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Subordinate Adverbial Clauses

in Hausa

A dissertation submitted in partial satisfaction of the  
requirements for the degree Doctor of Philosophy

in Linguistics

by

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1976

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IN MEMORY OF

MY LATE WIFE, HADIZA IYALLIYA

\*\*\*

Kullum ina begenki safe da yamma duk  
Kullum ina miki addu'a kyakkyawuya  
Abadan ba zan daina ba sai na tadda ke  
Mun sadu can Firdausi, kin ji Iyalliya

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## LIST OF ABBREVIATIONS

ASP	=	aspect (marker)
comp.	=	completive aspect (marker)
cop.	=	copula
Det.	=	determiner
fut.(1)	=	future 1 aspect (marker)
fut.2	=	future 2 aspect (marker)
habit.	=	habitual aspect (marker)
imäg.	=	imaginative particle
NP	=	noun phrase
N <sub>time</sub>	=	time noun
part.	=	particle
Prep.	=	preposition
prog.	=	progressive aspect (marker)
r.c.	=	relative completive aspect (marker)
r.p.	=	relative progressive aspect (marker)
subj.	=	subjunctive aspect (marker)
VP	=	verb phrase

## ACKNOWLEDGEMENTS

This study was made possible by a scholarship grant from the former North-eastern State of Nigeria for which I am grateful. I am also grateful to my employers, the Ahmadu Bello University for granting me leave of absence without pay for the first two years of my studies at UCLA and a study fellowship for the third year.

The letters of sympathy that Vickie Fromkin and Paul Schachter wrote to me and the cards that many of my fellow students in the linguistics department sent me on the death of my wife Hadiza, boosted my morale tremendously and encouraged me to come back to UCLA and resume my studies after that very trying period in my life. Therefore, I wish to express my sincere gratitude to the entire faculty, and to Paul and Vickie in particular.

I wish to make known my debt to Paul Schachter, my academic advisor, who has helped me in various ways. Not only have I benefitted from his systematic lectures and seminars on linguistic theories, but he has also read several drafts of this dissertation and offered many sound criticisms and suggestions for improvement which have mostly been well taken. I am also grateful to him for helping me financially on several occasions.

I also wish to make known my debt to the chairman of my doctoral committee, and my good friend Russell Schuh.

I have beniftted greatly from his immense knowledge of Chadic languages. Without the insight I have gained from my discussions with him on Chadic languages, I wouldn't have been able to explain some of the facts of Hausa that I described in this study. I also want to thannt him and his wife Maxine for inviting me to dinner and lunch and also outings, on several occasions.

I have beniftted greatly from Sandra Thompson's lectures and seminars on syntactic theories. Her pro-seminar on Subordination was one of the best seminars I have ever taken. In fact, this dissertation developed from a paper I submitted as a course requirement for the seminar. She has also read the two priliminary drafts of this dissertation and offered very useful suggestions. I am therefore grateful to her for allowing me to work so closely with her and also for inviting my family for a thanks giving dinner this year.

I am also grateful to Professor Will Leben (Zakin Stanford) of Stanford University for reading parts of the first draft of this dissertation and giving me very useful suggestions for improvement. I am also grateful to him and Mrs. Emily Hallin of the International Centre, Stanford University, and Miss Faye Knox for helping me in may ways during the two summers (of 1975 and 1976) that I worked at Stanford as a research assistant in the Centre for Research in International Studies.

Last, but not the least, I must thank all the members of my family and my friends and relatives in Nigeria who helped me in innumerable ways. I am particularly grateful to my brother Mallam Alhaji Muhammad, Likitan Isawa, and my friend Alhaji Umar Hassan. Without the cooperation of all these people, this dissertation would not have materialized.

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1976

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ABSTRACT OF THE DISSERTATION

Subordinate Adverbial Clauses in Hausa

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Doctor of Philosophy in Linguistics

University of California, Los Angeles, 1976

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This study is an attempt to analyze Subordinate Adverbial Clauses in Hausa, a Chadic language in the Afro-Asiatic family of languages. Subordinate adverbial clauses are classified into three groups according to their surface structures and other syntactic properties. This syntactic classification is shown to correlate with a semantic classification as well. Therefore, although the study is primarily descriptive, it has theoretical significance as well, in the sense that it illustrates some aspects of the relations between syntactic and semantic properties of sentences. It also has theoretical implications in the area of subordination, in the sense that it will contribute to a theory of relationships between clauses, etc.

The data analyzed in the study is mainly from the

speech of the writer, who speaks the Eastern Hausa dialect which, apart from a few minor phonological variations, does not appear to differ from Standard Hausa. Therefore, the study can be considered as a syntactic description of subordinate adverbial clauses in Standard Hausa.

Three syntactic types of subordinate adverbial clauses are identified--(1) relative adverbial clauses, (2) subjunctive adverbial clauses and (3) simple (i.e. non-relative, non-subjunctive) adverbial clauses. Time adverbial clauses are investigated and shown to be full NP's that are modified by restrictive relative clauses. It is shown that purpose, 'instead of', and 'much less' adverbial clauses surface in the subjunctive and it is proposed that they do so because they have the underlying semantic similarity, "dependent incompleteness of action/event". Those adverbials that have the structure of simple clauses are shown to be "conditional" adverbial clauses. Prepositions that can introduce more than one syntactic type of adverbial clauses are investigated and it is shown that the meanings of each of these prepositions are solely determined by the type of clause that follows it. The various uses of the relative aspect marker are also investigated. It is suggested that all the various instances in which the relative aspect marker is used obey Keenan and Hull's (logical) principle that "logically similar constructions are generally realized in syntactically similar ways". It is shown that

the logical similarity that the various construction types have is "presupposition".

## INTRODUCTION

### 1. General aims of the study

This study attempts to investigate Subordinate Adverbial Clauses in Hausa, a Chadic language in the Afro-Asiatic family of languages. The main aim of the study is to make some significant contributions to the study of Hausa linguistics by providing a rigorous description of subordinate adverbial clauses in the language. Subordinate adverbial clauses are classified into three groups according to their surface structures and other syntactic properties. This syntactic classification is shown to correlate with a semantic classification as well.

Therefore, although the study is primarily descriptive, it has theoretical significance as well, in the sense that it illustrates some aspects of the relations between syntactic and semantic properties of sentences, an area which generative grammarians have begun to investigate in recent years. It also has theoretical implications in the area of subordination in the sense that it contributes towards a theory of relationships between clauses, etc.

### 2. Dialect described

Although the dialect situation of Hausa is yet to be described in detail, Hausa linguists generally distinguish four major dialects: (1) a Western Dialect (e.g. Sokoto

dialect), (2) a Northern Dialect (e.g. Katsina, Daura and Damagaram dialects), (3) a Standard Dialect--which is generally considered to be based on Kano Hausa and (4) an Eastern Dialect (e.g. Guddiri and Hadejiya dialects).

The data analyzed in this study are mainly from the speech of the writer, who speaks the Eastern dialect. It should be noted, however, that apart from a few minor phonological variations, the Eastern dialect does not appear to differ from Standard Hausa. Therefore, this study can be considered as a syntactic description of subordinate adverbial clauses in Standard Hausa.

### 3. The scope of the study

The study is divided into five chapters. Chapter 1 investigates those adverbial clauses in Hausa that have the structure of relative clauses. Although Place and Manner adverbial clauses can also be shown to have the structure of relative clauses, only Time adverbial clauses are discussed in this chapter. First, simple time phrases are shown to be analyzable as ordinary lexical nouns that are either Deictic or Non-deictic. Non-deictic time nouns are shown to be the only source(s) of time adverbial clauses. That is, time adverbial clauses are essentially non-deictic time nouns that are modified by restrictive relative clauses. Next, since, until and after clauses are analyzed as relative clauses that are preceded by prepositions and it is shown that the antecedents of time

adverbial clauses can be deleted by an optional antecedent deletion rule which deletes the antecedent of a time adverbial clause.

Chapter 2 discusses those adverbial clauses that surface as subjunctive clauses. First, the general uses of the subjunctive in non-adverbial clauses are investigated and a generalization is drawn about the semantics of the subjunctive in non-adverbial clauses. Next, subjunctive adverbial clauses are discussed. Finally, it is shown that both adverbial and non-adverbial subjunctive clauses have one semantic aspect in common that can be said to be the main reason why they all surface in the subjunctive. It is proposed that the subjunctive is always used to characterize uncompleted dependent actions/events when the speaker is not certain whether the action/event in the subjunctive clause will materialize or not. That is to say that the semantic aspect that both adverbial and non-adverbial subjunctive clauses have is dependent incompleteness of action.

Chapter 3 deals with those adverbial clauses that have the structure of simple clauses--i.e. the structure of non-relative, non-subjunctive independent clauses. The cover-term "conditional" is used to label all the adverbial clauses that fall in this class. Conditional clauses are divided into two classes, "fulfilled" and "unfulfilled", and the "unfulfilled" class is again divided into two

classes, "Reality" and "Imaginative". Then Reality conditionals are subdivided into the classes "Probable" and "Possible" and Imaginatives are subdivided into the classes "Hypothetical" and "Counterfactual". The syntactic properties of the various classes of conditionals are discussed.

Chapter 4 explores the various uses of the relative aspect marker in Hausa and provides an explanation for the use of the relative aspect marker in all the various instances in which it is used. It is suggested that all the various constructions in which the relative aspect marker is used obey Keenan and Hull's (logical) principle that "logically similar constructions are generally realized in syntactically similar ways". It is shown that the logical similarity that these various construction types have is the feature "Given".

Chapter 5 is divided into two major sections. Section one deals with prepositions that introduce more than one type of subordinate adverbial clause and describes the syntactic properties of sentences introduced by prepositions. It is shown that the meanings of each of these prepositions are solely determined by the type of clause that follows it. The uses of the prepositions sai 'only; until' and har 'even (after)' as quantifiers of noun phrases and as introducers of subordinate adverbial clauses are discussed in some detail. It is shown that the uses of

these two prepositions as quantifiers of noun phrases are essentially the same as their uses as introducers of subordinate adverbial clauses, and as such, the two uses can be formulated in exactly the same way.

Section two of chapter 5 investigate different types of subordinate (adverbial) clauses that are introduced by the particle da.

## CHAPTER 1

### ADVERBIAL RELATIVE CLAUSES

#### 1. Introduction

In this chapter I will provide an analysis of Time Adverbial Clauses. Some examples of sentences containing time adverbial clauses are given below.

- (1) Yara-n sun ga sarki lokaci-n da  
kids-the they-comp. see king time-the r.m.  
suka shiga birni  
they-r.c. enter city

'The children saw the king when they visited the city'

- (2) Yara-n sun ga sarki da suka  
kids-the they-comp. see king r.m. they-r.c.  
shiga birni  
enter city

'The children saw the king when they visited the city'

- (3) Yara-n su-naa (ta) barci tun da  
kids-the they-prog. (part.) sleep since r.m.  
suka dawo daga makaranta  
they-r.c. return from school

'The children have been sleeping since they returned from school'

- (4) Yara-n sun yi barci baya-n da  
kids-the they-comp. do sleep back-of r.m.  
suka dawo daga makaranta  
they-r.c. return from school

'The children slept after they had returned from school'

- (5) Yara-n ba-su yi barci ba sai da  
 kids-the not-they-comp. do sleep not until r.m.  
iyaye-n-su suka dawo daga makaranta  
 parents-of-them they-r.c. return from school

'The children didn't sleep until (after) their parents had returned from school'

- (6) Yara-n ba-su yi barci ba har  
 kids-the not-they-comp. do sleep not even  
iyaye-n-su suka dawo daga makaranta  
 parents-of-them they-r.c. return from school

'The children didn't sleep even after their parents had returned from school'

The main claim of my analysis is that Time Adverbial Clauses are relative clauses. That is, they are full NP's that are modified by restrictive relative clauses. The time clause in example (1) is a full relative clause in the sense that it has an antecedent noun (lokaci 'time') and the relative clause marker da; the time adverbial clauses in examples (2) through (5) are also restrictive relative clauses but their antecedent nouns have been deleted leaving only the relative clause marker da. Sentence (6), however, contains a relative clause whose antecedent and relative clause marker have both been deleted. I will attempt to describe the processes of antecedent and relative marker deletions, and as far as possible, determine the constraint and/or motivations for the deletions. Since the main claim of my analysis is that time adverbial clauses are relative clauses, it is most appropriate for me to start with a brief illustration of the surface characteristics of the relative clause in Hausa. Once we understand the internal

structure of the relative clause it will be easier for us to see why claiming that time adverbial clauses are restrictive relative clauses seems quite reasonable.

## 2. Relative clauses in general

The surface structure of relative clauses in Hausa is as follows

$$(7) \text{ NP}_1 + \underline{\text{da}} + \left. \begin{array}{l} \emptyset - \text{ASP} - \text{V} \dots \\ \text{NP}_2 - \text{ASP} - \text{V} - (\text{PREP}) - (\text{PRO}).. \end{array} \right\}$$

$\text{NP}_1$  is the antecedent noun, which contains the referential particle  $-\underline{\text{n}}/-\underline{\text{r}}$  when definite ( $-\underline{\text{r}}$  is suffixed to feminine singular nouns and  $-\underline{\text{n}}$  to all other nouns, i.e. masculine singular and plurals for both feminine and masculine nouns).  $\text{NP}_1$  can be coreferential with the subject of the embedded clause (=subject relativization) in which case the subject of the relative clause does not show up on the surface; or  $\text{NP}_1$  may be coreferential with an NP other than the subject NP in the relative clause (e.g. the direct or indirect object, instrumental, locative, etc.), in which case a resumptive pronoun and/or a preposition marking the case of the relevant NP(s) may appear at the appropriate place in the embedded clause. The ASP(ect marker) can be said to consist of two elements: (a) a pronominal element agreeing in person, number and gender with the initial (=subject) NP of a sentence and (b) an aspect marker.<sup>(1)</sup> Relative clauses in the completive or progressive aspect have

special aspect markers that are phonetically different from those used in non-relative clauses. (2) PREP is a preposition that marks oblique cases such as indirect objects (ma/wa 'to, for'), instrumentals (da 'with'), locative (a 'at', kan 'on top', etc.), etc.

(8) (a) Yara-n sun zo jiya  
 kids-the they-comp. come yesterday  
 'The children arrived yesterday'

(b) Yara-n da suka zo jiya  
 kids-the r.m. they-r.c. come yesterday  
 'The children who arrived yesterday'

(9) (a) Audu ya-naa bugu-n yara-n  
 A. he-prog. beating-of kids-the  
 'Audu beats/is beating the children'

(b) Gaa yara-n da Audu ya-kee bugu(-n-su)  
 see kids-the r.m. A. he-r.p. beating (them)  
 'These are the children that Audu beats/is beating'

(10) (a) Sun sayaa ma yaro-n riga  
 they-comp. buy for boy-the shirt  
 'They bought a shirt for the boy'

(b) Gaa yaro-n da suka sayaa ma(-sa) riga  
 see boy-the r.m. they-r.c. buy for (him) shirt  
 'This is the boy they bought a shirt for'

(11) (a) Sun zauna (a) ka-n kujera  
 they-comp. sit (at) top-of chair  
 'They sat on the chair'

(b) Gaa kujera-r da suka zauna (a)  
 see chair-the r.m. they-r.c. sit (at)  
ka-n-ta/ kai  
 top-of-it top

'This is the chair they sat on'

It should be noted that markers of aspects other than the completive and the progressive are the same both in relative and non-relative clauses.

- (12) a. Yara-n zaa-su zo gobe  
kids-the fut.-they come tomorrow  
'The children will arrive tomorrow'
- b. Naa san yara-n da zaa-su zo gobe  
I-comp. know kids-the r.m. fut.-they come t.  
'I know the children who will be arriving tomorrow'
- (13) a. Su-kan sayaa ma yaro-n riga  
they-habit. buy for boy-the shirt  
'They (habitually) buy shirts for the boy'
- b. Gaa yaro-n da su-kan sayaa  
see boy-the r.m. they-habit. buy  
ma(-sa) riga  
for(-him) shirt  
'This the boy they (habitually) buy shirts for'
- c. Gaa iri-n riga-r da su-kan saya  
see type-of shirt-the r.m. they-habit. buy  
ma yaro-n  
for boy-the  
'This is the type of shirt they (habitually) buy for the boy'

### 3. Simple time adverbials

In this section, I will discuss simple time adverbials such as those exemplified in sentences (14) and (15) below. The main concern here is to show that simple time adverbials

are ordinary lexical nouns and to show the nature of the differences between the various types of simple time adverbials and how these differences should be characterized in a grammar of Hausa. This treatment of simple time adverbials is significant to the present study, for we shall see that simple time adverbials are ordinary lexical nouns of time and we shall see the similarities in their syntactic behaviour and that of clausal time adverbials (for example, both simple and clausal time adverbials may be foregrounded by being moved to sentence initial position, they pronominalize in exactly the same way, etc.). Moreover, we shall see that, in general, the semantic interpretation of simple time adverbials is mainly determined by the selectional characteristics of the verb in the main clause, just in the same way that a clausal time adverbial's semantic interpretation is determined by the main verb.

- (14) a. Audu yaa ziyarce ni yau/jiya/bara  
 A. he-comp. visit me today/yesterday  
 'Audu visited me today/yesterday/last year'
- b. Audu yaa ziyarce ni da yamma/damana  
 A. he-comp. visit me with evening/r.season  
 'Audu visited me in the evening/during the rainy season'
- c. Audu yaa ziyarce ni da karfe uku zuwa  
 A. he-comp. visit me with o'clock 3 to  
karfe biyar  
 o'clock five  
 'Audu visited me from 3 o'clock to 5 o'clock'

- (15) a. Audu yaa iso yanzu/dazu  
 A. he-comp. arrive now/a short while ago  
 'Audu has arrived (just) now/a short while ago'
- b. Audu yaa iso da karfe uku/  
 A. he-comp. arrive with o'clock 3/  
tska-r dare  
 middle-of night  
 'Audu arrived at 3 o'clock/midnight'
- c. Agogo-n nan ya-naa bugawa da kowane/duk  
 clock-of here he-prog. beating with every/all  
minti uku  
 minute three  
 'This clock rings every three minutes'

Hall (1964) gives four categories of English time adverbials:

- (16) a. point (instant): 2.00, ten minutes ago, when the gun went off
- b. duration: for ten minutes, from 8 o'clock until 10 o'clock, when the supplies hold out
- c. frequency: every ten minutes, whenever she sees him
- d. frame of reference: in 1960, in the fall, last year

all "frame"

She (mainly) cited selectional differences as justification for the status of the divisions between these four different classes of time adverbials. I think that Hall's four classes of time adverbials can be narrowed down to only two--at least for Hausa--"frame" and "instantive". Frequency adverbials are nothing more than "frame" adverbials with special determiners. Consider the following

phrases.

- (17) a. kowace/duk yamma/damana  
every/all evening/rainy season  
'(during) every evening/rainy season'
- b. kowane/duk minti biyar/rabi-n sa'a  
every/all minute five/half-of hour  
'(after) every five minutes/half hour'

Duration adverbials are also essentially "frame" adverbials. Both "frame" and "duration" adverbials denote an extended period of time, and as such, they should not be classified differently. We can therefore say that there are only two classes of time adverbials: "frame" and "instantive".

If we turn to examples (14 a-c) (frame adverbials) and examples (15a-c) (instantive adverbials), we can see that either of these two classes of simple time adverbials in Hausa can be subdivided into three. (1) Those that do not allow the preposition da, e.g. yau 'today', jiya 'yesterday', bara 'last year'; and yanzu 'now', dazu 'a short while ago'; (2) those that obligatorily take da, e.g. yamma 'evening', damana 'rainy season', karfe uku 'three o'clock', and tsakar dare 'midnight'; and (3) those that optionally take da, e.g. karfe uku zuwa karfe biyar '(from) 3 o'clock until five', kowace/duk yamma/damana 'every evening/rainy season' and kowane/duk minti biyar 'every five minutes'.

- (18) a. \*Audu yaa ziyarce ni da yau/jiya  
A. he-comp. visit me with today/yesterday  
\*'A. visited me at/during today/yesterday'

b. \*Audu yaa iso da yanzu/dazu  
A. he-comp. arrive with now/short while ago

\*'A. arrived at now/a short while ago'

(19) \*Audu yaa ziyarce ni yamma/damana  
A. he-comp. visit me evening/r.-season

\*Audu visited me evening/rainy season'

(20) a. Audu yaa yi barci (da) (daga)  
A. he-comp. do sleep (with) (from)  
karfe uku zuwa karfe biyar  
o'clock 3 to o'clock 5

'Audu slept from 3 o'clock until 5'

b. Agogo ya-naa bugawa (da) kowane/duk  
clock he-prog. beating (with) every/all  
minti biyar  
minute five

'The clock rings (after) every five minutes'

We can see that the selection of da (which is translatable into English as 'at' or 'in' or 'during' as the case may be) cuts across both types of adverbials--it has nothing to do with whether the adverbial is "frame" or "instantive". It seems that the difference between the adverbials with regard to da-selection can be accounted for entirely in terms of the lexical compositions of the adverbials. Those adverbials that do not allow da are actually nouns of time referring to "specific time references". That is to say, each of them directly identifies a unique time reference of which there can be only one in any given situation in the real world. Such time adverbial nouns are, in a way, similar to proper nouns. For example, although there may be

many Gerald Fords in the world, there can only be one Gerald Ford who became the president of the United States of America in 1974 after Nixon. Similarly, there can only be one jiya 'yesterday' or bara 'last year' in the sense that for each day, there is only one jiya 'yesterday' and for each current year, there can only be one bara 'last year'. I call these time nouns that identify unique time references (i.e. those that do not allow da) DEICTIC time adverbials. Those adverbials that obligatorily take da on the other hand, do not refer to any unique time reference. They are in fact ordinary common lexical nouns. These, and also those that optionally take da, can be termed as NON-DEICTIC time nouns. Therefore, another possible way of classifying time adverbials in Hausa is to describe them in terms of Deictic and Non-deictic. This division between time adverbials is of significance to the present study of time adverbial clauses in Hausa, for we shall see that all adverbial clauses are underlyingly Non-Deictic time nouns modified by restrictive relative clauses. In other words I am saying that Deictic time adverbials can never be the source of a time adverbial clause because they cannot be modified by restrictive relative clauses. This is consistent with the semantics of all deictic nouns--whether time or not, because they are essentially, like proper nouns which do not allow restrictive relative clauses. Thus the examples in (21) are all ungrammatical.

(21) a. \*Audu yaa ziyarce ni yau-din/bara-r  
 A. he-comp. visit me today-the/last-yr  
da makwabta-naa suka yi tafiya  
 r.m. neighbours-my they-r.c. do travelling

\*'Audu visited me the today/last year during which my neighbours were away'

b. \*Audu yaa iso yanzu-n da  
 A. he-comp. arrive now-the r.m.  
makwabta-naa suka dawo  
 neighbour-my they-r.c. return

\*'Audu arrived the now at which my neighbours returned'

(22) a. Audu yaa ziyarce ni da damana-r  
 A. he-comp. visit me with r.-season-the  
da aka yi fari  
 r.m. one-r.c. do draught

'Audu visited me the rainy season in which there was a draught'

b. Audu yaa iso (da) tsaka-r dare-n  
 A. he-comp. arrive (with) mid-of night-the  
barayi suka fasa gida-naa  
 thieves they-r.c. break house-my

'Audu arrived at the mid-night during which thieves broke into my house'

Sometimes Deictic time adverbials may be followed by a relative clause whose antecedent may have been deleted and as such, the relative clause will seem to be modifying the deictic time noun itself as can be seen in the following examples.

(23) Audu yaa ziyarce ni bara (lokaci-n) da  
 A. he-comp. visit me last yr. (time-the) r.m.  
makwabta-naa suka yi tafiya  
 neighbours-my they-r.c. do travelling

'Audu visited me last year while my neighbours were away'

(24) Audu yaa            iso    dazu  
 A.    he-comp.    arrive short while ago  
 (lokaci-n) da    makwabata-naa    suka    dawo  
 (time-the) r.m.    neighbours-my    they-r.c. return

'Audu arrived a short while ago, at the same time when my neighbours returned'

What follows bara 'last year' (in example (23) in the case when lokaci-n 'the time' is deleted), is not modifying the deictic time adverbial itself--it is another "frame" adverbial (clause) which specifies further the time when the visit took place. Two pieces of evidence support this. (1) the possibility of inserting lokaci-n 'the time' between the deictic time noun and the relative clause marker da, and (2) the necessity of a pause immediately after the deictic time noun which would not be the case if the relative clause is actually modifying bara 'last year', because no pause is allowed between the antecedent NP and the relative clause. It can be said in (23) that the time specified by the adverbial clause is subsumed in the simple adverbial bara 'last year'. In (24), however, dazu 'a short while ago' refers to the same time instant as the adverbial clause. Therefore, the two adverbials--the simple time dazu 'a short while ago' and the adverbial clause (lokaci-n) da makwabata-na suka dawo '(the time) when my neighbours returned'--are in appositional relation to each other. In (23), both bara 'last year' and (lokaci-n) da makwabata-na suka yi tafiya 'while my neighbours were away', are frame

adverbials, while in (24) both dazu 'a short while ago' and (lokaci-n) da makwabtana suka dawo 'when my neighbours arrived' are instantive adverbials.

