Language And Discourse Mechanics: A Metafunctional Analysis Of The Autistic Character In Temple Grandin

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Abstract

The present study aims to highlight the linguistic challenges faced by Temple Grandin, an individual with Autism Spectrum Disorder (ASD). The study examines these challenges through a Metafunctional analysis of her spoken discourse within Michael Halliday's Systemic Functional Linguistics framework (SFL). Mick Jackson's movie 'Temple Grandin (2010)' is used as the data sample. The research specifically focuses on the Textual Metafunction, analyzing how cohesive devices and theme-rheme structures impact the overall coherence and communicative effectiveness of her speech. Employing a qualitative methodology and content analysis design, this study highlights the difficulties individuals with ASD encounter in organizing their speech cohesively and coherently. Temple Grandin's speech, known for its detail-oriented nature, serves as an insightful case for exploring the broader communication challenges faced by those with autism spectrum disorder (ASD), a language disorder.[1] By examining the unique structure of her discourse, this research contributes to understanding how ASD affects speech production and organization. This research is significant as it offers a unique lens into the linguistic analysis of an autistic character within the SFL framework, filling a notable research gap. 'Temple Grandin' is a cinematic portrayal that has resonated widely, contributing to its relevance across diverse audiences. The findings hold potential implications for enhancing communication strategies for individuals with autism spectrum disorder, offering insights relevant to both linguistic research and therapeutic approaches. In essence, this research not only enriches the scholarly discourse but also provides a foundation for future investigations in linguistics, cinema, and the representation of diverse neurological conditions.

Keywords*: Systemic Functional Linguistics framework (SFL), autism spectrum disorder, Textual Metafunction, language disorder, communicative effectiveness, theme-rheme structures, cohesively, coherently, therapeutic, neurological.*

Introduction
The introduction presents the basic reasoning of the thesis. It discusses Systemic Functional Linguistics and Textual Metafunction and, also offers the rationale behind the current study. This chapter also highlights the research questions and the significance of the present research.

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SFL and Textual Metafunction

The central tenet of Michael Halliday's Systemic Functional Linguistics (SFL) theory of language is that language functions as a social semiotic system. According to Halliday (1994), "a language contains a set of systems which the author or speaker chooses to express meaning". He further claims that language systems are functional components that correspond to three Metafunctions. Within Halliday's framework, there are three primary types of metafunctions: the Ideational Metafunction the Interpersonal Metafunction, and the Textual Metafunction. In the process of creating and communicating meaning each of these is essential. Among three Metafunctions, the textual Metafunction comprising theme and rheme and other linguistic devices like cohesion and coherence is focused on in the present research for investigation.

The Rationale of the Study

The distinctive communication style of Temple Grandin as depicted in the film Temple Grandin, presents an insightful case for examining the linguistic challenges faced by people with autism spectrum disorder (ASD). A fundamental feature of ASD is speech-language difficulties which frequently show up as problems with speech coherence and cohesiveness as a result of neurodevelopmental differences (Kjelgaard 2001). Individuals with ASD frequently encounter obstacles in producing cohesive and coherent speech, including challenges with cohesive devices and the effective organization of theme and rheme structures (Halliday, 1994).

Moreover, Michael Halliday's Systemic Functional Linguistics (SFL) framework makes 'Temple Grandin', which was directed by Mick Jackson, a perfect subject for analyzing the Textual Metafunction. The reason behind this is that it provides a deep portrayal of her personal life and accomplishments. Grandin's communication difficulties are depicted in the movie in a way that gives viewers a fresh perspective on them. It highlights the barriers she faces, the strategies she employs, and the social obstacles she overcome. Grandin's life experiences served as the inspiration for this cinematic adaptation, which highlights the wider effects of communication difficulties in ASD in addition to showcasing her personal triumphs.

Furthermore, the basic function of communication in day-to-day life, where individuals express their thoughts, feelings, and knowledge, also led to the selection of this research topic. The film eloquently depicts Temple's struggles with self-expression highlighting linguistic obstacles and decisions that are frequently linked to autism. Temple experiences difficulties in public settings which makes her anxious and limits his capacity for self-expression. She turns to repeated speech as a coping mechanism in these circumstances. Her distinct way of speaking and acting in various social contexts sheds important light on how autistic individuals deal with communication difficulties.

By focusing on Temple Grandin's speech, this research addresses a significant gap in understanding how individuals with ASD manage their communication. This analysis is crucial for developing more effective speech-language therapy strategies and enhancing support for individuals with ASD. The findings from this research will contribute to the broader scholarly discourse on autism, offering insights into the linguistic dimensions of ASD and informing future studies in both linguistics and therapeutic practices.

Research Questions

The current research is a qualitative analysis centered on the Textual Metafunction, specifically exploring the communication effectiveness of an autistic lady's utterances in the movie 'Temple Grandin'. Following are the research questions to which the current research responds:

1. What cohesive devices are present in Temple Grandin's spoken discourse, and how do they contribute to the overall cohesion and coherence of her speech?
2. What effect does the textual metafunction, specifically in terms of theme and rheme, have on the communication effectiveness of Temple Grandin's discourse?

