

Examining Conversation of Children with Autism Spectrum Disorder (ASD)

An Application of Grice's Cooperative Principle

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Keywords: Grice's Cooperative Principle, Observance of Maxims, Non-Observance of Maxims, Autism Spectrum Disorder (ASD).

Abstract: This study looks at how individuals with Autism Spectrum Disorder (henceforth ASD) understand messages in a conversation. This study is a case study that focuses on two children with ASD in schools for special needs in Bandung. Applying Grice's Cooperative Principle, this study examines the observance and non-observance of maxims as well as the possible reasons underlying the non-observance of maxims by children with ASD. The data which are in the form of texts are obtained from recorded conversations and are analyzed qualitatively. Findings reveal that both children mostly observe all four maxims. However, there are also a small number of instances of non-observance of maxims; namely, flouting, infringing, violating, and opting out that are committed. The reasons behind the non-observance of maxim are, among others, impairment in speaking performance and imperfect command of language. The findings indicate that children with ASD in this context generally manage to create successful communication with their interlocutors. Nevertheless, there are also very rare cases of breaking maxims in which they sometimes make attempts to evoke jokes, avoid uncomfortable situations, and generate other meanings. In fact, these children sometimes fail to produce true and brief utterances due to the characteristics of their language skills.

1 INTRODUCTION

As a means of social interaction, communication has its own purposes such as conveying messages and maintaining relationships. In order to create and enhance successful communication, Grice (1975) proposes Cooperative Principles that speakers need to adhere, which are widely known as four Gricean maxims. The four maxims require the speakers to give true, sufficient, relevant, brief, and clear information or contribution.

However, people do not always observe or pay attention to the maxims, in which it can be done secretly, intentionally, or unintentionally due to several reasons (Rundquist, 1991; Dornerus, 2005; Mukanin and Izzah, 2006; Patridge, 2006; Mukaro, Mugari and Dhumukwa, 2013 and Thomas, 2013). This is what is referred to non-observance of maxims. Non-observance of maxims is divided into five types, namely flouting, violating, infringing, opting out, and suspending (detailed explanations for

each types of non-observance see Thomas, 2013). This makes the applications of Gricean maxims vary from time to time, which are interesting to be investigated. Therefore, this present study is conducted to examine both observance and non-observance of maxims. More specifically, it attempts to discover how children with ASD observe and break the maxims.

Autism Spectrum Disorder is a disorder which commonly begins in infancy or the first three years since the individuals are born (Lord, Cook, Leventhal, and Amaral, 2000). Individuals with ASD have distinctive characteristics in three skills, which are in behavior, social or interactional skills, and language and communication skills (de Villiers, Stainton, and Szatmari, 2007).

Regarding behavior, individuals with ASD have unusual attachments to objects (de Villiers et al., 2007), have stereotyped behaviors such as hand flapping, twirling, and repetitive finger movements (Johnson and Myers, 2007), and have a routine like go through the same order of routines again and

again, thus making it uneasy for them to adapt to changes which might mix up the order of the routines (Nordqvist, 2015).

In terms of language and communication skills, Philofsky and Hepburn (as cited in Wallace, 2011) state that children with ASD have poor topic maintenance and lack reciprocity in conversation. Furthermore, Johnson and Myers (2007) add that they have echolalia, a condition when they repeat words or phrases spoken by their interlocutors. Echolalia may also exist throughout their lifetime.

For social or interactional skills, unlike children in general, children with ASD often do not seek other people when they are happy (Lord et al., 2000). This is in line with de Villiers, Stainton and Szatmari (2007) who state that children with ASD lack peer relationship and shared attention. In addition, those children also lose temper, have outburst, and even cry every time they are interrupted during play (de Villiers, Stainton and Szatmari, 2007). Since individuals with ASD are generally known as individuals who have difficulties in several skills, including skills in communication, it becomes essential for people, especially those who have close relation with people with ASD, to understand and learn more about the utterances they produce in communication.

