# LEXICALIST HYPOTHESIS AND HAUSA1

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Chomsky [1970] challenges Lees' [1960] transformational analysis for the formation of the "derived" nominal and puts forward a new hypothesis. 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.<sup>2</sup>

The main theoretical aim of this paper is to analyze the various aspects of nominalization in Hausa and to see which of the two positions (Chomsky's lexicalist position or Lees' and later linguists' transformationalist position) it supports.

### 1. Derived nominal and gerundive nominal in Hausa

The study of nominalization is still a virgin field in Hausa 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 <u>nominalization</u> in two distinct ways: (1) to refer to the underlined phrases in the sentences:

(1) karanta littaafin baa wuyaa
reading the book no difficulty
'reading the book is not difficult'

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<sup>&</sup>lt;sup>2</sup>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 nominal as there was no explicit theory of the lexicon.

- (2) <u>daawoowar Audu</u> yanzu yaa baa ni maamaakii returning of A now it give me surprise 'Audu's returning now surprises me'
- (3) karaatun jariidaa ya naa da 'amfaanii reading of newspaper with usefulness 'newspaper-reading is useful'
- (4) rubuutun wasiikaa 'aikii nee mai saukii
  writing letter job is with easiness
  'letter-writing is an easy job'

and (2) to refer to the transformations which relate these phrases to the structures underlying (5) - (8):

- (5) X yaa karanta littaafii
  'X read a book'
- (6) Audu yaa daawoo yanzu
  'Audu has returned now'
- (7) 'a naa (yin) karaatun jariidaa
   one is doing reading of newspaper
  'one does newspaper-reading'
- (8) 'a naa (yin) rubuutun wasiikaa
  'one does letter-writing'

The main controversy over nominalization (in English) hinges on the question whether the derived nominal is to be entered directly in the lexicon with its own idiosyncratic features 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 distinct from gerundive nominals in Hausa. Therefore my first concern here is 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 students

of Hausa. Abraham [1959], for example, divides the verbal nouns in Hausa into two - primary verbal nouns, e.g. karantaawaa 'reading', rubuutaawaa 'writing', kasheewaa 'killing'; and secondary verbal nouns, e.g. karaatuu 'reading', rubuutuu 'writing', kisaa 'killing'. Parsons [1960] also divides them into two - strong and weak. His weak verbal noun corresponds to Abraham's primary, and his strong to Abraham's secondary. Hodge [1947], however, considers only Abraham's secondary (Parsons' strong) as verbal nouns. Hodge considers the verbal noun of the "changing 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:

VERB		GERUNDIVE NOMINAL	DERIVED NOMINAL 3
kashe	'to kill'	kashe(ewaa)	kisaa
ƙeera	'to forge'	ƙeera(awaa)	ƙiiraa
karanta	'to read'	karanta(awaa)	karaatuu
rubuuta	'to write'	rubuuta(awaa)	rubuutuu
gina	'to build'	gina(awaa)	ginii
rina	'to dye'	rina(awaa)	rinii

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 gerundive, e.g. they both have verbal roots and can occur in progressive constructions as in:

- (9a) Audu ya naa <u>kashe maciijii</u>
  - 'Audu is killing a snake'
- (9b) Audu ya naa kisam maciijii 4
  'Audu is killing a snake'

 $<sup>^3\</sup>mathrm{I}$  use these terms only as labels at this stage. The justification for their analysis as such will be given in due course.

<sup>&</sup>quot;Here the form of the derived nominal kisam differs from its

and in constructions such as:

- (10a) <u>kashe maciijii</u> Audu ya kee (yii)
- (10b) <a href="kisam macijji">kisam macijji</a> Audu ya kee (yii)

  'killing the snake (is what) Audu is doing'

and in nominalizations such as:

- (11a) kashe macijin Audu
  'Audu's killing the snake'
- (11b) kisam macijin Audu
  'Audu's killing of the snake'

There is, however, an important semantic difference between the two types of nominal, viz. those in construction (a) denote just a fact while those in (b) denote an action with the additional feature of either [+OCCUPATION] or [+HABIT] or both.<sup>5</sup> There is another (phonological) difference between the two nominals: as in English, the phonetic form of the derived nominal is largely unpredictable. Its form is also more noun-like than the primary verbal noun, especially in tone (the primary verbal noun tones are entirely predictable).

