

TWO BOLANCI COMPLEMENTIZERS: *ii* AND *na**

MAHER AWAD

1. INTRODUCTION. The purpose of this paper is to report on an in-progress study in the sentential complementation of Bolanci, a West Chadic language spoken in southwestern Borno State in northeastern Nigeria.¹ After a brief survey of the literature available on this language, I will present two complementizers in this language, *ii* and *na*. I will then propose an account for the diachronic evolution of one of the complementizers (*ii*). In the second half of the paper, I will explain what semantic functions the two complementizers encode. In connection with the question about the functions of the two complementizers, the findings reported here lend support to the *dicto/de re* distinction advanced in Frajzyngier 1991. Specifically, it will be shown that the *dicto/de re* distinction is encoded in the marking of the complement system of Bolanci.

2. WHAT IS AVAILABLE ON THE LANGUAGE. The most recent published work on Bolanci was done by Johannes Lukas (1969, 1970-72, 1971) in German. Lukas' work concentrates mainly on the phonology and the verbal system. Benton 1912 has a short grammatical sketch, and Meek 1931 is a wordlist. Among the known unpublished manuscripts, Schuh's 'The Bolanci verbal system' (1983a) and 'Bolanci genitives' (1983b) are the most recent. 'The Bolanci verbal system' is quite extensive. Abraham (n.d.) has some field notes in the Kaduna archives at Bayero University College (Nigeria), including grammatical notes and a wordlist (Schuh, p.c.). Finally, there is a B.A. thesis which is a contrastive analysis of Bolanci and English but which doesn't have a lot of information on Bolanci per se (Schuh, p.c.). There is no published work at all on Bolanci syntax.

3. THE TWO COMPLEMENTIZERS. As can be seen in the following examples, Bolanci has SVO word order. The embedded clauses (sentential complements) commence with either the complementizer *ii* or the complementizer *na*. The (a) version of each pair contains the complementizer *ii*, and the (b) version contains the complementizer *na*. These embedded clauses are the direct objects of the matrix clause verbs *poro* and *mono*.²

- (1) a. *ita poro (ii) isin anbara.*
 b. *ita poro (na) isin anbara.*
 3.F.SG.NOM said (COMP) 3.M.SG.NOM hunter
 'She said that he is a hunter.'
- (2) a. *ita mono (ii) isin karuu kom.*
 b. *ita mono (na) isin karuu kom.*
 3.F.SG.NOM know (COMP) 3.M.SG.NOM slaughtered cow
 'She knows that he slaughtered a cow.'

After some verbs, notably verbs of saying (e.g. 'say', 'ask') and verbs denoting mental activities (e.g. 'think', 'remember', 'know'), the presence of these two complementizers is optional. This optionality is indicated in parentheses in the above examples. Apparently, there is no difference in meaning between the (a) and (b) sentences in 1 or the (a) and (b) sentences in 2. In §5 we shall see, on the other hand, that after verbs of perception (such as 'see' and 'hear'), the presence versus absence of a complementizer serves an important semantic function, namely a modality function. But before we go to that discussion, I will trace in the next section the diachronic origin of the complementizer *ii*. I have no similar evidence about the sources for the complementizer *na*.

4. SOURCES FOR THE COMPLEMENTIZER *ii*: FROM ANAPHORA TO COMPLEMENTIZER. It is a well-documented fact that in many languages of the world complementizers are identical to, or are diachronically derived from, demonstrative or anaphoric pronouns. In this section, I will show how the origin of one complementizer in Bolanci, namely *ii*, is traceable to anaphoric pronouns.

In the following pair of examples, the anaphoric pronoun *ii* ('it') in the second clause of each sentence refers back to the NP antecedent in the first clause.

- (3) *ita dinko-naa wotto. n ii-wo ii.*
 3.F.SG.NOM cooked-1.SG.ACC food. 1.SG.NOM eat-PERF it
 'She cooked some food for me. I ate it.'
- (4) *isin gojjuu loori. n innaa-wo ii.*
 3.M.SG.NOM bought truck. 1.SG.NOM see-PERF it
 'He bought a truck. I saw it.'