Geis (1970, p.71) claims (for English) that "only a single instantive time adverbial can occur in a single sentence". This cannot be true in any strict sense judging from the occurrence of dazu 'a short while ago' and (lokaci-n da makwabtana suka dawo 'when my neighbours arrived' both of which can be interpreted as instantive and yet occur together in a single sentence (cf. example (25)). It is a fact that more than one instantive (or frame, for that matter) adverbial can occur in a single sentence on condition that one of them is there mainly to specify further the other one. Geis's example (13) on page 71:

"At ten o'clock John arrived at that time"

is ungrammatical because the second instantive time adverbial cannot be said to specify further the other one. In Hausa too (and probably in any language) comparable examples are ungrammatical. Thus (25) (which is in fact, a translation of Geis's ungrammatical example) is ungrammatical in Hausa.

(25) \*Da karfe goma Yunusa yaa iso lokaci-n nan  
with o'clock 10 John he-comp. come time-of there

\*'At ten o'clock John arrived at that time'

His example (14) (also on page 71) "At ten o'clock John

arrived when Harry left" may not be acceptable to native speakers, but its unacceptability may have very little to do with the occurrence of more than one instantive time adverbial in a single sentence. Consider the following example which is perfectly acceptable to many native speakers of English, and yet it contains two instantive time adverbials:

(26) John arrived at ten o'clock, after Bill had left

### 3.1. Verb adverbial co-occurrence

Instantive time adverbials can only co-occur with point-action verbs such as iso 'arrive', tashi 'leave', etc., and frame time adverbials will normally co-occur with durative-action verbs.

*no - any verb can occur with any time adverbial  
'yana aiki da karfe uku'*

(27) Audu yaa iso dazu/da karfe uku  
A. he-comp. arrive short while ago/at 3:00  
'Audu arrived a short while ago/at 3:00'

(28) Audu yaa yi aiki jiya/da yamma  
A. he-comp. do work yesterday/in the evening  
'Audu worked yesterday/in the evening'

However, frame time adverbials do sometime co-occur with point-action verbs. For example,

(29) Audu yaa iso da yamma/jiya  
A. he-comp. arrive with evening/yesterday  
'Audu arrived in the evening/yesterday'

*durative - frame*  *yana aiki awa biyu*  
*point - instantive*  *ya iso da karfe uku*

*durative - instantive*  *19 yana aiki da karfe uku*  
*point - frame*  *ya iso da kallahare*

Whenever a frame time adverbial co-occurs with a verb that should normally take an instantive time adverbial, the time must be interpreted as an instant (=point) somewhere between the beginning point and the ending point of the whole period. That is to say that the frame adverbial must be interpreted as "vaguely indicating the instantive time", and if one wants to eliminate the vagueness one can follow the (frame) adverbial with another which is more specific. Thus, if we want to be more specific in example (28) we can use the more specifically instantive time adverbial da karfe uku 'at 3 o'clock' immediately after da yamma 'in the evening'.

(30) Audu yaa iso jiya, da yamma,  
 A. he-comp. arrive yesterday with evening  
da karfe uku  
 with o'clock 3

'Audu arrived yesterday evening, at 3:00'

We have seen that simple time adverbials are basically lexical nouns of time that are either Deictic or Non-deictic nouns. I will now show how these simple time adverbials can be preceded by prepositions such as tun 'since', sai 'until', etc. This fact is significant to the present study of time adverbial clauses in Hausa, for we shall see that the same prepositions are used with time adverbial clauses.

- (31) a. Audu ba - i ziyarce ni ba tun bara  
 A. not-he-comp. visit me not since last yr.  
 'Audu hasn't visited me since last year'
- b. Audu ba za - i ziyarce ni ba  
 A. not fut.-he visit me not  
sai badi  
 until next year  
 'Audu will not visit me until next year'
- (32) a. Audu ba - i zauna ba tun (da) yamma  
 A. not-he-comp. sit not since evening  
 'Audu has been busy since (in the) evening'
- b. Audu ba za - i zauna ba sai (da) yamma  
 A. not fut.-he sit not until evening  
 'Audu won't cease being busy until evening'

Another fact concerning simple time adverbials that is of interest to the present study is how these time adverbials pronominalize. In general, simple time adverbials are pronominalized by sannan 'then', or lokaci-n nan 'that time'. We shall see that time adverbial clauses are exactly the same as simple time adverbials (which are lexical nouns) in this respect.

- (33) Audu yaa ziyarce ni jiya/bara,  
 A. he-comp. visit me yesterday/last year  
 Garba maa yaa ziyarce ni sannan/  
 G. too he-comp. visit me then/  
lokaci-n nan  
 time-of there

'Audu visited me yesterday/last year; Garba visited me then/that time, too'

- (34) Audu yaa yi barci da yamma, Garba  
 A. he-comp. do sleep with evening G.  
 maa yaa yi sannan/lokaci-n nan  
 too he-comp. do then/ time-of there

'Audu slept in the evening, Garba slept then/  
(during) that time too'

(35) Audu yaa farka da Karfe uku, Garba maa  
 A. he-comp. wake with o'clock 3 G. too  
 yaa farka sannan/lokaci-n nan  
 he-comp. wake then/ time-of there

'Audu woke up at 3:00, Garba woke up then, too'

### 3.2. Derivation of simple time adverbials

The following phrase structure rules will generate  
all simple time adverbials in Hausa:

(36) (i) TIME --> (Prep.) NP  
 (ii) NP --> (Det.<sub>1</sub>) N<sub>time</sub> (Det.<sub>2</sub>)

All time nouns will be marked by the features +DEICTIC or  
-DEICTIC, and a rule will be needed which says that all  
-DEICTIC time nouns are underlyingly marked by the prepo-  
sition da which can be interpreted as 'at/in/during....'  
according to the type of verb with which it co-occurs. We  
shall see later that this also accounts for time adverbial  
clauses by allowing a relative clause to modify a -DEICTIC  
time noun.

### 4. The structure of time adverbial clauses

In the following section, I will demonstrate that  
time adverbial clauses are also generated by the same rule  
(i.e. rule 36i). In other words I am saying that all time  
adverbial clauses are essentially full NP's modified by  
restrictive relative clauses. It will be shown that

-DEICTIC time nouns are the only source of time adverbial clauses because +DEICTIC time nouns such as jiya 'yesterday', bara 'last year', yanzu 'the present time', ɗazu 'a short while ago', etc., cannot take restrictive relative clauses since they already refer to specific times that cannot be restricted further.

Time adverbial clauses have the structure of relative clauses. That this is true can be seen in the fact that such adverbial clauses have all the surface characteristics of a relative clause. For example, they contain the relative clause marker da which may be preceded by a nominal element which can be analyzed as the antecedent of the relative clauses; and if the aspect of a time adverbial clause is either the completive or the progressive, the aspect marker has the same phonetic shape as that of a relative clause. (3) Ordinary when-clauses do not pose any observable problems to this analysis for it can clearly be shown that when-clauses in Hausa are analyzable as the time noun lokaci 'time' modified by a restrictive relative clause. Consider the following examples.

(37) Yara-n sun ga sarki (lokaci-n) da  
 kids-the they-comp. see king (time-the) r.m.  
suka shiga birni  
 they-r.c. enter city

'The children saw the king when they visited the city'

(38) Yara-n sun tsorata (lokaci-n) da  
 kids-the they-comp. frighten (time-the) r.m.

aka            safa        bindiga  
 one-r.c.        strike        gun

'The children were scared when the gun went off'

(39) Yaro-n ya-naa karatu lokaci-n da  
 kid-the he-prog. reading time -the r.m.  
uwa-r-sa            ta-kee            girki  
 mother-of-him she-r.p.            cooking

'The boy studied (during the time) when his mother was cooking'

That the head of when-clauses in Hausa is an ordinary lexical noun can be seen from the fact that the noun lokaci 'time' behaves like any other lexical noun. This is revealed in the following examples:

(40) a. Akwai wani yaro a Burundi wanda (wani-n  
 there-is one boy at B. who (one-the  
da) ya            girma tsakani-n dabbobi-n daji  
 r.m. he-r.c. grow middle-of wild animals

'There is/was a boy in Burundi who grew up among wild animals'

b. Akwai wani lokaci ya-naa zuwa  
 there-is one time he-prog. coming  
wan-da mata zaa-su yi shugabanci  
 when/who women fut.-they do leadership

'There will be a time when women will be the leaders'

(41) a. yaro-n yaa iso  
 boy-the he-comp. arrive

'The boy has arrived'

b. lokaci-n yaa yi daidai  
 time-the he-comp. do well

'The time is suitable'

- (42) a. Naa san yaro-n da ya zo jiya  
 I-comp. know boy-the r.m. he-r.c. come yest.  
 'I know the boy who came yesterday'
- b. Naa san lokaci-n da ya iso  
 I-comp. know time-the r.m. he-r.c. arrive  
 'I know the time when he arrived'

Examples (40) through (42) show clearly that lokaci 'time' is nothing short of an ordinary lexical noun.

There are many syntactic properties that simple time adverbials have in common with clausal time adverbials (i.e. when-clauses). For example, they can both be freely foregrounded by being moved to sentence initial positions, and they are both pronominalized by sannan 'then' or lokacin nan 'that time'.

- (43) Jiya/ da yamma, Audu yaa ziyarce ni  
 yesterday/ with evening A. he-comp. visit me  
 'Yesterday/in the evening, Audu visited me'
- (44) Lokaci-n da suka shiga birni, yara-n  
 time-the r.m. they-r.c. enter city kids-the  
 sun ga sarki  
 they-comp. see king  
 'When they visited the city, the kids saw the king'

Examples of adverbials pronominalized by sannan 'then' or lokacin nan 'that time':

- (45) Audu yaa ziyarce ni jiya, Garba maa  
 A. he-comp. visit me yesterday Garba too  
 yaa ziyarce ni sannan  
 he-comp. visit me then

'Audu visited me yesterday, Garba visited me then, too'

- (46) Audu yaa iso da ƙarfe uku, Garba  
 A. he-comp. arrive with o'clock 3 Garba  
 maa yaa iso sannan/lokaci-n nan  
 too he-comp. arrive then/ time-of there

'Audu arrived at 3:00, Garba too arrived then/  
 at that time'

- (47) Audu yaa yi barci (da) daga ƙarfe  
 A. he-comp. do sleep (with) from o'clock  
uku zuwa biyar, Garba maa yaa yi sannan  
 3 going five Garba too he-comp. do then

'Audu slept from 3:00 until 5:00, Garba slept then, too'

- (48) Yara-n sun ga sarki lokaci-n da  
 kids-the they-comp. see king time-the rm.  
suka shiga birni, Garba maa yaa gan  
 they-r.c. enter city G. too he-comp. see  
 shi sannan/lokaci-n nan  
 him then/ time-of there

'The children saw the king when they visited the city, Garba saw him then, too'

There are also semantic properties that simple time adverbials and time clauses share. For example, we have seen that the interpretation given to a simple frame time adverbial is determined by the type of verb with which it co-occurs--if the verb is a durative action verb, the time is interpreted as all or part of the frame, but if the verb is a non-durative action verb, the action is identified as occurring at some point within the frame, (cf. examples (29) and (30)). Similarly, time adverbial clauses are interpreted as "frame" or "instantive" only with reference to the verb in the main clause. Thus, when the

durative - frame  
 point - instantive  
 durative - instantive  
 point - durative

Audu yana barci lokacin da wuransa take girsi  
 na iso lokacin da suka fita  
 Audu yana barci lokacin da na iso  
 na iso lokacin da Isa yake barci

verb is the type that can take only "instantive" time, then the when-clause is interpreted as instantive time adverbial, and if the main verb is the type that can take only "frame" time, then the adverbial clause must be interpreted as denoting "frame" time. Thus, in example (49) the time adverbial clause is interpreted as "instantive" because the verb iso 'arrive' is the type of verb that can take only instantive time, while in example (50) the clause is interpreted as "frame" because the verb phrase yi-barci 'sleep' has the type of meaning which allows only frame time.

no - the  
 instantive  
 frame  
 distinction  
 dependent on  
 verb in the  
 time clause

(49) Audu yaa iso lokaci-n da yara-n  
 he-comp. arrive time-the r.m. kids-the  
suka fita  
 they-r.c. go out

'Audu arrived when the children went out'

(50) Audu yaa yi barci lokaci-n da Kande  
 A. he-comp. do sleep time-the r.m. K.  
ta yi girki  
 she-r.c. do cooking

'Audu slept (during the time) when K. cooked'

5. Antecedents other than lokaci 'time'

In section 4, I have demonstrated that time adverbial clauses are underlyingly relative clauses and that the non-deictic time noun lokaci 'time' is the antecedent noun of time adverbial clauses. However, it should be noted that there are other non-deictic time nouns that can be used instead of lokaci 'time' as antecedents of time adverbial clauses. These non-deictic time nouns are nouns

such as yayi 'time/fashion', zamani 'time/reign', sa'a/  
sa'i 'time/hour' and loto 'time'. Note that all these  
five time nouns are somewhat synonymous to lokaci 'time'.

- (51) Audu yaa yi barci lokaci-n/yayi-n/  
A. he-comp. do sleep time-the/fashion-the  
zamani-n/loto-n/sa'a-r Kande ta yi  
reign-the/time-the/hour-the K. she-r.c. do  
girki  
cooking

'Audu slept (during the time) when Kande cooked'

However, it should be noted that the two time nouns yayi  
'fashion/time' and zamani 'reign/time' are more commonly  
used when the main verb is a durative-action verb, in  
which case it is also preferable to use the (relative)  
progressive aspect instead of the completive in the time  
adverbial clause. Thus, although all the sentences in  
example (52) are acceptable as variant versions of one  
another, (a) is the highest on the scale of acceptability  
while (d) is the lowest.

- (52) a. Yaa yi barci yayi-n/ zamani-n da  
he-comp. do sleep fashion-the/reign-the r.m.  
Kande ta-kee (yi-n) girki  
K. she-r.p. (doing-of) cooking

'He slept while Kande was cooking'

- b. Yaa yi barci yayi-n/ zamani-n da  
he-comp. do sleep fashion-the reign-the r.m.  
Kande ta yi girki  
K. she-r.c. do cooking

'He slept while Kande cooked'

- c. Yaa            yi barci loto-n/sa'a-r/lokaci-n  
 he-comp. do sleep time-the/hour-the/time-the  
 da Kande    ta-kee            (yi-n)    girki  
 r.m. K.      she-r.p.    (doing-of) cooking

'He slept while Kande was cooking'

- d. Yaa            yi barci loto-n/sa'a-r/lokaci-n  
 he-comp. do sleep time-the/hour-the/time-the  
 da Kande    ta                    yi    girki  
 r.m. K.      she-r.c. do        cooking

'He slept while Kande cooked'

Now, if we look at the meanings of these time nouns we can see clearly the reason why (52a) and (52b) rank higher in the degree of acceptability than (c) and (d). The two nouns yayi 'fashion' and zamani 'reign' are naturally durative--yayi in Hausa, is a particular time during which a style prevails, and zamani is the time during which a sovereign rules. As such, it is only natural that these two durative time nouns are preferred as antecedents of time adverbial clauses when the main verb is a durative action verb.

#### 6. Time adverbial clauses with prepositions

We have seen that ordinary time adverbial clauses can be analyzed as full NP's that are modified by restrictive relative clauses. In this section, I will show that tun 'since', sai 'until' and bayan 'after' clauses are also relative clauses whose antecedents have been deleted. The sentences in example (53) contain various types of adverbial clauses that apparently lack antecedents.

(53) a. Yara-n su-naa barci tun da suka  
 kids-the they-prog. sleep since r.m. they-rc.  
dawo daqa makaranta  
 return from school

'The children have been sleeping since they returned from school'

b. Yara-n ba - su yi barci ba sai  
 kids-the not-they-comp. do sleep not until  
da iyaye-n-su suka dawo  
 r.m. parents-of-them they-r.c. return

'The children didn't sleep until (after) their parents had returned'

c. Yara-n sun fita baya-n da  
 kids-the they-comp. go out back-of r.m.  
suka ci abinci  
 they-r.c. eat food

'The children went out after they had eaten'

The main claim of my analysis is that tun, sai and bayan clauses underlyingly contain the simple time noun lokaci 'time' (or one of its synonyms) which is the antecedent of the relative clause that follows such prepositions.

That is, they are underlyingly when-clauses with prepositions. There are several pieces of evidence supporting the claim that such adverbial clauses are relative clauses whose antecedents have been deleted. Firstly, short of an antecedent, such adverbial clauses have all the surface characteristics of a relative clause--they all have the relative clause marker da, and their aspect markers are the same as that of a relative clause. In addition to this surface structure resemblance, other pieces of evidence can also be cited in support of analyzing such adverbial

clauses as underlyingly containing the time noun lokaci 'time'. These pieces of evidence relate to Pronominalization and Paraphrasing. We have seen that simple time adverbials such as jiya 'yesterday', da yamma 'in the evening', da karfe uku 'at three o'clock', etc., are pronominalized by sannan 'then' or lokacin nan 'that time', and that ordinary when-clauses are also pronominalized in exactly the same way. Thus,

- (54) Audu yaa ji yara-n lokaci-n da  
 A. he-comp. hear kids-the time-the r.m.  
suka shigo, nii maa naa jii su sannan  
 they-r.c. enter I too I-comp. hear them then  
 'Audu heard the children when they entered,  
 I too heard them then'

Now, consider the following examples in which sai 'until', tun 'since' and bayan 'after'-clauses are pronominalized.

- (55) Su-naa barci tun da suka dawo  
 they-prog. sleep since r.m. they-r.c. return  
daga makaranta, nii kuwa n-naa karatu tun  
 from school I but I-prog reading since  
sannan/lokaci-n nan  
 then/ time-of there

'They have been sleeping since they returned from school, but I have been reading since then/that time'

- (56) Sun yi barci baya-n da suka  
 they-comp. do sleep back-of r.m. they-r.c.  
dawo daga makaranta, nii kuwa naa yi  
 return from school I but I-comp. do  
 karatu (baya-n) sannan/lokaci-n nan  
 reading (back-of) then/ time-of there

'They slept after they returned from school, but I studied then/after that (time)'

- (57) Ba - i yi barci ba sai da iyayensa  
 not-he-comp. do sleep not until r.m. his parents  
suka dawo daga sinima, nii maa ba - n  
 they-r.c. return from cinema I too not-I-comp.  
 yi ba sai sannan  
 do not until then

'He didn't sleep until after his parents had returned from the movie, I too didn't until then'

It can be seen from (55) through (57) that tun, sai and bayan clauses pronominalize in exactly the same way as ordinary when-clauses and simple time adverbials. In the case of (54), one would suppose that underlying sannan 'then' is an occurrence of lokaci-n (da suka shigo) 'the time (they entered)', and moreover, each occurrence of lokaci-n 'the time' in (54) is given the same referential index so that the two occurrences of lokaci-n (da suka shigo) 'the time (they entered)' refer to the same point in time. It is crucial that the two occurrences have the same referential index, for (54) is grammatical while (58) is not.

- (58) \*Jiya, Audu yaa ji yara-n lokaci-n  
 yesterday A. he-comp. hear kids-the time-the  
da suka shigo, Garba maa yaa ji  
 r.m. they-r.c. enter Garba too he-comp. hear  
 su yau sannan  
 them today then

\*'Audu heard the children when they entered yesterday, Garba too heard them then, today'

Now, how are we to account for the fact that the tun 'since', sai 'until' and bayan 'after' clauses in examples

(55), (56) and (57) can also have sannan 'then' as their pronominal reflexes, and for the fact that tun, sai and bayan clauses are co-referential with sannan 'then'? One would expect an analysis of the nature of pronominalization and of co-reference to support the analysis that tun, sai and bayan clauses in the underlying structures of (55), (56) and (57) to have antecedent.

However, one might wish to argue that what actually gets pronominalized in such examples as (55) through (57) is the whole adverbial clause that follows the prepositions sai, tun and bayan ('until', 'since' and 'after'), and as such there would be no need for positing an antecedent (lokaci-n 'the time') in the structures underlying these examples. It is true that in Hausa, sentences can be replaced by a sentence pro-form, but the sentence pro-form in Hausa is invariably the word haka 'thus'--and not any other nominal. Moreover, when a clause is replaced by the pro-form it is the whole sentence (including all adverbials that it may contain) that is replaced by the pro-form haka 'thus'.

(59) Audu yaa ci kosai jiya, Garba maa haka.  
 A. he-comp. eat k. yesterday, G. too thus

'Audu ate kosai yesterday, Garba too, (ate kosai yesterday)'

(60) Audu yaa tashi domin Garba yaa  
 A. he-comp. leave because G. he-comp.  
 zo, nif maa haka  
 arrive I too thus

'Audu left because Garba has arrived, and I left too, (because Garba has arrived)'

- (61) Audu yaa ziyarce ni lokaci-n da  
A. he-comp. visit me time-the r.m.  
maƙwabta-na suka yi tafiya  
neighbours-my they-r.c. do travelling,  
Garba maa haka  
G. too thus

'Audu visited me while my neighbours were away, Garba too, (visited me while they were away)'

In sentences (59) through (61) what the pro-form haka 'thus' replaces is the whole matrix sentence, i.e. the main clause plus the adverbial clause: in (60), what underlies haka can be said to be the matrix clause naa tashi domin Garba yaa zo 'I left because Garba has arrived' while in (61) what underlies the pro-form is the matrix clause yaa ziyarce ni lokaci-n da maƙwabta-na suka yi tafiya 'he visited me while my neighbours were away'.

It should be noted that other adverbial clauses such as domin 'because/in order to' clauses can be replaced by haka 'thus' while tun, sai clauses cannot. Compare (62) and (63) below.

- (62) Audu za - i tashi domi-n Garba yaa  
A. fut.-he leave because G. he-comp.  
dawo, nii maa za - n tashi domi-n haka  
return I too fut.-I leave because thus

'Audu will leave because Garba is back, I too will leave because of that'

- (63) \*Su-naa barci tun da suka dawo  
they-prog. sleep since r.m. they-r.c. return

daqa makaranta, Garba maa ya-naa yii tun  
 from school G. too he-prog. doing since  
haka  
 thus

\*'They have been sleeping since they returned from school, and so has Garba since thus'

(64) \*Audu ba - i yi barci ba sai da  
 A. not-he-comp. do sleep not. until r.m.  
suka dawo nii maa ba - n yi ba  
 they-r.c. return, I too not-I-comp. do not  
sai haka  
 until thus

\*'Audu didn't sleep until after they had come back, I too didn't until thus'

How are going to explain the ungrammaticalness of (63) and (64) against the grammaticality of (62)? What seems a logical explanation to me is to suppose that what follows domin 'because' in (62) is a simple sentence, and as such, its reflex in its second occurrence in the sentence is the sentence pro-form haka 'thus'. In (63) (and also in (64)) however, what follows the preposition tun 'since' is not a simple clause--it is a relative clause which underlyingly is introduced by the time noun lokaci 'time' (i.e. its antecedent), and as such, its reflex in its second occurrence cannot be haka 'thus' but must instead be sannan 'then'

A final consideration which suggests that there is an antecedent in any time adverbial clause introduced by sai 'until' or tun 'since' or bayan 'after' is that one can freely insert the time noun lokaci-n 'the time' between

the preposition and the relative clause marker da without affecting any change in the meaning of the sentence. Thus, each of the following examples will mean the same thing with lokaci-n 'the time' as without it.

- (65) Su-naa       barci   tun (lokaci-n) da       suka  
 they-prog. sleep since time-the   r.m.   they-rc.  
 dawo       daga   makaranta  
 return from school

'They have been sleeping since they returned from school'

- (66) Ba - su       yi barci ba   sai (lokaci-n)  
 not-they-comp. do sleep not until time-the  
da   muka       dawo       daga   majigi  
 r.m. we-r.c. return from magic

'They didn't sleep until after we had returned from the movie'

If we look into the semantics of the prepositions tun, sai and  bayan we shall see the motivation behind the deletion of the antecedent. The meaning of each of these prepositions when they introduce time clauses, subsumes the basic meaning of the noun lokaci 'time'--tun 'since' may be paraphrased as "a time starting from point X", sai 'until' may be paraphrased as "a time ending at point X" and  bayan 'after' may be paraphrased as "a time starting after point X". Therefore, since these prepositions have inherent in their meanings the meaning of lokaci 'time', it will be redundant on a semantic basis to retain the antecedent of the relative clause which these prepositions introduce.

## 7. Antecedent deletion

I have shown that time adverbial clauses are underlying relative clauses and that those time adverbial clauses that are introduced by tun 'since', sai 'until' and bayan 'after' are also underlying relative clauses whose antecedents have been deleted (by an antecedent deletion rule). According to this analysis, the (a) sentences in examples (67) through (70) are derived from their (b) counterparts through the application of the deletion rule which deletes (optionally), the time noun lokaci 'time' before these prepositions.

