Relevance-Based Analysis of Aphasic Speech

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Abstract

The aphasics constitute an important segment of our population. Interacting with them requires special procedures. Some of the caregivers of the aphasics and some other members of society often dismiss the speech of the aphasics as irrelevant and incoherent. This attitude towards the aphasics is counter-productive, as the interlocutors as well as the aphasics get frustrated during interactions. Against this background, this paper examined interactions with three Yoruba-English bilingual aphasics, using the relevance theory, with a view to revealing the systematic ways the meanings of the utterances of aphasics can be decoded by somebody who is not present when such a speech was recorded. The paper concludes that a better way of making inferences from the discourse of aphasics is to enter their worlds of experience, show interest in their discourses, make assumptions about their ostensions. In most cases, the discourses of aphasics fulfil at least one of the Extent Conditions. This implies that the discourses of aphasics are relevant and the effort expended in processing them can be reduced if the interlocutor/ analyst appropriately deplores the necessary contextual cues and clues.

Key words: Yoruba-English bilingual aphasics; Extent conditions; Relevance theory; Ostensions; Caregivers

INTRODUCTION

Communication is vital to human existence. It could be linguistic, non-linguistic, or paralinguistic. But linguistic communication is basic, while the other forms of communication are complementary. Central to these forms of communication is co-ordination. The people involved in communication needs to properly coordinate their resources of communication to pass their intended messages. By the same token, the receivers need to be able to properly coordinate their interpretive and analytic resources to be able to decode the message of the sender. Co-ordination cannot be done without the brain, because the brain controls the activities of all organs of the body (Singh, 2002, p. 1; Cartell, 2006, p. 4). If there is damage to the brain cortex, communication will be severely affected, which will consequently affect human existence.

The human population comprises people who have language disorder and those who do not have it. These two groups of people interact in the society. Among those with language disorder, aphasics occupy a unique position. This is because, in them, there could be either total or partial loss of language ability. This means that such people will find it difficult to adequately use linguistic tools to communicate. In cases where they could minimally use linguistic tools to communicate, non-aphasic adults find it difficult to decode their language. Although other forms of communication are available to aphasics, there might still be difficulty in decoding their messages, since these other forms of communication are complimentary.

An aphasic could be monolingual or bilingual. The bilingual one uses two codes. Since the impairment affects the two languages, the way s/he manages to communicate need to be understood by the interlocutors for meaningful interaction to take place, as his/her language could be mixture of the two codes his/her language area of his/her brain. This paper therefore examined, using the relevance

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theory, the interaction between some bilingual Nigerian aphasics and a non-aphasic person to see the way and ease with which meaning can be decoded from the speech of aphasics by non-aphasics.

PREVIOUS RESEARCH ON THE LANGUAGE OF NIGERIAN APHASICS

Studying the speech of bilingual Nigerian adult aphasics from the linguistic perspective has enjoyed relatively little attention. Salami (2005) analyzed the speech of a 58-year old dysphasic woman who had been hypertensive for 22 years. He claims that the speech of Linda (the patient's pseudonym) was characterized by omission, such as 'vestigation' for investigation. He also identifies instances of substitution in her speech: 'sis' for 'his' and 'beat' for 'meat'; and addition of some phonemes to some words: 'julst' for 'just', and 'ealse' for 'ease'. According to him, Linda distorted some words: 'gradoli' for 'gradually' and 'dest' for 'diet'. In the area of speech comprehension, Linda could not link an ongoing conversation or utterance with what has gone before; she needed to be reminded about an earlier topic before she understood what was meant.

The effect of brain damage, resulting from stroke, on the English speech of a Yoruba speaker of English as a second language is the focus of Salami and Akande (2006). Using a 58-year-old female stroke patient diagnosed as having expressive aphasia, they claim that, although her speech was grammatically deviant (as she often omitted some grammatical items, like auxiliaries, articles, prepositions and pronouns) contrary to known characteristics of agrammatic patients, she could still use some grammatical items properly. But she had some problems with using the first person personal pronoun.