In 3, the antecedent of *ii* is the noun phrase *wotto*. In 4, the antecedent of *ii* is the noun phrase *loori*. The anaphora *ii* and its antecedent are both direct objects of their respective verbs. The anaphora *ii* can also refer to a whole proposition, as can be seen in the following set:

- (5) a. *isin poyyuu wokka.*
 3.M.SG.NOM broke calabash
 'He broke the calabash.'
- b. *n mono ii.*
 1.SG.NOM know that
 'I know that.'
- c. *n konnaa-wo ii.*
 1.SG.NOM hear-PERF that
 'I heard that.'

In 5b and 5c, *ii*, the direct object of the verbs *mono* and *konnaawo*, substitutes for the whole proposition of 5a, 'He broke the calabash'. In 7a below, the whole of the sentence in 6 is embedded as the direct object complement clause of the verb *poro*.

- (6) *isin anbara.*
 3.M.SG.NOM hunter
 'He is a hunter.'
- (7) a. *isin poro isin anbara.*
 3.M.SG.NOM said 3.M.SG.NOM hunter
 'He said he is a hunter.'
- b. *isin poro ii.*
 3.M.SG.NOM said that
 'He said that.'

In 7b, the anaphoric pronoun *ii* stands for the whole of the proposition in 6, 'He is a hunter'. Example 8 shows the last step in the evolution of the pronoun *ii* into a complementizer. Example 8 is identical to 7a except in the presence of the optional complementizer *ii*. There is no difference in meaning between 7a and 8.

- (8) *isin poro ii isin anbara.*
 3.M.SG.NOM said COMP 3.M.SG.NOM hunter
 'He said that he is a hunter.'

Unlike the demonstrative 'that' in English, *ii* has no deictic functions. Thus, one cannot use it to point to some extralinguistic situation. Its function is limited to an NP or propositional anaphora, as the previous examples illustrate. The deictic pronouns in Bolanci are *ama* (remote) and *eme* (proximate):

- (9) *rewē ama*
tree that
'that tree'
- (10) *rewē eme*
tree this
'this tree'

The fact that the anaphoric pronoun *ii*, which only refers to elements mentioned in speech (de dicto elements) rather than to elements in the real world (de re elements), does not have a deictic function is evinced by the ungrammaticality of the string in 11:

- (11) **rewē ii* for: 'this/tha tree'

Conversely, deictic pronouns, such as those in 9 and 10, cannot refer to elements in the domain of speech, as the ungrammaticality of the example in 12 demonstrates; cf. 13.

- (12) **isin poro ama/eme* for: 'He said that/this'
(13) *isin poro ii*
3.M.SG.NOM said that
'He said that.'

The only circumstance under which 12 can be felicitous is with an interpretation like 'He said (the word) *ama/eme*'.

The examples in 3 through 8 above show how *ii* has evolved from an NP anaphora to a propositional anaphora and finally into a complementizer. The morpheme *ii* has all these three functions in the synchronic state of Bolanci.

Although I cannot show any motivation for it, another possible alternative for the development of the anaphoric pronoun *ii* into a complementizer may be seen in the following set, where *ii*, the direct object cataphora of the verb *poro* 'say' in 16, may have been reinterpreted later as a complementizer in 15:

- (14) *isin poro ii: isin anbara.*
3.M.SG.NOM said that: 3.M.SG.NOM hunter
'He said that: He is a hunter.'
- (15) *isin poro ii isin anbara.*
3.M.SG.NOM said COMP 3.M.SG.NOM hunter
'He said that he is a hunter.'

