2007). The popularity of comedies, dramas, and dramadies is similar in television and film. Among those series in the above genres two large subgroups appeared, the crime show and the medical show. Six programmes between the three genres were detective based series, like *Law* & *Order: Criminal Intent* (Wolf, Conway, & Prinzi, 2003) and *NUMB3RS* (Falacci, Hueton, & Ross, 2008). Five of these shows were dramas, though *Bones* (Hanson et al., 2009) is a dramady. There

are four medical series, including *House* (Shore, Hoselton, & Sigel, 2006) and *Grey's Anatomy* (Rhimes et al., 2008). The majority of medical shows were also dramas, though *Scrubs* (Lawrence, Hobert, & Zisk, 2005) is a comedy. The trend of detective and medical programming is unique to television; film did not contain anything similar. No television shows fell into the romance or horror/thriller/action genres, unlike in film where both were relatively common genres. There were three programmes in the science fiction subcategory, including *Alphas* (Karnow & Penn, 2011) and *Fringe* (Abrams, 2008); in contrast, there were no movies in this genre. The final category, children and family, contained just one series, *Arthur* (Bailey, 2009), the only text in children and family in either media type.



Figure 46. Change over time of genre of television shows by number of shows with new episodes each year

Although each genre increases over time, before 2005, ASD did not appear in any programming that were not dramas. The year 2007 was the first in which more than one programme in a single year was not a drama. The first comedy appeared in 2005, though not in a long-running show until 2007. Comedies aired on long before the first film, which premiered in 2009. Dramas remained popular throughout the period, like in film. The first dramady was aired in 2008 and remained a common genre, while the only children and family was shown in 2009. Science fiction remained a consistent genre from 2006.

Varied Viewership: Summary

The majority of shows were targeted at adult audiences, though several were aimed at adolescents and children. Most television shows had large audiences, in contrast with film that predominantly had small viewership. While drama was also the leading genre in television, the prominence of other categories increased throughout the period, similarly to the increase shown in motion pictures.

Shift Toward Inclusion



Inclusion of Characters with ASD in Television Series

Figure 47. Inclusion status of characters on the spectrum in television series

Sixty-six percent, the majority of television shows, have characters who were 'included' in school and/or the workplace, nearly equivalent to the number of those included in film. Thirty-three percent of characters, individuals in eight programmes, were included in school and in the workplace. An additional seven characters, or thirty percent, were included in only school, all characters who were too young to be included elsewhere. One show, *NUMB3RS* (Falacci, Hueton, &

Ross, 2008), included the only character who was only included in the workplace because of the nature of his work and disability. *Touch* (Kring et al., 2012) contained the only character who was not included at all, a far smaller number than in film. Twenty-nine percent of the television programs, though, contain characters with unknown inclusionary statuses, a larger group than in film. This subcategory contains mostly characters who appeared in only single episodes of shows (six of the seven) and only one, *Eureka* (Paglia & Miller,, 2006), had a recurring character, Kevin. While it is made clear that Kevin went to the same school as neurotypical children, it is unknown whether he was placed in the same classes, special education classes, or advanced classes.



Figure 48. Change over time of inclusion status of characters in television series by number of shows with new episodes each year

Like the total number of television programmes, shows portraying inclusion climbed through the period. The number of characters with an unknown inclusionary status, on the other hand, peaked in 2009 and then dropped for the rest of the period. Although the only not included character is shown in 2012 and 2013, the sample size is too low for this to indicate an emerging trend, especially because the programme has since been cancelled.



Employment of Characters with ASD in Television Series

Figure 49. Employment status of adult characters on the spectrum in television series

In total, of the twelve characters old enough to be employed, three characters, or twenty-five percent, were unemployed. Two of these characters were full time students and the other was too impaired to maintain a position. The other nine programmes contained characters who were employed, all but one in professional capacities. These included doctors, scientists, a lawyer, and other professional occupations. The only nonprofessional was a lost package tracker in *NUMB3RS* (Falacci, Hueton, & Ross, 2008), and did the work of several people. More characters were depicted as being unemployed on television than in film. Both though, had appearances of unemployed characters early and late in their timelines.

Shift Toward Inclusion: Summary

The majority of characters on the spectrum were included in some capacity in television, with a relatively constant shift toward more inclusion. The adult characters were typically employed, though to a lesser degree on television than in movies.

Creating Stereotypes



Physical Demonstrations of ASD of Characters with ASD in TV Series

Figure 50. Physical demonstrations of ASD by characters on the spectrum in television series

Forty-six percent of shows contain no physical outbursts related to ASD, a significantly higher proportion, and actual number, than in film, which had thirty-one percent without a demonstration. While many of these characters are undiagnosed and several appear in only one episode of a programme, there are characters who have a diagnosis and are recurring without a physical demonstration. The characters with ASD in ReGenesis (Jennings, 2004), Alphas (Karnow & Penn, 2011), and Saving Hope (Brebner & Frank, 2012), appear in most episodes and are important supporting characters who behave on par with their neurotypical counterparts without visible outbursts. Fifty-four percent of programmes, though, had a character who physically demonstrated their ASD during the course of their appearances on the show, be it in one episode or the entire series. In House (Shore, Hoselton, & Sigel, 2006), a programme where a character with ASD appears only once, for example, the boy screams and thrashes when his video game is taken from him. Of the thirteen shows that contain physical demonstrations, six, or forty-six percent, of these are aggressive outbursts, violent demonstrations or those which are verbally or physically threatening to others. This proportion of aggressive demonstrations is a

similar number to film. This includes Max's throwing and flailing in *Parenthood* (Katims, 2010), Karla attacking a teacher in *Waterloo Road* (Holmes & Roach, 2006), and J.J. violently knocking over and kicking trash bins in *Skins* (Elsely, Faber, & Pattinson, 2007).



Figure 51. Change over time of physical demonstrations of ASD by characters on the spectrum by number of shows with new episodes each year

While the number of both physical demonstrations and aggressive outbursts increase throughout the period, so too do shows that do not contain visual demonstrations. Film also shows the trend of numbers of texts without physical demonstrations growing throughout the period.



Mental Health of Characters with ASD in Television Series

Figure 52. Comorbid mental health problems of characters on the spectrum in television series

Nineteen characters in television programmes with ASD do not have mental health issues outside of their autism or Asperger's, a similar number to their counterparts in film. There are only five characters with metal health comorbidities, who include recurring characters from long-running series and those who appear in a single episode. One character, in NUMB3RS (Falacci, Hueton, & Ross, 2008), suffers from OCD as manifested by his obsessive placement of the objects in his flat and hoarding tendencies. Three characters have depressive tendencies. Jerry in Boston Legal (Kelley, D'Elia, & Kaufer, 2004) struggles with depression throughout his appearances on the programme, while Bob in *ReGenesis* (Jennings, 2004) becomes notably better. In South Park (Parker & Stone, 2011), Stan is misdiagnosed with Asperger's though he has symptoms of depression. Like in film, depression is the most commonly represented mental health problem associated with ASD. No characters in television have symptoms of anxiety. A single character, Wally in Law and Order: Criminal Intent (Wolf, Conway, & Prinzi, 2003), has a mental health problem categorised as 'other,' sociopathic tendencies demonstrated by orchestrating the murders of a number of people for fiscal gain. While the kinds of other problems are quite different in each text, film also has a very small number of them, two rather than just one.

The number of characters who have mental health problems outside of their ASD has gone down in television during the latter half of the period the thesis covers. From 2004 to 2008, at least one character was shown with a mental health problem. Since 2008, though, only one character has had any variety of mental health issues outside of autism or Asperger's.



Special Interests of Characters with ASD in Television Series

Of the twenty-four television programmes, only one did not portray a character with a special interest. The single show was *South Park* (Parker & Stone, 2011), a series that satirises modern society, and the character was misdiagnosed for comedic effect. While the number of films without a special interest was much larger, the overwhelming number also depicted this trait. Twenty-three shows, or ninety-six percent, contained characters with a special interest or skill ranging from video games to specific parts of the human anatomy to types of insurance. While several characters who were depicted for multiple seasons had their special interests become less pronounced and/or change, there is, nonetheless, an obvious obsession at some point in the character's portrayal. Ten shows, or forty-three percent of those with special interests and/or skills, have them in science and/or maths. Just two shows, *Lewis* (Plater & Reed, 2007) and *Waterloo Road* (Holmes & Roach, 2006),

Figure 53. Special interests of characters on the spectrum in television series

contain characters with artistic interest and acumen; they represent characters as able to faithfully recreate what they see. Special interests remain consistently popular in television throughout the period, much like in film. Although the rates of stereotypical special interests, science/maths and art, drop, the number portrayed on television remains relatively high.



Speech of Characters with ASD in Television Series

Figure 54. Speech patterns of characters with ASD in television series

Television shows portrayed notable trends in speech patterns, containing eighty-three percent with stereotyped speech patters and only seventeen percent without. Twenty-five percent, or six programmes, portrayed characters who spoke in a slow, stilted manner, often characterised by stumbling over words or stuttering. Thirty-three percent, the largest single group, or eight series, had speech distinguished by rapidity and unusual tone and inflection, about twice the texts in film. An additional twenty-five percent of shows, or six, portrayed characters with little to no speech at all. This subcategory included programmes like *Bones* (Hanson et al., 2009) and *Eureka* (Paglia & Miller,, 2006). Television contained more texts with stereotyped speech patterns than film, but fewer who had little or no speech.

Throughout the period, no or little speech remained relatively constant in television, although film saw a distinct drop in the later years. There was a rise in

portrayals of slow and fast speech, largely in keeping with the rise in the number of shows in a year, although rapid speech remained consistently more depicted than the other groups. The number of characters without a marked speech pattern, though, is also much higher in the later period that in the early years, much like in film.



Diagnostic Characteristics of Characters with ASD in Television Series

Figure 55. Diagnostic characteristics of characters on the spectrum in television series

Television often used diagnostic criteria to characterise individuals on the autistic spectrum in fifty-four percent of series. Four television programmes contained representations of characters who were very literal, including *A Touch of Frost* (Wingfields, Russell, & Harrison, 2003), *Waterloo Road* (Holmes & Roach, 2006), *Community* (Harmon, 2009), and *Parenthood* (Katims, 2010). Characters in four shows, or seventeen percent, had rigidly fixed schedules. These were *A Touch of Frost* (Wingfields, Russell, & Harrison, 2003), *The Big Bang Theory* (Lorre, Prady, & Molaro, 2007), *Alphas* (Karnow & Penn, 2011), and *Parenthood* (Katims, 2010). Five portrayed characters with sensory sensitivity, like *ReGenesis* (Jennings, 2004). A marked lack of eye contact was noted in four shows, as was, physical stiffness was demonstrated. All the characteristics remained common throughout the period. While lack of eye contact slightly increases after 2008 and physical stiffness decreases, the other three subcategories increase with the number of shows on

television. The marked changes in TV's portrayal of eye contact and physical stiffness are opposite to that of film, where lack of eye contact portrayals decreases and physical stiffness increases. The general consistency of depiction, though, is similar to that in film.



Common Portrayals of Characters with ASD in Television Series

Figure 56. Common portrayals of characters with ASD in television shows

Seventeen television series portrayed characteristics common to multiple representations of ASD. Three programmes demonstrated marked improvement in the social skills of the individual on the spectrum with appropriate tools. In *Degrassi* (Stohn & Schuyler, 2001), *Boston Legal* (Kelley, D'Elia, & Kaufer, 2004), and *ReGenesis* (Jennings, 2004), all the characters started working with behaviour therapists and improved their social skills. The largest group of common portrayals in television, like in film, was the character with autism's constant need for care, with seven total programmes. Series in this category included *Touch* (Kring et al., 2012), *Bones* (Hanson et al., 2009), and *Waterloo Road* (Holmes & Roach, 2006). Two shows contained characters on the spectrum who were very good with animals, *ReGenesis* (Jennings, 2004) and *Parenthood* (Katims, 2010). The idea of photographic memories is depicted in three programmes and the inability to lie was shown in two. A marked dislike of change was noted in four television series, *Law and Order: Criminal Intent*, (Wolf, Conway, & Prinzi, 2003) *Arthur* (Bailey, 2009), *The Big Bang Theory* (Lorre, Prady, & Molaro, 2007), and *Parenthood* (Katims, 2010). Film quoting only appeared in one show, *Community* (Harmon, 2009). The portrayal of a breakthrough connection occurred in two programmes. For example, at the end of *House* (Shore, Hoselton, & Sigel, 2006), Adam, a patient, hands House his handheld video game console, his most prized possession. Although Adam hardly interacts with his parents or with House before this, he makes an unexpected, emotionally meaningful sacrifice by giving the object of his special interest to the doctor that saved his life. Television had a larger number of texts in improvement with proper tools, photographic memory, inability to lie, and marked dislike of change than film, though film had larger numbers in portrayals of the need for care, good with animals and breakthrough connection. Film quoting was equally rare in both types.

Like in film, because the sample sizes for each year are relatively small, each subcategory is portrayed relatively consistently over time, like due to the how long many of the series were on the air. The improvement and need for care categories, though, peak and then decline near the end of the period.

Creating Stereotypes: Summary

Characters with ASD were likely to have been portrayed as having physical demonstrations of the condition, special interests, and marked speech differences, though they were unlikely to have comorbid mental health problems, in television. In comparison with film, significantly fewer characters demonstrate other common portrayals on television. For example, about thirteen percent fewer characters in TV series demonstrated the need for care than in film, although it is the largest diagnostic or common characteristic in both film and television.

Complex Relationships: Intra- and Extrafamilial



Parents and Family of Characters with ASD in Television Series

Figure 57. Parent and family conditions affecting characters with ASD in television shows

In total, nine television series contain characters with family troubles related to ASD or live in families that are nontraditional. Eight shows portraying characters on the spectrum in their family units do not, the same number as in film. One character on television is portrayed as the cause of familial difficulties. Lawrence Burrell's autism and support needs in A Touch of Frost (Wingfields, Russell, & Harrison, 2003) are described by his parents as the reason his older brother left the area. There are three characters that can be seen as having a detrimental effect on the work and/or social lives of their parents. In Touch (Kring et al., 2012), Jake's condition causes his father Martin to constantly need to leave work unexpectedly and, eventually, entirely. Adam and Christina Braverman in Parenthood (Katims, 2010) complain about a lack of life outside of family largely because of their son with AS's needs. In House (Shore, Hoselton, & Sigel, 2006), both parents of the boy with ASD have guit their jobs to dedicate their lives full time to treating their son's condition. Six of the twenty-four programmes contain characters on the spectrum who come from 'incomplete' families, e.g. divorced parents, single parents, or nonparental guardianships. The characters on the spectrum in Community (Harmon,

2009), *Eureka* (Paglia & Miller, 2006), *Scrubs* (Lawrence, Hobert, & Zisk, 2005), and *South Park* (Parker & Stone, 2011) are all the products of divorces. In *NUMB3RS* (Falacci, Hueton, & Ross, 2008) and *Touch* (Kring et al., 2012), at least one parent has passed away.



Families with structures that deviate from the typical become more prominent throughout the period, while those that did not were nearly consistently the majority. While characters on television were only portrayed as causing marital or familial problems once early on, the depiction of characters causing problems at work or socially for their parents became more common throughout the period. Characters from nontraditional families was relatively consistent after the first appeared in 2005, as were characters with no apparent problems or differences.



Familial Status of Characters with ASD in Television Series

Only two programs contained a character with ASD who was married and had children, *ReGenesis* (Jennings, 2004) and *Law & Order: Criminal Intent* (Wolf, Conway, & Prinzi, 2003). Bob in *ReGenesis* gets married, has a clone-son, and becomes a widower and single parent in the future, portrayed in the last episodes of the final season. Bob is shown with his son in few scenes, just when the boy is an infant and very young child. In *Law & Order*, Wally is divorced and has two children, none of whom are shown in the episode in which he appears. Fifty percent of the analysed television programmes, or twelve total series, contained characters who were too young to be either married or have children. Like in film, the number of texts in television is very small. The first television show, however, to show a character on the spectrum with his or her own family was three years earlier than in film.

Figure 59. Familial Status of characters with ASD in television series



Relationships of Characters with ASD in Television Series

Figure 60. Relationships had by characters with ASD in television shows

Seventeen of twenty-four, or seventy-one percent of, television series feature characters on the spectrum and their relationships with their family members. Seven of the seventeen demonstrate only familial relationships, *Touch* (Kring et al., 2012), *Parenthood* (Katims, 2010), *Eureka* (Paglia & Miller, 2006), *Hawaii Five-0* (Kurtzman, et al., 2012), *Bones* (Hanson et al., 2009), *House* (Shore, Hoselton, & Sigel, 2006), *Scrubs* (Lawrence, Hobert, & Zisk, 2005), and *A Touch of Frost* (Wingfields, Russell, & Harrison, 2003).

Romantic relationships or romantic attempts were significantly less common, with a total of only eight shows, or three percent, depicting them. No series exclusively demonstrated a character with ASD in a romantic relationship in the programme or only family and romance.

Friendships are featured in fourteen of the programmes, or fifty-eight percent. *NUMB3RS* (Falacci, Hueton, & Ross, 2008) is the only show to exclusively depict friendship; the character only has a close friendship with his boss. The following shows contain friendships and romantic relationships: *Saving Hope* (Brebner & Frank, 2012), *Degrassi* (Stohn & Schuyler, 2001), *Boston Legal* (Kelley, D'Elia, & Kaufer, 2004), and *Lewis* (Plater & Reed, 2007). Five series, *Alphas* (Karnow & Penn, 2011), *Fringe* (Abrams, 2008), *Waterloo Road* (Holmes & Roach, 2006), *South Park* (Parker & Stone, 2011), and *Arthur* (Bailey, 2009), also featured both familial relationships and friendships.

Two shows, or eight percent, featured exclusively a relationship classified as 'other.' Wally in *Law and Order: Criminal Intent* (Wolf, Conway, & Prinzi, 2003) and Dr. Virginia Dixon in *Grey's Anatomy* (Rhimes et al., 2008) showed only superficial relationships with their colleagues. Wally, though, is perhaps best classified based on his lack of relationships, as the absence of his family is a key element of the episode.

Four programmes include all three kinds of standard relationships shown by characters with ASD. *Community* (Harmon, 2009), *Skins* (Elsely, Faber, & Pattinson, 2007), *The Big Bang Theory* (Lorre, Prady, & Molaro, 2007), and *ReGenesis* (Jennings, 2004) show their characters interacting with their families, friends, and significant (or potentially significant) others. While Abed from *Community* never sustains a romantic relationship like the other three characters, he does date and nearly strike up relationships on multiple occasions. All four shows demonstrate strong family ties and successful friendships.





As noted above, eight programmes demonstrated romance and a character on the autistic spectrum. Four romantic relationships represented in television, though, failed. Two of these attempts, those in *Community* (Harmon, 2009) and *Boston Legal* (Kelley, D'Elia, & Kaufer, 2004), were unsuccessful from the outset; a relationship was never started although appropriate romantic overtures were made in both shows. In *Saving Hope* (Brebner & Frank, 2012), a long-term relationship ended. *Law and Order: Criminal Intent*, never shows a relationship, but the failure of the relationship sparks the action of this episode. Although not considered failures, two series, *ReGenesis* (Jennings, 2004) and *Lewis* (Plater & Reed, 2007), include the death of the neurotypical partner at some point in the show's narrative, indicating relationship success despite an untimely end. Of the eight shown on television, only three would be considered to be traditionally 'successful' in that they continued through the show's or research period's end. Similarly, only a small number of the romantic relationships portrayed in films would be considered successful, due exclusively to the breakup of relationships rather than the addition of loss.

Throughout the period on television, like in film, familial relationships and friendships largely reflected the number of shows on the air, while 'other' kinds of relationships were portrayed only once. Romantic relationships, though, show growing prevalence as the years progress, though half of them are not successful.



Sexual Orientation of Characters with ASD in Television Series

Figure 62. Sexual orientation of characters on the spectrum in television series
Seven television programmes, or twenty-nine percent, contain characters who are heterosexual. This includes *ReGenesis* (Jennings, 2004), *Degrassi* (Stohn & Schuyler, 2001), and *Community* (Harmon, 2009). *Saving Hope* (Brebner & Frank, 2012) has the single homosexual character on the spectrum. No orientation was apparen for seven characters with ASD, such as Gary in *Alphas* (Karnow & Penn, 2011), Karla in *Waterloo Road* (Holmes & Roach, 2006), and Dr. Virginia Dixon in *Grey's Anatomy* (Rhimes et al., 2008). The largest single group was characters who were too young to demonstrate sexual preference, at thirty-eight percent of shows.

As time goes on, more shows define the sexuality of their characters on the spectrum, though no notable orientation is also common in the later part of the thesis. The first, and only, appearance of a homosexual character with ASD does not occur until 2012 on television, and does not happen at all in film during this thesis's period.

