

Analysis of the Speech Characteristics of High-Functioning Autistic Patients from the Perspective of Cooperative Principle---A Case Study of American series “Atypical Season 1”

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Abstract

The Cooperative Principle (CP), introduced by American philosopher H. Paul Grice, posits that linguistic communication is underpinned by a set of implicit norms, facilitating the achievement of communicative goals. This study examines the applicability of CP to individuals with High-Functioning Autism (HFA), a group often characterized by challenges in adhering to these norms, leading to communication breakdowns. Utilizing a textual analysis approach, this research delves into the dialogues of a character with HFA from the American television series “Atypical Season 1”. The aim is to identify patterns of compliance and violation of the CP maxims and to delineate the speech characteristics of individuals with HFA, enabling them to overcome barriers to social integration and achieve more successful communication outcomes. Our findings indicate that individuals with HFA tend to adhere to the Quality maxim but frequently violate the other three maxims, resulting in speech that is repetitive, blunt, self-isolating, disorganized, and excessive in quantity. The study also proposes three primary communicative strategies tailored to facilitate more effective interactions with individuals with HFA.

Keywords: Cooperative Principle; High-Functioning Autism; Atypical Season 1; communicative strategies

1.Introduction

The Cooperative Principle (CP) was put forward by the famous American linguist Grice and collected in the work *Logic and Conversation* (1975). Grice believes that in the process of communication, both sides of the dialogue seem to follow a certain principle, intentionally or unintentionally, in order to effectively cooperate and complete the communication task.

However, for people with special mental or psychological diseases, they are often unable to appropriately follow the CP in dialogue, resulting in violations. Autism as a pervasive developmental disorder defined by impairments in social and communication function, and repetitive and stereotyped behavioral patterns (American Psychiatric Association, 1994). High-Functioning Autism (HFA) is a sub-branch of Autism associated with relatively intact cognitive functions (i.e. IQ above 70), the absence of identifiable brain damage (DeLong, 1999). Their personalities are sensitive and straightforward, so they usually speak out their opinions too directly or even aggressively to some extent. An American TV series “Atypical Season 1” just talked about the life of a HFA patient. Many parts of the protagonist’s lines showed that he always violated the CP, caused the conversations ended in failure and directly led to the protagonist’s deep loneliness and social isolation.

Against this background, this study aims to figure out how this group of HFA patients represented by the protagonist in the show obey or violate the CP. After that, to summarize the discourse characteristics of HFA patients which serve as a foundation for the feasible communicative strategies that we can take to help these patients to achieve successful communication. By doing so, this study will contribute to helping HFA patients to break the shackles of loneliness.

2.Literature review

2.1Cooperative Principle (CP) in discourse analysis

The Cooperative Principle (CP), introduced by Grice (1975), has been pivotal in understanding the implicit dimensions of communication, emphasizing that the comprehension of speakers’ intentions relies on pragmatic inference rather than mere linguistic decoding. This inference is grounded in contextual assumptions and the principles of effective communication, encapsulated in Grice’s four maxims: quality, quantity, relation, and method. The deliberate violation of these maxims in certain contexts to achieve specific communicative goals highlights the dynamic nature of cooperative communication, which is particularly evident in dialogues, the essence of which can be mirrored in the discourse of film and television dramas—a favorite subject of discourse analysis for pragmatic researchers.

According to studies abroad, scholars have applied the CP to analyze TV drama language, focusing on various maxims and their violations to uncover underlying communicative intentions. For instance, Suci (2022) explored the relation maxim, revealing that violations stem from differing assumptions or goals among interlocutors. Mandarani (2017) applied the CP to daily conversations, identifying strategies for implicature transmission. The humorous effects of language, as discussed by Dynel (2017), and the role of silence in communication, as highlighted by Ephratt (2012), further exemplify the diverse applications of the CP in discourse analysis.

Studies at home have also embraced the CP for analyzing dialogues in movies and TV dramas, with a

focus on humor generation, character development, female language, and the study of lies. For example, some scholars dissected humor in sitcoms and movies, respectively, while others explored character portrayal through dialogue analysis (Zhang, 2013; Li, 2008; Zeng, 2010; Jin, 2018). What's more, there were also some studies examining the linguistic traits of female characters, or delved into the pragmatics of lying through the cooperative principle-based movie discourse analysis (Sun & Xia, 2021; Miao, 2012; Zhang & Tang, 2011; Hu & Chen, 2015).

