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**REPRESENTATION OF ASD MIND STYLES IN THREE CONTEMPORARY
NOVELS: A COMPARATIVE STYLISTIC ANALYSIS**

MA THESIS

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LIST OF ACRONYMS AND ABBREVIATIONS

APA	American Psychiatric Association
AS	Asperger's Syndrome
ASD	Autism Spectrum Disorder
DSM-4	The Fourth Edition of The Diagnostic and Statistical Manual of Mental Disorders
DSM-5	The Fifth Edition of The Diagnostic and Statistical Manual of Mental Disorders
<i>Marcelo</i>	<i>Marcelo in the Real World</i>
<i>The Curious Incident</i>	<i>The Curious Incident of the Dog in the Night-Time</i>
ToM	Theory of Mind

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ABSTRACT

This Thesis conducts a comparative stylistic analysis of *mind styles* within three novels featuring protagonists with AS: Mark Haddon's *The Curious Incident of the Dog in the Night-Time* (2004), Francisco X. Stork's *Marcelo in the Real World* (2009), and Jodi Picoult's *House Rules* (2010). The study identifies and compares the stylistic devices and linguistic strategies used by the authors to portray character *mind styles* with cognitive idiosyncrasies. Using both qualitative and quantitative methods, the research examines pragmatic failures such as literal interpretation and echolalia. The study compares the communication styles of Christopher, Marcelo, and Jacob, characters with AS. While they face common challenges, such as interpreting social cues, their distinct *mind styles* illustrate individual differences in navigating social interactions. Understanding these differences sheds light on the diverse experiences and *mind styles* of individuals with AS characteristics.

Results include prevalence of pragmatic failures, including literal interpretation and echolalia, among Christopher, Marcelo, and Jacob's *mind styles*. It underscores the distinct *mind styles* of each character and their struggles with figurative language and social cues. Overall, these insights contribute to a deeper understanding of individuals with AS in literary context.

Key words: *mind style*, Asperger's Syndrome, Theory of Mind, pragmatic failure, *The Curious Incident of the Dog in the Night-Time*, *House Rules*, *Marcelo in the New World*.

INTRODUCTION

Introduced by Fowler (1977), the concept of *mind style* refers to the unique and characteristic ways individuals perceive, process, and interpret information, reflecting their cognitive tendencies and communication preferences. Initially the concept primarily focused on fictional *mind styles*, involving the unique linguistic expression of a fictional character's mind, creating an impression of their worldview through the consistent use of certain linguistic structures. Subsequently the concept has expanded to become applicable to real, empirical individuals. Under this broader interpretation, *mind style* encompasses the individual's cognitive framework, information processing strategies, and expressive modalities, shaping how they engage with the world and interact with others. *Mind style* then refers to the unique linguistic expression of an individual's mind, creating an impression of their worldview through the consistent use of certain linguistic structures. These structures collectively shape the worldview depicted by characters or narrators into a distinct pattern, offering insight into their cognitive and perceptual framework.

Boase-Beier (2003), and Yazdanjoo, Sabbagh, and Shahriari, (2016), Stockwell (2002), among others, have been building upon Fowler's original formulation of the concept, which has therefore evolved over the decades. Boase-Beier (2003) has defined *mind style* as a linguistic manifestation of cognitive states, encompassing both conscious and unconscious elements of the mind. It refers to consistent stylistic patterns in language, including figurative language and grammatical choices, reflecting individuals' unique cognitive and stylistic traits. This concept serves as a crucial framework in linguistics and literary theory, facilitating the systematic examination of the intricate relationship between language and mental processes.

While extensive research (Semino 2014; Yazdanjoo, Sabbagh, and Shahriari 2016; Nuttall 2015), has explored the *mind styles* of neurotypical characters, there remains a notable gap in understanding the distinct *mind styles* exhibited by characters within the autistic spectrum. The unique and often divergent cognitive patterns Autism Spectrum Disorder characters exhibit are particularly well-suited for the analysis of *mind style*. The current MA Thesis will carry out a comparative stylistic analysis of three novels (the first of which was already examined in my BA paper) whose main characters are affected by Asperger's Syndrome, and as a consequence display of idiosyncratic *mind styles*: Mark Haddon's *The Curious Incident of the Dog in the Night-Time* (2004), Francisco X. Stork's *Marcelo in the Real World* (2009), and Jodi Picoult's *House Rules* (2010).

Previous studies have analysed some aspects of the aforementioned novels. Semino (2014), for example, has examined *mind style* of Christopher, the protagonist of Haddon's novel. Semino noted key elements of his *mind style* being simple vocabulary, frequent use of 'and' at the start of sentences, and difficulty with metaphorical language. Eilertsen (2022), and George (2023) have explored different aspects of Jacob's *mind style*, the protagonist of Picoult's novel. Eilertsen (2022) analysed

Jacob's AS characteristics through repetitive behaviour, hypersensitivity, and linguistic impediments for a deeper understanding of the diagnosis. Similarly, George (2023), noted that Jacob's *mind style* is characterized by a lack of understanding of figurative language, which creates difficulties in social interactions. While characters in both *The Curious Incident* and *House Rules* struggle with metaphorical expressions, their deviant *mind styles* have not previously been compared for accuracy and potential meaning. Additionally, Marcelo in the Real World has never been analysed before, even as an individual work. Thus, a notable gap exists in the literature regarding a comparative analysis of these novels. Most of these studies are in the cognitive poetics tradition: cognitive poetics assumes that there is a fundamental continuity between the real world and fictional ones. According to Stockwell (2002), a prominent exponent of cognitive poetics, our language and literary expressions are intertwined with our cognitive and embodied experiences, thus transcending traditional literary analysis that typically regarded literature as a separate sphere of experience, by viewing fictional minds as reflections of real minds, cognitive poetics establishes a connection between literary representation and human cognition, turning scientific and medical facts about Asperger's Syndrome into relevant tools for examining literary characters' idiosyncratic *mind styles*.

The **subject** of the Thesis is *mind style* of the main characters who have Asperger's Syndrome in the three novels: Mark Haddon's *The Curious Incident of the Dog in the Night-Time* (2004), Francisco X. Stork's *Marcelo in the Real World* (2009), and Jodi Picoult's *House Rules* (2010).

The **aim** of the Thesis is to identify and compare the stylistic devices, and linguistic strategies employed by the three aforementioned authors to portray characters with cognitive idiosyncrasies. By examining the cognitive processes, information processing mechanisms, and characteristic of autistic characters, this research endeavours to distinguish the nuanced variations in *mind style* among autistic characters. Moreover, this study seeks to explore how much *mind style* variations impact on various aspects of autistic characters' lives, including social interaction, communication, learning, and daily tasks and commitments.

In order to achieve this aim, the following **objectives** have been set:

1. To review the scientific literature related to *mind style*, the medical knowledge on ASD and the existing literary criticism of the selected novels;
2. To identify, classify and analyse the most prominent stylistic features of *mind styles* in the novels;
3. To interpret and compare the identified features of *mind style* in the selected novels, drawing conclusions about the differences and similarities among them and the way they contribute to the overall aesthetics and interpretation of the novels themselves.

The Thesis will mainly focus on aspects of *mind style* of fictional characters portraying Asperger Syndrome. By examining the cognitive processes of *mind styles* within different literary

works, this research strives to distinguish how characters with the same clinical type of mental disorder, are portrayed through different speech patterns. Through an in-depth exploration of *mind style* variations in characters, this Thesis will additionally explore the cognitive diversity inherent in the autistic population, thus challenging stereotypical views that tend to level them to an indistinct group of people.

This Thesis also seeks to explore whether the literary depictions of Asperger's Syndrome correspond to what is scientifically known about this medical condition. Thus, the findings of this Thesis can clarify the key aspects of idiosyncratic *mind styles* in fictional narratives, ultimately enhancing our understanding of the intricate relationship between language, cognition, and literary expression. Further positive ramifications of the study are: advancing general understanding of autism spectrum conditions and promoting inclusivity and support for individuals across the spectrum: contributing to the thriving agenda of *mind style* research.

Based on initial assumptions about the protagonists of the novels, the following **hypothesis** will be explored:

The portrayal of AS characters in the chosen novels will vary in terms of mind style depiction, linguistic patterns and narrative representation. Such variation reflects the authors' unique perspectives on the subject, as well as the varying structural demands of the plot and genre of the novels.

The general outline of the Thesis is as follows: the introduction delves into the concept of *mind style* and its relevance in the analysis of idiosyncratic characters in literature. The literature review overviews formerly published works on *mind style* such as Fowler (1977), Leech and Short (2007), Boase-Beier (2003) and examines different approaches to *mind style*, Asperger's Syndrome, abnormal speech patterns in AS individuals, along with previous research on the selected novels.

The theoretical and conceptual framework details how the analysis was conducted, incorporating both qualitative and quantitative research methods to achieve the objectives. Moreover, data analysis of *style markers* collected from the novels discusses the results of the compiled research and draws conclusions regarding Christopher's, Marcelo's, and Jacob's most notable style markers in relation to Asperger's Syndrome features.

I. NEURO(A)TYPICAL MIND STYLES

1.1 Mind Style

This dissertation investigates the concept of *mind style* in fiction, a topic I started exploring in my bachelor's Thesis (Kurbanova 2022). Coined by Fowler (1977), the term *mind style* stands for “any distinctive linguistic representation of an individual mental self” (p. 103) resulting in “impression of a worldview” formed by consistently using certain structural options. Such options jointly shape the fictional world filtered by characters or narrators into a specific pattern (p. 76). Thus, *mind style* presents an individual's unique linguistic representation of their mental self, providing a lens through which their worldview is portrayed and expressed. It should be noted that Fowler refers to real minds but takes Extracts for analysis from fictional characters, such ontological distinction between real and fictional minds would appear in later studies by other scholars.

Some decades later, Boase-Beier (2003) concisely defines *mind styles* as “linguistic style that reflects a cognitive state” (p. 254). The scholar delves deeper into the structure of mind style, arguing that it carries unconventional personal features, marked by conscious and unconscious aspects of the mind. *Mind style*, in essence, denotes a cognitive state enacted by consistent stylistic patterns in language use. It encompasses a range of semantic (e.g., figurative language), lexical (e.g., epithets), grammatical and structural choices encapsulating the distinctive mental and stylistic fingerprints that individuals leave on their linguist output. Overall, *mind style* serves as a critical concept in linguistics and literary theory, representing the intricate interplay between an individual's cognitive imprint and its corresponding linguistic expression. It functions as a framework through which the intimate relationship between language and the inner workings of mental processes is brought to the fore and can be systematically examined.

Especially in Fowler, the seemingly abrupt transition from fictional characters to real individuals suffering from this spectrum of conditions is justified in light of one of the key assumptions of cognitive poetics. Namely the existence of a fundamental continuity between the real (physical, psychological) and the fictional (semiotic) world. In cognitive poetics, an umbrella term referring to “any approaches to literary craft that take models from cognitive science as their descriptive methods” (Stockwell 2002, p. 8), the use of literary texts for empirical data aids to explore *mind style* both in its cognitive and social implications and in its stylistic texture. Through the multidisciplinary approach of cognitive poetics, which combines linguistics, literary studies and (social) psychology, researchers offer new insights into the portrayal of minds in fiction and the cognitive processes involved in literary interpretation. Cognitive poetics is indeed premised on the idea that our language and literary expressions are deeply intertwined with out cognitive and embodied experiences (Stockwell 2002). Cognitive poetics, then, transcends the traditional focus on the author, text, and reader triangle, offering a radical re-evaluation of the entire process of literary

activity by assuming that fictional minds are crafted as reflections of real minds. In this way, it establishes a bridge between literary representation and human cognition. Consequently, literature is seen as a form of art deeply connected to patterns emerging from cognitive psychology and linguistics. Within this epistemological framework, the inclusion of scientific and medical facts about AS becomes a pertinent tool in examining idiosyncratic *mind styles* of the literary characters.

Mind style should be distinguished from some interrelated yet separate concepts, especially point of view (perspective) and ideological point of view. As regards the former, Boase-Beier (2003, p. 255) bases the distinction between the speech style of the author (point of view) and that of the character (*mind style*). Whilst *mind style* reflects a character's cognition and personal emotions, point of view is concerned with the way events are conveyed to the reader depending on deictic and pronominal choices (e.g., first-person, third-person), thus contributing to the perceived narrative voice, e.g. homodiegetic or heterodiegetic, in Genette's taxonomy (1980). The collective counterpart to *mind style* is a third concept known as "ideological point of view" (Semino 2002, p. 97). Ideological point of view encapsulates elements of worldviews rooted in social, cultural, religious, or political origins. Individuals are prone to sharing these perspectives with others within similar social, cultural, religious, or political groups. Such ideological points of view encompass beliefs about humanity's place in the Universe, notions of justice, moral judgments, attitudes toward diverse social or ethnic groups, and more.

Point of view (perspective), ideological point of view and *mind style* provide complementary frameworks to analyse the structure of narratives and character portrayal in literature. Understanding their differences and overlaps allows for a more nuanced examination of how the author crafts the narrative and represents the characters' thoughts and perspectives. Even seemingly ordinary pieces of writing subtly guide readers toward a specific *mental set* (Leech and Short 2007, p. 188), thus underscoring the ubiquity of *mind style* well beyond fictional or literary contexts.

Building upon the foundational work of Fowler, Palmer (2004) stresses the significance of literature as a powerful medium for presenting fictional minds (p. 5). He emphasizes that when reading fiction, it is unavoidable to engage with the *mind style* of a character, since these often act based on motivations and intentions that may not be explicitly stated. Indeed, understanding fictional minds can contribute to the development of *theory of mind* (ToM henceforth) in psychology. Palmer defines ToM as

...the term used by philosophers and psychologists to describe our awareness of the existence of other minds, our knowledge of how to interpret our own and other people's thought processes, our ability to make sense of other people's actions by understanding the reasons for those actions. (2011, p. 208)

ToM, then, involves a range of mental operations: attributing a specific mental state to someone based on their observable behaviour, interpreting our own feelings, understanding complex emotional

states through limited descriptions, predicting audience responses in creative works, navigating social situations, and more.

According to Baron-Cohen (1990, p. 83) ToM typically develops during early stages of life; this process, however, fails to develop to the same extent in individuals on the autistic spectrum. Their inability to appropriately recognize the thoughts of others has been referred to as *mind-blindness* (Baron-Cohen 1990, p. 88). Therefore, lack of a well-developed ToM brings about an inability to recognize – and appropriately respond to – figurative language, such as metaphors, idioms, irony, jokes. This inability, in turn, is bound to affect the behaviour of others in many communicative situations. Thus, while ToM deficits may contribute to difficulties in understanding figurative language for some individuals on the autistic spectrum, multiple additional factors are involved, including literal thinking, language processing, executive functioning, and social communication challenges. Each individual on the autism spectrum exhibits a distinct set of characteristics and behaviours, and their ability to understand figurative language may vary based on a combination of these factors (National Institute of Mental Health 2022).

Even though linguistic choices always hint at a *mental set*, (Leech and Short 2007, p. 151), exploring the *mind style* of idiosyncratic characters can be more promising and rewarding than focusing solely on neurotypical characters perceived as the “norm”. Researching *mind style* in idiosyncratic characters demands critical and discerning thinking, leading to a more intellectually enriching analysis. The scholars engaged in this research area justify their endeavour by providing several reasons, such as the richer complexity of distinctive linguistic styles, a challenge to stereotypes and conventions, and the exploration of marginalized perspectives. Idiosyncratic characters often hold unique thought processes and unconventional perspectives channelled through linguistic patterns. Analysing their *mind style* provides a deeper understanding of the complexity and diversity of human cognition and enhance reader’s appreciation for narratives developing in unconventional ways. The depth, complexity, and diversity of storytelling itself is likewise enhanced by the literary representation of idiosyncratic characters.