2 METHODS

This present study is a case study since this study focuses on two ASD children who study at elementary schools for special needs in Bandung to describe and interpret the communication between the ASD participants and other people regarding the observance and non-observance of maxims. This is in line with Hitchcock and Hughes (as cited in Cohen, Manion, and Morrison, 2000) who state that a case study focuses on an individual, individuals, a group, or groups of individuals.

As a qualitative research, audio recording, non-participant observation, and open-ended interview are conducted to collect the data. This is in line with Creswell (2009) who suggests that qualitative researchers commonly gather multiple forms of data, such as interviews, observation, and documents, rather than relying on a single data source. In addition, non-participant observation was used because the study aims to gain and observe occurrences which normally happen; those without any involvement from the researcher. While for the interview, open-ended type of interview allows the researcher to ask the same questions in the same

order in which those questions can lead to different yet comparable answers (Cohen, Manion and Morrison, 2000).

Using theory from Grice (1975) and Thomas (2013), the data were analyzed in five steps of data analysis, which are, identifying what maxims are observed and broken by both children with ASD, categorizing the broken maxims into the types of non-observance, discovering the possible reasons underlying the cases of non-observance of maxims, interpreting the findings by referring and relating to theories, and drawing conclusions from the whole findings.

3 RESULTS AND DISCUSSION

The findings reveal that all maxims are both respected and not observed. Yet, occurrences of observance of maxims and occurrences of non-observance of maxims have different numbers. Of the two cases, the former has significantly larger number than the latter. In other words, occurrences of observance of maxims are more dominant. Furthermore, the findings also show that there are four out of five types of non-observance of maxims committed. They are flouting, infringing, violating, and opting out. In addition, the possible reasons behind the non-observance of maxims include reasons such as impaired speaking performance, imperfect command of language in young children, echolalia, and several other reasons which include personal reasons. The following section discusses findings in detail regarding observance of maxims, followed by non-observance of the maxims and its possible reasons.

3.1 Observance of the Maxims

With regard to observance of maxims, all four maxims are evidenced in this study with a large number of occurrences. This finding indicates that most of the time, both children with ASD adhere to Grice's Cooperative Principle, suggesting that they mostly create successful communication. However, if a comparison is made between the two children (Anggi and Fahri), Fahri performs more observance of maxims than Anggi, suggesting that he observes all four maxims more frequently than Anggi. The number of each observed maxim by Anggi and Fahri is presented in the next table.

Table 1: The distribution of observed maxims by Anggi and Fahri.

No	Observed Maxims	Anggi			Fahri		
		Frequency	Percentage	Rank	Frequency	Percentage	Rank
1	Maxim of quality	67	24.8%	2	106	25.7%	2
2	Maxim of quantity	60	22.2%	4	96	23.2%	4
3	Maxim of relation	82	30.4%	1	108	26.1%	1
4	Maxim of manner	61	22.6%	3	103	25.0%	3
Total		270	100%		413	100%	

From the table 1, it can be seen that maxim of relation has the highest numbers of observance, either by Anggi or by Fahri, followed by maxim of quality, maxim of manner and maxim of quantity. Due to the limited space of this paper, only examples from the most and the second most frequently observed maxims are provided in this paper. Complete examples on each maxim observance from both children are not provided here but can be seen in Aprilidya (2016).

As revealed in Table 1, maxim relation has the highest numbers of observance, either by Anggi or by Fahri. This indicates that most of the time, Anggi and Fahri give relevant contributions, which is in line with Grice (1975) who states that the only way to observe maxim of relation is by providing relevant information or contribution. However, this also suggests that they stick to the ongoing topics almost all the time and they hardly ever break this maxim in order to generate implicature as people commonly do. An example of observance of maxim of relation by Anggi is provided in the following example:

[a1] T : *ke mana Bu Ipehnya?*
Where is she?
Anggi : *ke rumah sakit ibunya*
She is in a hospital

In example [a1], Anggi manages to give a relevant answer to her teacher's question. In that example, she is aware that the question "where" must be responded by mentioning a place. Meanwhile, an occurrence of observance of this maxim by Fahri is presented in the following example.