This synthesis of foreign and domestic research underscores the CP's versatility and its potential for uncovering the subtleties of communicative practices across various contexts, from the micro-level of everyday conversations to the macro-level of international diplomacy and media discourse. However, few studies have focused on film and television works that feature special groups as their subject matter, with the aim of investigating both the compliance and discourse conditions of CP, so as to analyze the characteristics of these communities.

2.2 HFA patients' conversational features

In the realm of autism research, the study of High-Functioning Autism (HFA) and its speech characteristics has emerged as a significant yet underexposed area. The academic discourse has been traditionally sparse due to the self-contained nature of autistic individuals and the resultant limited research corpus. However, HFA presents a unique case, with affected individuals possessing the capacity for communication but exhibiting distinct pragmatic challenges.

Studies abroad have predominantly focused on the pragmatic deficits associated with autism spectrum disorders, highlighting difficulties in contingent discourse development compared to typically developing peers or those with Down syndrome (Tager-Flusberg & Anderson, 1991; Mitchell et al., 1997). "High-Functioning Autism" is distinguished from the traditional perception of autism by their relative cognitive capabilities and conversational skills, albeit with their own set of speech peculiarities (Nicole et al., 1999). Empirical evidence from abroad suggests that HFA individuals exhibit unique language use patterns, such as grammatical errors and off-topic shifts, when compared to children with specific language impairments (Megan & Doris, 2017). Additionally, research from South Korea indicates a notable impairment in idiom comprehension among children with ASD, further emphasizing the heterogeneity within the autistic spectrum (Seul & Seung, 2015). Recent studies also point towards HFA teens facing narrative challenges that extend beyond social-cognitive skills (Lucie & Elise, 2021).

In contrast, domestic research has concentrated on the intrinsic speech characteristics of HFA individuals, often under educational guidance, to explore their verbal traits (Wang & Shen, 2017). Experiments have revealed particular difficulties in listening comprehension, especially with special questions, and a tendency for host-guest asymmetry (Dai & He, 2021). The language output and communication of HFA children have been characterized by challenges in maintaining deep communication and utilizing high-degree interaction types, often manifesting as "high initiation, low interaction, and superficial" communication

patterns (Li, 2010).

However, both studies abroad and studies at home have yet to fully explore the dialogic characteristics of HFA individuals when interacting with others, presenting a gap that warrants further investigation. This uncharted territory in the discourse of HFA communication could offer new insights into the complexities of social interaction and the development of targeted support strategies for this population.

2.3 Communication strategies for HFA patients

Communication is integral to the social integration and therapeutic progress of High-Functioning Autism patients, prompting scholars to develop strategies to enhance their communicative abilities.

According to studies abroad, early 21st-century initiatives included computer-based educational tools to improve HFA patients' task processing and pragmatic skills (Grynszpan, Martin, & Nadel, 2007). More recent studies have emphasized the role of friendship in pragmatic development, suggesting that fostering such relationships can significantly aid in communication for HFA individuals (Bauminger, Golan-Itshaky, & Tubul-Lavy, 2017). A discourse analysis study identified eight coping strategies utilized by HFA patients, including humor and seeking support from atypical friends (Julie & André, 2018). The effectiveness of visually supported language instruction has also been demonstrated, indicating the potential of such interventions to improve language performance (Gillam, Hartzheim, & Studenka, 2015).

Compared to studies abroad, Chinese scholars have focused on social skills training (SST), categorizing approaches into Traditional SST, SST with a cognitive-behavioral orientation (SST-CB), and SST with parental involvement (SST-PC) (Wei, 2013). These interventions aim to address the diverse needs of HFA patients, with an emphasis on long-term, gradual progress and the importance of early intervention (Liu, 2008). Narrative-based interventions and perspective-taking strategies have further shown promise in advancing the language and social development of autistic children (Wang & Shen, 2017).