In light of these arguments, it is understandable that the majority of research tends to concentrate on unconventional *mind styles*, Leech and Short ([1981] 2007), for example, explore Benjy’s “childlike vision” in Faulkner's *The Sound and the Fury* with reference to a passage describing a golf game. Focusing on the general structure of the passage, its lexis, syntax, and textual relations, Leech and Short uncover recurring patterns in Benjy’s speech and acknowledge his *mind style* as a deviant one (pp. 162-166). Benjy's language is characterized by extreme lexical simplicity, with a preference for monosyllabic and concrete words (e.g. “fence”, “grass”, “tree”). The world he describes appears simple and dominated by sight over the other senses. Lexical repetition is accompanied by a low type/token ratio where a limited set of words account for the majority of

occurrences. Importantly, lexical repetition and the low type/token ratio cue Benjy's limited vocabulary size, which is in turn an indication of his cognitive underdevelopment. Textual relations reinforce the childlike nature of Benjy's speech, showcasing his inability to synthesize information for the reader's benefit, pronouns are used without clear reference, and clauses lack clear distinctions between major and minor information. The overall aesthetic impression the reader gets is that of a rudimentary ordering of direct sensory impressions. Despite the limitations of Benjy's language, Leech and Short acknowledge its poetic qualities, especially evident in phrases that capture a pristine awareness of things.

Benjy's syntax likewise exhibits a degree of naïve, childlike simplicity, with short sentences and a prevalence of simple and compound structures strung together paratactically. Leech and Short note that transitive verbs are often used as if they were intransitive, and therefore follow an unconventional pattern. The very same phenomenon was noticed by Halliday in Golding's *The Inheritors*, where normally transitive verbs are employed intransitively when representing the mindstyle of Neanderthal people, e. g., "he grabbed at the branches" (Halliday 1971, pp. 325-360). The lack of transitive verbs in Neanderthal's speech is evidence of their lack of understanding of cause-effect relations. It is also a cause of their inability to affect and control the environment as the Sapiens do, leading the latter species to eventually replace the former. Overall, while deviant and underdeveloped in terms of lexical breadth and syntactic complexity, Benjy's *mind style* expresses unique and poetic features that contribute to the richness and memorability of the narrative.

Semino and Swindlehurst (1996) examine a differently atypical *mind style* by focusing on Bromden, a Native American and the homodiegetic narrator of Kesey's novel *One Flew Over the Cuckoo's Nest*. The researchers explore Bromden's speech, emphasizing the creation of a distinct *mind style* that involves a "mechanistic world view" conducive to an odd perception of events. Bromden's altered state of mind and his possibly unreliable narration is made manifest from the very opening page. Notably, Bromden uses language creatively drawing on metaphorical connections (pp. 148-165) and presenting events as "facts" that may be subjective or distorted by his unique perspective. As a consequence, readers are challenged to discern between reality and imagination.

In particular, Bromden's language consistently draws on conceptual metaphors related to machines. Semino and Swindlehurst identify two dominant metaphorical systems: "Minds/People Are Machines" and "Institutions Are Machines." Examples include phrases like "running out of steam" and "a well-oiled mechanism." These metaphors constitute a core aspect of Bromden's *mind style*, providing a lens through which he interprets and communicates his experiences. While he is highly expressive in the domain of machinery, he lacks lexical diversity when discussing the inner workings of people and society. During the narrative, we learn that Bromden studied electronics and

worked as an electrician's assistant during World War II, linking his fascination with machinery to past traumatic experiences.

Another notable study explored Holden Caulfield's *mind style* in Salinger's *The Catcher in the Rye* (Yazdanjoo, Sabbagh, and Shahriari 2016). The research analyses the linguistic patterns and thematic signals in Holden's speech and identifies evaluation-laden keywords such as "bastard", "phony", "lousy" and colloquial clusters such as "if you want to know", "want to know the truth", and "you want to know the", that shed light on Holden's discontent and critical stance towards various aspects of society and cultural norms. Overall, Holden's *mind style* reflects his rebellious teen personality and his transition to adulthood (p. 5).

Nuttall (2015) shows how the main character of Richard Matheson's novel *I Am Legend* constructs vampires as mindless quasi-humans lacking ToM. This is achieved through a set of stylistic choices (Nuttall, 2015, pp. 27-36): 1. Intransitivity shows that vampires are not actively involved in actions. It focuses readers on specific parts of actions by not mentioning the goals. For example, in a scene with "the stake and mallet", the focus might be on the stake being used, rather than who is using it or why. 2. Meronymic agency involves treating parts of something as if they are separate entities. For instance, when talking about a woman's body, specific parts like "eyes", "chest", or "hands" are mentioned as if they are individual objects. 3. Indefinite naming, collective reference to the vampires as "they", signalling their collective mental state.

Taken together, the reviewed works delve into the minds of characters that possess unconventional or non-traditional ways of perceiving and consequently interpreting the world. They do so by analysing a wide range of features: metaphors, lexis, syntax, transitivity choices, lexical clusters, as well as the combined effects of these choices.

1.2 Autism Spectrum Disorder

Autism Spectrum Disorder (ASD henceforth) encompasses a spectrum of neurodevelopmental conditions, and individuals within this spectrum commonly enact distinct ways of thinking, perceiving, and interacting with the world. The unique, and often divergent cognitive patterns characters with ASD exhibit are therefore particularly well-suited for the analysis of *mind style*. This section will provide an overview of what we actually know about ASD by discussing medical definitions and clinical findings to appropriately contextualise the discussion of *mind style* patterns.

Asperger's Syndrome (AS henceforth) was first described by Austrian paediatrician Hans Asperger in 1944 (Hosseini and Molla 2024), and later was included in the Fourth Edition of *The Diagnostic and Statistical Manual of Mental Disorders* (1994, p. 75, DSM-4 henceforth) as a distinct diagnostic category. The American Psychiatric Association (APA henceforth) notes that the disorder is characterized by a severe and sustained impairment in social interactions and by the development of restricted, repetitive patterns of behaviour, interests, and activities, but otherwise it causes no

clinically significant delays in language or cognitive development (p. 75). In the Fifth Edition of *The Diagnostic and Statistical Manual of Mental Disorders* (DSM-5 henceforth) published in 2013, the diagnostic criteria for autism were revised, and AS, along with other pervasive developmental disorders, was subsumed under the umbrella term ASD. ASD includes conditions :“...previously referred to as early infantile autism, childhood autism, Kanner’s autism, high-functioning autism, atypical autism, pervasive developmental disorder not otherwise specified, childhood disintegrative disorder, and Asperger’s disorder.” (APA p. 53). Moreover, ASD diagnoses depend on behaviour patterns already displayed in childhood, characterized by a range of challenges related to social interaction and communication: “ASD is diagnosed only when the characteristic deficits of social communication are accompanied by excessively repetitive behaviours, restricted interests, and insistence on sameness” (p. 31). ASD diagnosis typically involves a comprehensive assessment conducted by a multidisciplinary team of healthcare professionals. The process of diagnosis may include cross-cutting symptom measures, and severity measures (p. 733). Cross-cutting symptom measures refer to assessment tools or scales that are designed to evaluate symptoms that may occur across various mental health disorders or conditions. These measures help to identify and assess symptoms that are not specific to a particular diagnosis but may be present in multiple mental health disorders. Such measure might assess mood, sleep patterns, anxiety, or irritability, allowing clinicians to evaluate a broad range of symptoms irrespective of a specific diagnosis. On the contrary, severity measures are tools or scales used to assess the intensity, magnitude, or degree of symptoms associated with a particular mental health condition. These measures help to determine the severity of a person's symptoms, providing valuable information for diagnosis, treatment planning, and monitoring progress over time. In the context of ASD, severity measures might assess the level of impairment in social communication, restricted interests, and repetitive behaviours. Severity measures are disorder specific and correspond closely to the criteria that constitutes the disorder definition (p. 733) that helps to assist in classifying individuals into different levels based on the extent of support they require. Level one is classified as patient “requiring support”, level two as patient “requiring substantial support”, and level three as patient “requiring very substantial support”. Hence, while certain individuals with ASD may need assistance in daily life and activities, others, such as those as formerly known as AS can quite independently accomplish daily tasks.

ASD is a spectrum disorder, meaning that it can manifest in each individual with varying degrees of severity. Symptoms that must be present in the early developmental period (although sometimes may be masked) include (2013, p. 50):

- 1. Repetitive motor movements, object use, or speech patterns**, such as simple motor stereotypes, arranging toys in a line, repeating phrases.

2. Insistence on sameness, inflexible adherence to routines, or ritualized behaviours; for example, experiencing extreme distress with minor changes, difficulties during transitions, rigid thought patterns, specific greeting rituals, or a need for consistent routes or daily food.

3. Highly limited and intense interests, such as strong attachment to unusual objects or preoccupation with specific, narrowly focused interests.

4. Hyper- or hyperreactivity to sensory input or a heightened interest in sensory aspects of the environment, including apparent indifference to pain or temperature, adverse reactions to certain sounds or textures, excessive smelling or touching of objects, and visual fascination with lights or movement.

With the elimination of AS as a specific diagnosis, APA (2013) acknowledges the wide range of symptoms and severity levels that individuals may experience within the three severity levels already discussed. Although the symptoms of AS are now included under the broader ASD terminology, the main characters in the three novels constituting the data - *The Curious Incident of the Dog in the Night-Time*, *House Rules*, and *Marcelo in the Real World* - are specifically described as having AS.

AS can be referred to as a form of ASD without language or intellectual impairment, characterized by a range of social, communicative, and behavioural challenges. According to the APA (2013, p. 50), individuals with AS exhibit continuing challenges in social communication and interaction across various situations. This table outlines how early developmental symptoms of AS manifest in childhood and how these characteristics continue to affect individuals into adult life (APA 2013):

Table 1. Challenges in social communication and interaction in individuals with AS

Early Developmental Symptoms	AS Characteristics in Adult Life
1. Lack of social-emotional reciprocity, meaning that the patients with AS often fail to recall and understand the feelings of others.	1. Continued difficulty in forming and maintaining personal relationships, often resulting in social isolation.
2. Failure in enacting and understanding non-verbal communicative behaviours, such as lack of body language and eye contact.	2. Persistent challenges with non-verbal communication, such as avoiding eye contact and not understanding body language or facial expressions.
3. Failure in developing, maintaining, and understanding relationships, such as adjusting their behaviour accordingly to social context.	3. Difficulty adapting behaviour to suit different social contexts, often leading to misunderstandings and difficulty in workplace or community settings.

Thus, individuals with AS often exhibit challenges in engaging in social interactions that involve a reciprocal exchange of emotions and understanding due to their underdeveloped ToM. They may struggle to recognize and respond appropriately to the emotions and feelings of others. For

instance, they might find it difficult to empathize with a friend's joy or understand when and why someone is upset. Moreover, because AS affects the understanding of nonverbal communication such as body language, facial expressions, and eye contact, individuals may struggle with interpreting and using these nonverbal cues effectively. Ultimately, these behavioural patterns can thwart the development of meaningful connections between individuals with AS and both neurotypical individuals, and even with other individuals with ASD.

1.2.1 Abnormal speech patterns in Asperger's syndrome individuals

Abnormal speech patterns in individuals with AS are distinctive characteristics that contribute to the unique communication profile associated with ASD. Even though ASD is not conducive to language or intellectual impairment, AS individuals often exhibit distinctive language patterns. Vogindroukas and colleagues (2022) argue that AS individuals showcase a number of atypical language patterns related to pragmatic impairment:

1. Inappropriate Language Behaviour: AS individuals often struggle with providing comments or asking for information in social situations. They may exhibit verbosity, by using excessive amount of words or unnecessary detail. Resulting in irrelevant information, causing them to lose track of the main point or becoming disengaged from the conversation (Mody and Belliveau 2013, as cited in Vogindroukas et al. 2022, p. 2372).

2. Literal Interpretation: people with AS may struggle with understanding figurative language or expressions. This can lead to challenges in comprehending metaphors, sarcasm, or idiomatic expressions commonly used in everyday communication. Such deficiency might cause difficulties and misunderstandings in daily life since our conceptual system is largely metaphorical (Lakoff and Johnson 2003 [1980], p. 124).

3. Domain-specific vocabulary: due to often displaying a deep knowledge of specific subjects of interest, individuals with AS may demonstrate an extensive vocabulary. Fowler (1991, p. 69) refers to this phenomenon as overlexicalisation, occurring when an individual possesses an unusually large number of specialised lexical items in topics of their interest. The technicality of domain-specific vocabulary leads AS individuals to exhibit an overly formal and precise way of speaking, especially when compared to their neurotypical peers. As a result, individuals may engage in verbose, detailed, or pedantic speech, as they often provide excessive information on a particular topic of interest.

4. Monotone or Atypical Prosody: individuals with AS often exhibit a monotonous or flat intonation in their speech. As a consequence, the individual's speech sound robotic or lacking in emotional expression. Importantly, the communication is further hampered by the fact that some grammatical information, at least in English, is realized prosodically (e.g., distinguishing

between “record” as a noun vs. “record” as a verb, or rising and falling intonation for questions vs. statements).

5. Difficulty with Social Pragmatics: challenges may arise in understanding and mastering social pragmatics: such as social cues. Nonverbal cues such as facial expressions, body language and tone of the voice may be particularly challenged for AS individuals to interpret.

6. Echolalia (repetition): as part of the repetitive behaviour associated with AS, individuals might overuse certain phrases or language structures in conversation. Often occurring as both coping and copying mechanism, it involves the repetition of phrases or sentences, either immediately after hearing them (immediate echolalia) or later on. Individuals may exhibit repetitive language in various forms such as repetition of words or phrases heard from others, scripting (repeating lines from movies, books, or TV shows) (APA 2013).

Comprehending these atypical speech patterns is crucial for gaining a glimpse into the idiosyncratic *mind styles* of characters with AS. It is important to note that there are no identical *mind style* patterns: some individuals might lack certain aspects that the others do not. Nevertheless, incorporating this checklist into analytical framework will serve as a valuable component of the methodology, drawing the analyst’s attention to specific patterns and *style markers*.

1.3 Previous research on the novels analysed

The novels chosen for the analysis are Mark Haddon’s *The Curious Incident of the Dog in the Night-Time* (2004), Francisco X. Stork’s *Marcelo in the Real World* (2009), and Jodi Picoult’s *House Rules* (2010). These novels have captivated readers and scholars alike, sparking a wealth of critical engagement. The selected novels for analysis vary in terms of how they present AS, yet they all grant access to the internal worlds of the characters, which is why they were chosen for further analysis and stylistic comparison of the main character’s idiosyncratic mindsets.

1.3.1 *The Curious Incident of the Dog in the Night-Time*

Mark Haddon’s *The Curious Incident of the Dog in the Night-Time* (2003, *The Curious Incident* henceforth) revolves around Christopher Boone, a 15-year-old boy with AS living in England with his father. The novel’s storyline follows Christopher’s investigation into the murder of a neighbour’s dog, a quest that leads to the revelation of hidden family secrets. Through this journey, the novel portrays Christopher’s unique cognitive processes and behavioural traits, highlighting both his strengths and the difficulties he faces in daily life due to his condition.

Christopher’s obsession with discovering the truth behind the crime scene could be considered a coping mechanism. In Christopher’s case, his obsession with solving the mystery may serve as a way for him to regain a sense of control and order in a world that he finds confusing and overwhelming. By focusing on the investigation, he may feel more in control of his surroundings and better able to navigate the complexities of social interactions and emotional situations. Overall, while

his obsession may present challenges, it could also serve as a coping mechanism to help him navigate the challenges of his environment.

While the novel does not explicitly label Christopher's condition, Anggreini and Manugeran (2019, pp. 114-116) provide evidence suggesting that Christopher has AS. They point out his several characteristics of AS, such as social challenges, such as his withdrawal from social settings, difficulty in both verbal and non-verbal communication, and inability to interpret social cues or demonstrate empathy and sympathy.