Complex Relationships: Summary

Most characters on television, like in movies, come from traditional families with no displayed internal strife. Characters on the spectrum, though, are unlikely to be shown creating their own families, a similar trend to that of film. Also like motion pictures, characters with ASD are likely to have familial relationships or friendships and relatively unlikely to have romantic interests. As suggested by the lack of families, most of these relationships fail, although they are increasingly becoming stable. Of those who demonstrate a sexual orientation, the majority are heterosexual, though there is a single homosexual male.

Changing Narratives



Narrative Type of Television Series Portraying Characters with ASD

Figure 63. Narrative type of television series containing a character on the spectrum

Forty-six percent of television programmes that contain a character with ASD could be placed into narrative type subcategories, a significantly smaller proportion than in film. Two shows, *Touch* (Kring et al., 2012) and *Skins* (Elsely, Faber, & Pattinson, 2007), were placed into multiple subcategories due to multiple narrative types being key to the show's plot and representation of ASD.

The largest subcategory of television shows with a narrative type was the family narrative. Twenty-one percent, or five series, fall into this bracket. In *Touch* (Kring et al., 2012), for instance, Jake's status as a son defines his importance to the programme, even though Jake has special abilities, his father's destiny is most often discussed, placing it in the personal growth subcategory as well. In *Scrubs* (Lawrence, Hobert, & Zisk, 2005), although the character appears only once, he is part of the show only because he is the son of the friend of a main character. Although in both film and television this is the largest of the defined narrative types, television has fewer texts, both numerically and proportionally, than film.

The personal growth narrative subcategory, relating to neurotypical characters, contains seventeen percent, or four, of the total shows analysed, a smaller

number of texts than in film. In *Skins* (Elsely, Faber, & Pattinson, 2007), for example, the show focuses on the problems and growth of the friends of the character with ASD, JJ, the majority of the time. In *Eureka* (Paglia & Miller, 2006), most of the main characters grow because of their interaction with Kevin, the character on the spectrum, and his autism, while he stays static. When his life is in danger, the other characters band together and risk their lives to save his; they become better, stronger characters and Kevin remains the same.

The Bildungsroman subcategory, coming of age growth narratives for characters on the spectrum, contains thirteen percent of, or three, analysed shows, a lower number than in film. In *Skins* (Elsely, Faber, & Pattinson, 2007), for instance, although JJ's growth is often not focused upon, he goes from an awkward and unsure-of-himself teen to, by the end of his run on the series, nearly a man by standing up for himself, maintaining a romantic relationship, and acting in a fatherly role to his partner's infant child. In *Community* (Harmon, 2009), Abed, who has undiagnosed Asperger's, starts the show as a quiet, strange kid with no friends to an odd young man with a social group, the ability to stand up for what he wants, and life prospects outside of his community college.

Only four percent, or one show, was classified as a recovery narrative, a similar number to film. *South Park* (Parker & Stone, 2011) shows Stan being diagnosed with Asperger's after his parents' divorce and 'overcoming' the condition by the end of the episode. He is obviously misdiagnosed, the show makes fun of the his diagnosis and the people who insist he has Asperger's, but is nonetheless thought to recover other characters.

Fifty-four percent of television shows did not fall into any narrative subcategory prescribed by this thesis or exclusively relatable to their representation of ASD. Television had more than twice the total number of uncategorised texts in film. These programmes represented their characters on the spectrum without a standard narrative.



Figure 64. Change over time in narrative type of television series containing a character on the spectrum by number of shows with new episodes each year

While all subcategories clearly increase throughout the fourteen year period, the uncategorised group reflects the graph of total shows per year. Family narratives and personal growth narratives contain a significant proportion of the programming from 2005 and 2006 onward, respectively, and proportionally remain relatively static. This pattern is similar to that of film. Unlike film, though, the only recovery narrative on television aired in the final three years the thesis analysed, rather than in the earlier period. The bildungsroman category appears in 2008 and demonstrates the most growth in the shortest time, as in film, and becomes one of the most represented narrative types by 2009.



Sensationalism of Television Series Portraying Characters with ASD

Figure 65. Sensationalism of television series portraying a character with ASD

The majority, fifty-eight percent, of the characters in television programmes had low levels of sensationalism, a lower proportion than in film. This included Waterloo Road (Holmes & Roach, 2006) and Boston Legal (Kelley, D'Elia, & Kaufer, 2004), with characters that did not have incredible skills and were not more exaggerated than their neurotypical counterparts. Twenty-one percent of the characters on the spectrum, or five, were classified as being moderately sensational. Film, in contrast, did not have any characters with moderate amounts of sensationalism. Characters such as Bob from ReGenesis (Jennings, 2004) and Sheldon from The Big Bang Theory (Lorre, Prady, & Molaro, 2007), for example, who were both of genius IQs but are not savants or otherwise exceptional were considered moderately sensational. Twenty-one percent of characters were classified as being highly sensational. Jake, from *Touch* (Kring et al., 2012), was not only obsessed with numbers, but could also predict the future and repair problems in society's fabric with them. Kevin in *Eureka* (Paglia & Miller, 2006) was a genius and, due to a time loop he may have helped to create, eventually lost his autism entirely. Over time, the number of characters with low sensationalism increases, as in film, and both proportionally decrease. Unlike film, the numbers of moderately

and highly sensational characters also increase. While they make up significant proportions, they became less prominent than those with low sensationalism in 2008.



Agency of Characters with ASD in Television Series

Fifteen characters, or sixty-two percent, had high levels of agency, a larger figure than films contained. Shahir Hamza in *Saving Hope* (Brebner & Frank, 2012), a medical drama, is an excellent brain surgeon and shows his authority through his professional decisions, like performing a risky surgery to save a friend's life. In *South Park* (Parker & Stone, 2011), a comedy that focuses on a group of friends in primary school, Stan demonstrates a high level of agency by breaking free of a terrorist organisation claiming to be a local Asperger's centre. The character with ASD, Max Braverman, in *Parenthood* (Katims, 2010), a show about the trials and tribulations of being a parent in the Braverman family, runs for student body president and shows a typical ability to control his life as a young adolescent. In *Community* (Harmon, 2009), a comedy about a Spanish study group at a community college, Abed, the character with undiagnosed AS, constantly demonstrates his agency through his participation in the group, from initially inviting most of the other members to running a chicken nugget cartel. Sheldon in *The Big Bang Theory* (Lorre, Prady, & Molaro, 2007), a comedy about the social lives of postdoctoral

Figure 66. Agency of characters with ASD in television series

physics researchers, demonstrates his agency by living and working independently and constantly pushing what is best for his life and research. In Degrassi (Stohn & Schuyler, 2001), Connor asserts his agency by leading the life of a typical teen in the honours programme, despite the lack of enthusiasm of others due to the social problems caused by his AS. In Alphas (Karnow & Penn, 2011), a science fiction programme which focuses on an elite group of humans with near superpowers called alphas, Gary, the character with ASD who can see waves and the information they carry, uses his superpower to gain agency. While his 'alpha' ability could be exploited, he controls and uses it to maintain employment and gain independence. In Grey's Anatomy (Rhimes et al., 2008), a medical drama, Dr. Virginia Dixon tells people what she requires because of her ASD, like rule following and help breaking emotional news, and expertly performs complicated heart surgeries, demonstrating the power she posses in her life. In Fringe (Abrams, 2008), a science fiction show in which an alternate universe exists containing versions of each established character, alternate universe Astrid demonstrates her agency with her professional competence and rule breaking for her own emotional benefit. JJ from Skins (Elsely, Faber, & Pattinson, 2007), a show about teens at college and their interpersonal drama, demonstrates his ability to control his life by showing control over his relationships. He is the voice of reason and rationale in his friendships and, although his parents do not approve, he enters a long-term relationship with a girl who has a child. Karla, from the school-based program Waterloo Road (Holmes & Roach, 2006), demonstrates her agency by standing up for herself when teachers are disparaging of her abilities and by learning to control her behaviour for a more successful educational experience. Jerry, the character with ASD in the legal drama Boston Legal (Kelley, D'Elia, & Kaufer, 2004), conquered fears and overcomes ASD-related ticks to become better at his job and in his personal life, demonstrating agency. Bob in ReGenesis (Jennings, 2004), a biochemist who investigates bioterrorism in the lab around which the show is based, displays his agency through his prominent lab position and position within the scientific community, his ability to live

independently, multiple advanced degrees, and his constant ability to adapt his life

and make his own decisions. The character with ASD in an episode of the detective show *A Touch of Frost* (Wingfields, Russell, & Harrison, 2003), Laurence, demonstrates his agency through is jail break and decision to give police the information on which he wants them to focus, rather than the information they are looking for. Wally, in *Law & Order: Criminal Intent* (Wolf, Conway, & Prinzi, 2003), sets up a string of murders in order to gain money from insurance fraud to get his wife back, the planning and execution of which indicate his agency.

Six characters, or twenty-five percent of those analysed, were considered to have moderate levels of agency, a slightly lower number than in film. This indicated that they had some power over their lives, but their actions were often interpreted or dictated by others. Jake in Touch (Kring et al., 2012), a show about a boy who predicts problems with the world through numbers and his father who interprets them, does not take action with the numbers he sees but instead passes the responsibility to his father, demonstrating his ability to control aspects of his life, but a marked lack of power to be the problem solving agent. In Hawaii Five-0 (Kurtzman, et al., 2012), a detective show focusing on homicide, the boy with autism is victimised by the villains in the episode and has to be saved by a detective, but is also the key to cracking the case. He does not willing give this information to the police, though, rather they accidentally ask the code question and he automatically gives a response that the detectives must interpret, indicating moderate agency. Carl in Arthur (Bailey, 2009), a children's show about Arthur the aardvark and his friends in preschool, shows his ability to make friends and choose his activity. When he has an emotionally upsetting moment, though, his reaction is interpreted for him by his parent and neurotypical new friend. Emerson in NUMB3RS (Falacci, Hueton, & Ross, 2008) holds a long-term job and sustains an independent lifestyle, while keeping his extra possessions in long term package rerouting. During the episode his agency is restricted by the characters around him dictating his actions. In Lewis (Plater & Reed, 2007), a detective drama focusing on homicide, Philip lives on his own, but more importantly fully participates in a police investigation providing evidence needed to find a murder. His agency is limited by his lack of important

choices; he does not contact the police about the necessary information, he just maintains being helpful. In *House* (Shore, Hoselton, & Sigel, 2006), a medical drama following doctor specialising in diagnostic medicine, the boy with autism, Adam, demonstrates agency by refusing medical treatment he does not understand. Although he is not able to communicate verbally, he makes choices about his medical care by physically protesting.

Three series, or about thirteen percent, have low levels of agency, a similar number to that in films. In *Bones* (Hanson et al., 2009), a crime dramady about a forensic anthropologist, Dougie, the boy with autism, is only shown or mentioned in the context of people watching play his video game and his father's crime. Kevin from *Eureka* (Paglia & Miller, 2006), a show about a city filled with government employed inventors and geniuses, is exclusively portrayed as a victim. Although he may have had some control over a time loop that caused him to lose his ASD, he is shown as a character who is the victim of things that go wrong in Eureka rather than a character who has an impact. Nathan, a toddler side character from *Scrubs* (Lawrence, Hobert, & Zisk, 2005), a medical comedy focusing on the interactions between doctors, is placed into play scenarios and has little ability to do for himself.



Figure 67. Change over time of agency of characters with ASD in television shows by number of shows with new episodes each year

As the years of the period of analysis progressed, the number of characters with low levels of agency plateaued, peaked in 2009, and decreased in television.

While low levels of agency remained similar in films numerically, both numbers and proportions declined in TV. Moderate agency didn't appear on television until 2006 and it remained relatively constant throughout the remaining eight years, although it was not seen in film. While high levels of agency were always the most commonly portrayed on television, both the total numbers and the proportions continued to increase from 2000, with only two drops in eleven years, linked to drops in the total number of series. While high levels of agency increased less notably in film, this subcategory was the most prominent in movies as well.

Changing Narratives: Summary

The majority of television series were not categorisable as standard narratives, in contrast with film. Characters were most likely to have low levels of sensationalism, but by a less significant margin than in movies. The majority of characters with ASD have high levels of agency, a prevalence that continues to increase over time. He, as is generally the case, is likely to have physically demonstrated the condition, a special interest, and no mental health problems. They are likely to be shown in friendship and familial relationships.

Common Characterisations in Large Audience Programming

While not all characters appearing in large audience television series are depicted as being the same, there are traits seen in the majority of these shows. As such, an individual in a major programme is likely to be white, male, middle class, adults with Asperger's in drama series. The most common character will have a physical demonstration of ASD, special interests, and no mental health problems. He or she will be shown in familial relationships and/or friendships, have low levels of sensationalism, and high levels of agency.

Shot Analysis: Connecting the Neurotypical and Autistic Gaze on Television

Shot analysis has been broken down by supporting and main characters. Side characters were not included in shot analysis because they would not have enough

shots from their perspectives that would be valuable or describe enough of importance for the thesis.

Table 6 shows the breakdown of shots for supporting characters in television shows, or those who play an important role but are not the main character. Seven television shows with supporting characters were analysed.

| Supporting Characters | Number of Shots | Frequency of Shots per 30 min | Number of shots of Objects | Number of Shots of People | Number of shots of other things |
|--------------------------|--------------------|-------------------------------------|---|---------------------------------|---|
| Touch | 8 | ~6 per 30 min | 6 | 1 | 1-tablet and other boy's hand |
| Alphas | 89 | ~59 per half an hour | 20- comm tablet | 66 | 3- 2 of her hands, 1 of his 'waves' |
| Parenthood | 15 | ~11 per half hour | 0 | 15 | 0 |
| Degrassi | 20 | >20 (~30)per | 1 | 19 | 0 |
| Waterloo Road | 28 | ~14 per 30 min | 13 | 15 | 0 |
| Boston Legal | 31 | ~22 per 30 min | 1- of courtroom, so people in shot, but looking at the whole | 30 | 0 |
| ReGenesis | 4 | ~2 per half hour | 0 | 4 | 0 |

Table 6Shot analysis of supporting characters with ASD in television series

Table 7 shows the breakdown of shots for the three main characters in television shows, or those who play the most important role in a programme.

Table 7Shot analysis of main characters with ASD in television series

| Main Characters | Number of Shots | Frequency of Shots per 30 min | Number of shots of Objects | Number of Shots of People | Number of shots of other things |
|---------------------------|--------------------|-------------------------------------|----------------------------------|---------------------------------|--|
| Community | 28 | >28 (~42) per thirty minutes | 0 | 28 | Troy's monkey in some shots of people |
| Skins | 115 | ~77 per thirty min | 3 | 109 | 3- hands in action |
| The Big Bang Theory | 10 | >10 (~15) per half hour | 0 | 10 | 0 |

The two tables above demonstrate a large variation in the number of shots both within each character type and when those types are compared. With the exception of *Touch* (Kring et al., 2012), the shows demonstrate a greater number of perspective shots of people than of objects and other things combined. All ten analysed episodes contained point of view shots of people and three had only perspective shots of people. Six of the episodes analysed included shots of objects and four contained point of view shots of 'other' things.

Although many of the programmes seem to have very few shots from the perspective of the character with ASD, this represents the style of that series more than the prominence or agency of the character on the spectrum. In *ReGenesis* (Jennings, 2004), for example, Bob had the same number of shots from his perspective as a neurotypical supporting character featured relatively equally in the episode on which shot analysis was preformed. Because *The Big Bang Theory* (Lorre, Prady, & Molaro, 2007) only has a twenty-three minute run time, compared to *Skins*'s (Elsely, Faber, & Pattinson, 2007) forty-five, it becomes difficult to compare them accurately. In addition, JJ from *Skins* is the only main character in the episode upon which shot analysis was preformed, but Sheldon in *The Big Bang Theory* is one of three.

Shot Analysis and Agency. Ultimately, the number of shots from a given character's perspective in a television programme, as in film, did not indicate agency. Except in *Touch* (Kring et al., 2012) where Jake has moderate amounts of agency, the shows analysed have characters on the spectrum with high levels of agency. In television, the only indicator of less agency in terms of shot analysis seems to be the smaller number of shots of people from Jake's perspective. Because he is the only character with less than high agency, though, the sample size is too small to draw any accurate comparison between high and moderate agency groupings.

Key Findings

The results in this thesis show a number of significant findings. The most significant from both film and television are the following:

- Demographics
 - There are nearly equivalent numbers of adults and minors (including both children and adolescents), with no adolescents until 2007 on television. The adults are predominantly employed and generally show no sexual orientation or heterosexuality.
 - Characters are primarily white, male, and middle class with Asperger's. They generally do not have other mental health problems, but generally do physically/visually demonstrate their ASD. Many other variations are portrayed.
- Characters with autism and Asperger's most often appear in dramas in both movies and television series. These dramas are most often targeted at adults and have large audiences in television and small audiences in film.
- Recurring characteristics appear in many films and programmes, most notably speech patterns, special interests, and a need for care.
- Characters with ASD are overwhelmingly included in either or both school and the workplace in film and television. The majority of adults in both media types are employed.

- Family lives are often portrayed as being complicated by autism, with problems attributed to the disorder appearing in forty-two and thirty-eight percent of films and television shows, respectively. Very few films and television shows contain married individuals on the spectrum (three films and two television shows) or people with ASD who are parents (two texts in each type).
- Characters on the spectrum are most often seen in family scenarios in both film and TV. Romantic relationships are significantly less common, though they do exist in both mediums. These romantic relationships, though, notably lack successful conclusions.
- The majority of films can be placed into standard narrative types; the most common is the family narrative. Television, on the other hand, has a majority of uncategorised shows, though family narrative is the most common categorised grouping.
- Sensationalism is overwhelmingly low, especially in film. This indicates that there are few characters who are savants or have superhuman/supernatural abilities.
- Most films and television programmes portray characters on the spectrum with high levels of agency, indicating that characters in most visual media have power and control over their own lives.

Chapter 5: Discussion

Answering Questions

This chapter will broach the nuances and potential implications of the information collected in Chapter 4: Results. The way in which ASD was represented in film and television, how this portrayal has changed since 2000, and how these changing portrayals may influence perceptions about the condition will be examined in the following sections.

Autism and Asperger's: Representations in Film and Television

Audiences and the Lens of Discussion

In order to fully understand the representation of autism and Asperger's in fictional visual media, recognising the size of the audience and the age of those viewing the works was essential to accurately discuss perceptions that could have been influenced and if a significant number of people have been reached. The analysis showed that the audience of texts that included ASD was overwhelmingly composed of adults, an important finding as subjects such as cognitive disability could be presented differently for adults and children. This is especially crucial in terms of inclusion, a practice that requires positive attitudes (Learning and Teaching Scotland, 2006, pp. 1) and acceptance (Humphrey, 2008) to be successful. Without knowledge of the condition, children may be less likely to accept their peers. Although their parents and teachers may be comfortable with the condition through their media exposure, without relatable children's media portravals, children may be less successful partners in educational inclusion than if they had age appropriate programming and, therefore, more knowledge of the condition. While four television shows were targeted to children or adolescents, the homogeny of the audiences' ages in the other 46 texts allow for a discussion of the texts not interpreted through the lens of the age groups viewing them.

The general audience size, on the other hand, varied substantially within each media type and, especially, between them. The relatively small number of films and significantly larger number of television shows that fell into the large audience category indicate the works with the most potential to influence general perceptions because the more people see a film or show, the more people are likely to be affected by it. Special attention was paid to texts in the large audience group in the results section due to this ability to influence a greater number of people. While there are not more films with large audiences later in the period, the number of large audience television shows increases relatively constantly between 2000 and 2013, indicating that the condition could be growing in popular consciousness.

Additionally, it can be assumed that the audiences for film and television are nearly entirely neurotypical, as the vast majority of the U.S. and U.K. population and, therefore, viewers do not have cognitive and/or developmental impairments. Their neurotypical status is generally not important, but it is crucial to note when examining ASD in fictional visual media as the neurotypical perspective on both social function and autism differs from that of an individual on the spectrum. Because of the demographics of the average viewer and the impact of size, this chapter discusses the results with the understanding that the presentations of ASD were portrayed to adult, neurotypical audiences and often highlights the findings related to texts with large audiences.

No Single Characterisation: Demographics and Beyond

The films and TV series portraying autism and Asperger's presented a variety of demographics, indicating that in contemporary film and television there is no single characterisation. The figures within these demographics were both related and unrelated to the real life numbers in the population of individuals on the spectrum. Both film and television present proportions of females that are out of sync with the one female to four male ratio in the contemporary United States (Baio, 2012). There is about one female to three males in film, about 8% higher than most estimates in the general population. In contrast, the proportion of women in television was

significantly lower than in real diagnoses, one female to seven males, about 11% less than expected in the population and nearly 20% less than in film. Although there is a discrepancy in the numbers represented in the two mediums, these findings form a counterpoint to the body of research looking exclusively at male characters on the spectrum and the critical works that claim that males are nearly the only characters that appear in fictional media. The connection between gender theory and this thesis suggests that neurotypical female characters are less empowered in media than their male counterparts in general, signifying the importance of looking at gender in the context of ASD. Though the majority of characters that appear are in fact males, motion pictures and television do not exclude females on the spectrum, especially in film. As shown in Appendix C for film and Appendix D for television, women and men are proportionally represented in nearly every category, including audience size, meaning audiences were no more or less likely to see a negatively-depicted woman on the spectrum as they were to see such a man.