(67) a. Su-naa (ta) barci tun da  
 they-prog. (part.) sleep since r.m.  
suka dawo daga makaranta  
 they-r.c. return from school

'They have been sleeping since they returned from school'

b. Su-naa (ta) barci tun lokaci-n  
 they-prog. (part.) sleep since time-the  
 da suka dawo daga makaranta  
 r.m. they-r.c. return from school

'They have been sleeping since (the time when) they returned from school'

(68) a. Ba - su yi barci ba sai da  
 not-they-comp. do sleep not until r.m.  
muka dawo daga makaranta  
 we-r.c. return from school

'They didn't sleep until after we had returned from school'

b. Ba - su yi barci ba sai lokaci-n  
 not-they-comp. do sleep not until time-the  
da muka dawo daga makaranta  
 r.m. we-r.c. return from school

'They didn't sleep until after (the time)  
when we had returned from school'

(69) a. Sun           fita    baya-n   da   suka  
they-comp. go out back-of r.m. they-r.c.  
ci       abinci  
eat     food

'They went out after they had eaten'

*addition of  
locative  
with bayar  
should  
beginning*

b. Sun           fita    baya-n   lokaci-n   da  
they-comp. go out back-of time-the r.m.  
suka       ci    abinci  
they-r.c. eat    food

'They went out after they had eaten'

(70) Ba - su                   yi   barci   ba   har  
not-they-comp. do sleep not even  
muka       dawo       daga   makaranta  
we-r.c. return from school

'They didn't sleep even after/until we had  
returned from school'

The prepositions tun, sai, har and bayan do not all  
behave alike with regard to the antecedent deletion rule.  
For example, after the antecedent has been deleted, sai  
'until', tun 'since' and bayan 'after' all retain the  
relative clause marker da before a clause with a relative  
aspect marker, but har does not. Thus the following  
ungrammatical example.

(71) a. \*Ba - su                   yi   barci   ba   tun   suka  
not-they-comp. do sleep not. since they-r.c.  
dawo       daga   makaranta  
return from school

'They didn't sleep since they returned from  
school'

b. \*Sun yi barci baya-n suka  
 they-comp. do sleep back-of they-r.c.  
 dawo daga makaranta  
 return from school

'They slept after they had returned from school'

c. ?Ba - su yi barci ba sai muka  
 not-they-comp. do sleep not until we-r.c.  
 dawo daga makaranta  
 return from school

'They didn't sleep until after they had returned from school'

d. \*Ba - su yi barci ba har da muka  
 not-they-comp. do sleep not even r.m. we-r.c.  
 dawo daga makaranta  
 return from school

'They didn't sleep until/even after we had returned from school'

*note?  
 with the  
 \* probably  
 because of  
 possible  
 1.500  
 against  
 what*

While har is the only preposition that must delete the relative clause marker da along with the antecedent, tun is the only exception in another respect. In the case of sai 'until', har 'until' and bayan 'after', both the antecedent and the relative clause marker da can be deleted and the time clause can appear in plain (not relative) aspect, but this is not possible with tun 'since'. Hence the following example.

(72) a. Ba - su yi barci ba har mun dawo  
 not-they-comp. do sleep not even we-comp. return  
 daga makaranta  
 from school

'They didn't sleep until/even after we had returned from school'

- b. Ba - su yi barci ba sai mun  
 not-they-comp. do sleep not until we-comp.  
 dawo daga makaranta  
 return from school

'They didn't sleep until after we had returned from school'

- c. Sun yi barci baya-n mun dawo  
 they-comp. do sleep back-of we-comp. return  
 daga makaranta  
 from school

'They slept after we returned from school'

- d. \*Su-naa (ta) barci tun mun dawo  
 they-prog. (part.) sleep since we-comp. return  
 daga makaranta  
 from school

'They have been sleeping since we returned from school'

The following table summarizes the deletion possibilities of the various prepositions.

	<u>tun</u>	<u>sai</u>	<u>har</u>	<u>bayan</u>
<u>Da</u> + Rel. Asp. marker:	+	+	-	+
Rel. Asp. without <u>da</u> :	-	-	+	-
Non-relative Aspect:	-	+	<u>⊕</u>	+

#### 8. Summary

In this chapter, I have analyzed time adverbial clauses. First, I explored simple time adverbials, which I showed to be simple lexical nouns that can be divided into two classes according to whether or not they take the preposition da ('in/at/during' etc.). Those simple time adverbials that do not allow da I call DEICTIC time nouns

and the ones that allow da (whether obligatorily or optionally) I call NON-DEICTIC time nouns. Next I demonstrated that time adverbial clauses are essentially non-deictic time nouns that are modified by restrictive relative clauses. I also showed that those time adverbial clauses can be introduced by the prepositions tun, sai, har and bayan 'since', 'until', 'even' and 'after' (just as simple time adverbials can), and that the antecedent(s) of time adverbial clauses can be deleted after these prepositions. Finally, I showed the various idiosyncracies associated with these prepositions in case of antecedent deletion.

## Notes to chapter 1

(1) Hausa has five aspects--completive, progressive, habitual, subjunctive and future (first and second). In some cases the aspect marker and the pronominal copy are easily isolated, but in others the two morphemes are so fused together that it is impossible to isolate them. For example, we can tell the aspect marker from the pronominal element in the progressive, the habitual and the first future aspects. In the following paradigm -naa marks the progressive aspect, -kàn the habitual and zaa-marks the first future:

	<u>Progressive</u>	<u>Habitual</u>	<u>First Future</u>
1 sm/f	n-nàà	na-kàn	zaa-n(a)
2 ms	ka-nàà	ka-kàn	zaa-ka
fs	ki-nàà	ki-kàm	zaa-ki
3 ms	ya-nàà	ya-kàn	zaa-y(a)
fs	ta-nàà	ta-kàn	zaa-ta
1 pl.	mu-nàà	mu-kàn	zaa-mu
2 pl.	ku-nàà	ku-kàn	zaa-ku
3 pl.	su-nàà	su-kàn	zaa-su
indefinite	?a-nàà	?a-kàn	zaa-?a

But, in the case of the completive, future 2 and the subjunctive, it is not possible to isolate the morphemes (one being the aspect marker and the other the pronominal element).

	<u>Completive</u>	<u>Future 2</u>	<u>Subjunctive</u>
1 sm/f	naa	n <sup>^</sup> aa	na`
2 ms	kaa	k <sup>^</sup> aa	ka`
fs	kin	ky <sup>^</sup> aa	ki`
3 ms	yaa	y <sup>^</sup> aa	ya`
fs	taa	t <sup>^</sup> aa	ta`
1 pl.	mun	m <sup>^</sup> aa	mu`
2 pl.	kun	kw <sup>^</sup> aa	ku`
3 pl.	sun	s <sup>^</sup> aa	su`
Indefinite	?an	? <sup>^</sup> aa	?a`

Vowel length is indicated by doubling the vowel; a grave accent over a vowel indicates low tone, a circumflex over a vowel indicates falling tone. High tones are unmarked.

(2) The completive and the progressive aspects take the following aspect markers when they occur in a relative clause (and other related constructions such as cleft sentences; wh-questions, etc.).

<u>Relative Completive</u>			
1 sm/f	na	(cf. plain	<u>naa</u> )
2 ms	ka	" "	<u>kaa</u>
fs	kika`	" "	<u>kin</u>
3 ms	ya`	" "	<u>yaa</u>
fs	ta`	" "	<u>taa</u>
1 pl.	muka`	" "	<u>mun</u>
2 pl.	kuka`	" "	<u>kun</u>
3 pl.	suka`	" "	<u>sun</u>
Indefinit	?aka`	" "	<u>?an</u>

Relative Progressive

1 sm/f	na-kèè	(cf. plain	n- <u>nàà</u> )
2 ms	ka-kèè	" "	ka- <u>nàà</u>
fs	ki-kèè	" "	ki- <u>nàà</u>
3 ms	ya-kèè	" "	ya- <u>nàà</u>
fs	ta-kèè	" "	ta- <u>nàà</u>
1 pl.	mu-kèè	" "	mu- <u>nàà</u>
2 pl.	ku-kèè	" "	ku- <u>nàà</u>
3 pl.	su-kèè	" "	su- <u>nàà</u>

(3) Place and Manner adverbial clauses also have the surface characteristics of a relative clause. For example, they take the relative aspect marker in the completive and progressive aspects, and the elements that introduce place and manner adverbial clauses can be shown to be morphologically complex comprising a nominal element suffixed with the referential particle -n/-r (-n in the case of place adverbial clauses, -r in the case of manner adverbial clauses) and the relative clause marker dà. Thus in the following examples, inda 'where' can be analyzed as ina-n dà 'place-the-r.m.', and yadda 'where' as yaa-r-dà 'manner-the-relative marker'.

(a) Yaa sami abinci-n-sa inda (from ina-n dà)  
 he-comp. find food-of-him (where)  
muka ajiye ma-sa (shii)  
 we-r.c. put for-him (it)

'He found his food where we kept it for him'

(b) Ya-naa koyarwa yadda ?a-kee soo  
 he-prog. teaching how one-r.p. liking

'He teaches very well'

Yaddà is derived from ya-r dà by simply assimilating the liquid (-r) to the following voiced dental, and inda can be analyzed as a contracted form of ina-n dà.

It is clear that the surface structure of place and manner adverbial clauses (like that of time adverbial clauses) is exactly the same as that of a relative clause. There is, however, one problem concerning the "antecedents" of place and manner (relative) clauses. Unlike the antecedent of time adverbial clauses, the antecedents of place and manner adverbial clauses do not behave syntactically as ordinary lexical nouns--i.e. they have restricted usages, as can be seen in the following examples.

- (a) i. yaron yaa zo  
'the boy has arrived'
- ii. lokacin yaa yi daidai  
'the time is suitable'
- iii. \*ina-n/ya-r yaa/taa yi daidai  
'the place/way is suitable'
- (b) i. naa san yaron/lokacin  
'I know the boy/the time'
- ii. \*naa san ina-n/ya-r  
'I know the place/the way'
- (c) i. lokaci-n da ya zaba daidai ne  
'the time he chose is suitable'
- ii. inda ya zaba daidai ne  
'the place he chose is suitable'
- iii. yadda ya yi daidai ne  
'the way he did it is correct'

- (d) i. naa san lokaci-n da ya zo  
'I know the time when he arrived'
- ii. naa san inda ya tafi  
'I know the place (where) he went'
- iii. naa san yadda ya yi  
'I know the way he did it'

## CHAPTER 2

### SUBJUNCTIVE ADVERBIAL CLAUSES

#### 1. Introduction

In this chapter I will attempt to describe those adverbial clauses in Hausa that surface as subjunctive clauses. The following types of adverbial clauses appear in the subjunctive: (1) kafin 'before', (2) saboda/domin 'in order to', (3) maimakon 'instead of' (4) balle 'much less' (5) har 'until (in the future)'. An attempt will be made to describe the semantic and functional properties that these various types of adverbial clauses have in common that account for their behaving similarly syntactically. Examples of sentences containing subjunctive adverbial clauses are given below:

- (1) Audu yaa / za - i      ci abinci kafi-n  
A. (2) he-comp./fut.-he eat food before  
ya      fita  
he-subj. go out

'Audu ate/will eat before he went/goes out'

- (2) Audu yaa/      za - i      yi kokari saboda/  
A. he-comp./fut.-he do effort in order to  
domi-n      ya      ci jarrabawa  
reason-of he-subj. eat exam.

'Audu worked/will work hard in order to pass the examination'

- (3) Audu yaa /      za - i      ci      kosai maimako-n  
A. he-comp./fut.-he eat k. instead-of

(ya      ci)      waina  
he-subj. eat w.

'Audu ate/will eat kosai instead of waina'

(4) Kafinta ba - i                      zo ba balle  
carpenter not-he-comp. come not much less  
ya                      gyara      kujera-r  
he-subj. repair chair-the

'The carpenter has not come much less repair  
the chair'

(5) a. Audu za - i      yi (ta)      gudu      har  
A. fut.-he do (part.) running until  
ya                      gaji  
he-subj. become tired

'Audu will keep on running until he becomes  
tired'

b. \*Audu yaa                      yi (ta)      gudu      har  
A. he-comp. do (part.) running until  
ya                      gaji  
he-subj. become tired

'Audu kept on running until he became tired'

Any analysis that one may propose for the adverbial clauses exemplified in (1) through (5) above, will be inadequate if it fails to account also for the general use of the subjunctive in the language. It is therefore essential that we discuss the general uses of the subjunctive in Hausa before discussing the subjunctive adverbial clauses.

## 2. General uses of the subjunctive in Hausa

— see further *Hambali Grammar*, p. 39

In this section, I will explore the various types of constructions (other than adverbial clauses) in which the

subjunctive is used and propose a generalization about the semantics of the subjunctive. I will later try to correlate this generalization with the semantic properties of adverbial clauses and propose an overall generalization that can explain the use of the subjunctive in both adverbial and non-adverbial clauses. The following are the general uses of the subjunctive in Hausa:

A. Imperatives and commands

The subjunctive is used to express imperatives and direct or indirect command. For example,

(6) a. Mu/su/ya tafi makaranta  
 we/the/he-subj. go school

'let us/them/him go to school'

b. Allah ya dade da ra-n Sarki  
 God he-subj. last-long prep. life-of king

'May the King live long'

(7) a. (Ka / ki) tafi makaranta  
 you-s.m/f-subj. go school

'Go to school!'

b. Ku tafi makaranta  
 you-pl.-subj. go school

'Go to school!'

(8) Sarki yaa ce mu zo da kai  
 king he-comp. say we-subj. come with you

'The King said we should take you before him'

It is to be noted that there are no infinitives in Hausa. Where some languages (e.g. English) would use infinitives Hausa will probably use the subjunctive. Sandy

Thompson (1976) in her Universal Typology of Subordination divides languages into two classes--Infinitive-languages and Subjunctive-languages. It can therefore be said that Hausa falls in the class of Subjunctive-languages.

*better would be 'a promise of mood'*

B. Subject of hortative predicates

A subjunctive clause can function as the extraposed subject of "hortative" predicates such as the verbs kamata 'be suitable', kyautu 'be seemly', and adjectivals such as dole/tilas 'must', gwamma/gara 'better'. For example,

- (9) a. Yaa            kamata            mu            tafi  
 it-comp. be suitable we-subj. go  
 'We should be going'
- b. Yaa            kyautu            mu            tafi  
 it-comp. seemly we-subj. go  
 'We better be going'
- c. Yaa            kyautu ka            gyara hali-n-ka  
 it-comp. seemly you-subj. mend your manners  
 'You better improve your manners'
- d. Dole/tilas (nee)    ka            gyara hali-n-ka  
 must (cop.) you-subj. mend your manner  
 'You must improve your manners'
- e. Gwamma/gara ka            gyara hali-n-ka  
 better you-subj. mend your manner  
 'You better improve your manners'

When a subjunctive clause functions as a sentential subject extraposition of the clause to post predicate position is obligatory. Thus example (10) below is not grammatical.

(10) \*Ka gyara hali-n-ka yaa kamata  
 you-subj. mend your manners it-comp. be suitable

'For you to improve your manners is suitable'

← C. Object of certain types of verbs

A subjunctive clause can be used as a sentential object of certain verbs such as so 'like/want', umarta 'command', saa 'cause', etc.

*does not belong with subjunctive or finite sense (perhaps of type D)*

(11) a. Audu ya-naa so(-n)(2) ya ci abinci  
 A. he-prog. liking(-of) he-subj. eat food

*could go under type B*

'Audu wants to eat'

b. Naa soo n ziyarce ka, (amma  
 I-comp. want I-subj. visit you (but  
 Allah ba - i yi ba)  
 God not-he-comp. do not

'I wanted to visit you, (but God never will-ed it)'

c. Sarki yaa umarce mu mu kashe ka  
 king he-comp. order us we-subj. kill you

*could go under type A*

'The King ordered us to kill you'

D. Non-initial coordinate clauses

In addition to the various uses of the subjunctive exemplified in A - C above, there are a number of other ways in which the subjunctive is used in Hausa. For example, in coordinate sequential clauses in aspects other than the completive, the basic aspect marker is used in the initial clause and the subjunctive in the subsequent clauses.

- (12) a. Kullum, Audu ya-naa tafiya kasuwa,  
 everyday A. he-prog. going market  
ya je masallaci ya dawo  
 he-subj. go mosque he-subj. return  
 da karfe biyar  
 at o'clock five

'Everyday, Audu goes to the market, attends the mosque and (then) returns home at 5:00'

- b. Audu za-i tafi kasuwa, ya je  
 A. fut.-he go market he-subj. go  
 masallaci, ya dawo gida da karfe 5  
 mosque he-subj. return home at 5:00

'Audu will go the market, attend the mosque and (then) return home at 5:00'

- c. Audu <sup>^</sup>yaa tafi kasuwa ya je  
 A. he-fut.2 go market he-subj. go  
 masallaci ya dawo gida da karfe 5  
 mosque he-subj. return home at 5:00

'Audu will (definitely) go to the market, attend the mosque and (then) return home at 5:00'

- d. Audu ya-kan tafi kasuwa ya je  
 A. he-habit. go market he-subj. go  
 masallaci ya dawo gida da karfe 5  
 mosque he-subj. return home at 5:00

'Audu normally goes to the market, attends the mosque and returns home at 5:00'

It is essential that the action or event in the coordinate clauses occur in a fixed sequence for one to be able to use the subjunctive in the non-initial clauses. If the coordinate clauses are not sequential, then the basic aspect marker and not the subjunctive must be employed in all the coordinate clauses. Hence, when one says

- (13) Audu ya-naa tafiya kasuwa ya-naa zuwa  
 A. he-prog. going market he-prog going

masallaci ya-naa dawowa gida da karfe 5  
 mosque he-prog. returning home at 5:00

'Audu goes to the market; he attends the mosque;  
 he returns home at 5:00'

the events in the coordinate clauses in example (13) cannot be interpreted as occurring in a fixed sequence: for example, he might go to the market first, then go home and then attend the mosque; or he might go the mosque first, then to the market and come back home, etc., etc.; he might even do something else in between going to the market and attending the mosque or attending the mosque and going back home.

Note that "purpose" adverbial clauses that are underlyingly marked by the preposition domin/saboda 'in order to', always occur in the subjunctive. But the "purpose" preposition can be deleted optionally, and, when the preposition is so deleted, the resulting surface structure is exactly the same as that of coordinate sequential clauses. Thus sentences like the examples in (14) are unspecified in the sense that the second (=subjunctive) clause can be interpreted either as a "purpose" or coordinate clause.

(14) a. Audu ya-naa tafiya kasuwa ya  
 A. he-prog. going market he-subj.  
 gaida sarkin fawa  
 greet chief butcher

'Audu goes to the market to greet/and greets  
 the chief butcher'

- b. Audu ya-kan tafi masallaci ya gaida sarki  
 A. he-habit. go mosque he-subj. greet king

'Audu normally goes to the mosque to greet/and greets the King'

- c. Audu za - i tafi makaranta ya yi kwallo  
 A. fut.-he go school he-subj. do football

'Audu will go to school to play/and play football'

The subjunctive cannot be used in the non-initial clauses of coordinate sentences if the sequence is in the completive aspect. Thus (15) is ungrammatical in any sense while (16) can only have a purpose interpretation.

- (15) \*Audu yaa sha giya ya yi salla  
 A. he-comp. drink beer he-subj. do praying  
ya koma gida  
 he-subj. return home

'Audu drank beer, said his prayers and went home home' (3)

- (16) Audu yaa tafi kasuwa ya sayi zane  
 A. he-comp. go market he-subj. buy cloth  
ya baa wa mata-r-sa  
 he-subj. give to wife-of-him

'Audu went to the market to buy a piece of cloth to give to his wife'

The fact that the subjunctive cannot be used in the non-initial clauses in coordinate sequential clauses if the sequence is in the completive is of great interest to the present study of subjunctive (adverbial) clauses in Hausa. I will return to this question in my summary of the uses of the subjunctive.

If we look at the various instances of the use of the

subjunctive in non-adverbial clauses exemplified above, it will be obvious that we cannot make any reasonable syntactic generalization(s) which can explain the use of the subjunctive in the various types of constructions. For example, the use of the subjunctive in imperatives and commands and its use in coordinate sequential clauses, on the one hand, are syntactically different from its use in sentential subjects or objects of certain types of verbs. That is to say, the subjunctive clause in imperatives and commands and in coordinate sequential clauses is an independent clause while it is a subordinate clause in complex sentences whose main verbs are verbs such as so 'want/like', ce 'say', kamata 'be suitable', kyautu 'be seemly'. Therefore, it would be extremely difficult (if not impossible) to draw any conclusions on syntactic grounds, to explain why the subjunctive is used in these various types of constructions. But if we look more carefully into the various instances of the use of the subjunctive, we will see that all of them have one thing in common semantically, viz. they all denote actions or events whose completion is semantically dependent on the realization of the proposition contained in the main clause (or the initial clause in the case of coordinate sequential clauses). For example, the action expressed in an imperative is clearly not completed, and in fact, has not yet commenced. The speaker is merely requesting or demanding

*Subordinate  
generalization*

*imperative*

that the action begin (by the hearer or someone else), and the commencement of the action/event is solely dependent on the request/command. The same thing holds in the case of the use of the subjunctive in sentential subjects or objects of verbs like kamata, so, umarta, etc. So 'want' constructions can be interpreted as indirect commands; kyautu 'be seemly' and kamata 'be suitable'-constructions can be interpreted as mild or polite requests (=exhortations). In all these sentences, the proposition in the main clause (i.e. the action denoted by the matrix verb) is completed or denotes a situation that holds before the proposition contained in the embedded (=subjunctive) clause commences/d. In fact, one is not even sure whether the proposition contained in the subjunctive clause will materialize or not--since it is one thing to request or advise or command one to do something and it is another thing for him to respond favorably to the request or the advise or command.

*complement  
to the*

It might be asked why, since the two future aspects in Hausa (future 1 and future 2) also denote actions not yet begun, these two aspects cannot be used instead of the subjunctive, especially in the case where the subjunctive denotes actions/events that are yet to begin, e.g. in imperatives, with hortative verbs, etc. ? Two semantic features of the subjunctive preclude the use of either of the two future aspects in the various instances where the

subjunctive is used. These two features of the subjunctive are (1) the element of doubt that the subjunctive event will take place and (2) the fact that the realization of the proposition contained in the subjunctive clause is semantically dependent on the realization of that of the main clause. Neither of these two features is true of either of the two future aspects in Hausa. Thus, with the imperatives and exhortations, and perhaps some others, we can't be certain that the action will take place; with malmakon 'instead of' and balle 'much less' the action in the main clause preempts that in the subjunctive clause which takes the element of doubt all the way to non-occurrence. With kafin 'before', har + subjunctive, subjunctive used in sequential coordinate clauses and also sai + subjunctive after conditional clauses (cf. chapter 3), the doubt stems from the fact that the subjunctive event is conditional on the event in the other clause, i.e. we cannot predict the subjunctive event with certainty since some other condition must first be met.

*semantic feature of subjunctive*  
*affirmative*  
*future aspect*  
 [see now Grims' notion of degree of control]

*in conditional clauses*

An interesting question here is the appropriateness of the subjunctive or future after conditional clauses using the relative and the plain completive (cf. chapter 3). Based on the data above, the future should be more appropriate after a plain completive conditional clause (i.e. what I call in chapter 3 "probable conditional") and a subjunctive after a relative completive conditional clause

(i.e. what I call "possible conditional"). But this is not the case. I haven't observed any preference for the future over the subjunctive in probable conditionals, or preference for the subjunctive over the future in possible conditionals. Perhaps the reason why such a preference does not exist in either case is the fact that there is an element of doubt anyway, as to whether the event in the main clause (which can be either in the subjunctive or the future) will materialize at all, and this element of doubt is primarily characterized in the subordinate clause, by the particle in 'if/when'. Hence, even when the future is used in the main clause, the element of doubt is still there and it overrides the relatively higher certainty of the future compared to the subjunctive. Thus the future is not preferred to the subjunctive in probable conditionals and the subjunctive is not preferred to the future in possible conditionals.

