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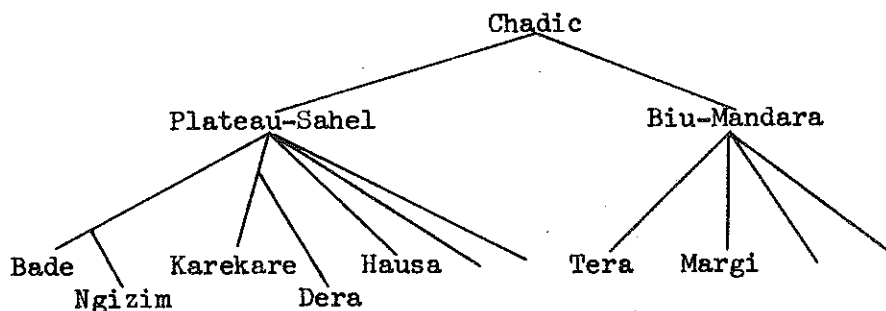
RECONSTRUCTION OF THE SYNTAX OF SUBJECT EMPHASIS
IN CERTAIN CHADIC LANGUAGES

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1. Introduction

In a number of Chadic languages, subjects are given contrastive emphasis by moving them from their normal position before the verb into the predicate, usually after the direct object if there is one. I will be presenting and comparing the rules needed for this operation in four Chadic languages: Bade, Ngizim, Karekare, and Dera.¹ Figure 1 below shows the relationship of these languages to each other and to the Chadic family as a whole.

Figure 1²



The technique for comparing the rules in the languages and for reconstructing earlier rules is taken from Klima [1965]. Klima hypothesizes two stages in grammatical change: innovation and restructuring.

¹Data on these languages were collected in the Northeastern State of Nigeria during 1969-1970. This field work was supported by a National Science Foundation Grant, No. GS 2279, Paul Newman Principal Investigator. The Dera data are from a preliminary manuscript of Newman [1972]. Maxine Schuh supplied me with the Karekare data. Ngizim and Bade data are from my own field notes.

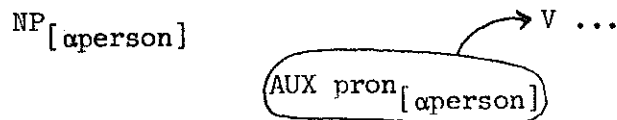
²This diagram is based on Newman and Ma [1966].

Innovation involves addition of new rules to a grammar or non-application of rules already in the grammar. The assumption is made that once a speaker has acquired a grammar, neither the order of application of the rules nor the rules themselves can change. The stage of restructuring takes place as the younger generation constructs a grammar based on the speech of mature speakers. Depending on what innovations have been introduced by the older generation, the younger generation may formulate a grammar fundamentally different from that of the older generation. Language change is, then, innovation followed by restructuring.

Four transformations will enter into the discussion:

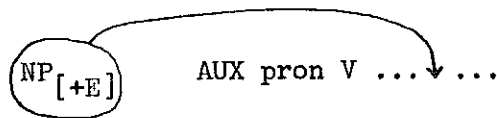
I. AUX Pronoun Insertion

The rule of AUX Pronoun Insertion attaches a bound pronoun prefix to the verb. This prefix agrees in person, number, and gender with the subject. It may have different forms depending on verb aspect.



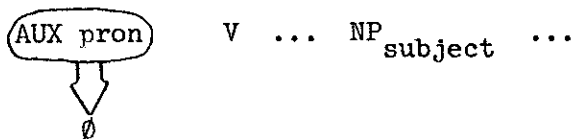
II. Subject Postposing for Emphasis

The rule of Subject Postposing moves a subject noun phrase marked for emphasis into the predicate. Languages may differ as to where in the predicate the subject is moved.



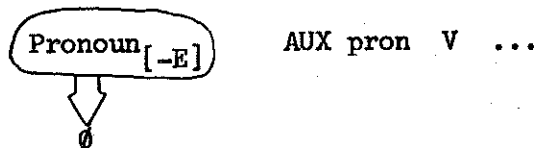
III. AUX Pronoun Deletion

The rule of AUX Pronoun Deletion optionally deletes the AUX pronoun inserted by Rule I if there is no subject noun phrase preceding it, i.e. if the subject has been moved by Rule II.



IV. Pronoun Subject Deletion

The rule of Pronoun Subject Deletion deletes an underlying pronoun subject in sentences where the subject is not marked for emphasis. This leaves only the AUX pronoun to mark person, number, and gender of the subject.



