SOME ASPECTS OF NOMINALISATION IN HAUSA

by

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This thesis presents part of the syntax of Hausa within the framework of Transformational Generative Grammar, the specific area investigated being various aspects of nominalisation.

After a theoretical introduction chapter 1 gives an analysis of the Hausa complement system in terms of embedding a sentence within an NP.

Chapters 2, 3 and 4 analyse in some detail four different kinds of nominalisation and present evidence in support of Chomsky's lexicalist hypothesis i.e., that at least some such nominals should be entered directly in the lexicon rather than be transformationally derived from underlying sentences.

There follow three appendices: one summarising and exemplifying the phrase structure rules presupposed in the preceding analysis; one giving a selection of the main transformational rules discussed; one listing a representative sample of verbs with their different complementation possibility.

The thesis closes with a bibliography of references cited.
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INTRODUCTION

The phenomenon of nominalisation has been frequently looked into within the framework of Transformational Generative Grammar (1) since Chomsky (1957) (2) cited the relationship of the ambiguous phrase "the shooting of the hunters" to either of the two sentences:

"The hunters shoot X" or

"X shoot the hunters"

as evidence in favour of a transformational approach to syntactic analysis. "Hunters" can be understood as the subject of the verb as "lions" is in "the growling of lions" or as the object of the verb as "flowers" is in "the raising of flowers". This ambiguity cannot be adequately explained on the level of phrase structure or Immediate Constituent Analysis because all these phrases are represented (at PS level or ICA) as "the-V-ing - of- NP". But we can adequately explain the ambiguity transformationally. To account for the interpretation of "the shooting of the hunters" analogous

(1) Some knowledge of the elements of Transformational Generative Grammar as in Syntactic Structures and Aspects of the Theory of Syntax by N. Chomsky is presupposed.

(2) Name Chomsky: Syntactic Structures.
to "the growing of lions", we can set up a transformation which rewrites any sentences of the form \((NP - V)_S\) as
\((the - V - ing - of - NP)_NP\); and to account for the interpretation of "the shooting of the hunters" analogous to "the raising of flowers" we can set up a transformation which rewrites sentences of the form \((NP_1 - V - NP_2)_S\) as
\((the - V - ing - of - NP_2)_NP\). Thus the first transformation will rewrite the sentences "the hunters shoot" and "the lions growl" as "the shooting of the hunters" and "the growling of lions" respectively and the second transformation will transform "X shoot the hunters" and "X raise flowers" to "the shooting of the hunters" and "the raising of flowers" respectively.

The origin of the ambiguity in "the shooting of the hunters" is the fact that the relation of "hunters" to "shoot" differs in the two underlying sentences. We do not have this kind of ambiguity in the growling of lions" or "the raising of flowers" because neither "X growls the lions" nor "flowers raise X" is a grammatical sentence in English.

Lees (1) extended this form of transformational analysis in his treatment of English nominalisations and assumed that action nominals such as the underlined words in 1 and 2 below:

1. The committee's appointment of John.
2. The committee's objection to John.

and agentive nominals such as the underlined nominals in

3 - 6:

3. He is the seller of the car.
4. He is the salesman.
5. He is the cook of the meat.
6. He is the cook.

are derived transformationally from "the committee appoints John", "the committee objects to John", "he sold the car", "he sells cars", etc., etc., etc..

Further, Rosenbaum(1) extended this transformational analysis to complement structures of the type exemplified by:

7. John condescended to go.
8. John wants to go.
9. John forced Mary to kiss him.
10. John knows that Bill is a good boy.

etc. where the sentence is embedded as either part of the VP or the NP.

Since these extensions of the theory were made various modifications have been suggested. Firstly the existence of the VP complements(2) has been called into question and secondly the validity of a transformational analysis for nominals of the kind Lees deals with has been put into doubt.

This thesis has two aims: to produce a theoretically rigorous description of a small part of the grammar of Hausa; to cast light on the two theoretical problems mentioned above.

The first chapter gives an account of the complement system in Hausa and in as much as there is no motivation for setting up a VP complement of any kind provide negative evidence for restricting complementation to the NP.

The remaining chapters describe the various nominals in Hausa and provide direct evidence for the so-called "lexicalist hypothesis". But to understand this it is necessary to review what is meant by this term.

Chomsky (1967) (1) challenges Lees' assumption and puts forward another hypothesis for the formation of nominals. The main difference between Chomsky's position and Lees' is in the treatment of the derived nominals (e.g. proof of P below). There is no controversy over the gerundive nominal (e.g. proving) - both Chomsky and Lees agree that the latter is transformationally derived from a base sentential form.

Chomsky's position is that transformations are not the appropriate mechanism for getting the derived nominal. He suggested that the derived nominal be entered directly in the lexicon with its own idiosyncratic features. (1) His three main reasons for differentiating between the derived nominal and the gerundive are based on the three differences between the two as regards: (1) their respective productivity (2) the semantic relation of the nominal to the underlying verb and (3) the internal structure of the whole NP. Specifically, the gerundive nominal can be formed freely from sentences and the semantic relationship between the preposition and the gerundive nominal is also regular. The gerundive nominal does not appear to have the internal structure of a noun phrase.

The derived nominal however, is quite different from the gerundive in all these respects. There are far more restrictions on the formation of derived nominals than there are on the formation of gerundive nominals. For example, we can have the gerundive

(1) We must remember that during Lees' time the theory of T.G.G. had not developed sufficiently to offer any alternative to a transformational derivation for both types of nominalization because there was no explicit theory of the lexicon.
constructions of 12 from 11 but not 13:

11. (a) John is easy to please.
   (b) John is certain to win the prize.
   (c) John amused the children with his stories.

12. (a) John's being easy to please.
    (b) John's being certain to win the prize.
    (c) John's amusing the children with his stories.

13. (a) *John's easiness to please.
    (b) *John's certainty to win the prize.
    (c) *John's amusement of the children with his stories.

There are however, some derived nominals that are superficially similar to the ones in 13 which pair with the gerundive nominal e.g. 14 versus 15 below:

14. (a) John's eagerness to please.
    (b) John's certainty that Bill will win the prize.
    (c) John's amusement at the children's antics.

15. (a) John's being eager to please.
    (b) John's being certain that Bill will win ...
    (c) John's being amused at the children's antics.

We must explain why/examples of 13 are ruled out although those of 14 are allowed.

(1) Chomsky : Remarks on Nominalisation op cit.
Regarding semantic regularity, the derived nominal's relation to the base form is not regular in the same way as the semantic relation of the gerundive nominal to the base form is. The derived nominal has its own idiosyncratic features in addition to the basic semantic features it shares with the base form (verb). Take for example such nominals as belief, doubt, conversion, permutation, activities, specifications, etc., etc., with their varied semantic relation to the verbs. If we were to accommodate these facts transformationally we would have to assign a range of meaning to the base form and say that with certain semantic features it nominalized and with others it does not. And this will then grossly affect the hypothesis that transformations do not affect meaning.

The third major difference cited by Chomsky between the nominals is that only the derived nominal has the structure of a noun phrase. Thus we can say "the proof of the theorem" but not "the proving the theorem"; or we can qualify the derived nominal with an adjective like any noun phrase e.g. "John's unmotivated criticism of the book" but not "John's unmotivated criticizing the book". The derived nominal can pluralize but the gerundive nominal cannot e.g. "John's three proofs of..."
the theorem" but not "John's three provings the theorem". On the other hand only the gerundive nominal can take aspect: "John's having proved the theorem" to which there is no analogous construction containing a derived nominal.

It is because of these contrasts between the two types of nominal that Chomsky treats them differently. He adopts the transformationalist position with the gerundive nominal which can be produced freely from propositions and maintains a close semantic relation with the base form and, moreover, retains the internal structure of a sentence rather than of a noun phrase; and he adopts the lexicalist position with regard to the derived nominal whose idiosyncrasies can be explained more appropriately in the lexicon than they can transformationally. (1)

Evidence comparable to that which Chomsky adduces for English will be brought forward for Hausa.

(1) cf Aspects (P.87-) " all properties of a formative that are essentially idiosyncratic will be specified in the lexicon". cf his footnote 16 : "Recall Bloomfield's characterization of a lexicon as the list of basic irregularities of a language (Bloomfield 1933 P.271). The same point is made by Sweet (1913 P.31) who holds that "grammar deals with general facts of language, lexicon with the special facts."
CHAPTER 1.

NP COMPLEMENTATION

The object of sentence 16 below is a simple NP. Now if we compare 16 with sentences 17 - 20 it will be clear that what follows the verb in 17 - 20 is also a kind of object and as such may also be analyzed as a kind of NP:

16. Audù yá nàa só n làabaärin
   Audu likes the story
17. Audù yá nàa só n rùbùûtün wàsììkàà
   Audu likes letter-writing.
18. Audù yá nàa só n rùbùutá wàsììkàà
   Audu likes writing letters.
19. Audù yá nàa só(ñ) (1) yà rùbùutá wàsììkàà
    Audu wants to write a letter.
20. Audù yaa són(ii) ceewáá Gárbà yaa rùbùutá wàsììkàà
    Audu knows that Garba has written a letter

(1) Some verbal nouns such as soo take the genitive link -n when they are followed by a non-sentential object i.e. a common noun like làabaärin story, a verbal noun e.g. koɔmaawáa "returning", or a pronoun. But the genitive link is optional with such verbal nouns when they are followed by a sentential object.

Examples of non-sentential objects:
Audu ya nàa só n làabaärin    Audu likes the story

fn (1) in+t on p. 14.
fn (2) on p. 14
The objects of sentences 17 - 20 are special kinds of NP which have certain characteristics which make them different from the simple NP object of 16: the objects of sentences 17 - 18 are nominals derived from a verb with which they still bear a close semantic relationship while the objects of sentences 19 and 20 consist of complete sentences. The items occurring as objects in sentences 17 - 20 are various instances of nominalisation in Hausa.

I shall assign the following simplified deep structures to sentences 16 - 20: cf. Appendix A. for the P.S. rules presupposed.

(1) cont.

\[
\begin{align*}
y_a_aa \text{ son koomaawaa} & \quad \text{he wants returning} \\
y_a_aa \text{ son sa} & \quad \text{he likes him/it.}
\end{align*}
\]

The first person singular pronoun is the only odd pronoun in this respect: instead of \underline{ya naa son na} we get \underline{ya naa soo naa} "he likes me". Note also that this pronoun differs from the other object pronouns in its tone and vowel length - all the other pronouns have a short vowel and a low tone while the first person singular pronoun has a long vowel and a high tone.

(2) The verb sanii "to know" drops its final vowel -ii obligatorily with non-sentential objects optionally with sentential objects e.g.: \underline{yaa san shi} he knows him, \underline{yaa san(ii) ceewaa ya naa zuwaa} he knows that he is coming.
1. S
   NP
   Pred
   AUX
   VP
   V
   NP

Audu ya naa soo
laabaarin
of example 16

2. S
   NP
   Pred
   Audu
   AUX
   VP
   V
   NP
   ya naa
   soo

rubuutuu
NP
NP
S
rubuutuu
NP
wasiikaa
AUX
PP
ta naa
Prep
NP
da rubuutuu

(this structure will be subject to T-Genitivization of P)
cf example 19.
cf example 19.
The two types of nominalisation exemplified in 19 and 20 are both instances of noun phrase complementation. I shall call them **Subjunctive Complement** and **Ceewaa - Complement** respectively. My object in this section is to try to show the necessity for rewriting an NP as an S in Hausa (and to show further that VP complementation does not exist in Hausa).

**Ceewaa-Complement:**

Ceewaa complements, like most nouns in Hausa can function as:

( a). objects of one-object verbs e.g.

21. Audu yaa san(ii) ceewaa Garba yaa koomoo
    Audu knows that Garba has returned
22. Aúðù yáá sáň màgánàř
Audu knows the story

(b) as second objects of a two-object verb e.g.

23. Aúðù yáá sánář dà níi cègeëaá Gárbà yáá kóómoó
Audu informed me that Garba has returned

24. Aúðù yáá sánář dà níi màgánàř
Audu told me the story

(c) as subjects e.g.

25. Ceewaa Audu yaa daawoo yaa baa ni maamaakii
That Audu has returned has surprised me

26. lāabāarin yáá bāa nì màamaakii
the story has surprised me

There is also a number of patterns of behaviour
which are characteristic of other NP's which are also
found with ceewaa-complements e.g.

They can take the anaphoric or referential ₂n/-r
or din e.g.

27. cègeëaá zaá sú gáyáă wà sárki -₃n/din bàì dàmée ni bà
the fact that they are going to tell the king
does not worry me
They can be modified by relative clauses e.g.

28. ceewaa zaa su gayaa wa sarkii din da ka yi bai daamee ni ba
the fact that they are going to tell the king as you have said does not worry me.