Christopher's idiosyncratic *mind style* has received considerable scholarly attention: Johansson (2008), Semino (2014), Abdulla (2016), Kurbanova (2022) explored various aspects of the protagonist's *mind style*. Johansson (2008) explores humorous elements stemming from Christopher's *mind style*, with the emphasis of such style markers as difficulties with *give and take* in conversation, literal interpretation of language, straightforwardness due to lack of empathy. Semino (2014) adds to the list other key elements of Christopher's *mind style*, including the simplicity of the vocabulary, and the use of coordination in sentence structure. Christopher's restricted number of words leads to several misunderstandings: for example, he fails to understand what single/return means when referring towards to train tickets. Christopher's extensive use of coordination, marked by a predominant use of "and" at the beginning of a sentences, cues its spoken origin and more importantly is reminiscent of child-like speech. Semino draws attention to the similarities between the *mind styles* of Benjy in Faulkner's *The Sound and the Fury* (Leech and Short 1981) and Christopher due to their frequent use of basic conjunctions such as "and" and "because". Interestingly, Christopher's vocabulary and grammar advance when he mentions topics of particular interest for him: on these occasions, his sentences are longer and feature a number of relative clauses. Semino also points out Christopher's difficulty in understanding figures of speech such as metaphors: in several instances, he fails to understand metaphorical expressions such as "I'm going to hit the hay", "it's brass monkeys out there".

Abdulla (2016) builds on Semino's (2014) observation on Christopher's simplified, underlexicalized speech by focusing on verb choices to explore Christopher's *mind style*. In particular, he notices that Christopher mainly employs material process verbs (occurring in total of 458 times) such as "arranged", "bent down", "bet", "borrow", "break". Material process verbs are more basic and easier to learn compared to mental (262 occurrences), relational (43 occurrences), verbal processes (101 occurrences), which are unsurprisingly less frequent, as shown by the number of occurrences reported in brackets. Moreover, Abdulla notes the prevailing use of concrete nouns in comparison with abstract ones, seemingly due to the fact that physical objects lend themselves to perception and are therefore more accessible to him. Indeed, Christopher rarely uses abstract nouns, except for those referring time, medical terms and qualities.

In my previous work (Kurbanova 2022), I examined several key aspects of Christopher's *mind style* in *The Curious Incident*. These included conjunctions and transitive verbs that were noted to be the most salient aspects of Christopher's *mind style*. Transitive verbs were classified by process types into four main categories: *material process*, *verbalization process*, *mental process*, and *relational process*. Characterized by a reliance on material process transitive verbs and a relative scarcity of relational process verbs. This linguistic pattern underscores his focus on concrete actions and his difficulty with abstract concepts, aligning with the cognitive profile of individuals with AS. Conjunctions were also a significant aspect of Christopher's *mind style*, with coordinating conjunctions being the most prevalent. This frequent use of conjunctions indicates his difficulty in distinguishing important details from unimportant ones, understanding cause and effect, and constructing complex sentences.

However, there are still areas left to explore in Christopher's speech. The research will delve into aspects of pragmatic failure, which were not covered in the initial study. Pragmatic failures such as literal interpretation in Christopher's language could reveal more about his social communication challenges, including difficulties in interpreting implied meanings and conversational norms. Echolalia, or the repetition of others' speech, might further illustrate how Christopher processes and uses language in social contexts.

1.3.2 House Rules

Like *The Curious Incident*, Picoult's *House Rules* (2010) is a crime novel with an autistic main character whose *mind style* is more often analytical, therefore more suitable for solving of a crime scene. The novel follows the life of 18-year-old Jacob Hunt, an individual with AS and who therefore seems to struggle in communicating himself to others. Jacob's passion for forensic analysis unjustly leads him to become a prime suspect of a murder. The novel explores the challenges faced by Jacob and his family as they are seeking justice while dealing with the social and emotional aspects of living with an individual with AS. Justice, understanding, and the impact of neurodiversity on family dynamics are the key themes explored by this novel.

Given that the novel portrays the medical conditions of actual individuals, the author faced scrutiny and critique for its depiction of ASD characteristics, sparking concerns and discussions within literary and neurodiversity communities regarding the representation of individuals on the autism spectrum. For instance, Harrison and Damodharan (2012, p. 73) have described the representation as excessive at times, because Picoult seemed to compile a variety of autistic traits and attributed them all to Jacob, thus creating the impression of a pathological assemblage of characteristics. Oyeboode (2004, p. 140) refers to such scheme as *amplification of deviance*, a technique whereby authors exaggerate their characters' mannerisms, behaviour, speech or experience to make them more memorable or effective. Jacob's behaviour is actually a fictional combination of

real behaviours, with specific behaviours being embellished to enhance storytelling. Nonetheless, the indisputable fact remains that Jacob exhibits many AS characteristics, such as hyper fixation on a specific topic, difficulties in communicating in both words and body language, as well as hypersensitivity and repetitive behaviour.

Jacob's idiosyncratic *mind style* has been researched by Suryandari and Sutrisno (2018), Eilertsen (2022), and George (2023). They explored different aspects of the protagonist's *mind style*. Suryandari and Sutrisno (2018) have focused on pragmatic failures in understanding other speakers and acting accordingly. Pragmatic failures refer to breakdowns in communication that occur due to misunderstandings in the use of language within a specific social or cultural context. These scholars classify the pragmatic failures observed in Jacob's speech into thirteen categories (p. 227). These comprise:

1. **Sarcasm:** the use of irony to mock or convey contempt, often saying the opposite of what one means.
2. **Idioms:** phrases with meanings that are not deductible from the individual words, culturally specific.
3. **Common Phrase:** widely recognized expressions that convey specific meanings
4. **Metaphors:** figures of speech, where a word or phrase is applied to an object or action that it does not literally denote to imply a resemblance.
5. **Hyperbole:** exaggerated statements or claims not meant to be taken literally.
6. **Joke:** a statement or story with a punchline intended to make people laugh.
7. **Pedantic Speech:** overly concerned with formal rules or details, often to show of knowledge or correct others.
8. **Words with Multiple Meanings**
9. **Violation of Conversational Maxims** (Grice 1975):
 - 9a. **Maxim of Quality:** Do not provide false information.
 - 9b. **Maxim of Quantity:** Provide the right amount of information.
 - 9c. **Maxim of Relation:** Be relevant.
 - 9d. **Maxim of Manner:** Be clear and orderly.
10. **Indirect Speech Acts:** statements that imply a different meaning than the literal one, often used to make requests or suggestions subtly.

Eilertsen (2022) analyses Jacob's AS characteristics through repetitive behaviour, hypersensitivity, and linguistic impediments for a deeper understanding of the diagnosis. Lastly, similarly to Suryandari and Sutrisno, George (2023, p. 9) notes that Jacob's *mind style* is characterized by a lack of understanding of figurative language, noting the subsequent difficulty it creates in social interactions. It is important to note that there is limited scholarly work directly comparing the *mind*

styles of Jacob and Christopher, and George (2023) appears to be one of the first ones to do so. George conducts a comparative analysis of the accuracy and possible meanings of the deviant *mind styles* between Jacob's and Christopher's characters. George points out that both characters struggle with understanding figurative language. For example, Christopher struggles to understand metaphors, while Jacob finds it difficult to understand idiomatic expressions. Both characters are detail-oriented but often fail to grasp the full picture of a situation. Additionally, both Jacob and Christopher exhibit pragmatic language impairments, as they have difficulty using language appropriately in social contexts.

1.3.3 *Marcelo in the Real World*

Francisco X. Stork's *Marcelo in the Real World* (2009, *Marcelo* henceforth) is the story of 17-year-old Marcelo Sandoval. Unlike *The Curious Incident* and *House Rules*, *Marcelo* is a coming-of-age love story. Nonetheless, the novel challenges the boundaries of autism by following the story of Marcelo who is assigned to work in the mailroom of his father's law firm over the summer despite not being accustomed to interacting with strangers. It is here where he meets his future love interest. Although the novel does not claim specifically that Marcelo has AS, he does seem to fit into the DSM description of AS. For example, he is easily irritated by a stimuli, has difficulties in communication due to pragmatic failure, is overly straightforward, and has special interests that include religion, classical music, and therapy ponies. Unlike Haddon's and Picoult's novels, *Marcelo* was praised as a rather authentic depiction of someone on the spectrum due to it focusing on one specific form of autism (Smith 2013). Unlike Haddon's and Picoult's novels, there is no existing stylistic study on Marcelo, making this an unexplored research niche. This gap offers a unique opportunity to analyse and understand the novel's depiction of autism in contrast to other well-studied works. Thus, Thesis aims towards identification of how much these characters: Jacob, Christopher, and Marcelo fit into the stereotype of AS, and subsequently comparing them.

II. THEORETICAL AND CONCEPTUAL FRAMEWORK

To understand how the unique cognitive perspectives of an individual with AS are mirrored in their consistent linguistic preferences, a connection must be established between the linguistic choices in the speech patterns of AS characters and the fictional autistic *mind styles* these give rise to.

Thus, to analyse the *mind styles* of characters with AS in fiction, this Thesis integrates the theoretical framework of *mind style* with the conceptual framework of AS. Characterized by the DSM-5 (2013), AS is defined by persistent deficits in social communication and social interactions, along with restricted, repetitive patterns of behaviour, interests, or activities and distinctive language pattern. This integrated approach allows for a comprehensive examination of how cognitive and linguistic patterns associated with AS are portrayed in literary texts.

The study draws on the language and speech characteristics in AS as previous research has outlined several of the commonly documented cognitive and pragmatic language processing characteristics of AS individuals. These characteristics comprise the following (Vogindroukas et al. 2022):

1. Inappropriate Language Behaviour
2. Literal Interpretation
3. Domain-specific vocabulary
4. Monotone or Atypical Prosody
5. Difficulty with Social Pragmatics
6. Echolalia

These features will act as guidelines to analyse and compare the speech patterns of the characters. Sometimes, it will be necessary to discuss two or more aspects in parallel: for example, literal interpretation is a precondition for pragmatic failure to occur; and pragmatic failure, in turn, affects social pragmatics.

The selected novels for this analysis are Mark Haddon's *The Curious Incident of the Dog in the Night-Time* (272 pages), Francisco X. Stork's *Marcelo in the Real World* (312 pages), and Jodi Picoult's *House Rules* (613 pages). These texts were chosen for their varied lengths and detailed portrayals of protagonists with AS, providing a broad spectrum for examining cognitive and pragmatical elements.

To fulfill the aim, both qualitative and quantitative methods were employed. The qualitative method involved close textual analysis of three contemporary novels to identify and categorize stylistic features representing AS *mind styles* in both the dialogue and internal monologues of the characters Jacob, Marcelo, and Christopher. Each extract was examined in detail to observe specific

characteristics of pragmatic failure such as literal interpretation and echolalia. The resulting extracts from the three novels are reported in Appendix A, Appendix B, and Appendix C.

Given the potential overlap between the features, careful consideration was given to the criteria used for categorization. For instance, literal interpretation is often a precondition for pragmatic failure, which in turn affects social pragmatics. To address this, the analysis followed these guidelines:

1. Literal Interpretation: Instances where characters interpret language in a strictly literal manner, leading to misunderstandings of figurative language. Classified according to categories suggested by Suryandari and Sutrisno (2018): sarcasm, idioms, common phrase, metaphors, hyperbole, joke, pedantic speech, words with multiple meanings, maxim of quality, maxim of quantity, maxim of relation, maxim of manner, indirect speech acts.

2. Echolalia: repetition of words or phrases of others, such as repetition of a sentence or final word of the speaker. This repetition may occur in order to understand the meaning or intention behind the original utterance (APA 2013).

When features implied each other, the primary categorization was based on the most immediate or apparent characteristic observed. For example, if a character's literal interpretation led to a pragmatic failure in a conversation, the feature was first classified under literal interpretation.

The quantitative analysis complements the qualitative findings by providing an overview of the size of the corpus used for the analysis. Table 2 below details the number of extracts and the total length on words for each novel, providing an overview of the size of the corpus used for the analysis. The collected data ensures a comprehensive examination of the linguistic and cognitive styles of AS characters across different novels.

Table 2. Corpus data collected from the novels

Novel	Number of Extracts	Total Length (in words)
Mark Haddon's <i>The Curious Incident of the Dog in The Night-Time</i>	29	2,505
Francisco X. Stork's <i>Marcelo in the Real World</i>	56	2,246
Jodi Picoult's <i>House Rules</i>	36	1,821

Further analysis involved comparing the number of occurrences of each characteristic across the novels, highlighting significant differences and similarities in their *mind styles*.

III. ANALYSIS OF MIND STYLES IN THE SELECTED NOVELS

One of the common traits of AS *mind styles* manifest through are pragmatic failures due to underdeveloped ToM, resulting in mind-blindness. These include deficiency in the pragmatic aspects of communication, which involves the appropriate use of language in social contexts to achieve communicative goals. Pragmatic failures as seen in previous studies, can manifest in various ways, such as literal interpretation and echolalia.

Individual analysis of each AS character's *mind style* enables assessment of their similarities and differences in portrayal of characters with the same clinical type of developmental disorder (AS). Thus, comparing the *mind styles* of Christopher, Marcelo, and Jacob on the provided analysis reveals how they are portrayed through speech patterns.

3.1 Christopher's mind style

The analysis of Mark Haddon's novel *The Curious Incident of the Dog in the Night-Time* resulted in total of 30 extracts of AS characteristic examples collected for further analysis. After analysing all extracts, as presented in Appendix A, Christopher's language displays traits commonly found in AS individuals, including literal interpretation and echolalia.

3.1.1 Literal Interpretation

The prevalence of literal interpretation, noted 30 times, is an evidence of a significant challenge in understanding figurative language. Such result is occurring likely due to underdeveloped ToM, a common aspect of AS individuals. This frequent occurrence suggests a tendency to interpret language in a strictly literal manner, often leading to challenges in grasping figurative language or understanding implied meanings. The instances of literal interpretation were further classified into thirteen categories, as shown in table 3.

Table 3. Communication failures from Christopher's literal understanding

No	Category	Number of occurrences	%
1.	Sarcasm	1	3.3
2.	Idioms	3	10
3.	Common Phrases	2	6.7
4.	Metaphors	1	3.3
5.	Hyperbole	0	0.0
6.	Words with Multiple Meanings	0	0.0
7.	Maxim of Quality	0	0.0
8.	Maxim of Quantity	5	16.7
9.	Maxim of Relation	11	36.7

10.	Maxim of Manner	0	6.3
11.	Jokes	0	0
12.	Indirect Speech Acts	3	10
13.	Pedantic Speech	4	13.3
Total		30	100

The analysis of linguistic phenomena within the collected extracts reveals a diverse range of occurrences, each contributing uniquely to the overall communication patterns observed. The most common source of misunderstanding among the characters is attributed to two factors, the maxim of relation is the most prevalent feature, noted eleven times throughout the data, constituting a significant portion of 36.6%. Second most apparent category is the maxim of quantity, appearing five times, comprising 16.7% of the total instances.

- (1) *Then the police arrived. I like the police. They have uniforms and numbers and you know what they are meant to be doing. There was a policewoman and a policeman. The policewoman had a little hole in her tights on her left ankle and a red scratch in the middle of the hole. The policeman had a big orange leaf stuck to the bottom of his shoe which was poking out from one side.* (p. 8)

Christopher often infringes the maxim of relation by providing details that are irrelevant to the story. In (1) when speaking about the arrival of the police Christopher provides detailed descriptions of the policewoman and policeman. Police officers have arrived to the murder scene to investigate the what has happened to neighbour's dog Wellington. Christopher notes specific physical attributes such as a hole in the policewoman's tights and a leaf stuck to the policeman's shoe. While these observations may be interesting to Christopher and may reflect his keen attention to detail, they are not directly relevant to the main narrative or the events leading up to the arrival of the police. Christopher's focus on these details seems to divert attention away from the central storyline and may appear unnecessary to others involved in the situation. This failure to maintain relevance in his narration could reflect Christopher's tendency to focus on minutiae rather than the broader context of the events unfolding around him.