The study employs an SFL framework to investigate the linguistic features and thematic elements within the autistic lady's discourse, which aims to gain insights into how language functions in conveying meaning and promotes effective communication.

Significance

This study carries great significance. This is valuable because it examines the linguistic nuances of Temple Grandin's speech from the perspective of systemic functional linguistics (SFL). In presenting the life of a well-known person whose communication difficulties and achievements offer a rich source of analysis, the movie 'Temple Grandin' presents a distinctive picture of autism spectrum disorder (ASD). Additionally, the present study closes a significant research gap in the representation of autism in linguistic analysis and cinematic narratives by concentrating on the Textual Metafunction and communication effectiveness in Grandin's discourse.

Furthermore, the current research is significant because it is the first to use SFL to analyze an autistic person's speech, an approach that has not been thoroughly discussed in previous research. This study offers new perspectives on how language choices, in particular cohesive devices and theme-rheme structures, affect the coherence and efficacy of communication for people with autism spectrum disorders. It is anticipated that the results will improve the comprehension of the relationship between language and autism representation with important implications for both theoretical and applied fields.

Additionally, by guiding strategies targeted at enhancing communication skills in people with ASD, the present study makes a significant contribution to the field of speech-language therapy. The knowledge acquired can direct the creation of focused interventions that target particular facets of the Textual Metafunction, eventually improving the communicative proficiency of people on the spectrum. Beyond addressing a significant void in the academic literature, the present research work establishes the foundation for further research in the fields of linguistics film and the representation of various neurological disorders (Halliday, 1994; Foer 2011).

Literature Review

The literature review carries great significance in the current research. This chapter enables the researcher to find the desirable research gap in a piece of literature of their interest.

Introduction to SFL

Systemic Functional Linguistics (SFL) offers a perspective that explores how language, within a given context, is used to facilitate learning, construct meanings, and make social change. In the 1960s, when it was developing it started to expand into many other branches of Applied Linguistics such as Critical Discourse Analysis, studies on Multimodality, and educational linguistics. According to Halliday (Halliday & Hasan, 1985), the role of grammar is functional as it is a valuable resource for creating meaning, also capable of adapting to and shaping the situational and cultural contexts in which semiotic systems are used and developed.

Additionally, Halliday declared language as a Social Semiotic SFL interprets language as a process of making meanings, it is not only text (what people mean) but also the semantic system (what they can mean) that embodies the ambiguity, antagonism, imperfection, inequality, and change that characterize the social system and the social structure (1978). It molds the meaning that is communicated as well as the shape and structure of language. This method of studying linguistics emphasizes the need to view language as a component of a broader social and cultural framework rather than as something that can be understood in isolation.

SFL and Metafunctions

According to Halliday, "a language-based theory of learning" (1993, p.93) determines how language performs different functions while constructing meanings. So, at the lexico-grammatic level, Halliday (1985) proposed three metafunctions which comprise the ideational, the interpersonal, and the textual. "First, the Ideational metafunction is responsible for constructing a model of experience and representations of the world. Second, the Interpersonal metafunction is responsible for enacting social relationships i.e., constituting social interactions. Lastly, Textual metafunction is responsible for creating relevance to context and creating cohesively structured texts and communicative events" (Halliday, 1985, p.36)

Halliday (1978) tells us that language use in SFL is understood to have three socio-semiotic variables, namely: field, tenor, and mode. The concept of "field" refers to the way experiences are expressed through language. This includes the processes, participants, and circumstances involved. "Tenor" refers to the relationships between language users and how they are expressed through mood, attitude, modality choices, and appraisals. Finally, "mode" accounts for textual features such as cohesion, coherence, and thematic patterns.

Figure 1. The levels of communication by Michael Halliday
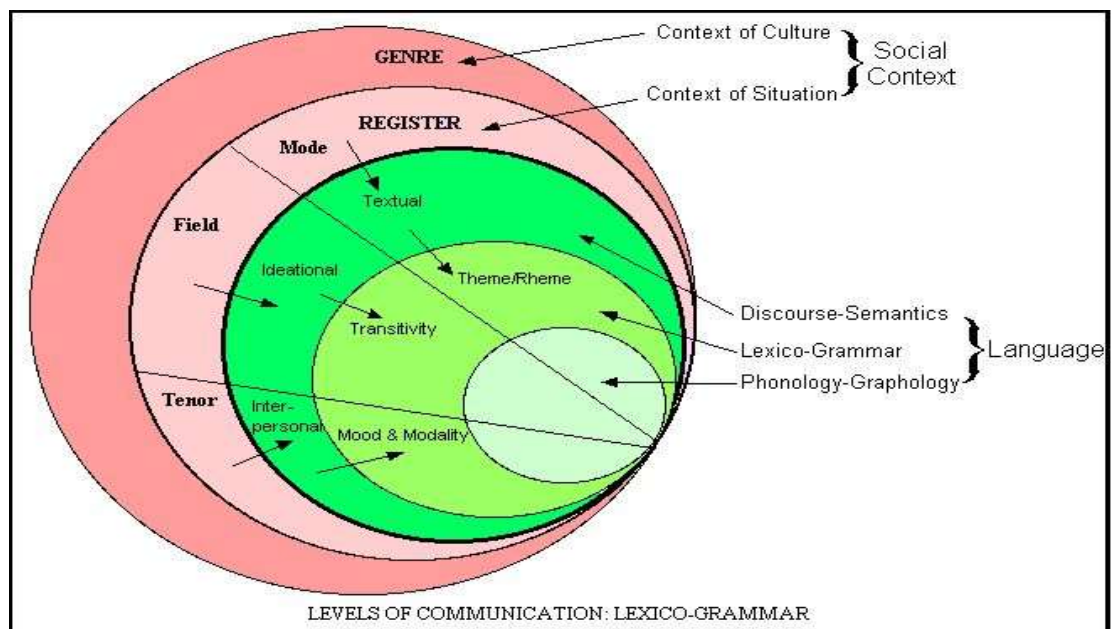
Textual Metafunction