Despite these efforts, a significant gap remains in the literature regarding the communication strategies needed by conversational partners when interacting with HFA patients. This oversight highlights the need for research that considers the reciprocal nature of communication and the importance of a bidirectional approach to enhance mutual understanding and interaction quality.

After reviewing the previous efforts and existing gaps, this study aims to analyze the dialogues of HFA patients in Atypical Season 1 from two aspects: compliance and violation of CP, so as to obtain the speech characteristics of HFA patients and summarize feasible communication strategies with them. The research questions can be raised as follows:

- (1) How is the Cooperative Principle shown in the HFA patients' communication?
- (2) What are the characteristics of HFA patients in communication?

(3) What communication strategies can we propose for HFA patients based on these communication characteristics?

3.Theoretical framework

Understanding Cooperative Principle's framework and its four maxims' explanations is indeed beneficial for effectively applying them in discourse analysis. The definition of Cooperative Principle proposed by Grice (1975) is that: *Make your contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged. Specifically, there are four maxims under this general principle.*

Quality maxim dictates that one should strive to make their contributions truthful. For example, if asked who the criminal is, responding with "the bad-looking guy, I think," violates this maxim because it lacks evidence and is based on a subjective judgment.

(Example for violation of Quality maxim)

A: Who is the criminal in this event?

B: Well, the bad-looking guy, I think.

Quantity maxim requires speakers to provide the right amount of information—neither too little nor more than necessary. A violation might occur if someone is asked for their address and they only respond with "South of the lake," which does not provide sufficient detail.

(Example for violation of Quantity maxim)

A: What is your family address?

B: South of the lake.

Relation maxim emphasizes the need for relevance in conversation. If someone shares gossip and the response is an unrelated request like "Can you pass me the salt?", it indicates a deliberate avoidance of the topic, thus violating the maxim.

(Example for violation of Relation maxim)

A: You know what, Susan broke up again last week.

B: Can you pass me the salt?

Method maxim calls for clarity and orderliness in communication, avoiding obscurity and ambiguity. An example of a violation could be an overly complicated and indirect refusal to a movie invitation, which indirectly communicates unavailability without explicitly stating a refusal.

(Example for violation of Method maxim)

A: Do you want to go to the movie with me this night?

B: Oh, no one in my house at night, my mom went out to work, and my dog alone at home, his rice bowl is empty, and

his food was eaten in three days ago...

These maxims collectively form the Cooperative Principle's framework, guiding the subsequent analysis of HFA patients' compliance and violation of them.

4. Methodology

4.1 Atypical Season 1

Atypical Season 1 is an American TV series of stories about an 18-year-old High-Functioning Autistic protagonist, Sam. Due to the impact of his condition, Sam often inadvertently leads to numerous communication failures, resulting in misunderstandings from others and propelling himself into whirlpools of paranoia and frenzy, and even into inescapable loneliness. However, thanks to the continuous encouragement of his family and the kind understanding of his friends, Sam is helped to opening up and fighting against loneliness step by step in love and warmth.

4.2 Data selection

In this study, a statistical count was conducted on all dialogues involving the character Sam, with at least two participants, across the eight episodes of Atypical Season 1. A total of 318 dialogue instances were collected, defined by the completion of exchanges among all speakers. Utilizing criteria such as the progression of the plot, the nature of the dialogue, and the emotional shifts of the participants, 76 instances were identified as unsuccessful in achieving effective communication. Consequently, these 76 dialogues, comprising 4,028 words, were selected as the subject of analysis and compared against the four maxims of the Cooperative Principle to assess their compliance and violations.

4.3 Research procedure

This study was conducted by a qualitative method. The procedures of this study are as follows: firstly, derived dialogue texts from the TV series in which the main character is involved that touched on CP's compliance and violation; secondly, used the four maxims of the CP as an aid to determine the frequency of compliance and violation of them within the text; thirdly, did an in-depth analysis of how and why the dialogue adhered to or violated a maxim; finally, summarized the discourse characteristics of HFA patients, and proposed feasible strategies for we normal people about how to successfully communicate with HFA patients.