In relationships, though, males and females have notable differences. Most females are represented in familial relationships in film, a larger percent of the category than the male to female ratio. This suggests that films place women in traditional roles more frequently than their male counterparts. Additionally, there is only one female on the spectrum depicted in either film or television who is involved in a romantic relationship, and she is with a male who also has Asperger's. The seven men involved in romances, on the other hand, are primarily in relationships with neurotypical women, putting forward the gender stereotype that men, regardless of ability, will not be victimised and will be cared for by women. Not only do the differences in relationship formation potentially indicate to an audience that women with ASD are not capable of being romantically involved, but also that they do not function successfully outside of their family groups. Despite these differences in portrayed relationships, men and women on the spectrum were both portrayed and done so relatively equitably. Fundamentally, autism throughout the period of research is not being portrayed as a disability for only boys and men, but one that also impacts girls and women.

The age of characters on the spectrum also varies and includes adults, children, and adolescents. While the presence of children and the lack of adults are consistently remarked upon in earlier research, this thesis found a nearly even split between adults and minors on the spectrum throughout the period as well as the inclusion of adolescents with ASD. While teenagers are portrayed least frequently and only after 2007, their inclusion in multiple works in both film and television, combined with the appearance of adults, signifies a shift away from the child with autism, described by Murray (2008) and Young (2012), and toward a more encompassing view of autism as a disorder that does not go away with age. This change allows for a glimpse of the trials and tribulations of the condition at any age, rather than only at the age where dependence is expected and required.

Unlike the inclusiveness of age groups, racial minorities are underrepresented in films and television. While this was an anticipated trend, as both movies and television have poor track records for portraying characters whose race is other than white (McNary, 2014), the lack of characters of colour suggests that the only people affected by the condition are white. Although visual media presents nearly exclusively white characters, diagnoses of ASD exist in all racial and ethnic groups in real-world cases (Baio, 2012). The lack of black, Asian/Pacific Islander, Latino, Middle Eastern, Native American, and other groups portrayed in motion pictures and television may not directly impact future diagnoses, but for those in the position of seeking or recommending diagnostic testing this portrayal creates the image of individuals on the spectrum as white. The image of the disorder as only affecting white characters could also be problematic for people who are another race and have, unexpectedly by media standards, been diagnosed with ASD. Minority characters began to appear in 2005 on television and not until 2008 in film, demonstrating a trend that is potentially changing. Currently, though visual media does not open doors of discussion in communities without majority standing, but instead the depiction of almost exclusively white characters enforces racial stereotypes.

Characters are nearly solely portrayed as middle class, similar to the limited nature of race. As it does with race, television portrays more characters in the

underrepresented groups than film, notably working class characters on the spectrum, but both film and TV have few examples of characters in the working or upper classes. Further, these depictions also do not start until late in the period, 2007 in television and 2008 in film, indicating the broadening of depicted demographics in the latter part of the analysis period. The significant majority of characters belonging to a single class designation again indicates that ASD only occurs in certain segments of society, despite its existence in all socioeconomic groups (Baio, 2012). While there are real discrepancies in diagnosis in regard to social class (Baio, 2012), this is likely due to differences in identification of traits associated with autism and lack of access to diagnostic services, especially among the working class communities in the United States where evaluations and health care are not necessarily provided by employers or the government, rather than differences in individuals on the spectrum. This issue of diagnosis is, in fact, at the centre of If You Could Say It In Words (Gray, 2008), which depicts the life of a black, working class man with undiagnosed Asperger's in the US. This film highlights problems relating to diagnosis and treatment in these communities, which most other texts entirely fail to acknowledge. Although gender and age are portrayed multifariously, films and television offer very little diversity in the presentations of race and social class.

Beyond demographics, the media present variations in the 'types' of cases of ASD it represents. As demonstrated above, the single portrayal of a white, middle class, young boy is no longer the only available portrayal in popular visual media, though it maintains dominance. Women, adults, and adolescents are increasingly portrayed, adding significant variation in these categories. The diagnosis and, therefore, level of disability is the most significantly diversified 'type' depicted in motion pictures and on television. The three colloquial categories used to describe diagnosis, high-functioning autism, classical autism, and Asperger's, contain a wide range of abilities and general portrayals. Characters with high-functioning autism in films, for example, range from Temple Grandin in *Temple Grandin* (Jackson, 2010), in which she single-handedly changed beef slaughtering in America, to Alan in *After Thomas* (Shore, 2006), who appeared to have little typical social-communicative

ability until his family acquired a pet dog. Classical autism, too showed varied portrayals. Annie in *Rose Red* (Baxley, 2002) had very little verbal ability, but could connect psychically and articulate feelings, while Adam in *House* (Shore, Hoselton, & Sigel, 2006) was nearly unable to communicate anything other than extreme displeasure. Asperger's, the largest diagnosis, has the most notable change over time in terms of demographics. With only a handful of cases in the first half of the period, Asperger's became the most commonly represented part of the autistic spectrum in the latter half. Throughout this period, though, undiagnosed characters and those with classical and high functioning autism remained represented, adding to the constant presence of multiple forms of the condition. Because of the wide variety of abilities in the undiagnosed category, the characteristics portrayed place characters in all three of other groupings, and their status as undiagnosed, these characters did not contribute to typical portrayals. For purposes of analysis, the undiagnosed characters were classified into the most fitting subcategory describing their diagnosis, most of whom were placed into Asperger's, diversifying these subcategories further.

In addition to diagnosis, comorbid mental health problems contribute to the multi-faceted portrayal of autism and Asperger's. While these additional disorders added more variety to the presentation of type in film and television, the majority of characters on the spectrum have only ASD. The limited number of characters with a second disorder in media is in contrast with the regularity of other mental health disorders in association with ASD in real world diagnoses (Levy et al. 2010). Because these disorders are all identified solely based on demonstrated behaviour rather than explicit diagnosis in film and television, it is suggested to the audience that comorbidities are rare or nonexistent, although they can be found in up to eighty percent of real individuals (Levy et al, 2010). Characters in visual, fictional media were found to have common traits and though generalisations about the portrayal of ASD can be made, each text presented the condition without the perpetuation of a stock character or single 'type' of the condition.

Complex Relationships, Agency, and Narratives

Characters with ASD were depicted in a range of relationships in motion pictures and television. The familial relationship, the best documented by earlier scholarship, maintains a large presence in the new millennium, though various forms of this relationship are depicted. As demonstrated by the family narrative subcategory in narrative type, characters are often seen only through the scope of their families. In 2000's Bless the Child (Russell) and 2010's Burning Bright (Brooks), for instance, the children with classical autism are at the mercy of family members; both are placed in danger by their stepfathers and both rescued by the female relatives, notably not the character's mother, responsible for his or her care. Texts demonstrating extreme familial control and turmoil, however, are in the minority of depictions of characters on the spectrum interacting with their families. More often, the parents like those in the television shows Waterloo Road (Holmes & Roach, 2006)) and *Parenthood* (Katims, 2010), are advocates for their children, rather than solely protectors or oppressors. Some characters break free of familial pressure entirely, as do Luke in The Story of Luke (Mayo, 2012) and Abed in Community (Harmon, 2009), and others meet parental expectations while maintaining independence, for example Sheldon in The Big Bang Theory (Lorre, 2007). Though some characters are still only depicted as functions of their families' desires, the complicated familial relationship portrayed since 2000 has the potential to influence the perceptions of what role individuals on the spectrum are able to play in their families.

The relationships characters on the spectrum developed were often beyond the realm of families, including many friendships and romances. Often, narratives that focused on families depicted friendships as well, an important expansion on the idea that characters on the spectrum are most commonly seen only in a family context. Characters such as Oskar in *Extremely Loud & Incredibly Close* (Daldry, 2011), Abed in *Community* (Harmon, 2009), and Carl in *Arthur* (Bailey, 2009) were shown making and sustaining friendships by putting themselves in new situations. Though the method and situation of making friends differed, the commonness of the

portrayal of friendships is significant. This tendency for texts to demonstrate friendships indicates the capacity for individuals on the spectrum to make friends, the power over their lives this gives them, and the ability of autism to impact people beyond family members.

Romantic relationships, or attempts to kindle romance, are also portrayed, as discussed in the context of gender. In a less specific setting, romantic relationships show the ability of a character with ASD to create and sustain partnerships. Most of the romances, however, are not traditionally successful and the majority end during the course of a text. This significant number of failed romantic relationships perpetuates an idea that it is nearly impossible and undesirable to maintain romantic partnerships with people on the spectrum. The depiction of healthy, long-lasting romantic relationships including an adult with ASD is notably lacking in film and TV. Only four successes were found to be present in both mediums; half, those in television, are between teenagers and half, those in films, relatively young adults. While these texts add support to the idea that people with ASD can have and maintain romances, they are few in number and do not depict relationships beyond the early stages; three show early dating and the fourth contains just one scene with the newly married couple. Though friendships are only positively represented, the depiction of romantic relationships is more complex. The illustration of autism and romance in general is favourable, but the repetitive failure of these relationships casts a negative shadow on these depictions. The relationships that characters with autism have with their families are shown as increasingly intricate, and more frequently friends and romantic interests are portrayed along with or instead of these familial relationships.

Overall, a character's ability to influence and create friendships and romantic relationships is indicative of his or her agency. Of the characters who had friendships or romantic relationships in both film and television, three had moderate levels of agency and only one had low levels; the remaining twenty-six contained characters with high agency. The single character with a friend and low levels of agency, Ryan in *The United States of Leland* (Hoge, 2003), is the most problematic

character in this subcategory, as his only 'friend' murders him before the movie begins to free him from the constraints of his condition, thus their friendship is shown in the murderer's flashbacks. Beyond this example, the relationships outside of families in these films demonstrate the characters' ability to make their own choices and influence their own lives. This is a critical part of independent life as it allows multiple structures of support to develop and demonstrates a character's ability to engage with the larger world. The creation of friendships and romances demonstrate that characters with ASD have the agency to choose those they spend time with and who will continue to impact their lives. The depiction and success of these relationships impact how an audience sees the abilities of these characters to function effectively outside of the family unit.

The portrayal of agency, as demonstrated by relationship-building and in the agency results in Chapter 4, was complex, impacted by multiple categories, and unique to each text. The majority of works, though, showed characters on the spectrum with substantial agency, in contrast to the victimised character on the spectrum described in early research. High agency is critical to the general representation of ASD in that it demonstrates that characters with ASD are more than their condition; they are frequently shown as individuals who have the ability to succeed by their own means rather than being subject to the desires of others. The more empathetic portrayal of characters with autism or Asperger's who have high levels of agency demonstrates to viewers that individuals with this disorder are capable, a perception potentially leading to greater social, workplace, and educational inclusion.

The narratives containing characters with high levels of agency, like most other texts portraying ASD, could still be placed into a marked narrative type, each of which represented different positives or problems for the texts that fell into these types. The family narrative positions and defines the character on the spectrum by the place he or she holds within his or her family, rather than his or her own attributes. The results show that although characters with ASD are often at the centre of these narratives, the story rarely is about this individual, but how their autism affects the family dynamic, insulating the character from situations in the rest of the world and making him or her seem incapable of succeeding elsewhere. It becomes a private disorder and problem, rather than a condition that should be introduced to the public. In *Fly Away* (Grillo, 2011), for example, Mandy's mother and father are the only people shown caring for her; her mother even rejects a potential suitor to focus on Mandy. Ultimately, Mandy is the source of action, the problem, while the story focuses on how her mother deals with this problem. While family narrative films and television shows demonstrate the care and support often needed by individuals on the spectrum, they rarely have complex enough depictions to convey a complete picture of the spectrum, making the most common set narrative type problematic for the representation of ASD.

On the same hand, personal growth narratives focus on changes in a neurotypical character, frequently due to interaction with a character with ASD. Those characters on the spectrum become static props for the betterment of the neurotypical characters rather than fully fleshed out, growing individuals in their own right. While there are several characters on the spectrum who are not portrayed as stagnant in this category, the stories are, generally, more about the neurotypical protagonist than the character with ASD. Mickey in *A Mile in His Shoes* (Dear, 2011), for instance, becomes a better baseball player and gains independence by the end of the film with the help of his coach. His coach, though, shows an increase in compassion, the ability to listen, and the ability to move on from his son's death because of his interaction with Mickey. The film focuses primarily on the coach's growth by assigning him more socially significant improvement points than Mickey's, making the coach the most important and most relatable character.

The recovery narrative, by contrast, focuses primarily on the character on the spectrum, but depicts those who overcome their ASD. Though few were made between 2000 and 2013, they imply that autism is not a valid or lifelong condition, but one that can be 'cured' or 'fixed,' rather than valuing a character based on the characteristics they have with and because of their autism. In *After Thomas* (Shore, 2006), for example, Kyle's severe autism and lack of attachment are almost cured by

the addition of a dog to the family. His change from a child who cannot understand love to one who communicates this feeling without prompting marks a degree of invalidity to his diagnosis; he is not truly impaired, he is not being stimulated appropriately. The idea of invalidity is not just contained in recovery narratives. In Eureka (Paglia & Miller, 2006), for example, Kevin is completely cured of his autism by a time loop suggesting that the disorder can and should be cured when possible, invalidating both the diagnosis and the worth of those attributes related to ASD. Additionally, the presence of superhuman skill can call into question the legitimacy of the condition. In Rose Red (Baxley, 2002), for instance, Annie's psychic abilities overshadow what is described as autism. The treatment of her powers suggests that the powers are the cause of her social difficulty, rather than ASD; her lack of verbal communication could be seen as being misread since she telepathically communicates with a select few. While this is a relatively uncommon phenomenon (only ten percent of the total texts indicate this link), three of the five works had large audiences and two moderate, indicating that the suggestion of invalidity has been seen by a large number of people. These portrayals could negatively impact the perception of the condition as it presents the idea that the condition is not real but a false, medicalised description of people who are different. These movies and programmes bring awareness to the condition, but they engage with the claim that ASD is an over-diagnosed disorder for children who are simply different and often gifted.

On the other hand, the bildungsroman demonstrates a large degree of growth motivated by the character on the spectrum and his or her life circumstances without that character losing his or her ASD. As coming of age texts, films and shows classified as bildungsromans in this thesis follow the struggles of a young person with ASD on the journey to becoming an adult. They are growth stories that typically work with the characteristics of ASD, rather than using them as props or eliminating the disorder entirely. Luke, in *The Story of Luke* (Mayo, 2012), for example, is shown struggling to find a job on his own after moving in with his cousin's family after his grandmother, his primary caretaker, dies. He secures his

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own prospects for the future despite the problems that come with his ASD, without outgrowing his previously demonstrated need for workplace and lifestyle support. While the bildungsroman is a predictable narrative, its growth in popularity in films and television indicate fictional media's perpetuation of positive images of ASD within these narratives rather than representations that distort the disorder for the story.

Many of the films and half of the television series were uncategorised narrative types in terms of their representation of ASD as they all portray ASD unlike other texts. While this does not indicate these works had no narrative formulas, they could not be grouped in relation to their portrayal of autism or Asperger's. The unique portrayals of the condition varied from the overwhelmingly positive to those which did not portray enough aspects of the condition to indicate narrative type. ReGenesis (Jennings, 2004), for instance, depicted Bob's Asperger's as a character feature, not a point that drove the story or fostered growth in others. While this lack of official category had a wide range of representations, it demonstrates the ability for fictional visual media to take multiple perspectives on ASD. The limited prevalence of uncategorised narratives in film and the large number of uncategorised texts in television suggest the greater acceptance of those on the spectrum within fiction. In films, where there are few of these works, the proportion of the bildungsroman text is on the rise, indicating more capable, significant characters with ASD. In television, where over fifty percent of texts are uncategorised, characters on the spectrum are shown in more diversified settings. Although texts with uncategorised narrative types do not necessarily contribute to positive portrayals of the condition, they contribute to the trend toward a more varied, less prescribed depictions of ASD in films and television that may help to break audience expectations of the condition.

Narrative type and genre describe the characteristics of a film or television programme, helping to identify the portrayal of characters within them. The known characteristics of a given genre moderate audience expectations of a text with in it; one would not expect a talking dog in a thriller, for instance. This feature of genre

limits the roles that a character on the spectrum can play without breaking the set parameters of each genre. While each genre does not have a set representations of characters with ASD, and many have widely varying portravals, there are genres with distinct patterns of depiction. In comedies and dramadies, for instance, characters with ASD are largely round, fleshed-out characters; there condition is not portraved as something to laugh at, but as something that allows the audience to laugh with these individuals. The character on the spectrum is overshadowed by neurotypicals in horror, thriller, and/or action films, both when they occupy the role of innocent and weak victim and when they have powers that create action. Similarly, narrative types mimic the impact of genre on a film by mediating and meeting audience expectations. Placing a character within a family unit, for example, dictates how a character behaves and is a familiar scenario to audiences. Parental care and authority are anticipated as are the roles the family members play. Films and shows that fit into the narrative types fulfil the expectations an audience has for character roles and narratives at work in these mainstream forms of visual media. The movement away from family narratives, personal growth narratives, and recovery narratives that contain characters on the spectrum fulfilling negative roles, though, correlates with a movement toward the bildungsroman and uncategorised narrative in which characters with ASD have more room to be round characters outside of these potential expectations. Although narrative type and genre mediate expectations, characters on the spectrum are largely not stereotyped based on the genre in which they appear. Differing levels of agency and ranges of relationships can be seen across most narrative types and genres, adding to the multidimensionality of contemporary portrayals of the condition.

Differences between Film and Television

Despite many similarities that allow the two mediums to largely be discussed together, there are significant differences between the portrayal of ASD in film and television that are worth highlighting. Since 2003, television has been more likely to have an impact on perception than film due to the similar number of television shows

having larger audiences than movies. The difference in potential impact indicates the significance of the contrasting depictions of ASD in the two visual media types. Demographics have notable differences. Nearly double the number of females on the spectrum existed in film than in television, a difference that could lead those in the largest viewing segment, those watching television, to associate the disorder with nearly exclusively boys and men. In contrast, the larger number of characters who were black or races other than white in television allow for more recognition of the prevalence of racial heterogeneity on the spectrum in TV audiences, though still falling short of the real numbers.

The level of inclusion also differs in films and television, with nearly twice the number of characters in film than television who are not included educationally or in the workplace and twice the numbers of unknown levels of inclusion on television. This is likely due to television having more characters of less consequence than movies. Film's tendency to have a more in-depth focus on individual characters with autism or Asperger's would allow this medium to explore education and workplace inclusion more commonly and more fully than television.

There are differences in behaviours as well. Movies more frequently portray physical demonstrations of ASD than TV. Combined with the greater focus an audience is likely to have on a film than a television show (King, 2002), the physical demonstrations give the audience a spectacle at which to stare, supporting the discussions of staring and the voyeuristic gaze in film by Murray (2008) and Mulvey (1975). The majority of both media types show physical demonstrations, a portrayal that is both true to life and reinforces character differences, indicating the importance of gaze in television and suggesting the potential power of these outbursts to make the 'glance' (Ellis, 1992) at television a stare. Dissimilarities exist in other commonly shown traits, higher rates of maths special interest and rapid, oddly inflected speech in TV. These indicate television's higher rate of stereotyping behaviour, discussed in more detail below. Fewer television shows could be placed in a narrative type, as noted above, and the characters portrayed on television were more likely to be sensational than in motion pictures. The contrasting depictions

illustrate the complete range of representation in both film and television without allowing generalisations about trends in each category to eclipse the full scope of contemporary presentation of autism and Asperger's in visual, fictional media.

Assessing Impact

Although ASD was presented by films and television shows in many different forms and in increasingly positive ways, the creation and perpetuation of stereotypes was prevalent. These stereotypes present positive and negative ideas; some are reflective of reality and others are entirely fictional. For instance, employment, discussed in greater depth in relation to inclusion, was common in movies and TV among those on the spectrum old enough to have a job, though in reality only about half of individuals on the spectrum are able to hold any form of employment (Farley et al, 2009). This positive stereotype, while inaccurate, shows the ability for people on the spectrum to be independent. In contrast, the need for care for a character with ASD is also prevalent in films and television, suggesting an inability to lead fully independent lives. The opposite nature of these two stereotypes presents a dichotomy in visual media, the capable and the incapable character on the spectrum.

