Context Establishment and Renewal in Conversations of an Adult Male with Autism Spectrum Disorders

By

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Abstract

In spite of the fact that persons with Autism Spectrum Disorders (ASD) have been said to have difficulty with understanding contexts of communication, little is known about how persons with Autism Spectrum Disorder establish and/or renew contexts of talk in conversation. This paper is a descriptive case study carried out to investigate whether a high functioning adult with ASD can adequately establish context for his talk in a conversation. A number of naturally occurring conversations of the case study are collected through participant observation and analysed qualitatively. The result reveals that the case study has difficulty establishing and renewing the context of his talk. It also shows that the case study has difficulty using Reference as a grammatical cohesive device in discourse. There are also indications of the wrong use of pronominal expressions especially anaphoric pronouns and zero anaphor which results in misrepresentation and misinterpretation of messages and information on the speaker's and hearer's part respectively. The study therefore concludes that persons with ASD have Context Establishment and Context Renewal Impairments. However, our data indicate the effort being made by the case study to repair his utterances when his attention is successfully drawn to the misrepresented part of the discourse. Hence this paper recommends that persons conversing with persons with ASD should be ready to bear most of the conversation burden by being patient and tolerant.

Keywords: **Autism Spectrum Disorder, Context, Cohesion, Reference, Conversation Burden**

Introduction

Naturally occurring discourses usually consists of utterances which meanings can only be understood or appreciated in connection with one or more sentences preceding or following it. Sometimes the meaning of a discourse may go beyond the ordinary or literal meaning of the linguistic components. Such meanings then can only be inferred. The first scenario is that of Context while the second is a Pragmatic one. Context is a very important aspect of effective communication and its role in the development of conversation cannot be overemphasized. Different fields of learning such as psychology, philosophy, neurology, communication studies, and artificial intelligence have recently shown that context plays a central role in the way the human brain processes information such as processing social information. On that premise this study hypothesizes that since ASD is known to affect social communication and interaction using context might be a challenge for persons with ASD. I had to study what context means and how persons with ASD interpret and use context. Recent studies on Autism Spectrum Disorders (ASD) have indicated that persons with ASD have difficulty with context and have also shown that pragmatic deficits are common in ASD and both are found in children and adults with ASD.

Despite the considerable amount of literature on ASD and Context, there is a paucity of research on context establishment and context renewal in discourses of persons with ASD. Most studies have concentrated on the severe problems that persons with ASD have with pragmatic aspects of language (Baron-Cohen 1988; Eales 1993; Ozonoff and Miller 1996; Tager-Flusberg 1996; Martin and McDonald 2003; Boucher 2003) as is shown, for example, by difficulties in understanding non-literal language, interpretation of irony and metaphors literally and difficulty understanding humor (Happe´ 1993, 1995; Dennis et al. 2001; Emerich et al. 2003; Martin and McDonald 2004), interpreting scalar implicatures (Pijnacker et. al 2009) and making pragmatic inferences (Dennis et al. 2001; Jolliffe and Baron-Cohen 1999, 2000).

Jolliffe and Baron-Cohen (2000) found that People with ASD were less able to use contextual information to make a global inference in a sentence arrangement task and were less likely to choose a bridging inference to make a scenario coherent if they had to select from a list of alternatives. This is a clear indication that people with autism have difficulty understanding language in context which is supported by the weak central coherence account of ASD. The weak central coherence account claims that people with ASD have a processing bias for details at the expense of the global picture (Frith 2006).

This study concentrates on the ability of a high functioning adult male with ASD to use reference as a grammatical cohesive tool in establishing or renewing the context of his discourse. High Functioning ASD here implies ASD without intellectual disability and with little or no formal language; phonological or syntactic; deficits (as they are not defining features of ASD according to Diagnostic and Statistical Manual of Mental Disorders (DSM-IV 1994). Minshew et al. 1995 posit that high-functioning persons with ASD usually have relatively intact core language features. However, Boucher 2003 and Walenski et al. 2006 suggest mild to moderate impairments in core language features.