The anaphoric particle in 27 and 28 may seem to qualify only the simple noun which they immediately follow (i.e. sarkii "the king") but what they actually qualify is the whole embedded sentence i.e. the ceewaa complement itself. This can be justified by example 29 below where the noun shari'aa "administering of justice" to which the -n is suffixed is feminine and feminine nouns in Hausa normally take the anaphoric -r and not the -n:

(1) The anaphoric -n/-r is generally used with both nouns and sentential NP's e.g:

yaaro-n"the boy"
ceewaa Audu yaa koomo-n"the fact that Audu has returned"
din is mainly used with sentential NP's and with foreign words or native words with unusual phonological forms e.g.:
ceewaa Audu yaa koomoo din.
pensur din - "the pencil"
29. *ceewáa sáráákúnáa suún dáína shári'á-á báá kyááu*
that the kings have stopped administering justice
is not good

Here, the anaphoric *-n* is used instead of the *-r* which
goes with feminine nouns. Therefore it must be qualifying
the whole complement sentence and not the feminine noun
*shári'áa* alone.

Further, the anaphoric particles are suffixed to
nominals only. They do not qualify verbs as such but
in 30 below we find din/-n suffixed apparently to a verb:

30. *ceewáa sóójá suún zíó-á/dín'áí báá 'abín múrnáa bá née*
that the soldiers have arrived is not good news.

The *-n/din*, although actually suffixed to a verb here,
is in reality qualifying the whole of the embedded
sentence which is a rewrite of an NP.

Ceewaa-complements can be linked to a preceding NP
by the genitive link e.g.

31. *láabaári-á (ceewáá) sáráákúnáa suún dáína*
  shári'á yáá zíó máána
the news that the kings have stopped administering
justice has come to us.
They can be preceded by prepositions e.g.

32. dágaa céewáá sóójà suú kááma múlkii sáí
talakááwáá su kà táá dà boorée
as soon as the army seized power the people
started to revolt.

They can be co-ordinated with other nouns e.g.:

33. yáá sání làábáárín dà kúma(1) céewáá mái dàdiií née
he knows the story and the fact that it is good news.

All these examples clearly justify the introduction
of S as a rewrite of an NP in Hausa.

I shall now discuss the structure of the céewáá-
complement and show how it is embedded into the matrix
sentence.

(1) In Hausa da (kuma) "and", "with" is used as a link
between nominals and adverbs but not between verbs
or clauses e.g.:
  Audu da Garba  Audu and Garba
  zuwaa da (kuma) koomoowaa
going and returning.
but not:
  * Audu yaa tafi da (kuma) Garba yaa koomoo
  Audu has gone and Garba has returned
kuma  "and" is used as a link between sentences only e.g
  Audu yaa tafi Garba kúma yaa koomoo
  Audu has gone and Garba has returned
The complement sentence is embedded directly into the matrix sentence by PS rule. The complementizer ceewaa is later introduced transformationally (cf. P. 31). When the complementizer is introduced the relationship between it and the embedded sentence is either appositional or genitival.

Appositional occurrence:

34. su nàa 'iimaänii dà ceewàa dúk bàkii báyyàn yàa mútà zài saâkè taâshîiìä wàní wùrii cîkiñ
kàsàr Hâbàshà
they believe that every blackman will rise after death in a certain place in Ethiopia.

Genitival occurrence:-

35. 'án baa dà ràhoötòò ceewà-ì soójìöjin 'yàn múlkiìn màllàkàà nà Amìrka sùn shìgà Kàmbôdiyà
it was reported that the imperialist American troops have entered Cambodia.

Similarly, when the main verb of the matrix sentence is a phrasal verb" which is in reality the verb yi "to do"

(1) The genitival occurrence is very rare with most of the Hausa speakers I have come into contact with here in London. I, moreover, do not use the genitive in this way in my idiolect at all.
followed by a dynamic-noun object; or when the ceewa complement occurs as a second NP modifying another preceding NP in constructions of the form V NP₁ NP₂, where NP₂ dominates a sentence which is preceded by ceewaa, the relationship between the complementizer and the dynamic noun is either appositional or genitival: appositional relationship between the dynamic noun and the complementizer:-

36. náa yi tsàmmaání (ceewá) ya náa zuwáa
   I do thinking that he is come
   I thought he was coming.

   genitival relationship with dynamic noun:

37. náa yi tsàmmaání-n(ceewáa)ya náa zuwáa
   I thought he was coming

   appositional with first NP:

38. 'án saamí làabaaríi ceewáa sóóján Amirka
    one get news soldiers
    suń shígá Kambodiya
    they enter Cambodia

   genitival relationship with first NP:

38 * * 38. 'án saamí làabaarí-í n ceewáá sóóján

   Amirka suń shígá Kambodiya and

Sentences 38 and 39 are synonymous/can contain the same lexical items (except the -n which is not present in 38)
They must therefore have the same deep structure: sentence 39 is derived from 38 by genitive link deletion:

T-Genitive Link Deletion

\[
\begin{array}{cccccc}
SD & X & N & GL \cdot S' & MP & Y \\
1 & 2 & 3 & 4 & 5 & SC: 1, 2, \emptyset, 4, 5.
\end{array}
\]

condition: N must have the feature plus dynamic. This condition will cover the restriction for both the phrasal verb and also a noun modified by a ceewaa complement.

The Complementizer "ceewaa"(1)

Ceewaa is the only complementizer in Hausa which has overt morphological shape.

The Hausa equivalents of the wh-complementizers of English are nouns of place, manner, time etc., modified by relative clauses. For example the Hausa for the following English sentences is:

(1) The grammatical status of ceewaa is not very clear. It has an etymological relation with the verb cee "to say"; in fact it has the same phonological form as the verbal noun of the verb but their syntactic functions are different. Although we do not get ceewaa ceewaa, we get ceewaa following immediately after the verbal nouns of verbs which have the same meaning as cee:

\[
yu \ naa \ faa\ a \ ceewaa \ S
\]

he is say that
40. Tell me when he came
41. I know where he went
42. I know what you know
43. I understand how it is done

are:

43. Gayää mi ni lookaciin da ya zoó
tell to me time which he come
44. naa san wúrí-n da ya tafi
place go
45. náa san 'ábi-n da ka sónii
thing you
46. náa gááneè yàd da 'á keè yìn sà
see how one is do it

It is evident that 'abi-n "the thing", lookaci-n
"the time" and wuri-n "the place" are just ordinary nouns
followed by the referential -n. That complex words such
as yadda/yanda "the way (how)" and 'inda "the place where",
are also compound words consisting of three grammatically
distinct morphemes can also be proved in the following way:

The three constituent morphemes of each of these words are (1) a noun (2) a referential particle and (3) a relativizer as shown in the following paradigm:

<table>
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<th>Noun</th>
<th>Referential Particle</th>
<th>Relativizer</th>
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<tbody>
<tr>
<td>yáaya</td>
<td>-n</td>
<td>da</td>
</tr>
<tr>
<td>'inda</td>
<td>-n</td>
<td>da</td>
</tr>
<tr>
<td>yáaya - n - da --&gt; yáayan da --&gt; yanda --&gt; yadda &quot;how&quot;</td>
<td></td>
<td></td>
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</table>
The derivation is like this: First, one of the two yaa's is dropped(1) leaving yan da and then the -n is assimilated to the following da giving yand da. The same process can be assumed for 'inda(i.e. 'inaa - n - da --> 'inda)(2) only that here the -n is not assimilated to the following da (cf foot note P).

Now, if we compare these two complex words (yadda, 'inda) with other ordinary nouns such as raanaa "day", wani "a certain one" which behave almost exactly in the same way when modified by a relative clause we see the following pattern:

raanaa - r - da --> raana-r da --> ran da

the day which

wani - n - da --> wani-n da --> wan da
"a certain male wh-"

wata - r - da --> wata-r da --> war da --> wadda
"a certain female wh-"

---

(1) When the first yaa is dropped the tone pattern of the complex word becomes high low yan da; but when the second is dropped leaving the yaa followed by the -n the falling pattern is high-low-low yanda. Both forms are commonly used in most dialects.

(2) 'inda may be a direct borrowing from Arabic of the Arabic preposition 'inda "where".
Another reason for disallowing these nouns as complementizers is that they are always followed by a relative clause and never by a general clause while the reverse is the case with ceewaa. Such a construction in Hausa is generated by the base rule:

\[
NP \rightarrow ( N (Ref) ) S
\]

while in English and Russian they are generated by the rule which rewrites an NP just as an S(1).

The presence of the complementizer is obligatory when the complement sentence is in initial position and is not modified by a relative clause e.g.

47. ceewaa Audu yaa daawoo gaskiyaa nee
    he return true is that Audu has returned is true.

but not *Audu yaa daawoo gaskiyaa ne.

But when the complement is in the initial position and is modified by a relative clause the presence of the complementizer is optional:

---

(1) Lees' Grammar of English Nominalization (P.59);
Comrie's Nominalizations in Russian, Dissertation for the Diploma in Linguistics, University of Cambridge, May, 1969. (2) cf foot note (1) on page 113
48. (cee\textwa) \textau\textdu\textva y\textaa da\textaw\textco\textdi\textn \textda\textka j\texti g\textas\textki\textya\textva n\textee hear that Audu has returned as you have heard is true.

The presence of the complementizer is obligatory also when the complement sentence is preceded by a preposition i.e when the sentence rewritten as an S is immediately dominated by a PP. e.g.

49. na\textaa t\textabb\textba\textt\textaa d\texta c\textee\textwa\texta \textau\textdu\textva y\textaa da\textaw\textco\textg\textas\textki\textya\textva n\textee believe with I believe that it is true that Audu has returned but 50 is ungrammatical:

50. * na\textaa t\textabb\textba\textt\textaa d\texta \textau\textdu\textva y\textaa da\textaw\textco\textg\textas\textki\textya\textva n\textee However, the preposition can be deleted optionally and when it is the complementizer may also be deleted together with it. e.g.

51. na\textaa t\textabb\textba\textt\textaa (cee\textwa) \textau\textdu\textva y\textaa da\textaw\textco\textg\textas\textki\textya\textva n\textee I believe that it is true that Audu has returned.

The complementizer is normally deleted when it is immediately followed by emphatic or doubt particles e.g.

52. ya\textaa k\textama\textaat\texta m\textu g\texta (cee\textwa) l\textall\textai h\textak\texta \textdi\textn b\texta\textt\texta it, behove we see emph this not-it faaru ba happen we must see for certain that this does not happen

53. ya\textaa g\textya\textaa w\texta 'y\textan\textja\textri\texti\textdu\textu (cee\textwa) w\textai j\texti\texth\textar\textsa say to, reporters (doubt) his region b\textaa t\texta h\texta s\texta a\textm\textu\textn t\texta\textim\textak\textco\texta 'is\textas\textsh\textee it get aide enough he told reporters that his region was not getting enough aide.
The presence of such particles makes the deletion of the complementizer almost (but not quite) obligatory and as a result of this the particles themselves appear to be the complementizers. But this is not true because the particles can be shifted to various places inside the sentence where the complementizer cannot be shifted. For example 54 (a) -(d.) are all grammatical:

54. (a) yáá káмаàtä mù gá lé îláî hákà dìn bà tà fàrù bà
(b) yaa kamaata mu ga haka din lalai ba ta faru ba
(c) yaa kamaata mu ga haka din ba ta faru ba lallai
(d) yaa kamaata lallai mu ga haka din ba ta faru ba

all meaning the same (cf example 52). But this is impossible with ceewaa. Thus the following are all ungrammatical:

55. (a)*yáá kámaàtä mù gá hákà dìn ceewaa bà tà fàrù bà
(b)*yaa kamaata mu ga haka din ba ta faru ba ceewaa
(c)*yaa kamaata ceewaa mu ga haka din ba ta faru ba

This is because the complementizer has one position only in relation to the embedded sentence viz it always immediately precedes the complement sentence and whenever the sentence is moved (by extraposition) it takes the complementizer with it.
Transformations required to produce the surface structures of sentences containing NP complements and sentential subjects:

1. **T-COMPLEMENTIZER PLACEMENT**

   SD: \( X (S)_{NP} Y \)
   
   \[1 \quad 2 \quad 3 \quad SC: \ 1 \text{ ceewaa} \quad 2,3 \]

   This rule will introduce ceewaa before NP complements and sentential subjects (cf examples 32, 33, 34).

2. **T-EXTRAPOSITION**

   SD: \( X (S)_{NP} \) Predicate \( Y \)
   
   \[1 \quad 2 \quad 3 \quad 4 \quad SC: \ 1, \ 0 \ 3, \ 2, \ 4 \]

   Sentences 56 (a) - (b) are synonymous:

   56. (a) cceewaa Audu zai tafi Kano mai yiwuwaa nee that Audu will go to Kano is possible
   
   (b) mai yiwuwaa ne (ceewaa) Audu zai tafi Kano.

   (b) is derived from (a) through the application of T-Extraposition which shifts sentential subjects to the right of predicates.

   This transformation must be cyclic:

   57. gaskiyaa nee mai yiwuwaa nene Audu zai tafi Kano possible will it is true that it is possible that A will go to Kano
58 will have the following simplified deep structure:

There is no relevant rule applied in the S₃ cycle.