- (2) *I said that I wanted to write about something real and I knew people who had died but I did not know any people who had been killed, except Mr. Paulson, Edward's father from school, and that was a gliding accident, not murder, and I didn't really know him. I also said that I cared about dogs because they were faithful and honest, and some dogs were cleverer and more interesting than some people. Steve, for example, who comes to the school on Thursdays, needs help to eat his food and could not even fetch a stick. Siobhan asked me not to say this to Steve's mother.* (p. 7)

Christopher frequently infringes the maxim of quantity by providing excessive and unnecessary details. For instance (2), when discussing what he wanted to write about, he mentions knowing people

who had died but not been murdered, then adds irrelevant details about Mr. Paulson's gliding accident. He also digresses into his opinions about dogs being cleverer than some people and brings up Steve, who needs help eating. Additionally, he includes an unnecessary remark about Siobhan asking him not to mention this to Steve's mother. These excessive details and irrelevant information clutter the conversation, demonstrating Christopher's difficulty in adhering to social norms of communication.

Further examination showed instances of pedantic speech, observed four times, consists of 13.3% of the total extracts. Idioms and indirect speech acts each appeared three times, representing 10% of the occurrences. Common phrases noted twice, make up 6.7% of the total extracts.

- (3) *What actually happens when you die is that your brain stops working and your body rots, like Rabbit did when he died and we buried him in the earth at the bottom of the garden. And all his molecules were broken down into other molecules and they went into the earth and were eaten by worms and went into the plants and if we go and dig in the same place in 10 years there will be nothing except his skeleton left. And in 1,000 years even his skeleton will be gone. But that is all right because he is a part of the flowers and the apple tree and the hawthorn bush now. When people die they are sometimes put into coffins, which means that they don't mix with the earth for a very long time until the wood of the coffin rots. But Mother was cremated. This means that she was put into a coffin and burned and ground up and turned into ash and smoke. I do not know what happens to the ash and I couldn't ask at the crematorium because I didn't go to the funeral. But the smoke goes out of the chimney and into the air and sometimes I look up into the sky and I think that there are molecules of Mother up there, or in clouds over Africa or the Antarctic, or coming down as rain in the rain forests in Brazil, or in snow somewhere.* (p. 30)

In Christopher's *mind style*, pedantic attitude is evident in the way he explains concepts with meticulous detail, aiming to provide precise and comprehensive information. This can be seen in (3), in this extract Christopher where he is talking to Reverent Peters about afterlife in heaven and meeting God. Christopher instead delves into the process of decomposition and cremation with a detailed, almost scientific description. He explains what happens to the body after death, the breaking down of molecules, and the natural cycle of decomposition. This level of detail, including the specifics about Rabbit and his molecules becoming part of the garden, illustrates Christopher's pedantic nature. He not only provides information but also ensures that every aspect is covered comprehensively.

Furthermore, Christopher's explanation of cremation and the dispersal of ashes into the atmosphere showcases his need to clarify processes thoroughly. His speculation about the molecules of his mother being in clouds over distant places or coming down as rain highlights his inclination to connect detailed scientific concepts with his personal experiences.

- (4) *And Mother said 'Go on or you'll catch your death,' but I didn't know what you'll catch your death meant, and I went inside.* (p. 135)

Idioms, phrases with meanings that are not deductible from the individual words and are culturally specific, pose significant challenges for Christopher. His literal interpretation of language makes it difficult for him to grasp the figurative meanings that idioms convey. For instance, in the extract "Go on or you'll catch your death" Christopher struggles to understand it, not understanding that it is an idiom meaning to catch a severe cold or illness from being out in the cold. Instead, he interprets the words literally and goes inside, puzzled by the warning.

Christopher's difficulty with idioms is a reflection of his broader challenges with non-literal language, a common trait in individuals with AS. These idiomatic expressions require an understanding of cultural and social contexts that Christopher often lacks.

- (5) *'And what, precisely, were you doing in the garden?' he asked. 'I was holding the dog,' I replied. (p. 8)*

The inability to recognize indirect speech acts, statements that imply a different meaning than the literal one is closely connected to the core problem of Christopher's difficulty in grasping of the intensions behind the question. Highlighting a specific area of difficulty in comprehension, such as subtle phrasing, relying on context, or requiring a straightforward answer. In (5) Christopher fails to understand the indirect question posed by Mrs. Shears, who wants to know why he is in her garden, since he was not invited to be there (5). Instead of recognizing the underlying inquiry about the reason or purpose behind his presence in the garden, Christopher provides a literal and direct response by stating that he is holding the dog. Such response indicates a lack of comprehension of the implicit meaning behind the question, highlighting a challenge in understanding pragmatic language use where meaning often extend beyond the literal interpretation of words.

Although less common, instances of misunderstanding of common phrases in extracts from Christopher's *mind style* occur twice, which is 6.7% of the extracts. Sarcasm and metaphors were noted once each, occurring in 3.3% of the extracts. Instances of hyperbole, multiple meanings, maxim of quality, maxim of manner, and jokes were not found upon analysing Christopher's *mind style*.

- (6) *Also I don't know what Father means when he says 'Stay out of other people's business' because I do not know what he means by "other people's business" because I do lots of things with other people, at school and in the shop and on the bus, and his job is going into other people's houses and fixing their boilers and their heating. And all of these things are other people's business. (p. 28)*

Even though common phrases are widely recognized and convey specific meanings, Christopher often struggles to interpret them correctly. For example, (6) "Stay out of other people's business" means to not interfere in matters that does not concern you. Christopher is confused by the phrase because he participates in various activities involving other people, such as school, shopping, and riding the bus. He also notes that their father's job involves going into other people's houses to

fix boilers and heating systems, which he perceives as being involved in other people's business. The confusion arises from a literal interpretation of the phrase, whereas the intended meaning is more figurative, advising the speaker to avoid meddling in the affairs or problems of others.

- (7) *And I said, 'Is that the A-to-Z?' and I pointed at the book.
And he said, 'No, it's a sodding crocodile.'
And I said, 'Is that the A-to-Z?' because it wasn't a crocodile and I thought I had heard wrong because of his accent. (p. 131)*

Sarcasm, characterized by the use of irony to mock or convey contempt. In this context (7), sarcasm involves saying the opposite of what one means, relying on tone and context to convey the intended meaning. Christopher is asking the vendor if a book he is holding is an A-to-Z (comprehensive guide or map), but the person sarcastically responds by saying "No, it's a sodding crocodile." Not understanding the sarcasm, Christopher repeats the question, thinking he misheard the person. Christopher takes the sarcastic response literally, leading to a failure to grasp the intended meaning, potentially straining the interaction between the speakers.

- (8) *'I am veined with iron, with silver and with streaks of common mud. I cannot contract into the firm fist which those clench who do not depend on stimulus.' What does this mean? I do not know. (p. 7)*

Metaphors, as figures of speech, involve applying a word or phrase to an object or action that it doesn't literally denote, often to imply a resemblance. In Christopher's *mind style*, understanding metaphors can be particularly challenging, as evidenced in the extract (8). Christopher struggles to grasp the metaphorical meaning conveyed by the phrase "veined with iron, with silver and streaks of common mud." The metaphor suggests a complex internal composition, made of strength (iron) with elements of purity (silver) and commonness (mud). However, Christopher's response reflects his literal interpretation, expressing confusion. This highlights Christopher's difficulty in deciphering non-literal language, including metaphors, which often require understanding abstract concepts and symbolic representations beyond their literal interpretations.

It is important to note that Christopher's difficulties with literal interpretation of non-literal expressions, such as idioms and sarcasm, highlight his challenges at the receiving end of communication. For instance, when other characters use idiomatic expressions or sarcasm, Christopher often fails to grasp their intended meaning and interprets their words literally.

3.1.2 Echolalia

Echolalia, observed in three extracts, presents a less frequent occurrence in Christopher's speech patterns.

- (9) *Left, right, left, right,.. (p. 109)*

The most frequently repeated phrase by Christopher appears to be “left, right, left...” as he repeats it three times when he is lost in the city. It seems like it is copying mechanism, suggesting a means to self-soothe or regulate his emotions, which is a common trait observed in AS individuals.

3.2 Marcelo’s mind style

Analysing Francisco X. Stork’s *Marcelo in the Real World* led to 56 extracts of AS characteristics collected for further analysis. After analysing all examples of pragmatic failures in Marcelo’s language, as presented in Appendix B, several conclusions can be drawn. Marcelo’s use of the language displays traits commonly found in AS individuals, including literal interpretation, and echolalia.

3.2.1 Literal Interpretation

In Marcelo’s *mind style* a predominant category is characterized by the challenges with non-literal communication, observed in 29 extracts. The instances of literal interpretation were further classified into thirteen categories, as shown in table 4.

Table 4. Communication failures Marcelo’s literal Understanding

No	Category	Number of occurrences	%
1.	Sarcasm	1	3.4
2.	Idioms	2	6.9
3.	Common Phrases	4	13.8
4.	Metaphors	2	6.9
5.	Hyperbole	0	0.0
6.	Words with Multiple Meanings	0	0.0
7.	Maxim of Quality	0	0.0
8.	Maxim of Quantity	5	17.2
9.	Maxim of Relation	4	13.8
10.	Maxim of Manner	0	0.0
11.	Jokes	1	3.4
12.	Indirect Speech Acts	7	24.1
13.	Pedantic Speech	3	10.3
Total		29	100

The analysis of the extracts reveals interesting insights into the communication styles and linguistic features observed within Marcelo’s *mind style*. The most prevalent category is indirect speech acts, which appears seven times, making up 24.1% of the total extracts.

- (10) ‘*Religion. What humankind has experienced and said and thought about God. I like to read and think about that.*’

'Is that right?'

'I don't know if it is right or not. It just is.' (p. 61)

In (10) when asked "Is that right?" suggesting the listener's attempt to prompt a confirmation or need of further explanation of the topic due to Marcelo's abrupt mention of God. Marcelo replies that he does not know if it is right or not, as he offers a straightforward statement about his perspective. Marcelo's response highlights his difficulty in discerning the implicit intention behind indirect questioning and providing a socially expected response. Such instance sheds light on a particular area of difficulty in comprehension in Marcelo's *mind style*.

(11) *'Tell me what you are thinking,' Aurora urges me. [...] 'No,' I say to Aurora. I regularly say no when people ask me to tell them what I'm thinking.* (p. 42)

In (11) Marcelo's response can be analysed as an indirect speech act. Although Aurora is explicitly asking Marcelo to share his thoughts, his refusal serves as an indirect way of expressing his unwillingness to disclose his feelings or thoughts. By consistently responding with "no" when asked about his thoughts, Marcelo indirectly communicates his discomfort or reluctance to express his internal state. This pattern of behaviour indicates a preference for keeping his feelings private and possibly a difficulty in articulating his emotions.

The maxim of quantity is the second most common category, with five extracts, 17.2% of the total data. This suggests that Marcelo provides either too much or too little information relative to what is required happens often in the text.

(12) *'How did you end up here?'*

'I walked.' (p. 138)

In (12) Aurora's question "How did you end up here?" is likely seeking more context or details about Marcelo's journey or decision-making process leading to his current location, knowing that he left their workplace and ended up somewhere far from it. Marcelo's response provides only the minimal information about the physical action he took to get there, without addressing the broader context or reasoning behind his presence. This response, therefore, is under-informative given the likely intent behind Aurora's question.

Common phrases and maxim of relation each occur four times, representing 13.8% of the total occurrences. The use of common phrases highlights a reliance on widely recognized expressions to convey specific meanings, while violations of the maxim of relation indicate instances where the information provided is not always relevant to the preceding conversation.

(13) *'You are coming to work every day, right?'*

'Every day,' I say. I wonder if that includes Saturday and Sunday. Arturo comes to work on those days frequently. Perhaps he expects me to do the same. (p. 55)

In (13) the phrase "every day" is commonly understood to mean all the regular working days of the week, typically Monday through Friday. Marcelo takes "every day" literally and interprets it to potentially include all seven days of the week, not just the typical workdays. This literal interpretation causes him to question whether he is expected to work on weekends as well.

(14) *'Where are you?'*

'By the dead fish,' I say, looking up to see where I am. (p. 137)

When Marcelo got lost, he fails to explain his exact location to Aurora who is trying to find him. Thus, in (14) Marcelo violates the maxim of relation because his answer is not sufficiently relevant or clear without additional context. It does not provide a specific or useful answer to the question about his location, leaving Aurora confused about where to find him.

Pedantic speech occurs in three extracts (10.3%). Such tendency is common in AS individuals, as they often find it challenging to understand the symbolic or metaphorical meanings.

(15) *'I guess that makes us both idiots.'*

'Idiots,' I repeat.

'That's not a good word, is it?'

'It is not accurate. An idiot is a mentally deficient person having intelligence in the lowest possible range, unable to guard against common dangers and incapable of learning connected speech. Sometimes people think I am an idiot. It is only true in some respects.' (p. 139)

In (15) Marcelo's response exhibits pedantic speech as he provides a detailed and formal explanation of the word "idiot." Instead of acknowledging the colloquial use of the term in the conversation, Marcelo opts to offer a technical definition of the word, emphasizing its literal meaning.

Idioms and metaphors are each recorded 2 times, making up 6.9% each of the total occurrences. This reflects a moderate use of figurative language and culturally specific phrases.

(16) *'Precisely. That's why it's helpful to assume that most people are **looking out for number one**.'* *At that moment, I picture a group of people standing on a corner waiting for a big number one to appear. (p. 48)*

Understanding and appropriately using idioms or metaphors often requires social and cultural knowledge because idiomatic expressions are deeply embedded in the context of a language. In (16), Marcelo struggles to understand the idiom "looking out for number one". The phrase "number one" is a colloquial term for oneself or one's own interests and the phrasal verb "looking out for" means taking care of or prioritizing. Overall, this idiom is a figurative expression implying that most people prioritize their own interests and well-being above others.

Sarcasm and jokes each appear once, accounting for 3.4% each of the total. The relatively low frequency of sarcasm and jokes suggests that while humour and irony are present, they are not dominant features of the text.

(17) *'That's deep, Marcelo. It really is. If you really feel that way and are not trying to pull my leg, or anything else for that matter, I take my hat off to you, I guess. But I'm not so sure. I don't think you're being totally honest with me.'*

'You don't have a hat on.' *It is my attempt at humor and at changing the subject but it doesn't work on either count. (p. 75)*

In (17) Marcelo attempts to make a joke in response to someone's comment. Marcelo's attempt at humour involves a play on words, where he points out the literal absence of a hat on the person's head despite their figurative expression of taking off their hat. This type of humour relies on wordplay

and the juxtaposition of literal and figurative meanings. However, Marcelo acknowledges that his attempt at humour falls flat as he does not receive intended reaction. This could be due to various reasons, such as the person not finding the joke amusing, Marcelo's delivery not being effective, or the timing being off. Thus, this example illustrates how individuals with AS may struggle with understanding and producing humour in social interactions. While Marcelo's attempt shows an understanding of wordplay, the execution may not align with social expectations or the intended audience's sense of humour.

(18) *'You can read, right?'* I wonder why she asks me that. Perhaps it's a joke of sorts that I don't understand. (p. 54)

In (18), Marcelo struggles to comprehend the intent behind the sarcastic question "You can read, right?". Repeating the question in his own mind (a possible instance of echolalia), he considers the possibility of it being a joke but does not grasp its underlying meaning.

Some categories have no occurrences: hyperbole, words with multiple meanings, maxim of quality, and maxim of manner each have zero occurrences, indicating an absence or minimal use of exaggerated statements, words with multiple meanings, false information, and unclear or disorderly communication. Despite his exceptional cognitive abilities, Marcelo's pragmatic failures underscore the complexities of his *mind style* and the ongoing journey to understand and interpret the subtleties of language and social interactions.

3.2.3 Echolalia

Echolalia is a repetitive speech phenomenon characterized by the immediate or delayed repetition of words, phrases, or sentences spoken by others. Occurring in 27 extracts of Marcelo's *mind style*.

(19) *'And what did you think?'*

'Think.' (p. 102)

(20) *'Tell me something that you want.'*

'Want.' (p. 133)

(21) *'You will consider what I said?'* he asks.