In addition to demonstrations of societal function, other common portrayals and diagnostic attributes were featured creating more complex stereotyped characters. The incorporation of characters on the spectrum with special interests provides insight into how these characters think, demonstrating an empathetic perspective on them while potentially highlighting their differences. The special interests nearly all characters showed were extremely varied and, therefore, evoked different levels of empathy and difference. Characters such as Dr. Virginia Dixon in *Grey's Anatomy* (Rhimes et al., 2008), a heart surgeon with an obsession with the human heart from its colour to its functions, help to elicit understanding from the viewer. Her ASD explains the intensity of her interest and helps to make her an expert in her field. The fact that she has an Asperger's diagnosis almost makes her more normal when discovered by the other doctors because it explains her odd behaviour. This follows for other characters as well, from Jerry Espenson in *Boston* *Legal* (Kelley, D'Elia, & Kaufer, 2004), a specialist attorney, to Dr. Alfred Jones in *Salmon Fishing in the Yemen* (Hallström, 2011), a fish and fishing expert. For other characters, especially those who are less high functioning, their special interests can set them apart further from neurotypical characters. In *A Touch of Frost* (Wingfields, Russell, & Harrison, 2003), Laurence Burrell's obsessions with aliens and space made him not only a poor witness, but also caused him to become a suspect in a murder investigation. The extremity of his interests keeps him from giving the information desired by the police and makes him seem suspicious by neurotypical standards, indicating that he very different from a typical boy his age. Characters from Kevin in *Eureka* (Paglia & Miller, 2006) to Linda in *Snow Cake* (Evans, 2006) were also made to stand out because of their condition. Most real individuals with ASD have special interests (Klin, Danovitch, Merz, & Volkmar, 2007), making this stereotyped behaviour important for understanding the population on the spectrum, though it can enhance the distinctions between neurotypical characters and those with ASD.

Films and television series portrayed further common behaviours and traits as well that could become anticipated types. Being good with animals, improvement with proper tools, having a photographic memory, and the inability to lie were all portrayed, though none commonly, informing the audience's sense of characters on the spectrum as different when they watch texts that contain these features. Further, constantly quoting films, though rare, as Abed in *Community* (Harmon, 2009) or Ifty in *I Am Sam* (Nelson, 2001) do, perpetuates a long-standing image created by *Rain Man* (Levinson, 1988). Speech was also commonly stereotyped, noted by one of three groupings, rapid, slow, or little or no speech in all but thirteen of fifty texts. While difficulty with communication is a diagnostic marker for ASDs, the consistency of the portrayal of these three manners of speech could restrict the public's perspectives about how difficulties in the ability to speak present themselves in people on the spectrum. Other diagnostic characteristics, such as literalness, lack of eye contact, and physical stiffness, were also depicted. More commonly, for instance, about one-third of motion pictures contained characters with

demonstrations of rigidity of thought and sensory sensitivity and about one quarter of television shows depicted sensory sensitivity. The incorporation of diagnostic criteria into popular fiction establishes credibility in the portrayals of the condition in these texts by showing accurate and recorded traits of people with ASD, though it suggests the requirement of these traits. Sensory sensitivity, for example, is common in individuals on the spectrum, but not necessary for diagnosis. As the commonality of the frequent portrayals noted above increases, as many have in recent years, the idea that this is a compulsive part of the condition might become pervasive and those without this diagnostic feature may become labeled as even more odd for not having them.

Additionally, the prevalence of breakthrough connections between characters on the spectrum and neurotypical characters impacts the perception of how individuals with autism build relationships. Although only sixteen percent of texts contain the depiction of characters with ASD suddenly having the capacity for highlevel emotional connections, the existence of this portrayal indicates that there is a perception that this can and does happen. In Dear John (Hallström, 2010), for example, Alan has an instant connection with John, although they have never met and he never speaks to people who are not family. His surrogate mother figure likens his immediate acceptance of John to the 'horse sense' that people with autism have about people, and further states that his autism allows him to sense good and evil. While this trait is neither sensational nor necessarily negative, this instant, unprompted, and unique moment between Alan and John and the connection to some kind of autistic sixth sense greatly oversimplifies the kinds of relationships individuals with ASD have with both their families and strangers. Although this is only one illustration of a social interaction that suggests a new corner turned in the progress of a character on the spectrum, it is indicative of the scenarios portrayed in other works. A character makes a connection with the main character that is marvelled at by at least one neurotypical and is symbolic of the growth and advancement of this character on the spectrum, without true growth being shown. Although each connection demonstrates a character on the spectrum's ability to

socially engage, it is concerning in terms of perceptions influenced. People watching these depictions may assume that every individual on the spectrum will have a moment of emotional connection with another person, when, in fact, some will not.

The relationships between characters with ASD and their neurotypical families are, like breakthrough moments, often stereotyped in film and television. Characters on the spectrum are often portrayed as the cause of familial instability, like the difficulties in and breakups of their parents' marriages and further problems in their parents' work and social lives. Although these issues remain high in television, showing some of the difficulties families may indeed face, there is a notable decrease in their portrayal in films, depicting instead ASD as demanding for parents, but not the cause of major issues. While both representations ring true, they make very different narrative points about living with an individual with the disorder. Television acknowledges the difficulties families face when they contain an individual on the spectrum throughout the period, while film shifts to focus more on the individual with ASD than demonstrate the challenges of parenting.

In addition to being depicted as the source of family strife, many characters come from 'nontraditional' families, those not made up of two, heterosexual, biological parents and their children. While this description does include families where one parent has died, like Jake's mother in *Touch* (Kring, 2012), the majority of characters on the spectrum in nontraditional familial settings live with a single, divorced parent or with family members who are not their biological parent(s). The number of characters on the spectrum living in these families has significantly increased in both movies and TV since 2000, suggesting three critical things in terms of the portrayal of autism. First, the trend indicates a greater acceptance of families outside of the typical, those with single parents and handicapped children for instance. Second, it resurrects the concept of Bettelheim's refrigerator mother and bad parenting as a cause of the disorder (Bettelheim, 1967). The mothers who place their already notably different children in the hands of other family members especially suggests that poor mothering causes the condition, a trend that can be seen from *Bless the Child* (Russell, 2000) to *The Story of Luke* (Mayo, 2012). Finally,

texts with divorced parents often present the nearly opposite scenario, linking the difficulties of parenting a child on the spectrum to the cause of separation. In *Community* (Harmon, 2009), Abed's mother leaves the family, which Abed blames on his own oddness. While it is clear that this was not the case in his father's eyes, the show suggests that Abed's condition made their married life more difficult. In *Fly Away* (Grillo, 2012), the divorce of Mandy's parents is explicitly tied to her autism and the demands made on the parents' lives.

The romantic relationships formed by characters on the spectrum and the families created by them also present problems for how the condition is seen by the general public. Characters with ASD are significantly less likely to form romantic relationships than friendships, though of characters with ASD, 47% of adults on television and 73% of adults in film demonstrate sexual orientation, a similar rate to those who experience or attempt to experience romantic relationships. These romances are overwhelmingly heterosexual; only one homosexual character exists. Of these relationships, the number of characters who create their own families is small. Combined with the high rates of failure in romantic relationships, as discussed above, characters on the spectrum are consistently shown as being incapable of having successful families. All of those with their own children are single, half due to divorce, half due to death of or unknown partner. Only half of those on the spectrum with children raised in film and TV raised them and very little of this parenting is ever depicted, as the majority of the children within the texts are adults. While characters on the spectrum are shown as capable of having families in fictional media, they are negatively stereotyped as poorly maintaining them. The lack of successes shown in the families formed by those with ASD could negatively impact the perceptions of the general public about people on the spectrum and their ability to have a successful family life.

The relationships of characters on the spectrum had with their own parents and friends, however, are stereotyped in the opposite direction; even those with the family problems described above have overwhelmingly positive and supporting relationships with their parent(s) or caretakers and companions. The significance of

relationships for characters on the spectrum is different than that of their neurotypical peers. Although these characters have a disability that makes social interaction difficult, their position within visual, fictional media is often based on their relationships with others and the requirements those relationships have. Independence is shown as positive, but a lack of productive relationships, near isolation, has the opposite effect. Regardless of the positive stereotypes shown in films and television, as in the above discussion of special interests, the stereotypes can contribute to individuals on the spectrum being seen as farther removed from social norms and expectations, similar to the space children on the spectrum without exceptional gifts may have once occupied (Murray, 2008). Therefore, these stereotypes have the potential to lead to greater negative feelings about and within those on the spectrum. When the same groups of symptoms are shown repeatedly in media, the ability for autism to manifest itself differently is ignored. Undiagnosed individuals could be missed by families and educators due to a lack of the stereotypical symptoms, and those who are diagnosed could be treated more often as socially different or in contrast to society's expectations.

Beyond the potential for them to be seen differently in relationships and because of commonly occurring behaviours and characteristics, the individuals with autism or Asperger's in film and television were frequently positioned as the 'other' in the text through the use of perspective shots. Characters on the spectrum often had few point of view (POV) shots, but were also likely to be minor or supporting characters or part of an ensemble cast, which would account for a large portion of this lack. More important than the number of shots, though, was the way in which these POV shots were formed. The things a character sees can position him or her as distinctly different when they are not interesting to a neurotypical eye and often contributed to the sense of a character's status as an other. The inanimate and nonfacial objects a character with ASD focused on, for instance, separated him or her from the neurotypical characters and audience. Looking at objects was depicted infrequently, although diagnostically speaking the nonfunctional, nonsocial things tend to be where the eye of an individual with ASD would be drawn (Klin, Jones, Schultz, Volkmar, & Cohen, 2002). In the subcategory of looking at objects, items from tablet screens in *Alphas* (Karnow, 2011) and *Touch* (Kring, 2012) to sparkly necklaces in *The United States of Leland* (Hoge, 2003), a near match to a shot in *Rain Main* (Levinson, 1988), were portrayed. Specifically, in the case of the tablets, though, these objects were being used for communicative means; nonsocial objects were given the status of communication facilitators for people not on the spectrum and were watched by those on the spectrum for meaningful social interaction. Hands and animals were also frequently shown from the perspective of a character on the spectrum, both nearly social things. Hands and animals can, to some degree, communicate emotion, although they do more closely align with the things at which people on the spectrum in the real world are most likely to be looking at (Klin, Jones, Schultz, Volkmar, & Cohen, 2002).

Shots of people and their faces, though, were the most commonly shown POV shots for characters on the spectrum, despite their diagnostic inability to understand sociocommunicative behaviour. In both film and television, the number of perspective shots of people was greater than the number of shots objects and other things combined for each individual character with ASD. In Skins (Elsely, Faber, & Pattinson, 2007), for instant, 95% of shots from JJ's perspective are of people. The high proportion of shots of people indicates that individuals on the spectrum have contextual social knowledge, such as knowing when to look at people. The consistency of the high proportion of POV shots of people normalises the condition in problematic manner. The subtle and nearly subliminal message to an audience through these shots could suggest that the antisocial interaction neurotypical people have with individuals on the spectrum that is a choice rather than a lack of understanding and ability. Significantly, this is likely because of the neurotypical status of the audience and those behind the camera, rather than a pure attempt to demonstrate what those with ASD would find most interesting. These shots may misrepresent what is most important to those on the spectrum in an attempt to hold the audience's attention. Because perspective shots allow a character to influence the perceptions of the audience (Mulvey, 1975), the fact that the audience sees shots of

people indicates that it is social interaction with humans that are most important to those on the spectrum, rather than their fascination with, for example, trains. While these shots that attempt to influence perception that are of people can label characters with ASD as being less atypical, the mixture with shots that seem strange to a neurotypical audience sets them apart. In the episode of *House* (Shore, Hoselton, & Sigel, 2006) containing a character with ASD, for instance, all the shots from the boy with ASD's perspective were shot through a filter that blurred the edges of the frame. Regardless of the subject at which he looked, most often House's face, his viewpoint was markedly different from all other shots in the show. Although they demonstrate his perspective, these filtered POV shots mark him as different to the audience.

The physical demonstrations of autism visually identify the character as atypical and, therefore, a societal other to the characters in the text and the audience. While these depictions do not always make the character seem deficient or a spectacle, they always separate a character on the spectrum from the neurotypical characters in a motion picture or television series. These representations indicates both the realistic picture of ASD that many texts create, as the disorder does have often physical elements, and the sense that these works are showing individuals who are different in their thoughts and [re]actions to those watching. In the romantic comedy Adam (Mayer, 2009), for example, the relationship between Adam, who has Asperger's, and his girlfriend progresses typically, from meeting her parents to the relative intimacy of their relationship. When Adam finds a note on her calendar indicating a small lie from earlier in the film, he yells at her and throws things around her apartment in a threatening manner. As the audience begins to forget his developmental difference, a physical outburst starkly sets him apart from the other characters as well as the audience. While real individuals with ASD do have moments like this, indicating a degree of realism in the films and shows that portray them, the on-screen representations actively construct a character's otherness rather than simply depicting an aspect of the condition.

Although stereotypes in films and television often position characters with ASD as outsiders, the inclusionary rates of characters on the spectrum indicates their
portrayed incorporation into their communities, a pattern which can also be seen in US and UK inclusion legislation. As noted in the literature review, the most significant pieces of educational inclusion legislation in both the United Kingdom and the United States have been put into place since 2000, including the Equality Act 2010 (UK), the Special Educational Needs and Disability Act (2001) (UK), the Individuals with Disabilities Act (amended 2004) (US), and The No Child Left Behind Act of 2001 (US). The increased depiction of educational inclusion combined with this legislation suggests that more people are likely to be in favour of inclusion because of greater exposure to educational special needs inclusion as successful and commonplace in practice in both schools and in visual, fictional media. Though not depicted in motion pictures or on television before 2006, there has been a significant increase since. Of the films and television shows that had explicit representations of educational inclusion, there were no failed attempts to incorporate students with ASD into mainstream classrooms. Although there were demonstrations of the students having obstacles related to their special educational needs and, occasionally, being aggressive at school, the behavioural difficulties were shown to be surmountable with appropriate action and attention. In Degrassi (Moore, 2001), for instance, Connor shoves a classmate to the ground for breaking his pencil, but is depicted, both later in the same episode and throughout the series, as being in behavioural therapy and improving his ability to more successfully interact with his teachers and peers. The capability for students with autism to have few behaviour problems and thrive in a traditional academic setting is increasingly being represented in films and television shows and reflected in legislation affecting educational inclusion of those pupils with special educational needs.

In addition to the educational inclusion of characters on the spectrum, the inclusion of characters in the workforce was also high in visual, fictional media. Only five of twenty-five total texts in both film and television containing adults on the spectrum showed unemployed characters. This indicates a perpetuation of the ideals of inclusion from education into the workplace. Not only are characters shown as being capable of participating successfully in the classroom, they can also

be valuable members of many professions, from relatively unskilled positions, like Linda in Snow Cake (Evans, 2006) stocking shelves, to highly technical professions, such as Jerry in Boston Legal (Kelley, 2004) working in a prestigious Boston law firm with an expertise in financial law. In reality, though, only about half of individuals on the spectrum are able to hold any form of employment (Farley et al, 2009) and far fewer, about 15% (Redman, Downie, Rennison, & Batten, 2009), are in full-time employment. The few characters not employed were portrayed as either being too impaired to be successful in a job or as full time students, suggesting that if a person on the spectrum is capable of having employment or honing his or her skills for future employment, he or she will. Though many of these texts demonstrate the struggle characters have to find and keep jobs, this positive stereotype, while too high in terms of real world statistics (Howlin, Goode, Hutton & Rutter, 2002; Farley et al, 2009; Redman, Downie, Redison, & Batten, 2009), indicates the potential for people on the spectrum to maintain a position, indicating their value to society. Film and television portravals depict the ability of all people on the spectrum to achieve at work and in all levels of education.

The real-world difficulties for those on the spectrum, though, can make even the most positive stereotypes problematic. Because only about half of those with ASD have 'good' life outcomes (Farley, 2009), there are significant parts of the autism community who are not represented by these media representations. Those on the spectrum who recognise the social expectations of education, family life, and employment have added pressure placed upon them by movies and television. In a society that marks people on the spectrum by their differences and deficiencies, failing to accomplish these life benchmarks could leave these individuals feeling and being treated as more of an other because popular media shows these achievements as being not only achievable but both commonplace and necessary for success.

Although stereotypes of individuals with ASD remain prevalent in visual, fictional, the perpetuation of more positive ideas suggests perceptions of the condition based on media consumption will become more positive. The features of characters related to their autism or Asperger's are represented more favourably and their worth is not based solely on their savant skills and status as innocent children. Though characters like Terry in *Quantum Apocalypse* (Jones, 2010), with his savant abilities and remarkably similar set of characteristics to Raymond Babbit, still exist, it seems that the contemporary depiction is shifting to more closely align with characters like Luke in *The Story of Luke* (Mayo, 2012), a fully fleshed-out individual with no special abilities and the desire to make something of himself. A shift can be seen from stereotyped characters to stereotyped patterns of behaviour more similar to the treatment of neurotypical characters.

These standard methods of depiction, then, become critical to the way perception about those on the spectrum is developed.

The stereotype is taken to express a general agreement about a social group, as if that agreement arose before, and independently of, the stereotype. Yet for the most part it is from stereotypes that we get our ideas about social groups. The consensus invoked by stereo-types [sic] is more apparent than real; rather, stereotypes express particular definitions of reality (Dryer, 1999, pp.247).

The stereotypes discussed in the portrayal of ASD in fictional film and television can be seen as a provider of thought about a certain group, as told by the parts of society that have the power to create these images, namely neurotypical filmmakers. The portrayals discussed and described do not necessarily become something 'everyone' thinks about ASD and those with it, but are the perceptions that have the potential to be created based on the stereotypes presented by fictional, visual media.

Ultimately, 'this activity of ordering, including the use of stereotypes, has to be acknowledged as a necessary, indeed inescapable, part of the way societies make sense of themselves, and hence make and reproduce themselves. (The fact that all such orderings are by definition, partial and limited does not mean that they are untrue -- partial knowledge is not false knowledge, it is simply not absolute knowledge.)[*sic*]' (Dyer, 1999). Autism is, as such, being represented in a way that compartmentalises it in an increasingly open way for the general population. In a neurotypical world, these stereotypes are not necessarily false, but simplified, tangible ways of looking at the other.

Changes in the Portrayal of ASD Since 2000

In the fourteen years this thesis examined, there were important changes in the representation of ASD. The differences incorporated shifts from negative common depictions to an increase in the diversity of depictions, both in terms of behaviours and demographics of characters represented. This alteration in portrayals signifies a distinct movement away from limiting characters on the spectrum to roles that fill a few niche spaces in the story lines. This is especially notable in the increasing numbers of characters with low levels of sensationalism and high levels of agency. The wider set of roles in which characters on the spectrum have been placed has allowed these characters to become increasingly important in their own right, rather than acting solely as props for the wider, neurotypical narrative of a text.

From Here to the Future

Limitations and Strengths

While this thesis aimed to be as comprehensive as possible, there were limiting factors constraining the exhaustive nature of the research. Only films and television were covered by this thesis because they are the two forms of fictional media with the largest audience bases, indicating their ability to impact the largest number of people. However, this selection does leave out the third major form of popular fictional media, the novel. It is a medium which contains a number of extremely popular texts dealing with ASD, including *The Curious Incident of the Dog in the Night-Time* by Mark Haddon, which has been deemed a new foundational text by Stuart Murray (2008, pp.12-13) due to its popularity and prevalence in the social consciousness. The limited popularity of most books and the dissimilarity to film and television made this additional media form less important to discuss.

In addition to a limited variety of media, access to movies and television series was restricted. Many films or programmes were available for only a short period through various rental services and libraries, reducing the ability to

preliminarily analyse and revisit texts. Several works were only accessible through American sources, also limiting the time spent with a piece as research was conducted primarily in the UK. A number of motion pictures and shows were completely unavailable, most notably older programming and made for BBC films, leading to their complete exclusion. While these works would not have made a significant impact on the results, due to their relatively small audiences, their omission inhibits the complete nature of the thesis.

Though this thesis used a total of fifty texts from which to draw conclusions, the number of categories that contained small sample sizes means it is often not possible to interpret the data collected without qualification. Both of the black characters in film, for instance, have Asperger's and high levels of agency, but this does not indicate a definite trend about them because two is too small a number on which to make generalised claims. For the majority of categories, the results should not be applied absolutely, but in the context of the total number of characters with ASD in a given category, subcategory, or year. Indicating the movement toward individuals on the spectrum in film and TV with high levels of agency would be accurate, for example, but claiming that characters with low levels of agency are disappearing would be a misinterpretation of the data, despite the relative lack of characters with low levels of agency after 2010. There are simply not enough texts in many subcategories to conclusively state results.