T-Extrapolation must operate first on S₂ which will shift S₃ to the right of the predicate of S₂ whose derived structure will then be mai yiwuwa nee Audu zai tafi Kano "it is possible that Audu will go to Kano". Secondly the whole of S₂ is then extrapolated to the right of the predicate of S₁ whose derived structure after the application of the transformation will be:
This transformation is obligatory with certain verbs e.g. zamana "to happen", kyautu "to be good/better", yiwu "to be possible" etc., etc., eg.

58. 'inaa so(n) ya zamana kun shiryaa kaafin na daawoo
   I want you to be ready before I
   happen you ready before I return.

59. *'inaa so(n) kun shiryaa ya zamana kaafin na daawoo
   but not:

The simplified deep structure for 58 can be characterized by the following tree diagram:
With most verbs, however, both the extraposed and the non-extraposed versions are acceptable though the former is always far more acceptable. For example 60 and 61 are both acceptable but 61 is generally more acceptable than 60:
60. *ceewaa Audu zai tafi Kano gaskiyaa nee that Audu is going to Kano is taye

61. gaskiyaa nee *ceewaa Audu zai tafi Kano it is true that Audu is going to Kano.

3. T·Prep·Deletion

\[
\begin{align*}
SD: & \quad X & da & (ceewaa S)_{NP} & Y \\
& 1 & 2 & 3 & 4 \\
SC: & \quad 1 & \emptyset & 3 & 4
\end{align*}
\]

The preposition da "with" in V·prep (i.e. verbs which are normally followed by the preposition da) can be deleted optionally:

62. (a) *naa tabbataa da ceewaa Audu zai tafi Kano

(b) naa tabbataa (ceewaa) Audu zai tafi Kano
I believe that Audu is going to Kano.

4. T·Comp·Deletion

\[
\begin{align*}
SD: & \quad X & (V ceewaa (S)_{NP})_{Pred} \\
& 1 & 2 & 3 & 4 & \rightarrow & SC: 1, 2, \emptyset, 4
\end{align*}
\]

Condition: 2 must be immediately dominated by a predicate phrase. This condition is necessary in order to prevent the deletion of the complementizer in sentential subjects and other initial positions.
It seems that the complementizer also cannot be deleted with certain *pfwaa* (dynamic nouns) which are modified by ceewaa-complement e.g. maamaakii "surprise" or "wonder", hushii "anger" etc., etc. Thus (b) in \[36\] are ungrammatical:

\[36\] (a) naa yi maamaakii ceewaa yaa tafi 
(b) *naa yi maamaakii yaa tafi. 
I am surprised that he has gone.

There are other cases where the opposite is true (i.e. where the complementizer is obligatorily deleted) with some individual verbs e.g.

\[65\] (a) naa daukaa gobe zai tafi 
(b) *naa daukaa ceewaa gobe zai tafi. 
I thought he was going tomorrow.

\[66\] (a) naa zataa shii dooloo nee 
I thought he was a fool 
(b) *naa zataa ceewaa shii dooloo nee. \(^{(1)}\)

\(^{(1)}\) some speakers may accept (b) 63-66 as perfectly normal Haama sentences but none will however, deny that (a) is more natural than (b) in all the examples.
The exceptional behaviour of such verbs (and nouns) will be treated by the lexical selection features of the verbs. For example the noun hush .ii will be entered in the lexicon as:

```
[ N
  + Comp
  - Comp Del]
```

and the verb zataa will be entered as:

```
[ V
  + Comp
  - Comp Del]
```

The operation of $T_1$ ... $T_4$ can be exemplified by the following simplified tree diagrams:

T- Comp Place

gaskiyaa nee mai yiwuwaa ne Audu zai tafi K

simplified SD:

```
S1
  NP
  S2
    gaskiyaa nee
    is true
    NP
    S3
    mai yiwuwaa nee
    is possible
    Audu zai tafi Kano
    Audu will go to Kano
```
Derived structure after Comp. Placement:

The complementizer must be 'Chomsky-adjoined' to the complement sentence so that the complement sentence can carry the complementizer with it\(^{(1)}\) whenever it is shifted by extraposition. If the complementizer were to be 'sister-adjoined' to the sentence, then it would not take the complementizer with it when it is extraposed and this would result in generating ungrammatical sentences like

\[ \text{67. *ceewaa mai yiwuwaa nee Audu zai tafi Kano} \]

\(^{(1)}\) in accordance with Chomsky's A/A principle. cf Chomsky (1962 P.931, and 1964 P. 1); and Ross (1967) passim for a detailed critique of this concept.
**SC:** after T-Extrapolation has operated on $S_2$ and $S_1$ cycles:

$S_1$

- **Pred**
- **NP**
- **gaskiyaa nee**

$S_2$

- **Pred**
- **NP**
- **gaskiyaa nee**

$S_3$

- **Pred**
- **NP**
- **mai yiwuwa nee**

$S_4$

- **Comp**
- **ceewaa**
- **Audu zai tafi Kano**

Audu zai tafi Kano
T-Comp Deletion

SD:

\[
\begin{array}{c}
S \\
\text{Pred} \\
gaskiyaa nee \\
\text{Comp} \\
ceewaa \\
S \\
S \\
S \\
Audu zai tafi Kano
\end{array}
\]

SC:

\[
\begin{array}{c}
S \\
\text{Pred} \\
gaskiyaa nee \\
\text{NP} \\
\emptyset \\
S \\
\emptyset \\
\emptyset \\
Audu zai tafi Kano
\end{array}
\]
T-Prep Deletion:

SD:

```
S
  |--- NP
  |    |--- Pred
  |     |    |--- AUX
  |      |      |--- VP
  |        |        |--- naa
  |          |          |--- I
  |            |            |--- tabbataa
  |              |              |--- believe
  |                |                |--- Prep
  |                  |                  |--- PP
  |                    |                    |--- NP
  |                      |                      |--- da
  |                        |                        |--- with
  |                          |                          |--- Comp
  |                            |                            |--- ceewaar
  |                              |                              |--- that
  |                                |                                |--- Audu zai tafi Kano
```

SC:

```
S
  |--- NP
  |    |--- Pred
  |     |    |--- AUX
  |      |      |--- VP
  |        |        |--- naa
  |          |          |--- tabbataa
  |            |            |--- PP
  |              |              |--- NP
  |                |                |--- Comp
  |                  |                  |--- ceewaar
  |                    |                    |--- Audu zai tafi Kano
```
The Subjunctive Complement;

The internal structure of the subjunctive complement is the same as that of the ceewaa-complement. There are however, two differences between the two:

(1) while ceewaa-complement is restricted to the non-subjunctive tenses the subjunctive complement has always the same tense which is the subjunctive tense, hence its name the subjunctive complement.

(2) ceewaa-complements allow the introduction of the complementizer ceewaaa while in most cases the subjunctive do not.

Verbs which permit the introduction of ceewaa with the subjunctive complement are very few in number\(^1\). e.g.

68. yáa gayáa mú su (ceewáa) su dákáa tamkár súná gidáa
to them they feel like they home
he told them to feel at home

69. yáa gárgáóóe shí dā (ceéwáa) yá kúlāa dā kánneúsá
warn him look after brothers
he warned him to look after his younger brothers

\(^1\) There are clearly four possible classes of verbs defined in terms of their co-occurrence with either or both of the two complementizers (ceewaa and subjunctive). cf Appendix C for a partial listing of these four classes of verb.
The tests used to justify ceewaa-complements as NP's can also apply to subjunctive complements (cfP. 18 - 22) e.g. they can function as object of a one-object verb:

70. 'i nàa sò(n) n tàfì  "I want to go"
    (cf 'i nàa son kudìi  "I want money")
as second objects of a two-object verb:

71. nàà roòkèè sù sù koòmàã gìðāá
    beg
    I begged them to return home
cf: (nàà roòkèè sù kudìi - I begged them money)
The first object is the pronoun su "them" and the second the subjunctive clause su koomaa gidaa "they return home"

All the transformations that operate on ceewaa-complement can also operate on the subjunctive complement. But T-Extraposition is always obligatory with subjunctive complements.

Parsons' analysis of the subjunctive is inadequate (cf his Exercises on Morphophonemic Verb Classes, Ex.19: Verbs ... taking Subjunctive clauses as objects). He analyzed the subjunctive clause "mu 'isa garii" "(w) to reach the town" as the subject of the verb rage(e) "to leave/remain", in the sentence:
72. "yáá rágè(e) mìl bíyú m̀ù 'ísá gàrìì"
leave mile two reach town
we have two miles left to reach the town.

and as the complement of the noun saúraa (mìl bíyú)
in the sentence:

73. saúraa mìl bíyú (nèè) m̀ù 'ísá gàrìì
remainder
we have two miles left before we reach the town.

His analysis is basically correct with yaa rage(e) i.e.
the subjunctive clause is the subject but his exemplification show clearly that he is wrong because he cannot account for the shift of the subjunctive clause to the right of the predicate.

The deep structure he proposes for the sentence yaa rage(e) mìl bíyú m̀ù 'ísá gàrìì is:

74. mìl bíyú sùn rágè(e) m̀ù 'ísá gàrìì
2 mile they remain we reach town

Obviously the subject here is mìl bíyú "two miles" and not m̀ù 'ísá gàrìì (which is the object in this sentence)
because the pronoun part of the auxiliary(1) of the main sentence sùn "they" agrees in number and gender with the NP mìl bíyú and not with the subjunctive clause which is a syntactic NP which cannot be pluralized as it has the feature [+ ABSTRACT]. Parsons example (mìl bíyú sùn rage_&

(1) cf base rule No.7.)
mu 'isa garii) is anyway, not an acceptable sentence of Hausa for me or for many native speakers I have checked with.

The correct structures of Parsons' examples are as exemplified in the following diagrams:

\[\text{yaa rage(e) mil biyu mu 'isa garii.}\]

\[\text{SD:}\]

\[\text{S1}\]

\[\text{NP}\]

\[\text{Pred}\]

\[\text{yaa}\]

\[\text{mu 'isa garii we reach town}\]

\[\text{v}\]

\[\text{ra}\text{g(e) remain}\]

\[\text{mil biyu mile two}\]

\[\text{EXTRAPOSITION}\]
SC:

S

Pred

AUX

yaa

VP

mu 'isa garii

NP

V

rage(e)

NP

mil biyu
( sauraa mil biyu mu 'isa garii)

SD:

S1

NP

Hard

NP

Complement

Cop

mu 'isa garii

we reach town

S2

S3

NP

Pred

NP

Complement

Cop

nee

is

Sauraa remainder

mil

mile

N

Pred

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Cop

D Adj
nee

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one of the two copulas is deleted by equal identity deletion rule and the other is deleted by a later transformation viz copula deletion. After this we get the surface structure:

sauraa mil biyu mu 'isa garii.
CHAPTER 2

DERIVED NOMINAL AND GERUNDIVE NOMINAL

The main theoretical aim of this section of my thesis is to analyse the various aspects of nominalisation in Hausa other than the complement system, and see which of the two positions (Chomsky's lexicalist position or Lees' and later linguists' transformationalist position) it supports.

The study of nominalization is still a virgin field in Hausa linguistics even within the framework of traditional linguistics. To the best of my knowledge nobody has done any large-scale treatment of this subject in Hausa at all.

For Hausa, I shall use the term "NOMINALISATION" in two distinct ways:

1. to refer to such phrases as:

75. kawân-ka hatta-fin "reading the book"
76. daawoower Audu "Audu's coming back"
77. karântun jarâddaa "newspaper-reading"
78. rubuutun wasiikaa "letter-writing"

(1) e.g. Lakoff, Ross and Chapin.
in the sentences:

79. karanta littaafin ba'a wuya
reading the book is not difficult

80. daawoo wa Audi yanzu ya'a ba'a ni maamaakki now give
Audu's having come back now surprises me

81. karatuun jaridiya yanaa da amfaanii
newspaper is with usefulness
newspaper reading is useful

82. rubuutun wasiikaa 'aikii nee mai saukki
letter job with easiness
letter-writing is an easy job

and (2) to refer to the transformations which relate
those phrases to the structures underlying the sentences:

83. X ya'a karanta littaafin
read book
X read the book.

84. Audi ya'a daawoo yanzu
Audu has returned now

85. 'a n'aa (yin) karatuun-jaridiya
one do
one does newspaper-reading

86. 'a n'aa (yin) rubuutun-wasiikaa
one does letter-writing
The main controversy over nominalisation (in English) hinges on the question whether the derived nominal is to be entered directly in the lexicon with its own idiosyncrasies or is to be derived transformationally from sentences containing the corresponding verb which alone would occur in the lexicon. Accordingly it is logical for me to begin my treatment of Hausa nominalization by investigating whether we have derived nominals in Hausa distinct from gerundive nominals. Therefore my first concern in this section will be to try to show that in Hausa there are two grammatically distinct types of verbal noun corresponding to the derived nominal and the gerundive nominal of English.