The case of coordinate sequential clauses where the subjunctive is used in non-initial clauses instead of the basic aspect marker is significant in this respect. We have seen that the subjunctive cannot be used in the non-initial clauses of coordinate sequential clauses if the sequence is in the completive aspect. The reason why the subjunctive cannot be used in such coordinate clauses will not be difficult to find if one accepts the interpretation of the use of the subjunctive I am proposing here, i.e.

only such  
not used  
as a result  
of the  
W. P. H. H.

the subjunctive is always used to characterize uncompleted dependent actions/events when the speaker is not certain whether the event/action in the subjunctive clause will materialize or not. Therefore, since the actions or events in coordinate sequential clauses in the completive have already materialized, the subjunctive cannot be used to replace the basic (=completive) aspect markers in the non-initial clauses

I don't accept this since the subjunctive is used in post verbal contexts

### 3. The use of the subjunctive in adverbial clauses

We have seen that in both independent and subordinate clauses, the subjunctive is used when the action/event of the clause is <sup>①</sup>incomplete and there is <sup>②</sup>no certainty that it will be completed at all. Now, if we look at the various types of adverbial clauses in which the subjunctive is used, we shall see that in all of them, either the action/event in the main clause is (supposed to be) completed before that of the embedded adverbial clause is started, or it is impossible for the action/event in the adverbial clause to happen at all. Thus, in kafin 'before', saboda/domin 'in order to' and har 'until (in the future)' clauses, the proposition in the main clause must be completed before the action or event in the adverbial clause can commence. In the case of maimakon 'instead of' clauses however, the proposition contained in the subjunctive clause cannot materialize because that of the main clause has preempted it, <sup>(4)</sup> while in the case of balle 'much less'

the event in the subjunctive cannot materialize because that of the main clause upon which it is "dependent" has not taken place. It is clear that subordinate adverbial clauses share the same feature of dependent incompleteness of action or event, and we can deduce that it is this feature that motivates the use of the subjunctive in all such cases.

### 3.1. Categorization of subjunctive adverbial clauses

It can be shown that the adverbial clauses that surface in the subjunctive have different categorial sources: maimako-n 'instead of', domi-n 'in order to' and kafi-n 'before' can be said to be essentially nominals plus the linker -n that is used to link two nouns in genitive relationship, while sabo da 'in order to' may be analyzed as the nominal sabo 'cause/reason' followed by the preposition da. Balle 'much less' and har 'until (in the future)' are prepositions that function as subordinators and thus directly link the main clause with the subordinate adverbial clause; or we may interpret the subjunctive clauses that follow them as functioning as sentential objects of prepositions. In the case of maimako-n 'instead of', domi-n 'in order to' and kafi-n 'before' however, the sentences that follow them can be analyzed as genitive complements. What I am saying is that kafi-n, domi-n and maimako-n adverbial clauses have, essentially, the same internal structure as that of nouns with genitive

N + linker + S  
typical

prep. + S

complements. Consider the following examples:

- (17) a. alkalami-n Audu (nee wannan)  
pen- of A. (cop. this)

'This is Audu's pen' Lit.: the pen of Audu

- b. (Yaa sayi) wando-n ulu  
he-comp. buy pants of wool

'He bought woolen pants' Lit.: pants of wool

- c. Wannan ruwa-n dadi nee  
this water-of sweetness cop.

'This is palatable water'

And, consider further, the following examples:

- (18) a. Naa baa ka wannan domi-n Allah  
I-comp. give you this sake-of Allah  
'I give you this for the sake of Allah'

- b. Su-naa bauta wa kudi maimako-n Alla  
they-prog. worship prep. money instead of A.

'They worship money instead of Allah'

- c. Zaa-mu kai gari-n kafi-n dare  
fut.-we reach town-the before night

'We will reach the town before nightfall'

What follows alkalami 'pen', wando 'pants' and ruwa 'water' in sentences (17a through c) (i.e. the linker -n plus the noun) is a genitive complement of the noun that precedes the complex. The same analysis is adequate for the phrases domi-n Allah 'sake of Allah', maimako-n Allah 'instead of Allah' and kafi-n dare 'front of nightfall' in examples (18a through c). If we accept this analysis, then we can easily extend it to include some of the subjunctive adverbial clauses as well. We can then take

the subjunctive clauses that occur after domi-n, maimako-n and kafi-n (and also those that occur after sabo da) as instances of nominalization, i.e. instances of NP rewritten as S. In other words, all those adverbial clauses (other than balle 'much less' and har 'until (in the future)' clauses) that occur in the subjunctive are essentially nouns or nominals with special types of nominal complements. There are some pieces of evidence that seem to indicate that this categorization of subjunctive adverbial clauses into "nominal" and "prepositional" types is worthwhile. For example, one may wonder why some of them can be used in focus (=emphasis) constructions while some others cannot. Consider the following examples.

*Subjunctive  
differs  
from by*

*NP but  
not AP*

- (19) Kafi-n su fita (nee) suka  
 front-of they-subj. go out (cop.) they-r.c.  
 ci abinci  
 eat food

'It's before they went out that they ate (not after)'

- (20) domi-n/ sabo da su ci jarrabawa (nee)  
 sake-of/cause-of they-subj. eat exam (cop.)  
 su-kee karatu dare da rana  
 they-r.p. reading night and day

'It's in order to pass the examination that they study day and night'

- (21) Maimako-n n kai ki sinima (nee) na  
 instead-of I-subj. take you movie (cop.) I-r.c  
 kai ki zuu  
 take you zoo

'It's instead of taking you to the movie that I took you to the zoo'

(22) \*Balle ya gyara kujera-r (nee)  
 much less he-subj. repair chair-the (cop.)  
 kafinta ba - i zo ba  
 carpenter not-he-comp. come not

\*'It's much less repair the chair that the  
 carpenter did not come'

(23) \*Har su gaji (nee) za - su yi gudu  
 until they-subj. tire cop. fut-they do running

\*'It's until they become tired that they will run'

Sentences (19) through (21) are instances of focussing (=emphasis) in Hausa. How are we going to explain that kafi-n, domi-n/sabo da and maimako-n adverbial clauses can be focussed while balle and har clauses cannot? Now, in Hausa, the subject, the object and indirect and other oblique NP's can be focussed by being fronted. For example, any of the NP constituents of (24) can be focussed to give the sentences in (24').

(24) Yara sun kama kifi a kogi jiya  
 boys they-comp. catch fish at river yesterday

'The boys caught fish in the river yesterday'

(24') a. yara (nee) suka kama kifi a kogi..  
 boys (cop.) they-r.c. catch fish at river

'It's the boys who caught fish in the river'

b. kifi (nee) yara suka kama a kogi..  
 fish (cop.) boys they-r.c. catch at river

'It's fish that the boys caught in the river'

c. jiya (nee) yara suka kama kifi  
 yesterday (cop.) boys they-r.c. catch fish

'It's yesterday that the boys caught fish'

d. a kooi (nee) yara suka kama kifi  
 at river (cop.) boys they-r.c. catch fish

'It's at the river that the boys caught fish'

The VP of a sentence can also be focussed, but it must be nominalized first. Thus, the VP of (25) (buge ni 'beat me') can be nominalized and focussed as in (25').

(25) Malam yaa buge ni jiya  
 teacher he-comp. beat me yesterday

'The teacher beat me yesterday'

(25') Buguu-naa Malam ya yi jiya (baa  
 beating-me teacher he-r.c. do yesterday (not  
 zagi-naa ba)  
 scolding-me not)

'Beating me the teacher did yesterday (not scolding me)'

It appears therefore that only nouns (together with any determiners that they may have) or nominalized VP's can be focussed in Hausa. And, as such, only those adverbials that are essentially nouns can be focussed. Those that are not NP's cannot be focussed. Hence the grammaticality of examples (19) through (21) and the ungrammaticality of (22) and (23).

There is another syntactic phenomenon that seems to support this differentiation between subjunctive adverbial clauses. Balle 'much less' and har 'until (in the future)' clauses cannot be nominalized while the others can.

(26) a. Yaa yi barci maimako-n ya je  
 he-comp. do sleep instead-of he-subj. go  
 makaranta 'school'

*how about (24'd) or as S like da kama ne suka kama kifi ? (see opposite)*

*nominalized*

*with subj. subject ?*

*na ba shi kudi don sayen masara grammatikal ?*

'He slept instead of going to school'

- b. Yaa yi barci maimako-n zuwa makaranta  
he-comp. do sleep instead-of going school

'He slept instead of going to school'

- (27)a. Mun ci abinci kafi-n su zo  
we-comp. eat food front-of they-subj. come

'We ate before they arrived'

- b. Mun ci abinci kafi-n zuwa-n-su  
we-comp. eat food front-of coming-of-them

'We ate before their arrival'

- (28)a. Su-naa karatu domi-n su ci  
they-prog. reading sake-of they-subj. eat  
jarrabawa kawai  
exam. only

'They study only to pass examinations'

- b. Su-naa karatu domi-n ci-n jarrabawa  
they-prog. reading sake-of eating-of exam.  
kawai

'They study only for passing examinations'

While maimako-n, domi-n/sabo da and kafi-n clauses can nominalize, balle and har clauses do not nominalize. Consider the following pairs of sentences the second of each is ungrammatical.

- (29) a. Kafinta ba - i zo ba balle  
carpenter not-he-comp. come not much less  
ya gyara kujera-r  
he-subj. mend chair-the

'The carpenter has not come much less mended the chair'

- b. \*Kafinta ba - i zo ba balle  
carpenter not-he-comp. come not much less  
gyara-kujera-r-sa 'mending-chair-of-him'

'The carpenter has not come much less mended the chair'

(30) a. Za - i yi gudu har ya gaji  
fut.-he do running until he-subj. tire

'He will keep on running until he becomes tired'

b. \*Za - i yi gudu har gajiya-r-sa  
fut.-he do running until tiring-of-him

? 'He will keep on running until his becoming tired'

I don't know exactly why balle and har subjunctive clauses cannot nominalize while the other subjunctive adverbial clauses can. But, whatever the reason for this syntactic difference may be, it cannot be unrelated to the fact that har and balle are not nouns but the others are.

*problem to be solved  
(see appendix)*

3.2. Kafi-n 'before' and har 'until' clauses  
*of Chapter 1* (Two time adverbial clauses using the subjunctive)

I have shown in chapter 1 that all time adverbial clauses are essentially full NP's that are modified by a relative clause. I have also shown that time nouns can be complements to prepositions and that when the antecedent of a time relative clause is the time noun lokaci 'time', the antecedent optionally deletes. Now, kafi-n 'before' and har 'until (in the future)' clauses are obviously time adverbial clauses also and as such, one would expect them to have essentially the same type of underlying structure as that of all other time adverbial clauses, i.e. to have the internal structure of a relative clause. But this is

not the case--at least on the surface. Instead, they surface as subjunctive clauses. How are going to explain the fact that all other time adverbial clauses have the structure of a relative clause while kafi-n 'before' and har 'until (in the future)' clauses appear in the subjunctive (which is never used in relative clauses in Hausa)? There are two possible ways to approach this problem. One way is to assume that kafi-n and har clauses also have the same underlying structure as all other time adverbial clauses, but because they have certain peculiar (semantic) properties of their own, they surface in the subjunctive. The second alternative (which I consider not worthwhile) is to assume entirely different types of underlying structure for these two time adverbial clauses which have nothing to do with the underlying structure of all the other time adverbial clauses. But, doing so would deny us the possibility of capturing any significant generalization with regard to the various types of time adverbial clauses in Hausa.

The <sup>a</sup>analysis I am proposing here for kafi-n 'before' and har 'until (in the future)' clauses is that their underlying structure is essentially the same as that of the other time adverbial clauses that have the structure of a relative clause. In other words, I am claiming that kafi-n 'before' and har 'until (in the future)' are underlyingly prepositions just like baya-n 'after', tun 'since'

and sai 'until', introducing the antecedent of a time relative clause (i.e. the time noun lokaci 'time'). Assuming that kafi-n 'before' and har 'until (in the future)' clauses have the same underlying structure as that of all the other time adverbial clauses, let us now investigate the reason why these two time clauses surface in the subjunctive rather than as relative clauses. We have seen earlier in this chapter, that the subjunctive is mainly used in subordinate clauses when the action denoted by the matrix verb is completed or denotes a situation that holds before the proposition contained in the embedded subjunctive clause commences/d. Now, if we look at the meanings of these two words (kafi-n 'before' and har 'until (in the future)'), we shall see why the clauses that follow them should appear in the subjunctive--since the actions in kafi-n and har clauses are dependent on and/or always start after the completion of the action or event in the main clause, the embedded clauses should appear in the subjunctive since the subjunctive always indicates this aspect of meaning in clauses. But there is a general constraint in Hausa syntax that says that the subjunctive cannot be used at all in relative clauses. Thus the following example is ungrammatical.

- (31) \*N-naa    nema-n    magani    wan-da    ya  
 I-prog. looking-of medicine one-r.m. he-subj.  
wakar da    kaba-ta  
 heal    prep. ulcer-my

'I am looking for a medicine that might cure my ulcer'  
 However, instead of the subjunctive, the future aspect can be used in relative clauses (and perhaps other types of subordinate clauses) whose actions/events are supposed to start only after the action/event in the main clause is completed.

- (32) N-naa nema-n magani wan-da za - i  
 I-prog. looking-of medicine one-r.m. fut.-he  
 warkar da kaba-taa  
 heal prep. ulcer-my

'I am looking for a medicine that might cure my ulcer'

- (33) Zaa-su share daki-n kafi-n lokaci-n  
 fut.-they sweep room-the front-of time-the  
da zaa-mu iso  
 r.m. fut.-we arrive

'They will sweep the room before (the time) we arrive'

- (34) Zaa-su yi (ta) gudu har lokaci-n  
 fut.-they do (part.) running until time-the r.m.  
da zaa-su gaji  
 r.m. fut.-they tire

'They will keep on running until they become tired'

The adverbial clauses in (33) and (34) are obviously relative clauses; the noun lokaci 'time' is the antecedent of the relative clause in both cases, and kafi-n 'before' and har 'until' are functioning as prepositions. Now, the antecedent deletion rule can delete the noun lokaci 'time' (and the relative clause marker da in this case) in (33) and (34). After the antecedent (plus the relative clause

marker da) has been deleted, these clauses look very much less like relative clauses--and since the actions in them is supposed to start after that of the main clause is completed, the subjunctive is used, and as a result, we get the surface forms of (35) and (36).

(35) Zaa-su        share daki-n    kafi-n    mu        iso  
 fut.-they    sweep room-the    before we-subj. arrive  
 'They will sweep the room before we arrive'

(36) Zaa-su        yi (ta        gudu        har        su  
 fut.-they do (part.) running until they-subj.  
 gaji  
 tire  
 'They will keep on running until they become tired'

#### 4. Summary

In this chapter, I have discussed those adverbial clauses that surface in the subjunctive. First, I investigated the general uses of the subjunctive in non-adverbial clauses and came up with a generalization about the semantics of the subjunctive in non-adverbial clauses. Next, subjunctive adverbial clauses were discussed and it was shown that both adverbial and non-adverbial subjunctive clauses have one semantic feature in common that can be said to be the main reason why they all surface in the subjunctive. It was proposed that the subjunctive is always used to characterize uncompleted dependent actions/events when the speaker is not certain whether or not the action in the subjunctive clause will materialize. Finally, I

discussed the derivation of kafi-n 'before' and har 'until  
(in the future)') time adverbial clauses from underlying  
relative clauses.

## Notes to chapter 2

(1) Cf. footnote (1) in chapter 1 for the full paradigm of subjunctive aspect markers.

(2) Hausa uses verbal nouns (instead of verbs) in sentences in the progressive aspect. There is a special class of verbal nouns in Hausa such as soo 'liking', guduu 'running', ginfi 'building', saaraa 'chopping', that obligatorily require the link -n/-r before their direct object nouns or pronouns.

(a) Audu ya-naa bugu-n yaro/sa  
A. he-prog. beating-of boy/him

'Audu is beating/beats the boy/him'

(b) Audu ya-naa saara-r gungume/sa  
A. he-prog. chopping-of log/it

'Audu is chopping/chops logs/it'

However, when such verbal nouns are followed by sentential complements, the link (-n/-r) is optional.

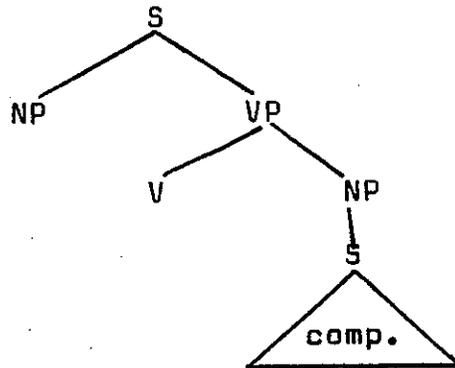
(c) Audu ya-naa soo/so-n ya tafi  
A. he-prog. liking/liking-of he-subj. go

'Audu wants to go'

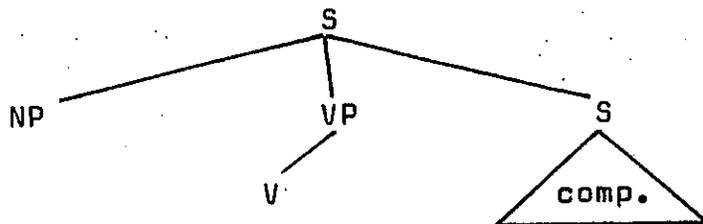
(d) Ya-naa neemaa/neema-n ya cuce ni  
he-prog. trying/trying-of he-subj. cheat me

'He is trying to cheat me'

When the linker is present the structure is



when the linker is absent, the structure is



i.e., it has been extraposed out of the VP and hence out of the environment for the linker insertion.

(3) Sentence (15) cannot be interpreted as sequential coordinate clauses because the subjunctive cannot be used in the non-initial clauses when the sequence is in the completive. Neither can it be interpreted as containing purpose clauses in the Hausa cultural context because Hausa muslims are prohibited from taking alcohol and as such, it is meaningless (or sacriligious) to say that someone drinks/drank beer in order to say his prayers.

(4) Paul Schachter pointed out to me that in English you can say 'John should have stayed instead of leaving' which implies that he did leave. In Hausa too, such hypo-

hypothetical sentences have the same implication.

(a) Daa Audu yaa zauna maimako-n ya tafi  
imag. A. he-comp. stay instead-of he-subn. go

'Audu should have stayed instead of leaving'

It is true that the event in the subjunctive clause in (a) has taken place while that of the main clause hasn't.

we still can characterize this as dependent incompleteness -  
the problem is that the event in the main clause is hypothetical, if we imagine a world where this was a real event, the main clause fulfills the proper conditions, i.e. there is a reversal of event precedence

## CHAPTER 3

### SUBORDINATE ADVERBIAL CLAUSES HAVING THE STRUCTURE OF SIMPLE CLAUSE

#### 1. Introduction

In this chapter, I will discuss those adverbial clauses that have the structure of "simple" clauses. By "simple" clauses, I mean independent non-imperative clauses. Sentences (1) through (3) below, contain some examples of subordinate adverbial clauses that fall in this class.

- (1) a. Audu za - i tashi in yara-n sun  
A. fut.-he leave if kids-the they-comp.  
dawo da-wuri  
return early  
'Audu will leave if the children return early'

- b. Audu ba za - i tashi ba sai yara-n  
A. not fut.-he leave not unless kids-the  
sun dawo  
they-comp. return

'Audu will not leave unless/until the children return'

- (2) a. Audu yaa/za - i tashi domi-n yara-n  
A. he-comp./fut.-he leave because kids-the  
sun dawo  
they-comp. return

'Audu has left/will leave because the children are back'

- b. Audu yaa/ za - i tashi tunda yara-n  
A. he-comp./fut.-he leave since kids-the  
sun dawo  
they-comp. return

'Audu has left/will leave because the

children are back'

- (3) a. In daa sarki za - i ziyarce ni (daa)  
if imag. king fut.-he visit me (imag.)  
za - n baa shi tuwo-n dawa  
fut.-I give him tuwo-of guinea-corn

'If the king were to visit me, I'd give him  
tuwon dawa'

- b. In daa sarki yaa iso, daa mun  
if imag. king he-comp. arrive imag. we-comp.  
ji kakkaki  
hear trumpet

'If the king had arrived, we would hear/have  
heard trumpets (blowing)'

- c. In daa nii Allah nee, daa naa  
if imag. I God cop. imag. I-comp.  
arzurta kowa  
enrich all

'If I were God, I would have made everyone  
rich'

The criterion for classifying those adverbial clauses in this class is primarily syntactic, i.e. the fact that all the subordinate clauses that are grouped in this class have the structure of simple clauses. But, it can also be shown that the syntactic classification correlates with a semantic one. Mainly, all the adverbial clauses that fall in this class have one semantic property in common, viz., the realization of the action/event in the main clause is subsequent to and/or dependent, in some way, upon the action/event in the subordinate clause. <sup>(1)</sup> This is comparable to what obtains between the main clause and the subordinate clause in the case of "Subjunctive" adverbial

*syntactic*  
*semantic*

*syntactic*  
*semantic*

clauses (cf. chapter 2) where the event/action in the main clause is always either realized before that of the subordinate clause, or the action/event in the subordinate clause will not materialize at all once that of the main clause has been completed. I claim that those subordinate clauses that appear in the subjunctive do so because their events/actions are dependent on the completion of the main clause. Now, since the action/event in main clauses with embedded adverbial clauses that have the structure of a simple clause is also dependent on the completion of the subordinate clauses, one would expect such main clauses to appear in the subjunctive. And, this is exactly what happens. Thus we have the following sentences which can be said to be variants of those in (1) through (3) above.

*must - hit  
I don't think  
it's likely  
(see below)*

- (4) a. In yara-n      sun              dawo      da-wuri      sai  
if kids-the      they-comp.      return early      then  
Audu ya              tashi  
A.      he-subj.      leave

'If the children return early, then Audu will will/should leave'

- b. Sai      yara-n      sun              dawo              Audu  
only      kids-the      they-comp.      return      Audu  
ya              tashi  
he-subj.      leave

'Only if/when the children return would Audu leave'

Cf. examples (1a-b)

- (5) a. Domi-n      yara-n      sun              dawo,      sai      Audu  
because      kids-the      they-comp.      return      then      Audu  
ya              tashi  
he-subj.      leave

*(5a-b)  
seem to  
me to be  
a subordinate  
clause*

'Because the children are back, then Audu will leave'

- b. Tunda yara-n sun dawo, sai Audu  
since kids-the they-comp. return then Audu  
ya tashi  
he-subj. leave

'Since the children are back, then Audu will/  
should leave'

Cf. examples (2a-b).

- (6) a. In daa sarki za - i ziyarce ni (daa) sai  
if imag. king fut.-he visit me (imag.) then  
n baa shi tuwo-n dawa  
I-subj. give him two-of guinea-corn

'If the king were to visit me, then I would  
give him tuwon dawa'

- b. In daa sarki yaa iso daa sai  
if imag. king he-comp. arrive imag. then  
mu ji kakkaki  
we-subj. hear trumpet

'If the king had arrived, we would have heard  
trumpets (blowing)'

- c. In daa nii Allah nee, daa sai n  
if imag. I God cop. imag. then I-subj.  
arzurta kowa  
enrich all

'If I were God, I would have made everyone  
rich'

Cf. examples (3a-c).

The examples in (4) through (6) show an important  
fact, namely, the subjunctive always has the meaning  
"subsequent to something else" and this meaning is not  
merely a function of its being in subordinate clauses.

In order to be able to group those adverbial clauses  
that fall in this class (i.e. those adverbial clauses  
having the structure of simple clauses), I use the term

*I had  
given  
double check  
No subjunctive!*

"conditional" as a cover-<sup>term</sup> ~~term~~ to include all of them. However, the terminology (conditional) may seem a bit confusing here because a conditional clause traditionally means a clause that starts with if (Hausa in). The reason why I am considering all the adverbial clauses of this class together and calling them "conditionals" is because of certain related syntactic behaviour that they share. Although calling them "conditional" is an extension of the traditional use of the term, it is well-motivated because indeed all the clause types express "conditions" for the events in the main clause. This is not something that one can prove syntactically--it is something that one knows by knowing the meaning of the sentences. I am therefore extending the use of the term "conditional" to cover these clauses which share certain syntactic features and I feel that this extension is well-motivated on semantic grounds as well.

## 2. Types of conditional clauses

Jacquelyn Schachter (1971) made the following semantic distinctions between conditionals in English:

### A. Reality Conditionals

If the sun shines, then it is time to get up

### B. Unreality Conditionals

#### 1. Simple Future

If it rains, we'll eat inside

#### 2. Imaginative Conditionals

a. Hypothetical

If I saw an elephant on campus, I'd faint

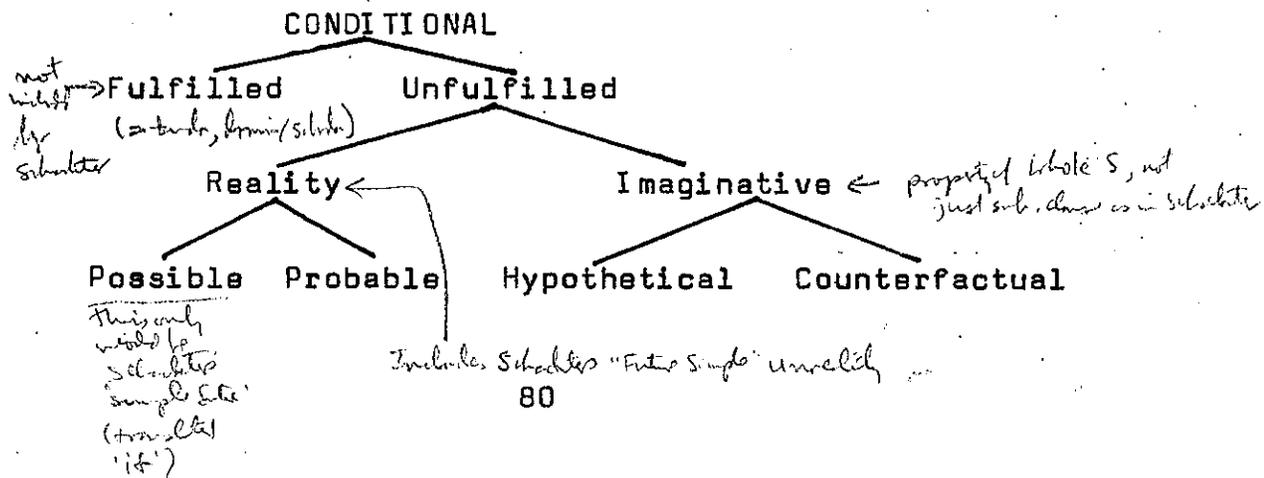
b. Conterfactual

If I were you, I wouldn't talk like that

If Jill had eaten the pie, she'd be sick now.