5. Results

5.1 The frequency of compliance and violations of CP

In the entirety of Sam's 76 social interactions that led to communication failures, there was a notable phenomenon that showed by Table 1: The Quality maxim showed a strong compliance with 33 instances, marred by a single violation. Conversely, the Quantity maxim recorded the highest incidence of violation at 10, against only 3 instances of compliance. The Relation maxim exhibited a moderate level of compliance with 14 instances, slightly outweighed by violations at 2 instances. Lastly, the Method maxim had a relatively balanced record with 9 compliances and 4 violations.

Table 1 The frequency of compliance and violations of CP

	Quality	Quantity	Relation	Method
Compliance	33	3	14	9
Violation	1	10	2	4

The tabulated findings underscored a pattern that: Sam frequently adhered to the Quality maxim, consistently ensuring the truthfulness of his statements. Regarding the Quantity maxim, Sam generally aimed to provide as much information as possible in his responses. However, he often struggled with the Relation maxim and the Manner maxim, showing a tendency to either stray from the topic at hand or to express himself in a convoluted manner. What's more, the influence of varying social contexts led to a fluctuation in his compliance to the CP, with violations being the predominant outcome in many situations.

5.2 Compliance of Cooperative Principle

5.2.1 Compliance of quality maxim

Quality maxim requests interlocutors to make their contribution one that is true and avoid saying what people believe to be false. In this part, the quality maxim is used to test whether the protagonist Sam who suffers from HFA always tells the truth or not. In the following analysis, some extreme compliance of quality maxim in Sam's dialogues can be found. For example:

Girl: When you told me we were having dinner in the Techropolis parking lot, I thought you were kidding.

Sam: No, I don't do that. By the way, you're very pretty.

Girl: Thanks. I always thought my nose was too big.

Sam: It is. But the rest of your face makes up for it.

Girl: (laugh) Wow, you're really honest, huh?

From this conversation, it was clear that Sam's method of discussing dating with girls was distinct from the norm. He eschewed the use of insincere flattery and opted for candid remarks that corresponded with reality. For instance, if a girl had a noticeable nose, Sam would not hesitate to point it out directly. His

comments were grounded in factual evidence and truth, a testament to his unwavering commitment to the quality maxim in pragmatics.

In the following example, Sam was very straightforward in stating the facts, even though this strictly adhered to the quality maxims, it seemed overly blunt.

Paige: I was just thinking that maybe we could study together?

Sam: Why would I wanna do that? I ' m getting an A in biology and you are only getting an A-. That wouldn ' t benefit me at all.

Upon being invited by girls to study together, most individuals might accept or decline the offer with tact and consideration. However, Sam's response did not account for the emotional impact on others; he simply stated the truth outright, asserting that he would not derive any benefits from studying with those he perceived as less capable. This type of speech, which might be perceived as indicative of a low emotional intelligence (EQ), also underscores his consistent, albeit unconscious, adherence to the quality standards when engaging in conversation.

As if none of the previous examples were enough of a failed conversation, the following one was the painful price Sam paid for his overly strict adherence to quality maxims:

(in the family dinner)(suddenly)

Sam: Paige, I gotta go, because I don't love you.

Paige:(Shocked) What?

Sam: I thought I did because you passed a simple checklist test that I devised, but it turns out the simpler test was just knowing, and you failed that one. So I think we should break up. Have a good dinner everyone, and see you at the school, Paige.

This example vividly illustrated one of the profound social challenges faced by individuals with HFA, as exemplified by Sam. Once Paige became Sam's girlfriend, she extended an invitation for him to attend a family gathering. During the meal, Sam bluntly articulated his thoughts, stating that he did not love Paige. This candidness inflicted significant emotional harm on the other party and even imperiled Sam's own social standing, culminating in a communication catastrophe. The incident underscored that the propensity for excessive straightforwardness is a major impediment to the social integration of HFA patients. While adherence to the cooperative principle and the quality maxim is generally advisable, an extreme adherence as seen in HFA patients can be counterproductive, hindering their ability to assimilate into society and engage in effective communication with others.

In addition to adhering to the quality maxim by stating his true opinions in a straightforward manner, Sam's words were closely linked to facts and evidence. For instance:

Dad: You ' d better date with someone your own age.