The thesis also did not have the scope to take under consideration the opinions and perceptions of individuals beyond the author. This limitation makes the interpretive data and analysis of both descriptive and interpretive data more subjective. Additionally, it did not have the scope to survey members of the public about their perceptions of autism or engage them in discussion about changing opinions after viewing films or television shows presenting a character with ASD. While these components would have allowed for greater concrete knowledge about perception, they would have increased tensions with the subject matter of representation, an area largely still unknown in relation to ASD in contemporary visual, fictional media.

The limitations of the research, however, are eclipsed by its strengths. It is the largest textual analysis of autism in fictional film and television to date including the highest number of texts in a single piece of research. Its size allows it to draw more accurate conclusions about the body of work that represents autism and Asperger's than other work that has analysed the portrayal of autism in fiction. Because the total amount of research on the subject is relatively small, adding a nearly comprehensive look at contemporary depictions to the previous work provides a much fuller context for future research on the topic in addition to establishing critical trends without neglecting available texts.

This thesis represents the most inclusive work on autism in visual, fictional media. Because so few texts attempt to be comprehensive in nature, the design of this research presents more texts than any other critical work on the subject. In addition to general extensiveness of works covered, it also includes television, a topic merely touched upon by most other research. Though a few researchers discuss individual episodes of programmes in some depth, most notably Young's analysis of stereotypes in two television episodes (2012), including a range of programming is unique to this thesis, as is the attempt to be all-inclusive of these TV shows. The wide-ranging nature of the research gives the data collected broader implications and less room for misinterpretation or neglect of important texts than other research about ASD in film and, especially, on television.

At the time of initial submission in May 2014, it is the latest piece of research to be published on the portrayal of autism in fictional visual media. Its status as new research indicates its applicability to contemporary thoughts in disability studies, especially work related to autism and other cognitive impairments in film and television, and research that can be relied upon by future studies on the same and related topics. The timing of publication allowed the thesis to stretch nearly across the first decade and a half of the new millennium.

As research covering a broad span of time, the longitudinal nature of this thesis provides information about how the portrayal of autism and Asperger's in film and television is changing. The majority of other work in this field focuses exclusively on how ASD is portrayed in general rather than focusing on a select period and how representations differ within the set interval. The notion of change over time is suggested in a few other studies, as noted in the literature review, but their limited scope indicates this assertion is based on finite evidence rather than comprehensive research. This thesis has the ability to accurately measure differences across the period on which it focuses rather than furnish limited commentary about the nature of change.

Future Research

Though the methods of the thesis are best for the questions posed, there is room for more research on the representation of ASD in the media with different designs. Future studies could focus more heavily on novels. During the research for this thesis, numerous fictional books handling the subject of autism were noted, some of which with large reading bases, including *The Curious Incident of the Dog in the Night-Time* (Haddon). This could provide a more well-rounded scholarship about autism in fictional media in the future.

Interviews with directors, writers, and actors in films and television who portray characters on the spectrum would also give more insight into the subject. Not only could the outcome and presumed intent be analysed, but the purpose and motivation at each level of production could also be examined and described in context with the textual analysis.

Additionally, conducing interviews with audience members and surveys with the general public based on this research would provide greater insight into the cultural pervasiveness of the disorder, as represented in fiction. This would indicate an objective account of the public's perception of ASD and could closely link awareness of popular representations of the disorder with the opinions held about autism.

Because of the number of texts discussed in this thesis, an in-depth analysis of each could not be included due to space considerations. Research that has focused criticism of newer texts could provide more insightful views on each work. The additional research could add nuance to greater body of knowledge about autism in fiction.

The discussion of fiction, though, has been more widely discussed than nonfiction representing autism and Asperger's, with documentary films and television segments especially neglected. The idea of a documentary presenting solely unbiased, factual information presents problems for the broader interpretation of the growing number of texts in this genre, upon which analysis could shed light.

Future research could continue to study the work being produced contemporarily. While certain texts like *Rain Man* (Levinson, 1988), may remain in the public's consciousness about autism and Asperger's for decades to come, films and television shows being produced in the future stand to reinvent stereotypes and replace foundational texts in the eyes of the public. The changes in media should constantly be reassessed in order to have the current representation of ASD discussed in scholarship.

Changing the Public's Perceptions

Since 2000, problematic representations have become less common and a move toward fully incorporating characters with ASD into a film or show as a means in and of itself, rather than a means to an end, has begun. While depictions of autism and Asperger's nearly always have shortfalls, the overall portrayal of characters on the spectrum has improved. The continued perpetuation of the idea of people with autism being savants or super humans, for example, culturally validates this false stereotype. Strong characters on the spectrum and characters who speak for their autism themselves exist contemporarily, but sorely lacking among portrayals that have large audiences. Visual fictional media still has room to improve its depictions of round characters on the spectrum, but the stereotypes that have the potential to inform audience opinion are improving.

Conclusions

The representation of autistic spectrum disorder in film and television is an ever-changing landscape that have the potential to influence one's perceptions of the condition. This thesis has found a distinct shift in the representation of ASD in the new millennium, in contrast to the findings of previous research on earlier fiction. While patterns and stereotypes emerge, the overall trend is to the presentation of characters who are no longer homogenous in demographics, behaviours, or relationships. Stereotypes are still portrayed, though many of them are positive, and, therefore, could continue contribute to the expectations the audiences of these texts have for the behaviour of individuals on the spectrum due to their frequency of occurrence in major television programming and motion pictures. Characters with ASD are portrayed as active participants in complex relationships, both within and outside of their respective family units, further developing the multifaceted view of these characters and demonstrating the potential for individuals on the spectrum to lead traditionally successful lives. The progressing narratives in which these characters are portrayed and the kinds of roles they play in them present a view of ASD which demonstrates the breadth of not only the spectrum, but also the achievements that people on it are capable. Many of these positive messages of the condition, though, have the potential to negatively impact those on the spectrum by raising the expectations neurotypical individuals have for people with ASD and/or increasing the pressures people with the disorder place on themselves to fit into both the neurotypical world and the position in that world in which neurotypicals expect them to fit. Although the current depictions of the condition may make some on the spectrum feel more disenfranchised and some neurotypicals have unrealistic expectations, they are likely point to greater acceptance of ASD and the probability that it will continue to be seen increasingly positively within the general population. From this analysis, there are strong indications that visual, fictional media is slowly shifting toward a more empathetic view of autistic spectrum disorders.

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Appendix A: List of Texts

Films

| The Story of Luke (2012) | Dear John (2010) | If You Could Say It In Words (2008) | The United States of Leland (2003) |
|--|------------------------------|--|------------------------------------|
| Joyful Noise (2012) | Burning Bright (2010) | P.S. I Love You (2007) | Punch-Drunk Love (2002) |
| Salmon Fishing in the Yemen (2011) | Quantum Apocalypse (2010) | After Thomas (2006) | Rose Red (2002) |
| Extremely Loud & Incredibly Close (2011) | Mary and Max (2009) | Snow Cake (2006) | I Am Sam (2001) |
| Fly Away (2011) | Adam (2009) | Breaking and Entering (2006) | Bless the Child (2000) |
| A Mile in His Shoes (2011) | The Black Balloon (2008) | Mozart and the Whale (2005) | |
| Temple Grandin (2010) | Dustbin Baby (2008) | Somersault (2004) | |

Television

| Law and Order: Criminal Intent (2003) | Eureka (2006-2012) | Degrassi (2008-2013) | Parenthood (2010-2013) |
|---|---------------------------------------|-------------------------|---------------------------|
| A Touch of Frost (2004) | Waterloo Road (2007-2010) | Arthur (2009) | South Park (2011) |
| REGenesis (2004-2008) | The Big Bang Theory (2007-2013) | Bones (2009) | Alphas (2011-2012) |

| Boston Legal | NUMB3RS | Skins (2009-2010) | Hawaii Five-0 |
|---------------|----------------|--------------------------|----------------------|
| (2005-2008) | (2008) | | (2012) |
| Scrubs (2005) | Lewis (2008) | Community (2009-2013) | Touch (2012-2013) |
| House (2006) | Grey's Anatomy | Fringe | Saving Hope |
| | (2009-2009) | (2010-2012) | (2012-2013) |

Appendix B: Synopses of Texts

Films

The Story of Luke (Mayo, 2012)

A young man with high-functioning autism looks for a job and love after the death of his primary care taker.

Joyful Noise (Graff, 2012)

Two families try to save a small town competitive choir that is struggling to stay running.

Salmon Fishing in the Yemen (Hallstöm, 2011)

At the request of a sheik, Dr Alfred Jones attempts to introduce salmon fishing to Yemen.

Extremely Loud & Incredibly Close (Daldry, 2011)

A boy Oskar Schell, on a journey to find meaning in his father's death in 9/11 determines his own path and overcomes anxieties by going door to door alone in New York City to try to gain information about his father.

Fly Away (Grillo, 2011)

A mother struggles with caring for her daughter with classical autism.

A Mile in His Shoes (Dear, 2011)

Micky, a farm boy with Asperger's, becomes a minor league baseball player after he is accidentally discovered by a coach.

Temple Grandin (Jackson, 2010)

A fictional biopic about the early adult life of one of the more famous people with autism, Temple Grandin, and her attempt to change the beef slaughtering industry.

Dear John (Hallstöm, 2010)

A university coed and a marine fall in love over the summer while he is home on leave.

Quantum Apocalypse (Jones, 2010)

When the world is threatened by a giant meteor, a team of rebellious scientists attempt to solve a solution, with the help of small-town heroes.

Burning Bright (Brooks, 2010)

Siblings are trapped in a house with a hungry Bengal tiger and struggle to escape.

Mary and Max (Elliot, 2009)

A girl from Australia and a man with Asperger's from the New York become pen pals and relate their lives to each other through letters, despite their social difficulties

Adam (Mayer, 2009)

Adam, a man with Asperger's, develops a romantic relationship with his neighbour, Beth.

The Black Balloon (Down, 2008),

The brother of a young man with classical autism struggles to accept his brother and find first love in a new town.

If You Could Say It In Words Gray, 2008)

Nelson, a working class artist with undiagnosed Asperger's, forms a romantic relationship with a woman already involved in an affair with her boss.

Dustbin Baby (May, 2008)

A teenager who was found in a rubbish receptacle as an infant struggles to come to terms with her birth.

P.S. I Love You (LaGravenese, 2007)

A woman comes to terms with her husband's death through letters he sent her to take her through the journey of grieving.

After Thomas (Shore, 2006)

Parents struggle with their son's autism, improved by a dog named Thomas.

Snow Cake (Evans, 2006)

A woman with autism dealing with the death of her daughter who develops a friendship with man driving the car in which her daughter was killed.

Breaking and Entering (Minghella, 2006) A man reevaluates his life after a run in with a young thief.

Mozart and the Whale (Naess, 2005) A love story between two people with Asperger's Syndrome.

Somersault (Shortland, 2004) A troubled teenager learns about love after running away from home.

The United States of Leland (Hoge, 2003) A young man murders a boy with autism in a middle class suburb.

Punch-Drunk Love (Anderson, 2002)

A man with social difficulties forms a romantic relationship while being extorted by a phone sex operator.

Rose Red (Baxley, 2002)

An academic pushes a group of psychics to waken a haunted house.

I Am Sam (Nelson, 2001)

A developmentally disabled man fights to keep custody of his daughter.

Bless the Child (Russell, 2000)

A child who is a profit of God is kidnapped by a satanic cult intent on making her evil.

Television

Saving Hope (Brebner & Frank, 2012)

A medical drama focusing on the ability of a doctor in a coma to interact with the souls of recently deceased patients.

Touch (Kring et al., 2012)

A boy with autism predicts problems in the world through numbers while his father interprets them to ensure necessary human connections are made.

Alphas (Karnow & Penn, 2011)

An elite group of humans with near superpowers called 'alphas' solve mysterious crimes.

Parenthood (Katims, 2010)

The Braverman clan faces the trials and tribulations of parenting.

Fringe (Abrams, 2008)

An FBI agent and a team of scientists work to solve unexplainable phenomenon with the assistance of their alternate universe selves.

Community (Harmon, 2009)

A group of outcasts form a Spanish study group at a community college.

Skins (Elsely, Faber, & Pattinson, 2007) Teens at college struggle with their interpersonal drama.

Degrassi (Stohn & Schuyler, 2001)

Diverse teens at Degrassi High School try to fit in.

Grey's Anatomy (Rhimes et al., 2008)

A medical drama following the lives of surgical interns and their bosses.

The Big Bang Theory (Lorre, Prady, & Molaro, 2007) The social lives of postdoctoral physics researchers get more interesting when a woman moves in across the hall.

Waterloo Road (Holmes & Roach, 2006)

The lives of teachers and students are followed at a challenging comprehensive school.

Eureka (Paglia & Miller, 2006) A city filled with inventors and geniuses to create things for the government's use.

Boston Legal (Kelley, D'Elia, & Kaufer, 2004)

The lives and cases of attorneys in a major Boston law firm are chronicled.

ReGenesis (Jennings, 2004),

NORBAC, a North American group science venture, investigates bioterrorism in Canada, Mexico, and the United States.

Hawaii Five-0 (Kurtzman, et al., 2012) A detective show focusing on homicide in Hawaii.

South Park (Parker & Stone, 2011)

A comedy that focuses on a group of friends in primary school.

Bones (Hanson et al., 2009)

A crime dramady about following the work of acclaimed forensic anthropologist Temperance 'Bones' Brennan.

Arthur (Bailey, 2009)

A children's show about Arthur the aardvark and his friends in preschool.

NUMB3RS (Falacci, Hueton, & Ross, 2008) A mathematician works for the FBI to help solve crimes.

Lewis (Plater & Reed, 2007) A detective drama focusing on difficult crimes in Oxford.

House (Shore, Hoselton, & Sigel, 2006) A medical drama follows a doctor specialising in diagnostic medicine.

Scrubs (Lawrence, Hobert, & Zisk, 2005) A medical comedy focusing on the interactions between doctors.

A Touch of Frost (Wingfields, Russell, & Harrison, 2003) A detective show centred on unconventional Inspector Detective Jack Frost.

Law & Order: Criminal Intent (Wolf, Conway, & Prinzi, 2003) A crime drama focusing on the homicide unit in New York, with the addition of the criminals' perspectives.

Appendix C: Category Tables - Films

Gender of Characters with ASD in Film

| Male | Female |
|--|------------------------------------|
| Joyful Noise (2012) | Fly Away (2011) |
| The Story of Luke (2012) | Temple Grandin (2010) |
| Extremely Loud and Incredibly Close (2011) | Dustbin Baby(2008) |
| Salmon Fishing in the Yemen (2011) | Breaking and Entering (2006) |
| A Mile in His Shoes (2011) | Snow Cake (2006) |
| Quantum Apocalypse (2010) | Mozart and the Whale (2005)* |
| Dear John (2010) | Rose Red (2002) |
| Burning Bright (2010) | Bless the Child (2000) |
| Mary and Max (2009) | |
| Adam (2009) | |
| If You could Say it In Words (2008) | |
| The Black Balloon (2008) | |
| P.S. I Love You (2007) | |

| Male | Female |
|------------------------------------|--------|
| After Thomas (2006) | |
| Mozart and the Whale (2005)* | |
| Somersault (2004) | |
| The United States of Leland (2003) | |
| Punch Drunk Love (2002) | |
| I Am Sam (2001) | |

Diagnosis of Characters with ASD in Film

| Autism- High Functioning | Autism- Classical | Asperger's | Undiagnosed ASD |
|---------------------------------|--|--|---|
| 7 | 6 | 13 | 8 |
| Dear John (2010) x2 | The Black Balloon (2008) | Mozart and the Whale (2005) x2 | Dear John (2010) (1/2 is undiagnosed) |
| Snow Cake (2006) | Fly Away (2011) | Extremely Loud & Incredibly Close (2011) | Extremely Loud & Incredibly Close (2011) |
| Temple Grandin (2010) | The United States of Leland (2003) | Salmon Fishing in the Yemen (2011) | Salmon Fishing in the Yemen (2011) |
| Quantum Apocalypse (2010) | Rose Red (2002) | Mary and Max (2009) | Punch-Drunk Love (2002) |
| The Story of Luke (2012) | Burning Bright (2010) | Adam (2009) | The United States of Leland (2003) |
| After Thomas (2006) | Bless the Child (2000) | Punch-Drunk Love (2002) | Breaking and Entering (2006) |
| I Am Sam (2001) | | Breaking and Entering (2006) | If You Could Say It In Words (2008)* |
| | | If You Could Say It In Words (2008) | I Am Sam (2001) |
| | | PS I Love You (2007) | |
| | | A Mile in His Shoes (2011) | |
| | | Joyful Noise (2012) | |
| | | Dustbin Baby (2008) | |

Age of Characters with ASD in Film

| Adult Character with ASD | Child Character with ASD | Adolescent Character | Both Child and Adult |
|---|---|----------------------------------|-------------------------|
| 12 | 8 | 5 | 1 |
| Snow Cake (2006) | Rose Red (2002) | Joyful Noise (2012) | Dear John (2010) |
| Mozart and the Whale (2005) | Breaking and Entering (2006) | A Mile in His Shoes (2011) | |
| Salmon Fishing in the Yemen (2011) | Bless the Child (2000) | The Black Balloon (2008) | |
| Quantum Apocalypse (2010) | Extremely Loud & Incredibly Close (2011) | Dustbin Baby (2008) | |
| Mary and Max (2009) | The United States of Leland (2003) | Fly Away (2011) | |
| Adam (2009) | Burning Bright (2010) | | |
| Punch Drunk Love (2002) | Somersault (2004) | | |
| Temple Grandin (2010) | After Thomas (2006) | | |

| The Story of Luke (2012) | | |
|--|--|--|
| If You Could Say It In Words (2008) | | |
| P.S. I Love You (2007) | | |
| I Am Sam (2001) | | |

Race of Characters with ASD in Film

| White | Black | Other |
|------------|---|-------|
| 24 | 2 (7%) | 0 |
| all others | If You Could Say It In Words (2008) | |
| | Joyful Noise (2012) | |

Social Class of Characters with ASD in Film

| Working Class | Middle Class | Upper Class |
|---------------------------------|--------------------------------|-----------------|
| 4 | 22 | 1 |
| Dustbin Baby | Somersault | Dear John (boy) |
| Dear John (Father) | The Story of Luke | |
| Mary and Max | Fly Away | |
| If You Could Say It In Words | Salmon Fishing in the Yemen | |
| | EL&IC | |
| | Burning Bright | |
| | Adam | |
| | The Black Balloon | |
| | P.S. I Love You | |
| | Snow Cake | |
| | Breaking and Entering | |
| | Mozart and the Whale | |
| | The United States of Leland | |

| Working Class | Middle Class | Upper Class |
|---------------|---------------------|-------------|
| | Punch-Drunk Love | |
| | Bless the Child | |
| | Joyful Noise | |
| | I Am Sam | |
| | Rose Red | |
| | After Thomas | |
| | Quantum Apocalypse | |
| | Temple Grandin | |
| | A Mile in His Shoes | |

Audience Size of Films with Characters with ASD

| Small | Moderate | Large | |
|---|---|---|---|
| 11 | 6 | 8 | |
| Snow Cake (30,000) (2006) | Adam (2 mil) (2009) | Dear John (80-114mil) 2010 | After Thomas (no data available) 2006 |
| Mozart and the Whale (36,000) (2005) | Breaking and Entering (1mil) (2006) | Extremely Loud & incredibly Close (31 mil) 2011 | |
| Mary and Max (156,000 AUD opening, probably close to double this total) (2009) | Salmon Fishing in the Yemen (9 mil) (2011) | Punch-Drunk Love (17 mil) 2002 | |
| The United States of Leland (345.000) (2003) | The Black Balloon (2 mil) (2008) | Bless the Child (29 mil) 2000 | |
| Fly Away (festivals, limited release) (2011) | Temple Grandin (2010) | Joyful Noise (30 mil) 2012 | |
| The Story of Luke (festival circuit) (2012) | Dustbin Baby (about 2.3 mil viewers) (2008) | I Am Sam (40 mil-100 mil) 2001 | |
| Quantum Apocalypse (2010) | | Rose Red (Averaged 18.5 million viewers) 2002 | |

| Small | Moderate | Large | |
|--|----------|-----------------------|--|
| A Mile in His Shoes (2011) | | PS I Love You 2007 | |
| Burning Bright (may have been straight to DVD release) (2010) | | | |
| If You Could Say It In Words (2008) | | | |
| Somersault (film festivals) (2004) | | | |