If we took the nominals in (b) to be gerundive like the ones in (a) we would then be assuming that constructions (12) and (13) could be transformationally derived from the same source:

- (12) karanta littaafin Audu
  'Audu's reading/having read the book'
- (13) karaatun littaafin Audu
  'Audu's reading of the book'

which is not true. The source of (12) is the same as the structure

original form kisaa as shown in column 3 by virtue of the genitive which links it to its object. The long final vowel, characteristic of Hausa common nouns, becomes short in the "nomen regens" before the genitive -n/-r. The -n/-r is normally assimilated to the first consonant of the "nomen rectum" e.g. sarkli 'a king'; sarki-n Masar -> sarki-m Masar 'the king of Egypt'; sarauniyaa 'a queen'; sarauniya-r Kano -> sarauniya-k Kano 'the queen of Kano'.

<sup>&</sup>lt;sup>5</sup>The nominals in (a) correspond to Lees' second nominal, i.e. his

which underlies (14).

(14) Audu yaa karanta littaafii
'Audu read a book'

whereas (13) cannot be derived from any underlying source at all. (13) is in fact a simple genitive construction of the same structure as (15), (16) and (17), i.e. a lexical noun modified by a genitive.

- (15) dookin sarkii
   horse of king
   'the king's horse'
- (16) ruwan tafkii
   water of lake
  'water of the lake'
- (17) riigar Audu shirt of Audu 'Audu's shirt'

In support of this claim it can be observed that a number of transformations which operate on genitive constructions such as (15) - (17) can also operate on nominal constructions like (13). 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:

- (18) ruwa-n<sup>6</sup> tafkii nee → ruwaa nee na tafkii
  'it is lake-water'
- (19) karaatu-n littaafii nee → karaatuu nee na littaafii
  'it is the reading of the book'

but not:

gerundive nominal [Lees 1960:54], and those in (b) to his first nominal, i.e. the "action nominal" [Lees 1960:56], e.g. karanta littafin 'reading the book', karaatu-n littaafin 'the reading of the book'.

<sup>&</sup>lt;sup>6</sup>When the head noun and the genitive are separated the genitive link (-n/-r) assumes its full form and becomes na/ta.

(20) karanta littaafii nee → \*karanta(awaa) nee na littaafii
where nee intervenes between a gerundive nominal and its object.

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 genitive for emphasis:

- (21) ruwan tafkii mai sanyii → ruwaa mai sanyii na tafkii water of lake possessor of coolness 'cool water of the lake'
- (22) karaatun littaafii <u>mai 'amfaanii</u> + karaatuu <u>mai 'amfaanii</u> na littaafii

but not:

(23) \*karanta mai 'amfaanii na littaafii

'the useful reading of the book'

where the adjectival phrase intervenes between a gerundive nominal and its object. Likewise a demonstrative can occur at the end of a whole NP or between a head noun and a genitive.

- (24) ruwa-n tafkin nan → ruwan nan na tafkii
  'this water of the lake'
- (25) karaatu-n littaafin nan → karaatun nan na littaafii
  'this reading of the book'

but not:

(26) \*karanta nan na littaafii

where the demonstrative nan has been moved between a gerundive nominal and its object.

The various constituents of a sentence (VP, object, adverbials) can be front-shifted for emphasis, and this is true even when the sentence is nominalized. Examples are:

(27) karanta littafii (nee) Audu ya yi (VP front-shifted)
'reading the book (was what) Audu did'

- (28) jiya (nee) Audu ya karanta littaafii (adverbial front-shifted)
  '(it was) yesterday (that) Audu read the book'
- (29) daakii Audu ya kee ginaawaa (object front-shifted)
  '(it was) a room (that) Audu was building'

When the object of a gerundive nominal is front-shifted the nominal takes the suffix -waa as in ginaawaa. Similarly, when the object is deleted the nominal takes the -waa suffix, e.g.

(29) Audu ya naa ginaawaa
'Audu is building X'

The derived nominal and the gerundive can occur in apparently identical contexts, e.g.

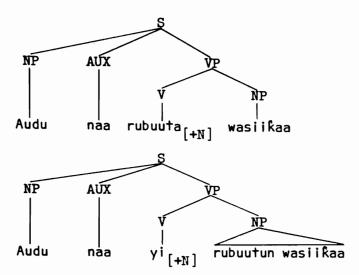
- (30) Audu ya na ƙeeraawaa/rinaawaa
  'Audu is forging/dying X'
- (31) Audu ya naa ƙiiraa/rinii

In constructions containing gerundive nominals, as in (30), there is always a deleted object implied while in the case of constructions containing the other type of nominal the fact is that we are specifying an occupation that he is engaged in, i.e. he is doing (the activity of) manufacturing/dying. There is no object implied.