Sam: Like a practice girlfriend before I date Julia?

Dad: I wouldn ' t call it that.

Sam: When Ronald Amundsen first explored Antarctica, he took several practice journeys over easier terrain. It's the logical thing to do. And when I get enough experience with other girls, then I can date Julia and she can stop being my therapist.

The backdrop of this conversation was Sam's father discovering Sam's affection for Julia, his psychotherapist, who was considerably older. Upon learning this, Sam's father patiently advised him to consider dating girls closer to his own age. In response, Sam employed a highly logical argument to justify the prudence of having a practice relationship before pursuing a romantic involvement with Julia. This incident revealed that Sam possessed a robust logical and theoretical foundation in his discourse. He was well-prepared with ample evidence to bolster his assertions, strictly conforming to the quality maxim.

Also, Sam would not fully accept the jokes of others but rather points out the unreasonableness of the jokes with facts at a glance. An example was:

Dad: Yeah, look at you. Cock of the walk. You know, because of your hair.

Sam: That makes no sense. I look nothing like a rooster. Rooster don't even have hair. They have a coxcomb, which is fleshy.

Here, the father employed a pun to create a humorous effect, intending to compliment Sam's hairstyle as being very fashionable. However, Sam, as a patient with HFA, seemed unable to process the jokes made by others and instead presented the facts to clarify that he could not be likened to a rooster. This incident also exemplified Sam's strict adherence to the quality maxim.

5.2.2 Compliance of quantity maxim

One of the requirements of quantity maxim requests interlocutors to make their contributions as much as possible. The speaker should make their contribution sufficient for the conversation topic. In this part, Sam showed great adherence to the quantity maxim in this regard, and most of his answers were very full and consistent with all the information needed for the questions. However, such reasonable compliance existed in only a few situations. For example:

Boss: Congratulations. How about your girlfriend?

Sam: Her name is Paige, and she has blonde hair. She's bossy and touches all of my stuff. She was born in New Jersey in the same town as Queen Latifah, and she's coming over today after work.

Boss: (kind of embarrassed) Okay, cool.

When inquired about his girlfriend, Sam divulged all the information he was aware of regarding Paige, including what was anticipated to transpire. While this level of detail addressed the number of questions posed by the boss, it was actually inappropriate, or even inappropriate, when considering the professional relationship between a boss and an employee. At times, Sam could adhere to the quantity maxim by providing ample answers to the other party's queries, but he would invariably reveal everything he knew

without considering whether the recipient needed to know so much. While sufficient information can clarify an answer, it can also lead to communication breakdowns, a point that will be further discussed in the subsequent analysis.

5.3 Violations of Cooperative Principle

5.3.1 Violation of quantity maxim

Another requirement of the quantity maxim is that interlocutors should make their contributions no more than necessary. They should not provide too much information beyond the appropriate amounts. So obviously, as the above part mentioned that Sam could just appropriately adhere to the quantity maxim in a few situations. But most of the time, Sam couldn't control the amount of the information he provided and violated the quantity maxim. For instance:

Sister: Okay, finish this sentence: "I spend a lot of time thinking about__"

Sam: Easy, penguins. And, especially, I'll say chinstrap penguins. They are my favorite bird, but all four types of Antarctic penguins are good. Did you know early explorers thought they were fish and classified them that way? Not birds, fish. (laugh)

Sister: (Signed) Okay, I'm gonna put "Sports."

Originally, Sam's sister just wanted to get a simple answer that was enough to fill in the blanks, but Sam provided too much information he knew, which was obviously redundant for filling in the blanks and violated the quantity maxim of CP.

Another text also proved this quantity of uncontrollable speech characteristics:

Mom: Oh, you bring Paige home.

Sam: She waited for me at the bus stop, and she made me carry her Thermos, which is nickel-plated, so it was very cold. She talked the whole way. Now is the first time she's not talking.

Sam's answer contained obvious extraneous details and came across as excessively verbose. This is actually one of the characteristics of his speech, providing information beyond the required range, thus violating the quantity maxim.

Besides, he even corroborated a simple question with an additional amount of information:

Dad: You can't lock a girl in the closet.