Genre of Films with Characters with ASD

| Comedy | Drama | Dramady | Romance | Thriller/ Horror/ Action | Scienc e Fiction | Children and Family |
|---|---|---|--|---------------------------------|------------------------|---------------------------|
| 2 | 12 | 2 | 6 | 4 | 0 | 0 |
| Mary and Max (animated 2009) | After Thomas (2006) | The Story of Luke (2012) | Dear John 2010 | Burning Bright 2010 | | |
| Joyful Noise (2012- musical comedy) | A Mile in his Shoes (2011) | Salmon Fishing in the Yemen 2011 | Adam 2009 | Bless the Child 2000 | | |
| | Extremely Loud & Incredibly Close 2011 | | Mozart and the Whale (Rom Com) 2005 | Rose Red (2002) | | |
| | Fly Away 2011 | | Punch- Drunk Love (Rom Com) 2002 | Quantum Apocalypse (2010) | | |
| | Snow Cake 2006 | | PS I Love You (2007) | | | |
| | Breaking and Entering 2006 | | If You Could Say It in Words (2008- Rom Dram) | | | |

| Comedy | Drama | Dramady | Romance | Thriller/ Horror/ Action | Scienc e Fiction | Children and Family |
|--------|--|---------|---------|--------------------------------|------------------------|---------------------------|
| | The United States of Leland 2003 | | | | | |
| | The Black Balloon 2008 | | | | | |
| | I Am Sam (2001) | | | | | |
| | Somersault (2004) | | | | | |
| | Dustbin Baby (2008) | | | | | |
| | Temple Grandin (2010- Dramentary) | | | | | |

Inclusion of Characters with ASD in Film

| Included- School | Included- Workplace | Included in Both School and Workplace | Not Included | Unknown |
|--|-------------------------------|--|--|--|
| 4 | 4 | 7 | 7 | 5 |
| Joyful Noise (2012) | Snow Cake (2006) | Punch-Drunk Love (both) (2002) | Bless the Child (2000) | Dear John (Alan- not mentioned) (2010) |
| Extremely Loud & Incredibly Close (School) (2011) | A Mile in His Shoes (2011) | Mozart and the Whale (both characters work and at least male school) (2005) | The United States of Leland (2003) | I Am Sam (minor character, unknown) (2001) |
| Breaking and Entering (school) (2006) | The Story of Luke (2012) | Adam (both) (2009) | The Black Balloon (2008) | Somersault (minor character) (2004) |

| Included- School | Included- Workplace | Included in Both School and Workplace | Not Included | Unknown |
|------------------------|---|---|--------------------------|--|
| Dustbin Baby (2008) | P.S. I Love You (work, unknown school) (2007) | Mary and Max (both) (2009) | Burning Bright (2010) | If You Could Say It In Words (doesn't have job that really needs inclusion, school unknown (2008) |
| | | Dear John (father- both can be assumed) (2010) | Fly Away (2011) | Quantum Apocalypse (probably wasn't, but no mention made) (2010) |
| | | Salmon Fishing in the Yemen (work, school can be assumed) (2011) | Rose Red (2002) | |
| | | Temple Grandin (difficulties with it, but eventually was) (2010) | | |

Employment of Characters with ASD in Film

| Employed | Unemployed |
|---|---------------------------------|
| 11 | 2 |
| Salmon Fishing in the Yemen (2011) | Quantum Apocalypse (2010) |
| Dear John (2010) | I Am Sam (2001) |
| Adam (2009) | |
| Mary and Max (on and off in his lifetime employed in film) (2009) | |

| Employed | Unemployed |
|---|------------|
| Snow Cake (2006) | |
| Mozart and the Whale (2005) | |
| Punch-Drunk Love (2002) | |
| Temple Grandin (2010) | |
| The Story of Luke (focus is on his eventually successful search for a job) (2012) | |
| If You Could Say It In Words (as an artist, so ish) (2008) | |
| PS I Love You (2007) | |

Physical Demonstrations of the disorder of Characters with ASD in Film

| No Physical Physical Demonstration Demonstration | | Aggressive Demonstration |
|--|--|------------------------------|
| 8 | 18 | 9 |
| P.S. I Love You (2007) | Adam (lying scene) | Adam (2009) |
| I Am Sam (2001) | Breaking and Entering (fighting with mum seen by dad through window) | After Thomas (2006) |
| Salmon Fishing in the Yemen (2011) | Bless the Child (beating head against wall & rocking) | Breaking and Entering (2006) |

| No Physical Demonstration | Physical Demonstration | Aggressive Demonstration |
|---|---|--|
| Dustbin Baby (not a big enough character) (2008) | Burning Bright (school office scene) | Fly Away (2011) |
| Joyful Noise (2012) | Mary and Max (standing in corner on stool rocking & psych scenes) | Mary and Max (2009) |
| A Mile in His Shoes (2011) | Mozart and the Whale (carnival scene) | Punch-Drunk Love (2002) |
| Somersault (not really a big enough character) (2004) | Punch-Drunk Love (breaks back window scene) | The Black Balloon (2008) |
| Quantum Apocalypse (2010) | Snow Cake (dog vomit) | Burning Bright (2010) |
| | The Black Balloon (birthday dinner) | If You Could Say It In Words (2008) |
| | The United States of Leland (bike against tree) | |
| | Extremely Loud & Incredibly Close (key throwing scene) | |
| | Fly Away (um, the whole film) | |
| | Temple Grandin (first cow | |
| | If You Could Say It In Words (end scene at party) | |
| | The Story of Luke (scream during funeral, mild and short) | |
| | After Thomas (numerous- in shoe shop, at home) | |
| | Rose Red (rocking and causing things in her house to fall | |
| | Dear John (scene in car when he can't go to party and nearly hyperventilates) | |

Mental Health Problems Outside ASD of Characters on the Spectrum in Film

| None | OCD | Depression | Anxiety | Other |
|------|-----|------------|---------|-------|
| 20 | 2 | 4 | 2 | 2 |

| None | OCD | Depression | Anxiety | Other |
|---|---------------------------|--|--|--|
| The Story of Luke (2012) | Snow Cake | Extremely Loud & Incredibly Close (including self harm and anxiety) | EL&IC (afraid of HUGE list of things) (2011) | Mary and Max ([over]eating disorder) (2009) |
| Joyful Noise (2012) | Dear John (father)* | Fly Away (mild- self hatred expressed multiple times) | Mary and Max (social anxiety, nearly agoraphobic) (2009) | Mozart and the Whale (Donald- hoarding tendencies)* (2005) |
| Salmon Fishing in the Yemen (2011) | | If You Could Say It In Words | | |
| A Mile in His Shoes (2011) | | Punch-Drunk Love | | |
| Temple Grandin (2010) | | | | |
| Dear John (boy)* (2010) | | | | |
| Burning Bright (2010) | | | | |
| Quantum Apocalypse (2010) | | | | |
| Adam (2009) | | | | |
| The Black Balloon (2008) | | | | |
| Dustbin Baby (2008) | | | | |
| PS I Love You (2007) | | | | |
| After Thomas (2006) | | | | |
| Breaking and Entering (2006) | | | | |
| Mozart and the Whale (Isabelle)* (2005) | | | | |
| Somersault (2004) | | | | |
| The United States of Leland (2003) | | | | |
| Rose Red (2002) | | | | |
| I Am Sam (2001) | | | | |
| Bless the Child (2000) | | | | |

Special Interests of Characters with ASD

| No Special Interests | Special Interests | Science/Maths as Special Interest | Art as a Special Interest or Skill |
|--|--|--------------------------------------|--|
| 6 | 20 | 4 | 2 |
| EL&IC (2011) | Adam (Space) | Adam (2009) | Mozart and the Whale (2005) |
| Punch-Drunk Love (2002) | After Thomas (Thomas the Tank Engine) | Temple Grandin (2010) | If You Could Say It In Words (2008) |
| Bless the Child (2000) | Breaking and Entering (gymnastics) | Mozart and the Whale (2005) | |
| The United States of Leland (2003) | Dear John (coins) | Quantum Apocalypse (2010) | |
| PS I Love You (2007) | Temple Grandin (cows) | | |
| Burning Bright (2010) | Dustbin Baby (hair) | | |
| | If You Could Say It In Words (painting & etymology) | | |
| | Joyful Noise (1 hit wonders) | | |
| | Mary and Max (noblets) | | |
| | Mozart and the Whale (numbers, music, painting, animals) | | |
| | Rose Red (2 big band songs) | | |
| | Salmon Fishing in the Yemen (fish/fishing) | | |
| | Snow Cake (snow) | | |
| | The Black Balloon (other's toilets) | | |
| | The Story of Luke (recipes) | | |
| | Quantum Apocalypse (computers and space) | | |
| | Fly Away (planes) | | |
| | A Mile in His Shoes (pitching) | | |
| | I Am Sam (Movies) | | |
| | Somersault (Rabbits) | | |

Speech Characteristics of Characters with ASD in Film

| Speech- slow, stilted | Speech- rapid, odd inflection | Speech- none or nearly none | No categorical marked speech |
|------------------------------------|---|--|---------------------------------------|
| 5 | 4 | 8 | 9 |
| A Mile In His Shoes (2011) | Extremely Loud & Incredibly Close (2011) | After Thomas (2006) | |
| Breaking and Entering (2006) | I Am Sam (2001) | Bless the Child (2000) | |
| Dear John (2010) | Punch-Drunk Love (2002) | Burning Bright (2010) | |
| Quantum Apocalypse (2010) | Temple Grandin (2010) | The Black Balloon (2008) | |
| The Story of Luke (2012) | | Fly Away (2011) | |
| | | Rose Red (2002) | |
| | | The United States of Leland (2003) | |
| | | Somersault (2004) | |

Diagnostic Characteristics of Characters with ASD in Film
| Literalness | Rigid Schedule | Sensory Sensitivity | Lack of Eye Contact | Physical Stiffness | Not in Subcategory |
|-----------------------------------|---|---|---|---------------------------------|-------------------------------|
| 4 | 9 | 8 | 6 | 5 | 8 |
| Temple Grandin (2010) | Breaking and Entering (2006) | After Thomas (2006) | After Thomas (2006) | After Thomas (2006) | Joyful Noise (2012) |
| Mozart and the Whale (2005) | Burning Bright (2010) | Burning Bright (2010) | Breaking and Entering (2010) | Quantum Apocalypse (2010) | A Mile In His Shoes (2011) |
| Snow Cake (2006) | Dear John (2010) | Extremely Loud & Incredibly Close (2011) | Quantum Apocalypse (2010) | Snow Cake (2006) | Dustbin Baby (2008) |
| Somersault (2004) | Fly Away (2011) | If You Could Say It In Words (2008) | Snow Cake (2006) | The Story of Luke (2012) | PS I Love You (2007) |
| | I Am Sam (2001) | Mary and Max (2009) | Somersault (2004) | The Black Balloon (2008) | Punch-Drunk Love 2002 |
| | Mary and Max (2009) | Mozart and the Whale (2005) | The United States of Leland (2003) | | Red Rose (2002) |
| | Salmon Fishing in the Yemen (2011) | The Story of Luke (2012) | | | I Am Sam (2001) |
| | Snow Cake (2006) | The United States of Leland (2003) | | | Bless the Child (2000) |
| | The Story of Luke (2012) | | | | |

Common Portrayals of Characters with ASD in Film

| Improves with proper tools | Need for care | Good with Animals | Photo- graphic Memory | Inability to lie | Marked dislike of change | Film Quoting | Break- through Connec- tion |
|-------------------------------------|---|--------------------------------------|--------------------------------------|-----------------------------------|-----------------------------------|-----------------------|--------------------------------------|
| 2 | 11 | 3 | 2 | 3 | 1 | 1 | 6 |
| After Thomas (2006) | Rose Red (2002) | After Thomas (2006) | Mozart and the Whale (2005) | Punch- Drunk Love (2002) | Mary and Max (2009) | I Am Sam (2001) | Burning Bright (2010) |
| Bless the Child (2000) | Breaking and Entering (2006) | Mozart and the Whale (2005) | Temple Grandin (2010) | Adam (2009) | | | Fly Away (2011) |
| | After Thomas (2006) | Somer- sault (2004) | | Snow Cake (2006) | | | After Thomas (2006) |
| | A Mile in His Shoes (2011) | | | | | | Bless the Child (2000) |
| | The Black Balloon (2008) | | | | | | Dear John (2010) |
| | Dear John (2010) | | | | | | Rose Red (2002) |
| | Quantu m Apocaly pse (2010) | | | | | | |
| | Fly Away (2011) | | | | | | |
| | The Story of Luke (2012) | | | | | | |
| | The United States of Leland (2003) | | | | | | |
| | Burning Bright (2010) | | | | | | |

Parents and Family of Characters with ASD in Films

| Cause of familial/ parental marital problems | Detrimental to work/ social lives of parents | Nontraditional Families | No Apparent Issues |
|--|---|---------------------------------|---|
| 6 | 3 | 7 | 8 |
| After Thomas (2006) | After Thomas (2006) | Bless the Child (2000) | Punch-Drunk Love (2002) |
| Breaking and Entering (2006) | Breaking and Entering (2006) | Breaking and Entering (2006) | Somersault (2004) |
| Fly Away (2011) | Fly Away (2011) | Burning Bright (2010) | Snow Cake (2006) |
| Rose Red (2002) | | Dear John (2010) | Quantum Apocalypse (2010) |
| The Black Balloon (2008) | | Fly Away (2011) | Temple Grandin (2010) |
| The United States of Leland (2003) | | Mary and Max (2009) | A Mile in His Shoes (2011) |
| | | The Story of Luke (2012) | Extremely Loud & Incredibly Close (2011) |
| | | | Joyful Noise (2012) |

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Familial Status of Characters with ASD in Films

| Married (# if divorced) | Children |
|--|-----------------|
| 3 | 2 |
| Dear John-BIII # | Dear John- BIII |
| Salmon Fishing in the Yemen (eventually #) | Snow Cake |
| Mozart and the Whale | |

Relationships of Characters with ASD in Films

| Familial | Romantic | Friendships | Other |
|--------------------------------|---------------------------------|---------------------------------|-------------------------------------|
| 18 | 7 | 16 | 2 |
| The Story of Luke | The Story of Luke | The Story of Luke | |
| Joyful Noise | | Joyful Noise | |
| | Salmon Fishing in the Yemen | Salmon Fishing in the Yemen | |
| EL&IC | | EL&IC | |
| Fly Away | | | |
| A Mile in His Shoes | | A Mile in His Shoes | |
| Temple Grandin | | Temple Grandin | Temple Grandin (professional) |
| Dear John | | | |
| Burning Bright | | | |
| Quantum Apocalypse | | | |
| | | Mary and Max | |
| | Adam | Adam | |
| The Black Balloon | | | |
| | | Dustbin Baby | |
| | If You Could Say It In Words | If You Could Say it In Words | |
| | PS I Love You | PS I Love You | |
| After Thomas | | | |
| Snow Cake | | Snow Cake | |
| Breaking and Entering | | | |
| | Mozart and the Whale | Mozart and the Whale | |
| Somersault | | | |
| The United States of Leland | | The United States of Leland | |
| Punch-Drunk Love | Punch-Drunk Love | Punch-Drunk Love | |
| Rose Red | | | Rose Red (psychic connection) |
| | | I Am Sam | |
| Bless the Child | | | |

Sexual Orientation of Characters on the Spectrum

| Heterosexual | Homosexual | No orientation apparent | Too young for expressed orientation |
|---|------------|---------------------------------|---|
| 11 | 0 | 7 | 9 |
| If You Could Say It In Words (2008) | | I Am Sam (2001) | The United States of Leland (2003) |
| The Story of Luke (2012) | | Joyful Noise (2012) | Rose Red (2002) |
| Adam (2009) | | Dustbin Baby (2008) | Bless the Child (2000) |
| The Black Balloon (2008) | | Quantum Apocalypse (2010) | Somersault (2004) |
| Punch-Drunk Love (2002) | | Temple Grandin (2010) | Breaking and Entering (2006) |
| Mozart and the Whale (2005) | | Snow Cake (2006) | After Thomas (2006) |
| P.S. I Love You (2007) | | Mary and Max (2009) | Burning Bright (2010) |
| Dear John (2010) dad** | | | Dear John (2010) Alan ** |
| A Mile in His Shoes (2011) | | | Extremely Loud & Incredibly Close (2011) |
| Fly Away (2011) | | | |
| Salmon Fishing in the Yemen (2011) | | | |

Narrative Type of Films Containing Characters on the Spectrum

| Family Narrative | Personal Growth Narrative | Recovery Narrative | Bildungsroman | Uncategorised |
|--|--|--------------------------------|--|--|
| 34 | 26 | 7 | 23 | 23 |
| 9 | 7 | 2 | 6 | 6 |
| Bless the Child & (2000) | Dear John (John and Seyfried) (2010) | Bless the Child (2000) & | Adam (2009) | Mary and Max (2009) |
| Breaking and Entering (2006) | Snow Cake (Alan Rickman) (2006_ | After Thomas (2006) & | Mozart and the Whale (2005) | Punch-Drunk Love (2002) |
| Burning Bright (2010) | Joyful Noise & (2012) | | Extremely Loud & Incredibly Close (2011) | Salmon Fishing in the Yemen (2011) |
| The Black Balloon (2008) | Somersault* (main) (2004) | | The Story of Luke (2012) | I Am Sam (2001) |
| Fly Away (2011) | P.S. I Love You* (Holly) (2007) | | Temple Grandin (2010) | The United States of Leland (2003) |
| After Thomas & (2006) | Dustbin Baby* (main character) (2008) | | Joyful Noise & (2012) | If You Could Say It In Words (2008) |
| Quantum Apocalypse (a family saving the world & being sent back in time) (2010) | A Mile in His Shoes (coach) (2011) | | | |
| Rose Red (2002) | | | | |
| Joyful Noise & (2012) | | | | |

Sensationalism of Films Containing Characters on the Spectrum

| High | Moderate | Low |
|------------------------------|----------|-----------------|
| 4 | 0 | 22 |
| Mozart and the Whale (2005) | | All other films |
| Bless the Child (2000) | | |
| Rose Red (2002) | | |
| Quantum Apocalypse (2010) | | |

Agency of Characters with ASD in Film

| High Levels of Agency | Moderate Levels of Agency | Low Levels of Agency |
|---|------------------------------------|--|
| 13 | 8 | 4 |
| Snow Cake (2006) | Breaking and Entering (2006) | The United States of Leland (2003) |
| Mozart and the Whale (2005) | A Mile in HIs Shoes (2011) | Burning Bright (2010) |
| Adam (2009) | After Thomas (2006) | Dear John (2010) |
| Extremely Loud & Incredibly Close (2011) | The Black Balloon (2008) | Bless the Child (2000) |
| Salmon Fishing in the Yemen (2011) | Rose Red (2002) | |
| Mary and Max (2009) | I Am Sam (2001) | |
| The Story of Luke (2012) | Fly Away (2011) | |
| Temple Grandin (2010) | Quantum Apocalypse (2010) | |
| Joyful Noise (2012) | | |
| lf You Could Say it In Words (2008) | | |
| PS I Love You (2007) | | |
| Dustbin Baby (2008) | | |
| Punch-Drunk Love (2002) | | |

*Note: *Somersault* (2004) was not included as the character had too little screen time to determine level of agency.