Autism Spectrum Disorders

Autism spectrum disorder (ASD) is a disorder categorised as "neurodevelopmental disorders" in the Diagnostic and Statistical Manual of Mental Disorders, Fifth edition (DSM-5 2013). ASD is characterized by persistent deficits in social communication and interaction across multiple contexts, along with restrictive, repetitive, and stereotypical patterns of behaviour, activities, and interests and which must be present in the first phases of development. Actually, deficits in communication entail deficits in language use. However, a wide range of verbal language abilities are reported in individuals with ASD, but a striking feature about their language profile is a universal impairment in pragmatic language (Parsons et al 2017). Pragmatics is the study of how contextual factors interact with linguistic meaning in the interpretation of utterances. For every utterance or talk in interaction, context must be kept in mind.

Context

The term 'context' is believed to have originated in the fourth century, from the Latin word 'contextio' which means "put together," "joint," or "composed". (https://www.researchgate.net/publication/249970775). According to Vermuelen 'the meaning of context as "the text before and after a text of interest" is the first meaning of the word found in dictionaries' (2012: 28). Through the years, the meaning of the word expanded, although still in relation to the interpretation of texts. Vermuelen (2012) went further to explain that:

> In a broad sense, the word context not only referred to co-text
> but also to the intent of the author of the text. … .
> To understand the text well required considering not only the surrounding
> text and the intent of the author but also the historical context, the
> cultural context, the place in time – in short, all circumstances in which
> the text originated. When circumstances were not taken into account,
> it was, and still is, referred to as "taken out of context". (p.29)

Context has been seen and defined in different but related ways by scholars from various disciplines like History, Archeology. From the linguistic point of view, context is everything that surrounds the production of a piece of communication. This includes the physical situation (external context) in which the communication takes place, the interactors or conversationalists, the expressions that precede and follow a particular expression and the knowledge of the communicators (internal context) of their cultural norms and expected behaviour. All these features of context help language users to interpret meaning appropriately. The context of a word is the sentence in which it appears and that of the sentence is the paragraph or utterance in which it occurs, in writing or speaking respectively. On the other hand, "the choice of words depends on the purpose and context of a text" (Anderson & Anderson 1997:7). Text is a term used in linguistics to refer to any passage- spoken or written, of whatever length, that does form a unified whole" (Halliday and Hasan 1976). Creating a text requires skills for understanding of the grammatical relations that hold this text together and to understand a text one must delve into the connective devices that hold a text together (Nash-Webber 1977). A text is a representation of semantically and syntactically connected elements. The inter-relatedness of components of a sentence or sentences that make those sentences meaningful and purposeful is called cohesion (Brown and Yule 1989).

Establishing the context of a word or sentence therefore implies situating that word or sentence in an appropriate linguistic environment. Subsequently the established contexts can be renewed through the use of cohesive devices or markers such as Reference, Substitution, Identification, Conjunction, and Ellipsis. Grammatical cohesion is a means of creating links between sentences in a text through the use of the grammatical resources of the language. This study is on how an adult male with ASD, Rex, establishes context for his message/information and how he uses Reference in renewing contexts.

Reference

Crystal (2003) defines reference as "a term often used to state a relationship of identity which exists between grammatical units, e.g. a pronoun refers to a noun or noun phrase" (p.407). While Thompson (2004) explains that "reference is the set of grammatical resources that allow the speaker to indicate whether something is being repeated from somewhere earlier in the text (i.e. we have already been told about it), or whether it has not yet appeared in the text (i.e. it is known to us)" (p.180). A reference item cannot be interpreted semantically in its own rights. It has to be interpreted by looking at other elements that have been used before it or the ones that will be used after it. Reference is typically signified through the use of pronouns, such as personal pronouns (he, she, it, they, them, we, etc) comparative pronouns (this, that, these, etc) and demonstratives (here, there). References

can generally be divided into two different types namely Endophora and Exophora. (Awwad 2017)

Endophora which is also known as Textual Reference is a kind of reference that has its referent within the text and links the message to its internal context. Such a referent can either be **Anaphoric** (preceded by the referent e.g.: '**Amaka** came in the morning, but **she** did not meet me at home.') or **Cataphoric** (the referent comes after the reference, i.e. the item that refers comes before what it refers to, e.g.: '**He** barged into the room. It took me some time to recognize **Rex**.'