Sam: It was only ten minutes. That's nothing. Researchers at Antarctica's Halley VI Station live in 24-hour darkness for months.

Sam offered additional information to justify his actions regarding not locking the girl in the cabinet,

relying solely on factual instances to determine right and wrong. However, he failed to take into account the feelings of others or whether his actions contravened the moral code. The examples he cited were not the responses others were seeking; instead, they were indicative of a breach of the maxim of quantity, which stipulates that one should provide the right amount of information, neither too little nor too much.

In conveying a simple message, he even piled on all the information related to the topic, even if some of them were useless in the current context:

Sam: What kind of TV did you buy?

Julia: Sony, I think.

Sam: I'll check on it, and then help you take it to your car. I didn't use to do that because the old carts were stiff and hard to push, but the new ones are smooth and fast and I like to pretend I'm in a video game. Be right back.

In reality, the ongoing conversation could have been succinctly concluded in just three sentences: Sam could have identified the TV brand Julia desired and then proceeded to fetch it. However, Sam's tendency was to share an abundance of irrelevant details, which were extraneous to the immediate context. If the other party was not well-acquainted with Sam, the interaction could deteriorate, as Sam's verbosity had the potential to provoke impatience among customers and even escalate into conflict. This exemplified the communication breakdown that can arise from oversharing information.

5.3.2 Violation of relation maxim

The relation maxim asks speakers to try to make their contribution relevant. The speakers should not wax eloquent about content that is irrelevant to the topic. Through the following part's analysis, it is easy to find many speeches made by Sam violate the relation maxim mostly because of his self-isolated illness. One of the examples is:

Julia: You mean, I should have a romantic relationship with a teenage patient?

Sam: Sure, because I love you.

Julia: (angry) I'd lose my job for dating with a patient, so I won't have any money to pay my bills or my rent, and I have \$200,000 in student loans. Do you have that \$200,000?

Sam: No. So, you don't love me?

Julia: No, god. NO!

Sam: (Self-talking) Adelie, chinstrap, emperor, gentoo...

Julia: Sam, listen, I'm so sorry.

Sam: Adelie, chinstrap, emperor, gentoo...

This was the biggest conflict point about the protagonist Sam in the whole play, and it was also the

strongest segment of Sam's symptoms. Julia was a therapist who had always been around Sam. For him, Julia was like a confidant and a good medicine. Sam could feel the greatest security and comfort around her. However, after this dependence turned into love, Sam told Julia straight away. Obviously, this was an unacceptable reality. Julia had been bored with trifles in her life for a long time. At this moment, she finally broke out and made an emotional output that did not conform to the professional nature of the therapist, breaking all Sam's psychological defenses in a flash. Sam had a habit of repeating four penguin breeds when he was anxious, which was also a symptom of HFA. So at that moment, Sam repeated these four words almost crazily, and his mood was completely out of control.

The subsequent example further highlighted Sam's inclination to interrupt others in order to steer the conversation towards his own preoccupations or innermost thoughts:

Julia: Well, let's continue our topic, you'd better relax when you're...

Sam: What's your favorite type of lemonade?

Julia:(confused)Uh...regular?

In fact, numerous instances throughout the TV series depicted Sam violating the relational maxim of dialogue, as he was deeply engrossed in his own world. The aforementioned example occurred when Sam realized his affection for his therapist, Julia, and became engrossed in exploring her interests and meticulously documenting them in a notebook. Consequently, at that moment, he entirely disregarded what Julia was saying to him, interrupted the ongoing conversation, and posed the inquiries that were foremost in his mind.

There were also times when he immersed in his own world and talked to himself, automatically blocking out all the words said by the other party:

Sam: You're wearing my sweatshirt.

Paige: When I was locked in your closet, I got cold, so I stole your cute sweatshirt and I love it. Oh, you could drop your study hall and take French with me, it would be so fun and...

Sam: (self-talking) That's my sweatshirt.

For Sam, his clothes were a part of himself. Like Antarctica he was familiar with, the skin of the creatures living there was their protective cover. If they were occupied by others, they would lose their sense of security. Thinking of this, Sam felt helpless and confused. He violated the relation maxim and kept repeating a sentence, ignoring everything the other party said.