Salami (2008) reported articulation disorder in the speech of a native Yoruba speaker of English suffering from dysarthria due to tongue lesion. He asserts that the speech of the subject was characterized by backing of alveolar stops to velar stops; hyponasalisation; weak articulation of /l/ and /r/; omission of segments in cluster; and inability to show contrast in words and phonemes.

Sunday (2008) concentrates on a description of the phonology of 50 bilingual Nigerian adult aphasics from the perspective of Optimality Theory. He identifies three forms of deviation in the speech of the aphasics at the segmental level: substitution, deletion, and epenthesis. In the speech of the Broca's aphasics, substitution dominated, while deletion dominated in the speech of the Wernicke's aphasics. In the Broca's aphasics, consonant substitution was prominent in word-initial and word-final positions; vowel substitution was predominant in word-medial position. In the Wernicke's aphasics, vowel deletion was almost evenly distributed, while consonant deletion featured most prominently in word-medial position. The suprasegmental features of the phonology of 20 bilingual Nigerian adult aphasics who were bilingual in Nigerian English and Yoruba is the focus of Sunday (2010). Using Optimality Theory as the theoretical framework, he avers that the speech of the aphasics is characterized by syllable simplification and modification. Their stress and intonation patterns were not significantly affected, except in few cases; they are similar to what obtains in Nigerian English. The rhythm of their speech was characterized by syllables and pauses occurring at roughly regular intervals; he proposes Syllable-Pause Theory to account for this rhythmic pattern.

APHASIA

Aphasia could be broadly categorized into Broca's and Wernicke's Aphasia. The former is also known as expressive or motor aphasia. The lesion is located in the lower frontal lobe, just anterior to the Rolandic fissure, which divides the frontal and parietal lobes. Its features include non-fluent and effortful speech articulation, simplification of consonant clusters, substitution, missing function words and bound morphemes (Caplan, 2003:585). The latter is otherwise referred to as receptive or sensory aphasia. The lesion is located in the upper surface of the temporal lobe, affecting the auditory cortex, and occasionally the parietal lobe. Its characteristics include fluent spontaneous speech, phonemic paraphasias, verbal paraphasias, neologisms, paragrammatisms, use of general proforms and hackneyed phrases, errors in the sue of determiners and pronouns, problems with comprehending the speech of others, problems in retrieving words from memory, and circumlocutions (Parker, 1986, p. 191; Crystal, 1987, p. 271).

The other types of aphasia could be classified in relation to the two described above. Global Aphasia manifests the features of the two. Conduction Aphasia, which is a product of disruption in the transfer of information between the language reception and the language expression area, tends toward Wemicke's Aphasia. Transcortical Sensory Aphasia is similar to Wernicke's Aphasia, except that in it there is better retention of what is said and repetition is relatively intact. Mixed Transcortical Aphasia is similar to Broca's Aphasia, except that in it repetition is relatively preserved. Anomic Aphasia, a kind of recovery syndrome, is also similar to Wemicke's Aphasia (Helm-Estabrooks and Albert, 1991; Wingfield, 1992; Wertz, 1996, p. 48).

RELEVANCE THEORY

The cognitive approach to discourse is interested in the mental processes involved in encoding and decoding discourse. Grice's (1975) Cooperative Principle (CP) is a pioneer in this regard. Relevance is the fourth of the

maxims in CP. Some other scholars have concentrated attention on this. This has culminated in the relevance theory.

This theory assumes that linguistic communication is based on two principles: ostension and inference. The former is the communicator's manifestation of what s/ he means through a linguistic code, while the latter is the audience's interpretation of the utterance. Before inference can be made by the hearer, the speaker engages in behaviour that shows an intention to communicate something, ostensive behaviour. As soon as this is recognized, the hearer has a guarantee that whatever the speaker intends to pass across will be relevant. It is now the duty of the speaker to be relevant to the hearer (Jaworski & Coupland, 2002, p. 116). If the hearer could prove the relevance of an utterance, then s/he has understood it (Grundy, 2008, p. 139).