A great deal has been written on "verbal nouns" by various Hausa students. R.C. Abraham (1) for example, divides the verbal nouns in Hausa into two; (1) primary verbal nouns e.g karantaawaa "reading" rubuutaawaa "writing" kishaawaa "killing"; and (2) secondary verbal nouns e.g karantaau "reading", rubuutaau "writing", kisaau "killing".

(1) The Language of the Hausa People; Government Printers, Kaduna (1959)
F.W. Parsons (1) also divides them into two - strong and weak. His weak verbal noun correspond to Abraham's primary and his strong to Abraham's secondary. C.T. Hodge (2) however, considers only Abraham's secondary (Parsons' strong) as verbal nouns. Hodge considers the verbal noun of the unchanging verb (i.e Parsons' weak verbal noun) as a verb form which, according to him is to be treated in the syntax "as regards its nominal function".

In the traditional approaches to Hausa linguistics the nominals in the third column below are analyzed as strong or secondary verbal nouns of the corresponding verbs in the first column:

<table>
<thead>
<tr>
<th>VERB</th>
<th>GERUNDIVE NOMINAL</th>
<th>DERIVED NOMINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>kashe</td>
<td>kashē(ēwāā)</td>
<td>kisāa</td>
</tr>
<tr>
<td>kēērā</td>
<td>keērā(awāā)</td>
<td>kīirāa</td>
</tr>
<tr>
<td>kārānta</td>
<td>kārānta(awāā)</td>
<td>kārāantuū</td>
</tr>
<tr>
<td>rubūūtā</td>
<td>rubūūtā(awāā)</td>
<td>rubūūtuū</td>
</tr>
<tr>
<td>gina</td>
<td>gina(awāā)</td>
<td>gīnīi</td>
</tr>
<tr>
<td>rīnā</td>
<td>rīnā(awāā)</td>
<td>rīnīi</td>
</tr>
</tbody>
</table>

(2) An Outline of Hausa Grammar. Language Monograph, 41, 1
(3) I use these terms only as labels at this stage. The justification for their analysis as such will be given in the course of this chapter.
What has formerly led people to classify the derived nominal as equivalent to the gerundive is the fact that derived nominals are in some respects similar to the gerundives e.g. they both have verbal root and can occur in progressive construction as in 87:

87.  
(a) Audu ya naa kashê maciiiji (1)  
\textit{kil} \textit{snake}  
(b) Audu ya naa kiså-m maciiiji (1)  
Audu is killing a snake

and in constructions such as 88:

88. (a) kashê maciiiji Audu ya kee yii  
(b) kiså-m maciiiji Audu ya kee yii  
killing the snake Audu was doing

and in nominalizations such as:

89. (a) kashê maciiiji-n Audu  
Audu's killing the snake  
(b) kiså-mm maciiiji-n Audu  
Audu's killing of the snake

\begin{itemize}
\item (1) Here the form of the derived nominal (kisam) differs from its original form (kisaa) as shown in column 3 by virtue of the genitive -n which links it to its object (cf P13). The long final vowel characteristic of Hausa common nouns becomes short in the nomen regens before the genitive -n/-r, and the -n/-r is normally assimilated to the first consonant of the nomen rectum e.g.  
sarkii "a king" - sarki-n Masar - sarki-m Masar "the king of Egypt"  
sarauniyya "a queen" - sarauniya-r Kano - sarauniya-k Kano "the queen of Kano"
\end{itemize}
There is however, an important semantic difference between the two types of nominal, viz those in construction (a) denote just a fact while the ones in (b) denote an action with the additional feature of either [+Occupation] or [+HABIT] or both.\(^{(1)}\)

If we took the nominals in (b) to be gerundive like the ones in (a) we would then be assuming that constructions 90 and 91 could be transformationally derived from the same source:

90. káranţà littaafi-n Audù
Audu's reading/having read the book

91. karaatu-n littaafi-n Audù
Audu's reading of the book

which is not true. The source of 90 is the same as the structure which underlies 92:

92. Audù yáá kárántà littaafi
Audu read a book

whereas 91 cannot be correctly derived from any underlying source at all. 91 is in fact a simple genitive construction.

\(^{(1)}\) The nominals in (a) correspond to Lees' second nominal i.e his gerundive nominal (Lees 1960 P.54) and those in (b) correspond to his first nominal i.e the action nominal (Lees 1960 P.56) e.g.

(a) karanta littaafin reading the book

(b) karaatu-n littaafin the reading of the book
of the same structure as 93, 94, 95 (i.e a lexical noun modified by a genitive):

93. dóokí-h sárkiíi  "the king's horse"
   horse

94. ruwá-n táfkiíi  "water of the lake"
   lake

95. riïga-r Audù  "Audu's shirt"
   shirt

In support of this claim it can be observed that a number of transformations which operate on genitive constructions such as 93 - 95 can also operate on nominal constructions like 91. For example when the complement of a copula-sentence contains a genitive the copula nee/cee can come in between the head noun and the genitive (cf96-98)

In the same way adjectives qualifying the genitive-NP which normally come at the end of the whole NP (i.e head noun plus genitive), can also occur in between the head noun and the genitive for emphasis (cf examples 99,100)

All these transformations operate freely on the derived nominal and its genitive:

Examples:

copula occurring in between the head noun and the genitive:

96. ruwá-n táfkiíi nee ——>
   ruwáa neè ná táfkiíi - "It is lake-water"

(1) when the head noun and the genitive are separated the genitive link (-n/r) assumes its full form and becomes na/ta.
97. kàraatu-ù líttààfìì neé —

kàraatúù nèe nà líttààfìì
it is the reading of the book

but not:
98. * kàran tàá líttààfìì neé

* kàran tàá neé nà líttààfìì
it is reading the book

adjective occurring in between the head noun and the genitive:
99. ruwá-ù táfììì mai sànyìì —
cold
ruwá áà sànyìì nà táfììì
"cool water of the lake"

100. kàraatu-ù líttààfìì mai ààmìàànìì —
kàraatúù máái ààmìàànìì nà líttààfìì
useful reading of the book

but not:
101. *kàrántà máái ààmìàànìì nà líttààfìì.

demonstratives coming in between noun and genitive:

102. ruwá-ù táfììì nàà —
ruwá nàà nà táfììì
this water of the lake.

103. kàraatu-ù líttààfìì nàà —
kàraatúù nàà nà líttààfìì
this reading of the book.

but not:
104. *kàrántà nàà nà títtààfìì.
The various constituents of a sentence (VP, object, adverbials) can be front shifted for emphasis (cf T-TOE Appendix B ¶129) and this is true even when the sentence is nominalized. (1)

Examples: VP front shifted:-

111. kàrànțà littaàfìì (néé) Àudù ya yi reading the book was what Audu did

object. front-shifted:

112. littaàfìì (néé) Àudù ya kee kàrànțààwàà(cf f.n.1) a book was/is what Audu was/is reading
time adverbial front-shifted:

113. jiyàa (néé) Àudù ya kàrànțà littaàfìì it was yesterday that Audu read the book

(1) When the object of a gerundive nominal is front shifted or deleted and the verb is in the progressive tense the nominal takes the suffix -wàà but the derived nominal never takes this suffix.

e.g. object of gerundive nominal front shifted:

105 wasiikaa Audu ya kee rubuutaawàà it is/was a letter that Audu is/was writing
gerundive nominal with deleted object:

106. rubuutaawa-r Audu Audu's writing/having written

but not:

*107. *wasiikaa Audu ya kee rubuutuwàà
108. *rubuutuwa-r Audu

neither can we have the gerundive nominal with its object front shifted or deleted without the -wàà. Thus the following are ungrammatical:

110. *rubuuta Audu (Audu's writing).
place adverbial front-shifted:

114. 'à cǐkì-n dě̀skì (níè) A yá káraàntà lítútafìn.
   at inside room
   it was inside the room that Audu read the book.

Objects of sentences can be front-shifted as shown in example 112. However, we cannot have 115 or 116 i.e with the object of the derived nominal front-shifted:

115. *wásiìkàà Aúdù yá këe rùbùtùuú
116. *lítə̀taafìì Aúdù yá këe káraatauú

The reason why 115 and 116 are ungrammatical is because of the fact that front-shifting is done only within the framework of a sentence and since the derived nominal is not a transformation of a sentence therefore its object cannot be front-shifted.

All these examples show clearly that the derived nominal plus its "semantic" object or subject has similar syntactic behaviour to the genitival NP in Hausa (for the derivation of which see Appendix B P.125). This means that the nominals káraatauú "reading", rùbùtùuú "writing" (and all derived nominals) are entered in the lexicon as are the simple nouns ruwaa wañèr and dookìì "horse".

It might be argued that káraatau-n Aúdù Audu's reading can have 117 as its source:
117. Audu yáá yi kàràatúú
Audu (did (some) reading

with yi-kàràatúú analyzed as a verbal unit. Derived nominals do in fact have some syntactic behaviour in common with the so-called dynamic nouns\(^1\) in Hausa. For example there is the possibility of inserting (a) an indirect object or (b) a particle such as har even, dai(emph) etc. between the verb yi "to do" and the derived nominal e.g.

118. Audu yáá yi dai kàràatúú
Audu did (some) reading

119. Audu yáá yi ìn Garbá kàràatúú
Audu did (some) reading for Garba

The derived nominal can also be qualified by an adjective\(^2\)

120. Audu yáá yi kyàkkyaàawan kàràatúú
good
Audu did a good reading

It is true that there are compound forms in Hausa, but these are normally indivisible. For example no particles,

\(^{(1)}\) cf Parsons: Abstract nouns...in Hausa; Afrikanistische Studien, ed Lukas, 1955, 373-404.

\(^{(2)}\) The same also applies to dynamic nouns: the dynamic noun mag an a *"speech/talking" could be substituted for kàràatúú in the examples given.
adjectives or adverbs can occur in between the constituents of the following compound forms:

121. bàbbáá-da-jàkàáá "a kind of bird"
122. bàbbá-da-tsóóloó "untasty broth"
123. kàamàá-kàryáá "oppressive rule"
124. ìììí-kà-mutú "china ware"
125. kàamà-kàndà "a kind of sweet"

The elements of compound forms are inseparable; this is not true with yi plus its derived nominal as shown above.

The verbal noun yìì plus the genitive link which connects it with its object in the progressive construction is normally deleted e.g.

126. Áìììù ìììá (yìì) kàraàtúù
   Audu is doing some reading

In the same way, the verbal noun can be deleted when the sentence is nominalized e.g.

127. a. ((Áìììù yìì yìì kàraàtúù)S)_{NP} --->
    Audu did reading
b. (yìì-m kàraatu-n Áììù)_{NP} --->
   c. kàraatu-n Áììù "Audu's (doing the) reading"
When the verbal noun plus the genitive is deleted in constructions such as 127 (b) to produce (c) the reduced version has the same surface form as the derived nominal construction. This is why 127 (c) can be ambiguous: it can mean either (1) Audu's (manner) of reading which is analogous to ruwa-n tafkii "lake-water" i.e a simple genitival construction where a noun is modified by a genitive or (2) it can mean Audu's reading/having read which is a reduced form of yi-n karaatu-n Audu "Audu's doing/having done the reading".

This disambiguation is supported by certain syntactic facts. For example, the reduced transformational version can be followed by certain adverbials while the derived nominal version cannot be followed by any adverbial:

128. ((Audu yáá yi kàrààtúú dà râáńá)₅)NP →
   Audu has read in the afternoon

129. yi-n kàrààtúú Audu dà râáńá
   Audu's having read in the afternoon.

but not:

130. * kàrààtúú-n Audu dà râáńá

The point here is that the derived nominal does not admit adverbial extensions which are possible with the gerundive nominal because the gerundive nominal is a transformed sentence and the derived nominal is not.
Another syntactic difference between the two types of nominal is that the object of a gerundive nominal always follows it without a genitive link while a derived nominal is always linked to its object by a genitive link.

e.g. derived nominal with genitive link:
131. ka’amù-n dòókìì horse-catching
132. kiírì-r fàrtànyàa hoe-making

gerundive nominal without genitive link:
133. ka’amà dòókìì catching a horse
134. keëra fàrtànyàa making a hoe

Our discussions above show explicitly that the syntactic behaviour of the derived nominal in Hausa is not at all the same as that of the gerundive nominal: the gerundive nominal behaves more or less in the same way as a sentence e.g it has a subject and an object and adverbs each of which can be front shifted just in the same way as each of these items can be. front-shifted in a sentence; but the derived nominal is more like an ordinary noun (rather than a nominalized sentence) and as such it is better treated like an ordinary noun i.e to be put directly in the lexicon.
CHAPTER 3

THE GERUNDIVE NOMINAL

I shall now return to the gerundive nominal. In sentences which contain gerundive nominals such as:

135. bān soó zaunāawārAudū mīntī 'ukū 'ā kān
   kuječrā-r maalām bā
I did not like Audu's sitting for three minutes on the teacher's chair.