'Consider.' (p. 134)

Echolalia in Marcelo's *mind style* is characterized by a repetition of words or phrases made by others. A total of 27 instances of echolalia were observed of him repeating words or phrases of others in an attempt to ask and understand what others mean by that. Like in examples provided (20, 21, and 22) where he repeats "think", "want", "consider", as if questioning what the speaker wants from him exactly. Through echolalia, Marcelo attempts to grasp the meaning behind what others say and express his own understanding or perspective.

3.3 Jacob's mind style

The analysis of Jodi Picoult's *House Rules* resulted in total of 36 examples of AS characteristic examples collected for further analysis. After analysing all examples of pragmatic failures in Jacob's

language, as presented in Appendix C. Jacob's use of the language displays traits commonly found in AS individuals, including literal interpretation, difficulty with social pragmatics, and echolalia.

3.3.1 Literal Interpretation

The analysis of Jodi Picoult's novel *House Rules* resulted in total of 36 extracts of AS characteristic extracts collected for further analysis. After analysing all extracts, as presented in Appendix C, Jacob's language displays traits commonly found in AS individuals, including literal interpretation and echolalia. Literal interpretation was observed in 25 extracts. The instances of literal interpretation were classified into thirteen categories, as shown in table 5.

Table 5. Communication failures from Jacob's literal understanding

No	Category	Number of occurrences	%
1.	Sarcasm	2	8
2.	Idioms	3	12
3.	Common Phrases	2	8
4.	Metaphors	2	8
5.	Hyperbole	2	8
6.	Words with Multiple Meanings	0	0
7.	Maxim of Quality	0	0
8.	Maxim of Quantity	3	12
9.	Maxim of Relation	7	28
10.	Maxim of Manner	0	0
11.	Jokes	0	0
12.	Indirect Speech Acts	1	4
13.	Pedantic Speech	3	12
	Total	25	100

In the extracts showcasing Jacob's *mind style*, the most prominent category is the maxim of relation, accounting for 28% of occurrences. This suggests a focus on how the utterances are related to the context or situation, indicating a strong emphasis on interpersonal dynamics, communication strategies, and contextual relevance.

(22) 'Hey, Jacob, isn't this the coolest MP3 player?'
'It was probably made by Chinese kids.' (p. 25)

In (22) Jacob violates the maxim of relevance when asked about a MP3 player by classmate. Jacob comments on the ethics of its production and thus this comment shifts the topic from discussing the MP3 player's qualities to a controversial and unrelated issue about labor practices. The MP3

player being made by Chinese kids is irrelevant to the primary topic of discussing the MP3 player's qualities.

Following this, pedantic speech and idioms are both in the second most prominent category, each comprising 12% of extracts.

(23) *He thinks I am retarded, even though the diagnosis of mental retardation is reserved for people who score lower than 70 on an IQ test, and I myself have scored 162. In my opinion, the very fact that Mark doesn't know this diagnostic criterion suggests that he's a lot closer to actual retardation than I am.* (p. 66)

Like many AS individuals Jacob tends to display pedantic speech in his *mind style*. In (23) when called retarded by his classmate (Mark), Jacob focuses on technical details, specifically the diagnostic criterion for mental retardation. Jacob emphasizes his own high IQ score and contrasting it with Mark's perceived lack of knowledge, Jacob implies intellectual superiority.

(24) *'There was a confrontation in the kitchen,' Jacob explains. 'It ended with the phone being thrown in defense, and me being chased into the living room, where **Theo clocked me.**' ... 'Well, just so you know – it means to punch someone. Not hit them with an actual clock (p. 8)*

In (24) Jacob misinterprets an idiom “clock someone out”, thinking it refers to hitting someone with an actual clock, rather than understanding its colloquial meaning of punching someone.

Sarcasm, common phrases, metaphors, and hyperbole each account for 8% of occurrences.

(25) *'You know why you can pick up AM stations better at night? Because the ionosphere reflects radio signals better when the sun isn't radiating the heck out of the upper atmosphere.'*
'Thanks. I couldn't have gone to sleep tonight without knowing that.'
'Really?' (p. 523)

In (25) reply "Thanks. I couldn't have gone to sleep tonight without knowing that" to Jacob's detailed explanation could be interpreted as sarcastic. It implies that the information provided about AM stations and the ionosphere was unnecessary or uninteresting, suggesting that the speaker does not actually care about the topic. Thus, by asking if that is true Jacob not only fails to understand sarcasm but also violates the maxim of relation.

(26) *'What is it like (in Vermont)?'*
*'Lots of green, and **rolling hills.**'*
'Won't they hurt us?' (p. 8)

In (26) the misunderstanding of the common phrase "rolling hills" likely occurs due to a literal interpretation of the words, rather than understanding the intended meaning. In this context, "rolling hills" describes a geographical feature, referring to gentle, undulating slopes in the landscape (collinsdictionary.com 2024). However, Jacob interpreting it understood the phrase too literally, perhaps imagining hills literally rolling and causing harm. This demonstrates a lack of familiarity with the common figurative meaning of the phrase and an inability to infer its intended meaning based on context.

(27) *This week she moved out of her dorm room and into a professor's house. **She is babysitting for the house,** which sounds like an immense waste of time, because it's not as if the house is going to touch the stove if it's hot or eat something poisonous or fall down its own stairs.* (p. 68)

In (27) Jacob displays a literal interpretation of a metaphor. The phrase ‘babysitting for the house’ implies that the person is taking care of the house in a similar way to how one would take care of a child. This metaphor suggests a sense of responsibility and caretaking, emphasizing the idea that the person is responsible for the well-being and upkeep of the house. Jacob seems to understand it in terms of actual babysitting. This literal interpretation leads him to question the necessity of such a task, as houses cannot perform the actions typically associated with babysitting.

(28) *‘Don’t move-don’t even breathe.’ Normal kids ignored the statement; a few Goody Two-shoes worked quietly at their desks. And me? I sat like a statue with my lungs on fire, until I was on the verge of passing out. (p. 24-25)*

In (28) Jacob misinterprets hyperbole “Don’t move-don’t even breathe” by taking it literally and therefore interpreting it as a strict command. This results in an extreme reaction (sitting still until on the verge of passing out) rather than complying with the intended meaning, that is, that of remaining still and quiet.

Indirect speech acts is the least prominent categories, with 4% occurrences through the extracts.

(29) *‘I could fucking kill you, Hunt.’ Well, I spent the rest of the day in an utter panic, because he could kill me, I had no doubt of that. (p. 497)*

In (29) after Sawyer Trigg is reported to the principal by Jacob for impersonation of their teacher, Mrs. Witchlow, Sawyer Jacob becomes anxious for the remainder of the day. Trigg tells him that he could kill Jacob. Although Trigg threatens Jacob verbally, it does not mean that he is actually intending to kill him. As a precautionary measure, Jacob takes a butter knife from the cafeteria to defend himself in case Trigg poses any threat to him.

Some categories have no occurrences: words with multiple meanings, maxim of quality, maxim of manner, and jokes. Overall, the text demonstrates a varied use of language and communicative strategies, with a predominant focus on the interpersonal aspects of communication, including relevance, precision, and figurative expression.

3.3.3 Echolalia

Echolalia manifests prominently in Jacob’s communication style, particularly through the repetition of quotes from movies, occurring in all eleven cases. Such repetitive behaviour serves as a coping mechanism or a way for Jacob to express himself and navigate social interactions (common for AS individuals). The examples provided illustrate Jacob’s tendency to repeat the phrases from his favourite movies or songs.

(30) *A single tear streaks from the corner of his eye. ‘I shot the sheriff,’ he whispers, “but I swear it was in self-defense. (p. 15)*

In (30) Jacob quotes a line from a song “I shot the sheriff” while being interrogated for a murder of his teacher, followed by a self-defence claim. This particular quote is repeated three times by Jacob in different cases, as it appears to be an efficient way for him to calm down.

(31) *I start rocking back and forth. ‘Nobody puts Baby in a corner,’ I quote under my breath. (p.76)*

Another instance of copying mechanism (31), Jacob while being in distress quotes a famous movie line, “Nobody puts Baby in a corner”, while rocking back and forth, he tries to calm down.

Through these examples, Jacob’s echolalia emerges as a prominent feature of his communication style, providing insight into his thought processes and emotional state.

3.4 Comparison of the Mind Styles

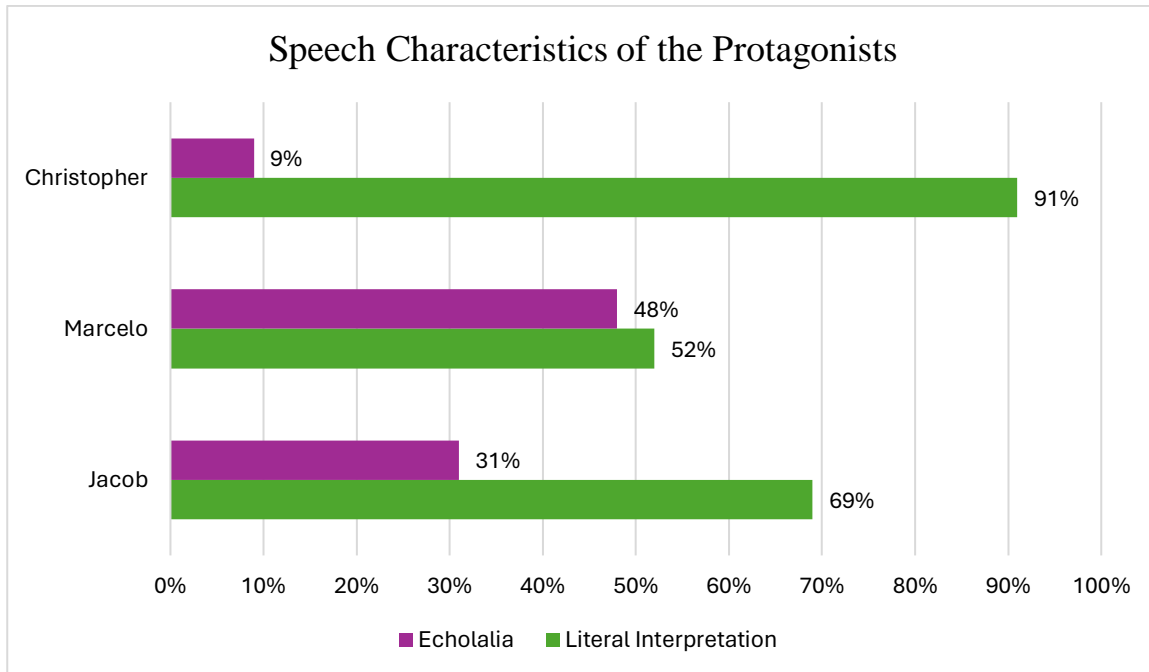


Figure 1. Frequency and type of speech characteristics in Christopher’s, Marcelo’s, and Jacob’s mind styles

The analysis of the *mind styles* of the three characters - Christopher, Marcelo, and Jacob - revealed that although all characters struggle with pragmatic failures, the specific categories and their prevalence vary, as shown in the collected data (Figure 1). The collected extracts of *mind styles* reveal distinct patterns in the data regarding literal interpretation and echolalia among Jacob, Marcelo, and Christopher's *mind styles*. Christopher exhibits a tendency for literal interpretation in 91% of the extracts, indicating a strong inclination to interpret language literally. Jacob's *mind style* extracts consist of 69% literal interpretation, while Marcelo demonstrates a lower rate at 52%. Despite their differences, certain common characteristics reflect themes of social and linguistic challenges often associated with AS.

Both Christopher and Jacob frequently violate the maxim of relation, which are characteristic of individuals on the autism spectrum. In contrast, Marcelo struggles the most with indirect acts of speech, highlighting his difficulty in discerning implicit intentions or meanings behind statements made by others. Unlike Jacob and Christopher, Marcelo sometimes speaks indirectly. In (11), when Aurora asks Marcelo to share his thoughts, his refusal indirectly expresses his discomfort and reluctance to disclose his feelings, indicating his preference for privacy and difficulty in articulating emotions.

Although their instances vary in frequency, one common issue noted among all three characters is the difficulty to understand figurative language, such as: sarcasm, idioms, common phrases, indirect speech acts, and hyperbole. All three of them tend to interpret figurative language literally, possibly due to a lack of ToM associated with AS. Such literal-mindedness results in responses that often seem unrelated or irrelevant to the conversational partner's intent or question. All of the collected extracts showcase that while Christopher does not use any figurative language, Jacob and Marcelo attempt to do so, but still struggle to use them correctly.

Moreover, each character struggles with aspects of social communication, including understanding indirect speech acts, sarcasm, and jokes. While all characters struggle with humor and sarcasm, the frequency and context of these challenges vary. Marcelo is the only one who attempts to joke by highlighting the literal absence of a hat in response to a figurative expression, but his humour falls flat, illustrating how individuals with AS may struggle with producing and understanding humour in social interactions. Despite his understanding of wordplay, Marcelo's execution does not align with social expectations or the audience's sense of humour.

Another common trait found in all three characters is pedantic speech, as is typical for individuals with AS. All three characters exhibit pedantic speech through their focus on precise details and technical definitions, often missing the broader or implied meanings in conversations. While Jacob tends to emphasize his intellectual abilities and uses technical details to assert his intelligence, Marcelo focuses on providing accurate and detailed explanations, with an awareness of social interactions but a struggle with nuance. Christopher pays close attention to environmental details and explains concepts scientifically, often without emotional engagement. This characteristic underscores their unique cognitive styles and highlights a common trait among individuals with AS, where literal interpretation and a preference for detailed accuracy take precedence over colloquial or implied meanings in social interactions.

Although less frequently used, echolalia still is a defining characteristic of the characters. Marcelo shows the highest frequency of echolalia (48%), followed by Jacob (31%) and then Christopher (9%). Marcelo's echolalia involves immediate repetition of recent dialogue, Jacob's involves movie and song quotes, and Christopher's involves simple, repetitive phrases. Moreover, Marcelo uses echolalia to understand and process communication, Jacob uses it as a coping mechanism by quoting familiar lines, and Christopher employs it for self-soothing in stressful situations.

The comparative analysis of Christopher, Marcelo, and Jacob *mind styles* reveals that while they share common challenges associated with AS, their communication styles reflect individual differences in how they navigate and interpret social interactions. Each character's unique *mind style* provides insights into the diverse ways that individuals with AS experience and manage language and

communication. Thus, the comparison of the *mind styles* of different characters validates the hypothesis that the portrayal of AS characters in the selected novels will exhibit variations in *mind style* depiction. These differences underscore the authors' distinct viewpoints on the subject matter, along with the diverse structural requirements of the plot and genre across the novels.

IV. CONCLUSIONS

1. In order to explore *mind styles* within the three novels: Mark Haddon's *The Curious Incident of the Dog in the Night-Time* (2004, *The Curious Incident* henceforth), Francisco X. Stork's *Marcelo in the Real World* (2009, *Marcelo* henceforth), and Jodi Picoult's *House Rules* (2010), scientific literature related to *mind style*, the medical knowledge on Autism Spectrum Disorder (ASD), and the existing literary criticism of the selected novels was reviewed. *Mind style*, initially conceptualized by Fowler (1977) as a unique linguistic representation of an individual's mental self, has since been refined by Boase-Beier (2003) to encompass cognitive states reflected through language. Stockwell (2002) situates *mind style* within cognitive poetics, a field that leverages insights from cognitive science to analyse literary texts.

It is essential to distinguish *mind style* from related concepts like point of view. While *mind style* pertains to an individual's cognitive and stylistic imprint on language, point of view primarily concerns the narrative perspective through which events are conveyed to the reader. Moreover, understanding Theory of Mind (Palmer 2004) which refers to the ability to attribute mental states to oneself and others, is a crucial concept in order to understand *mind style*, particularly in individuals with ASD.