When people utter or write any piece of work, they produce a text. "The term 'text' refers to any instance of language, in any medium, that makes sense to someone who knows the language" (cf. Halliday and Hasan, 1976: Chapter 1). The textual metafunction is the main focus of this research. It considers language as an instrument of communication to build sequences. The Textual Metafunction is responsible for organizing the information flow in a way that ensures a coherent and cohesive extended discourse. Halliday (2014) claims that "clause as message" which means that every clause carries and delivers a message. The textual metafunction helps in fulfilling the function of the message of the clause. It has a very close link with the information structure. It can be analyzed in terms of theme and rheme and other linguistic devices like cohesion and coherence.

Theme and Rheme:

Textual metafunction can be analyzed by dividing it into two parts: theme and rheme. The theme is regarded as "the point of departure of the message" by Halliday (2014, p. 83). It usually comes at the start of the clause and mostly contains the given or already-known information. On the other hand, rheme is "the part of the assembly of the new information that the text offers" (Cummings, 2003, p. 133) as cited in (Wei, 2016, p. 178). There are five types of theme/rheme. These show the progression pattern of the new and given information. These five types of theme/rheme patterns are; progressive theme or theme repetition, zigzag, ideational themes, interpersonal themes, and textual themes.

Furthermore, these theme/rheme patterns are categories of the basis of the provided information. For instance, then the paragraph is about a single idea, it will be a progressive theme. When the theme of one sentence is carried forward as the rheme of the following sentence, then it is a zigzag pattern. "These ideational themes use circumstances of time to organize a series of events according to when they happened and are very common in historical discourse" (Coffin, 2009) as cited in Gebhard, Meg & Accurso, Kathryn. (2020). The sentences that begin with the sentences expressing someone's feelings, attitude, or judgment towards something are regarded as interpersonal themes. Lastly, Textual themes refer to the themes that draw attention to the connection between longer pieces of discourse and the clauses within them.

Pattern	Example	Function	Implications for practice
Theme repetition (use of same word, synonyms, pronouns)	**A right isosceles triangle** *has one angle that measures 90 degrees and two angles that measure 45 degrees.* **It** *has two legs of equal lengths because of their corresponding angles.* **It** *has an area that can be determined by the same formula for all triangles.*	The theme is *a right isosceles triangle*. The rheme adds new information about this theme. Each sentence begins with the same theme using the pronoun *it*, which is repeated as a way of staying on topic.	Text analysts, including students, can highlight and critically discuss how theme patterns progress depending on the genre they are producing (e.g., narratives, historical recounts, mathematical descriptions, scientific explanations).
Zigzag (rheme in one clause becomes theme in the next)	Boston is where **the American Revolution of 1776** *began.* **This revolution** *started because the King of England was* **taxing the Americans too much.** **These taxes** *included the tax on tea, which resulted in the famous Boston Tea Party.*	In a zigzag fashion, the rheme of the first clause becomes the theme of the second, and so on. This pattern creates cohesion between given and new information while building the field.	
Time and place themes (ideational themes)	**On January 20, 1961**, *John F. Kennedy was inaugurated as the 35th President of the United States.* **On November 22, 1963**, *he was assassinated.* **In the United States**, *people of a certain age can recall vividly where they were when Kennedy was shot.*	The themes draw attention to when or where something happened to accent time and place.	
Attitudinal themes (interpersonal themes)	**With fear and frustration**, *many Puerto Ricans continue to live without power and running water in the aftermath of 2017's Hurricane Maria.*	The theme focuses on the speaker/writer's attitudes to draw attention to feelings, evaluations, and judgments.	
Connecting themes (textual themes)	**Because of the narrowing of the arteries**, *there is increased blood pressure.* **As a result**, *patients with high blood pressure have a greater chance of having a heart attack or stroke.*	The theme focuses on a cause to set up a cause-and-effect relation. Other kinds of connecting themes signal different kinds of relationships between clauses—for example, adding information (*in addition, furthermore*), sequencing (*first, second, third, last*), or contrasting information (*however, in contrast, on the other hand*).	

Figure 2. Patterns of Theme and Rheme in Various Disciplines

Cohesion and Coherence

Cohesion and coherence are essential ideas in Systemic Functional Linguistics that immensely aid in the understanding of the organization and interpretation of texts. These concepts are crucial for analyzing how language creates meaningful messages in different contexts. According to Khan cohesion is defined as "the grammatical and lexical relationship between different elements of a text which hold it together" while coherence is "a semantic property of discourse formed through the interpretation of each sentence related to the interpretation of other sentences" (Khan, 2020). The connectedness that is experienced in the interpretation of normal discourses is not simply based on connections between the words. There must be some other factor that leads us to distinguish connected discourses that make sense from those that do not. This factor is usually described as coherence.