The cognitive environment, the set of facts manifest to a person, is important in determining what is relevant to that person. This is because, in communication, the speaker essentially tries to alter the cognitive environment (the mental state) of the hearer. The extent of this alteration depends on how relevant such discourse is. Therefore, the speaker has to make some assumptions about the likely state of the hearer's cognitive environment (Malmkjaer, 2002, p. 423).

In communicating, the speaker might be trying to impart three kinds of information to the hearer. The first is old information; that is, information already available to the hearer. This is worth processing only if it is needed for a particular cognitive task and it does not immediately manifest. The second is information that is new but completely unconnected to anything that the hearer knows already. Such information should be treated as irrelevant. The third is information that is new but connected with information that is already manifest in the hearer's cognitive environment (Sperber & Wilson, 1987, p. 701). This can be used for inference from new information. If the effort expended on working out the effects of this information is not too costly, such new information is relevant (Malmkjaer, 2002, p. 423). The most salient meaning is that to which people respond in conversation (Grundy, 2008, p. 143). This deductive processing of information involves a set of deductive rules. Apart from being spontaneous, the derivation of new information is automatic and unconscious. It produces certain contextual effects in the cognitive environment of the hearer. The contextual effects could be contextual implications, strengthening, or contradictions. The contextual effects and relevance are directly proportional (Sperber & Wilson, 1986/1995, p. 85).

The assumption made about any discourse is made up of a set of concepts. The pattern of arrangement of the concepts to form the assumption is the logical form of that assumption. The concept has a label which appears either as an address in memory or as a constituent of a logical form. There are three kinds of information held in memory for a concept: logical, encyclopedic, and lexical. A logical entry comprises a set of deductive rules that apply to logical forms to which that concept belongs and rules of concept logic that determine deductions from seemingly similar propositions. The encyclopedic entry consists of information about the objects, events or properties that make the entry clear. The lexical entry contains information related to the components of natural language used to express the concept, sense and intention (Sperber & Wilson, 1986/1995, p. 86; 1987, p. 702).

The logical and encyclopedic entries obviously rely on the lexical entry for the expression from the subconscious mind to the conscious level. Sperber and Wilson (1986/1995, p. 120) give two extent conditions for relevance:

- **Extent Condition1**: an assumption is relevant in a context to the extent that its contextual effects in this context are large.
- **Extent Condition 2**:an assumption is relevant in a context to the extent that the effort required to process it in this context is small.

The kind of linguistic structure used in the discourse could either facilitate or hinder the processing of information, since any linguistic stimulus a mind receives triggers an automatic decoding process (Sperber & Wilson, 1987, p. 704). This is similar to Morton's (1969; 1977) logogen model of word recognition, which claims that "an input pattern simultaneously activates multiple lexical representatives according to their degree of match with the input" (Williams, 2002, p. 434). For ease of processing of information, cohesion and coherence of the discourse are crucial.

THE DATA

The data presented and analyzed below were obtained from the interactions of a researcher with three Yoruba-English bilingual aphasics from a teaching hospital in south-western Nigeria. These aphasics were seen at different wards and the Medical Out-Patient (MOP) clinic of the hospital. These patients were purposively sampled after they had been seen by the consultant neurologists on duty, who did the neurological diagnosis. The interactions with these patients were tape-recorded. The patients are identified as P1, P2, and P3.

ANALYSIS

This section focuses on the analysis of the data. It begins with how a non-aphasic person can decode the speech of an aphasic.