[a2] T : *paling juga istirahat ya, bentar lagi istirahat da ini*
Just wait until recess, it is almost recess okay
Fahri : *Ibu::: po ih po ih (pop mie pop mie)*
Ma:::m, pop mie pop mie
T : *iya nanti tiitp dibeliin sama Wulan ya:::h*
Right we will ask Wulan to buy it oka:::y

The example is one of the textual evidence that Fahri respects maxim of relation. When his teacher (T) mentions about recess, he is aware that he gets to

have meals, thus, he produces the utterance saying what food he wants to have.

The second most frequently observed maxim is maxim of quality which is fulfilled by Anggi and Fahri for 67 and 106 times, respectively. This suggests that Fahri respects this maxim more frequently than Anggi. Despite those numbers, it is evidenced that maxim of quality is mostly observed by both Anggi and Fahri by giving true information and being truthful. An occurrence of observed maxim of quality by Anggi is presented as follows:

[b1] T : *pagi::: Anggi udah makan belum?*
Good morni:::ng Anggi, have you had breakfast?
Anggi : *udah, sosis.*
I have, I had sausage.

In example [b1], it is seen that Anggi provides information which does not lack evidence. According to the situational context, Anggi has indeed had breakfast before she goes to school, thus, the utterance "*udah, sosis*" observes maxim of quality even though it breaks maxim of quantity.

Meanwhile, an occurrence of Fahri observing maxim of quality is presented in the following example:

[b2] T : *Fahri ke sini naik apa?*
How did you get here?
Fahri : *na::: ih moto (naik motor)*
I came here by motorcycle

In example [b2], it is also evidenced that Fahri observes maxim of quality by giving true information. By referring to the situational context, he always goes to school by motorcycle with his father.

3.2 Non-Observance of the Maxims and Its Possible Reasons

Despite the large number of observance of maxims, there are still a small number of non-observance of maxims. Anggi and Fahri occasionally break the maxims which are due to an attempt to create another meaning, intention to tell a lie, and incapability to speak clearly. Table 2 below presents number of occurrences of broken maxims along with the type of non-observance committed is presented.

Table 2: The distribution of types of non-observance of maxims by Anggi and Fahri.

No	Types of non-observance of maxims	Anggi				Total	Rank	Fahri				Total	Rank
		Types of maxims						Types of maxims					
		Quality	Quantity	Relation	Manner			Quality	Quantity	Relation	Manner		
1	Flouting	6	18	4	11	39	2	-	10	1	3	14	1
2	Infringing	12	10	3	16	41	1	2	3	-	3	8	2
3	Violating	5	-	-	-	5	3	1	-	-	-	1	4
4	Opting Out	-	1	-	1	2	4	-	3	-	3	6	3
	Total	23	29	7	28	87		3	16	1	9	29	

From table 2, types of non-observance of maxims which are committed are flouting, infringing, violating, and opting out. Suspending, another type of maxim non-observance, is not evidenced in this study. Regarding flouting (a case which occurs when a maxim is intentionally broken because the speaker attempts to create an implicit meaning), Anggi flouts more frequently than Fahri which also means that she has more intention to deliberately break the maxims. An example of flouting by Anggi is presented as follows:

[c1] T : *dua:: mata?*
Who's got two eyes?
Anggi : *saya::*
me::
T : *hidung saya?*
my nose is?
Anggi : *pese::k ((smiles))*
fla::t ((smiles))
T : *((laughs))*
((laughs))

In example [c1], it is obvious that Anggi does not sing the right lyrics and thus flouts maxim of quality. She says what she believes to be untrue and attempts to crack a joke. This case is in accordance with Dornerus (2005) who states that maxims can be flouted for various reasons such as evoking humor. As for Fahri, an example of flouting by Fahri is presented as follows:

[c2] T : *jam sepulu::lu::h.Fahri udah makan?*
It is ten o'clock. Have you eaten something?
Fahri : *u ah. Po ih, the ge ah (udah. Pop mie, teh gelas)*
Yes I have. I had pop mie and teh gelas