The semantic typology I am proposing for Hausa conditionals is somewhat similar to that which Schachter proposed for English. There are however, two major differences between my typology and Schachter's: (1) she does not include the type of clauses I call "fulfilled" conditions, and (2) in her imaginative conditionals, she considers only the if-clause as the conditional (excluding the then-clause), but in my typology, I am going to consider the whole sentence as a conditional sentence rather than the in 'if' clause alone, as will be seen presently. Moreover, I do not mean exactly the same thing by "reality" as she does in the sense that my "reality" conditional includes her "Future Simple" unreality conditionals as well as her reality conditionals.

I am proposing the following typology for Hausa conditionals:-



### 3.1. Reality Conditionals

Reality conditionals are those conditional clauses in which the realization of the "proposition" contained in the conditional clause is a reality in the "real world". Hausa makes a structural distinction between those reality conditionals that express a condition whose realization the speaker considers highly probable and those that express a condition whose realization the speaker considers merely possible. I call these two types of reality conditionals "Probable" and "Possible" conditionals, respectively.

*to be checked*

#### Probable reality conditionals

(7) In an fara (yin) ruwa za - mu shiga  
if one-comp. start (doing) water fut.-we enter  
daka 'inside'

'When it starts raining, we'll get inside'

#### Possible reality conditionals

(8) In aka fara (yin) ruwa za - mu shiga  
if one-r.c. begin (doing) water fut.-we enter  
daka 'inside'

'If it starts raining, we'll get inside'

Sentence (7) can only be said when there are all possible indications that it will rain--for example, the sky is cloudy, the wind is blowing, etc., etc., i.e. when one is almost certain that the rain will fall. Sentence (8) however, can be said only when such signs of rain are not present, i.e. in a situation where one is not sure whether

it will rain or not.

### 3.2. Syntactic properties of reality conditionals

*such as  
etc.*

Probable conditionals are translatable into English as when-clauses such as in "John will leave when Bill arrives". In fact even in Hausa, probable conditional clauses can always be replaced by when-clauses. For example, sentences (9) and (10) below, both mean the same.

- (9) In yara-n sun zo, za - n baa su  
if kids-the they-comp. come fut.-I give them  
kwabo-kwabo  
penny-penny

'When the children come, I'll give them a penny each'

- (10) Lokaci-n da yara-n suka zo, za - n  
time-the r.m. kids-the they-r.c. come fut.-I  
baa su kwabo-kwabo  
give them penny-penny

'When the children come, I'll give them a penny each'

Sentences (9) and (10) can only be said when one is almost certain that the children will be coming--it is only a question of time. Thus (11) is ungrammatical while (12) is perfectly grammatical.

- (11)\*In yara-n sun zo, za - n baa su  
if kids-the they-comp. come fut.-I give them  
kwabo-kwabo, amma ba - n sani ba ko  
penny-penny but not-I-comp. know not whether  
za - su zo ko ba za - su zo ba  
fut.-they come or not fut.-they come not

\*'When the children come, I'll give them a penny each, but I don't know whether they will come or not'

(12) In yara-n suka zo, za - n baa su  
if kids-the they-r.c. come fut.-I give them

kwabo-kwabo, amma ba - n sani ba ko  
penny-penny but not-I-comp. know not whether

za - su zo ko ba za - su zo ba  
fut.-they come or not fut.-they come not

'If the children come, I'll give them a penny each, but I don't know whether they will come or not'

However, it should be noted that although all native speakers of Hausa make a structural difference between "probable" and "possible" conditionals, they may not make the distinction in exactly the same way as I do in my dialect. Some native speakers who have a different dialect would use the syntactic configuration I use in my own dialect, for possible conditionals to express "probable" conditionals and use the one I would use for "possible" conditionals for "probable". Thus, while Mallam Sirajo Muhammad, a native of Kano (who presumably speaks the Kano dialect of Hausa) was helping me check my data, I asked him the following question in Hausa:

"Mene ne bambancin 'In yaran sun zo, zan ba su kwabo-kwabo', da 'In yaran suka zo, zan ba su kwabo-kwabo'?"

English translation:

"What is the difference between 'If the children come,

I will give them a penny each' and 'If the children come, I will give them a penny each'?"

His response to my question was in the form of a rhetorical question. I quote:

"Yo ba sai ka san suna zuwa ba, za ka ce  
'In suka zo'?"

'Wouldn't you say 'In suka zo' only when you are sure that they will come?'

The difference between my grammar and that of Mallam Sirajo in this respect, does not matter very much as far as the analysis I am proposing here for "probable" and "possible" conditionals is concerned. We both make a structural distinction between the two types of conditionals. I will return to this fact of syntactic difference between "probable" and "possible" conditionals in my discussions section in chapter 4.

Both probable and possible reality conditionals exhibit some degrees of tense/aspect restrictions in their antecedent clauses. Thus, while there is no tense/aspect restriction whatsoever in the consequent clause (as can be seen from examples (13) and (14) below), not all aspects can occur in the antecedent clause (cf. examples (15) through (19) below).

(13) In: an yi ruwa, duniya  
if one-comp. do water world

<u>taa</u> yi sanyi she-comp. do cold	(completive)
<u>ta-naa</u> sanyi she-prog. cold	(progressive)
<u>zaa-ta</u> yi sanyi fut.-she do cold	(future 1)
<sup>^</sup> <u>taa</u> yi sanyi fut. <sub>2</sub> -she do cold	(future 2)
<u>ta-kan</u> yi sanyi she-habit. do cold	(habitual)
<u>sai ta</u> yi sanyi then she-subj. do cold	(subjunctive)

'When it rained/rains, the atmosphere

was cool becomes cool will be cool will sure be cool is normally cool will then be cool
--

(14) In aka yi ruwa, duniya  
if one-r.c. do water the world

<u>taa</u> yi sanyi she-comp. do cold	(completive)
<u>ta-naa</u> sanyi she-prog. cold	(progressive)
<u>zaa-ta</u> yi sanyi fut.-she do cold	(future 1)
<sup>^</sup> <u>taa</u> yi sanyi fut. <sub>2</sub> do cold	(future 2)
<u>ta-kan</u> yi sanyi she-habit. do cold	(habitual)
<u>sai ta</u> yi sanyi then she-subj. do cold	(subjunctive)

'If it rained/rains, the atmosphere } was cool  
is cool  
will be cool  
will sure be cool  
is normally cool  
will then be cool

Progressive aspect (in the antecedent clause):

(15) In ka-naa (yi-n) barci rib - da - ciki,  
if you-prog. (doing-of) sleep on-the-stomach  
(too) baa-kaa ji - n dadi  
(then) not-you-prog. feeling-of good

'If you sleep on your stomach, then you don't/  
won't enjoy it'

*note that the  
verb, unit.  
cannot  
be used to  
get the  
same  
possible/possible?  
distinction  
as in the prog.*

Future 1 aspect:

(16) In zaa-ka tafi (too) za - n baa ka sako  
if fut.-you go (then) fut.-I give you message

'If you are going, I will give you a message'

Habitual aspect:

(17) ?In a-kan yi ruwa (too) mu-kan kwana  
if one-habit. do water (then) we-habit sleep  
a daka  
at inside

? 'If it normally rains, then we normally sleep  
inside'

Future 2 aspect:

(18) \*In aa yi ruwa (too) maa kwana  
if one-fut.<sub>2</sub> do water (then) we-fut.<sub>2</sub> a sleep  
a daka  
at inside

? 'If it will sure rain, then we will certainly  
sleep inside'

Subjunctive aspect:

- (19) \*In a yi ruwa, (too) sai mu  
if one-subj. do water (then) then we-subj.  
kwana a waje  
sleep at inside

\*'If for it to rain, then we will sleep inside'

When the antecedent clause of a reality conditional is in an aspect other than the completive, the distinction between probable and possible can be characterized by using the particle too 'then (and only then)' before the consequent clause. Thus, for example, sentence (16) will be interpreted as a "probable" conditional without the too, but it will be interpreted as a "possible" conditional when the particle too is used before the consequent clause.

*too as  
marker  
of  
possibility  
vs  
probability*

Thus:

- (20) In zaa-ka tafi, za - n baa ka saƙo  
if fut.-you go fut.-I give you message

'When you are going, I will give you a message'

- (21) In zaa-ka tafi, too za - n baa ka saƙo  
if fut.-you go then fut.-I give you message

'If you are going, I will give you a message'

Examples (17) through (19) illustrate that the occurrence of the habitual aspect in the antecedent clause of reality conditionals is questionable (cf. example (17)), and that the future 2 and the subjunctive do not occur at all (in the antecedent clause of reality conditional). We

shall see later (in the next section) that the subjunctive and the future 2 do not occur either in the antecedent clauses of imaginative conditionals. I will attempt to account for the non-occurrence of these two aspects in the antecedents of conditionals in my discussions in the next section.

#### 4.1. Imaginative conditionals

I define Imaginative Conditionals as those conditionals whose fulfillments are either (1) not possible under normal circumstances in the "real world", or (2) "counterfactual" to what obtains in a given situation in the "real world". The first type of Imaginative Conditionals I call Hypothetical and the second type Counterfactual.

#### 4.2. Hypothetical conditionals

Hypothetical imaginative conditionals, like all other conditionals, contain two clauses--an antecedent clause and a consequent clause. The antecedent clause, which is syntactically the subordinate clause, normally precedes the consequent clause and is introduced by the subordinator in 'if'. The consequent clause is syntactically the main clause. But, both the antecedent and the consequent clauses contain the particle daa which marks "imaginativeness".

I use the terms "antecedent" and "consequent" in much

the same way Schachter (1971) used them, to refer to the propositions in the in-clause ('if'-clause) and the main clause, respectively.

- (22) In daa zaa-ka zo gobe, daa naa  
if imag. fut.-you come tomorrow imag. I-comp.  
baa ka kyauta  
give you present

'If you would (only) come tomorrow, I would give you a present'

The antecedent and consequent of (22) are (23) and (24), respectively.

- (23) Zaa-ka zo gobe  
fut.-you come tomorrow

'You will come tomorrow'

- (24) Naa baa ka kyauta  
I-comp. give you present

'I gave you a present'

I shall also use the term the negation of the antecedent to describe the negation of the proposition expressed in the clause that follows in 'if'. Thus the negation of the antecedent of (22) is (25).

- (25) Baa zaa-ka zo ba gobe  
not fut.-you come not tomorrow

'You will not come tomorrow'

The antecedent clause of hypothetical conditionals is always in the future 1 aspect (or in the progressive with a future reading) while the consequent clause is normally

*hypothetical  
antecedent  
always  
future*

in the completive aspect--but it can also occur in the future 1 or the subjunctive. For example:

*consequent  
comp.  
fut. 1  
subj.*

- (26) a. In daa sarki za - i ziyarce ni, daa  
if imag. king fut.-he visit me imag.  
naa baa shi tuwo-n dawa  
I-comp. give him tuwo-of guinea-corn  
  
'If the king were to visit me, I'd give him tuwon dawa'
- b. In daa sarki za - i ziyarce ni, (daa)  
if imag. king fut.-he visit me imag.  
za - n baa shi tuwo-n dawa  
fut.-I give him tuwo-of guinea-corn  
  
'If the king were to visit me, I'd give him tuwon dawa'
- c. In daa sarki ya-naa ziyara-taa (daa)  
if imag. king he-prog. visiting-me imag.  
sai n baa shi tuwo-n dawa  
then I-subj. give him tuwo-of guinea-corn  
  
'If the king were to visit me, I'd give him tuwon dawa'

The imaginative marker daa is optional in the antecedent clause in the (b) and (c) sentences of example (26). However, when the consequent clause is in the subjunctive, the conjunction sai 'then' is obligatorily used between the two clauses (the antecedent and the consequent) whether the imaginative marker is used in the consequent clause or not. Hence sentence (27) is bad.

*Sai obligatory with subjunctive*

- (27) \*In daa sarki za - i ziyarce ni, (daa)  
if imag. king fut.-he visit me imag.  
n baa shi tuwo  
I-subj. give him tuwo  
  
'If the king were to visit me, I'd give him t.'

#### 4.3. Counterfactual conditionals

Counterfactual Conditionals have almost the same internal structure as that of Hypothetical Conditionals in the sense that their antecedent clause, like that of hypothetical conditionals, is normally sentence initial and is introduced by in 'if', and both the antecedent and the consequent clauses contain the imaginative marker daa. The consequent clause of counterfactual conditionals also normally occurs in the completive, but it can also occur in the subjunctive or future 1, and the imaginative marker daa is optional in the consequent clause if the clause is not in the completive aspect. The only structural difference between the two types of imaginative conditionals (the hypothetical and the counterfactual) is that the antecedent clause of hypothetical conditionals is always in the future 1 aspect (or in the progressive with a future reading) while that of counterfactual conditionals can be in any aspect other than the two futures or the subjunctive. Cf. section 4.4. (Syntactic properties of imaginative conditionals).

- (28) a. In daa sarki yaa iso, daa mun  
if imag. king he-comp. arrive imag. we-comp.  
ji kakkaki  
hear trumpet

'If the king had arrived, we would have heard trumpets (blowing)'

b. In daa sarki yaa iso, daa zaa-mu ji  
 if imag. king he-comp. arrive imag.fut.-we hear (check)  
 kakkaki 'trumpet'

'If the king had arrived, we would have heard trumpets (blowing)'

c. In daa sarki yaa iso daa sai mu  
 if imag. king he-comp. arrive imag. then we-subj.  
 ji kakkaki  
 hear trumpet

'If the king had arrived, we would have heard trumpets (blowing)'

#### 4.4. Syntactic properties of imaginative conditionals

Imaginative conditionals have more aspect restrictions in their consequent clauses than reality conditionals. Thus, while all the possible aspects in Hausa can be used in the consequent clauses of reality conditionals, the consequent clauses of imaginative conditionals do not allow the habitual and the future 2 aspects.

*|| or the rel. compl.*

(29) In daa sarki yaa iso, daa  
 if imag. king he-comp. arrive imag.

mun ji kakkaki  
 we-comp. hear trumpets

zaa-mu ji kakkaki  
 fut.-we hear trumpet

sai mu ji kakkaki  
 then we-subj. hear trumpet

?mu-naa ji-n kakkaki  
 we-prog. hearing trumpet

\*maa ji kakkaki  
 fut.2-we hear trumpet

\*mu-kan ji kakkaki  
 we-habit. hear trumpet

*Prohibition  
 except*

'If the king had arrived, {  
 we would have heard trumpets  
 we would hear trumpets  
 we'd then hear trumpets  
 \*we are/were hearing trumpets  
 \*we would surely hear trumpets  
 \*we normally hear trumpets

(30) In daa sarki za - i ziyarce ni, daa  
 if imag. king fut.-he visit me imag.

*Abdurra'uf*  
*request*

{  
naa baa shi tuwo-n dawa  
 I-comp. give him tuwo-of corn  
za - n baa shi tuwo-n dawa  
 fut.-I  
sai n baa shi tuwo-n dawa  
 then I-subj.  
 ?n-naa baa shi tuwo-n dawa  
 I-prog.  
 \*naa baa shi tuwo-n dawa  
 fut.-I  
 \*na-kan baa shi tuwo-n dawa  
 I-habit.

'If the king were to visit me,

{  
 I'd give him tuwon dawa  
 I'd give him tuwon dawa  
 I'd then give him tuwon dawa  
 \*I am giving him tuwon dawa  
 \*I will sure give him tuwon d.  
 \*I would normally give him ...

But, while imaginative conditionals have tighter aspect restrictions in their consequent clauses than reality conditionals, their antecedents have fewer aspect restrictions than the antecedent clauses of reality conditionals. Thus, while reality conditionals allow only the future 1 and the progressive with a future reading,

? reality conditionals allow the progressive

in their antecedent clauses, imaginative conditionals allow those three aspects in their antecedent clauses as well as the habitual aspect.

(31) In daa kaa zo, daa naa gan ka  
if imag. you-comp. come imag. I-comp. see you

'If you had come, I would have seen you'

(32) In daa zaa-ka zo, daa za - n gan ka  
if imag. fut.-you come imag. fut.-I see you

'If you were to come, I would see you'

(33) In daa ka-naa so, daa naa baa ka  
if imag. you-prog. want imag. I-comp. give you

'If (it were the case that) you need it, I'd have given (it) to you'

(34) In daa ka-kan ci, daa naa baa ka  
if imag. you-habit. eat imag. I-comp. give you

'If (it were the case that) you normally eat (it), I'd have given you (some)'

(35) \*In daa kaa zo, daa naa gan ka  
if imag. you-fut.<sub>2</sub> come imag. I-comp. see you

(36) \*In daa ka zo, daa naa gan ka  
if imag. you-subj. come imag. I-comp. see you

Whenever the antecedent clause of imaginative conditionals is in the completive or habitual aspect, the conditional is interpreted as counterfactual, and when the antecedent clause is in future 1 aspect, the conditional is always interpreted as hypothetical. But, when the antecedent clause occurs in the progressive aspect, the conditional is unspecified--i.e., it may be interpreted as either hypothetical or counterfactual. The fact that

\*

imaginative conditionals can be interpreted as either hypothetical or counterfactual when the antecedent clause is in the progressive is due to the semantic nature of the progressive aspect/tense. In Hausa, as in English and many other languages, the progressive/continuative aspect/tense can be used to express futurity. In addition to this, the Hausa progressive aspect marker is also used to express an aspect/tense comparable to the present tense in English.

(37) Audu ya-naa zuwa yanzu/gobe/ kullum  
 A. he-prog. coming now/tomorrow/everyday

'Audu is coming now/tomorrow'  
 'Audu comes everyday'

Now, I said earlier that the only structural difference between a hypothetical conditional and a counterfactual one is that the antecedent clause of a hypothetical conditional is always in the future aspect (or in the progressive with a future reading). Therefore, whenever we find the progressive aspect in the antecedent clause of an imaginative conditional, we may take the (progressive) aspect marker as expressing futurity, and the conditional is consequently interpreted as hypothetical, or we may take the (progressive) aspect marker to be expressing the present aspect in which case the conditional is interpreted as counterfactual. Thus, example (38) will have three possible translations in English:

(38) In daa Audu ya-naa zuwa makaranta daa  
 if imag. A. he-prog. coming school imag.  
 kaka - r - sa taa saya masa keke  
 grandmother-of-him she-comp. buy him bike

- (a) 'If (it were the case that) Audu goes to school (everyday), his grandmother would have bought him a bike'
- (b) 'If (it were the case that) Audu is coming to school (now), his grandmother would buy him a bike'
- (c) 'If Audu were to come/go to school (tomorrow), his grandmother would buy him a bike'

Note, however, that we can specify the imaginative conditional by using an appropriate time adverbial (e.g. yanzu 'now', kullum 'everyday', or gobe 'tomorrow', etc.). Consider examples (39) through (41) below, where (39) and (40) are specified as counterfactual by the time adverbials kullum 'everyday' and yanzu 'now' respectively, and (41) is specified as a hypothetical conditional by the adverbial gobe 'tomorrow'; that is, the progressive aspect markers in the antecedent clauses in these examples have been specified by using the relevant time adverbials.

(39) In daa Audu ya-naa zuwa makaranta kullum,  
 if imag. A. he-prog. going school everyday  
daa kaka-rea taa saya masa keke  
 imag. grandmother-his she-comp. buy him bike

'If (it were the case that) Audu goes to school everyday, his grandmother would have bought him a bike'

(40) In daa a-naa fate yanzu, daa mun  
 if imag. one-prog. party now imag. we-comp.  
 ji kara-r kida  
 hear noise-of drumming

'If there were a party (going on) now, we would have heard the music'

(41) In daa ka-naa zuwa makaranta gobe,  
if imag. you-prog. coming school tomorrow  
daa naa gwada maka lissafi-n nan  
imag. I-comp. show you maths.-of there

'If you were to come to school tomorrow, I'd show you (how to solve) that mathematical problem'

Another question that is worth answering is why the future 2 and the subjunctive never occur in the antecedent clauses of (imaginative) conditionals. As for the non-occurrence of the subjunctive in the antecedent clauses of conditionals, that can be explained by the basic meaning of the subjunctive in Hausa, namely, the subjunctive always has the meaning "subsequent to something else". Since the event of the antecedent clause of conditional sentences is not dependent or subsequent to anything in the matrix sentence, the subjunctive cannot occur in the antecedent clause. As for the non-occurrence of the future 2 in the antecedent clauses of (imaginative) conditionals, the main reason I think, is related to the fact that the semantic connotations of the antecedent clause of all conditionals (reality and imaginative) is incompatible with the semantics of the future 2. On the one hand, the main theme of conditionals is hypotheticalness, and that hypotheticalness is primarily contained in the antecedent clause (although the whole matrix sentence is colored by it). On the other hand, the future 2 is ordinarily used to

*Why not  
subjunctive  
& future 2  
in the antecedent  
clause*

express a very strong probability. Thus when I say

- (42) Gobe      naa      gama      darasi-n      nan  
tomorrow I-fut.<sub>2</sub> finish lesson-of here  
'Tomorrow, I will finish this lesson'

there isn't the slightest doubt in my mind that I will finish the lesson by then. Therefore, it will be semantically contradictory to use the future 2 aspect with an in (daa)-clause because, on the one hand one would be expressing doubt or nonfactualness (i.e. just hypothesizing) by using in (daa) 'if (it were)' and on the other hand, one would be expressing almost certainty by using the future 2 aspect. (2)

##### 5. Summary

In this chapter, I have discussed those adverbial clauses that have the structure of simple clauses (as opposed to those adverbial clauses that were discussed in chapter 1, that have the structure of relative clauses and those in chapter 2 that are subjunctive clauses). I have used the cover term "conditional" to group together all the adverbial clauses that are discussed in this chapter because they have many syntactic properties in common. I have classified "conditionals" into two broad classes-- "fulfilled" and "unfulfilled". Unfulfilled conditionals are further divided into two, "Reality" and "Imaginative" conditionals. I have illustrated that in Hausa, those reality conditionals that express a condition whose

realization the speaker considers highly probable (= Probable Conditionals) are structurally different from those that express a condition whose realization the speaker considers merely possible (= Possible Conditionals).

Imaginative conditionals are also shown to be two types-- Hypothetical and Counterfactual. I have discussed some of the syntactic properties of both Reality and Imaginative conditionals and attempted to explain why the future 2 and the subjunctive aspects do not occur in the antecedent clauses of conditionals.

### Notes to chapter 3

(1) Bayan 'after' clauses also have this semantic property when their main clause is in the future aspect as in

- (a) Audu za - i tashi baya-n mun ci abinci  
A. fut.-he leave back-of we-comp. eat food

'Audu will leave after we eat'

- (b) Baya-n mun ci abinci, sai Audu ya tashi  
back-of we-comp. eat food then A. he-subj.leave

'After we eat, then Audu will leave'

Cf. examples (1) through (3) and examples (4) through (6).

Therefore, bayan 'after' clauses such as (a) and (b) above, can also fit into this class. Note however, that those bayan clauses whose main verbs are not in the future (i.e. those discussed in chapter 1) do not belong to this class.

(2) It might be argued that the completive aspect also expresses considerable "certainty", but it still occurs in the antecedent clauses of conditional sentences. It is true that the completive also expresses considerable "certainty" when the action/event in the clause has actually taken place (i.e. when the completive can be interpreted as a tense rather than as an aspect) as in independent clauses such as:-

- (a) Yara-n sun yi barci  
kids-the they-comp. do sleep  
'The children (have) slept'

(b) Mun dawo daga makaranta  
we-comp. return from school

'We have returned from school'

However, in subordinate clauses, the completive does not necessarily mean that the event has actually taken place and as such, the use of the completive cannot be said to express any certainty.