136. daawōcwa-r Audū gidāā kullūm da tsakā-r dārē
data shī da kyāū
Audu's always returning home at midnight is not good

always at middle of night
not it with good

it is desirable to consider the gerundive nominal complex (i.e. the verbal noun, subject, object(s) adverbials etc.) as an embedded sentence since deriving it from a head noun plus a great variety of optional categories (especially the various adverbials which are normally found in finite clauses) would be extremely complicated and redundant i.e. repetitive(1)

In this section I shall consider the operations which re-order the various elements of the embedded sentence under nominalization. It is essential that we consider the whole sentence here and not the VP alone because by doing so we shall expose more clearly the syntactic differences between the two types of nominal under consideration (i.e. the derived nominal and the gerundive nominal). I shall however, lay some emphasis on the VP with regard to its area of domination in order to see how the various adverbials are related to the VP within the nominalized sentence and to see whether this will bring to light any evidence for or against putting some of the adverbials within the VP. (1)

Tense and Aspect in the Nominalized Sentence:

Tense and aspect are normally neutralized in the nominalized sentence. (3) Thus the embedded sentences in examples (137) - (139) are all rewritten as zuwa-n Audu "Audu's coming" in 140 - 141:

(1) cf Chomsky (1965 P.102) who suggests that the VP contains, in addition to certain other elements, adverbs of manner but not temporal adverbs. Lakoff and Ross (1966) suggest that adverbs of manner are also outside the VP.

(2) cf Base rule No. 12 (Appendix A P.107).

(3) cf Relational nominalisation (P.32) in which the gerund is modified by a relative clause.
137. ṉ nāa ẓato(-n) (Audù zāi zo'ō)S)NP
I think Audu will come

138. nāa tābbataá (dā) ceewáa (Audù yāa zo'ō)S)NP
I believe that has come

139. ṉ nāa nāa só(-n) (Audù yāa zo'ō)S)NP
I do not want Audu to come

140. ṉ nāa ẓato-ń zuwā-ń Audù
I anticipate Audu's coming

141. nāa tābbataá dā zuwā-ń Audù
I am certain of Audu's having come.

142. bāa nāa só-ń zuwā-ń Audù
I do not want Audu's coming

The nominalization transformation rule must be ordered before the complementizer-placement rule so that the operation of the nominalization transformation on an embedded clause will block the complementizer placement. If T-Nominalization were to operate after complementizer placement we would then have ungrammatical sentences:

143. *n nāa ẓato-ń ceewáa zuwā-ń Audù
144. *nāa tābbataá dā ceewáa zuwā-ń Audù
avoiding which would complicate the ceewaa deletion rule.
Adverbials in the Nominalized Sentence:

Adverbs of Time, Manner, Place etc. can occur freely with the gerundive nominal together with the other elements of the VP (objects, adverbials of duration, frequency etc., etc.) e.g.

145. daawoowa-r Audu yanzu yaa baa nì maamaakii
Audu's having returned now has surprised me

146. karantaawa-r Audu da-karfiin yaa firiigaal ni
with vigour frighten
Audu's reading intensely frightened me

147. zaunaawa-r Audu l-a-nijeera-r maalam baa daidei baa nì
right
Audu's sitting on the teacher's chair is ill mannered.

The various adverbials can co-occur and exchange places among themselves in the nominalized sentence exactly as in the base sentence without effecting any major change in the meaning or emphasis of the sentence. But their sphere of free exchanging is restricted to the end of the construction only i.e. they cannot come before the major constituents of the sentence (viz the subject, the object and the nominalized verb). Thus examples 148, a ... f all have the same meaning (with perhaps a slightly different focus of emphasis with some speakers):
Most native speakers will generally accept (a) - (f) as perfect Hausa. Perhaps some may assign different degrees of acceptability, but none will reject any of them as ungrammatical.
One exception to the generalization that adverbials function identically in simple and embedded sentences is that none of the adverbials can occur before the verbal noun in a nominalized sentence although some of them can precede the verb in a non-nominalized sentence (in fact only Time adverbial can be front-shifted but not other adverbials. Place, frequency and sometimes duration adverbials can also be front-shifted in poetic or figurative speech to give extra emphasis). Accordingly, (a) are grammatical while (b) are not in the following examples:

149 (a) jiya Áudu yáá koómaa kánoó
yesterday Audu returned to Kano

(b) *jiya koómaawa-r Áudu kánoó
yesterday Audu's returning to Kano

150, (a) 'a kánoó Áudu yáá yi sheékáraa 'úku
at Kano Audu spent three years.

(b) *'a kánoó yi-n Áudu sheékáraa 'úku
at Kano Audu's staying for three years

However, I shall assume here that in Hausa the natural place of all the adverbials i.e where they are generated by PS rules, is at the end of the sentence
after the VP proper and that when a sentence is nominalized all adverbials must remain in their natural place. The difference in grammaticality of 149 - 150 (a) and (b) is then naturally accounted for if we assume that nominalization is cyclic and that adverb shift is last cyclic.

Manner adverbs in Hausa are realized by the preposition da "with" followed by an abstract noun e.g:
dà kárìi "vigorously (lit. with vigour )
dà sáúrìi "quickly" ( " " quickness )
dà saibìi "sluggishly" ( " " sluggishness)

When a sentence containing a manner adverb is nominalized the adverb can be retained as such :

151. (a) ñ nàa fàatàa Aùù dàa wòò dá sáúrìi
   I hope Adu will return quickly

(b) ñ nàa fàatà-ù dàáwòówà-ù Aùù dà sáúrìì
   I hope of Adu's returning quickly,

Alternatively the adverb itself can be substantivized by deleting the preposition. When the adverb is substantivized it must precede the gerundive nominal and a genitive will join the two together:
152. (dááwoówá-r Audù dà sáurií →)

sáurií-n dááwoówá-r Audù
Audu's quick return.

The Category (Neg) in the Nominalized Sentence:
The category (Neg) is realized under nominalization by
the negatival-noun ráhhííi "lack (of)" and not by the
negative particle(s) ba -----(ba). The negatival noun
always precedes the gerundive nominal to which it is
joined by the genitive -n:

153. ((Audù báí dááwoó ba)₃)NP →
Audu has not returned.

154. ráshíí-n dááwoówá-r Audù
Audu's having not returned.

Emphatic elements such as hár 'abáddáa "never", hár
yáñzu "not yet", kóó kádan "(not) at all" etc. which
can occur with the category Neg in non-nominalized
sentences are not retained at all in any form under
nominalization (cf condition on T-Nom₁).

There are three types of nominalization rule which
can operate on a sentence to turn it into an NP. I shall
label these transformations as:

(1) T-Nom 1 (T-Nominalization One)
(2) T-Nom 2 (T-Nominalization Two)
(3) T-Rel.Nom (T-Relatival Nominalization)

1. **T-Nom 1**:

   This rule can operate on any type of sentence in Hausa regardless of whether it is transitive (with one or more objects) or intransitive. When this transformation operates on a sentence the gerundive nominal always comes first and the underlying NP subject always separates the gerundive nominal and its object(s). The subject is joined to the gerundive nominal by the genitive link but the object(s) always follow(s) the subject without the genitive link.

   This transformation rule can be formalized in the following way:

   \[
   \text{T-Nom}^{-1}_1: X ((\text{NP AUX V Y})_S)_{\text{NP}} Z
   \]

   \[
   \text{SC: } 1 \emptyset \emptyset \emptyset \emptyset \text{Nom}_r 2 5 6
   \]

   Condition: 5 cannot contain Emph.

   Examples:

   nominalization of sentences containing intransitive verbs followed by an adverbial:
155. (a) Audu yaa zaunaa'aa ka'ñ kujeeraa → Audu sat on a chair
(b) zaunàawà-à Audu 'à ka'ñ kujeeraa
Audu's sitting on the chair.

nominalization of sentences containing single transitive verbs:
156. (b) Audù yàà keera fàrtañyàà → Audu has made a hoe
(b) keeraàawà-à Audù fàrtañyàà Audu's making the hoe.

nominalisation of sentences with prepositional objects:
157. (a) Audù yàà yardá da Garba → trust with Audu trusts Garba
(a) yardà-à Audù da Garba Audu's trusting Garba

nominalization of double transitive sentences:
158. (a) sàrkii yàà nàda Audù haàkimii → appoint lord the king has made Audu a lord
(b) nàdaàawà-à sàrkii Audù haàkimii the king's making Audu a lord.
159. (a) Audu yaa sayar da dookii na Garba
    sell
Audu sold a horse for Garba

(b) sayarwa-r Audu dookii na Garba
    Audu's selling the horse for Garba

In the unmarked case, this transformation operates on intransitive verbs. It may operate on transitive verbs too (as shown), but the other two transformations are more natural with transitive verbs.

The following tree diagrams illustrate the operation of T-Nom₁ on a selection of sentences containing intransitive and transitive verbs:
Audu ya daawo wa-gidaa kullah y a nna da kyau
Audu he return home always it is with good
daawoowa-r Audu gidaa kullah y a nna da kyau
Audu's always returning home is good
daawoowa r Audu gidaa kullum ya naa da kyau
returning of Audu home always it is with good

daawoowa-r Audu gidaa kullum ya naa da kyau
Audu's always returning home is good.
koeeraawaa r Audu fartanyaa
Audu's making the hoe

cf example 156
we hear king he appoint a lord
muu we
mun we
ji nadaawaa r sarkii A haakimii hear appointing king A lord

of example 158
This rule is restricted to single transitive sentences only i.e. to sentences with verbs which take only one object. Here, the whole of the VP is considered as a single item and nominalizes accordingly. The nominalized VP occurs as the leftmost element of the embedded sentence, the subject is joined to it by the genitive link and the various adverbials follow the subject.

This rule can be formalized in the following way:

\[
SD: X ((NP\ AUX\ V\ ((da)\ N)_{NP}\ (ADV))_{S_{NP}}\ Y
\]

\[
SC: 1\ 0\ 0\ f\ 4\ 1\ -\ *\ \ G\ L\ -\ 2\ 5\ 6
\]

Conditions: (1) the object NP contains no modifiers,  
(2) the embedded sentence does not contain Emph.

Examples:

160. (a) \textit{Audu ya\‘a ke\‘er\‘a fart\‘anya\‘a} \rightarrow Audu made a hoe.

(b) \textit{ke\‘er\‘a fart\‘anya\‘a-\‘r} Audu Audu's making the hoe.

161. (a) \textit{Audu ya\‘a y\‘ar\‘a da Gar\‘ba} \rightarrow Audu trusts Garba

(b) \textit{y\‘ar\‘a\‘a da Gar\‘ban Audu} -- Audu's trusting G
When any kind of modifier follows the object this transformation is not possible. Therefore 162 is ungrammatical:

162. * keärà fartáñyàa kyákkyaáwá-r Audù
Audu's making the beautiful hoe
(from: Audù yáà keärà fartáñyàa kyákkyaáwáà)
Audu made a beatiful hoe.

The occurrence of a modifier on the object necessitates the application of T-Relatival Nominalization.

**T-Relatival Nominalisation:**

This rule, like T-Nom₁, also operates on double transitive, transitive or intransitive sentences. But here it is the whole VP (as in T-Nom₂) that is nominalized and front-shifted and not the verb alone.

The surface characterization of the nominalized sentence after the application of T-Rel Nom is quite different from that realized after the application of T-Nom₁ or T-Nom₂: in T-Nom₁ or T-Nom₂ the subject is joined to the gerundive nominal by the genitive link while in T-Rel Nom the gerundive nominal (the nominalized VP) is modified by a relative clause.
This rule can be formalized in the following way:

T-Rel Nom.

\[ SD: \begin{array}{cccccc}
X & NP_1 & AUX & V & NP_2 & Y \\
1 & 2 & 3 & 4 & 5 & 6 
\end{array} \]

\[ SC: \begin{array}{cccccc}
1 & 5 & da & 2 & 3 & 4 & 6 
\end{array} \]

Examples:

163. kōmaₚₐₚₐ gidaₚₐ dà Audù zai yì returning home which A will do

(from: Audu zai (yi) koma gidaa)
will(do)return home

164. Keērā fartānyāa dà Audù yā yi making hoe which A he did

(from: Audu yaa(yi) Keera fartanyaa)
he (do) making hoe

165. nādā Audù haₚₜₛₜₘₚₜ dà sarkiₚ yā yì making A lord which king he did

(from: sarkii yaa (yi) nā Audù haₚₜₛₜₘₚₜ)
he (do) making A lord

The following tree diagrams illustrate the operation of T-Rel Nom:
T-EMBEDDED SUBJECT DELETION
Sc:

S

NP  AUX  VP

yaa
it

V

NP

yi
be

kyau
good

NP_i  AUX  VP

Audu
Audu

yaa
he

V

yi
do

NP_j

S → Ø by pruning

keera
make

fartanyaa
hoe

T-Rel Nom
The relative clause retains the tense of the nominalized sentence as shown in the examples above.