Previous studies have predominantly focused on analysing *mind style* in fictional characters, such as Leech and Short (2007) who have examined Benjy's "childlike vision" in Faulkner's *The Sound and the Fury*. However, there has been a discernible shift towards exploring *mind style* in real individuals, particularly those with neurodevelopmental conditions like ASD. This shift underscores the interdisciplinary nature of research in this domain, bridging insights from literary analysis with empirical data from psychology and neuroscience.

To analyse the *mind styles* of characters with Asperger's Syndrome (AS), medical knowledge on the condition is needed. According to American Psychiatric Association (APA) ASD encompasses a range of neurodevelopmental conditions (2013), AS being one of them, where individuals often display unique ways of thinking, perceiving, and interacting with the world. AS is characterized by severe impairment in social interactions and repetitive patterns of behavior and interests, without significant delays in language or cognitive development (APA 2013). Individuals with AS often exhibit unique speech patterns, contributing to their distinct communication profile. Some of these patterns include: inappropriate language behaviour, literal interpretation, domain-specific vocabulary, monotone or atypical prosody, difficulty with social pragmatics, and echolalia.

Semino's (2014) previously has distinguished the *mind style* of Christopher, the protagonist of *The Curious Incident*. Semino described it as simplified, underlexicalized speech, and characterized by the use of coordination in sentence structure. Meanwhile, the *mind style* of Jacob, the protagonist

of *House Rules*, was explored by Suryandari and Sutrisno (2018), who focused on pragmatic failures in understanding other speakers and acting accordingly. Following pragmatic failures were distinguished by scholars: sarcasm, idioms, common phrases, metaphors, hyperbole, jokes, pedantic speech, words with multiple meanings, violation of conversational maxims: maxim of quality, maxim of quantity, maxim of relation, maxim of manner (Grice 1975), indirect speech acts. Unlike the novels by Haddon and Picoult, there is no existing stylistic study on *Marcelo*. This gap presents a unique opportunity to analyze and understand the novel's depiction of autism, distinguishing it from other well-studied works.

2. The study utilized the language and speech traits associated with AS as guidelines for analysing and comparing the *mind styles* of characters. Moreover, *mind style* characteristics distinguished by Vogindroukas et al. (2022) served as a guideline for the Thesis, which include: inappropriate language behaviour, literal interpretation, domain-specific vocabulary, monotone or atypical prosody, difficulty with social pragmatics, echolalia. Close textual analysis of three contemporary novels to identify and categorize stylistic features representing AS *mind styles* in both the dialogue and internal monologues of the characters Jacob, Marcelo, and Christopher has allowed to distinguish extracts of the *mind styles* containing literal interpretation and echolalia. Literal interpretation was further subdivided accordingly to pragmatic failures distinguished by scholars Suryandari and Sutrisno (2018): sarcasm, idioms, common phrases, metaphors, hyperbole, jokes, pedantic speech, words with multiple meanings, violation of conversational maxims: maxim of quality, maxim of quantity, maxim of relation, maxim of manner (Grice 1975), indirect speech acts. Both Christopher's and Jacob's prominent features is violation of maxim of relation, while Marcelo tends to struggle with indirect speech acts. Meanwhile echolalia subdivided into two prominent categories: repetition of phrases or sentences, and repetition of words or phrases heard from movies, books, or TV shows. Marcelo's echolalia involves immediate repetition of recent dialogue, Jacob's involves movie and song quotes, and Christopher's involves simple, repetitive phrases he is familiar with.

3. The analysis reveals distinct patterns in the characters' literal interpretation and echolalia, two prominent features of their respective *mind styles*. Notably, Christopher demonstrates the highest inclination towards literal interpretation. He tends to respond in strictly literal manner, devoid of nuanced interpretations.

Moreover, the examination uncovers common challenges shared by all three characters, reflective of themes associated with AS. These challenges encompass difficulties in understanding figurative language, such as sarcasm, idioms, and indirect speech acts. Despite their attempts to engage with figurative expressions, Christopher, Marcelo, and Jacob frequently struggle to grasp their intended meanings, often leading to responses that seem disconnected from the conversational context.

Additionally, the analysis unveils shared struggles in social communication, particularly in understanding humour and sarcasm. Notably, Marcelo's attempt at humour falls flat, highlighting the disconnect between his interpretation of language and social expectations. This disparity underscores the complexities of navigating social interactions for individuals with AS, where linguistic comprehension does not always align with social conventions.

Furthermore, pedantic speech emerges as a common trait among the characters, typifying their meticulous focus on precise details and technical definitions. Each character exhibits pedantic speech in distinct ways, reflecting their unique cognitive approaches to communication and interaction.

Despite these commonalities, the comparative analysis reveals individual differences in how the characters navigate and interpret social interactions. Both Christopher's and Jacob's prominent features is violation of maxim of relation, while Marcelo tends to struggle with indirect speech acts. When it comes to echolalia, Marcelo exhibits the highest rate of echolalia. Marcelo's echolalia entails immediate repetition of recent dialogue as a way to process communication, Jacob's involves quoting movie and song lines, while Christopher repeats simple, familiar phrases. For both Jacob and Christopher echolalia is a coping mechanism.

The comparison of the *mind styles* of different characters confirms the hypothesis that the portrayal of AS characters in the selected novels varies in terms of *mind style* depiction, linguistic patterns, and narrative representation. This variation reflects the authors' distinct perspectives on the subject, as well as the diverse structural requirements of the plot and genre of each novel.

PRIMARY SOURCES

Haddon, M. (2004). *The Curious Incident of the Dog in the Night-Time*. Clays Ltd, Elcograf S.p.A.

Picoult, J. (2010). *House Rules*. Atria Kindle Edition

Stork, F. X. (2009). *Marcelo in the Real World*. Scholastic Paperbacks

REFERENCES

- Abdulla, Saza Ahmed Fakhry. (2016). *An Eclectic Model for the Stylistic Exploration of Mind Style in Function*. (Doctoral thesis, University of Huddersfield). Available at:
<http://eprints.hud.ac.uk/id/eprint/31084>
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). American Psychiatric Publishing, Inc.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Available at: <https://doi.org/10.1176/appi.books.9780890425596>
- Anggreini, D., Manugeran, M. (2019). The Characteristics of autism Asperger syndrome in Mark Haddon's novel *The Curious Incident of the Dog in the Night*. *Journal of Language Volume 1, Number 2, pp: 112-119*
- Baron-Cohen, S. (1990). *Autism: a specific cognitive disorder of "mind-blindness"*. *International Review of Psychiatry*. Doi: <https://doi.org/10.3109/09540269009028274>
- Boase-Beier, J. (2003). *Mind Style Translated*. Penn State University Press. Available at:
<https://www.jstor.org/stable/10.5325/style.37.3.253>
- Collins Dictionary. (n.d.). Rolling (adjective). *In Collins English Dictionary*. Retrieved May 20, 2024. Available at:
<https://www.collinsdictionary.com/dictionary/english/rolling#:~:text=rolling%20ADJECTIVE%20%2F'r%20l%20l%20n%2F-.Rolling%20hills%20are%20small%20hills%20with%20gentle%20slopes%20that%20extend,rolling%20countryside%20of%20this%20area.>
- Eilertsen, S.A. B. (2022). *Jacob's mind style in Jodi Picoult's House Rules* [Master's thesis, Østfold University College]. Østfold University College Open Archive. Available at:
https://hiof.brage.unit.no/hiof-xmlui/bitstream/handle/11250/3011835/Eilertsen_Simone%20Anett%20Berg.PDF?sequence=2&isAllowed=y
- Fowler, R. (1977). *Linguistics and the novel*. London: Methuen.
- Fowler, R. (1991). *Linguistic criticism*. Oxford: Oxford University Press (OUP)
- Fowler, R. (2003). *Linguistics and the novel*. Taylor & Francis Group.
- Genette, G. (1980). *Narrative Discourse*. Tr. J. E. Lewin. Oxford: Blackwell.
- George, A. (2023). Shifting Autism Popular Fiction: Representing Asperger's Syndrome in Select Works of Mark Haddon, Jodi Picoult and Steig Larsson. *Creative Saplings*. 2. 1-18. Doi:
<https://doi.org/10.56062/gtrs.2023.2.09.460>

- Grice, H. P. (1975). Logic and conversation. In P. Cole & J. L. Morgan (Eds.), *Syntax and semantics: Vol. 3. Speech acts* (pp. 41-58). Academic Press.
- Halliday, M. A. (1971). Linguistic Function and Literary Style: An Inquiry into William Golding's *The Inheritors*. In S. Chatman (Ed.), *Literary Style: A Symposium* (pp. 330-368.). New York, NY: Oxford University Press.
- Harrison, K., & Damodharan, S. K. (2012). House Rules. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 21(1), 72–73. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3269256/#b2-ccap21_1p72
- Hosseini, S. A., & Molla, M. (2024). Asperger Syndrome. In *StatPearls*. StatPearls Publishing.
- Johansson, L. (2008). *Humour and handicap in Mark Haddon's The Curious Incident of the Dog in the Night-time*. (Pro graduate thesis, University of Tampere). Available at: <https://trepo.tuni.fi/bitstream/handle/10024/79489/gradu02949.pdf?sequence=1>
- Kurbanova, K. (2022). *Mind Style In Mark Haddon's Novel "The Curious Incident Of The Dog In The Night-Time"*. (Bachelor's thesis). Vilnius University
- Lakoff, G. & Johnson, M. (1980). *Metaphors We Live By*. The University of Chicago Press.
- Leech, G. N., & Short, M. (2007). *Style in fiction: A linguistic introduction to English fictional prose* (No. 13). Pearson Education.
- Mody, M., & Belliveau, J. W. (2013). Speech and Language Impairments in Autism: Insights from Behavior and Neuroimaging. *North American journal of medicine & science*, 5(3), 157–161. <https://doi.org/10.7156/v5i3p157>
- National Institute of Mental Health. 2022. Autism Spectrum Disorder. Available at: <https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd/index.shtml>
- Nuttall, L. (2015). Attributing minds to vampires in Richard Matheson's *I Am Legend*. *Language and Literature*, 24(1), 23-39. Doi: <https://doi.org/10.1177/0963947014561834>
- Oyebode, F. (2004). Fictional narrative and psychiatry. *Advances in Psychiatric Treatment*, 10(2), 140-145. Available at: <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/CE54B423D6B60CA0F50C719D9AC6B1F3/S135551460001176a.pdf/fictional-narrative-and-psychiatry.pdf>
- Palmer, A. (2004). *Fictional Minds*. University of Nebraska Press.
- Semino, E. (2014). Language, mind and autism in Mark Haddon's *The Curious Incident of the Dog in the Night-Time*. In *Linguistics and Literary Studies/Linguistik und Literaturwissenschaft* (pp. 279-304). De Gruyter.
- Semino, E., & Swindlehurst, K. (1996). Metaphor and Mind Style in Ken Kesey's *One Flew Over the Cuckoo's Nest*. *Style*, 30(1), 143–166. Available at: <http://www.jstor.org/stable/42946325>

- Smith, S. E. July 1st, (2013). *Review: Marcelo in the Real World by Francisco X. Stork*. Available at: <https://disabilityinkidlit.com/2013/07/01/s-e-smith-reviews-marcelo-in-the-real-world/>
- Stockwell, P. (2002). *Cognitive Poetics*. Routledge
- Suryandari, R., & Sutrisno, A. (2018). Pragmatic Failures Experienced by Jacob in Jodi Picoult's Novel *House Rules*. *Lexicon*, 5(2), 224-234.
doi:<http://dx.doi.org/10.22146/lexicon.v5i2.42100>
- Vogindroukas, I., Stankova, M., Chelas, E. N., & Proedrou, A. (2022). Language and Speech Characteristics in Autism. *Neuropsychiatric Disease and Treatment*, 18, 2367–2377. Doi: <https://doi.org/10.2147/NDT.S331987>
- Yazdanjoo, M., Sabbagh, M. & Shahriari, H. (2016). *Stylistic Features of Holden Caulfield's Language in J.D. Salinger's The Catcher in the Rye: A Corpus-Based Study*. Doi: <http://dx.doi.org/10.1080/0013838X.2016.1198122>

SANTRAUKA

Šio baigiamojo darbo **tema** - Aspergerio sindromą turinčių trijų romanų pagrindinių veikėjų sąmonės būklę atspindintis stilius: Marko Haddon'o „Tas keistas nutikimas šuniui naktį“ (2004), Stork'o „Marcelo realiame pasaulyje“ (2009) ir Jodi Picoult „Namų taisyklės“ (2010). Baigiamojo darbo **tikslas** - nustatyti ir palyginti stilistines priemones, nuosekliuose kalbiniuose struktūros pasirinkimuose, kurias trys minėti autoriai taiko vaizduodami personažus, turinčius kognityvinių ypatumų. Nagrinėjant kognityvinius procesus, informacijos apdorojimo mechanizmus, būdingus autistiniams personažams, šiuo tyrimu siekiama išskirti autistinių personažų mąstymo stiliaus niuansus. Be to, šiuo tyrimu siekiama išsiaiškinti, kokią įtaką proto stiliaus variacijos turi įvairiems autizmo personažų gyvenimo aspektams, įskaitant socialinę sąveiką, bendravimą, mokymąsi, kasdienes užduotis ir įsipareigojimus. Siekiant šio tikslo, buvo iškelti šie **tiksai**: apžvelgti mokslinę literatūrą, susijusią su sąmonės būklę atspindinčiu stiliumi, medicininės žinias apie autizmo sutrikimą ir esamą pasirinktų romanų literatūros kritiką; nustatyti, suklasifikuoti ir išanalizuoti ryškiausius sąmonės būklę atspindinčius stilistinius bruožus romanuose; interpretuoti ir palyginti atrinktuose romanuose nustatytus sąmonės būklę atspindinčio stiliaus bruožus, padaryti išvadas apie jų skirtumus ir panašumus bei tai, kaip jie prisideda prie bendros romanų estetikos ir interpretacijos.

Baigiamasis darbas pabrėžia, kad sąmonės būklę atspindi individo pasaulėžiūrą, jo unikalią kognityvinę sistemą ir aplinkos suvokimą per sąmoningai pasirinktus kalbinius sprendimus, žinomus kaip stiliaus ženklas, tokius kaip nuolatinis perkeltinės kalbos naudojimas, retoriniai prietaisai, sakinių struktūra ir įvairių tipų daiktavardžių ar veiksmažodžių pasirinkimas.

Baigiamojo darbo struktūrą sudaro: santrumpų ir akronimų sąrašas, padėka, abstraktas, įvadas, neuro(a)tipiniai mąstymo stiliai, teorinis ir conceptualus pagrindas, mąstymo stilių analizė pasirinktuose romanuose, išvados, pirminiai šaltiniai, literatūros sąrašas, santrauka ir priedai.

Nustatyta, kad anksčiau visi trys romanai nebuvo analizuojami ir lyginami kartu, todėl jų mąstymo stiliai nebuvo visapusiškai ištirti.

Personažų sąmonės būklę atspindintį stilių analizei buvo taikomi kokybinis ir kiekybinis metodai. Disertacijoje pateiktos AS asmenų kognityvinės ir pragmatinės kalbos apdorojimo charakteristikos Vogindroukas et al. (2022):

1. Netinkamas kalbinis elgesys
2. Pažodinis aiškinimas
3. Su sritimi susijęs žodynas
4. Monotoniška arba netipiška prozodija
5. Socialinės pragmatikos sunkumai
6. Echolalija

Tolesnei romanų analizei ir palyginimui buvo išskirtos tokios pragmatinės nesėkmės kaip pažodinis aiškinimas ir echolalija.

Po tarp ištraukų su atskirais proto stiliais buvo surinkta: Marko Haddon'o „Tas keistas nutikimas šuniui naktį“: 29 ištraukos, bendra apimtis 2 505 žodžiai. Stork'o „Marcelo realiame pasaulyje“: 56 ištraukos, bendras ilgis 2 246 žodžiai. Jodi Picoult Namų taisyklės“: 36 ištraukos, iš viso 1 821 žodis.