Types of Cohesive Devices:

Cohesion in SFL refers to the linguistic elements that link sentences and clauses within a text, creating a sense of unity and connectedness. It is primarily concerned with the surface features of a text, such as its grammar and vocabulary. "Taxonomy of Cohesive Devices Halliday & Hasan (1976) identified general categories of cohesive devices that signal coherence in texts; reference, ellipsis, substitution, conjunction, lexical cohesion grammatical cohesion" ((Khan, 2020).

- Reference: "It is the act of citing information from another source while using your own words as well as comparatives and demonstrative pronouns" (T. de los Santos & F. Examen, 2023, p. 3308-3314) There are three types; personal, demonstrative, comparative.
- Substitution: In speaking and writing, to avoid repetition of words, phrases, or clauses substitution or substitute forms are used.
- Ellipsis: It is the omission of a noun (Nominal ellipsis), verb (Verbal ellipsis), or a clause on the assumption that it is understood from the linguistic context.
- Conjunction: It specifies the relationship between clauses or sentences or links in the chain.
- Lexical cohesion refers to the ties created between lexical elements, such as words, groups, and phrases. (Halliday 537). It is subcategorized into Repetition, synonymy, antonymy, collocation, polysemy, homonymy, and many more.

Disorders Affecting Language Production and Comprehension

Significant deficits in a person's capacity to comprehend or use language are indicative of language disorders. Both verbal and nonverbal communication can be impacted by these impairments which can affect interactions in different situations. As per ASHA (2016), language disorders comprise challenges in multiple fundamental domains. These domains are: Phonology and articulation problems can make speech difficult to understand. These include difficulties enunciating certain sounds correctly. Sometimes people will change omit or distort sounds which makes it harder to understand what they are saying (ASHA, 2016). The next is Fluency: Speech disturbances like stuttering or hesitations that obstruct fluid verbal expression are frequently signs of fluency issues (Guitar, 2014). Lastly, Voice Quality: A language disorder may also be indicated by abnormalities in voice quality such as unusual pitch or volume. Paul (2007) suggests that vocal problems may impede a speaker's capacity to effectively communicate meaning.

Hence, it can be difficult for people to communicate effectively and to express their needs wants, and emotions clearly and concisely when they struggle with language production and comprehension. There are many different causes of language disorders including neurological diseases physical abnormalities developmental delays and hearing loss. These

disorders can also arise as a result of genetic predispositions and environmental factors (Beitchman et al., (1996).

Autism Spectrum Disorder

The complex developmental disorder known as autism spectrum disorder (ASD) has a major influence on the behavior, social interaction, and communication of individuals. Autism spectrum disorder (ASD) is typified by a variety of symptoms that differ in intensity but are always associated with difficulties in social communication and repetitive behaviors, according to Landa (2007). Environmental and Genetic Factors are crucial in the development of this language disorder. According to research, autism spectrum disorder development is influenced by both environmental and genetic factors. Numerous genes have been linked to autism through genetic research suggesting a significant hereditary component (Abrahams and Geschwind, 2008). Furthermore, prenatal and perinatal variables could affect a child's likelihood of having ASD (Modahl et al., 1998). Communication Difficulties are the biggest symptom of people with autism spectrum disorder. Because they have frequently distinctive communication styles. They could have trouble understanding and utilizing non-verbal clues like gestures and facial expressions as well as having trouble using language in social situations (Tager-Flusberg, 2006).

Moreover, their inability to maintain relationships and participate in regular social interactions may be impacted by these communication issues. They have distinct Behavioral traits. According to Veague (2010), there are five or six primary genes and as many as 30 secondary genes that are involved in the development of autism Strict adherence to routines increased sensitivity to sensory inputs and repetitive movements are typical behavioral traits of autism spectrum disorders (ASD). The way people with autism spectrum disorder perceive and react to their surroundings may be impacted by these behaviors which could make social interactions and communication even more difficult (American Psychiatric Association, 2013). To improve communication and social functioning for those impacted it is essential to comprehend the nature of language disorders and the distinctive characteristics of ASD to create useful interventions and support plans.

Speech Disruptions due to Cognitive Challenges

Speech production that is fluent and coherent can be severely impacted by cognitive difficulties. Reluctance or problems with speech fluency are common signs of cognitive problems, (O'Connor and Klein, 2004). When a speaker is having trouble finding the right words or effectively organizing their thoughts these interruptions can be especially difficult. Cognitive issues can cause speech impediments or periods of hesitation during which a speaker's verbal output is interrupted. These hesitancies may arise from the speaker's inability to find the right words or from difficulties processing and organizing their ideas (O'Connor and Klein 2004).