Exophora is a reference to the context of situation or external context and not any element within the text. An example of Exophoric Reference is produced below.

'Will you come here and let me have that.'

In the text above, the words 'here' and 'that' are exophoric items. We can only get their meanings by looking at the context in which they are produced. For instance, 'here' will refer to somewhere close to the speaker and 'that' will refer to something with the addressee.

Research Method

The research is a descriptive study of conversations of an adult male with ASD in order to describe his usage of reference in establishing and renewing context. The data consist of a number of naturally occurring conversations between the case study, Rex and his niece in different discourse contexts. The data was collected through participant observation analysed qualitatively. The description adopts Conversation Analysis which involves describing how turns in conversations are taken and allocated and how errors in speech are corrected when conversationalists are made to realize the error. CA provides a structure that shows how conversationalists relate with one another to achieve orderly and meaningful communication (Sacks et al 1974).

Results and Discussion

Sample conversations of Rex are presented and analysed below to shows Rex's knowledge of the role of context.

Conversation 1:

1. **Rex:** He said I should come in the evening.
2. **Niece:** Who said?
3. **Rex**: My cardiologist, of course. Ọ kwa m gwaa gị na m ga-akpọ ya. (I told you that I would call him)

4. Rex: I told you. I told you.
5. He said I should come to his rest house and not to the hospital.

Rex walks into the lounge where his niece is seated and starts a conversation with the pronoun 'He' with no antecedent at all. His niece is now left with no option than to ask for clarification for who the 'he' refers to. In an attempt to provide referent 'The cardiologist' Rex uses a discourse marker 'Of course' which seems to indicate an irritation at a seemingly unnecessary question, "Who said', asked by the niece. Rex's use of "Of course" and "I told you that I would call him" in line 3, is not appropriate. The use of 'Of course' here implies that what the 'He' refers to has already been established and is well-known or obvious to both the speaker and the hearer and that there is no need for the question.

Conversation consists of bits of talk called turn. Turns at talk are both context-shaped and context-renewing, in that a tum exists within the context of a prior tum, and any tum becomes the context for the turn which follows (Heritage 1989:21). Thus the turn-taking system ensures that speakers will design each turn to build on the context of prior turns at talk and that hearers will attempt to understand a turn with reference to the sequential context provided by the prior turns. In Conversation 1 above, Rex fails to establish a context for his talk; both internal and external contexts are missing in line 1. There is no text before and after line 1 therefore Rex's message is difficult to understand because his intent and the place in time are not known. For this reason, it can be said that Rex's utterance is produced out of context. So the other conversationalist is left to do any extra interactional work by calling for a repair.

The status of 'He' as a reference whether endophoric or exophoric, cannot be determined in line 1 as it contains no referent. However, in line 3, Rex is able to repair his error by creating the referent and also establishing the context. Lines 3 and 4 is a clear indication that Rex does not even understand that he is expected to renew an already created context that has been overtaken by intervening conversational topics. His irritation shows that. Good a thing, Rex is able to give more details on the topic.

It may seem as if it is always easy for Rex to make such repairs. There are other instances where confusion arises from Rex's wrong use of endophoric references. The conversation below is an extract from the report given by Rex to his niece at home after he and his business partner had earlier in the day interviewed a job applicant who happened to be a nursing mother.

Conversation 2

1. R: Ihe ga-eme bụ na Ọ kpọtịanụ, nye ya nrinụ, Ọ kpọrọkwanụ ya.
   (What will happen is that if she brings the baby, breastfeeds her, she takes her back)
2. N: So, Ọ gana-akpọ nwa abia ọrụ?
   (So, she will be coming to work with the baby?)

3. R: ::: Mbaaanụ! Ọ bụrụnụ na Ọ kpọtịanụ, Ọ ga-akpọnakwanụ ya.
   (Noooo! If she brings the baby, she will take him/her back.)