Furthermore, influenced to some extent by the uncontrollable urge to share, Sam tended to divulge every thought that crossed his mind all at once, which could lead to the inclusion of information that was tangential or completely unrelated to the topic at hand:

(Sam is still working)

Boss: Your shift ended 20 minutes ago. Is everything okay?

Sam: Yes, I'm fine. I had curly fries for lunch, and I have a girlfriend now.

The boss inquired of Sam why he had not yet left for the day, but preoccupied with his own concerns, Sam also shared these worries, despite their irrelevance to the question asked. This behavior contravened the relation maxim, which mandates that conversation should stay on topic. From an alternative perspective, this characteristic of Sam's speech, indicative of the thought processes of individuals with HFA, often leads to abrupt shifts in the conversation, potentially disrupting the flow and continuity of dialogue.

5.3.3 Violation of method maxim

The method maxim refers to speakers should try their best to make the contribution be brief and order. They should not express information in an obscure and ambiguous way. For Sam, he sometimes couldn't appropriately express himself or provide information in a disorder way, then violated the method maxim. For instance:

Mom: Sam, how was your session with Julia today?

Sam: She wants me to donate my brain.

Mom: (Shocked face)

Sam: but don't worry, it's after I die.

Possibly influenced by his cognitive style, there were instances when Sam would directly articulate the most critical and central information that came to his mind. This approach, however, sometimes resulted in a violation of the method maxim in communication, causing his statements to become ambiguous and unclear.

While answering questions, Sam sometimes failed to grasp the point of the question, resulting in disorganized answers:

Julia: So, how's your week?

Sam: Well, I still don't have a date and I scared a girl off from across the room, and we had meat loaf twice and I hate meat loaf.

Julia: How?

Sam: My mom just made it in the oven.

Julia: I mean how did you scare her away?

When asked about his weekend, Sam deviated from the norm by not employing adjectives to encapsulate his experience. Instead, he recounted precisely what transpired over the weekend, resulting in a chaotic

and muddled narrative interspersed with events and emotions. Consequently, he inadvertently breached the method maxim, which calls for orderly and clear expression, as his thoughts were not structured in a coherent manner.

6. Discussion

6.1 Characteristics of HFA patients' speech

First of all, a lecture about autism at the beginning of the play mentioned that, the disorder results in Repetitive behaviors, difficulty socializing, persistent and intense preoccupations. And each of these behavioral traits can be confirmed by Sam's verbal examples: First one is the repetitive behaviors, it can be shown in the example of 'Adelie, chinstrap, emperor, gentoo...'. Second is about difficulty socializing, the example of 'Paige, I gotta go, because I don't love you.' can be used to prove it. And the last one, persistent and intense preoccupations can be represented by the example 'Did you know there are 432 girls at our school and 91 of them have a name that starts with an M, which is 21%, and the national average is only 9%?' mentioned in the show.

Secondly, it can be concluded from the discourse analysis above that compliance with the quality maxim is one of the most outstanding aspects of Sam's performance. What he says is grounded in reality and even in science. And his verbal characteristics were greatly influenced by his interest in Antarctica, and the store of knowledge contributed to his verbal output. At the same time, Sam will openly reveal his inner thoughts, so that many of his words are inappropriate and lack empathy, and even hurt the speaker, resulting in a lot of social failures. Overall, HFA patients may have the same IQ as the average person, but their EQ seems to be far below normal due to the effects of the disease, and their speech is both truthful and blunt.

Thirdly, from many dialogues in the TV series, it can be seen that Sam is easily trapped in the vortex of self-thinking. He is sensitive and fragile, and sometimes he is hurt by other people's words. At such times, he would shut himself up in his own little world, cut off communication with the outside world, and repeat his own confusion and words of comfort. Such linguistic features are clearly reflected in the violation of the relation maxim, which we can summarize as self-isolation.