Additionally, Speakers may repeat specific words or phrases during these hesitant periods which can result in stereotypical language patterns that impair their speech's overall fluency (Henderson, 2006). Word Retrieval Problems are faced by autistic patients. When speakers struggle to find the appropriate words, it can lead to fillers and pauses that impede communication. The problem of maintaining a smooth and coherent conversation can be made worse by this problem which is commonly known as word retrieval difficulty (Clark, 1996). Severe cognitive impairments may cause frequent disruptions that make it difficult for the listener to understand what the speaker is trying to say. There is a huge impact on communication. An individual's capacity to remember and incorporate previously discussed information during a conversation may also be impacted by these cognitive difficulties. As a result, speakers may find it difficult to keep their discourse coherent and consistent which can provide further obstacles to effective communication (O'Connor & Klein 2004).

Speech Patterns and Language Use in Autism

Distinctive communication patterns and difficulties that impact both spoken and non-spoken interactions are attributes of autistic language. According to Tager-Flusbergs (2000), autism spectrum disorder (ASD) is a comprehensive term that includes a variety of developmental disorders that impact an individual's language processing and usage. People with autism spectrum disorders frequently display characteristic communication behaviors such as echolalia and delayed verbal responses. One can experience immediate or delayed echolalia which is the repeating of words or sentences that one has heard. Repetition of words or phrases immediately after hearing them is known as immediate echolalia whereas repetition of previously heard phrases is known as delayed echolalia (Gleason, 1998). The challenges with spontaneous and adaptable language use that are frequently seen in autistic people may be attributed to these patterns. Children diagnosed with autism spectrum disorders frequently face difficulties in social communication and interaction. They might struggle to read and interpret nonverbal clues which are essential for efficient interpersonal communication and include body language and eye contact (Baron-Cohen et al., 2009). These difficulties may hinder their capacity to interact socially and build relationships.

Moreover, using repetitive and stereotyped utterances is a prominent characteristic of language used by people with autism. This can interfere with the natural flow of conversation and includes the constant repetition of particular phrases or strict adherence to particular topics (Carroll 2008). Further complicating their communication children with autism may also display phonological and morphological errors such as repetition assimilation deletion and substitution (Wetherby and Prutting, 2007). Developmental Aspects: When compared to their peer autistic people frequently exhibit delays in language acquisition. Phonology syntax and semantics are just a few areas of language use that may be impacted by these delays. Tager-Flusberg (2006) claims that people with autism spectrum disorders frequently experience persistent communication difficulties that can affect their environment and social stimuli responses.

Summary of the Movie

The movie Temple Grandin (2010) chronicles the life of an autistic woman 'Temple Grandin', who becomes a revolutionary figure in the livestock sector. The film starts with Temple's early years during which she had difficulty interacting with people and communicating her thoughts and feelings. The movie portrays her mother's unwavering desire to see that she went to school. Temple Grandin's fascination with cattle begins when she spends time on her aunt's ranch as a teenager. When Temple finally enrolls in college, she encounters prejudice and discrimination. She only succeeds because of her distinct visual thinking style. Her design of humane livestock handling systems is influenced by her experiences with cattle. Despite obstacles her innovations, which center on lowering animal stress during handling and slaughter, revolutionized the industry. Her achievements as a well-known supporter of animal welfare and autism awareness are highlighted in the epilogue of the film which also highlights her impact and legacy.

Some Significant Previous Studies on Autism Spectrum Disorder

Some research papers that have been done on the language analysis of an autistic patient are briefly summarized in this section. Researchers have looked at patient's behavior attitudes and language difficulties related to autism. Using the quantitative research method approach they have also investigated the causes and contributing factors for the responses of autistic patients.

One of the researches was made using behavioral markers to diagnose autism spectrum disorder in its early stages. The goal of this research is to identify behavioral markers in infants and toddlers to aid in the early detection of autism spectrum disorder. Early interventions can greatly enhance developmental outcomes the researchers discovered. Jones and Klin (2013)

highlighted the importance of skilled practitioners in identifying preliminary indicators such as diminished eye contact and restricted social engagements.

Additionally, in research by Sadin and others, emphasized that ASD is caused by a combination of environmental and genetic factors. However, prenatal exposure to specific drugs and other environmental factors also increases the risk. The research on the genetic and environmental causes of ASD has shown that the disorder is highly heritable. To completely comprehend the etiology of ASD the study (Sandin et al., 2014) suggested more investigation of gene-environment interactions.

Furthermore, A study was presented in 2003 by Fauziya in which she examined the pragmatic analysis of speech acts employed by a person with autism spectrum disorder in RSI films. She used Hymes's theory as a theoretical foundation for her investigation. She identified three distinct acts in the utterances: directive, assertive, and expressive utterances. According to her research children with autism do not employ declarative or commission speech acts when speaking (Fauziya, 2003).

In addition to this, the effects of Early Intensive Behavioral Interventions (EIBI) on children with ASD were assessed in the study by Peter and other researchers. According to the findings, kids who got Early Intensive Behavioral Interventions (EIBI) significantly outperformed kids who did not get the intervention in terms of their language and cognitive abilities. EIBI is suggested by the authors as a typical early intervention (Peters-Scheffer et al., 2011).