Moreover, in the case of the future 2, the "certainty" is overtly expressed by the aspect marker (which marks both futurity and certainty as opposed to the future 1 aspect marker which marks only futurity); in the case of the completive however, there is nothing in the aspect marker that can be said to mark "certainty"--the "certainty" can only be implied or ~~deduced~~ deduced from the meaning of the completive aspect. Therefore, since the certainty in the completive is only implied, it can be used in the antecedent clauses of conditional sentences because the hypotheticalness in the antecedent clause (which is physically marked by in (daa) 'if (it were)') will over-ride the certainty implied in the completive. It is not possible for the hypotheticalness in the antecedent clause to over-ride the "certainty" in the future 2 because both the two meanings (hypotheticalness and "certainty") are physically marked.

## CHAPTER 4

### USES OF THE RELATIVE ASPECT MARKER

#### 1. Introduction

In chapter 1, I pointed out that special aspect markers are used to mark the completive and the progressive aspects when they occur in relative clauses. Hence the names "Relative Completive and Relative Progressive". But, the use of such special aspect markers for the completive and the progressive is not restricted to relative clauses only. This chapter investigates the various instances in which the relative aspect markers are used in order to discover what parameters determine their uses.

The relative aspect markers are characteristically used in the following types of constructions:

#### A. In Relative Clauses. For example:

- (1) a. Yara-n da suka iso jiya  
kids-the r.m. they-r.c. arrive yesterday

'The children who arrived yesterday'

- b. Yara-n da su-kee isowa gobe  
kids-the r.m. they-r.p. arriving tomorrow

'The children who will be arriving tomorrow'

#### B. In Wh-ever sentences. For example:

- (2) a. Koowaa muka gayyata, za - i zo  
whoever we-r.c. invite fut.-he come

'Whoever we invite, will come'

b. Koowaa mu-kee soo ya zo, za-i zo  
whoever we-r.p. liking he-subj. come will

'Whoever we want to come, will come'

(3) a. Koomee suka yi ma-ka, kada ka damu  
whatever they-r.c. do to-you don't you worry

'Whatever they do to you, don't worry'

b. Koomee su-kee yii maka, kada ka damu  
whatever they-r.p. doing

'Whatever they are doing to you, don't worry'

C. In Wh-questions. For example:

(4) a. Waa/mee ya tsorata ku?  
who/what he-r.c. frighten you

'Who/what frightened you?'

b. Waa/mee ya-kee tsorata ku?  
who/what he-r.p. frightening you

'Who/what is frightening you?'

D. The relative aspect marker is also characteristically used in cleft constructions. For example:

(5) a. Yara (nee) suka ci wake  
kids (cop.) they-r.c. eat beans

'It's the children that ate beans'

b. Yara (nee) su-kee ci - n wake  
kids (cop.) they-r.p. eating-of beans

'It's the children that eat/are eating beans'

c. Wake (nee) yara suka ci  
beans (cop.) kids they-r.c. eat

'It's beans that the children ate'

d. Wake (nee) yara su-kee cii  
beans (cop.) kids they-r.p. eating

'It's beans that the children eat/are eating'

E. The relative completive aspect marker is also used in narrative sentences, i.e. when the speaker is narrating events that have taken place (probably in a set sequence). For example:

(6) Wata rana, dabbobi-n daji suka taru  
one day animals-of forest they-r.c. meet  
su-naa shawara-r yadda zaa-su fuskanci  
they-prog. counselling how fut.-they face  
Da - n Adam. Dila ya ce ya-naa da  
son-of Adam jackel he-r.c. say he-prog. with  
dabara. Kura maa ta ce ta-naa da  
trick hyena too she-r.c. say she-prog. with  
wata. Zaki ya umarci Dila da Kura  
one lion he-r.c. commad jackel and hyena  
su fadi dabaru-n-su. Dila da Kura  
they-subj. say tricks-of-them jackel and hyena  
suka fadi dabaru-n-su saura-n dabbobi  
they-r.c. say tricks-of-them rest-of animals  
suka ji. ....  
they-r.c. hear

'Oneday, the wild animals met discussing how they should face the (problem of) Man. The jackel said he had a trick. The hyena said she had one too. The lion ordered the jackel and the hyena to tell (the rest of the animals) their tricks. They told them and the other animals listened to them...'

F. The relative completive aspect marker is also used in Probable Reality Conditionals in some dialects.

Possible! (p. 81)

(Cf. chapter 3, pp. 82-83). For example:

(7) In yara-n suka dawo za - n baa su  
if kids-the they-r.c. come fut.-I give them  
kwabo-kwabo 'penny-penny'

'When the children come back, I will give them  
a penny each'

The relative aspect markers are also used in Time, Place and Manner adverbial clauses. I have shown in chapter 1, that Time Adverbial Clauses are underlyingly full NP's containing relative clauses. I have also indicated that Place and Manner adverbial clauses too have most of the formal characteristics of relative clauses (cf. footnote 3 in chapter 1). I am therefore considering Time, Place and Manner Adverbial clauses as a sub-type of relative clauses here--although the three adverbials may as well be considered as a potentially distinct use of the relative aspect markers.

Syntactically, the various types of constructions in which the relative aspect marker is used in Hausa have very little in common. In fact, the only obvious syntactic similarity is the fact that they all use the same (special) aspect marker (=relative completive/progressive). For example, in the case of relative clauses, there is always (at least underlyingly) an antecedent NP, and the (relative) clause is normally preceded by the relative clause marker da, while in the other instances of the use of the

relative markers (e.g. Wh-Questions, Cleft and Wh-ever sentences, etc.), the clause that follows the head-word cannot be preceded by (the relative clause marker) da. Hence, example (8)--i.e. a relative clause without the relative marker da--and examples (9) through (12) are all ungrammatical.

- (8) a. \*Yara-n suka zo jiya  
kids-the they-r.c. come yesterday  
'The children who arrived yesterday'
- b. \*Yara-n su-kee zuwa gobe  
kids-the they-r.p. coming tomorrow  
'The children who will be arriving tomorrow'
- (9) a. \*Waa da kuka gayyata?  
who r.m. you-r.c. invite  
'Who did you invite?'
- b. \*Mee da ku-kee soo?  
what r.m. you-r.p. liking  
'What do you want?'
- (10) a. \*Koowaa da kuka gayyata za - i zo  
whoever r.m. you-r.c. invite fut.-he come  
'Whoever you invite, will come'
- b. \*Koomee da ki-kee soo, za - n baa ki  
whatever r.m. you-r.p. liking fut.-I give you  
'I will give you whatever you want'
- (11) a. \*Wake (nee) da yara suka ci jiya  
beans (cop.) r.m. kids they-r.c. eat yester  
'It's beans that the children ate yesterday'
- b. \*Wake (nee) da yara su-kee cii  
beans (cop.) r.m. kids they-r.p. eating  
'It's beans that the children eat/are eating'

- (12) a. \*In da yara-n suka zo za - n  
 if r.m. kids-the they-r.c. come fut.-I  
 baa su kwabo-kwabo  
 give them penny-penny

'When the children come, I will give them a penny each'

Sentences like (10) are ungrammatical when koowa/koomee are interpreted as wh-ever expressions. However, these words have the meaning 'everyone/everything', in which case they function (and behave) like ordinary nouns and as such may be modified by relative clauses. For example,

- (13) a. Koowaa da muka gayyata yaa zo  
 everyone r.m. we-r.c. invite he-comp. come

'Everyone that we invited has come'

- b. Koomee da ki-kee soo naa baa ki  
 everything r.m. you-r.p. liking I-comp. give

'I gave you everything that you wanted'

## 2. A semantic/logical explanation

In many languages of the world Relative Clauses, Wh-questions and Cleft constructions exhibit striking structural similarities (just as they do in Hausa), a fact which suggests that there is some deep, non-language-specific relationship between the constructions. Some linguists have even tried to derive all the three from a common underlying source. For example, Akmajian (1970) has proposed a relative clause source for focus constructions. But Schachter (1973) has demonstrated that it is unreasonable to try to derive focus constructions from relative clauses.

(or vice versa) or to posit a single underlying source for even relative and cleft constructions, much less for all the three types (relative clauses, cleft sentences and wh-q.'s), and in the case of Hausa, for those three and also for Wh-ever, narrative and probable reality conditionals. We must therefore seek to explain the similarities between the various types of constructions where the relative aspect marker is used in Hausa, on grounds other than syntactic.

Keenan and Hull (1973) propose a logical explanation for the syntactic similarities between the three construction types--relative clauses, Wh-questions and cleft sentences. They suggest that "the syntactic similarities arise from an underlying logical similarity, and that these constructions are obeying the principle for any natural language, that logically similar constructions are generally realized in syntactically similar ways" (underlining is mine). Cf. Keenan and Hull (1973:350) They claim that all three constructions

"have a condition given by a sentence S that they impose in some way on the noun phrase separated from it. Further, they all presuppose that some member of the world satisfies this condition, and are concerned with the member or members which actually do satisfy the condition"

Cf. Keenan and Hull (1973:350)

Thus, according to Keenan and Hull, (14) and (15) both "presuppose" that Mary invited someone, and (16) only

refers when Mary invited someone:

- (14) It was Fred that Mary invited
- (15) Which student did Mary invite?
- (16) The student who Mary invited

It can therefore be said that the logical similarity that the three construction types (i.e. relative clauses, cleft sentences and wh-questions) share according to Keenan and Hull, is "presupposition".

Now, if we turn to those instances where the relative aspect markers are used in Hausa, we can see that the uses of these markers are not confined to the three construction types (relative clauses, wh-questions and cleft sentences) alone. In addition to these three constructions, Hausa uses the relative aspect markers also in wh-ever, reality conditional and narrative constructions. However, I believe that the various constructions have some logical similarities and that they are obeying Keenan and Hull's logical "principle" that "logically similar constructions are generally realized in syntactically similar ways", and I suggest "presupposition" to be the logical similarity that these Hausa constructions share. In relative clauses, wh-questions, cleft and wh-ever sentences, the action/event in the clauses that follow the head-words (i.e. the clauses marked by the relative aspect markers) is old information, i.e. it is presupposed and as such, it can be backgrounded by being marked with a relative aspect marker. What is not presupposed in such constructions is the head-word. Thus in the following examples, the (b) sentences are the

presuppositions of their (a) counterparts and are therefore backgrounded by being marked with the relative aspect.

- (17) a. Yaro-n da Kande ta-kee soo (- nsa)  
 boy-the r.m. K. she-r.p. liking (-him)

'The boy that Kande likes/loves'

- b. Kande ta-naa so - n wani  
 K. she-prog. liking someone

'Kande likes/loves someone'

- (18) a. Waa kuka gayyata?  
 who you-r.c. invite

'Who did you invite?'

- b. Kun gayyaci wani  
 you-comp. invite someone

'You invited someone'

- (19) a. Koowaa kuka gayyata (za - i zo)  
 whoever you-r.c. invite (fut.-he come)

'Whoever you invite, (will come)'

- b. Zaa-ku gayyaci wani  
 fut.-you invite someone

'You will invite someone'

- (20) a. Wake (nee) yara-n suka ci  
 beans (cop.) kids-the they-r.c. eat

'It's beans that the children ate'

- b. Yara-n sun ci wani-abu  
 kids-the they-comp. eat something

'The children ate something'

While in the case of relative clauses, wh-questions, wh-ever and cleft sentences there is always an element in the constructions that is not presupposed in reality conditionals everything in the conditional clauses is

presupposed. The relative completive aspect marker is used here because the speaker presupposes that the condition expressed by the (subordinate) clause will materialize (as opposed to possible reality conditionals where the speaker considers the realization of the condition merely possible --hence he uses the simple completive).

but he  
has it  
just  
background  
- it is the  
"probable"  
condition  
which is not the  
simple  
perfective

It should be noted that narrative constructions cannot be said to involve any presuppositions, and as such, they cannot be included in this generalization (which covers all the other uses of the relative aspect marker in Hausa). Therefore, narrative constructions should be treated as a separate phenomenon still in need of explanation.

### 3. Summary

In this chapter, I explored the various uses of the relative aspect marker in Hausa. I showed that the similarity between the various types of constructions in which the relative aspect marker is used cannot be explained on syntactic grounds. I showed that Keenan and Hull's "presupposition" hypothesis can explain the facts in Hausa. Therefore, I proposed that "presupposition" is the logical similarity between the various types of constructions that use relative aspect markers in Hausa (leaving out the narrative construction which I consider as a separate phenomenon still in need of explanation). Because all the constructions share this feature, they obey Keenan and Hull's principle that logically similar constructions are

generally realized in syntactically similar ways.

## CHAPTER 5

### PREPOSITIONS THAT INTRODUCE SUBORDINATE CLAUSES

#### 1. Introduction

In chapter 1 where I discussed Time Adverbial Clauses (which I analyzed as being essentially relative clauses, i.e. full NP's that are modified by a relative clause), I showed that such (time) adverbial clauses can be preceded by the prepositions sai 'until', har 'until' and tun 'since'. Cf. chapter 1 section 5. For example

1. Ba - i            yi barci ba sai    da    suka  
not-he-comp. do sleep not until r.m. they-r.c.  
dawo 'return'  
'He didn't sleep until (after) they had returned'
2. Ba - i            yi barci ba har    suka            dawo  
not-he-comp. do sleep not even they-r.c. return  
'He didn't sleep even (after) they had returned'
3. Ba - i            yi barci ba tun    da    suka dawo  
not-he-comp. do sleep not since r.m. they-r.c.  
'He hasn't slept ever since they returned'

And, in chapter 2 where I discussed Subjunctive Adverbial Clauses, it was shown that the prepositions domin/saboda 'in order to, so that' and har 'until' are among the prepositions that can introduce subjunctive adverbial clauses (cf. chapter 2, page 1, examples (2) and (5) repeated

below as (4) and (5), respectively).

- (4) Yaa/za - i yi kokari domi-n /sabo-da  
he-comp./fut.-he do effort reason-of/cause of  
ya ci jarrabawa  
he-subj. eat examination

'He worked/will work hard in order to pass the examination'

- (5) Za - i yi (ta) gudu har ya ga ji  
fut.-he do (part.) running even he-subj, tire

'He will keep on running until he becomes tired'

Now, in chapter 3, where I discussed those adverbial clauses that have the structure of simple clauses, it was shown that among the prepositions that can introduce such simple adverbial clauses are also sai 'unless', tun-da 'since (=because)' and domin/saboda 'because'. Therefore, it is clear that the prepositions sai, har, tun(da) and saboda/domin can each introduce more than one type of adverbial clause. For example, sai and tun(da) can each introduce either relative or simple adverbial clauses, har can introduce either relative or subjunctive adverbial clauses while domin/saboda can introduce either simple or subjunctive adverbial clauses.

The purpose of this chapter is to describe the syntactic behaviour of these prepositions and their semantic interpretations as they occur in the various types of adverbial clauses of chapters 1, 2 and 3.

I exclude the prepositions bayan 'after' and kafin 'before' from the discussions of this chapter for the

following reason: although bayan 'after' can introduce either a relative or a simple completive clause, and kafin 'before' can introduce either a subjunctive or a relative adverbial clause, these two prepositions do not have the same kinds of semantic interpretations that, for example, sai or tun(da) has when it is followed by a different type of clause. I.e. the meaning of the preposition itself is not affected by the type of clause that follows it. For example, whereas tun is translated as temporal 'since' whenever it is followed by a relative clause, it is translated as 'since (=because)' whenever it introduces a non-relative clause, kafin and bayan are always translated as 'before' and 'after' respectively, no matter what the aspect of the clause they introduce, and the clause is naturally interpreted as a temporal adverbial clause. Stated in transformational terms, the important difference is that all clauses after bayan 'after' and kafin 'before' have the same deep structure (with or without lokacin da 'the time that'); for sai etc., there can actually be clauses with different verb aspects which yield different surface verb aspects with different meanings. For example, in both (6) and (7) below, the adverbial clause is temporal and bayan is translated as 'after', likewise in (8) and (9) kafin is translated as 'before'. But in example (10) tunda is translated as '(ever) since' and the adverbial clause it introduces is a

temporal clause while in example (11) tunda is translated as 'since (=because)' and the adverbial clause is interpreted as a reason adverbial clause. Note that both the two embedded clauses in (10) and (11) are introduced by tunda, but the embedded clause in (10) has a relative completive aspect while that of (11) has a simple completive aspect. This aspectual difference makes a considerable semantic difference between the two types of subordinate adverbial clauses.

- (6) Sun yi barci bayan da suka ci abinci  
 they-comp. do sleep after r.m. they-r.c. eat  
 'They slept after they had eaten'
- (7) Sun yi barci bayan sun ci abinci  
 they-comp. do sleep after they-comp. eat food  
 'They slept after they had eaten'
- (8) Sun ci abinci kafin lokaci-n da suka kwanta  
 they-r.c. lie  
 'They ate before (the time) they went to bed'
- (9) Sun ci abinci kafin su kwanta  
 they-subj.  
 'They ate before they went to bed'
- (10) Ba - n gan su ba tun-da suka  
 not-I-comp. see them not since-r.m. they-r.c.  
 tashi 'leave'  
 'I haven't seen them (again) (ever) since they left'
- (11) Ba - n gan su ba tunda sun tashi  
 not-I-comp. see them not since they-comp. leave  
 'I didn't see them since (=because) they had left'

Examples (6) through (9) and examples (10) and (11) show clearly that the type of clause that follows bayan

'after' and kafin 'before' do not influence their meanings at all while the semantic interpretations of tunda for example, are basically dependent on the type of clause that follows it. This is the reason why I do not include the two prepositions bayan 'after' and kafin 'before' in the discussions of this chapter. I have however, included the particle da in this chapter because it too, like sai, tunda, etc., is interpreted differently according to the type of clause that follows it. For example, consider the following sentences each of which contains an embedded clause introduced by da but the semantic interpretations of the embedded clauses differ because those clauses have different aspects.

(12) Da suka zo, mun ci abinci  
 ? they-r.c. come we-comp. eat food

'We ate when they came'

(13) Da suka zo, sai muka ci abinci  
 ? they-r.c. come then we-r.c. eat food

'When they came, then we ate'

(14) Da sun zo zaa-mu ci abinci  
 ? they-comp. come fut.-we eat food

'As soon as they arrive, we will eat'

This chapter will be divided into two major parts-- one section will deal with prepositions that can introduce more than one type of subordinate adverbial clauses (i.e. sai, tunda, domin, etc.) and the other section will be dealing specifically with da-clauses.

2. The syntax and semantics of the prepositions tunda, saboda, domin, har and sai

The prepositions tunda, saboda/domin, har and sai can each introduce more than one type of adverbial clause and the meanings of each of these prepositions are largely determined by the type of aspect in the subordinate adverbial clause that they introduce.

2.1. Tunda and saboda/domin

Whenever tunda (or tun lokacin da) is followed by a relative clause, the clause is always interpreted as a temporal adverbial clause and tunda has the meaning 'since (the time that)'. But when tunda introduces a subordinate clause other than a relative clause, the subordinate clause is interpreted as an adverbial clause of reason, and tunda is translatable in this context as 'since (=because)'. For example

- (15) Ba - n gan su ba tunda suka dawo  
not-I-comp. see them not since they-r.c. return  
daga makaranta 'from school'

'I haven't seen them (ever) since they returned from school'

- (16) Ba - n gan su ba tunda sun tafi  
not-I-comp. see them not since they-comp. go

'I haven't seen them because they have gone away'

Whenever the preposition saboda/domin introduces a subjunctive clause, the preposition is translatable as 'in order to, so that', and the clause it introduces (i.e. the



my examples with saboda/domin have been restricted to the subjunctive and the simple completive aspects. I shall now give a fuller account of the type of aspect that can occur in a subordinate clause introduced by tunda or domin/saboda. Tunda introduces (1) relative clauses (i.e. temporal adverbial clauses) and (2) clauses in the simple completive, future, progressive or habitual aspects (i.e. adverbial clauses of reason). Note that tunda never introduces clauses in the subjunctive aspect. Thus the following examples are ungrammatical.

(19) \*Ba - n gan su ba tunda su iso  
not-I-comp. see them not since they-subj, arrive

\*'I haven't seen them since for them to arrive'

(20) \*Za - n gan su tunda su dawo daga  
fut.-I see them because they-subj. return from  
makaranta 'school'

\*'I will see them because for them to return from school'

While tunda allows all aspects other than the subjunctive in the clauses it introduces, saboda/domin allows all aspects other than the relative.

(21) \*Sun ci jarrabawa saboda/domin  
they-comp. eat examination because  
suka yi koKari  
they-r.c. do effort

'They passed the exam. because they worked hard'

Both tunda and saboda/domin are sometime translatable as 'because/since', i.e. whenever tunda introduces a clause

other than a relative clause and whenever saboda/domin introduces a clause other than a subjunctive clause. In other words, both tunda and saboda/domin can introduce clauses that can be interpreted as adverbial clauses of reason.

- (22) Sun ci jarrabawa domin/saboda/tunda  
 they-comp. eat examination because  
 sun yi kokari  
 they-comp. do effort

'They passed the exam. because they worked hard'

- (23) Zaa-su / saa ci jarrabawa domin/tunda/saboda  
 fut.-they/fut.<sub>2</sub> eat exam. because  
 sun yi kokari  
 they-comp. do effort

'They will/definitely will pass the exam. since/  
 because they have worked hard'

- (24) Zaa-su ci jarrabawa-r tunda/saboda/domin  
 fut.-they eat exam.-the because  
su-naa (yi-n) kokari  
 they-prog. (doing-of) effort

'They will pass the exam. because/since they are  
 working hard'

- (25) Zaa-su ci jarrabawa-r tunda/saboda/domin  
 fut.-they eat exam.- the because/since  
zaa - su / saa yi kokari  
 fut.-they/fut.<sub>2</sub>-they do effort

'They will pass the exam. because/since they  
 will/definitely will work hard'

- (26) Zaa - su ci jarrabawa-r tunda/saboda/domin  
 fut.-they eat exam. -the because/since  
su-kan yi kokari  
 they-habit. do effort

'They will pass the exam. because/since they  
 normally work hard'

### 3. Sai and har

Laura F. Meyers (1974) discusses the syntactic behaviour of sentences containing the "particle" sai and har and gives a "logical formulation of the presuppositions and implications of each particle". Because the only systematic analysis comparing these particles known to me is Meyers', and because I intend to make some (minor) criticisms of her analysis and then build up on what she hypothesizes about the syntax of sentences containing these particles, I will first summarize her thesis criticizing and ~~amending~~ some of her claims as I go along.

It should be noted that Meyers' paper deals only with those sentences that contain sai and har as "quantifiers of noun phrases". She does not attempt to analyze complex sentences containing the particles. I.e., her paper does not examine the syntax of complex sentences embedding adverbial clauses introduced by sai or har. One of the purposes of my reviewing Meyers' paper here is to show that her analysis--with the minor amendments I am going to propose, can be extended to include complex sentences containing subordinate adverbial clauses introduced by the particles sai and har.

#### 3.1. The use of sai to mean 'only'

Meyers gives as an example of sai meaning 'only' the following sentence.

(27) Sai Bello (nee) ya-kee so - n rogo  
 only B. (cop.) he-r.p. liking-of cassava

'It's only Bello who likes cassavas'

She claims that clefting of the constituent quantified by sai is obligatory; uncleft sentences are ungrammatical.

She claims further that cleft sentences in Hausa have a presupposition that an entity exists, at least in the real world of discourse and that "sentences with 'only' in Hausa and English add the identification of the individual/entity whose existence is presupposed in their presuppositions". Thus for (27), Meyers claims, the presupposition is (28) and the implication is (29).

(28) Akwai wani wanda ya-kee so-n rogo,  
 there-is one who he-r.p. like cassava  
 shi Bello nee  
 he B. cop.

'There exists someone who likes cassavas, and that someone is Bello'

(29) Banda Bello, baa wan-da ya-kee son rogo  
 except B. no one-who he-r.p. like cassava

'Aside from Bello, no one likes cassavas'

She represented the presupposition and implication of sai meaning 'only' as:-

(30) Presupposition:  $\forall x (Fx \ \& \ x = a)$   
 Implication:  $\sim \forall y (y \neq a \ \& \ Fy)$

Now, if (30) is to represent the presupposition and implication of (27), for the presupposition we would get: there

exists x such that x yana son rogo ('x likes cassavas') and x is Bello, and for the implication we would get: there is no y such that y is not Bello and y yana son rogo ('y likes cassavas').

Meyers also points out that sai "is often translated as 'except'" when it occurs in sentences such as (31).

- (31) Koowaa baa-yaa so - n rogo,  
everyone not-he-prog. liking-of cassava  
sai Bello 'except Bello'

'Everyone doesn't like cassavas, except Bello'

She further claims that the clause which precedes sai 'except' must be negated. Hence, according to her, the following example is ungrammatical.

- (32) Koowaa ya-naa so-n rogo, sai Bello  
everyone he-prog. like cass. except B.

'Everyone likes cassavas, except Bello'

She defines sai meaning 'except' as referring to a set for which a proposition does not hold, and identifying an entity for which the proposition does hold.