According to Frajzyngier 1991, Lockwood 1968 proposes for Germanic that the demonstrative was first the direct object of the verb 'say' and then later became a constituent of the embedded clause, becoming thus a complementizer. Thus, the complementizer *ai* in 17 is derived from the demonstrative *iað* in 16. The examples are from Faroese (cited in Frajzyngier 1991):

- (16) *Eg sigi iað: hann kemur.*
'I say that: he comes.'
- (17) *Eg sigi ai hann kemur.*
'I say that he comes.'

Frajzyngier criticizes this proposed path of demonstrative→complementizer evolution for Germanic on the grounds that it is unmotivated: It is not clear why there should be a demonstrative in the direct object position in 16. This criticism only partially applies to my parallel example in 14 because, as we have seen in 7b for example, the anaphora *ii* quite often occurs in the object position of verbs of saying. Where 14 is unmotivated lies in the observation that unlike in 7b, where *ii* is a true anaphora (i.e. coming after its antecedent in speech), in 14 *ii* is a cataphora, preceding its antecedent. We have not seen in any of the examples above an instance where *ii* has a cataphoric function. In fact, I do not have examples in my corpus of *ii* functioning as a cataphora, and I believe that such examples cannot be found in a synchronic study of Bolanci.

Before moving on to the next section, I will briefly mention how Schuh 1983a, who is not concerned with complementation, treats the morpheme *ii*. In Schuh 1983a, *ii* is treated as a transitive verb suffix (-*ii*; allomorph: -*yii*) occurring after the perfective marker and whose function is to mark the "understood direct object" (p. 32). He calls it a zero direct object marker. The following examples are modified from Schuh (1983:38):

- (18) a. (*isin*) *doppi-nii-woo.*
(3.M.SG.NOM) follow-3.M.SG.ACC-PERF
'He followed him.'
- b. (*isin*) *doppuu kom.*
(3.M.SG.NOM) followed cow
'He followed the cow.'
- c. (*isin*) *doppu-woo-yii.*
(3.M.SG.NOM) follow-PERF- \emptyset obj. marker
'He followed (it).'

The optionality of the subject pronoun and the different forms of the transitive verb stem *doppuu* 'follow' are not relevant for our discussion. What is important about these examples is that when the direct object of the verb is overtly mentioned, as in 18a and 18b, the \emptyset direct object marker (-*yii*) does not appear. That is to say, an overt direct object preempts -*yii*. On the other hand, when there is no overt direct object (i.e. when there is zero direct object), as in 18c, the \emptyset direct object marker -*yii* appears, and its position is at the end of the verb complex after the perfective marker. It will be noticed that these facts about 18c in connection with -*yii* (my *ii*) are quite parallel to the second clause complexes in my examples 3 and 4. In other words, in regards to the status of the morpheme *ii*, Schuh's and my analyses are not discrepant with each other, but rather that my analysis takes the further step of showing how this \emptyset object marker came to be interpreted as an anaphora and (later) as a complementizer.

5. THE FUNCTION OF THE COMPLEMENTIZERS. Frajzyngier 1991 finds the complementizer *nə* in Mupun (Chadic) to have similarly evolved from an anaphora. He also shows that when it occurs after verbs of saying and after verbs denoting mental activities, the complementizer *nə* carries no modal function. This is completely true for the two Bolanci complementizers as well. In the following set of examples no modality is expressed in any of the sentences:

- (19) a. *ua poro ii isin karuu kom.*
 b. *ua poro na isin karuu kom.*
 3.F.SG.NOM said COMP 3.M.SG.NOM slaughtered cow
 'She said that he slaughtered a cow.'
- (20) a. *ua mono ii isin anbara.*
 b. *ua mono na isin anbara.*
 3.F.SG.NOM know COMP 3.M.SG.NOM hunter
 'She knows that he is a hunter.'
- (21) a. *isin kono ii ua ndii gaa gomaa nzono.*
 b. *isin kono na ua ndii gaa gomaa nzono.*
 3.M.SG think COMP 3.F.SG went PREP market yesterday
 'He thinks that she went to the market yesterday.'
- (22) a. *n unnaa-wo ii isin saa taaba.*
 b. *n unnaa-wo na isin saa taaba.*
 1.SG.NOM remember-PERF COMP 3.M.SG.NOM smoke tobacco
 'I remembered that he smoked tobacco.'