2. Rules for Bade and Ngizim

Let us turn first to the rules needed to account for subject emphasis in Bade and Ngizim. For each language, I have given two example sentences showing how rules I-IV apply to underlying structures to give surface structures with emphasized subjects. Included with each illustration of a sentence with subject emphasis is the corresponding sentence without subject emphasis. The sentences without subject emphasis are numbered (1'), (2'), etc. Sentences enclosed in slashes are underlying or partially derived structures which do not appear as spoken sentences.

a. Bade.

- (1a) /ayu_[+E] zədə səraw/ 'I dug the well'
 I dug the-well
- (1b) $\xrightarrow{\text{I}}$ /ayu_[+E] nə zədə səraw/
- (1c) $\xrightarrow{\text{II}}$ nə zədə-k ayu səraw
- (1d) $\xrightarrow{\text{II}}$ nə zədə səraw ayu
- (1e) (opt) $\xrightarrow{\text{III}}$ zədə-k ayu səraw
- (1') /ayu zədə səraw/ 'I dug the well'
 I, IV
 $\xrightarrow{\hspace{1cm}}$ nə zədə səraw

- (2a) /Dlaagəna_[+E] ɖaaguraa-gi/ 'Dl. called you'
 proper name call you (m.s.)
- (2b) II
 ⇒ ɖaaguraa-gi-k Dlaagəna
- (2') Dlaagəna ɖaaguraa-gi 'Dl. called you'

Examples (1) and (2) illustrate subject emphasis in Bade. In (1a), *ayu* is the underlying first person singular pronoun subject.³ Rule I, AUX Pronoun Insertion, inserts the pronoun prefix, *nə*, to give (1b). Since the subject, *ayu*, is marked for emphasis, Rule II, Subject Postposing, applies to move *ayu* into the predicate. This is illustrated in (1c). The marker *k*, hyphenated and underlined in (1c), is a marker inserted before a postposed subject. Most of the subject postposing languages that I know of insert such a marker, though the phonological form may differ from language to language.

In Bade the preferred position for an emphasized subject is directly after the verb and before the direct object if there is one. However, a postposed subject may optionally be placed after a direct object. This option is illustrated in (1d). Note that here the marker *k* is not used.

Bade allows optional deletion of the AUX pronoun by Rule III if the subject has been postposed. This option is exemplified in (1e).

Example (1') illustrates the sentence without an emphasized subject which corresponds to (1). Rule I first applies to insert the AUX pronoun, *nə*. Since the subject is not marked for emphasis, neither Rule II nor Rule III will apply. Rule IV then applies to delete the underlying subject pronoun, *ayu*, leaving only the AUX pronoun, *nə*, to mark the person, number, and gender of the subject.

Example (2) and the corresponding (2') illustrate a Bade sentence with a third person subject. There is no special AUX pronoun for third person, so Rule I does not apply. Rule II moves the emphasized subject,

³The pronoun forms given in subject position of sentences enclosed in slashes are a shorthand version of what would be matrices of features such as [+I, -pl, -fem, etc.] in a more rigorous account.

Dlaagəna, into the predicate, and the marker *k* is inserted to give (2b). Pronoun direct objects, such as *gi* in (2), are bound to the verb, so the option of inserting the subject between the verb and direct object is not available here as it was in (1c).

b. Ngizim.

- (3a) /ci_[+E] dlame papiya/ 'you lied'
 you (m.s.) do lie
- (3b) $\overset{\text{I}}{\Rightarrow}$ /ci_[+E] ka dlame papiya/
- (3c) $\overset{\text{II}}{\Rightarrow}$ ka dlame papiya-n ci
- (3d) *dlame papiya-n ci
- (3e) ci ka dlame papiya
- (3') /ci dlame papiya/ 'you lied'
 $\overset{\text{I, IV}}{\Rightarrow}$ ka dlame papiya
- (4a) /bədlamu_[+E] təkə aaku/ 'the hyena killed the goat'
 hyena kill goat
- (4b) $\overset{\text{II}}{\Rightarrow}$ təkə aaku-n bədlamu
- (4') bədlamu təkə aaku 'the hyena killed the goat'

Application of Rules I-IV in Ngizim is illustrated in (3) and (4). Rule I is applied to the underlying structure, (3a), to insert the second person singular AUX pronoun, *ka*, found in (3b). Rule II then applies to give (3c). In Ngizim, an emphasized subject is always placed after a direct object if there is one. The marker of postposed subjects in Ngizim is *n*, hyphenated and underlined in (3c).

Rule III doesn't apply in Ngizim to delete the AUX pronoun. Hence, example (3d), which is parallel to the Bade example (1d), is ungrammatical.