In example [c2], by conveying more information than required, he flouts maxim of quantity. This is in line with Wallace (2011) who states that it is not necessary to provide extra information to the one

who poses the question. The question is a yes or no question, yet he answers not only with a yes but also with additional information. In this example, it is obvious that he wants his interlocutors to know what food he has had

For infringing (a case when a maxim is unintentionally broken by the speaker), Anggi infringes all maxims for 41 times while Fahri infringes three maxims (all maxims except maxim of relation) for only 8 times. An example of infringing by Anggi is presented in the following example:

[d1] R : *di sekolah ada pelajaran olahraga nggak?*
your school have sport class, doesn't it?
Anggi : *pelajaran olahraga nggak? Ada*
Sport class, doesn't it? Yes, it has

In the conversation, Anggi's utterance infringes maxim of manner because it contains unnecessary words "pelajaran olahraga nggak?" Furthermore, the reason for this infringement is a characteristic of individuals with ASD called echolalia, a state of repeating the last words or phrases uttered by one's interlocutors. As for Fahri, infringing occurs as provided in the following example:

[d2] Fahri : *Oma::n (.) Oma::n*
Oma::n (.) Oma::n
F : *apa?*
what?
Fahri : *hah hah*
hah hah
F : *kenapa?*
what happened?
Fahri : *hah hah ((flutters his hand around his mouth))*
hah hah ((flutters his hand around his mouth))

Example [d2] is a conversation between Fahri and his friend, more specifically when Fahri is having a meal; a spicy one. By saying "hah hah",

maxim of manner is infringed because the utterance "hah hah" alone is rather unclear and obscure for the interlocutor. This clearly breaks the rules of maxim of manner proposed by Grice (1975) which is to be clear and to avoid obscurity. It is evidenced to be obscure because Fahri's friend as the interlocutor did not understand what Fahri meant and he had to ask Fahri afterwards. Furthermore, the reason underlying this case of infringement is impairment in the speaker's speaking performance, as mentioned by Thomas (2013). More specifically, his speaking performance at that very moment is impaired due to the sudden feeling he gets from the spicy food he is eating. The spiciness is what makes it hard for him to speak clearly.

Regarding violating, it refers to a case when a speaker secretly breaks a maxim and wishes their interlocutors to understand something which the truth is not (Thomas, 2013). The findings show that there are only a small number of occurrences where Anggi and Fahri commit violating, and the only maxim they violate is maxim of quality. Table 2. shows that Anggi violates this maxim for five times while Fahri violates this maxim for only one time. This shows that they hardly ever tell lies, deceive, or wish their interlocutors to know something except the truth. An example of violating by Anggi is presented in the following example:

[e1] T : *Anggi tadi belajar apa? Kelas pertama*

Anggi, what did you learn in the previous class?

Anggi : *nggak tau*
I don't know

Example [g1] is a conversation between Anggi and her teacher before starting the second class. In the example, her teacher asks Anggi what Anggi has learned in the first class. However, using the utterance "nggak tau", she tells a lie and thus, violates maxim of quality. This is in line with Mukanin and Izzah (2006) who states that maxim can be broken for reasons such as hiding something. As a matter of fact, she knows what she has learned in the first class (as what she tells her teacher a few minutes afterwards). Furthermore, using the utterance "nggak tau", she is likely to suggest that she does not feel like talking about the ongoing topic at that moment. An example of violating by Fahri is presented in the following example:

[e2] T : *rasanya a::sem.Fahri kemarin masuk sekolah nggak?*

It is sou::r. Did you come to school yesterday?

Fahri : *ma uk (masuk)*

Yes I did

In the conversation, it is not quite obvious that Fahri violates a maxim, particularly maxim of quality. By saying "masuk" when his teacher asks him whether he attended the class "yesterday", it is as if Fahri follow the maxim. But, in fact, he violates maxim of quality because what he says is not true. That day was a day off due to the teachers' training program outside the school. So, Fahri did not come to school that day and neither did all of his friends. This maxim violation is most likely due to one of the characteristics of individuals with ASD; that is, "having continuous routine." More specifically, the routine in this case is "going to school every day."