Decoding Aphasic Speech

One of the tasks which any interlocutor faces when

interacting with an aphasic is decoding his/her message. This task becomes particularly difficult when the aphasic introduces some apparently irrelevant expressions. The exchange below is illustrative:

(A) 1.Researcher: You have tried. Ok. Continue

1.Itesearener.	Tou nave tried. OK. Continue
2.P1:	I can challenge I can
	challenge enge I can
	challenge
3.Researcher:	Who can you challenge?
4.P1:	The authority
5. Researcher:	You can challenge what?
6.P1:	I can challenge the authority
7.Researcher:	Which authority, sir?
8.P1:	The authority who arrest
	who tries to arrest me
	(people
	around laugh)
9.Researcher:	When did they do that, sir?
	When? Is it now? Is it now that
	they tried to do it?
10. P1:	In the broad daylight anybody
	who tried to molest me
11.Researcher:	Ok. No problem. That's good.
	Well done, Sir. Do you see me
	well?
12.P1:	I I see you

The patient in the excerpt above was an 88-year old man who could speak both English and Yoruba. He was seen at one of the wards in the hospital when this interaction took place. He was diagnosed as having left hemispheric CVD (Cerebrovascular disease), ischaemic type, with right hemiparesis and expressive aphasia. The patient was asked to read a prepared text. The excerpt above began when the patient got to the last sentence of the passage he was given to read. The passage is reproduced below for a proper understanding of the analysis:

When I was going home yesterday, I saw the mechanic who stole my car. I quickly called the police. Thank God, they responded quickly and arrested him. Now I am a proud owner of two Toyota Carina cars. I'm fully happy today and I can challenge that madam who masterminded the attack.

The ostension in this except relies on the lexical item "*challenge*" repeated and produced in different ways by P1. It is this that necessitated the question raised by this researcher. Therefore, to prove the relevance of the speech of this aphasic, one needs to know the explicature that "*challenge*" contains. It is to be noted that many aphasics produce utterances that are not sentences. The effort to be expended in processing their utterances from the lexical items at his/her disposal.

The patient did not complete the passage. The word "authority" substituted by him is not in the passage at all. This word affected the coherence of the discourse, because it appears irrelevant in this context. This is why the researcher asked: "You can challenge what"? This came after the question: "Whom can you challenge?" The change of the interrogative pronoun from <u>who</u> to <u>what</u> is predicated on the expression "The authority" uttered by the patient.

The question: 'do you see me well?' is an attempt to be sure that the man is coordinated. The expression: "You have tried" (Exchange 1) is a strategy by the Researcher to encourage him to continue reading. This is necessary because, as revealed in the pauses noticed in the excerpt, P1 had difficulty reading. The pronominal "which" prompted P1 to reveal further details. This pronominal makes the ostension of P1 clear. This implies that with patience and appropriate questioning an aphasic can reveal his/her world of experience.

The repetition of the word "*challenge*" is an ostensive behaviour that fired some logogens in the researcher. This is why he asked "Who can you challenge?" (Exchange 3). The response "*authority*" is apparently irrelevant. The researcher closed the discussion because the assumption of the patient is too costly. P1's ostension is revealed after performing the task he was given by the researcher. *Challenge* used in the passage fired in him some logogens which made him to remember an incident that had happened. Although P1 did not specify this, the researcher knew that, at least, he wanted to say something in relation to an *authority*. This utterance is relevant to the extent that it shows that P1 must have had a contact which involved some molestation.

The words "challenge", "authority" and "molest" make the utterance coherent. They suggest infringement. The expression "broad daylight" indicates that he did not expect such an act in the day. He issued a threat, a kind of incomplete protest "... anybody who tried to molest me...." In the immediate environment, this could be refusal to take drug or talk with anybody. Since the scene is a hospital, a likely inference is that, before the man came to the clinic, he had had a terrible experience with some people, presumably law enforcement agencies. Another inference is that some people in the clinic are trying to maltreat him. The word daylight suggests that the man did not expect such an incident to happen at such a time. He appears to be protesting something. The nonlinguistic cue of the people around (laughter) suggests that it must be an incident that happened at the clinic. If we take the second inference to be the implicature, we can now begin to think of who the authority is. In a context like this, the authority comprises the nurses, the physiotherapists, speech therapists, and the neurologists on duty. What could they have done that would have warranted this elderly man challenging them? A clue to this could be that they wanted to treat him and he resisted and they forced him to be attended to. The man is likely to be somebody who cherished his freedom much. And he felt that his condition did not mean that his freedom should be trampled upon. He was trying to say that he cannot be subjected to what he did not want. He was not moved by the laughter; he went ahead. But he no longer read the text given him. The researcher's curiosity about the whole issues suggests that he assumed that there must have been an incident that worried that man. There is some seriousness in the response of the man. He used lexical items that point to the fact that he was troubled by something.