Following Frajzyngier 1991, it appears that the function of both complementizers *ii* and *na* is to mark the embedded clause as belonging to the domain of speech (domain de dicto in Frajzyngier's terminology). This is true by virtue of the fact that these complementizers follow verbs of saying, and these complementizers do not carry any information about the epistemic value of the embedded clause when occurring after a verb of saying. However, since these complementizers are associated with complements of verbs of saying, which have an inherent epistemic value, such that the information obtained through speech (hearsay) is less reliable than information obtained through direct perception, their use with verbs of perception ('see', 'hear') functions as an indication of less than direct evidence. When either *ii* or *na* occurs after a verb of perception, they seem to function as markers of indirect evidence. Witness the following examples:

- (23) a. *n konnaa-wo ii isin karuu kom.*
 b. *n konnaa-wo na isin karuu kom.*
 1.SG.NOM hear-PERF COMP 3.M.SG.NOM slaughtered cow
 'I heard that he slaughtered a cow.'
- (24) *n konnaa-nii-wo karuu kom.*
 1.SG.NOM hear-3.M.SG.ACC-PERF slaughtered cow
 'I heard him slaughter a cow.'

In 23a and 23b, the subject did not actually hear the event or action of slaughtering; his evidence is indirect -- hearsay. In 24, on the other hand, the subject witnessed the event firsthand. The evidence for these claims is that it is possible to felicitously precede (or follow) 24 with 25, but it is not possible to do so with 23.

- (25) *lookaši laz n erno ga boi boo bin*
 time REL 1.SG.NOM stand PREP back mouth room
 'when I was standing behind the door'

The native consultant dismissed as semantically dubious the sentence in 23 when preceded or followed by 25. In this situation, the translation he rendered for this string was 'When I was standing behind the door I heard him that he slaughtered a cow', and when prompted to repeat the translation, he rendered 'When I was standing behind the door I heard him SAY that he slaughtered a cow'. While these renditions are a little odd upon analogy with similar sentences, they reinforce

the claim that the subject in 23 does not actually hear the event or action of slaughtering but rather hears ABOUT it. Similarly, 23 can be felicitously followed by the string in 26, while 24 cannot.

- (26) *inko ayša por-naa-wo*
 because Aysha tell-1.SG.ACC-PERF
 'because Aysha told me (so)'

While it is true that when either *ii* or *na* occurs after a verb of perception they indicate that the evidence for the information expressed in the embedded clause is indirect, as in 23, their absence per se does not necessarily mean that the evidence is direct. Witness the following example, which, except for the absence of the complementizers, is identical to 23. Examples 23 and 27 have the same meaning. In 27, the evidence for the event of slaughtering is also indirect -- hearsay:

- (27) *n konnaa-wo isin karuu kom.*
n konnaa-wo isin karuu kom.
 1.SG.NOM hear-PERF 3.M.SG.NOM slaughtered cow
 'I heard that he slaughtered a cow.'

In addition, the presence versus absence of the complementizer in 28 below apparently does not bear on the meaning of the sentence. Note, however, the spontaneous use of 'realized' in the translation of 28, an inference (indirect evidence) verb by definition.

- (28) *n innaa-wo (na) isin karuu kom.*
n innaa-wo (ii) isin karuu kom.
 I see-PERF (COMP) 3.M.SG.NOM slaughtered cow
 'I realized that he slaughtered a cow.'