Moreover, Nafiah (2008) claimed to have examined and recognized expressive language disorders in autistic patients in the Mercury movie. She discovered that the child with autism primarily made phonological articulation and voice errors when speaking. By dissecting the speech of the autistic patient in the Temple Grandin film this study closes a gap. Additionally, it will draw attention to the characteristics of an autistic child that are depicted in the film. Thus, there is a correlation between the current research topic and the previously discussed research topics (Nafiah, 2008).

Additionally, the difficulties adolescents with ASD have communicating with others in social situations were investigated in one of the studies. The results showed that while deficiencies in social reciprocity and pragmatic language continued as people aged deficiencies in other social skills improved as well. Adolescents with these deficits should receive specialized interventions according to the study (Paul et al., 2013).

Lastly, in a research study, parents of children diagnosed with ASD were asked about their psychological stress levels. It was discovered that in comparison to parents of children who are typically developing parents, mothers in particular, frequently experience higher levels of stress and anxiety. The study made clear how important support networks are for reducing parental stress (Hayes & Watson 2013).

Research Methodology

Nature of the Study

The approach that is opted for in the current research is the qualitative approach. According to Denzin & and Lincoln,

> "Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world". (2005, p. 3)

Correspondingly, the present research opted for a qualitative research approach because it is based on words, concepts, and ideas and based on perceptions and not on numerical data. A deeper understanding of the cohesion and coherence, thematic progressions, and effective communication of autistic patients is obtained through the dialogue of the character, 'Temple' in the movie Temple Grandin.

Design of the Qualitative Research Method

The current study applies the qualitative research approach. The qualitative research method consists of seven designs; narrative research, content analysis, historical research, case study research, grounded theory research, phenomenology research, and ethnographic research. Out of these seven, 'content analysis' is used in the current research. "Content analysis focuses on analyzing and interpreting recorded material to learn about human behavior. The material may be public records, textbooks, letters, films, tapes, diaries, themes, reports, or other documents" (Ary et al., 2002, p. 468).

Accordingly, the current research is opting for the content analysis research design because it allows us to systematically analyze the contents of the script of the movie 'Temple Grandin'. It helps to examine discourse, the use of language, scripts, scenes, and dialogues of various characters. In this way, the content analysis helped to analyze the dialogues of the main character, Temple. Content analysis also helps to answer the questions starting from "what" and the present study also contains questions starting from the same words. So, it may be stated that the content analysis research design of the qualitative approach can be applied to the current study (Ijaz, Khan, & Ijaz, 2024).

Data and Sampling

The data of the current research is the Warner Bros movie. As a sample, the movie entitled 'Temple Grandin' is selected. The duration of this movie is two hours and nine minutes. The idea of selecting the movie as a sample is to outline the cohesion and coherence, thematic progressions, and effective communication of Autism Spectrum Disorder patients using Systemic Functional Linguistic Textual Metafunction.

There are many qualitative sampling techniques. Out of these, purposive sampling is the qualitative research that is opted for by the researcher in the current study.

"Purposive sampling is a non-probability (also known as judgment, selective or subject sampling) sampling technique in which the researcher relies on his or her judgment when choosing members of the population to participate in the study" (Dudovskiy, 2022)

Accordingly, the current research applies the purposive sampling technique because the researcher has not selected all the characters of the selected movie. On the other hand, the character which is chosen for the sample is the protagonist, Temple, who has ASD. So, it can be concluded that the current research may opt for the purposive sample technique of qualitative research.

Procedure

The data is collected by watching the movie, Temple Grandin. A general observation about the character is made by the researcher. Firstly, the entire film is watched by the researcher. While watching general observations are made which focus on the plot, main theme, and setting of the movie. Then, the script of the movie is read many times and a list is made of the character who has ASD. The problem is identified by focusing on the implicit and explicit meanings and structures of the dialogues. The researcher took notes of their spoken utterances in the movie and then compared them to whether they matched the script or not.

Accordingly, the researcher analyzes the data by using some techniques. The researcher watched and observed the movie very carefully and read the subtitles. The researcher identified the character's linguistic choices and patterns of thematic progression and their struggle to communicate effectively. Finally, the researcher concluded the result of the researcher.

Data Analysis
The utterances which are found in the movie 'Temple Grandin' are discussed based on the production of language disorder i.e., Autism spectrum disorder. The analysis is discussed based on data findings to elaborate the research problems.

Data 1.
"Person A: Temple, how do you feel about today's meeting? Were you excited to meet everyone?
Temple: Uh... feel? I... I don't... don't know. I mean, it's... it's okay, I guess? But, uh, the noise... um, no, not noise, just... there was too much. Too many people. I, uh... it was hard. Hard" (Monger & Johnson, 2008).
Context
This situation happens When someone asks Temple about her feelings regarding a specific incident. She finds it difficult to express them in social situations.
Analysis

Person A asks These are two fairly simple and socially acceptable questions to start the conversation with Temple. Because people with autism spectrum disorder (ASD) often struggle to recognize express and react to emotional states these questions focus on emotions and social engagement two areas that can be especially difficult for them. Moreover, Temple's answer identifies a number of communication issues related to ASD. The phrase "I... I don't... don't know" conveys hesitancy and doubt a symptom of trouble understanding and expressing her feelings. Using broken sentences ("I mean, it's... it's okay, I guess?") suggests that the speaker is having difficulty putting their feelings into words. Given that ASD is frequently associated with difficulties identifying and labeling one's own feelings it is not surprising that Temple is unable to offer a conclusive response.