According to Meyers, sai meaning 'only' "identifies an entity for which a proposition holds, and implies that for all other entities the proposition does not hold" while sai meaning 'except' identifies an entity for which a proposition does not hold, and implies that for all other entities the proposition holds.

I agree with most of what Meyers claims about the use

of sai meaning 'only/except'. But, there are two aspects of her analysis with which I disagree, namely, (1) the kind of distinction she draws between sai meaning 'only' and sai meaning 'except' and (2) her claim that unclefted sentences containing sai must be negated (and cleft sai-sentences must be affirmative).

Meyers tries to draw a distinction between the two uses of sai (i.e. sai meaning 'only' and sai meaning 'except')--probably to maintain her claim that clefted sai-sentences (i.e. when sai means 'only') must be affirmative and unclefted sai-sentences (i.e. when sai means 'except') must be negated. It is true that in English, 'only' and 'except' exhibit some differences in their syntactic behaviour, though in English, the two words are not that basically different semantically. Hausa does not need the kind of distinction that Meyers proposes for the two uses of sai. Native speakers of Hausa feel that the two uses of sai are one and the same thing. What is interesting about sai when compared to English is that it shows that 'only' and 'except' in English must have a great deal in common or be identical in their logical structures (since Hausa uses a single word where English uses two).

Meyers is basically right about the obligatoriness of clefting in sentences like (27) and also about sentences such as (31) where clefting is entirely disallowed. Her analysis implies that all clefted sai-sentences must be

affirmative and unclefted must be negated. But this is not the case because one gets clefted sai-sentences that are negated and unclefted that are affirmative. Consider the following examples.

- (33) Sai Bello nee baa-yaa so - n rogo  
 only B. cop. not-he-prog. liking cassava

'It is only Bello who does not like cassavas'

Cf.

- (34) Sai Bello nee ya-kee so - n rogo  
 only B. cop. he-r.p. liking cassavas

'It is only Bello who likes cassavas'

- (35) Koowaa yaa ci rogo, sai Bello  
 everyone he-comp. eat cassava only Bello

'Everyone ate cassavas, except Bello'

Cf.

- (36) Koowaa ba - i ci rogo ba sai Bello  
 everyone not-he-comp. eat cassava not only Bello

'No one ate cassavas, except Bello'. Literally:  
 Everyone didn't eat cassavas, except Bello

It is evident from examples (33) through (36) that the choice between clefting and non-clefting of sai-sentences cannot be explained in terms of negative versus affirmative. What determines whether a sentence containing a constituent which is quantified by sai will be clefted or not has to do with what part (or parts) of the sentence the speaker wants to focus: if the speaker is focussing on the proposition contained in the sentence (rather than on the entity identified by sai), clefting is not possible, but if the speaker is focussing on the entity identified by sai (rather than on the proposition that

holds (or does not hold) for it), then clefting is obligatory. Consider the following examples.

(37) Koowaa yaa jefa ma-ka Kuri'a?  
everyone he-comp. throw for-you votes

'Did everyone vote for you?'

(38) I, koowaa yaa jefa mi-ni, sai Bello  
yes everyone he-comp. throw for-me only B.

'Yes, everyone voted for me, except Bello!'

(39) Sai Bello nee ba - i jefa mi - ni ba  
only B. cop. not-he-comp. throw for-me not

'Only Bello didn't vote for me'

If (38) is said in response to (37), the speaker is understood to be unconcerned about the fact that Bello didn't vote for him. But, if (39) is the response, it is understood that the speaker is worried or concerned about Bello's not having voted for him. We can therefore see that clefting in sentences containing sai has to do with discourse factors rather than with affirmative versus negated sentences.

### 3.2. Summary

I have so far pointed out that the two uses of sai (meaning 'only' and 'except') are not that distinct and therefore, the different treatments that Meyers gives them is not necessary in Hausa. I have also stated the circumstances under which clefting is obligatory and those under which it is disallowed in sentences containing sai 'only/

except'. In the light of these observations, I will propose the representation of the presupposition and implication of sai meaning 'only/except' as follows.

- (40) Presupposition:  $\exists x (\alpha Fx \ \& \ X = a)$   
 Implication:  $\sim \forall y (y \neq a \ \& \ \alpha Fy)$

( $\alpha Fx$  = either  $Fx$  or  $\sim Fx$ ;  $\alpha Fy$  = either  $Fy$  or  $\sim Fy$ . The symbol must have the same value in both the presupposition and the implication)

Now, if (40) is to represent the presupposition and implication of (27),  $\alpha$  will have a positive value and for the presupposition we would get: there exists  $x$  such that x yana son rogo (' $x$  likes cassavas') and  $x$  is Bello; and for the implication we would get: there is no  $y$  such that  $y$  is not Bello and y yana son rogo (' $y$  likes cassavas'). But if (40) is to represent the presupposition and implication of (41)--where  $\alpha$  will have a negative value:

- (41) Sai    Bello nee    baa-yaa    so-n    rogo  
 only    B.    cop.    not-he-comp.    liking-of    cass.

'It is only Bello who doesn't like cassavas'

for the presupposition we would get: there exists  $x$  such that x baa yaa son rogo (' $x$  doesn't like cassavas') and  $x$  is Bello; and for the implication we would get: there is no  $y$  such that  $y$  is not Bello and y baa yaa son rogo (' $y$  does not like cassavas').

### 3.3. The use of har to mean 'even'

Meyers gave the following sentences as examples of har meaning 'even' (i.e. her examples (25) through (27), repeated below as (42), (43) and (44), respectively).

(42) Har Bello ya-naa so-n rogo  
even Bello he-prog. liking-of cassava

'Even Bello likes cassavas'

(43) Koowaa ya-naa so-n rogo, har Bello  
everyone he-prog. liking-of cassava even Bello

'Everyone likes cassavas, even Bello'

(44) Koowaa baa-yaa so-n rogo, har Bello  
everyone not-he-prog.

'Everyone doesn't like cassavas, even Bello'

Meyers is right in describing har as identifying the constituent it quantifies "as a member of a set which necessarily has other (unidentified) members; and both the constituent quantified by har and the other members of the set share the characteristic that a given proposition holds or does not hold, for them". She represents the implication of har meaning 'even' as follows.

(45) Implication:  $\forall s (\bigwedge y (yEs \rightarrow (\sim)Fy \ \& \ aEs) \ \& \ \forall y (y \neq a \ \& \ yEs)$

If we apply (45) to (42) we get: there exists a set (s) such that for all y if y is a member of the set then y likes cassavas, and Bello is a member of the set; and there exists at least one y such that y is not Bello and

y is a member of the set.

In her footnote (9), Meyers claims that "with English 'even', the speaker presupposes that the hearer would not expect the proposition to hold for the identified entity. This presupposition is not available in Hausa..". This is not true. The same kind of presupposition also holds in Hausa for har meaning 'even' (and also for har 'until').

Meyers considers sentences such as (46) ungrammatical.

- (46) Baa wan-da ya-kee so-n rogo, har Bello  
no one-r.m. he-r.p. liking cassava even Bello  
'No one likes cassavas, even Bello' (Lit. there is  
no one who likes cassavas, even Bello)

because "it refers to an empty set and adds that Bello also does not belong to the set, for which the proposition x yana son rogo holds". Example (46) is in fact perfectly grammatical--at least in my dialect and also in the dialect(s) of the various native speakers with whom I was able to check my data.

#### 3.4. Sai meaning 'until'

Meyers exemplifies the use of sai meaning 'until' with the following sentences.

- (47) Bello ba - i zo ba sai karfe biyu  
B. not-he-comp. come not until o'clock 2  
'Bello didn't come until 2:00'
- (48) Bello ba - i yi aiki ba sai karfe biyu  
B. not-he-comp. do work not until 2:00  
'Bello didn't work until 2:00'

She also says that the following examples are ungrammatical.

(49) \*Bello yaa zo sai karfe biyu  
B. he-comp. come until o'clock two

\*'Bello came until 2:00'

(50) Bello yaa yi aiki sai karfe biyu  
B. he-comp. do work until o'clock 2

'Bello worked until 2:00'

Meyers' main claim about sai meaning 'until' can be summarized as follows: (1) sai identifies a point of time before which some entity was not involved in a state or activity after which the same entity was in the state or involved in the activity, (2) when sai occurs with point-action verbs, it refers to a point of time at which an activity or state occurs and (3) when sai occurs with durative verbs, it identifies a point of time at which the durative action will begin.

In Meyers' analysis, sai meaning 'until' has implications which can be formalized as follows.

(51) Implication:  $\wedge t_1 (t_1 < t_2 \rightarrow \sim Ft_1)$   
Implication:  $\vee t_3 (t_3 > t_2 \ \& \ Ft_3)$

If we apply (51) to (48) we get: for all time<sub>1</sub> such that time<sub>1</sub> is before 2:00 (time<sub>2</sub>) Bello didn't work at that time<sub>1</sub>; and there exists time<sub>3</sub> such that time<sub>3</sub> is after 2:00 (time<sub>2</sub>) and Bello worked at that time<sub>3</sub>.

Meyers is correct in her definition of sai meaning 'until' when it occurs with point-action verbs, i.e. I

agree that sai identifies a point of time (on a scale), at which an activity or state occurs. But her interpretation of sai occurring with durative verbs is not correct. With durative verbs, sai identifies a point of time at which the durative action will begin or end (not just 'begin' as Meyers claims). What presumably led her to interpreting sai occurring with durative verbs in the way she did is her incorrect data (i.e. her example (38) which she wrongly marked as ungrammatical).

- (52) \*Bello yaa yi aiki sai karfe biyu  
 B. he-comp. do work until o'clock 2  
 'Bello worked until 2:00'

The reason why Meyers marked (52) as ungrammatical is her claim that sai meaning 'until' must always occur in negated sentences. But this is not true of sentences with durative verbs, as is clear from examples like the following, which are perfectly grammatical in any dialect of Hausa that I know of.

- (53) Audu yaa yi barci sai karfe biyu  
 A. he-comp. do sleep until o'clock 2  
 'Audu slept until 2:00'
- (54) Zaa - ku yi aiki sai magariba  
 fut.-you do work until sun-set  
 'You will work until sun-set'

*Abdurrahman  
 Ahmad  
 S. Ahmad*

Therefore, Meyers' formulation of the implication of sai meaning 'until' is incorrect. The correct formalization of

sai meaning 'until' will therefore be as follows:

(55) Implication:  $\forall t_1 (t_1 < t_2 \rightarrow \alpha Ft_1)$

Implication:  $\exists t_3 (t_3 > t_2 \ \&\text{-}\alpha Ft_3)$

When alpha has a negative reading, the implications will be: for all time<sub>1</sub> such that time<sub>1</sub> is before time<sub>2</sub> an event or activity (F) did not occur, and there exists time<sub>3</sub> such that time<sub>3</sub> is after time<sub>2</sub> and an activity or event occurred at that time<sub>3</sub>. But when alpha has an affirmative reading, the implications will be: for all time<sub>1</sub> such that time<sub>1</sub> is before time<sub>2</sub> an event or activity occurred; and there exists time<sub>3</sub> such that time<sub>3</sub> is after time<sub>2</sub> and the event or activity did not occur at that time<sub>3</sub>.

### 3.5. The use of har to mean 'until'

Meyers gave the following sentences as examples of the use of har meaning 'until'

(56) Bello yaa yi aiki har karfe biyu  
B. he-comp. do work until o'clock 2

'Bello worked until 2:00'

(57) Bello ba - i yi aiki ba har karfe biyu  
B. not-he-comp. do work not until o'clock 2

'Bello didn't work until 2:00'

She defines har meaning 'until' in positive sentences as referring to "a period of time during which a given proposition holds and identifying a point of time at which it is certain that the proposition also holds." She represents

the implication of har meaning 'until' in positive sentences as follows:

(58) Implication:  $\forall p (\wedge t_1 E p \rightarrow F t_1) \& p \geq t_2$

If we apply (58) to (56), the implication will read: there is a period of time, such that for all time<sub>1</sub> that is within that period, Bello worked at that time<sub>1</sub>; and that period of time extends up to and include 2:00 (time<sub>2</sub>).

Meyers interprets har meaning 'until' in negated sentences such as (57) as making the negated sentences "ambiguous as to the scope of negation". According to her, sentence (57) has two readings. In the first reading the scope of the negation is the whole sentence, i.e. the sentence is read as the negation of (56). In the second reading, however, she claims that the scope of the negation "includes the time phrase only". I do not agree with Meyers' interpretation here, because sentence (57) is not ambiguous at all. Let us briefly discuss some facts about negation in Hausa so that we may see why Meyers' interpretation of (57) is incorrect.

Hausa sentences are generally negated with two ba's 'not'. The first ba (which has a low tone) is placed immediately before the aspect marker, while the second ba (which has a high tone) can be placed any where in the predicate (other than immediately after the main verb). Although the first ba is also important in marking negation in Hausa (because it is obligatory), the second ba is what

really matters in defining the scope of negation in a sentence. Consider the following examples.

(59) Audu ba - i            ci    waina a kasuwa ba    jiya  
A.    not-he-comp. eat h.cake at market not yest.

'Audu didn't eat hot-cakes at the market  
yesterday'

(60) Audu ba - i            ci    waina a kasuwa    jiya ba

'Audu didn't eat hot-cakes at the market  
yesterday'

Now, both (59) and (60) can be said to be ambiguous (i.e. the scope of negation in either of them is not specifically defined): either of these two sentences can have two readings. In the first reading, the scope of the negation is every thing that falls between the two ba's (i.e. yaa ci waina a kasuwa 'he ate hot-cakes at the market'--cf. (59), and yaa ci waina a kasuwa jiya 'he ate hot-cakes at the market yesterday', cf. sentence (60)). In the second reading, however, the negation affects only the constituent that immediately precedes the second ba, i.e. a kasuwa 'at the market' in the case of (59) and jiya 'yesterday' in the case of (60). When the scope of negation is restricted to the constituent that immediately precedes the second ba, there must be a pause immediately before the negated constituent and also after the second ba. Hence, for the second reading, (59) and (60) will be punctuated as in (61) and (62) respectively.

- (61) Audu ba - i ci waina, a kasuwa ba,  
 A. not-he-comp. eat hot-cakes at market not  
 jiya (amma yaa ci a makaranta)  
 yesterday but he-comp. eat at school

'Audu didn't eat hot-cakes at the market  
 yesterday, (but he ate some at school)'

- (62) Audu ba-i ci waina a kasuwa, jiya ba, (amma yaa  
 ci shekaran-jiya)  
 day before yesterday

'Audu didn't eat hot-cakes at the market yester-  
day, (but he ate some (there) the day before)'

Therefore, example (57) is not ambiguous at all. What is negated in (57) is yaa yi aiki 'he worked', i.e. what comes in between the two ba's. Meyers' second reading of (57) can only apply to sentences such as

- (63) Bello ba-i yi aiki, har karfe biyu ba  
 B. not-he-comp. do work until o'clock 2 not

'Bello didn't work until 2:00'

In (63), while it is necessarily true that Bello worked sometime before 2:00, it is not true that his working continued up to and included 2:00--it was the case that Bello stopped working sometime before 2:00.

Another thing that I disagree with in Meyers' analysis of the use of har meaning 'until' is her claim that "har cannot occur in sentences with point-action verbs." While it is true that har cannot occur in affirmative sentences with point-action verbs, its occurrence in negated sentences with point-action verbs is perfectly grammatical. Hence, sentences such as (64) which Meyers

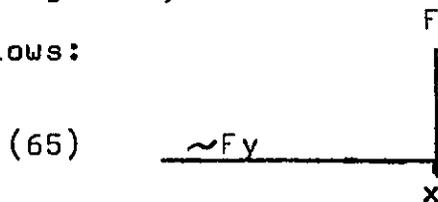
claims are ungrammatical, are in fact perfectly grammatical.

(64) Bello ba - i            zo ba har karfe biyu  
 B.    not-he-comp. come not even 2:00

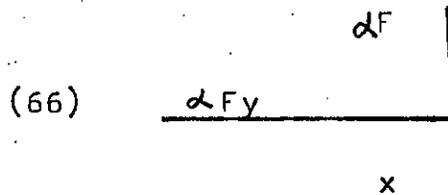
'Bello didn't arrive even at 2:00'

### 3.6. Summary

In her conclusion, Meyers summarizes the uses of sai meaning 'only' and 'until' and diagrams both uses as follows:



She diagrams the two uses of har meaning 'even' and 'until' as follows:



In the case of sai meaning 'only/except' and har meaning 'even', the horizontal line represents the entities or members for which a given proposition holds or does not hold while the vertical line represents the limit or extent of the membership beyond which the proposition does not hold or holds. In the case of sai meaning 'until' and har meaning 'even after/until', however, the horizontal line represents the period of time during which a given proposition holds or does not hold while the vertical line

represents the end of the period (i.e. a time point in the period at which the proposition ceases to hold or starts to hold). In diagram (65) (i.e. in the case of sai meaning 'only, until', x falls to the right of the vertical line (i.e. beyond the limit of the membership or the period of time) while in diagram (66) (i.e. in the case of har 'even (after)'), x falls to the left of the vertical line and as such, is included in the membership or the period of time (represented by the horizontal line).

Meyers claims that for both uses of sai the focus is on x while for both uses of har the focus may not be placed on x but rather on the set of which x is a member or the period of time during which x is a point. "Focus" here, simply means emphasis or the attention of the speaker.

Now, note that I have amended Meyers' representation of the presupposition and implication of sai meaning 'only' as follows. (Cf. example (40)):

Presupposition:  $\exists x (\alpha Fx \ \& \ x = a)$   
 Implication:  $\sim y (y \neq a \ \& \ \alpha Fy)$

I think my representation of the presupposition and implication of sai meaning 'only' is more adequate than Meyers'. What led her to propose the presupposition and implication of sai in the way she did is the fact that she considers certain sentences as ungrammatical which are in fact perfectly grammatical, namely sentences like her example (19) "kowa yana son rogo, sai Bello 'everyone likes cassavas,

except Bello'". The supposed ungrammaticalness of such sentences was her main reason for concluding that "the clause which precedes the constituent quantified by sai must be negated"., as in her representation of the presupposition and implication of sai meaning 'only/except'.

I also propose a different representation for the implication(s) of sai meaning 'until' as follows:

Implication:  $\wedge t_1 (t_1 < t_2 \rightarrow \alpha F t_1)$

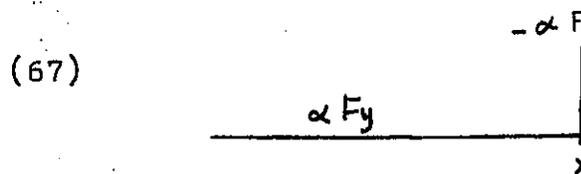
for the same reasons that motivate me to amend her representation of the presupposition and implication of sai meaning 'only/except'.

With regard to har meaning 'even', I find Meyers' interpretation totally adequate, i.e. her describing har as identifying the constituent it quantified as a member of a set which necessarily has other (unidentified) members and both the constituent quantified by har and the other members of that set share the characteristic that a given proposition holds or does not hold, for them. So her representation of the implication of har meaning 'even' is also totally acceptable to me:

Implication:  $\exists s (\wedge y (yEs \rightarrow \alpha Fy \ \& \ aEs) \ \& \ \exists y (y \neq a \ \& \ yEs))$

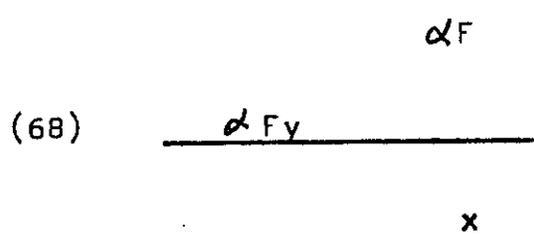
Therefore, in the light of these amendments, I will summarize the uses of sai and har (as quantifiers of noun phrases) as follows: when sai has the meaning 'only/except' it identifies an entity (x) as the sole member of a set

for which a given proposition holds or does not hold ( $\alpha Fx$ ), and implies that for all other entities the proposition does not hold or holds ( $-\alpha Fy$ ) (cf. (40)). And when sai has the meaning 'until', it identifies a point of time ( $x$ ) at which a given proposition holds or does not hold ( $\alpha Fx$ ) and implies that for all time preceding that point of time, the proposition does not hold or holds ( $-\alpha Fy$ ). Cf. (51).



Har meaning 'even' refers to a set for which a given proposition holds or does not hold ( $\alpha Fx$ ) and identifies an entity ( $x$ ) as an additional member of the set for which the proposition also holds or also does not hold (although the speaker was (not) expecting the proposition to hold also for  $x$ ) ( $\alpha Fx$ ). Cf. (45). When har has the meaning 'until' it refers to a period of time during which a given proposition holds or does not hold ( $\alpha Fy$ ) and identifies a point of time ( $x$ ) at which the given proposition also holds or also does not hold ( $\alpha Fx$ ). Both two uses of har can be diagrammed as follows:

*this element of meaning is distinctive on the first while set is metrical then an addition to the set is included*



\* In both uses of sai (i.e. meaning 'only/except' and 'until' and also in both uses of har (meaning 'even' and 'until'), the focus is on x. The only difference between the two is that, in both its two uses, sai refers to a set for which a given proposition holds or does not hold and identifies (x) as a member of the complementary set, while har (in both its two uses) refers to a set for which a given proposition holds or does not hold and identifies (x) as a member of the set for which the proposition also holds or also does not hold. In other words, sai excludes x from the members of the set for which a proposition holds (or does not hold) while har includes the constituent it quantifies in the members of the set for which the proposition holds (or does not hold).

### 3.7. Sai and har as introducers of adverbial clauses

In sections 3.1. through 3.6. of this chapter, I reviewed Meyers' analysis of the uses of sai and har as quantifiers of noun phrases and revised her analysis in several places (cf. section 3.6. (67) and (68)). In this section, I will discuss complex sentences containing sai and har as introducers of subordinate adverbial clauses and show how Meyers' analysis (with the amendments I have proposed) can be made to subsume the uses of sai and har as introducers of adverbial clauses as well.

#### 3.7.1. The use of sai meaning 'until' in complex sentences

The preposition sai can introduce two different types of subordinate adverbial clauses. It can introduce clauses in the Relative (Completive) Aspect and clauses in the Simple (Completive) Aspect. When sai introduces a clause in the relative aspect, it is translatable as 'until' and the subordinate clause it introduces is interpreted as a temporal adverbial clause. The antecedent of the relative clause may or may not be present on the surface, but, whether the antecedent is there or not, the adverbial clause is always interpreted as a temporal clause. It should be noted, however, that the relative clause marker da must always be present whenever a temporal (relative) clause is introduced by sai.

(69) a. Ba - i yi aiki ba sai (lokaci-n) da  
 not-he-comp. do work not until (time-the) r.m.  
suka zo  
 they-r.c. come

'He didn't work until (after) they had come'

b. \*Ba - i yi aiki ba sai suka zo  
 not-he-comp. do work not until they-r.c. come

'He didn't work until (after) they had come'

(70) a. Ba - i iso ba sai (lokaci-n) da suka tashi  
 arrive leave

'He didn't arrive until after they had left'

b. \*Ba - i iso ba sai suka tashi  
 not-he-comp. arrive not until they-r.c. leave

'He didn't arrive until after they had left'

It is interesting to note that the kind of restriction

that obtains when sai meaning 'until' quantifies a noun phrase also obtains when sai introduces a temporal clause. For example, if the verb in the main clause is a point-action verb, the main clause must be negated before sai can be used to embed a temporal adverbial clause into the main clause. Thus, while (71a) is grammatical, (71b) isn't (because sai occurs in an affirmative sentence containing a point-action verb).

- (71) a. Ba - i            zo   ba   sai   da   suka   tashi  
 not-he-comp. come not until r.m. they-rc.leave  
 'He didn't come until after they had left'
- b. \*Yaa            zo   sai   da   suka   tashi  
 he-comp. come until r.m. they-r.c. leave  
 \*'He came until they had left'

Consider the following examples containing sai meaning 'until' as a quantifier of noun phrases.

- (72) a. Ba - i            zo   ba   sai   karfe   biyu  
 not-he-comp. come not until o'clock 2  
 'He didn't come until 2:00'
- b. \*Yaa            zo   sai   karfe   biyu  
 he-comp. come until o'clock 2  
 \*'He came until 2:00'

However, sai can occur in both affirmative and negated sentences containing durative action verbs either as a quantifier of noun phrases or as an introducer of temporal clauses. Thus while only the (a) sentences are grammatical

in (71) and (72), both (a) and (b) are grammatical in (73).

(73) a. Ba - i            yi karatu ba sai da suka  
not-he-comp. do reading not until r.m. they-rc.  
tashi 'leave'

'He didn't study until after they had left'

b. Yaa            yi karatu sai da suka            tashi  
he-comp, do reading until r.m. they-r.c. leave

'He studied until they left'

Compare example (73) with examples (5<sup>2</sup>) and (5<sup>3</sup>), page 13<sup>2</sup>.