The absence of a complementizer in 24 seems to be a by-product of the process of subject-to-object raising: The subject of the embedded clause in 24 is raised to object position in the main clause. Notice that the syntactic structures in 24, on the one hand, and 23, 27, and 28, on the other, are different. In 24, the embedded clause has no overt subject, and in the main clause the direct object is *-nii* (3.M.SG.ACC), suffixed onto the verb. In contrast, in 23, 27, and 28 there is no NP direct object (the direct object is the whole of the embedded clause -- the sentential complement), and the embedded clauses all have overt subjects (*isin*). That subject-to-object raising has operated in 24 is evinced by the fact that a sentence cannot have both a direct object in the main clause and a subject in the embedded clause, hence the ungrammaticality of the following strings:

- (29) a. **n konnaa-nii-wo (ii) isin karuu kom*
 b. **n konnaa-nii-wo (na) isin karuu kom*
 for: 'I heard him slaughter a cow' or 'I heard that he slaughtered a cow.'
- (30) a. **n innaa-nii-wo (na) isin karuu kom*
 b. **n innaa-nii-wo (ii) isin karuu kom*
 for: 'I saw him slaughter a cow' or 'I saw that he slaughtered a cow.'
- (31) **n innaa-wo yusup isin karuu kom*
 for: 'I saw Yusup slaughter a cow'
 or 'I saw that Yusup slaughtered a cow.'
- (32) **n innaa-nii-wo yusup karuu kom*
 for: 'I saw Yusup slaughter a cow'
 or 'I saw that Yusup slaughtered a cow.'

- (33) **n innaa-nii-wo isin karuu kom*
for: 'I saw him him slaughter a cow' or 'I saw that he slaughtered a cow.'

It is interesting to note that on a different occasion the consultant admitted the strings in 29 only if interpreted as 'I heard from him that he slaughtered a cow' or 'I heard him SAY that he slaughtered a cow'. I think that it is no accident that 29 and 23 were interpreted as having the verb 'say', even when in fact these sentences do not contain this verb. This observation further reinforces the claim that the primary function of the two complementizers in Bolanci is to mark the embedded clause as belonging to the domain of speech. These facts provide additional support for Frajzyngier 1991, who reports on a similar phenomenon involving Mupun.

The verb 'see' behaves similarly to the verb 'hear'. Direct evidence involving the verb 'see' is also indicated by a structure of subject-to-object raising:

- (34) *n innaa-nii-wo karuu kom.*
1.SG.NOM see-3.M.SG.ACC-PERF slaughtered cow
'I saw him slaughter a cow.'
- (35) *n innaa-wo anbara karuu kom.*
1.SG.NOM see-PERF hunter slaughter cow
'I saw the hunter slaughter a cow.'

The evidence that the subject of the matrix verb in 34 and 35 actually saw the cow being slaughtered is the fact that both 34 and 35 can felicitously be followed by the string in 36:

- (36) *inko n ga isin*
because 1.SG.NOM PREP 3.M.SG.NOM
'because I was with him'

Example 35 is the first instance we have so far of a raised-to-object nominal NP. The test for whether the NP *anbara* is in fact a constituent of the main clause is complementizer insertion. The complementizers *ii* or *na* can only be inserted before *anbara* in 35, never after it. We conclude that subject-to-object raising cannot coincide with the presence of the complementizer:

- (37) **n innaa-wo anbara iina karuu kom*
for: 'I saw the hunter slaughter a cow'
or 'I saw that the hunter slaughtered a cow.'

These additional ungrammatical strings illustrate the same point, namely that raising cannot coincide with complementizer presence:

- (38) **ia konnaa-nii-wo iina karuu kom*
for: 'She heard him slaughter a cow'
or 'She heard that he slaughtered a cow.'
- (39) **ia innaa-nii-wo iina karuu kom*
for: 'She saw him slaughter a cow'
or 'She saw that he slaughtered a cow.'

On the other hand, if *anbara* is analyzed as a constituent of the embedded clause (its subject), we would expect that the complementizer may grammatically precede it. This is in fact the case, as can be seen in 40, but with an important difference in meaning from 35:

- (40) *n innaa-wo iina anbara karuu kom.*
1.SG.NOM see-PERF hunter slaughter cow
'I saw that the hunter slaughtered a cow.'