If the nominalized sentence contained adverbials, these adverbials occur either just before the relative clause which modifies the gerundive nominal or after it e.g:
166. (a) Keera fartanyaa da Audu zai yi goobe {tomorrow}

making the hoe which Audu will do tomorrow

(b) Keera fartanyaa goobe da Audu zai yi (meaning the same as (a)).

Although all sorts of adverbials can occur either immediately before or after the relative clause Time and Place adverbials seem more natural when they occur after the relative clause (i.e away from the nominalized VP) while all other adverbials seem more natural when they are before the relative clause (i.e when they are near the VP). This obviously suggests that Place and Time adverbials are different from the rest of the adverbials, and since Time and Place are more acceptable when they are at the furthest position away from the gerundive nominal (i.e the nominalized VP) and the others are more acceptable when they are near it, this fact can be cited as evidence for putting all adverbials other than Time and Place within the VP.
CHAPTER 4

AGENTIVE AND PAST PARTICIPIAL NOMINALS.

1. The Agentive Nominal:

The compound morpheme 

\[ \text{ma...ii} \]

can be suffixed to a fairly large number of Hausa verbs to form the so called agentive nominal. (1) The agentive nominal so formed can be feminised by the feminine suffix 

\[ \text{-yaa} \]

and pluralised by the plural morpheme suffix 

\[ \text{-aa} \] e.g.

\[ \text{dink- "to sew" ma\text{-}inkii "a tailor" ma\text{-}inkiyaa feminine ma\text{-}inkaa plural} \]

\[ \text{gin- "to build" ma\text{-}ginii "builder" ma\text{-}giniyaa feminine ma\text{-}ginaa} \]

\[ \text{shaa(y)- "to drink" ma\text{-}shaayii "an alcoholic" ma\text{-}shaayiyaa feminine ma\text{-}shaayaa plural} \]

Prima facie it would appear reasonable to derive such agentive nominals from underlying verbs. However, there are two pieces of evidence which militate against

(1) of Abraham: The Language of the Hausa People, (P.41).
this analysis. Firstly, the semantic relationship between
the verb and the agentive nominal is by no means regular
as witness the examples just given and those on page 91
below. Secondly, there are some agentive nominals such as:

- **mākećtići** "acruel person"
- **māmāgancići** "a talkative person"
- **māgīdāncići** "a house-holder"

which do not have verbal forms from which they can be
derived at all, but rather come from underlying nouns—
specifically  kètān "cruelty",  màgànnà "speech", and
gīdān "a house".

Moreover, these are different again from a further
class of noun which can be verbalized by the addition
of the suffix -(a(n)t e.g.

- **gaggaawàa** (haste) *gaggaùta* "to hasten"
- **mutùn** (a human being) *mutùnta* "respect"
- **baakoó** (a stranger) *bafùnta* "to be a stranger"
- **wùyàan** (difficulty) *wùyaùta* "to be scarce/difficult"
- **tsànànnìi** (intensity) *tsànànta* "to intensify"

some (but only some) of which allow a secondary
nominalization morphologically identical to the agentives
e.g. **màwùyàacıći** "something scarce", **màtsànàncići** "something
intense", but whose meaning is clearly not agentive.

In other words we have an extremely irregular and unpredictable distribution of nominals. One possible explanation for this might be that putative verbal forms used to be active but have now become extinct(1), leaving only the "agentive" form, or alternatively we might postulate a dummy verbal form for such nouns which is used only in forming the "agentives" and nowhere else.

All this evidence, however, supports deriving such nominals lexically rather than transformationally because deriving them transformationally would mean putting many ad hoc restrictions on the transformation in order to account for some verbs not having agentives and some agentives not having verbal roots etc..

Moreover, as recorded, the semantic relationship between the various agentive nominals and their respective verbs (where these exist) is not regular at all. Further evidence of this is provided by the following types of agentive:

(1) But there is no evidence of survivals either in old dictionaries or current dialects.
Group i:

måkeetåci "a cruel person"
måsållåci "one who prays (very much)"
mågùji "a fast runner"
måróowåci "a stingy person"
måyåudårii "a deceitful person"
måshåayii "an alcoholic"

Group ii:

mådånkii "tailor"
måginii "a builder"
måsåcåki "a weaver"
måsåssåkii "a wood carver"

Group iii:

matåmbåyi "a questioner"
matafiyi "a traveller"
mågåaji "an heir"
måmåci "a deceased person"

The nominals in group (i) denote either one who performs an action so intensively or so frequently that it has become almost a habit of his; or a person (or thing) possessing a certain characteristic (e.g. maroowacii
a person characterized by roowaa "stinginess"). The nominals in group (ii) denote one who performs an action as his occupation while those in group (iii) denote just one who performs an action, though not necessarily by habit or occupation.

It is very difficult to account for these discrepancies in the semantic relationship between these agentive nominals and their respective verbs transformationally and to describe simple sentences such as:

167. Audu makæreetăcii nêe
Audu is a cruel person

168. Audu makæerii nêe
Audu is a black smith

169. wání mätafiyiïi yáá zóó
one traveller
a certain traveller has arrived

we would require the following structural description:
i.e. a whole bunch of dummy adverbials must be assigned to \( S_2 \) in order to account for the semantic idiosyncrasies of the agentive nominal and then be deleted by the agentivization transformation.

This very complicated analysis can easily be avoided if we simply put the agentive nominal directly in the lexicon where its various idiosyncrasies will then be shown as a bunch of semantic features. We can thus represent any agentive nominal in the following way:
which would in fact be a sufficient representation for class (iii) and then class (i) would have added the feature $[+\text{INTENSITY}+\text{HABIT}]$, and class (ii) the feature $[+\text{OCCUPATION}]$, and where $X$ represents a lexical item which may not belong exclusively to any grammatical category. In other words we have a partially unspecified formative $[X+\text{NOM}]$ which may be further specified as $\text{AGENT} ; \text{OCCUPATION}$ etc. which further features will condition the relevant morphological process of derivation.

It will, incidentally, be necessary to represent in the lexical entry the fact that agentive nominals (i) and (iii) are in free variation with a construction involving the particle $\text{ma}i$ follow by a dynamic noun e.g.

$\text{mákâryâciî - mài káryáa "a lier"}$

(possessor of lies)

$\text{mároîowâciî - mài róôwâa "a stingy person"}$

$\text{mátâfiyii - mài tâfiyâa "a traveller"}$

whereas class (ii) agentives do not allow this variant. Thus we do not have $* \text{mài giniîi "builder"} , * \text{mài rînîi dyer}$. 

\[ X \\
\downarrow ^{\text{NOM}} \]
\[ \downarrow ^{\text{AGENT}} \]
2. The Past Participial Nominal:

The so-called "past participle" in Hausa which normally functions as an attributive or predicate adjectival in surface structure (cf. Abraham L.H.P. page 31) is formed morphologically by doubling the final consonant of the verb and adding the suffix -ee. The past participial nominal can be feminized by the feminine morpheme -yaa and pluralized by adding the plural morpheme -uu e.g.

<table>
<thead>
<tr>
<th>VERB:</th>
<th>Past Part Nom.</th>
</tr>
</thead>
<tbody>
<tr>
<td>gin- &quot;build&quot;</td>
<td>ginannée &quot;built&quot;</td>
</tr>
<tr>
<td></td>
<td>ginánniyään feminine</td>
</tr>
<tr>
<td></td>
<td>ginánnuú - plural</td>
</tr>
<tr>
<td>rin- &quot;to dye&quot;</td>
<td>rinannée &quot;dyed&quot;</td>
</tr>
<tr>
<td></td>
<td>rinánniyään feminine</td>
</tr>
<tr>
<td></td>
<td>rinánnuú - plural</td>
</tr>
<tr>
<td>keebe &quot;to set something aside&quot;</td>
<td>keebebbée &quot;set aside&quot;</td>
</tr>
<tr>
<td></td>
<td>keebebóiyään feminine</td>
</tr>
<tr>
<td></td>
<td>keebebóóuú - plural</td>
</tr>
</tbody>
</table>

Past participial nominals can be divided into three groups:
1). Those which are derived from transitive verbs and refer to the object of that verb: e.g.

dàfàffée "cooked" – from daf- to cook
cìnyáyyée "eaten" – from ciny- to eat
kàrìyáyyée "broken" – from kary- to break

2). Those which are derived from transitive verbs and refer to the subject of that verb.

e.g.
fiyìyjyée "superior" from fiy- to surpass others
gàgàgàràrìrì "troublesome" – from gaagar- to thwart

3). Those which are derived from intransitive verbs e.g.
busháshshee "dried" – from buush- to dry up
gàjìyáyyée "tired" – from gaji- to get tired

Types 1) and 2) can be formed freely from any transitive verb – they are one hundred per cent productive and the nominal always retains the original meaning of the verb from which it has been derived: it does not

(1) 1) and 2) correspond to Abraham's passive and active respectively. (cf Abraham L.H.P. Page 31-32)
have any additional semantic connotations. Therefore these types of past participial nominal can best be transformationally derived. The P.P of the intransitive verb has a semantic feature additional to the basic meaning of the underlying verb: specifically INTENSE. Since this feature is regular with all such PP nominals they also can be transformationally accounted for in the same way as the PP's of the transitive verb with, however, the reservation that there are one or two lexical exceptions which do not allow this transformation (e.g. zoo ~ to come).

Therefore we need three separate transformational rules for the three types of past participial nominal. These can be formalized in the following way:

1.) T-PP₁:

\[
SD: X \ N_i \ ((\text{PRO} \ V \ N_i)_S Y
\]

\[
1 \ 2 \ 3 \ 4 \ 5 \ 6
\]

\[
SC: 1 \ 2 \ \varnothing [\]
\]

2.) T-PP₂:

\[
SD: X \ N_i \ (N_i \ V \ NP)_S Y
\]

\[
1 \ 2 \ 3 \ 4 \ 5 \ 6
\]

\[
SC: 1 \ 2 \ \varnothing [\]
\]
3) **T-PP**: Intr:

\[
\begin{align*}
SD: & \quad X N_1 (N_1 V)_S Y \\
     & \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \\
SC: & \quad 1 \quad 2 \quad \emptyset \quad 4 \quad 5
\end{align*}
\]

The following diagrams illustrate the operation of these rules:

**T-P-P** | SD:

\[
\begin{align*}
S & \quad \text{AUX} \quad \text{VP} \\
    & \quad \text{PRO Tense} \quad \text{ASP Past} \quad \text{V} \quad \text{NP} \\
    & \quad \text{Binta} \quad \text{taa} \quad \text{she} \quad \text{sayi} \quad \text{buy} \quad \text{zanne} \quad \text{cloth} \\
    & \quad \text{Pro} \quad \text{AUX} \quad \text{VP} \quad \text{NP} \quad \text{'an rina zanne one dye cloth}
\end{align*}
\]
Binta bought a dyed cloth.
Audu yan sayi dookii kooshasshee
Audu has bought a well fed horse.
APPENDIX A

HAUSA BASE RULES.

\[
S \rightarrow \\{\text{Imp} \} (\text{Neg}) (\text{Emph})(\text{Part}) \text{ NP PRED PHR (ADV)}
\]

The declarative sentence is taken to be basic in Hausa. It can be optionally negated, emphasized or turned into a question or command. The categories Neg, Emph, Q, etc., will trigger various relevant transformations. For present purposes I shall ignore all non-obligatory constituents dominated by S i.e. I shall assume that the first rule of the grammar is effectively:

B 1. \( S \rightarrow \text{NP PRED PHR} \)

The basic division in the Hausa sentence is between the subject and the predicate.

B 2. \( \text{PRED PHR} \rightarrow \text{Pred (ADV)} \)

B 3. \( \text{Pred} \rightarrow \{\text{Pred}_1\} (\text{Auxiliary Predicate}) \) \( \{\text{Pred}_2\} (\text{Non-Auxiliary Predicate}) \)

The expansion of the predicate phrase accounts for the major types of Hausa sentence.

B 4. \( \text{Pred}_1 \rightarrow \{\text{VP} \} \) \( \text{Nloc} \) \( \text{Aux} \) \( \text{PP} \) \( \text{N} \) \( \text{Stat} \)

<table>
<thead>
<tr>
<th>VP</th>
<th>Verbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nloc</td>
<td>Locative</td>
</tr>
<tr>
<td>Aux</td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>Possessive</td>
</tr>
<tr>
<td>N</td>
<td>Stative</td>
</tr>
</tbody>
</table>
The auxiliary predicate is subdivided into four: (1) **Verbal** - an auxiliary followed by a VP; (2) **Locative** - an auxiliary followed by a locative noun; (3) **Possessive** - an auxiliary followed by a PP and (4) **Stative** - an auxiliary followed by a stative noun.

Examples:

1. Audu (\((ya' naa)_{\text{Aux}} (ka'naa kiiifi)_{\text{VP}}\)_{\text{Pred}})_{1}
   Audu is catching fish
   
   2. Audu (\((ya' naa)_{\text{Aux}} (d'aka)_{\text{N}_{\text{loc}}}\)_{\text{Pred}})_{1}
   Locative
   Audu ya naa daka
   Audu is inside.