It is no coincidence that the syntax and semantics of sentences containing sai meaning 'until' as quantifier of noun phrases and as introducer of temporal clauses are so much alike especially if we recall that time adverbial clauses are essentially full NP's that are modified by restrictive relative clauses. Now, given that time adverbial clauses are underlying NP's, we can say that in both simple and complex sentences sai is actually introducing ordinary noun phrases. Accordingly, both the two uses of sai (i.e. its use in complex sentences, where it introduces a temporal clause, and in simple sentences, where it introduces a noun phrase) can be represented in exactly the same way. I.e., in both cases sai can be defined as identifying a point of time (on a scale) at which a given proposition holds or does not hold and implying that for all time preceding that point of time the proposition does not hold or holds. Thus, the presupposition and implication of sai 'until' can be represented as in (55) above.

3.7.2. The use of sai meaning 'unless, only if'

When sai introduces a clause other than a relative clause, the preposition is translatable as 'unless, only if' and the clause introduced by it is consequently interpreted as a conditional adverbial clause. For example, in the following sentences sai is followed by a clause in the simple completive aspect and as such, the clause is interpreted as a conditional clause

- (74) Baa za - i yi aiki ba, sai sun tashi  
not fut.-he do work not unless they-comp. leave

'He won't work unless/until they leave'

- (75) Sai sun tashi za - i yi aiki  
only they-comp. leave fut.-he do work

'He will work only if they leave'

It should be noted that there is always the possibility of inserting in 'if' immediately after sai and before the subordinate clause. In fact, if the main verb is not negated, the sentence is much better with in 'if' than without it. Consider the following examples which mean exactly the same things with their respective counterparts in (74) and (75).

- (76) Baa za-i yi aiki ba, sai in sun tashi  
if  
'He won't work unless/until they leave'

? zamu saɓaɓa  
wanna ken baɓi  
sai in sun tashi

- (77) Sai in sun tashi za-i yi aiki  
if  
'He will work only if they leave'

We can therefore say that the use of sai meaning

'unless, only if' is essentially the same as its use meaning 'only' (i.e. as a quantifier of noun phrases). The only difference between the two uses of sai is that when it quantifies a noun phrase it identifies an individual while with conditional clauses it identifies a condition, as the sole condition under which a given activity or event will commence or cease and implies that for all other conditions the activity or event will not commence or cease. Therefore, it is possible that the presupposition and implication of sai meaning 'unless, only if' (i.e. introducing adverbial clauses) can be formalized in ways similar to those of sai meaning 'only' (i.e. introducing noun phrases).

### 3.7.3. Har introducing temporal adverbial clauses

The preposition har can be used to introduce two different types of adverbial clauses in Hausa--(1) clauses in the relative (completive) aspect (cf. chapter 1, Time Adverbial Clauses) and (2) clauses in the subjunctive (cf. chapter 2, Subjunctive Adverbial Clauses).

When har introduces a clause in the relative aspect, it is translatable as 'until/even after' and the adverbial clause is interpreted as a temporal adverbial clause. Note that in this case the clause that follows har is essentially a relative clause, i.e. a full NP modified by a relative clause, although sometimes the clause may lack an antecedent and in this particular case, the relative clause marker da will consequently be absent too. However, whether

the antecedent of the relative clause (introduced by har) is there or not, the aspect marker in the embedded clause will be a relative (completive) aspect marker. Thus, in the following sentences, all the clauses that follow har are interpreted as temporal adverbial clauses.

(78) Ba - i yi barci ba har (lokaci-n da)  
 not-he-comp. do sleep not even time-the r.m.  
muka dawo daga makaranta  
 we-r.c. return from school

'He didn't sleep even after we returned from school'

(79) Yaa yi barci har (lokaci-n da) muka  
 he-comp. do sleep even time - the r.m. we-r.c.  
 dawo daga makaranta  
 return from school

'He slept even up to the time when we returned from school'

As exemplified in (78) and (79), har can occur in both negated and affirmative sentences. Now, if we compare the use of har as an introducer of temporal adverbial clauses and its use meaning 'until' when introducing noun phrases, we will see that the two uses are essentially the same, especially when we recall that temporal adverbial clauses are relative clauses (i.e. full NP's modified by relative clauses). In both cases har refers to a period of time during which a given proposition holds (or does not hold) and identifies a point of time at which it is certain that the proposition also holds (or also does not hold).

When har introduces a subjunctive clause, the clause

is also interpreted as a temporal adverbial clause. I.e., both types of clauses introduced by har (i.e. relative and subjunctive clauses) are temporal clauses. Note that the clause introduced by har can only be in the subjunctive if the aspect in the main clause is other than the completive aspect. (Cf. chapter 2 where I discussed the various uses of the subjunctive).

- (80) Baa za - i yi barci ba har mu dawo  
not fut.-he do sleep not even we-subj. return

'He will not sleep even when we return'

- (81) Za - i yi barci har mu dawo  
fut.-he do sleep even we-subj. return

'He will be sleeping even after we have returned'

Note that whenever the main clause is in the future (or other non-completive) aspect there are two options with regard to the tense in the subordinate clause that har introduces. The embedded clause may be in the subjunctive (as in 80 and 81) or it can be a full relative clause as in (82) and (83) below.

- (82) Baa za - i yi barci ba har lokaci-n da ~~mu~~  
not fut.-he do sleep not even time-the r.m.  
muka dawo daga makaranta  
we-r.c. return from school

'He will not sleep even when we return from school'

- (83) Za - i yi barci har lokaci-n da muka dawo  
fut.-he do sleep even time-the r.m. we-r.c.return

'He will be sleeping even after we have returned'

It can therefore be said that all the uses of har (i.e. its use in introducing relative and subjunctive adverbial clauses and its use when introducing simple NP's) are essentially the same. That is, in all the three where it is used (with a temporal meaning), har refers to a period of time during which a given proposition holds or does not hold and identifies a point of time at which it is certain that the proposition also holds or also does not hold. Therefore, all the three uses of har have, essentially, the same implication(s) which can be represented as follows:

(84) Implication:  $\exists p (\wedge t_1 (t_1 \in p \rightarrow \neg Ft_1) \ \& \ p \geq t_2)$

If we apply (84) to (78) we get: there exists a period of time such that for all time<sub>1</sub> that is within that period bai yi barci ba ('he didn't sleep') at that time<sub>1</sub> and that period of time<sub>1</sub> extends up to and includes when we returned from school (time<sub>2</sub>). But, if we apply (84) to (79) or (81) we would get: there exists a period of time such that for all time<sub>1</sub> that is within that period, yaa yi barci ('he slept') at that time<sub>1</sub> and that period of time<sub>1</sub> extends up to and includes when we returned from school (time<sub>2</sub>).

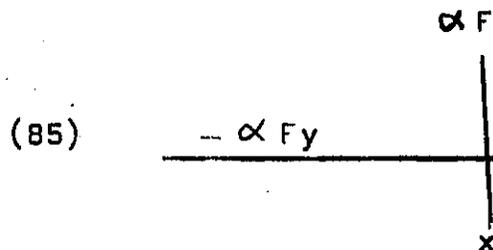
### 3.8. Summary (of the uses of sai and har when introducing NP's and when introducing adverbial clauses)

In the foregoing sections, I have discussed the various uses of sai and har (introducing noun phrases and

adverbial clauses) and come up with the following conclusions:

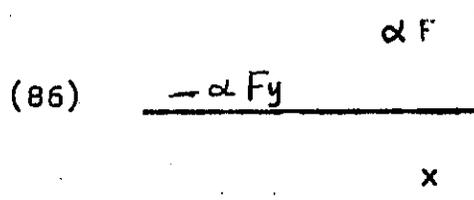
- A. (1) When sai has the meaning 'only; except', it identifies an entity as the sole member of a set for which a given proposition holds or does not hold and implies that for all other entities the proposition does not hold or holds.
- (2) When sai has the meaning 'unless; only if', it identifies a condition as the only condition under which a given activity/state will start or cease (i.e. will hold or will not hold) and implies that under all other conditions the activity/state will not commence or cease (i.e. will not hold or will hold). Cf. (66).
- (3) When sai has the meaning 'until' in simple and complex sentences (i.e. when it quantifies a noun phrase and when introducing an adverbial clause) it identifies a point of time at which a given proposition holds or does not hold and implies that for all time preceding that point of time the proposition does not hold or holds. Cf. (55).

All the three uses of sai (i.e. as in A. (1), (2) and (3)) can be diagrammed as follows:



- A. (1) When har has the meaning 'even' it refers to a set for which a given proposition holds or does not hold and identifies an entity as an additional member of the set for which the proposition also holds or also does not hold (although the speaker was (not) expecting the proposition to hold also for the identified entity).
- (2) When har has the meaning 'until; even after' in both simplex and complex sentences (i.e. when introducing noun phrases and when introducing adverbial clauses), it refers to a period of time during which a given proposition holds or does not hold and identifies a point of time at which the given proposition also holds or also does not hold.

All the various uses of har can be diagrammed as follow:



4. Da: an introducer of subordinate clauses

In this section, I will investigate sentences that contain subordinate clauses that are introduced by the "particle" da. The following sentences contain different types of subordinate clauses that are introduced by da:

- (87) a. Gaa yaro-n da Kande ta-kəs so(-nsa).  
 see boy-the ? K. she-r.p. like(-him)

'Here is the boy that Kande likes/loves'

- b. Gaa yaro-n            ya-kee    so-n    Kande  
 see boy-the            he-r.p. like K.  
 'Here is the boy who likes/loves Kande'
- c. Sun            tashi lokaci-n da muka    iso  
 they-comp. leave time-the ? we-r.c. arrive  
 'They left when we arrived'

(88) a. Da mun            iso,    zaa-su    tashi  
 ? we-comp. arrive fut.-they leave  
 'As soon as we arrive, they will leave'

b. Da suka            iso,    sai muka    ci abinci  
 ? they-r.c. arrive then we-r.c. eat food  
 'Immediately after they had arrived, we ate'

Verb da + relp.

(89) a. Naa            yi mamaki da kuka            zo    da-wuri  
 I-comp. do wonder ? you-r.c. come early  
 'I am surprised that you arrived (so) early'

b. Naa yi murna da kuka            sami dama-r    zuwa  
           glad ? you-r.c. get chance-of coming  
 'I am glad you were/are able to come'

Verb da + subjunctive

(90) a. Yaa            gargade su    da su            daina  
 he-comp. admonish them ? they-subj. stop  
 zalumta-r    talakawa  
 cheating-of poor people  
 'He admonished them to stop cheating the poor'

b. Naa            dokanta da n            tafi gida  
 I-comp. eager ? I-subj. go home  
 'I am anxious to go home'

(91) Gwamma mu            zauna da mu            tafi  
 better we-subj. stay ? we-subj. go  
 'It is better for use to stay than to go away'

It can be seen from the above examples that da introduces several types of subordinate clauses. In example 87, the particle da is used to mark or introduce relative clauses. Here, the particle is always placed between the antecedent NP and the relative clause (that is, in relative clauses that contain overt antecedents). It should be noted the da's in sai da 'until', tun-da 'since' and bayan da 'after', etc., are also instances of the relative clause da. In the sentences of (88), however, the particle introduces subordinate adverbial clauses while in the sentences of (89) - (91) it introduces nominalized sentences that function as predicate complements. That the clauses in such examples as (89) through (91) are nominalizations can be seen from the fact that any of the clauses in the examples can be replaced by an ordinary noun phrase. For example,

- (92) a. Naa yi-murna da doki-n (da ka baa ni)  
 I-comp. happy ? horse-the (you gave me)  
 'I am happy about the horse (you gave me)'
- b. Yaa gargade su da sallaa  
 he-comp. admonish them ? prayers  
 'He admonished them to pray'
- c. Gwamma Audu da Garba  
 better A. ? G  
 '~~Audu is better than Garba~~  
*Audu is preferable to Garba*

We can therefore say that the particle da introduces three types of subordinate clauses--(1) relative clauses, (2) adverbial clauses and (3) nominalized sentences.

The three types of subordinate clauses introduced by da exhibit some differences in their syntactic behaviour.

#### 4.1. Da introducing relative clauses

When da introduces a relative clause, the clause has the following syntactic characteristics:

(a) there is generally a noun phrase in the underlying structure of the main clause that is reflected in the subordinate clause (i.e. the relative clause).

(93) yaro-n da Kande ta-kee so(-nsa)  
 boy-the ? K. she-r.p. liking(-him)

'The boy that Kande likes/loves'

(94) yaro-n da ya-kee so-n Kande  
 boy-the ? he-r.p. liking K.

'The boy who likes/loves Kande'

(b) the clause cannot be moved to sentence initial position leaving the antecedent behind. Therefore, (95) is ungrammatical.

(95) \*Da Kande ta-kee soo, gaa yaro-n  
 ? K. she-r.p. liking see boy-the

\*'That Kande likes/loves, this is the boy'

*not a good example  
 since focus on a  
 constituent is  
 impossible*

(c) the clause cannot be replaced by a gerundive nominal. Thus the following examples are ungrammatical.

(96) \*Wannan nee yaro-n da so-n Kande  
 this cop. boy-the ? liking Kande

\*'This is the boy that Kande's liking'

(97) \*Mun ci abinci lokaci-n da zuwa - n - su  
 we-comp. eat food time-the ? coming-of-them

\*'We ate when their coming'

#### 4.2. Da introducing adverbial clauses

When da is used to introduce adverbial clauses as in example (88), the adverbial clause has the following (syntactic) characteristics.

(a) The clause does not contain a reflex of any NP's in the main clause.

(b) The clause can be fronted. In fact when the da introduces an adverbial clause in the relative completeive fronting is almost obligatory.

(98) Da sun zo, zaa-mu ci abinci  
 ? they-comp. come fut.-we eat food

'As soon as they arrive, we will eat'

(99) Da suka zo, sai muka ci abinci  
 ? they-r.c. come then we-r.p. eat food

'Immediately after they had arrived, we ate'

(c)  
 (a) The adverbial clause introduced by da can be replaced by a gerundive nominal.

(100) Da zuwa - n - su, sai muka ci abinci  
 ? coming-of-them then we-r.c. eat food

'On their arrival, we ate'

(101) Da zuwa - n - su, zaa-mu ci abinci  
 ? coming-of-them fut.-we eat food

'On their arrival, we will eat'

(d) Adverbial clauses introduced by da have tense restrictions in their main clauses. When the adverbial clause is in the simple completive, the main clause must be either in the subjunctive (in which case it is obligatorily preceded by sai 'then') or in the future 1.

*impossible probably ok*

(102) Da yaa zo, sai mu ci abinci  
 ? he-comp. come then we-subj. eat food  
 'As soon as he arrives, we should eat'

(103) Da yaa zo, zaa-mu ci abinci  
 ? he-comp. come fut.-we eat food  
 'As soon as he arrives, we will eat'

*not a Q*

But, when the adverbial clause is in the relative completive, the main clause must also be in the relative completive. Note, however, that if the main clause is a single clause, it must be preceded by sai 'then', but if there is more than one clause (i.e. when the main clause is a sequence of co-ordinated clauses), sai is optionally used before the last clause.

*is this true - check*

(104) Da suka zo, sai muka ci abinci  
 ? they-r.c. come then we-r.c. eat food  
 'Immediately after they had arrived, we ate'

(105) Da Audu ya zo, muka ci abinci, muka  
 ? A. he-r.c. come we-r.c. eat food we-r.c.  
 zauna muka yi hira (sai).....  
 sit we-r.c. do converse (then)....  
 'When Audu arrived, we ate, sat down and conversed and then....'

The adverbial clauses in (104)-(105) (and also the one in

<sup>no</sup>  
 (1) they do not mean "the time when" indeed the word in the clause cannot be the time when the main clause took place

example (88b))--i.e. those that are interpreted as 'immediately after' clauses, are I think, ordinary when-clauses, because they all can have the time noun lokaci 'time', optionally. Hence, (106) means the same as (104)--although the latter example is generally more acceptable.

(2) whether the adverbial clauses can be fronted for focus or left S front, these clauses are never fronted & cannot be focussed

(106) Lokaci-n da suka zo, sai muka ci abinci  
 time-the r.m. they-r.c. come then we-r.c. eat

'Immediately after they had arrived, we ate'

(3) equivalent clauses in all languages do not have a form which resembles RC

It is the presence of sai 'then' in the main clause that necessitates the interpretation of the ordinary when-clause as 'immediately after' adverbial clause in such sentences as (104).

I doubt it - rather it is the meaning of this type of clause that calls for sai, i.e. in the story set in the da clause, all events are excluded except that called by sai

4.3. Da introducing nominalized sentences

When da is used to introduce sentential complements of certain types of predicates such as yi-murna 'be happy/glad', yi-mamaki 'be surprised', gargada 'admonish', etc., the embedded clause has the following characteristics:

← not true (an indirect restriction case)

(a) the embedded clause does not contain a reflex of any noun phrase in the main clause.

(b) the clause generally cannot be fronted; thus the following ungrammatical examples:

(107) \*Da su daina zalumci, yaa gargade su  
 ? they-subj. stop cheating he admonish them

\*'To stop cheating, he admonished them'

(108) \*Da kuka zo da wuri, naa yi-mamaki  
 ? you-r.c. come early I-comp. surprised  
 'That you came so early, I am surprised'

(c) Sentential complements introduced by da can be replaced by a gerundive nominal.

(109) Naa yi-murna da zuwa - n - ku  
I-comp. glad/happy ? coming-of-you

'I am glad about your coming'

(110) Yaa gargade su da daina-zalumtar-talaka  
he-comp. admonish them ? stopping cheating poor

'He admonished them to stop cheating the poor'

(111) Da tafiya-r-mu gara mun zauna  
? going-of-us better we-comp. stay

'It is better for us to stay than to go'

(c) Tense restriction:

Sentential objects of predicates such as yi-mamaki 'be surprised', yi-murna 'be happy/glad', etc., allow all aspects other than the subjunctive. However, when the aspect of the da clause is the completive or the progressive, the relative aspect marker is used instead of the plain completive or progressive. (Cf. sentences (115-118)).

(112) Naa yi-murna da zaa-ku sami dama-r zuwa  
I-comp. glad ? fut.you get chance-of coming

'I am glad you will be able to come'

(113) Naa yi-murna da ku-kan sami dama-r zuwa  
you-habit.

'I am glad you normally get the chance to come'

(114) \*Naa yi-murna da ku sami dama-r zuwa  
you-subj.

\*I am glad for you to be able to come'

(115) \*Naa yi-mamaki da kun sami dama-r zuwa  
I surprised ? you-comp. get chance-of coming

'I am surprised you were able to come'

(116) \*Naa yi-murna da ku-naa samu-n dama-r zuwa  
you-prog. getting

'I am glad you get the chance to come'

(117) Naa yi-mamaki da kuka sami dama-r zuwa  
you-r.c.

'I am surprised that you were able to come'

(118) Naa yi-murna da ku-kee samu-n dama-r zuwa  
you-r.p.

'I am glad that you get the chance to come'

But, sentential complements of predicates such as gwamma/  
gara 'better', fi-kyau 'better', gargada 'admonish', etc.,  
always occur in the subjunctive. Thus the following ungram-  
matical sentences.

(119) \*Yaa gargade su da sun/suka  
he-comp. admonish them ? they-comp./they-r.c.  
daina zalumta-r talakawa  
stop cheating poor

\*'He admonished them that they stopped cheating  
the poor'

(120) \*Yaa fi-kyau mu tsaya da mun/muka tafi  
it-comp. better we stop ? we-comp. go

\*'It is better for us to stay than we went'

(121) \*Gwamma mu tsaya da zaa-mu tafi  
better we stay ? fut.-we go

\*'It is better for us to stay than we shall go'

##### 5. Da: the neutral marker of subordinate clauses

It can be seen from the data presented in section 4  
of this chapter that all the three types of clauses that  
can be introduced by da are subordinate clauses. We can

therefore deduce that the particle da is the neutral marker of subordinate clauses in Hausa. Assuming that da is the neutral marker of subordinate clauses, let us try to investigate why da is not used to introduce all subordinate clauses.

Subordinate clauses in Hausa can be divided into three main groups with regard to the introducer da.

A. those that are obligatorily marked by da, viz.

(1) sentential complements of certain types of predicates such as yi-murna 'be happy/glad', yi-mamaki 'be surprised', etc., (2) relative clauses and (3) adverbial clauses such as those in (87a).

(122) \*naa        yi-mamaki kuka        zo        da-wuri  
I-comp. surprised you-r.c. come        early

'I am surprised that you have come so early'

(123) \*Naa        yi-murna kuka        zo        da-wuri  
I-comp. glad        you-r.c. come        early

'I am glad you have come early'

(124) \*Yaro-n    ya-kee        so-n        Kande  
boy-the he-r.p. liking-of K.

'The boy who likes/loves Kande'

(125) \*Sun        zo,        zaa-mu    ci        abinci  
they-comp. come fut.-we eat food

'As soon as they come, we will eat'

B. those subordinate clauses that are optionally introduced by the marker da, viz. sentential complements of certain types of predicates such as san 'know', gargada

'admonish', dokanta 'be anxious', etc.

(126) Naa san (da) (cewa) sun tafi  
I-comp. know ? (saying) they-comp. go

'I know that they have gone'

(127) Naa dokanta (da) n tafi gida  
I-comp. anxious ? I-subj. go home

'I am anxious to go home'

(128) Yaa gargade su (da) su daina zalumci  
he-comp. admonish them ? they-subj. stop cheat

'He admonish them to stop cheating'

C.(i) those subordinate clauses in which da is totally disallowed, i.e. those subordinate clauses that function as objects of prepositions such as domin 'because; in order to', har 'until', which introduce adverbial clauses.

(129) \*Za - n tashi domin da Garba yaa zo  
fut.-I leave because ? G. he-comp. come

'I will leave because Garba has come'

(130) \*Za-n yi karatu domin da n ci jarrabawa  
do reading because ? I-subj. eat exam.

'I will study in order to pass the exam.'

(131) \*Za-n yi gudu har da n gaji  
do running until ? I-subj. tire

'I will run until I become tired'

(ii) those subordinate clauses in which the marker da is integrated into the preposition which introduces the subordinate clause, i.e. prepositions such as tun 'since (=because)', and sabo 'in order to, because'.

- (132) Za - n tashi tun-da Audu yaa dawo  
 fut.-I leave since Audu he-comp. return  
 'I will leave, since Audu is back'
- (133) Za - n tashi sabo-da Audu yaa dawo  
 fut.-I leave because A. he-comp. return  
 'I will leave because Audu is back'
- (134) N - naa karatu sabo-da m ci jarrabawa  
 I-prog. reading in order I-subj. eat exam.  
 'I study so that I may pass the exam.'

It can be seen from the data above, that da is generally either obligatory or optional in non-adverbial subordinate clauses, but it is generally either disallowed or integrated into a preposition in adverbial subordinate clauses. The reason why the neutral subordinator da is either disallowed or integrated into a preposition in subordinate adverbial clauses has to do with the fact that adverbial clauses are generally introduced by semantically significant prepositions which can themselves function as subordinators. Therefore, when the neutral subordinator da co-occurs with such adverbial prepositions, it becomes redundant and so it is either deleted or merged with the preposition.

It is interesting to note that there is one type of subordinate adverbial clause (i.e. 'as soon as' clauses) that obligatorily takes the neutral subordinator da. This is so because there isn't any adverbial preposition that marks 'as soon as' adverbial clauses.

## 6. Summary

In this chapter, I have attempted to describe the syntax and semantics of sentences containing the adverbial prepositions sai, har, tun, domin and saboda and clauses that are introduced by the particle da. The data have shown that each of the prepositions can introduce at least two semantically distinct adverbial clauses, the meaning of the clause in each case being determined by the kind of aspect it contains. It can therefore be said that it is not the prepositions themselves that trigger the use of the subjunctive or the relative or simple aspect in the subordinate clauses that can follow them but rather that it is the aspect in the clause that determines the meanings of the prepositions. It has also been shown that the particle da introduces three types of subordinate clauses, and should therefore be regarded as the neutral introducer of subordinate clauses.

*differences in  
context may  
alter  
the meaning of  
the particle  
does not  
change*

The following table illustrates the various types of clauses that each of the prepositions and the particle da can introduce and the meanings of each of them according to the type of aspect in the subordinate clause.

Prep.	Simple Comp.	Relative Comp.	Subj.
<u>sai</u>	+ (unless; only if)	+ (until)	-
<u>har</u>	-	+ (until; even after)	+ (until; even after)
<u>tun(da)</u>	+ (since = because)	+ (since)	-
<u>saboda</u>	+ (because)	-	+ (so that; in order to)
<u>domin</u>	+ (because)	-	+ (so that; in order to)
<u>da</u>	+ (as soon as)	+ (that-comp.; rel. marker)	+ (to-comple- mentizer)

da obligatorisch mit relp.

sai da sutka...

sai sun...

tun da sutka...

tun da sun...

da sutka...

da sun...

yi munu }  
yi mahali } da sutka...

\*

\*

har sutka...

\*

\*

har sun...

domin sun...

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