Additionally, Temple's transition from talking about her emotions to emphasizing sensory overload ("the noise... um, no, not noise, just... there was too much") demonstrates her inability to keep the conversation's thematic focus. She becomes fixated on the situation's environmental aspects especially the overbearing number of people rather than addressing the emotional content of the question. Since people with ASD frequently find it easier to describe sensory experiences than emotional ones they tend to focus more on tangible external stimuli than on internal emotions.

Furthermore, her speech was disjointed with pauses appearing throughout ("Uh... feel? I... I don't... don't know") and self-corrections ("no, not noise, just...") which highlights her struggle to put her ideas into words and arrange them. This rambling speech pattern may be a reflection of Temple's social cognitive overload which is an overwhelming inability to process emotions environmental cues and social cues at the same time.

Moreover, the usage of ellipses (…) and pronouns like "it" represent pauses which affect the fluency of the responses and coherence even as they connect various parts of her speech. Furthermore, another difficulty she encountered during the meeting can be seen by the use of the word 'hard' twice in her response. The word 'hard' is used several times implying that Temple finds it difficult to fully express how uncomfortable she is and turns to straightforward language instead. This also illustrates a propensity for repetitive language

which is a typical characteristic of ASD. People with ASD may repeat particular words or phrases when they struggle to move past them or when they are experiencing strong emotions.

Data 2.
"Person B: Temple, can you tell me why you love working with animals so much?

Temple: Cows. Cows are... cows are fascinating. The way... the way they move. The way they think. I can see what they see. I can... I can feel what they feel. Cows are fascinating. I just... just love cows." (Monger & Johnson, 2008) Context
In a discussion about her interest in animal science, Temple keeps repeating herself when elaborating on a particular idea.
Analysis

Significant issues with cohesiveness and thematic development, which are typical in people with ASD, are evident in Temple's response. Temple becomes fixated on cows and repeats Cows when asked why she enjoys working with animals. "Cows. Cows are... cows are fascinating.". This repetition implies that she may be having trouble putting her ideas in order and coherently developing them. Her inability to give a thorough or comprehensive explanation ruins the coherence and flow of her response. Temple stays focused on one single distinct idea i.e., cows, instead of expanding on the theme of animals.

Moreover, the theme 'cows' is the only theme that changes throughout the thematic progression and the rheme or explanation is given only sparingly of attention. She even briefly and repetitively explains why cows are fascinating citing things like "the way they move," "the way they think". The terms "fascinating" and "I can... I can" are used nonstop. "I can" emphasizes how difficult it is for her to extend the rheme which adds to the speech's shallowness. She also hesitates and pauses occasionally (Cows are…. Cows are fascinating) and exhibits cognitive processing difficulties a defining characteristic of Autism spectrum disorder as Temple finds it difficult to communicate her ideas clearly. All things considered Temple's restricted response to repetitious speech and narrow focus on a single topic point to common communication difficulties linked to autism spectrum disorder.

Data 3.
"Person C: Temple, have you tried the dessert? It's delicious!
Temple: Uh... I don't... I don't eat sweets. Too much sugar. Too much. It's, um, bad for... bad for the brain. You know? Sugar. It's, uh... it's not good.
Person C: Oh, I see! So, do you have any plans for tomorrow?
Temple: Sugar is bad. For the brain. It... it makes people jittery. You know? The brain... uh, too much sugar is bad." (Monger & Johnson, 2008)
Context
When asked about a dessert, Temple struggles to change the subject and instead answers by focusing on the harmful effects of sugar."
Analysis

Temple's responses in this dialogue show severe issues with coherence and cohesiveness which are common in people with autism spectrum disorder (ASD). Person C approaches Temple about trying the dessert and Temple quickly turns the conversation to her dislike of sweets and how sugar affects the brain. Her reply was "Uh... I don't... I don't eat sweets. Too much sugar. Too much," which shows how difficult it is for her to go beyond a single theme and offers a disjointed repetitious explanation that breaks coherence.

Additionally, Temple's persistent emphasis on the negative effects of sugar, even when the conversation turns to plans for the following day, highlights her communication difficulties

even more. "Sugar is bad. For the brain". She exhibits difficulty switching between topics by saying "It... it makes people jittery,". As a result of her repeated worries about sugar rather than answering the question about her plans. she continues the theme progression in which the theme "the effects of sugar" dominates her answers. Her difficulty in extending her responses beyond a single topic is highlighted by the recurrence of phrases like "Too much sugar and It's bad for the brain". Because Temple is unable to change her attention or give different answers this repetition adds to her lack of coherence.

Moreover, her reluctance to speak and her tendency to repeat herself when speaking indicate that she finds it difficult to think clearly. All in all, Temple's trouble changing the subject and her constant focus on sugar are indicative of common communication difficulties associated with autism spectrum disorder (ASD). Her incapacity to participate in a cogent and engaging dialogue stems from her narrow focus and difficulties with thematic progression.