If a subject marked for emphasis is a pronoun, Rule II applies only optionally to postpose it. If Rule II is not applied, a disjunctive pronoun appears on the surface preceding the AUX pronoun as in (3e).

Example (4) illustrates an Ngizim sentence with a third person subject. As in Bade, there is no special AUX pronoun form for third person.

Two differences can be observed between the rules needed for Bade and Ngizim: first, Bade can put an emphasized subject before or after a direct object while Ngizim requires that the subject follow a direct object. I do not fully understand the reasons for this difference, so I will not attempt to give an account of it in this paper.⁴

The second difference involves the deletability of the AUX pronoun if a subject has been postposed. Bade can delete AUX pronouns, Ngizim cannot. This difference can be explained by the following sequence of events, outlined below.

<u>Proto-Bade-Ngizim (=Bade)</u>	(innovation) <u>pre-Ngizim</u>	(restructuring) <u>Ngizim</u>
I (obligatory)		I (obligatory)
II (? opt. for pron. subj.)		II (opt. for pron. subj.)
III (optional)	III (option never taken)	
IV (obligatory)		IV (obligatory)

Proto-Bade-Ngizim had an optional rule deleting an AUX pronoun if the subject was postposed. After the Bade-Ngizim split, an innovation took place in the pre-Ngizim community whereby the option to delete the AUX pronoun was taken less and less until it was never applied. Later generations of speakers constructed a grammar without the rule, giving contemporary Ngizim.

⁴It is possible that the pre-object and post-object positions for emphasized subjects have different origins. Some Chadic languages have VSO as the unmarked order under certain circumstances. This is also the prevailing order in most of the rest of Afroasiatic. The pre-object order may reflect an earlier period when this was the unmarked order, while the post-object position has arisen (probably as a later development) as a real emphasis position.

2. Rules for Karekare and Deraa. Karekare.

- (5a) /dəku_[+E] taadan agoogoo/ 'you broke the watch'
 you (pl.) break watch
- (5b) \xRightarrow{I} /dəku_[+E] ku taadan agoogoo/
- (5c) \xRightarrow{II} ku taadan agoogoo na dəku
- (5d) (opt) \xRightarrow{III} taadan agoogoo na dəku
- (5e) dəku ku taadan agoogoo
- (5') /dəku taadan agoogoo/ 'you broke the watch'
 $\xRightarrow{I, IV}$ ku taadan agoogoo
- (6a) /tamakən_[+E] ran/ 'the sheep entered'
 sheep (pl.) enter
- (6b) \xRightarrow{II} ran na tamakən
- (6') tamakən ran ko 'the sheep entered'

The rules needed to account for subject emphasis in Karekare are similar to those for Bade. Rule I operates on the Karekare sentence (5a) to introduce the second person plural perfective AUX pronoun, *ku*, seen in (5b).

As in Ngizim, a postposed subject in Karekare always follows a direct object if there is one. It is preceded by a marker *na*. Thus, Rule II applies to (5b) to give (5c).

Karekare resembles Bade in allowing deletion of an AUX pronoun if the subject has been postposed. Thus, in (5d) the AUX pronoun, *ku*, has been deleted from (5c) by Rule III.

Pronoun subjects marked for emphasis can be left sentence initial. If this is done, a disjunctive pronoun will precede the transformationally inserted AUX pronoun, as illustrated in (5e). If the subject is not marked for emphasis, only the AUX pronoun may appear as the subject

marker, as in (5'), where the underlying pronoun subject, *dəku*, has been deleted by Rule IV.

Example (6) illustrates a Karekare sentence with a third person subject. As in Bade and Ngizim, there is no special third person AUX pronoun.

b. Dera. Dera differs in an interesting way from Bade, Ngizim, and Karekare. Postposing a subject marked for emphasis is not obligatory, but if a subject is postposed, an AUX pronoun cannot appear before the verb. We have been accounting for the optional appearance of an AUX pronoun in the other languages by inserting it, then optionally deleting it if the subject is postposed. In Dera, where an AUX pronoun never occurs in a sentence with a postposed subject, the optimal grammar would be one where subjects marked for emphasis are postposed before AUX pronoun insertion. AUX pronouns are then inserted only where a subject noun phrase precedes the verb. This rule ordering is illustrated in (7) and (8).