4. N: keduzikwanụ etu ọ ga-esi mee, ebe Ọ bụ na Ọ gaghị akpọ nwa abia ọrụ?
   ((How will that be since she will not come with the baby?)
   Ọ bụ Ọ bịachaa, Ọ nọọ obere oge Ọ laa gaa kpọta nwa ya?
   (Will she come to work, then go back after some time to get her baby?).

5. R: (Getting irritated already)
   ::: Nooo! Ọ bụrọ ya ga-akpọta nwa. ((She is not the one to bring the baby)
   Onye ọzọ ga-eme ya. (Somebody else will do that)

6. N: Ọọ ihe ị kara ikwu nu. (That is what you should have said)
   Ọ bụrọ ị na-asị 'Ọ ga-akpọta' kama ị ga-asị 'a ga-akpọta'
   (And not saying "she will bring" instead of 'someone will bring')

7. R: That is what I have been explaining. The child's care giver will do so.

8. N: Ok. (Starts mumbling. All the time you will be saying 'o' and 'e'. Can't you just mention the person? Always getting someone confused. Mtcheeew)

There is a faulty use of the anaphoric pronoun 'Ọ' by Rex in lines 1 and 3 which resulted in confusion as a result of the ambiguous nature Ọ. As the niece rightly says in line 6, the impersonal pronoun 'a' is the more appropriate reference to be used in this context. In Igbo 'Ọ' means 'he/she'. Igbo has the impersonal pronoun 'a/e' which is used when the gender of the particular person being referred to is not known. Rex's utterances lack the impersonal pronouns because he uses 'Ọ' in their place. Where he is supposed to say:

'Ọ bụrụ na **a** kpọtịa, Ọ nye ya nri, a kpọrọkwịa'
(If he/she is brought, she feeds her, he/she will also be taken)

He would say

'Ọ bụrụ na Ọ kpọtịa, nye ya nri, Ọ kpọrọkwia'
(If she brings him/her, feeds him/her, she will also take him/her)

This is a big anomaly because every competent user of the Igbo language knows the difference between 'Ọ' and 'a/e'

Again his use of zero anaphor is faulty, in line 1 where he said "if she brings her, breastfeeds her", one will assume the missing anaphor in the second part 'breastfeeds her' to be the same anaphor 'she' in "if she brings her". The long pause (:::) in line 3 shows that Rex is confused as well as his listener and this may be an indication that he may find processing pronominal expressions difficult. However, Rex repairs all errors committed towards the end of the conversation.

Conversation 3:

Rex is expecting someone to send him a package and he has mentioned it to his niece in the morning. The following is an extract from his conversation with his niece later in the evening of same day.

R: Ká m kpọgodu onye a. Ị ma na onwee ka ndị mmadụ si eme. E nwere ike ọ weta ya, ọ gaghị agwa m.
(Gloss: Let call this person. You know that he behaves somehow. He may bring it but not tell me)

N: Aghọtaakwam ihe Ị na-ekwu. Onye ka Ị choro ịkpọ? (I don't understand what you are saying. Who do you want to call?)

R: …. (sigh) O kwa agwara m I na o nwere onye ga-ewetere m ihe? (Did I not tell you that someone will bring something for me?)

N: O bu ya ka I na-ekwu? Amaghi m nu. Ihe I gwara m kemgbe ututu ka I biara kitaa na-ekwu na-akowaro ya akowa. (Is that what you are saying? I don't know. What you told me since morning is what you are referring to now without any explanation.)

R: …Agwara m gi ya. I kwesiri ima. (Sighs). (I told you about it. You ought to know)

N: Nekwanu Anya! Kedu ka m gesi mara na o bu maka ya ka I na-ekwu na mgbede a. O bu so maka ya ka m na-eche taa nile?
(Imagine! How will I know that it is what you are talking about this evening? Is that the only thing I will be thinking about the entire day

Rex starts the above conversation presupposing that his niece, N will be able to relate his narrative to a discussion had about 10 hours earlier. It should be noted that in-between the morning and evening, Rex and his niece has had other conversational topics unrelated to the current conversation. Rex seems not to understand why Niece will not make a connection between what he has told her in the morning and what he is telling her at present. Now that is the first interactional challenge in the conversation. Rex is able to initiate a conversation with his niece and he also understands and observes the rules of turn taking and turn allocation. He is able to maintain his turns; initiating the First Pair Part (FPP) and providing appropriate answers as the Second Pair Parts (SPP). However, Rex fails to understand that a hearer interprets the meaning of an utterance in light of the previous utterances and that turns are highly context-dependent. That is why he insists that Niece is supposed to know what he is saying.