Fourthly, due to the unique thinking habits of HFA patients, they tend to think in a jumping way and cannot focus on the current topic itself. Language is the window of thinking. For HFA patients, the characteristics of their speech sometimes also reflect the jumping of thinking, and they often lack organization in narration and have patchwork answers when answering questions. Take Sam's communication habits as an example. When asked how his weekend was, he would not use an adjective to describe his weekend but simply list several unrelated trifles. We can generalize such speech characteristics as incoherence and disordered.

Finally, another significant aspect of the speech characteristics of HFA patients is the inability to properly adhere to quantitative maxims. As shown in Figure 2, only quantitative criteria are both observed and violated by HFA, which also proves the fact that the speech characteristics of HFA patients cannot adapt to the complex changing context. They will rush out all the information they know, regardless of whether the speaker needs it or not. In psychotherapy, this feature may help the therapist to understand the patient's condition more fully, but if it is really in daily life, too complicated and lengthy discourse is easy to cause the interlocutor unhappiness and communication failure. Therefore, the speech characteristics of an HFA patient can be summarized as uncontrolled quantity.

In short, the speech characteristics of HFA patients are as follows: repetitive, honest and blunt, self-isolated, disorganized, and uncontrollable in quantity.

6.2 Feasible communication strategies

Most of the previous studies on strategies to improve the communication of HFA patients focused on how to start with the patients themselves and change their thinking and behavioral ability through intervention, so as to improve their communication ability. But, this is a medical treatment, and it's always difficult to really fight disease. In fact, in order to truly help HFA patients communicate with the outside world more effectively and smoothly, the other side of their communication should take corresponding measures to guide and assist them.

On the basis of previous studies and analysis of dialogues in TV series, this study proposes the following communication measures that we can take in conversations with HFA patients:

Firstly, do not use overly aggressive and cathartic statements in front of HFA patients. According to the above analysis, when HFA patients are stimulated and offended by the outside world, they will have repetitive discourse and fall into self-isolation and a cycle. Therefore, in order to prevent the above situation from happening, as the interlocutor, we should be clear about the possible emergency situation of HFA patients, try our best to keep our emotional stability, not ignore that we are facing HFA patients, and try our best to pay attention to the rationality of our own words.

Secondly, cultivate a friendship with the HFA patient to develop empathy when speaking. One of Sam's monologues tells us that HFA sufferers are not totally incapable of empathy. they are also happy that what they say pleases the people they care about. Therefore, we should care and cultivate affection with HFA patients as friends, exchange each other's sincerity, and let them understand that if some facts are directly spoken out, friends will be sad, so as to alleviate their candor regardless of the occasion.

Thirdly, try to steer the conversation and control the amount of information they provide. In this study, we have learned the speaking characteristics of HFA patients. Due to the hopping of thinking and the uncontrollable amount of information, they are easy to say messy information unrelated to the problem or provide too long information. To do this, we can tailor the questions we ask to the least possible range

of answers. For example, when we want to ask him about his weekend, we can ask: Did you have any Onions for dinner on Saturday? Or: Did your coach get mad at your Sunday tennis class? More detailed questions like these can help avoid irrelevant and verbose answers.

7. Conclusion

This study pioneers discourse analysis within the Cooperative Principle framework by examining High-Functioning Autism (HFA) patient speech, offering new theoretical insights and expanding the application of CP beyond typical dialogues. Shifting focus from the illness to the conversational partner, the research outlines strategies for effective communication with HFA patients. It emphasizes the importance of dialogue in their social and personal growth and suggests that tailored communication approaches can significantly improve their quality of life, despite the challenges posed by their condition.

Although this thesis provides a new angle for appreciating literature works, it is not without limitations. This thesis offers a novel perspective on literary appreciation but acknowledges its limitations in scope and depth. The study's data is confined to the first season of the TV series "Atypical", suggesting that a more extensive corpus from all four seasons could yield richer insights. Additionally, while the Cooperative Principle serves as an analytical tool, the inclusion of pragmatics, conversational meanings, and speech acts could enhance future research. The thesis also calls for a deeper exploration of the underlying motives for HFA patients' adherence to or deviation from the Cooperative Principle, considering variables such as gender, age, social status, economic background, and education.

In essence, the study posits that the linguistic traits of HFA individuals merit further investigation and hopes to inspire new avenues for scholarly inquiry in linguistics.

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