Nustatyta, kad surinkti pažodinių interpretacijų pavyzdžiai įvairiu laipsniu patenka į anksčiau minėtas Suryandari ir Sutrisno (2018) įvestas subkategorijas: sarkazmas, idiomos, bendrinės frazės, metaforos, hiperbolės, anekdotai, pedantiška kalba, daugiareikšmiai žodžiai, pokalbio maksimų: kokybės maksimos, kiekybės maksimos, santykio maksimos, būdo maksimos (Grice 1975) pažeidimas, netiesioginės kalbos aktai. Tuo tarpu echolalija skirstoma į dvi kategorijas: : frazių ar sakinių kartojimas, bei žodžių ar frazių, girdėtų filmuose, knygose ar televizijos laidose, kartojimas.

Išanalizavus tris sąmonės būklę atspindinčius stilius buvo nustatyta, kad nors jų mąstymo stiliai turi tam tikrų panašumų, pavyzdžiui, bendrų sunkumų, susijusių su perkeltinė kalba, AS personažų vaizdavimas pasirinktuose romanuose skirsis mąstymo stiliaus vaizdavimo, kalbinių modelių ir pasakojimo pateikimo požiūriu.

APPENDICES

Appendix A: data from Haddon's *The Curious Incident of the Dog in the Night-Time****Literal Interpretation***

Total number found (30)

Extracts:

1. "I am veined with iron, with silver and with streaks of common mud. I cannot contract into the firm fist which those clench who do not depend on stimulus." What does this mean? I do not know. " (p. 7)
2. "I said that I wanted to write about something real and I knew people who had died but I did not know any people who had been killed, except Mr. Paulson, Edward's father from school, and that was a gliding accident, not murder, and I didn't really know him. I also said that I cared about dogs because they were faithful and honest, and some dogs were cleverer and more interesting than some people. Steve, for example, who comes to the school on Thursdays, needs help to eat his food and could not even fetch a stick. Siobhan asked me not to say this to Steve's mother." (p. 7)
3. "Then the police arrived. I like the police. They have uniforms and numbers and you know what they are meant to be doing. There was a policewoman and a policeman. The policewoman had a little hole in her tights on her left ankle and a red scratch in the middle of the hole. The policeman had a big orange leaf stuck to the bottom of his shoe which was poking out from one side." (p. 8)
4. "'How old are you?' he asked.
I replied, 'I am 15 years and 3 months and 2 days.'" (p. 8)
5. "And what, precisely, were you doing in the garden?" he asked.
"I was holding the dog," I replied." (p. 8)
6. "And why were you holding the dog?" he asked.
This was a difficult question. It was something I wanted to do. I like dogs. It made me sad to see that the dog was dead."
"'I like dogs,' I said." (p. 8)
7. "It was a clear night and you could see the Milky Way.
Some people think the Milky Way is a long line of stars, but it isn't. Our galaxy is a huge disk of stars millions of light-years across, and the solar system is somewhere near the outside edge of the disk.
When you look in direction A, at 90° to the disk, you don't see many stars. But when you look in direction B, you see lots more stars because you are looking into the main body of the galaxy, and because the galaxy is a disk you see a stripe of stars.
And then I thought about how for a long time scientists were puzzled by the fact that the sky is dark at night, even though there are billions of stars in the universe and there must be stars in every direction you look, so that the sky should be full of starlight because there is very little in the way to stop the light from reaching earth.
Then they worked out that the universe was expanding, that the stars were all rushing away from one another after the Big Bang, and the further the stars were away from us the faster they were moving, some of them nearly as fast as the speed of light, which was why their light never reached us. " (p. 11)
8. "And when the universe has finished exploding, all the stars will slow down, like a ball that has been thrown into the air, and they will come to a halt and they will all begin to fall toward the center of the universe again. And then there will be nothing to stop us from seeing all the stars in the world because they will all be moving toward us, gradually faster and faster, and we will know that the world is going to end soon because when we look up into the sky at night there will be no darkness, just the blazing light of billions and billions of stars, all

falling.

Except that no one will see this because there will be no people left on the earth to see it. They will probably have become extinct by then. And even if there are people still in existence, they will not see it because the light will be so bright and hot that everyone will be burned to death, even if they live in tunnels.” (p. 12)“Chapters in books are usually given the cardinal numbers 1, 2, 3, 4, 5, 6 and so on. But I have decided to give my chapters prime numbers 2, 3, 5, 7, 11, 13 and so on because I like prime numbers. This is how you work out what prime numbers are.

First you write down all the positive whole numbers in the world.

Then you take away all the numbers that are multiples of 2. Then you take away all the numbers that are multiples of 3. Then you take away all the numbers that are multiples of 4 and 5 and 6 and 7 and so on.

The numbers that are left are the prime numbers.

The rule for working out prime numbers is really simple, but no one has ever worked out a simple formula for telling you whether a very big number is a prime number or what the next one will be. If a number is really, really big, it can take a computer years to work out whether it is a prime number.

Prime numbers are useful for writing codes and in America they are classed as Military Material and if you find one over 100 digits long you have to tell the CIA and they buy it off you for \$10,000. But it would not be a very good way of making a living.

Prime numbers are what is left when you have taken all the patterns away. I think prime numbers are like life. They are very logical but you could never work out the rules, even if you spent all your time thinking about them.” (p. 13)

9. “It was nice in the police cell. It was almost a perfect cube, 2 meters long by 2 meters wide by 2 meters high. It contained approximately 8 cubic meters of air. It had a small window with bars and, on the opposite side, a metal door with a long, thin hatch near the floor for sliding trays of food into the cell and a sliding hatch higher up so that policemen could look in and check that prisoners hadn't escaped or committed suicide. There was also a padded bench.” (p. 14)
10. “It was 1:12 a.m. when Father arrived at the police station. I did not see him until 1:28 a.m. but I knew he was there because I could hear him.” (p. 17)
11. “At 1:28 a.m. a policeman opened the door of the cell and told me that there was someone to see me.” (p. 17)
12. ‘He said, "Did you mean to hit the policeman?"
I said, "Yes."
He squeezed his face and said, "But you didn't mean to hurt the policeman?"
I thought about this and said, "No. I didn't mean to hurt the policeman. I just wanted him to stop touching me."’ (p. 17)
13. “I'm not a spazzer, which means spastic, not like Francis, who is a spazzer, and even though I probably won't become an astronaut, I am going to go to university and study mathematics, or physics, or physics and mathematics (which is a Joint Honor School), because I like mathematics and physics and I'm very good at them. But Terry won't go to university. Father says Terry is most likely to end up in prison.
Terry has a tattoo on his arm of a heart shape with a knife through the middle of it.” (p. 25)
14. “For example, people often say "Be quiet," but they don't tell you how long to be quiet for. Or you see a sign which says KEEP OFF THE GRASS but it should say KEEP OFF THE GRASS AROUND THIS SIGN or KEEP OFF ALL THE GRASS IN THIS PARK because there is lots of grass you are allowed to walk on.” (p. 28)
15. “Also I don't know what Father means when he says "Stay out of other people's business" because I do not know what he means by "other people's business" because I do lots of things with other people, at school and in the shop and on the bus, and his job is going into other

people's houses and fixing their boilers and their heating. And all of these things are other people's business.” (p. 28)

16. “Mrs. Forbes at school said that when Mother died she had gone to heaven. That was because Mrs. Forbes is very old and she believes in heaven. And she wears tracksuit trousers because she says that they are more comfortable than normal trousers. And one of her legs is very slightly shorter than the other one because of an accident on a motorbike.” (p. 30)
17. “I said that there wasn't anything outside the universe and there wasn't another kind of place altogether. Except that there might be if you went through a black hole, but a black hole is what is called a singularity, which means it is impossible to find out what is on the other side because the gravity of a black hole is so big that even electromagnetic waves like light can't get out of it, and electromagnetic waves are how we get information about things which are far away. And if heaven was on the other side of a black hole, dead people would have to be fired into space on rockets to get there, and they aren't or people would notice.” (p. 30)
18. “What actually happens when you die is that your brain stops working and your body rots, like Rabbit did when he died and we buried him in the earth at the bottom of the garden. And all his molecules were broken down into other molecules and they went into the earth and were eaten by worms and went into the plants and if we go and dig in the same place in 10 years there will be nothing except his skeleton left. And in 1,000 years even his skeleton will be gone. But that is all right because he is a part of the flowers and the apple tree and the hawthorn bush now. When people die they are sometimes put into coffins, which means that they don't mix with the earth for a very long time until the wood of the coffin rots. But Mother was cremated. This means that she was put into a coffin and burned and ground up and turned into ash and smoke. I do not know what happens to the ash and I couldn't ask at the crematorium because I didn't go to the funeral. But the smoke goes out of the chimney and into the air and sometimes I look up into the sky and I think that there are molecules of Mother up there, or in clouds over Africa or the Antarctic, or coming down as rain in the rain forests in Brazil, or in snow somewhere.” (p. 30)
19. “My age is 15 years and 3 months and 3 days.” (p. 35)
20. “All the other children at my school are stupid. Except I'm not meant to call them stupid, even though this is what they are. I'm meant to say that they have learning difficulties or that they have special needs. But this is stupid because everyone has learning difficulties because learning to speak French or understanding relativity is difficult and also everyone has special needs, like Father, who has to carry a little packet of artificial sweetening tablets around with him to put in his coffee to stop him from getting fat, or Mrs. Peters, who wears a beige-colored hearing aid, or Siobhan, who has glasses so thick that they give you a headache if you borrow them, and none of these people are Special Needs, even if they have special needs.” (p. 37)
21. “What the hell were you doing poking round her garden?”
I said, “I was doing detective work trying to find out who killed Wellington.” (p. 39)
22. “Well, Mrs. Shears is a friend of yours, isn't she. A friend of you and your father. So perhaps your father doesn't like Mr. Shears because he left Mrs. Shears. Because he did something bad to someone who is a friend.” And I said, “But Father says Mrs. Shears isn't a friend of ours anymore.” (p. 42)
23. ““God, you do get the third degree, don't you.” But I didn't know what the third degree was.” (p. 52)
24. “And I am going to finish this chapter with two interesting facts about Sherlock Holmes

In the original Sherlock Holmes stories Sherlock Holmes is never described as wearing a deerstalker hat, which is what he is always wearing in pictures and cartoons. The deerstalker hat was invented by a man called Sidney Paget, who did the illustrations for the original books.

In the original Sherlock Holmes stories Sherlock Holmes never says "Elementary, my dear Watson." He only ever says this in films and on the television." (p. 57)

25. "For example, if people say things which don't make sense, like, "See you later, alligator," or "You'll catch your death in that," I do a Search and see if I have ever heard someone say this before. " (p. 60)
26. "So, what have you been up to today, young man?"
And I said, "Today we did Life Skills with Mrs. Gray. Which was Using Money and Public Transport. And I had tomato soup for lunch, and 5 apples. And I practiced some maths in the afternoon and we went for a walk in the park with Mrs. Peters and collected leaves for making collages." " (p. 72)
27. "I looked up and saw that there was a policeman standing in front of me and he was saying, "Anyone at home?" but I didn't know what that meant." (p. 104)
28. "And he said, "Do you want to go one way, or do you want to go and come back?" And I said, "I want to stay there when I get there" And he said ""For how long?" And I said, "Until I go to university."" (p. 108)
29. "And I said, "Is that the A-to-Z?" and I pointed at the book.
And he said, "No, it's a sodding crocodile."
And I said, "Is that the A-to-Z?" because it wasn't a crocodile and I thought I had heard wrong because of his accent." (p. 131)
30. "And Mother said "Go on or you'll catch your death," but I didn't know what you'll catch your death meant, and I went inside." (p. 135)

Echolalia

Total number found (4)

Extracts:

1. "Left, right, left, right,.. " (p. 109)
2. "Left, right, left, right, left,.. " (p. 118)
3. "Left, right, left, right, left, right. . ." (p. 127)

Appendix B: data from Stork's *Marcelo in the Real World*

Literal Interpretation

Total number found (29)

Extracts:

1. "You are really looking forward to your job as stable man, aren't you?" I hear Aurora ask me. It is not like Aurora to ask me unnecessary questions. Of course I am looking forward to this summer job, just like I am looking forward to my last year at Paterson. The job of stable man will continue into next year, only next year I will be involved not just with the upkeep of the ponies and the stable, but with the actual training of the ponies. Fritzzy will be ready to be trained in early fall. It is an unbelievable process, to take these ponies and get them accustomed to anything and everything a disabled kid can do. No amount of noise or discomfort or even pain will cause them to hurt a child if they are well-trained. (p. 16)
2. "How long will these visits go for?"
"They last about an hour."
"No, that's not what I meant. I mean, how much longer are these experiments or observations going to go on?" (p. 23)
3. "Are you all right?" she asks.
"No."
"Your father told me that he talked to you about working at the law firm this summer." (p. 31)
4. "Tell me what you are thinking," Aurora urges me. [...] "No," I say to Aurora. I regularly say no when people ask me to tell them what I'm thinking. (p. 42)
5. "Everyone. People will be testing you. They'll want to see if you can do the job or if you're just there because you're my son and I'm the boss." "I'm starting to get dizzy. Who am I supposed to work harder than or be smarter than?" (p. 48)
6. "Precisely. That's why it's helpful to assume that most people are looking out for number one." At that moment, I picture a group of people standing on a corner waiting for a big number one to appear. (p. 48)
7. "Do whatever she tells you. But watch out for her, she eats little boys for breakfast." That must be another figure of speech, I say to myself. But I do not know what it signifies. (p. 51)
8. "You can read, right?" I wonder why she asks me that. Perhaps it's a joke of sorts that I don't understand. (p. 54)
9. "You are coming to work every day, right?"
"Every day," I say. I wonder if that includes Saturday and Sunday. Arturo comes to work on those days frequently. Perhaps he expects me to do the same. (p. 55)
10. "Martha for one would not hesitate to jump your bones."
I think of the passage in the Bible where the prophet Ezekiel jumps up and down on a pile of skulls and bones. The rapidity with which I am encountering new concepts is making me dizzy.
"What's wrong with you anyway?"
"You need to speak clearly. I don't know what the phrase 'jump your bones' means. It would be very helpful if you were more literal." (p. 57)
11. "My special interest is God."
"Excuse me?"
"Religion. What humankind has experienced and said and thought about God. I like to read and think about that."
"Is that right?"
"I don't know if it is right or not. It just is." (p. 61)
12. "And I'm being extremely literal. Listen to me. If she or Holmes or little boy Wendell asks you to do anything, anything whatsoever, you need to tell me immediately. Do you understand?"
"Yes. I know Wendell. He is not a little boy. He is about three years older than I am." (p. 64)