Establishing or renewing context in conversation is more often than not a great challenge for Rex. He always initiates a conversation out of context. He would start up a topic that its context was introduced hours earlier without any recourse to the context even with all the intervening discourses. This creates a big interactional work for the other conversationalist. These challenges are referred to in the study as **Context Establishment Impairment** and **Context Renewal Impairment**. Rex has the two impairments. Actually, Rex finds renewing the context of his message difficult. Any topic he has ever discussed with someone could be raised hours or even days later with no allusion to the established context.

Conversation 4

1. R: They will be wondering where I have been?

2. N: Who?

3. R: Where my office is situated. Two people are concerned about me there.
   So, whenever they don't see me for some time, they call me.
   So:::So, one is a pastor and the other one, an evangelist.
   But they refused to give me their numbers.

4. N: Ah-ha, what do they call you with? Do they hide their numbers when they
   call you? Otherwise, you can save the numbers they call you with whenever they call you.

5. R: They hide their numbers. You know, when we had a compound meeting.
   They refused to give anybody their numbers.

6. N: So, why did you give them your number when they don't want anybody to have theirs?
   R: No, I didn't give them mine.

7. N: Ah-ahh-haa! How then did they get your number?
   What have they been calling you with?

8. R: They don't call me.

9. N: You are getting me confused. You said earlier that they call you when they don't see you for a long time.

10. R: No! It's not those two. I'm talking about another two people in the compound who don't call or want to be called.

11. N: Oh, Chi m ooo! You didn't finish talking about the first two before talking about the second two.
12. R: It is the pastor and the evangelist that don't call anybody.
13. N: Ok.

Rex finds it difficult to end a topic of discussion appropriately before moving to the next. Even when he changes the topic of discussion, he does not do the change in such a way that there would be no confusion by establishing a context for the new topic. That is why people in the first instance sometimes do not make sense of what he says until some repairs are called for and executed. For instance, in the conversation between Rex and his gatekeeper below, there is a sudden change of topic that got the gatekeeper confused.

1. R: Did you hear noise last night?
   You know there was a time I saw a dead bird that way.
   I thought I would see something like that this morning.

2. GK: I hear the sound oo but e be like say wind dey push tree
   [go the zinc of our neighbor gateman.

3. R: …but there is no tree in their compound]
   Ok, maybe something else fell.
   know that boy or man.
   Yes, he is not a man yet.
   I know that he is not married

4. GK: Who? Their gateman?

5. R: Were you not the one that reminded me of the person I gave an appointment at 10am?
   So I am talking about the man.

6. GK: Ahahhaa! Oga,
   I think say we dey talk about noise now.
   Ok.

Summary of findings

Results of this study show that the case study, an Adult male with ASD does not understand that conversational turns are context-dependent. Therefore he fails to establish or renew the context of his talk and says things out of context. He also fails to understand that pronouns are used as reference items in texts as such before pronouns are used within a text there must be a preceding or preceded referent. Data also revealed that using anaphoric pronouns and Zero anaphor is very challenging to Rex. His discourse is usually filled with wrong use of pronominal expressions.

Conclusion

Context is everything, internal and external, that surrounds a linguistic utterance. Typical communication requires context sensitivity, that is, the ability to choose and use meaningful and suitable elements of context. Contextual sensitivity is important in inferring people's intended message. A lack of contextual sensitivity results in atypical communication. Most persons with Autism Spectrum Disorders are not context sensitive and their language behaviour are mostly logical and out of context. The study therefore concludes that persons with ASD have context establishment and context renewal impairments.

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