As stated by Nordqvist (2015), having continuous routine is a great deal in the individuals' lives, thus, it is not easy for them to adapt to changes that might appear in the order of the routines. What Fahri remembers is that he always goes to school. He does not quite remember the day he does not go to school, which is why he provides the utterance "masuk" in that conversation.

For opting out, Anggi opts out from observing maxims for only two times while Fahri opts out for six times. In addition, it is necessary to highlight that in cases of opting out, both Anggi and Fahri opt out by being silent and not saying anything. An example of opting out by Anggi is provided in the following example:

[f1] T : *Anggi cantik nggak?*
Anggi, are you pretty?

Anggi : *cantik nggak?*
(are) you pretty?

T : *cantik nggak, jawab, ca:::nti:::k, ca:::nti:::k*

Pretty or not, you answer with (I am) pretty:::, pretty:::

Anggi : ((silent))
((silent))

In the example, it is obvious that Anggi chooses to be silent when her teacher asks her the question. The reason for this case of opting out is more of a personal reason, which is because she is not interested in the question and thus, she decides to refuse answering the question. While in Fahri's case, violating occurs as presented in the example as follows:

[f2] T : *jam berapa sekarang?*
what time is it now?

Fahri : ((silent and then looks away))
((silent and then looks away))

In example [f2], it is also evidenced that Fahri opts out from the conversation. Additional information delivered by his teacher tells that Fahri has not yet comprehended the concept of time and currency. This is likely to be the reason which causes him to refuse to answer the question and be silent instead. Furthermore, it is plausible to state that he chooses to keep silent because he does not want to give a false answer. This is in accordance with Thomas (2013, p. 74) who states that in opting out, "the speaker wishes to avoid generating a false implicature". Due to the insufficient knowledge of time, if he did answer the question, he might have provided a false answer of the current time. Thus, he decides to be silent.

From the whole findings of this case study, it is apparent that cases of non-observance of maxims influenced by characteristics of children with Autism Spectrum Disorder are cases of infringing and violating (in this case, violating by the second participant only). Subsequently, cases of flouting and opting out are due to their own personal intentions of generating implicatures, avoiding uncomfortable situations, cracking joke, hiding the truth, and refusing to create false answers, as what people in general commonly do. As a matter of fact, this is all due to the causes or reasons of flouting and opting out itself. Unlike infringing, flouting and opting out are not influenced by impaired speaking performance, imperfect command of the language, or any distinctive characteristic of one's language skills. Cases of infringing occur unintentionally; otherwise, cases of flouting and opting out occur intentionally with the speakers' deliberate intention.

Furthermore, from the occurrences of flouting, opting out, and violating (violating by the first participant), it is evidenced that children with ASD in this research can respond to certain topics like people in general usually do. On the other hand, possible reasons behind infringing and violating (violating by the second participant) such as echolalia, unusual attachments to objects, stereotypies in thought, and habit of having continuous routine, can be further examined and also treated to contribute to linguistic therapy for future directions.

4 CONCLUSIONS

From the findings, it can be concluded that children with ASD generally manage to create successful communication, which is indicated by the large number of occurrences of observance of Gricean

maxims. However, there are also a small number of non-observance of maxims. The non-observance of maxims occurs when the two ASD children attempt to crack jokes, avoid uncomfortable circumstances, and generate another meaning including cases when they produce utterances which are not quite brief and unclear; thus, make their interlocutors confused. Furthermore, Anggi and Fahri lack conversational reciprocity. This means that conversations which occur between Anggi and Fahri and their interlocutors are started and kept going by the interlocutors; they hardly ever start the conversation first. This finding is in line with Philofsky and Hepburn (as cited in Wallace, 2011) who state that children with ASD find it hard to initiate conversation or interaction with people. This is also in agreement with Lord et al., 2000; de Villiers et al, 2007; and Wallace, 2011 who add that reciprocity in conversation by children with ASD is lacking.

ACKNOWLEDGEMENTS

This paper was based on the first author's undergraduate research paper who was supervised by Dadang Sudana, M.A., Ph.D. and Ernie D. A. Imperiani, M.Ed. Our highest appreciation also goes to those who have helped the whole process of writing and publishing this article.

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