Appendix D: Category Tables - Television

Gender of Character with ASD on Television

| Females | Males |
|----------------------------------|---------------------|
| 3 | 21 |
| Waterloo Road (2007-2010) | Law & Order |
| Fringe (2010-2012) | A Touch of Frost |
| Grey's Anatomy (2008-2009) | Scrubs |
| | Numb3rs |
| | Lewis |
| | Arthur |
| | Bones |
| | South Park |
| | Hawaii Five-0 |
| | ReGenesis |
| | Boston Legal |
| | House |
| | Eureka |
| | Big Bang Theory |
| | DeGrassi |
| | Skins |
| | Community |
| | Parenthood |
| | Alphas |
| | Touch |
| | Saving Hope |

Diagnosis of Character with ASD on Television

| Autism-High Functioning | Autism- Classical | Asperger's | Undiagnosed |
|----------------------------|----------------------|--------------------|-----------------|
| 4 | 5 | 15 | 6 |
| A Touch of Frost | Scrubs | Waterloo Road | Hawaii Five-0 |
| Numb3rs | House | Fringe | Big Bang Theory |
| Eureka | Bones | Grey's Anatomy | Community |
| Alphas | Hawaii Five-0 | Law & Order: Cl | Fringe |
| | Touch | Lewis | Lewis |
| | | Arthur | Numb3rs |
| | | South Park | |
| | | ReGenesis | |
| | | Boston Legal | |
| | | Big Bang Theory | |
| | | DeGrassi | |
| | | Skins | |
| | | Community | |
| | | Parenthood | |
| | | Saving Hope | |

Age of Character with ASD on Television

| Adult | Child | Adolescent |
|--------------------------------|--|------------------------------|
| 12 | 9 | 3 |
| Law & Order: CI (2003) | Scrubs (2005) | Waterloo Road (2007-2010) |
| A Touch of Frost (2003) | House (2006) | Degrassi (2008-2013) |
| Numbers (2008) | Arthur (2009) | Skins (2009-2010) |
| Lewis (2008) | Bones (2009) | |
| ReGenesis (2004-2008) | South Park (2011) | |
| Boston Legal (2005-2008) | Hawaii Five-0 (2012) | |
| Big Bang Theory (2007-2013) | Eureka (progresses to adolescent) (2006-2010) | |
| Grey's Anatomy (2008-2009) | Parenthood (progresses to adolescent) (2010-2013) | |
| Community (2009-2013) | Touch (2012-2013) | |
| Fringe (2010-2012) | | |
| Alphas (2011-2012) | | |
| Saving Hope (2012-2013) | | |

Race of Character with ASD on Television

| White | Black | Other |
|-------------------------|-------------------------|---|
| 17 | 4 | 2 |
| All other programmes | Scrubs (2005) | Saving Hope (Shahir Hamza is Pakistani or middle eastern) (2012-2013) |
| | Eureka (2006-2010) | Community Abed (Palestinian and Polish) (2009-2013) |
| | DeGrassi (2008-2013) | |
| | Fringe (2010-2012) | |

Social Class of Character with ASD on Television

| Working Class | Middle Class | Upper Class |
|---------------------------------|-------------------------------|---------------|
| 2 | 21 | 1 |
| Skins (2009-2010) | Saving Hope | Hawaii Five-0 |
| Waterloo Road (2007-2010) | Touch (possibly upper?) | |
| | Alphas | |
| | Fringe | |
| | Parenthood | |
| | Community | |
| | DeGrassi | |
| | Grey's Anatomy | |
| | Big Bang Theory | |
| | Eureka | |
| | Boston Legal | |
| | ReGenesis | |
| | Bones | |
| | Arthur | |
| | Lewis | |
| | Numb3rs | |
| | House | |
| | Scrubs | |
| | A Touch of Frost | |
| | Law & Order: Cl | |
| | South Park | |

Target Audience of Shows with Characters on the Spectrum

| Adults | Children | Adolescents |
|--------|----------|-------------|
| 20 | 1 | 3 |

| Adults | Children | Adolescents |
|--------|----------|---------------------------------|
| | Arthur | Skins (2009-2010) |
| | | Degrassi (2008-2013) |
| | | Waterloo Road (2007-2010) |

Audience Size of Shows with Characters on the Spectrum

| Small | Medium | Large |
|-------|----------------------------|--|
| 0 | 8 | 16 |
| | Touch (2012-2013) | Parenthood (2010-2013) |
| | Alphas (2011-2012) | Community (2009-2013) |
| | Fringe (2010-2012) | Skins (2009-2010) |
| | Degrassi (2008-2013) | Grey's Anatomy (2008-2009) |
| | Eureka (2006-2010) | Big Bang Theory (2007-2013) |
| | ReGenesis (2004-2008) | Waterloo Road (2007-2010) |
| | Arthur (2009) | Boston Legal (2005-2008) |
| | Saving Hope (2012-2013) | Hawaii Five-0 (2012) |
| | | South Park (2011) |
| | | Bones (2009) |
| | | Numb3rs (2008) |
| | | House (2006) |
| | | Scrubs (2005) |
| | | Law & Order: CI (2003) |
| | | A Touch of Frost (8.3 million views its last episode) (2003) |
| | | Inspector Lewis (11 mil view high) (2008) |

Genre of Shows with Characters on the Spectrum

| Genre | Comedy | Drama | Dramady | Ro- mance | Thriller/ Horror/ Action | Science Fiction | Child- ren |
|-------|-----------------------------------|--------------------------------------|-------------------------------|--------------|--------------------------------|--|--|
| Total | 4 | 12 | 4 | 0 | 0 | 3 | 1 |
| Med | 1 | 3 | 0 | | | | |
| Crime | 0 | 5 | 1 | | | | |
| | Community (2009-2013) | Touch (2012- 2013) | Parenthood (2010- 2013) | | | Alphas (2011- 2012) | Arthur |
| | Big Bang Theory (2007-2013) | Boston Legal (2005- 2008) | Skins (2009- 2010) | | | Eureka (2006- 2010) | |
| | South Park (2011) | ReGenesis (2004- 2008) | Degrassi (2008- 2013) | | | Fringe (2010- 2012) | |
| | Scrubs (2005) | Waterloo Road (2007- 2010) | Bones (2009) | | | | |
| | | Hawaii Five-0 (2012) | | | | | |
| | | Lewis (2008) | | | | | |
| | | Numb3rs (2008) | | | | | |
| | | A Touch of Frost (2003) | | | | Drama/ Comed y- Detecti ve | Drama / Come dy- Medic al |
| | | Law & Order: Cl (2003) | | | | 6 | 4 |
| | | Saving Hope (2012- 2013) | | | | | |
| | | Grey's Anatomy (2008- 2009) | | | | | |
| | | House (2006) | | | | | |

| Not Included | Included School | Included Workplace | School and Workplace | Unknown |
|----------------------|---|-----------------------|-----------------------------------|------------------------------|
| 1 | 7 | 1 | 8 | 7 |
| Touch (2012-2013) | Parenthood (eventually) (2010-2013) | Numb3rs (2008) | Big Bang Theory (2007-2013) | Hawaii Five-0 (2012) |
| | Community (2009-2013) | | Grey's Anatomy (2008-2009) | Bones (2009) |
| | Skins (2009-2010) | | Saving Hope (2012-2013) | Arthur (2009) |
| | Degrassi (2008-2013) | | Boston Legal (2005-2008) | House (2006) |
| | Waterloo Road(2007-2 010) | | ReGenesis (2004-2008) | Scrubs (too young) (2005) |
| | Lewis (2008) | | Law & Order: Cl (2003) | A Touch of Frost (2003) |
| | South Park (2011) | | Fringe (2010-2012) | Eureka (2006-2010) |
| | | | Alphas (2011-2012) | |

Inclusion of Characters with ASD on Television

Employment of Characters with ASD on Television

| Employed | Unemployed |
|-----------------------------------|--|
| 9 | 3 |
| Saving Hope (2012-2013) | Community (full time student, does occasionally work) |
| Alphas (2011-2012) | Lewis (full time student) |
| Fringe (2010-2012) | A Touch of Frost (too impaired?) |
| Grey's Anatomy (2008-2009) | |
| Big Bang Theory (2007-2013) | |
| Boston Legal (2005-2008) | |
| ReGenesis (2004-2008) | |
| Numb3rs (2008) | |
| Law & Orderr: Cl (2003) | |

Physical Demonstration of Difference of Characters with ASD on Television

| No Physical Demonstration | Physical Demonstration | Aggressive Demonstrations |
|--------------------------------|---|------------------------------|
| 11 | 13 | 6 |
| Saving Hope (2012-2013) | Touch (rocking and groaning, does occasionally scream) (2012-2013) | A Touch of Frost (2003) |
| Fringe (2010-2012) | Parenthood (meltdowns about little things like number of stickers) (2010-2013) | Boston Legal (2005-2008) |
| Alphas (2011-2012) | Skins (inappropriate behavior in front of shrink's office) (2009-2010) | Degrassi (2008-2013) |
| Community (2009-2013) | Degrassi (pushes girl in class) (2008-2013) | Skins (2009-2010) |
| Eureka (2006-2010) | Grey's Anatomy (yelling at patient's hug) (2008-2009) | Waterloo Road (2007-2010) |
| ReGenesis (2004-2008) | Waterloo Road (attacks teacher) (2007-2010) | Parenthood (2010-2013) |
| Bones (2009) | Boston Legal (attacks his boss) (2005-2008) | |
| Lewis (2008) | Hawaii Five-0 (kicking, screaming when carried down) (2012) | |
| Scrubs (2005) | South Park (the whole hallway scene in the program) (2011) | |
| Law & Order: Cl (2003) | House (screaming at removal of game) (2006) | |
| Big Bang Theory (2007-2013) | A Touch of Frost (tantrum in questioning) (2003) | |
| | Arthur (yelling about ventriloquism) (2009) | |
| | Numb3rs (repeating no loudly at table while rocking) (2008) | |

Mental Health Problems of Characters with ASD on Television

| None | OCD | Depression | Anxiety | Other |
|-----------------------------------|---|---|---------|--|
| 19 | 1 | 3 | 0 | 1 |
| Saving Hope (2012-2013) | Numb3rs (OCD-like hoarding tendencies) | Boston Legal (2005-2008) | | Law & Order: CI (sociopathic tendencies re: orchestrating murders) |
| Touch (2012-2013) | | *ReGenesis (struggles for a bit, but overcomes) (2004-2008) | | |
| Alphas (2011-2012) | | South Park (depression misdiagnosed as AS (2011) | | |
| Parenthood (2010-2013) | | | | |
| Fringe (2010-2012) | | | | |
| Community (2009-2013) | | | | |
| Skins (2009-2010) | | | | |
| Degrassi (2008-2013) | | | | |
| Grey's Anatomy (2008-2009) | | | | |
| Big Bang Theory (2007-2013) | | | | |
| Waterloo Road (2007-2010) | | | | |
| Eureka (2006-2010) | | | | |
| Scrubs (2005) | | | | |
| Hawaii Five-0 (2012) | | | | |
| Bones (2009) | | | | |
| Arthur (2009) | | | | |
| Lewis (2008) | | | | |
| House (2006) | | | | |
| A Touch of Frost (2003) | | | | |

| Special Interests of | Characters on | the Spectrum | on Television |
|-----------------------------|----------------------|--------------|---------------|
| | | | |

| No Special Interests | Special Interest | Science/Maths as Special Interest | Art as a Special Interest |
|-------------------------|---|--------------------------------------|---------------------------------|
| 1 | 23 | 10 | 2 |
| South Park | A Touch of Frost (aliens, space) | A Touch of Frost (2003) | Lewis (2008) |
| | Alphas (tech and waves- like radio, phone, etc.) | The Big Bang Theory (2007-2013) | Waterloo Road (2007-2010) |
| | Arthur (trains) | Eureka (2006-2010) | |
| | The Big Bang Theory (physics) | Fringe (2010-2012) | |
| | Bones (specific video game) | Grey's Anatomy (2008-2009) | |
| | Boston Legal (law- insurance) | ReGenesis (2004-2008) | |
| | Community (films) | Saving Hope (2012-2013) | |
| | Degrassi (changes- from online game to space) | Touch (2012-2013) | |
| | Eureka (anything sciency) | Alphas (2011-2012) | |
| | Fringe (comp sci) | Degrassi (2008-2013) | |
| | Grey's Anatomy (human heart) | | |
| | Hawaii Five-0 (handheld game) | | |
| | House (video game) | | |
| | Law & Order: CI (life insurance) | | |
| | Lewis (painting/drawing) | | |
| | NUMB3RS (tracking numbers/shipping) | | |
| | Parenthood (reptiles to specific war) | | |
| | ReGenesis (biochem) | | |
| | Saving Hope (neurosci) | | |
| | Scrubs (blocks) | | |
| | Touch (numbers) | | |
| | Waterloo Road (art) | | |
| | Skins (magic tricks) | | |

| Speech- slow, stilted | Speech-rapid, odd inflection | Speech- none or nearly none | No Categorical marked speech |
|----------------------------------|---|-----------------------------------|---------------------------------------|
| 6 | 8 | 6 | 4 |
| A Touch of Frost (2003) | The Big Bang Theory (2007-2013) | Bones (2009) | Saving Hope (2012-2013) |
| Alphas (2011-2012) | Boston Legal (2005-2008) | Eureka (2006-2010) | Degrassi (2008-2013) |
| Fringe (2010-2012) | Community (2009-2013) | Hawaii Five-0 (2012) | South Park (2011) |
| Grey's Anatomy (2008-2009) | Law and Order: Criminal Intent (2003) | House (2006) | Arthur (2009) |
| Lewis (2008) | Skins (2009-2010) | Scrubs (2005) | |
| NUMB3RS (2008) | Waterloo Road (2007-2010) | Touch (2012-2013) | |
| | ReGenesis (2004-2008) | | |
| | Parenthood (2010-2013) | | |

Speech Characteristics of Characters with ASD on Television

Diagnostic Characteristics of Characters on the Spectrum on Television

| Literalness | Rigid | Sensory | Lack of Eye | Physical |
|---------------------------|---------------------------------------|----------------------------------|----------------|----------------------|
| | Schedule | Sensitivity | Contact | Stiffness |
| 4 | 4 | 5 | 4 | 4 |
| A Touch of | A Touch of | Alphas | Grey's Anatomy | Boston Legal |
| Frost (2003) | Frost (2003) | (2011-2012) | (2008-2009) | (2005-2008) |
| Community | Alphas | Arthur (2009) | Law and Order: | NUMB3RS |
| (2009-2013) | (2011-2012) | | CI (2003) | (2008) |
| Parenthood (2010-2013) | The Big Bang Theory (2007-2013) | Grey's Anatomy (2008-2009) | NUM3RS (2008) | Touch (2012-2013) |
| Waterloo Road | Parenthood | ReGenesis | Parenthood | Waterloo Road |
| (2007-2010) | (2010-2013) | (2004-2008) | (2010-2013) | (2007-2010) |
| | | Touch (2012-2013) | | |

| Common Characteristics of Characters on the Spectrum | on Television |
|--|---------------|
|--|---------------|

| Improve ment with proper tools | Need for care | Good with Animals | Photo- graphic Memory | Inability to lie | Marked dislike of change | Film Quoting | Break- through Connec- tion |
|--|--|-------------------------------|-------------------------------|-------------------------------------|--|-----------------------------------|--------------------------------------|
| 3 | 7 | 2 | 3 | 2 | 4 | 1 | 2 |
| Degrassi (2008- 2013) | A Touch of Frost (2003) | ReGenesis (2004-2008) | A Touch of Frost (2003) | A Touch of Frost (2003) | Arthur (2009) | Commu -nity (2009- 2013) | House (2006) |
| Boston Legal (2005- 2008) | Eureka (2006- 2010) | Parenthood (2010- 2013) | Hawaii Five-0 (2012) | Waterloo Road (2007- 2010) | The Big Bang Theory (2007- 2013) | | Touch (2012- 2013) |
| ReGene- sis (2004- 2008) | Touch (2012- 2013) | | Lewis (2009) | | Law and Order: CI (2003) | | |
| | Scrubs (2005) | | | | Parentho od (2010- 2013) | | |
| | House (2006) | | | | | | |
| | Bones (2009) | | | | | | |
| | Water- loo Road (2007- 2010) | | | | | | |

Parents and Family in Shows with Characters on the Spectrum

| Cause of familial/ parental marital problems | Detrimental to work/ social lives of parents | Nontraditional Families | No Apparent Issues |
|--|---|----------------------------|---------------------------------------|
| 1 | 3 | 6 | 8 |
| A Touch of Frost (2003) | Touch (2012-2013) | Community (2009-2013) | Arthur (2008) |
| | Parenthood (social) (2010-2013) | Eureka (2006-2010) | Bones (2009) |
| | House (2006) | NUMB3RS (2008) | Hawaii Five-0 (2012) |
| | | Scrubs (2005) | ReGenesis (2004-2008) |
| | | South Park (2011) | The Big Bang Theory (2007-2013) |
| | | Touch (2012-2013) | Skins (2009-2010) |
| | | | Fringe (2010-2012) |
| | | | Alphas (2011-2012) |

Familial Status in Shows with Characters on the Spectrum

| Married | Children |
|------------------|-------------|
| 2 | 2 |
| ReGenesis | ReGenesis |
| Law & Order # | Law & Order |

Relationships of Characters with ASD on Television

| Familial | Romantic | Friendships | Other |
|---------------------|---------------------------------------|--------------------|-------------------------------------|
| 17 | 8 | 14 | 2 |
| | Saving Hope | Saving Hope | |
| Touch | | | |
| Alphas | | Alphas | |
| Parenthood | | | |
| Fringe | | Fringe | |
| Community | Community | Community | |
| Skins | Skins | Skins | |
| | Degrassi | Degrassi | |
| | | | Grey's Anatomy- work |
| Big Bang Theory | Big Bang Theory | Big Bang Theory | |
| Waterloo Road | | Waterloo Road | |
| Eureka | | | |
| | Boston Legal (failed attempt) | Boston Legal | |
| ReGenesis | ReGenesis (attempts until 2008) | ReGenesis | |
| Hawaii Five-0 | | | |
| South Park | | South Park | |
| Bones | | | |
| Arthur | | Arthur | |
| | Lewis | Lewis | |
| | | Numb3rs | |
| House | | | |
| Scrubs | | | |
| A Touch of Frost | | | |
| | | | Law & Order- work/ familyless |

Sexual Orientation of Characters with ASD on Television

| Heterosexual | Homosexual | No Orientation apparent | Too Young |
|---------------------------------------|----------------------------|----------------------------------|---------------------------|
| 7 | 1 | 7 | 9 |
| Community (2009-2013) | Saving Hope (2012-2013) | Alphas (2011-2012) | Touch (2012-2013) |
| Skins (2009-2010) | | Fringe (2010-2012) | Parenthood (2010-2013) |
| Degrassi (2008-2013) | | Grey's Anatomy (2008-2009) | Eureka (2006-20 |
| The Big Bang Theory (2007-2013) | | Lewis (2008) | Hawaii Five-0 (2012) |
| Boston Legal (2005-2008) | | NUMB3RS (2008) | South Park (2011) |
| ReGenesis (2004-2008) | | Waterloo Road (2007-2010) | Arthur (2009) |
| Law & Order (2003) | | A Touch of Frost (2003) | Bones (2009) |
| | | | House (2006) |
| | | | Scrubs (2005) |

Narrative Type of Programmes on Television with Characters on the Spectrum

| Family Narrative | Personal Growth | Recovery Narrative | Bildungsroman | Uncategorised |
|---------------------------|--|-----------------------|--------------------------|-----------------------------------|
| 5 | 4 | 1 | 3 | 13 |
| Touch* (2012-2013) | Skins* (his friends) (2009-2010) | South Park** | Degrassi (2008-2013) | ReGenesis (2004-2008) |
| Bones (2009) | Touch* (his father) (2012-2013) | | Community (2009-2013) | Fringe (2010-2012) |
| Parenthood (2010-2013) | Eureka (literally everyone else) (2006-2010) | | Skins* (2009-2010) | Alphas (2011-2012) |
| Scrubs (2005) | Numb3rs (Charlie, maths prof) (2008) | | | Arthur (2009) |
| House (2006) | | | | Boston Legal (2005-2008) |
| | | | | Hawaii Five-0 (2012) |
| | | | | Big Bang Theory (2007-2013) |
| | | | | Grey's Anatomy (2008-2009) |
| | | | | Lewis (2008) |
| | | | | Saving Hope (2012-2013) |
| | | | | Law & Order Cl (2003) |
| | | | | Waterloo Road (2007-2010) |
| | | | | A Touch of Frost (2003) |

Sensationalism of Programmes on Television with Characters on the Spectrum

| High | Moderate | Low |
|--------------------|--------------------------------|-----------------|
| 5 | 5 | 14 |
| Alphas (2011-2012) | ReGenesis (2004-2008) | Degrassi |
| Touch (2012-2013) | A Touch of Frost (2003) | Waterloo Road |
| Numb3rs (2008) | Big Bang Theory (2007-2013) | Fringe |
| South Park (2011) | Hawaii Five-0 (2012) | Skins |
| Eureka (2006-2010) | Lewis (2009) | Arthur |
| | | Bones |
| | | Boston Legal |
| | | Community |
| | | Grey's Anatomy |
| | | House |
| | | Law & Order: Cl |
| | | Parenthood |
| | | Saving Hope |
| | | Scrubs |

Agency of Characters with ASD on Television

| High | Moderate | Low |
|------------------|----------------------|--------------------|
| 15 | 6 | 3 |
| ReGenesis | Touch (2012-2013) | Eureka (2006-2010) |
| A Touch of Frost | Arthur (2009) | Bones (2009) |
| Degrassi | Hawaii Five-0 (2012) | Scrubs (2005) |
| Waterloo Road | Lewis (2008) | |
| Fringe | House (2006) | |
| Alphas | Numb3rs (2008) | |
| Skins | | |
| Boston Legal | | |
| Community | | |
| Grey's Anatomy | | |
| Law & Order: Cl | | |
| Parenthood | | |
| South Park | | |
| Saving Hope | | |
| Big Bang Theory | | |

Appendix E: Film Category Comparisons

Gender Comparisons

The following is a chart representing the numbers of males and females in key categories. There are a total of eight female and nineteen male characters. The categories are in descending order as follows: diagnosis, race, social class, genre, inclusion, relationships, and agency.



Gender and Diagnosis. Women's diagnoses were split between three subcategories of diagnosis—Asperger's, high-functioning autism, and classical autism. There were no undiagnosed females. Males were placed into all four diagnostic subcategories.