When contrasted with 35, example 40 clearly shows the function of the complementizer: In 40, the complementizer functions as the sole marker of indirect evidence.

One may conclude from the preceding discussion that for verbs of perception, direct evidence is indicated by the structure of subject-to-object raising, with the concomitant absence of a complementizer, while indirect evidence, at least for the sentences containing a nominal NP after the main verb -- which is ambiguous between a matrix object and embedded subject interpretation -- is indicated by the presence of the complementizer. Clearly, for 28 we do not want to say that the complementizer functions as the marker of indirect evidence since the presence of the complementizer in that example is optional. On the other hand, that sentence has the unambiguous nominative pronoun *isin*, which can only be interpreted as the subject of the embedded clause.

6. AN OPEN PROBLEM: TWO COMPLEMENTIZERS IN A SEQUENCE. In my corpus, there exist a lot of examples of complex sentences where both complementizers *ii* and *na* occur in a sequence. The following are just a sample:

- (41) *ia mono ii na isin karuu kom.*
1.F.SG.NOM know COMP COMP 3.M.SG.NOM slaughtered cow
'She knows that he slaughtered a cow.'
- (42) *n konnaa-wo ii na isin karuu kom.*
1.SG.NOM hear-PERF COMP COMP 3.M.SG.NOM slaughtered cow
'I heard that he slaughtered a cow.'

When the two complementizers occur in a sequence *ii* always precedes *na*. Thus, the following strings are ungrammatical:

- (43) **ia mono na ii isin karuu kom*
(44) **n konnaa-wo na ii isin karuu kom*

I was unable to detect any difference in meaning between any of the following sentences, all of which are attested. All four sentences mean 'She knows that he slaughtered a cow':

- (45) *ia mono isin karuu kom.*
(46) *ia mono ii isin karuu kom.*
(47) *ia mono na isin karuu kom.*
(48) *ia mono ii na isin karuu kom.*

Whenever the two complementizers occur in a sequence, regardless of whether the main clause verb is a verb of saying or a verb of perception, it is possible to eliminate at least one of the two complementizers with apparently no difference in meaning. This situation runs counter to recent functional literature on complementizers. For example, Frajzyngier 1992 provides evidence from other languages, including Chadic languages, that complementizers are closely linked with other modality markers in the complex sentence. Specifically, complementizers are complementary distribution with other modality markers in the sentence. Therefore, it would be expected that one versus two complementizers in a sentence should result in a (modality) meaning difference. I was unable to confirm this prediction for my sentences, however.

7. CONCLUSIONS. In §4, I provided some evidence on the derivation of the complementizer *ii* from anaphoric pronouns. In the synchronic state of Bolanci, the morpheme *ii* has at least two functions, as an NP or propositional anaphora and as a complementizer. This dual (or triple) function may suggest that the status of this morpheme is in transition. In §5, I showed that after verbs of saying, the primary function for the complementizers is to mark the embedded clause as belonging to the domain of speech (de dicto). Unlike in some other languages, e.g. Lele (Chadic, reported in Frajzyngier 1992), where one complementizer functions as a marker of de dicto (and indirect evidence) and another complementizer as a marker of de re (direct evidence), in Bolanci both complementizers seem to function as markers of de dicto. De re (direct evidence) is marked by the obligatory absence of the complementizer. In Bolanci, the presence of a complementizer after a verb of perception indicates that the evidence for the event described in the sentence is indirect or inferred. The absence of the complementizer and the concomitant change in the structure of the sentence (subject-to-object raising) indicate that the evidence is direct. Further investigation is needed into the function of the two complementizers in a sequence.

NOTES

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¹Other names for this language are Bole and Bolewa.

²Bolanci is a tone language. To the best of my knowledge, the fact that I have not transcribed tone here does not affect the analysis or conclusions of this study. As far as I am aware, tone does not bear on the question of sentential complementation.

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