3. Audu (\((ya' naa)_{\text{Aux}} (d'aka k'udii)_{\text{PP}}\)_{\text{Pred}})_{1}
   Possessive
   Audu has money

4. Audu (\((ya' naa)_{\text{Aux}} (za'umé)_{\text{N}_{\text{Stat}}}\)_{\text{Pred}})_{1}
   Stative
   Audu is seated.

The VP is further expanded according to the possible co-occurrence of the verb with other elements such as, direct object, associative object, benefactive etc. Thus we might have:
5. Áudu yaá ((zoo)\(V\))_{VP}
Audu has come

6. Áudu yaá ((ci)\(V\) ('ābīnci)\(NP\))_{VP}
  eat food
Audu has eaten (food)

7. Áudu yaá ((yārdá)\(V\) (dā Garbā)\(PP\))_{VP}
  agree with
Audu trusts Garba

8. Áudu yaá ((shaāwārcī)\(V\) (Gārbā)\(NP\) (gāmē dā Ali)\(PP\))_{VP}
  consult connected with
Audu consulted Garba about Ali

9. Áudu yaá\(V\) ((āmicācī)\(V\) (da Gārbā)\(PP\) (wājen tuūfī)\(PP\))
  trust with connected with
Audu trusts Garba in driving.

10. talākāwāwā yūn ((zaābī)\(V\) (Áudu)\(NP\) (shūgābānsū)\(NP\))_{VP}
    people elect leader
The people elected Audu their leader

Rules (i) - (vi) can be conflated as:

B5. VP → V\(V\left(NP\right)\left(PP\right)\)

B6. V → CS
In addition to strict subcategorization this CS will account for the four so-called grades in Hausa which are realized by different suffixes on the verb:—(1)

(i) -ee: this suffix marks the grade four which indicates a complete action or an action thoroughly done e.g.

11. Audu yáa ciny-éé 'abínčín
Audu has eaten all the food.

(ii) -oo: marks the grade five verbs which indicate movement towards the speaker. e.g.

12. Audu yáa tuńkúd-oo Garba
push
Audu pushed Garba towards me.

(iii) -u: marker of grade six verbs which indicate thoroughness of action. Sentences containing a

(1) Parsons; "secondary grades" in his Verbal System in Hausa op cit. Parsons classifies Hausa verbs into grades according to these suffixes (and other syntactic and semantic features). Note that these grade suffixes are different from the three suffixes which are affixed to the changing verb in Hausa according to the kind of object which follows it: -i after noun objects; -ee after pronoun objects and -aa when no object follows, e.g:—

Audu yáa bug-ż Garba Audu hit Garba
Audu yáa bug-éé shí Audu hit him
Audu yáa bug-na Audu has hit (X).
grade six verb are derived from an underlying sentence containing the unspecified 4th. person as subject. When used with the future tense the verb indicates a possibility. e.g.

13. Aúdù yáa tünkùd-u
   Adu was pushed well away

from 14. Aání tünkùdèé Adu
   one pushed Adu well away.

15. Aúdù zài tünkùd-u
   Adu can be pushed

from 16. zaa 'á 'iýà tünkùdè Aúdù
   will one be able to
   one can push Adu (away)

(iv) -ar (da): the causative grade marker. This grade changes morphologically intransitive verbs into transitives, and transitives into double transitives e.g.

16. Aúdù yáa zaùn-ář da Gárba
    sit
    Adu seated Garba.

17. Aúdù yáa ciy-ář da Gárba 'àbíncì
eat
   Adu fed Garba food.
B7. AUX \rightarrow PRO Tense

The auxiliary consists of a "pronoun" and a tense marker. These two components of the auxiliary are so amalgamated in the past tense and the Future 2 that they cannot be morphologically separated.

B8. PRO \rightarrow Person, Gender, Number

The pronoun part of the auxiliary indicates the features of person, gender and number of the subject NP.

\[
\begin{align*}
\text{B9. Person} & \rightarrow \{ \text{First}, \text{Second}, \text{Third}, \text{Fourth} \} \\
\text{The fourth person indicates an unspecified subject}
\end{align*}
\]

B10. Gender \rightarrow \{ F, M \}

Nouns in Hausa are either masculine or feminine.

B11. Number \rightarrow \{ Singular, Plural \}

Hausa nouns are either in the singular or plural.

B12. Tense \rightarrow \{ ASP, \text{Past}, \text{Prog}, \text{Habit}, \text{Future 1}, \text{Future 2}, \text{Subjunctive} \}
There are six tenses in Hausa: past, progressive, habitual, Future 1, Future 2, and the Subjunctive. I treat the subjunctive as a tense and not as a mood in line with the traditional analysis of tenses in Hausa. (1)

B13. ASP \(\rightarrow\) \{(Relative)\}
\(\rightarrow\) \{(General)\}

The term "Aspect" is used here as a mnemonic to indicate the difference between the tense of the verb in relative clauses on the one hand and the tenses of the verb in non-relative clauses on the other hand. e.g.

18. Aúdù yá nāa zuwàa (Non-relative)
Audu is/was coming

19. lóókàcín à Àudù yá kòč zuwàa (Relative)
The time the time when Audu is/was coming

20. náá sānìì (cèèwàa) Aúdù yáá zuó̂ (Non-relative)
I know that Audu has arrived

21. náá sān lóókàcín à Àudù yáá zuó̂ (Relative)
I know the time when Audu arrived.

A representative selection of the various types of auxiliary predicate generated by base rules 4-13 is given in the following tree diagrams:

(1) cf for example, Abraham: Language of the Hausa People (1959) p.7.
1. 

\[
\begin{array}{c}
\text{PRO} \\
3 \\
M \\
S \\
\end{array} \quad \text{Tense(1)} \\
\begin{array}{c}
\text{ASP} \\
\text{Prog} \\
\text{Gen} \\
\end{array} \quad \text{Pred(1)} \\
\begin{array}{c}
yá \\
he \\
ná\text{ is/was} \\
zúwà\text{a coming} \\
\end{array} \\
\text{(cf sentence 18)} \\
\end{array}
\]

2. 

\[
\begin{array}{c}
\text{PRO} \\
3 \\
M \\
S \\
\end{array} \quad \text{Tense} \\
\begin{array}{c}
\text{ASP} \\
\text{Prog} \\
\text{Rel} \\
\end{array} \quad \text{Pred(2)} \\
\begin{array}{c}
yá \\
ná \\
zúwà \\
\end{array} \\
\text{(cf example 19)} \\
\end{array}
\]

(1) Convergent branches are used where morphophonemic rules have operated on the structure actually generated by PS rules.
3. 3.  

Pred₁ (Verbal)

AUX

[PRO]

Tense

[ASP]

Past

[PRO]

M

S

he

yaa (of example 6)

V

NP

ci

'abinci food

(cf example 6)

4.

Pred₁ (Verbal)

AUX

[PRO]

Tense

[ASP]

Past

[PRO]

M

S

he

yaa

zoo (cf example 21)
5. \( \text{Pred}_1 \) (Locative)

\[
\begin{array}{c}
\text{Tense} \\
\text{ASP} \downarrow \\
\text{Gen} \downarrow \\
\text{Prog} \\
\text{N}_{\text{loc}} \\
\text{AUX} \\
\text{PRO} \\
\end{array}
\]

(provided by example 2)

6. \( \text{Pred}_1 \) (Possessive)

\[
\begin{array}{c}
\text{Tense} \\
\text{ASP} \downarrow \\
\text{Gen} \downarrow \\
\text{Prog} \\
\text{PP} \\
\text{AUX} \\
\text{PRO} \\
\end{array}
\]

(provided by example 3)
7. Pred₁ (Stative)

AUX

PRO

Tense

ASP

Gen

is/was

zaune seated

(cf example 4)

B14. Pred₂ → \{Compl Cop \} (Equational)

\{Predicator \} (Existential)

The non-auxiliary predicate is either (1) an "equational predicate" consisting of a complement followed by a copula or (2) an "existential predicate" consisting of a predicator particle.

B15. Compl → \{NP \} \{Adj \}

B16. Cop → nec

The copula is nec if the complement has the feature [+MASCULINE] or [+PLURAL]. The allomorph nec is used with complements which have the feature [-Feminine] [-PLURAL].
There is tonal polarity between the last syllable of the complement and the copula: e.g.

22. Aúdu máaładáa nee learned man
   Aúdu is a learned man.

23. Kàndé máaładáa cée
    Kàndé is a learned woman

24. Aúdu dà Kàndé máaładáa nee
    Aúdu and Kàndé are learned people

25. Kàndé mće cée
    Kàndé is a woman.

B17. Predicator \(\rightarrow\) (dağı'akwai)\(^{(1)}\)

25. (dà) 'akwai sányii 'a Ingîlà
cold in England
    dà sányii 'à Ingîlà
    England is cold (There is cold in England)

The grammatical function of the NP which \(\mathbb{W}\) comes after the predicator in surface structure e.g.

\(^{(1)}\) I am using Fillmore's convention that at least one element of a series embedded in linked parentheses must be chosen. of Fillmore Case for Case P.28.
(-da Allah "there is God" i.e he exists) is not very clear. I tentatively analyze it here as the subject of the existential sentence viz it is immediately dominated by the node S rather than the predicate phrase. But it is obligatorily shifted to the right of the predicate. Note that when a pronoun occurs as the subject of the predicate, the form of the pronoun is the same as the form it assumes when it is in object position e.g.

27. (da) ᵀᵃᵏʷᵃⁱ ˢʰⁱ/ᵗᵃ/ˢᵘᵘ  etc
    he/she/they
    he/she/they exist(s).

compare 27 with 28:

28. ᴬᵘᵈᵘ ʸᵃᵃ ᵇᵘᵍᵉᵉ ˢʰⁱ/ᵗᵃ/ˢᵘᵘ
    Audu has beaten him/her/them

But when the sentence is negated or when only da is used as the predicate the pronoun takes the form it has in disjunctive subject position. e.g.

29. ᵃᵃᵃᵇᵘ ᵐⁱⁱ/⁽ʲⁱᵗᵃ⁾/ˢᵘᵘᵘ
    he/she/they do(es) not exist.

30. ᵃᵃ ˢʰⁱⁱ⁽ʲⁱᵗᵃ⁾/ˢᵘᵘᵘ  "he/she/they exist(s)."
Compare 28, 29 with 30-32 below:

30. shii malaamii nee "he is a learned man"
31. ita maalamii cee "she is a learned woman"
32. suu malaamii nee "they are learned people"

This rule subcategorizes adverbials into adverbial of time, adverbial of place, adverbial of manner etc. Any one of those adverbials or any combination of them may be chosen in a sentence:

33. Audu yaa tafi (kaasuwann) Place ('a kaa kekkeee) Manner market at on bicycle (jiya) Time (doin ya sawo nمام) Purpose yesterday for he buy meat
Audu went to the market on a bicycle yesterday to buy meat.

If more than one adverb of place or time occurs in a sentence they are always hyponymously related:

34. Audu yaa gamu da Garba ('a Azare) Place ('a ungwari quarters meet with makaamaa) Place ('a gidan maaji) Place
Audu met Garba in Azare in Makama Quarters at Maji's house.

35. Aúdù yáá tafi kààsùwáá (jiýà) \(\text{Time}(\text{dà ràánà})\) \(\text{Time}(\text{dà kàrìfèe jùkù})\) 3 o'clock
Audu went to the market yesterday in the afternoon at three o'clock.

36. Aúdù yáá záùnàá (à) (nàñ) \(\text{Nloc}(\text{da Np})\)
Audu has sat here.

37. Aúdù yáá záùnàá (à) (gààfèe) \(\text{Nloc}(\text{dà (Gàrbà) Np})\)
Audu has sat beside Garba.

38. Aúdù yáá tafi \(\text{Nloc}(\text{kààsùwáá})\)
Audu went to the market.

39. Aúdù yáá ñàáwóó (tùñ) \(\text{Conj}(\text{jiýà})\)
Audu has been back since yesterday.
The noun Ṽokácii "time" in Hausa is modified by a relative clause to form when clauses:

40. Audù ya nèa gidaa Ṽokácii dà Gàrba ya daàwòô
Audu was at home (the time) when Garba returned

"As soon as" clauses are realized by the insertion of the conjunction sai "then (suddenly)" between the relative clause and the main clause:

ísimo

41. dà Audù ya kwàntáâ sai bàrçii ya dáúkèé shì
as soon as he lay down Audu fell asleep

The noun Ṽokácii can be deleted, optionally when the clause is not nominalized, obligatorily when the clause is nominalized in sentences with as soon as adverbs:

42. dà Audù ya kwàntáâsai bàrçii ya dáúkèé shì
(meaning the same as 41).

43. dà kwàntáâwàr Audù sai bàrçii ya dáúkèé shì
(meaning the same as 42 and 41).