13. “She must be good at something all right if your father likes her.” He smirks again. “See if you can figure out why your father keeps Jasmine around. That would be a good project for you this summer. In any event, don’t you worry about Jasmine. I’ll take care of her.”
 “Marcelo does not worry.” I am still angry but the anger is subsiding. I take a deep, deep breath as I have been taught to do at Peterson.” (p. 71)
14. “I see you’ve been talking to the old man.”
 “Your father is not old,” I say.” (p. 73)
15. “That’s deep, Marcelo. It really is. If you really feel that way and are not trying to pull my leg, or anything else for that matter, I take my hat off to you, I guess. But I’m not so sure. I don’t think you’re being totally honest with me.”
 “You don’t have a hat on.” It is my attempt at humor and at changing the subject but it doesn’t work on either count.” (p. 75)
16. “You and Jasmine must be getting along then.”
 That sounds to me like a conclusion and not a question so I don’t respond. We stand at the corner waiting for the miniature person on the walk sign to turn white so we can cross. Part of the momentary annoyance at working out is that I don’t need to work out. I lift the dumbbells every morning, as I have ever since my uncle Hector taught me how to do it.
 “I asked if you and Jasmine were getting along.”
 So it was a question then. I hesitate because Arturo is crossing the street even though the person in the sign is still red. (p. 96)
17. It is a book that Rabbi Heschel lent to me. It is called *God in Search of Man*. It is written by a man named Abraham Joshua Heschel, but Rabbi Heschel is not related to him. (p. 108)
18. Rabbi Heschel asks me slowly, “Have they talked to you about sex at Paterson?”
 “Sexual intercourse is how humans procreate. The erect penis of the man goes into the vagina of the woman. I am not a child.” (p. 119)
19. “You will consider what I said?” he asks.
 “Consider.”
 “You will consider helping me. That is my understanding. Is it yours as well?” (p. 134)
20. “Where are you?”
 “By the dead fish,” I say, looking up to see where I am. (p. 137)
21. “How did you end up here?”
 “I walked.” (p. 138)
22. “I guess that makes us both idiots.”
 “Idiots,” I repeat.
 “That’s not a good word, is it?”
 “It is not accurate. An idiot is a mentally deficient person having intelligence in the lowest possible range, unable to guard against common dangers and incapable of learning connected speech. Sometimes people think I am an idiot. It is only true in some respects.” (p. 139)
23. “The lawyer here is out on vacation, and when he comes back he’s going to be fired, so you can use this office. Just put the pictures and stuff on his desk in a box. Don’t go through any of his drawers. He can do that himself. He’s going to get axed the minute he comes in.”
 I stand there looking at a desk full of pictures of children. “Fired. Axed.” I am not sure what these words mean, but because I am going to use his office, I suspect that it means that the lawyer will be dismissed from the law firm. (p. 172)
24. “I have no doubt he would.”
 “My uncle Hector brought Namu and Namu’s brother, Romulus, from Texas when I was twelve years old. He gave Romulus to Paterson, the school I attend.” (p. 189)
25. “Do you know that guy Robert Steely, the one that got canned last week?”
 “Yes.” Canned. Another mysterious figure of speech.” (p. 200)
26. “Well, I worked with Stephen Holmes, but since Holmes was away, it fell upon your father to do the honors.”
 “Honors.” (p. 204)

27. "How about lunch?"
"I have lunch." (p. 210)
28. "When the door closes, Jonah says, "She's afraid we're going to have a heart-to-heart."
"A 'heart-to-heart'?"
"A man-to-man. Two men talking straight and honest to each other." (p. 236)
29. "The urge. Urge."
"Great word, isn't it? Sounds like when a piece of gefilte fish gets stuck in your throat and you try to dislodge it by coughing and gagging. Uurrch. Uuurguh." She imitates a person choking.
"'Urgency' and 'urgent' are related to urge," I say." (p. 274)

Echolalia

Total number found (27)

Extracts:

1. "Sweet," I say. "It is sweet." I look for Toby but he is up in the control room. (p. 8)
2. "Good morning," she says when she sees me. "You look very elegant today."
Aurora says that every single morning despite the fact that I usually wear the same thing: white button-down shirt (short sleeves in the summer, long sleeves in the winter), blue cotton pants (summer) or blue corduroy pants (winter), black socks, and black sneakers.
"Aurora looks very elegant," I say. Aurora has on white nurse's pants, a mint-green blouse with yellow smiley faces, white stockings, and white shoes with thick, white rubber soles. (p. 41)
3. "Thank you, Mother, for making me lunch," she says, to remind me.
4. ", God only knows why."
"God knows why," I tell her. I wonder if mentioning God in the workplace is also something that should not be done, along with praying or quoting Scripture. In any event, Jasmine does not seem to mind. (p. 65)
5. "Now." I repeat
"Yes. Now. As in immediately. He only has a few minutes before his eleven o'clock. If you could get here right away that would be wonderful." (p. 67)
6. "She's hot, isn't she?"
"Hot." Why is it that whenever I don't understand how a word is used, I tend to repeat it?" (p. 67)
7. "You mean to tell me that you never," Wendell lowers his voice, "never want to, you know, do it." Wendell has made a circle with his index finger and his thumb and is sticking the middle finger from his other hand repeatedly in and out of the circle.
"It."
"It." Now Wendell lifts his arm slowly up in the air like an elephant raising his trunk. I know that Wendell's finger poking is a gesture meant to signify sexual intercourse and that the rising arm signifies an erection. The rules regarding sexuality and conversations about sexuality are hazy, confusing. I don't know whether Wendell is joking or whether he is interested in discussing the topic seriously. I decide that Wendell is most probably joking and I don't need to respond. I stand up and say, "I need to go help Jasmine. (p. 75)
8. "It's a creepy feeling inside."
"Creepy."
"Yeah, creepy. Wendell gives me the heebie-jeebies." (p. 94)
9. "Heebie-jeebies. Can you be more specific?"
"Have you ever been greedy for something?" (p. 94)
10. "How are you doing at work?" Arturo asks me.
"Hunky-dory," I respond. I try to say it the way Jasmine says it, but I don't quite get the right intonation. (p. 95)

11. "And what did you think?"
"Think." (p. 102)
12. "He used a rock."
"He used a rock. Maybe." (p. 118)
13. "Can you imagine Jasmine at dinner conversing with my father and mother about world events? Jasmine barely finished high school for one, and for another Jasmine has been...around."
"Around." (p. 125)
14. "Tell me something that you want."
"Want." (p. 133)
15. "You will consider what I said?" he asks.
"Consider." (p. 134)
16. "He is remembering," I say.
"Remembering what?"
"It's a word I use for praying. Sometimes it's like waiting for music to come out of the silence." (p. 147)
17. "Kaput." I make the same sword-motion with my hand." (p. 151)
18. "Move them down to where you are going to be."
"Where I am going to be." (p. 172)
19. "Three years in high school. Besides, I hate to tell you, but taquería is not that hard to translate. This picture could have been taken in any of the countless places in Spanish-speaking countries where Vidromek does business. Except that..."
"Except that." (p. 179)
20. "Well, I worked with Stephen Holmes, but since Holmes was away, it fell upon your father to do the honors."
"Honors."
"To tell me, you know, 'Please pick up your things now and go.'" (p. 204)
21. "When the door closes, Jonah says, 'She's afraid we're going to have a heart-to-heart.'
"A 'heart-to-heart'?" (p. 236)
22. "Are you attracted to Jasmine?"
"Attracted." I am at a loss as to what to say. I like being with Jasmine." (p. 240)
23. "They make mistakes galore because of it."
"Galore." I like that word." (p. 258)
24. "How I found out what God wanted me to do is that the urge to do it got too painful to ignore. I ended up going to seminary just so I could finally get some sleep."
"The urge. Urge." (p. 274)
25. "The right note sounds right and the wrong note sounds wrong." (p. 278)
26. "This house once was from rich family. When last daughter die, she leave it to us. Is a big house. Now some nights we have forty girls. In rich family there only four live here. Father, mother, and two daughters. And maybe five servants." She laughs. "Imagine."
"Forty girls," I say to myself out loud. (p. 293)
27. "We kissed. The next day I wrote him that note. Sounds like I'm trying to make excuses. I don't mean to. I know I don't owe you an explanation, but that's what happened."
"You kissed." (p. 306)
"You kissed? You ran out? He used force to kiss you?" (p. 306)

Appendix C: data from Picoult's *House Rules*

Literal Interpretation

Total number found (25)

Extracts:

1. "There was a confrontation in the kitchen," Jacob explains. "It ended with the phone being thrown in defense, and me being chased into the living room, where Theo clocked me." (p. 8)
2. "What is it like (in Vermont)?"
"Lots of green, and rolling hills."
"Won't they hurt us?" (p. 8)
3. "Stupid English." "English isn't stupid," I say." (p. 12)
4. "I may be autistic, but I can't tell you what day of the week your mother's thirty-second birthday fell on. I can't do logarithms in my head. I can look at a patch of sod and tell you it has 6,446 individual blades of grass. On the other hand, I could tell you anything you ever wanted to know about lightning, polymerase chain reactions, famous movie quotes, and Lower Cretaceous sauropods. I memorized the periodic table without even trying; I taught myself how to read Middle Egyptian; and I helped my calculus teacher fix his computer. I could talk forever about friction ridge detail in fingerprint analysis and whether said analysis is an art or a science. (For example, DNA of identical twins is identical; we know that based on scientific analysis. But the fingerprints of identical twins differ in their Galton details- which evidence would you rather have if you were a prosecutor? But I digress.)" (p. 22)
5. "I don't have any friends. The bullying started in kindergarten, when I got my glasses. The teacher made a popular boy wear fake glasses so I'd have someone to connect with, but as it turned out, he didn't really want to talk about whether archaeopteryx should be categorized as a prehistoric bird or a dinosaur." (p. 24)
6. "Hey, Jacob, isn't this the coolest MP3 player? It was probably made by Chinese kids." (p. 25)
7. "Don't move-don't even breathe." Normal kids ignored the statement; a few Goody Two-shoes worked quietly at their desks. And me? I sat like a statue with my lungs on fire, until I was on the verge of passing out." (p. 24-25)
8. "Instead, I hang out in the teachers' room, where if I happen to mention that Pythagoras did not really discover the Pythagorean theorem (the Babylonians used it thousands of years before Pythagoras was even a seductive gleam in his Grecian parents' eyes), they do not look at me as if I have grown a second head. If things get really bad, pressure helps-like lying under a pile of laundry or a weighted blanket (a blanket if I happen to mention that Pythagoras did not really discover the Pythagorean theorem (the Babylonians used it thousands of years before Pythagoras was even a seductive gleam in his Grecian parents' eyes), they do not look at me as if I have grown a second head. If things get really bad, pressure helps-like lying under a pile of laundry or a weighted blanket (a blanket with little poly pellets inside that make it heavier)-because the deep touch sensory stimulation calms me down. One of my therapists, a Skinnier aficionado, got me to relax to Bob Marley songs. When I get upset, I repeat words over and over and talk in a flat voice. I close my eyes and ask myself, What would Dr. Henry Lee do?" (p. 27)
9. "I like a guy who already has a girlfriend. I know he likes me cuz-God, don't they teach you how to spell these days?"
"No," I answer. "They teach us to use spell-check." (p. 31)
10. "He thinks I am retarded, even though the diagnosis of mental retardation is reserved for people who score lower than 70 on an IQ test, and I myself have scored 162. In my opinion, the very fact that Mark doesn't know this diagnostic criterion suggests that he's a lot closer to actual retardation than I am." (p. 66)
11. "A man comes down the stairs that lead up from the entryway of the pizza place. He has a dog on a leash, a miniature poodle. I step into his path and start patting the dog.
"Thor! Down!" he says, but the dog doesn't listen.

- “Did you know poodles aren’t French? In fact the name poodle comes from the German word Pudel, which is short for Pudelhund, or splashing dog. The breed used to be a water dog.” (p. 67)
12. “This week she moved out of her dorm room and into a professor’s house. She is babysitting for the house, which sounds like an immense waste of time, because it’s not as if the house is going to touch the stove if it’s hot or eat something poisonous or fall down its own stairs.” (p. 68)
 13. “What the hell?” “An AP test-acid phosphatase test-it’s used with a forensic light source to test for presumptive semen. It’s not as conclusive as DNA, but then again, when you get a rapist who’s had a vasectomy, there won’t be any sperm, and if an AP test and a 530-nanometer trispot is all you’ve got-” (p. 72)
 14. “Well, no. You can just... I don’t know. Call them names.”
“Their names are Sean and Amahl,” Jacob said.” (p. 88)
 15. “She said she’d die if Paul McGrath didn’t ask her to the Winter Formal, but in reality, she would not have died-she would just have been really sad. Or the way Theo sometimes smacks another kid’s shoulder and says “Get out!” when that really means he wants his friend to keep talking. Or that time my mom muttered “Oh, that’s just great” when we got a flat tire on the highway although it clearly was not great; it was a colossal hassle.” (p. 91)
 16. “Hypothesis Two would be that she is actively choosing to not communicate with me, which would indicate anger or frustration (see above: Just get lost). But that doesn’t make sense, since she specifically told me at our last meeting that I should tell her what I’d learned....which implies another meeting.” (p. 91)
 17. “...but then I remember Jess telling me that not everything is about me, and that putting yourself in someone else’s shoes is part of social interactions. (Not literally, I would not fit in Thoe’s shoes. He wears ten and a half, while I wear a twelve.) (p. 93)
 18. “Here are some facts about forensics:1. Forensics is defined as the scientific methods and techniques used in connection with the detection of crime.2. The word forensic comes from the Latin forensic, which means “before the forum.” In Roman times, a criminal charge was presented in front of a public group in the forum. The accused and the victim would give testimony, and the one who had the best argument would win.3. The first written account of forensics to solve cases was during the Song Dynasty in China in 1248. After a person was killed with a sickle, an investigator told everyone to bring their sickles to a specified location, and when the flies were drawn to one by the smell of blood, the murderer confessed.4. The earliest incidence of fingerprint use to determine identity was in the seventh century, when a debtor’s fingerprints were attached to a bill, as proof of the debt for the lender.5. Forensic science is a lot easier to perform when you aren’t personally involved. The tips of your fingers, the palms of your hands, and the soles of your feet aren’t smooth. They are friction-ridged skin, series of lines with contours and shapes. Like a topographical map. Along those lines are sweat pores, and if they become contaminated with sweat, ink blood, or dirt, they’ll leave a reproduction of those lines on the object that’s been touched. Or, in less fancy terms, a fingerprint. (p. 113)
 19. “The largest fish in the world is a whale shark, at fifty feet.
Four million marshmallow Peeps are made each day.
(That sort of makes me wonder who on earth is buying them when it’s not Easter.)
It takes the average adult man thirteen minutes to eat his dinner.
“I’ve got one for you, Ms. Agworth,” I say. “The word ass is in the Bible 170 times.” (p. 126)
 20. “If they’re about forensics,” he says, growing animated, “then I am more than happy to help. Have you heard about the research coming out of Purdue, on desorption electrospray ionization? They found that the sweat from finger pores slightly corrodes metal surfaces-anything from a bullet to a piece of a bomb. If you spray the fingerprints with positively charged water, the droplets dissolve chemicals in the fingerprints and transfer minute amounts that can be analyzed by mass spectrometer. Can you imagine how handy it would be to not

- only get fingerprint images but also identify the chemicals in them? You could not only place a suspect at a crime scene but also get proof that he handled explosives.” (p. 137)
21. “Do you have any questions?” Jacob nods. “Can we get a snack now?” (p. 179)
 22. “You can’t talk to anybody,” I clarify. “Do you understand?” Jacob glances down at the table. “Jacob? Hello?” “You told me not to talk to anybody,” he mutters. “Will you make up your mind already?” (p. 207)
 23. “A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms shall not be infringed,” Jacob recites. (p. 345)
 24. “You know why you can pick up AM stations better at night? Because the ionosphere reflects radio signals better when the sun isn’t radiating the heck out of the upper atmosphere.” “Thanks. I couldn’t have gone to sleep tonight without knowing that.” “Really?” (p. 523)
 25. “It’s your funeral,” I murmur. “No,” Jacob says. “It’s my trial.” (p. 554)

Echolalia

Total number found (11)

Extracts:

1. “A single tear streaks from the corner of his eye. “I shot the sheriff,” he whispers, “but I swear it was in self-defense.” (p. 15)
2. “I start rocking back and forth. “Nobody puts Baby in a corner,” I quote under my breath.” (p. 76)
3. “You can’t handle the truth,” he says, in a dead-on imitation of Jack Nicholson,” (p. 82)
4. “I shot the sheriff... but I didn’t shoot the deputy.” (p. 96)
5. “This is where I go, when I go:” x 4 (p. 108)
6. “I shot the sheriff,” I whisper. “But I swear it was in self-defense.” (p. 114)
7. “Then I speak my message, the same words I say to her every Thursday: See you in three days.” (p. 127)
8. “Hasta la vista, baby,” I murmur, and I make up my mind that, no matter what this detective says to me, I’m not speaking again until my show is over.” (p. 143)
9. “I told you I went to her house Tuesday, like I was supposed to. And things weren’t right.” “What do you mean?” “There were stools knocked over in the kitchen, and papers all over the floor, and all the CDs were thrown on the carpet. It wasn’t right, it wasn’t right...” (p. 148)
10. “Houston, we have a problem.” (p. 148)
11. “Houston, we have a problem.” (p. 150)