(7a) /məni_[+E] gopo - mu Šani/⁵ 'we passed by Šani'
we pass by we name of a town

(7b) $\begin{array}{l} \text{II} \\ \Rightarrow \end{array}$ gopo-mu Šani məni

(7c) *mə gopo-mu Šani məni

(7') /məni gopo-mu Šani/ 'we passed by Šani'


$\begin{array}{l} \text{I, IV} \\ \Rightarrow \end{array}$ mə gopo-mu Šani

(8a) /Balau_[+E] at dənoi/ 'B. ate peanuts'
proper name eat peanuts

(8b) $\begin{array}{l} \text{II} \\ \Rightarrow \end{array}$ at dənoi Balau

⁵The formative -mu suffixed to the verb in (7) is an obligatory pronoun form reflecting person, number, and gender of the subject which is added to intransitive verbs. It is unrelated to the AUX pronoun. Note that it must be added before postposing the subject while, as examples (7) and (8) illustrate, AUX pronouns are inserted after subject postposting.

(8') /Balau at denoi/ 'B. ate peanuts'

I, III
 Balau a at denoi

The underlying subject pronoun, *meni*, in (7a) is moved into the predicate by the Subject Postposing rule to give (7b), with no AUX pronoun. As in Ngizim and Karekare, postposed subjects follow a direct object if there is one (or, as in the case of (7a), a locative goal). There is no marker accompanying postposed subjects in Dera.

Example (7c), parallel to Bade (1c), Ngizim (3c), and Karekare (5c), is ungrammatical. The subject has been moved into the predicate, but an AUX pronoun, *mə*, has been inserted before the verb. In example (7'), the corresponding sentence without emphasis, only the AUX pronoun marks person, number, and gender of the subject.

Sentence (8) illustrates a Dera sentence with a third person subject. As we would expect from the proposed ordering of rules in Dera, postposing of the subject, *Balau*, leaves the verb, *at*, at the beginning of the sentence. Unlike the other languages, Dera does have an obligatory perfective marker prefixed to the verb in the third person if the subject precedes the verb. This marker, *a*, is seen in (8'), where the subject has not been postposed.

Postposing of subjects marked for emphasis is not obligatory in Dera. If an emphasized constituent is left before the verb, the regular perfective markers are replaced by special AUX pronoun forms and the final vowel of the verb is changed to *a*. Sentences (9) and (10) illustrate this construction.

(9) wuni wun kapa kurei 'they planted corn'
 they 3rd pl. plant corn
 special perf.
 AUX pron.

(9') wu kape kurei 'they planted corn'
 neutral
 3rd pl. perf.
 AUX pron.

- (10) Baša shee tupa-ya 'Basha sent him'
 proper 3rd f.s. send him
 name special perf.
 AUX pron.
- (10') Baša a tupe-yi 'Basha sent him'
 neutral
 perf. marker

The special AUX pronouns wun in (9) and shee in (10) have replaced the regular perfective markers wu and a in (9') and (10') respectively, and the final vowels of the verbs in the sentences with emphasized subjects have been changed to a, giving kapa and tupa.

None of the other three languages discussed here have this obligatory aspect marker replacement. It is found, however, in Chadic languages as distantly related as Hausa and Tera. Because of the wide pattern of occurrence of this very specialized rule in distantly related branches of Chadic its presence in the grammar of Proto-Chadic is quite certain. The extent of the use of such a rule in contemporary languages and the conditions for its use will require further research. I will restrict my remarks to saying that loss of the rule in numerous Chadic languages has probably been the result of the aspect replacement being a redundant feature in most of the environments where it was required.

I would like to offer a more detailed explanation for the reversal of the AUX Pronoun Insertion and the Subject Postposing rules in Dera. The hypothesized stages of development are outlined below.

Changes in Karekare-Dera

<u>Proto-Karekare-Dera (= Kar.)</u>	<u>(innovation) pre-Dera</u>	<u>(restructuring) Dera</u>
I (obligatory)		II (optional)
II (optional, probably for all subjects)		I (obligatory)
III (optional)	III (made obligatory)	
IV (obligatory)		IV (obligatory)

Like the change in Ngizim, this change depends on the presence of

an optional rule deleting AUX pronouns when the subject is postposed. I believe we can fairly safely say that at some pre-Dera stage such a rule existed, since we find the same rule in languages of two separate sub-groups, Bade and Karekare. I would hypothesize then that during the innovation stage, speakers of pre-Dera applied AUX Pronoun Deletion more and more until its application became obligatory, i.e. AUX pronouns were always deleted when the subject was postposed. Obviously a grammar obligatorily inserting a formative, then obligatorily deleting it, is not an optimal grammar. A restructuring has taken place, resulting in the contemporary Dera grammar where the order of application of AUX Pronoun Insertion and Subject Postposing is the reverse of the earlier stage, and the rule of AUX Pronoun Deletion has been dropped from the grammar.

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