This man speech is not all that difficult to process because of the collocation of the lexical choices he has made. Some of what aphasics utter, which may appear meaningless and irrelevant to a non-aphasic human can be decoded if they are situated within the context of the past experiences of the patient. But a pertinent question is: how does the hearer enter into this world? At the moment of interacting with an aphasic, questions derived from some lexical choices made by the aphasic, no matter how distortedly these lexical items are articulated, could be used to fire some logogens that will make the discourse coherent in the aphasic. In other words, the discourse of P1 could be said to fulfill Extent Condition 1 but partly fulfills Extent Condition 2.

Interacting with Aphasics with Cognitive Impairment

In neurology clinics, test of cognition is part of examination before diagnosing aphasics. The test could involve simple arithmetic; the patient may be asked to complete or give the meanings of some native proverbs; some items may be mentioned for the patient to reproduce later. All these are attempts to ascertain whether the aphasia affects the cognitive ability of the patient.

In patients with cognitive impairment, some important dates and events may be incoherently presented. The patient labelled P2 below was a Wernicke's aphasic. He was born in 1941. He was diagnosed as having Right hemispheric CVD, with right hemiparesis, with excessive salivating but was not previously hypertensive. The exchange below took place at the Medical Out-Patient (MOP) Clinic of the hospital, in March, 2006.

,	chine of the hosp	<i>full</i> , in March, 2000.
(B)	1.Researcher:	Which year did it start?
	2.P2:	It started in 1904
	3.Researcher:	1904? 1904?
	4.P2:	Maybe three years ago
	5.Researcher:	Three years ago?
	6.P2:	Ah
	7.	Researcher: That's 1904. Ok
		erm Ok. And when it started,
		were you able to use any of
		your hands?
	8.P2:	Yes, I use my hand small small
	9.Researcher:	Small, small Ok. But that 1904,
		that's more than four years
		ago now. 1904. Were you born
		then?
	10.P2:	Ah 204, I mean.
		·

11.Researcher:	Ok. You mean 204. 19204 or
	204?
12.P2:	204,204.
13.Researcher:	Year 204?
14.P2:	Un. Ok. That's four years ago?
15.Researcher:	But 204 is not four years ago.
	That's two years.
16.P2:	That's two years?
17.Researcher:	Un 204?
18.P2:	Maybe six now.
19.Researcher:	Six now. Six years ago now
20.P2:	From there now, year 206. It
	started in the 204.
21.Researcher:	It's 204. Ok. Now, which hand
	do you use?
22.P2:	Left and right.

This excerpt shows that P3 had difficulty with figures. The ostension is the year of an event but they are conflicting dates. Researcher appears confused about which year in particular the stroke that led to the aphasia the patient suffered started. This discourse requires much effort to process; thus, the information supplied by the patient regarding the onset of the stroke appears irrelevant. This patient was born in 1941 but he said the onset of the stroke was 1904. This may be why Researcher repeated that date. The use of maybe by P2 (Exchange 4) shows uncertainty; he has probably mixed up the date. It is to inform Researcher that the date should not be taken seriously. He is somehow conscious that he has cognitive impairment. He has obviously lost count of the year of the onset of the stroke. Three years ago in this context will mean either 2003 or 2004, depending on whether one includes the year of the interaction or whether one is particular about calendar months.