Data 4.
"Teacher: Temple, can you tell us why it's important to understand animal behavior?
Temple: (Pauses for several seconds) Um... animals... uh, they... they don't think like humans. People don't... don't get that. They... they just don't... don't understand.
Teacher: That's a good start. Can you elaborate a bit more?
Temple: (Pauses again) I already said. I already... I already said what matters. I don't... don't get why... why you want more." (Monger & Johnson, 2008)
Context
When asked to elaborate on the significance of comprehending animal behavior, Temple becomes frustrated and finds it difficult to give a thorough response.
Analysis:

Temple's responses in this dialogue show how coherence and thematic progression can be challenging issues, that are common in people with autism spectrum disorder (ASD). A detailed explanation is needed to answer the teacher's question about comprehending animal behavior but Temple's response has serious coherence problems and provides little detail. The first thing Temple said was "Um... animals... uh, they... they don't think like humans. People don't... don't get that," illustrates her inability to clearly explain a difficult idea.

Furthermore, the use of pauses and words that are said again ("they... they don't... don't") throws off the consistency of her answer. This rambling speech pattern suggests that she has trouble structuring and articulating her ideas in a coherent manner. Her emphasis on the idea that animals "don't think like humans" is a lacking and shallow attempt to justify the significance of comprehending animal behavior. Temple responded "I already said. I already... I already said what matters," expressing annoyance and defiance of additional justification. She struggles with thematic progression and building on her original theme as evidenced by her repeated use of the phrase "I already said" and her unwillingness to provide more information.

Additionally, "I don't... don't get why... why you want more" illustrates her difficulty with coherence and flexibility in conversation and expresses her uncertainty about the necessity for additional explanation. Temple exhibits cognitive processing issues as evidenced by her pauses and repetitious speech. It makes it difficult for her to provide a more thorough or nuanced response. Those with autism spectrum disorder (ASD) may struggle to explain things in detail and may become frustrated when asked to give more information than they had planned to. These are characteristics of the disorder. All things considered, Temple's dialogue highlights common communication difficulties associated with ASD such as a limited focus inadequate elaboration, and issues with thematic progression and coherence. When confronted with conversational demands she finds it difficult to elaborate on her ideas and often resorts to making the same statements over and over again.

Findings and Conclusion

The discussions below highlight the key findings of the current study from the textual analysis and provide an in-depth understanding of the implications of the dialogues. Additionally, it also states the responses to the research questions

Findings

1. Temple regularly makes phonological and morphological mistakes in her speech as evidenced by the analysis of her dialogues. Temple exhibits issues with word formation and pronunciation. For instance, Temple repeatedly says "Cows are fascinating" in a dialogue where she finds it difficult to express her feelings. This is an example of a syntactic and phonological error. She has difficulty producing coherent grammatically correct speech as evidenced by the fragmented and often unclear nature of her conversations.

2. Additionally, the analysis of the dialogue of the autistic character Temple shows a language disorder called repetition. Temple uses a pattern of repetition in her dialogue analysis, repeating ideas and phrases to accentuate her points. For instance, Temple frequently says "Cows are fascinating" and "I can" when talking about why she loves cows. "I can... I can feel what they feel." This repetition seems to be a tactic to reinforce her argument as well as a reflection of her inability to go beyond her opening remarks. One may struggle to develop and elaborate on themes if they have a tendency to repeat words and phrases.

3. Moreover, Temple has a lot of trouble keeping thematic progression and coherence under control. She tends to stick to a single limited topic in conversations particularly when asked to expand on her interests or provide more details. For instance, Temple struggles to change topics or answer coherently when asked about her thoughts or plans for dessert. She frequently brings up the subject of sugar's harmful effects.

4. Furthermore, Cohesive devices significantly contribute to the overall cohesion of Temple's discourse and maintain a sense of connectedness. Temple dialogues have problems with coherence and cohesion as shown by the analysis. Her answers are frequently repetitive and have a limited scope which detracts from the conversation's general flow. One additional factor that undermines coherent discourse is the frequent use of hesitancies and disjointed thoughts. Although Temple finds it difficult to expand on or switch between topics her consistent use of particular themes suggests some coherence despite these problems.

5. In addition to this, Temple's communication issues are indicative of cognitive and expressive difficulties that are frequently linked to autism spectrum disorder. Her speech frequently shows that she has trouble understanding and articulating complicated concepts which results in recurrent and disjointed answers. Her difficulties with both cognitive processing and the expressive demands of conversation are highlighted by these patterns.

Conclusion

The complexity of the communication difficulties experienced by people with autism spectrum disorder is brought to light by the analyses of Temple's dialogues. The results show how she struggles with coherence thematic progression and phonological and morphological accuracy. Temple's limited thematic focus frequent phrase repetition and difficulty expanding her responses offer important insights into the communication patterns influenced by autism spectrum disorder (ASD).

Moreover, Coherent devices and thematic consistency are important aspects of Temple's speech that the current study highlights. Her conversations show an effort to preserve coherence through particular themes and repeated emphasis despite the repetitiveness of her

responses and her difficulties with thematic shifts. These results advance our knowledge of the relationship between cohesive devices thematic development and successful communication in people with autism spectrum disorder (ASD). Our understanding of the distinctive communication style of people with autism spectrum disorder (ASD) and the difficulties they encounter in handling demanding conversations is improved by the insights this analysis provides.

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