B21. ADV Manner \rightarrow \{ da N Abstract \\
kanar NP \}
Simple manner adverbs are many in number in Hausa. (1) Manner adverbials can also be formed by the preposition ḅa "with" followe by an abstract noun, or by the manner noun kàmaa "resemblance" followed by a genitive modifier (cf. Page 119):

43. Aúdù yáá zaúnaa kàwài.  
    quietly
    Aúdù sat quietly.

44. Aúdù yá nàa tàfiyàa (da kàrfìi)ₐₐₐbstract)ₐₐₐADV Manner
    Aúdù is/was walking vigourously.

45. Aúdù yá nàa tàfiyàa (kàmà-ř (tsóófóó)ₐₐₐold man NP)ₐₐₐADV Manner
    Aúdù is/was walking like an old man.

B22. PP ———> Prep NP
B23 NP ———> (Noun (RefjS)

NP is either (1) a noun followed by an optional referential article or a sentential modifier or both or (2) a sentence. This sentence must undergo some nominalization transformation before it appears on the surface.

(1) Ideophones and adverbs of degree are also considered here as kinds of manner adverbs.
B24. Noun \(\rightarrow\) CS

Hausa has no definite or indefinite article marker. There is only a referential marker which is added to any noun which has previously been referred to. The referential marker is \(-r\) when the noun referred to is feminine singular. Its allomorph \(-n\) is used in all other cases:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>budurwaa &quot;a girl&quot;</td>
<td>budurwaa</td>
<td>budurwaa-(r)</td>
</tr>
<tr>
<td>saurayii &quot;a boy&quot;</td>
<td>saurayii</td>
<td>saurayii-(n)</td>
</tr>
<tr>
<td>samaarii &quot;boys&quot;</td>
<td>samaarii</td>
<td>samaari-(n)</td>
</tr>
<tr>
<td>buduurai &quot;girls&quot;</td>
<td>buduurai</td>
<td>buduur-(n)</td>
</tr>
</tbody>
</table>

All relative clauses and attributive adjectives and possessive modifiers (i.e. genitives) are transformationally derived from full sentences (cf Appendix B for relevant transformations):

46. (dookin ((dà mú kà sàyáá)\(_S_{Mod}\))\(_{NP}\) the horse which we bought

47. (riiga(((-r)\(_GL_{Audu}\))\(_S_{Mod}\))\(_{NP}\) Audu's shirt.

48. (yàarinyàa (((kyákkyaàwuyáá)\(_{Adj}\))\(_{Mod}\))\(_{NP}\) a beautiful girl.
The following tree diagrams give a representative selection of structures generated by the base rules with a minimum of T-rules and morphophonemic rules assumed:

Audu yaa sayaa ma sarkii dookii?
Has Audu bought a horse for the king?
dōkkīn dà mū kà sàyàa mā sārkīi bāi 'ísōō bā

the horse which we bought for the king has not arrived
tsoofii su naa sopo tsoofii su shaa kunuu
old people they are like old p they drink kunuu

tsoofii su naa son shan kunuu
old people like drinking kunuu
APPENDIX B

TRANSFORMATIONAL RULES.

T1. T-AUXILIARY–PRONOUN DELETION:

SD: X NP (PRO TENSE)AUX Y
    1  2  3  4  5
SC: 1  2  Ø  4  5.

Conditions: (i) 3 must be third person
(ii) 4 must be either progressive or habitual.

This rule will optionally delete the pronoun part of the auxiliary when the tense is progressive or habitual:

49. Aūdū ya nāa zuwāa → Aūdū nāa zuwāa
    Aūdū(he) is coming
49. Aūdū(he) is coming.

50. mutaānēs su kān zoō → mutaānēs kān zoō
    people (they) habitually come
50. people (they) habitually come

T-2 PROMOUN AND TENSE PERMUTATION:

SD: X (PRO TENSE)AUX Y
    1  2  3  4  5
SC: 1  3  2  4.

Condition: Tense must be Future 1.
The pronoun and the tense marker obligatorily exchange places in the Future 1 tense:

51. *Audu yà zaà zóó —> Audu zai zóó
Audu yà zaà zóó —> Audu zai zóó (by later morpho-phonemic rules)

T-3. T-RELATIVIZATION:

SD: X (N S)NP Y
1 2 3 4 SC: 1 2 da 3 4.

Nouns can be modified by full sentences embedded as relative clauses. The embedded sentence must contain a noun identical to the modified noun. The relativizer da "which/who" joins the modified noun and the embedded sentence.

T4. T-ADJECTIVIZATION:

SD: X (N (N Adj Cop)S)MOD NP Y
1 2 3 4 5 6 SC: 1 2 Ø 4 Ø 6.

A noun can be modified by a copular sentence whose subject must be identical to the modified noun and whose complement must be an attributive adjective.
For example the NP *dookii farii* "a white horse" has the following underlying structure:

11. **SD:**

```
      NP
       \   /   \
      S    PRED PHR
   \       /   /   \
   Ni     NP  Ni
         \     /   \
         Compl Cop
             \  /  \
             Adj
             /  \
           dookii dookii farii nee
              horse horse white is
```

**T-RELATIVIZATION**

12. **SC:**

```
    NP
    /  \
   N    Adj
   /    |
 dookii farii
   horse  white
```

**T5. T-GENITIVIZATION:**

```
SD: X (Ni (NP AUX da Ni)S)MOD)NP Y
    1 2 3 4 5 6 7
SC: 1 2 - GL - 3 ø ø ø 7
```

Nouns can be modified by a sentence with a possessive predicate which contains a noun identical
to the modified noun. (1)

e.g. the NP *dooki-n sarkii* "the king's horse" is derived from the following underlying structure:

13. SD: NP

```
  Ni
   \  
    S   PRED PHR
       \  
        NP     
              \  
               N   Pred₁
                  \  
                   AUX  PP
                      \  
                       F₁  Fₙ  Prep  NP
                             \  
                              \  
                               Ni
```

dookii sarkii ya naa da with dookii
horse king he is horse

T-GENITIVIZATION

14. SC: NP

```
  Ni
   |  
    GL N
       
```

dookii -n sarkii
horse of the king

(1) Where this noun is abstract there are certain restrictions in the genitive which are beyond the scope of this thesis.
T6. T-COMPLEMENTIZER PLACEMENT:

SD: \( X (S) \text{NP}_3 \)

SC: 1 ccewaa 2 3.

A full sentence can be embedded as an object of a verb that takes a sentential object or as a complement after a noun. (cf P.31)

T7. T-EXTRAPOSITION:

SD: \( X ((S)_{NP} \text{Pred}_4 Y)_S \)

SC: 1 \( \emptyset \) 3 2 4.

Sentential subjects are extraposed to the right of the predicate. This transformation is obligatory with certain verbs especially those that take subjunctive complement subjects. (cf P.33)

T8. T-PREP DELETION:

SD: \( X \text{da} (ccewaa S)_{NP} Y \)

SC: 1 \( \emptyset \) 3 4.

The preposition da "with" in V-prep can be deleted optionally. (cf P.35)
T9. **T-COMP DELETION:**

SD: \[X \ (\text{ceewaa} \ S) \ NP \ Y\]

\[
\begin{array}{cccc}
1 & 2 & 3 & 4 \\
\end{array}
\]

SC: \[1 \ 3 \ 4\].

The complementizer ceewaa can be deleted, optionally in certain cases, obligatorily in others. (cf P.35)

T10. **T-EMPH ATTACHMENT:**

SD: \[(\text{Emph Particle} \ X \ (\text{NP})_{\text{VP}} \ Y)_{S}\]

\[
\begin{array}{ccccc}
1 & 2 & 3 & 4 & 5 \\
\end{array}
\]

SC: \[3 \ 4 \ 1 \ 2 \ 5\].

The subject of a sentence can be emphasized by inserting an emphatic particle at its right. Similarly the VP, the object and the various adverbials in a sentence can be emphasized:

52. fulaanii kam, sun kaawoo nadaraa kaasuwaajiya bring milk
53. fulaanii sun kaawoo nadaraa kasuwaa kam jiya
54. fulaanii sun kaawoo nadaraa kam, kaasuwaajiya
55. fulaanii sun kaawoo nadaraa kaasuwaajiya kam

all meaning the same thing viz "the Fulanis brought milk to the market yesterday", but with emphasis on the item on the left of the emphatic particle kam...
T11. **T-TOPICALIZATION:**

SD: \((X \text{ NP Emph-Particle Y)}_3\)

SC: 2 3 1 4.

Any item which has been emphasized can be front-shifted for extra emphasis:

56. \(\text{fułaanii kàm, sùn kaáwoó màdàràà jiỳà}

57. \(\text{màdàràà kàm, fułaanii sùn káwòó (tà) jiỳà}

58. \(\text{jiỳà kàm, fułaanii sùn káwòó màdàràà.}

"The Fulanis brought milk"

T12. **T-Cop Emph:**

SD: \(X (\text{NP } \{\text{Adj}\} \text{ Cop})_3 \text{ S Y}\)

SC: 1 4 2 3 5.

The predicate of a copular sentence can be front shifted for emphasis:

59. \(\text{Audù sàrkiiì nèe} \rightarrow \text{sàrkiiì nèe Audù.}

Audu is a king a king is Audu.

Parsons' B-Type sentences are actually copular
sentences which have undergone this kind of transformation. For example the sentence:

it was milk that the Fulanis brought.

has the following underlying structure:

17. SD:

```
   / \  
  /   \  
S     S
     / \  
 NP   PRED PHR
       /   \  
  Np   S
     /   \  
 NP   PRED PHR Compl Cop
       /   \  
  NP   Pred1
     /   \  
 AUX  VP
      /   \  
 PRO Tense V NP
       /   \  
    NP    N
         /   \  
      N1
```

'abu fulaanii sun kaawoo 'abu madaraa nee something F they bring something milk is T-Cop Empn
T-Relativization (and other relevant transformations) will then apply on the embedded sentence ($S_2$) to give the following derived structure:

61. mádáraá née 'ābin dà Fúlàànií sú kà kaawóó milk was the thing which the Fulanis brought.

Then the copula née and the modified noun together with the relativizer da are deleted by a later transformation to produce 60.
T13. **T-Cop Deletion:**

SD: X (NP Compl Cop)s Y

1 2 3 4 5

SC: 1 2 3 Ø 5.

The copula can be deleted optionally normally in answer to word questions:

62. súnáa naá Aúdo nee ----> súnáa naá Aúdo
name my Audo is My name is Audo.

T14. **T-NOMINALIZATION**:

SD: X ((NP AUX V Y) s) NP

1 2 3 4 5

SC: 1 Ø Ø 4 r 2 5,

NOM

This rule transforms sentences into NP's (cf P.72)

T15. **T-NOMINALIZATION**:

SD: X ((NP AUX (V(da)N) V P Y) s) NP Z

1 2 3 4 5 6

SC: 1 Ø Ø 4 GL 2 5 6

NOM

This rule operates on sentences containing single transitive verbs to turn them into nominals. (cf P.81)
T-16. T-REL NOMINALIZATION:

SD: $X ((N_P_1 \ AUX (y_1)_V \ N_P_2)_S)_{N_P} Y$

1 2 3 4 5 6

SC: $1 \begin{array}{c} \text{da} \ 2 \ 3 \ 4 \ 6 \end{array}$

This rule operates on all types of sentence containing verbal predicates. (cf P.82).
APPENDIX C

A List of Representative Sample of Verbs with Their Different Complementation Possibilities:

\[+ceewaa +Subjunctive\] :-

- bukaaci to need  
  tiilasta to force  
  guji to avoid  
  yarda to agree  
  tsammanci to anticipate  
  daarrara to be anxious  
  daagee to insist  
  neemi to seek  
  wajabta to be necessary

\[-ceewaa -Subjunctive\] :-

daukaa to assume  
zataa to think  
kaddara to will  
saa to cause  
nufa to intend
Subjunctive:

- **gaya** to tell
- **kanaata** to behave
- **luura** to notice
- **bayyanaa** to explain
- **tabbata** to be certain
- **jaddada** to emphasize
- **fahimta** to realize
- **riska** to comprehend
- **tuna** to remember
- **karfafa** to emphasize
- **ambata** to mention

Subjunctive:

- **hana** to prevent
- **’iya** to be able to
- **gaya** to ask
- **kanata** to behave
- **soo** to like
- **kii** to dislike/refuse
- **gwammace** to regret
- **wajaba** to be necessary
APPENDIX D.

LIST OF ABBREVIATIONS AND SYMBOLS:

ADV  Adverbial
Adv  Adverb
Excla Exclamation
Part Particle
Stat Stative
Man Manner
loc Locative
Compl Complement
Comp Complementizer
Cop Copula
GL Genitive link
P.P Past Participle
PP Prepositional Phrase
Prep Preposition
ASP Aspect
Prog Progressive
----> Rewrite as
====> Rewrite as
* Ungrammatical
(X)_Y X belongs to the category Y
[X]_Z X has the feature Z
(X) X is optional
\{X\} \{Y\}  
X or Y  
/  
High tone  
\  
Low tone  
-aa  
Long -a vowel
APPENDIX E

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