Because Researcher could not make sense of what P2 was saying, he shifted the course of the discourse by asking: "And when it started, were you able to use any of your hands?" The response of P2 was clear enough. The researcher appeared satisfied and P2's response gave some assurance to Researcher that P2 was capable of giving coherent response. This, perhaps, necessitated Researcher's reversion to the initial course of the discourse, by asking: "1904. Were you born then? Have you been born in 1904?". P2's response to these questions is different from his initial response and even odder: "Ah 204 I mean". P2's insistence on this year despite the suggestions of 19204 and 204 by Researcher, suggests that P2 has something to do with the figures 2 and 4. This is supported by P2's response in Exchange 14 indicating that he meant four years ago that he meant. But when the researcher informed him that "... 204 is not four years ago. That's two years ago", P2 felt it was six years ago. He has perhaps added 2 and 4. The suggestion of 204 being four years ago from 2006 by Researcher is, perhaps, hinged on Researcher's guess that P2 meant four years. The suggestion of six years ago by P2 could be addition of four years and two years earlier given by Researcher. The change of the discourse by Researcher could be because he could not get any meaningful response from P2. The question: "... Now, which hand do you use?"(Exchange 21) is an attempt not to frustrate P2. It is a question often asked to determine the handedness of neurological patients to determine language dominance.

This interaction shows that there is difficulty understanding the message being given by an aphasic with cognitive impairment, especially when it involves figures, particularly dates. P2's speech fulfills Extent Condition 1 but it does not fulfill Extent Condition 2 at all. A neurologist seeking to get information relating to the date of the onset of the stroke of such a patient, or anything that could have caused the aphasia, faces a lot of problems getting the exact information. In such a case, the caregivers may be of help, by giving the exact date.

Interacting with Aphasics with Extremely Effortful Speech

There are some aphasics who could not utter a single word: there are also some who could utter only few words, with great effort. The excerpt below involves a Broca's aphasic whose speech was extremely effortful.

P3 was a 61-year-old woman who could speak English, Yoruba and Pidgin English. She was diagnosed as having left hemispheric CVD involving the left MCA (Middle Cerebral Artery) territory, with atrial tibullation and right hemiperesis, with right fascioparesis, and expressive aphasia. The speech of P3 was characterized by fillers and long pauses. The excerpt began after the researcher was about leaving her bedside. P3 had been given the same prepared text which was given to P1 above. She could not read it. The earlier part of the interaction was full of neologisms.

(C)	1.Researcher:	Don't worry, ma. Very soon you'll get better.
	2.P3:	Unhun
	3.Researcher:	Thank you
	4.P3:	(As the researcher and a doctor
		leave) Adetuwa
	5.Researcher:	Ehn?
	6.P3:	Adetuwa
	7.Researcher:	Adetuwa
	8.P3:	Ehn
	9.Researcher:	Who is Adetuwa?
	10.P3:	Ah, ehn, one o the dotor
	11.Doctor:	Ogunsua
	12.Researcher:	Ogunsua
	13.P3:	Uhn
	14.Doctor:	Do you want to see him?
	15.P3:	Ehn
	16.Researcher:	Ok. Do you know Prof?
	17.P3:	Ah en the prolem is erm that
		is ehn

18.Researcher:	Ok. Do you want to see them?
	You want to see those ones?
19.P3:	Uhn
20.Researcher:	They will soon come to see
	you

The opening expression by Researcher is a way of encouraging and assuring P3. The inference we can make from this is that P3 had some difficulty in speaking. The vocative Adetuwa shows Researcher the ostension. But he could not make any inference. Since Researcher and another person were there, it could mean that P3 was calling the other person, a neurologist, but this doctor did not respond. This implies that the doctor's name is not Adetuwa. If that was his name, he should have answered. except if he wanted to ignore the call or he did not here. But there is nothing suggesting this in the discourse. The doctor was friendly, as noticed in Exchanges 11 and 13; he was even the one that suggested the likely name P3 meant to call. To ascertain the ostension, Researcher repeated the name as if he didn't hear well. But to show that her comprehension was intact, P3 repeated the name Adetuwa.