Gender, Race, and Class. No films included females who belonged to an ethnic or racial minority. Only one female character is not in the middle class. Poppy from *Dustbin Baby* (2008) qualifies as working class based on her educational opportunities. The single upper class character was male as were the other three working class characters. Of the two black characters, both were male and one was working class. Because there are so few working class characters, the single black character makes up twenty-five percent of the working class, indicating that a quarter of the working class characters are black although they make up only eight percent of the total number of characters.

Gender and Genre. The eight female characters with autism or Asperger's were split between three genres, five in drama, one in romance, and two in thriller/ horror/action, while male characters were in five of seven, including dramadies and comedies, which did not contain female characters.

Gender and Inclusion. Five of eight women were included in some capacity, two in school, one only at work, and two in both. They made up half of those included in just school and a quarter of those included at work and in both locations, a fair comparison to their thirty percent of characters total. Three females were not included at all, forty-three percent of the total of excluded characters, including both females in a thriller/horror/action movie. There were not any women whose inclusion status is unknown.

Gender and Physical Demonstrations of ASD. Only one of the eight females does not have a physical demonstration of the disorder, a significantly smaller proportion than women in the general sample. There were only two females of nine total physical outbursts, another seeming underrepresentation.

Gender, Relationships, and Sexual Orientation. Seventy-five percent of female characters, are shown in familial relationships, compared to sixty-three percent of males. Only one female was shown in a romantic relationship and her relationship is with a man also on the spectrum. Six of the seven men in romantic relationships are with neurotypicals. Two women, a quarter, demonstrate heterosexuality, despite relationship status. The other three female characters old

enough to indicate orientation did not have an apparent one and make up forty-three percent of the characters without apparent orientation, though they comprise thirty percent of characters in general. Half of the women are depicted in friendships compared to sixty-eight percent of men. The only two characters in 'other' kinds of relationships were women.

Gender and Agency. Of the four films with low levels of agency, one contains a girl with ASD. Three, thirty-seven percent, of the eight films showing characters moderate levels of agency include a female on the spectrum. The other four women, and nine males, have high levels of agency. Women make up a proportionally similar number to their overall totals in each agency group.

Race Comparisons

The chart below shows the breakdown of characters of different races compared to other categories. Because there are only two characters who of colour in film, there are few detailed breakdowns. They are the following: diagnosis, gender, class, employment, genre, inclusion, physical demonstrations, relationships, sexual orientation, sensationalism, and agency.



Race and Diagnosis. Both black characters, Walter Hill from *Joyful Noise* (2012) and Nelson Hodge from *If You Could Say It In Words* (2008), have Asperger's syndrome. While Nelson is undiagnosed in the film, its promotional material specifically states that due the poverty of his family his Asperger's remained undiagnosed.

Race and Genre. The two black characters are split between two genres, comedy and romance. They account for half of the comedy films and seventeen percent of romance films. All of the characters in dramas, dramadies, and thriller/ horror/action movies were white.

Race and Physical Demonstrations of ASD. One black character and seven white characters on the spectrum were portrayed with no physical demonstrations. Black characters make up one of eighteen physical demonstrates and one of nine aggressive demonstrations. Nelson, in *If You Could Say It In Words* (2008), tears up a party in a rage about losing his girlfriend and then punches her lover and boss.

Race and Agency. Both black characters with ASD are represented as having high levels of agency. The eleven other characters with high amounts of agency are white, as are the eight with moderate agency and the four with low agency.

Diagnosis Comparisons

Diagnosis and Genre. Both of the characters in comedy have diagnosed Asperger's syndrome. Drama contains three characters with classical autism, four characters with high-functioning autism, and five with Asperger's. In the two dramadies, one portrays high functioning autism and the other undiagnosed Asperger's. Of the six films in the romance genre, five contain character's with Asperger's and one contains characters with high functioning autism. Three of the four characters in thriller/horror/action have classical autism, while the other has a form of high-functioning autism.

Diagnosis, Family, and Social Position. Characters in all of the subcategories associated with parents and families overwhelmingly have autism, rather than Asperger's. Classical autism, especially, is disproportionally represented, making up only twenty-three percent of total diagnoses, but at thirty-three percent in each 'parents and families' subcategory. Of those characters indicated as the cause of familial and marital problems, one has high-functioning autism, one has Asperger's, and the other four have classical autism, sixty-seven percent of characters in this subcategory. The three characters who were depicted as being detrimental for the social and/or work lives of their parents had classical autism, high-functioning autism, and Asperger's, respectively. Of the seven characters who come from unconventional households, two have high-functioning autism, two have Asperger's, and three have classical autism, forty-three percent of this subcategory. The two

characters who were married are at the top end of the spectrum, one with highfunctioning autism, the other with undiagnosed Asperger's, as are the two with children, both of whom have high-functioning autism.

Diagnosis, Relationships, and Sexual Orientation. Six, or one third, of the eighteen characters shown in a familial context are in each of the diagnostic groups, high-functioning autism, classical autism, and Asperger's. Although there are an even number of diagnostic representations, both ranges of autism are over-represented, with eighty-six percent of those with high-functioning autism and all of those with classical autism placed in the context of their families. Of the seven characters shown in romantic relationships or romantic situations, six have Asperger's and only one has high-functioning autism. The only character with autism is also never successful in initiating a relationship, despite his attempts to do so. Four characters with no apparent orientation have high-functioning autism, and three have Asperger's. Because all characters with classical autism were minors, only two demonstrate sexuality and, though neither are able to even attempt to forge a romantic relationship, they are both heterosexual. Two heterosexual characters have high-functioning autism and seven have Asperger's. The characters who are shown in friendships are predominantly those with Asperger's, with eleven films depicting them. There were three characters with high-functioning autism and a single character with classical autism that had friends. The two characters with 'other' kinds of relationships have high-functioning and classical autism.

Diagnosis and Narrative Type. The nine characters in family narratives are broken down into five with classical autism, two with high-functioning autism, and two with Asperger's. Two characters with high-functioning autism and five with Asperger's make up the characters in the personal growth of a neurotypical subcategory. One films that tells a recovery narrative contains a character with classical autism and the other has a character with high-functioning autism. Of the six films in the bildungsroman narrative type group, two contained characters with high-functioning autism and four portrayed characters with Asperger's coming of age. The majority of films that were uncategorised, four of the six, had characters with Asperger's. One had a characters with high-functioning autism and the sixth had classical autism.

Diagnosis and Sensationalism. Of the four films deemed highly sensational, fifty percent of characters had classical autism, twenty-five percent had high-functioning autism, and one had Asperger's. The remaining four characters with classical autism, six with high-functioning autism, and twelve with Asperger's were not sensational.

Age, Diagnosis, and Agency. All of the six characters with classical autism are under eighteen and two of these, one third, have low levels of agency. Minors are portrayed in the entirety of those films with low levels of agency, two with classical autism and two with high functioning autism. John's father in *Dear John* (2010) is the only adult character included in this subcategory, one of the six adults with high-functioning autism. Of the eight characters with moderate agency, three are children, one with classical autism, high-functioning autism, and Asperger's, respectively; three are adolescents, two classical autism and one high-functioning autism; and two are adults who had high-functioning autism. Of the thirteen films portraying high levels of agency, ten contained characters with Asperger's, the single high-functioning child, two adolescents and seven films with adults. The remaining three with high amounts of agency were adult characters with high-functioning autism.

Diagnosis and Agency. Three films with high-functioning autism and ten with Asperger's had high levels of agency. The eight movies depicting moderate agency were made up of three films with high-functioning autism, three with classical autism, and two movies with Asperger's. Of the four characters with low levels of agency, three had classical autism and one had high-functioning autism. None of the characters with classical autism had high levels of agency and they comprised seventy-five percent of characters with low levels of agency. In contrast, seventy-seven percent of characters with high agency and none of the characters with low levels of agency had Asperger's.

Audience Size Comparisons

Below is a chart indicating the trends in films with small, medium, and large audiences. Although twenty-six movies were analysed, only twenty-five had information indicating the size of viewership; the results for *After Thomas* (2006) have been excluded from the following sets of comparisons. There were eleven that had a small number of viewers, six with moderate audiences, and eight with large ones.



Audience Size and Demographics. Of the eleven small grossing films, three contained female characters and eight males on the spectrum. There were three children, two adolescents, and six adults with ASD represented small motion pictures. Only one of the films with a small audience had a black character. Two low grossing movies contained characters in the working class and nine were middle class. Three of six films with moderate-sized audiences contained with female characters with ASD. None of the moderate-sized films contained children, but half contained adolescents and half adults. None of the films with moderate audiences contained black or upper class characters, though one portrayed a working class individual on the spectrum and five had middle class characters. The eight large audience films contained two females on the spectrum and six males. Three with large audiences showed children on the spectrum, three had adults, one contained both, and one depicted an adolescent. One of the large grossing films that featured a black character with autism. Films with large audiences also contained one upper class character and one working class character, while the remaining six were middle class.

Audience Size and Diagnosis. The single film with no audience data available, *After Thomas* (2006), contained a character with high-functioning autism. Three of the eleven small films, or twenty-seven percent of them, contain a character with high-functioning autism and another three have a character with classical autism. The remaining five small grossing films, or forty-six percent, represent characters with Asperger's. Of the six moderate-sized films, one character has highfunctioning autism and one character has classical autism. The other four films, or sixty-six percent, show characters with Asperger's. Of the eight high grossing films, two featured characters with high-functioning autism, two had characters with classical autism, and four, or fifty percent, contained characters with Asperger's. Fifty percent of the films with large audiences identify ASD. In those with a small size, though, eighty-two percent identify the character's disorder.

Audience Size and Employment. Two films feature characters without employment; one, I Am Sam (2001), had a large audience and the other, Quantum

Apocalypse (2010), had a small audience. Of the ten films featuring employed characters on the spectrum, five were in low grossing films, three were in moderate-sized films, and two were in films with large audiences.

Audience Size and Genre. In comedy, there was one film in the small and large audience subcategories. Of the eleven dramas, five had small audiences, four had medium levels of viewership, and two had large audiences. The two dramadies were in the small and medium subcategories. There were two small, one medium, and three large romantic films. The four thriller/horror/action films were split evenly between small audiences and large ones, with two in each group.

Audience Size and Inclusion. Of films that had large audiences, two were included just in school, one was included solely in the workplace, and two were included in both. There were two characters in the large audience group who were not included and two who had no context of inclusion. The films with medium-sized audiences were composed of two films that had only educational inclusion, three with school and workplace inclusion, and one movie that had unknown inclusion. There were three films with small audiences showing only inclusion in the workplace, two with school and workplace inclusion, three with characters who were not included, and three with unknown inclusion.

Audience Size and Physical Demonstrations. Three films with small audiences, two films with medium viewership, and three films with large audiences had characters without physical demonstrations of ASD. Of the seventeen films that do have physical demonstrations, eight had small audiences, four moderate ones, and five had large viewerships. The eight films with aggressive outbursts (and notable audience size) contained four characters from films with small audiences, three from medium, and one large audience.

Audience Size, Relationships, and Sexual Orientation. No films represented homosexual characters and a nearly equal number in each audience size showed those with no apparent orientation, a lower number of small motion pictures than anticipated based on the ratios of the audience size subcategories. Small films, though, did have the highest number of heterosexual characters and friendships represented. Large films were most likely to represent familial relationships and friendships.

Audience Size and Narrative Type. Of the eight films with large audiences, three have family narratives, three depict personal growth narratives of those without ASD, one has a recovery narrative, two are bildungsromans, and three do not fit into any subcategory.

Audience Size and Sensationalism. Half of the four films with high levels of sensationalism also have large audiences, which account for twenty-five percent of large grossing movies. In addition, the two with large audiences and high sensationalism are two of the earliest films. The other two films with high levels of sensationalism have small audiences. The rest of the large-grossing films have low sensationalism.

Audience Size and Agency. Characters on the spectrum in films with large audiences are predominantly shown as having high levels of agency; four of eight fall into this subcategory. Of the remaining four movies with large audiences, two portray moderate agency and two low. The six films with medium-sized audiences are made up of two with moderate agency and four with high amounts of agency. There were two movies with low agency, three with moderate, five with high agency, and one without enough agency to classify in the eleven films with small audiences.

Appendix F: Television Category Comparisons

Gender Comparisons

The following is a chart representing the numbers of males and females in key categories. The categories are in descending order as follows: diagnosis, race, social class, genre, inclusion, relationships, and agency.



Gender and Diagnosis. All three female characters were had Asperger's, though one was undiagnosed. The males were split as follows: four had high-functioning autism, five had classical autism and twelve had Asperger's. Five males were undiagnosed.

Gender, Race, and Class. Of the three characters depicted as working class, one was female and two were male; all three were white. The remaining two female characters were middle class, one of whom was black. Fourteen males were middle

class, three who were black and two were other races. The single upper class character was also male and white.

Gender and Genre. The three female characters with ASD were split into only two genres, drama, which contained two women, and science fiction, which had the third. Women accounted for seventeen percent of characters on the spectrum in drama and thirty percent of characters with ASD in science fiction. Like in film, comedy and dramady television programming only contained male characters on the spectrum. Children and family contained a male characters on the spectrum.

Gender and Inclusion. All of the female characters are included to the fullest extent for their age. The two adult female characters are included in both the workplace and were included in school and the adolescent female character on the spectrum is included in school. Women make up twenty-nine percent of those included in both the workplace and school and fourteen percent of characters included just educationally.

Gender and Physical Demonstrations of ASD. One woman with autistic spectrum disorder shows no physical demonstration of the condition, only eight percent of the characters who do not. Of the two who do show a physical demonstration, one has a physically aggressive outburst. Female characters make up about fifteen percent of physical demonstrations and seventeen percent of aggressive ones.

Gender, Relationships, and Sexual Orientation. The women on the spectrum in television are never portrayed as being in romantic relationships. Two of them are shown in both familial relationships and friendships and the third is represented as only being involved in work relationships. Male characters on the spectrum are seen across all four categories. The lack of romance in the lives of these three women extends to their orientation; none of them are shown to have any noted interest in sex and sexuality.

Gender and Agency. The three female characters have high levels of agency, twenty percent of those in this subcategory. Male characters make up the remaining eighty percent.

Race Comparisons

The chart below shows the breakdown of characters of different races compared with other categories in the following in that order: diagnosis, gender, class, employment, genre, inclusion, physical demonstrations, relationships, sexual orientation, sensationalism, and agency.



Race and Diagnosis. The four black characters in television were split between diagnostic groups. Half had Asperger's, including the only black female character, one had classical autism, and one character had high-functioning autism. The two

characters belonging to 'other' racial groups both had Asperger's and were male. There were two undiagnosed characters of colour who made up one third of the total undiagnosed characters. Of the seventeen white characters, three had highfunctioning autism (seventy-five percent of high-functioning autism), four had classical autism (eighty percent of classical autism), and ten had Asperger's (seventyone percent of Asperger's).

Race and Genre. Racially diverse characters were in all five genres on television. Half of comedies had a black or 'other' race character, one in each. Only one drama, the largest overall genre, contained a black character. Twenty-five percent, or one, of characters in dramadies was black. Two of the three science fiction programmes contained a black character on the spectrum. Children and family was not included in the racial breakdown as the only character with ASD was not human.

Race and Inclusion. Of the six characters with ASD who are black or an 'other' race, four are included to the fullest extent possible for their age group. Two who are student-aged are both included in school (about twenty-eight percent of individuals included in school) and two characters are included both in school and in the workplace (about twenty-eight percent included in school and the workplace). The remaining two characters fall into the unknown category; the boy in *Scrubs* (Lawrence, Hobert, & Zisk, 2005) is too young to be included and Kevin in *Eureka* (Cosby, 2006) is never shown in an educational context to suggest inclusion status.

Race and Physical Demonstrations of ASD. Five characters who are black or other did not have a physical demonstration of the condition, about forty-five percent of characters with no physical demonstration. One character of thirteen who had a physical demonstrations was black, Connor in *Degrassi* (Moore, 2001), and was among the six with aggressive outbursts.

Race, Relationships, Age, and Sexual Orientation. Three of the characters with ASD of colour on the spectrum are involved in romantic relationships. This includes the single black adolescent and two adult characters in the 'other races' subcategory. Two, the adolescent and one adult, are in heterosexual relationships

while the third has the only homosexual relationship represented. The only black adult does not demonstrate any sexual preference, but does interact in the sphere of family and friends. Two of the characters are too young for romance and are shown only in the context of family. The two 'other' adults, one black adult, and single black adolescent are depicted in friendships.

Race and Sensationalism. One of the black characters, Kevin in Eureka (Cosby, 2006), is portrayed as being highly sensational as he has savant level genius abilities in science and maths. The other four characters with high sensationalism are white. The other three black characters and two 'other' race characters have low levels of sensationalism.

Race and Agency. Of the three characters with low levels of agency, two of them are black. This indicates that not only are sixty-six percent of characters with little agency black, but also that half of the black characters have low agency. The other fifty percent of black characters and both characters of 'other' races have high amounts of agency.

Diagnosis Comparisons

Diagnosis and Genre. There are three characters with Asperger's and one with classical autism in comedies. Of the twelve dramas, three contained characters with high-functioning autism (all of whom are undiagnosed), two with classical autism, and six with Asperger's. The four dramadies are made up of three programmes with characters with Asperger's and one with classical autism. The three science fiction series contain one character with Asperger's and two with high-functioning autism. The single children and family show portrays a character with Asperger's.

Diagnosis, Family, and Social Position. The only character on the spectrum who seems to be a cause of familial problems has high-functioning autism. Of the three characters who are detrimental to the work and/or social lives of their parents, two have classical autism and one has Asperger's. There are six characters with ASD who come from nontraditional families, two from each of the three diagnostic subcategories, including two characters who are undiagnosed classified with high-

functioning autism and Asperger's, respectively. The only two to get married or have children are characters with Asperger's.

Diagnosis, Relationships, and Sexual Orientation. Twenty programmes show familial relationships, including three with high-functioning autism, five with classical autism who have no other kinds of relationships, and twelve with Asperger's. Eight series contain romantic relationships, all containing characters with Asperger's. The single homosexual character has Asperger's. Of the fourteen shows that depict friendships, two portray characters with high-functioning autism and twelve show characters with Asperger's. The two characters with 'other' kinds of relationships both have Asperger's. Outside of familial relationships, only two characters have high-functioning autism and none have classical.

Diagnosis and Narrative Type. There were five shows with family narratives, four of which portrayed characters with classical autism and one which showed Asperger's. The personal growth narratives of neurotypical characters presented two characters with high-functioning autism, one with classical autism. and one with Asperger's. The single recovery narrative depicted a character incorrectly diagnosed with Asperger's. The three bildungsroman programmes all contained characters with Asperger's. The majority of the series were uncategorised; two presented high-functioning autism, one had classical autism and ten portrayed Asperger's.

Diagnosis and Sensationalism. Of the five characters in highly sensational programmes, three contained characters with high-functioning autism, one had classical autism, and one showed Asperger's. The five series with moderate levels of sensationalism could be broken down into one with high-functioning autism, one with classical autism, and three with Asperger's. Fourteen characters, three with classical autism and eleven with Asperger's, were in shows that had low sensationalism, the vast majority of programmes. No characters with high-functioning autism had low levels of sensationalism.

Age, Diagnosis, and Agency. Of the three characters with low agency, two have classical autism and one has high-functioning autism, all three of whom are children. The following six characters have moderate agency: two with Asperger's,

one child and one adult; one has high-functioning autism, an adult; and three have classical autism, all children. The five characters with classical autism were children, none of whom had high levels of agency. The three adolescents, though, all of whom have Asperger's, have high levels of agency. Two children, both of whom also have Asperger's, have high amounts of agency. The remaining ten of fifteen characters with high levels of agency are adults, two of whom have high-functioning Asperger's and eight of whom have Asperger's and high levels of agency.

Audience Size Comparisons

The below chart indicates the trends in television programmes with moderate and large audiences, as there were no shows with small audiences. There are a total of nine shows with moderate sized audiences and fifteen with large audiences.



Audience Size, Relationships, Sexual Orientation, and Race. The single show which demonstrated a homosexual character with ASD, Saving Hope, had a moderately sized audience. Shahir Hamza is also one of only three characters of ethnicities that were neither black nor white. Of the other seven characters in moderately popular programmes, two did not demonstrate orientation, two were heterosexual, and three were two young. Of the sixteen with large audiences, five did not have demonstrated orientation, five were heterosexual, and six were too young.

Audience Size and Narrative Type. Moderate-sized series were as likely to be personal growth narratives for neurotypical characters as shows with large audiences, a higher proportion of medium shows than expected based on their total number. They were also more likely than anticipated to be uncategorized, while those with large audiences were statistically more represented in family narratives.

Audience Size and Sensationalism. Shows with moderate audiences were more likely than their large counterparts to have a character with high amounts of sensationalism, though in all other subcategories, the proportion was as anticipated based on the moderate to high ratio.

Audience Size and Agency. Expected subcategory ratios were observed in each category. Programmes with medium and large audiences were most likely to have characters with high levels of agency.