The name Adetuwa features prominently in P3's speech. Therefore, to understand her speech, one needs to know who Adetuwa is. The full form of Exchange 4 could be "call me Adetuwa" or "Adetuwa come" in which case one of the people with her was being referred to. The turn of Doctor indicates that the person P3 meant was Ogunsua (Exchahge 11). She obviously wanted to see Ogunsua because of the utterance "uhn", which means yes. Another explicature is that this Ogunsua must be somebody that the doctor knew. We could have taken it to mean Prof., but the way Researcher framed the question suggests that Prof. is different from Ogunsua. Obviously, Researcher knew Prof. but he did not know Ogunsua. Researcher assumed that P3 wanted to see these people. We can then infer that Ogunsua and Prof. are doctors attending to her. Except if Researcher already knew the caregivers of the patient, it is not plausible that either Ogunsua or Prof. were relatives of P3. Her utterance in Exchange 10 "Ah, ehn, one o the dotor" (Ah, ehn, one of the doctors) also points to the fact that it is the medical personnel that she wanted to see. The word "prolem" (problem) could be taken to refer to her aphasic condition and it is for that that she needed the attention of Ogunsua. She emphasised her own problem. Probably, she wanted something to be done on her problem. She wanted to see her doctor. Her entire intention could then be summed thus: Call me Ogusua because of the problem that I have.

Her responses show that she could recognize people and their profession. It was when she gave the response in Exchange 10 that even Doctor could understand what she was saying. The name given by Doctor is different from the one given by P3; the names differ in the prefixes they have. That of Doctor has Ogun (the Yoruba god of iron), while that of P3 has Ade (Yoruba word for crown). Also, the patient substituted /s/ for /t/ in the stem of the name. The /w/ in Adetuwa is optional. The "Uhn" uttered by Researcher in Exchange 13 shows satisfaction; it implies "so this is what she meant". We can construe the utterance of P3 as a shortened form of "I want to see Adetuwa/ Ogunsua", going by the response of P3 in Exchange 15. This could be the most familiar or hospitable doctor to her or the doctor assigned to her. The substitution of Adetuwa for Ogunsua may be because P3 is more familiar with the latter than the former, since both Ade and Ogun are common prefixes for names among the Yoruba.

The above analysis shows that to understand the message of an aphasic like P3, the interlocutor/analyst needs to make assumptions and guesses. Even if it is a single word that the patient has uttered, by assuming the likely full form of such an utterance, one can decode what the patient has encoded. The name repeated is linked with people they have recently had contact with; they may want to see such a person. Even if not all the morphemes are correct, one can substitute likely morphemes if one knows that language. If it tallies, she can say yes or no. P3's speech does not fulfill Extent Condition 2 but it fulfills Extent Condition 1. But with some inferences, her ostension eventually becomes clear.

CONCLUSION

The foregoing analyses are indicative of the fact that processing the discourses of aphasics should not be dismissed as lacking relevance and coherence. If an interlocutor does not process carefully the discourse of an aphasic, s/he would be frustrated and end up frustrating the aphasic, who is already unhappy about his/her condition. In most cases, their discourses thrive on repetition. But they do not just repeat expressions; many of them repeat lexical items that they want to stress because they carry the burden of their ostensions. Some of them use fillers and single-word utterances. Therefore, an interlocutor needs to patiently listen to an aphasic and try to assume what the aphasic wants to say. This may even mean constructing a special grammar for the aphasic; a lot of explicatures is involved in this. As the discourse proceeds, the interlocutor needs to show interest and encourage the aphasic, and ask few relevant questions. S/he must not display any attitude that will show the aphasic that his/her speech lacks relevance. Essentially, therefore, an interlocutor needs to enter an aphasic's world of experience to enjoy such discourse. The contextual resources the interlocutors/analysts bring to the ostension are crucial in decoding the discourses of aphasics.

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