Front-shifting of objects is not permissible with the derived nominal. Thus (32) is ungrammatical.

(32) \*wasiiƙaa Audu ya kee rubuutuu

The two sentences Audu ya naa rubuuta wasiikaa and Audu ya naa rubuutun wasiikaa are two simple sentences whose main verbs have been obligatorily nominalized because of the continuative aspect auxiliary. The two sentences can be characterized by the following (partially derived) structures. The feature [+N] has been added to the verbs because of the continuative aspect AUX.



Front-shifting is prevented in the second tree because this would involve ripping part of an NP away. In the case of the first tree, the entire object NP is moved, however.

All these examples show clearly that the derived nominal plus its semantic object or subject has similar syntactic behavior to the genitival NP in Hausa. This means that the nominals karaatuu 'reading', rubuutuu 'writing' (and all other derived nominals) are entered in the lexicon as simple nouns such as ruwaa 'water' and dookii 'horse'.

It might be argued that karaatu-n Audu 'the reading of Audu' can have (33) as its source:

(33) Audu yaa yi karaatuu
'Audu did (some) reading'

with yi-karaatuu 'to do-reading' analyzed as a verbal unit. Derived nominals in Hausa do in fact have some syntactic behavior in common with the so-called <u>dynamic nouns</u>. For example, there is the possibility of inserting (a) and indirect object or (b) a particle such as har 'even', dai (emphasis), etc. between the verb yi 'to do' and the derived nominal:

(34) Audu yaa yi dai karaatuu
'Audu did (some) reading'

(35) Audu yaa yi <u>ma Garba</u> karaatuu
'Audu did (some) reading for Garba'

The derived nominal can also be qualified by an adjective: 7

(36) Audu yaa yi kyakkyaawan karaatuu 'Audu did a good reading'

It is true that there are compound forms in Hausa, but these are normally indivisible. For example, no particles, adjectives, or adverbs can occur in between the constituents of the following compound forms:

- (37) babba-da-jakaa
  'a kind of bird'
- (38) babba-da-tsoolaa 'untasty broth'
- (39) kaamaa-karyaa 'oppressive rule'
- (40) faadi-ka-mutu 'china ware'
- (41) kaama-kanda '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 yii plus the genitive link which connects it with

(gerundive nominal with deleted object).

<sup>&</sup>lt;sup>7</sup>When the object of the gerundive nominal is front-shifted or deleted (and the verb is in the progressive tense), the nominal takes the suffix -waa but the derived nominal never takes the suffix, e.g.

wasiiƙaa Audu ya kee rubuutaawaa 'it was/is a letter that Audu was/is writing'

<sup>(</sup>object of gerundive nominal front-shifted);

Audu ya naa rubuutaawaa 'Audu was/is writing X'

its object in the progressive construction is normally deleted, e.g.:

(42) Audu ya naa (yi-n) karaatuu
'Audu is doing (some) reading'

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

- (43) [[Audu yaa yi karaatuu] $_{\rm S}$ ] $_{\rm NP}$  ===>
- (44) [yi-n karaatu-n Audu] $_{
  m NP}$  ===> karaatu-n Audu

'Audu's (doing the) reading'

When the verbal noun plus the genitive is deleted in constructions such as (44), the reduced version has the same surface form as the derived nominal construction. This is why karaatu-n Audu 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 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 reading'. The claim that this is indeed ambiguous in this fashion 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 adverbials:

- (45) [[Audu yaa yi karaatuu da raana] $_{S}$ ] $_{NP}$  ===>
  'Audu has read in the afternoon'
- (46) yi-n karaatu-n Audu da raana
  'Audu's having read in the afternoon'

but not:

(47) \*karaatu-n Audu da raana

The point here is that the derived nominal does not admit adverbial extentions 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 nominals is that the object of a gerundive nominal always follows it without a genitive link while the derived nominal is always linked to its object by a genitive link, e.g.:

- (48) kaama dookii (gerundive)
  'catching a horse'
- (49) keera fartanyaa (gerundive)
  'forging a hoe'
- (50) kaamu-n dookii (derived)
  'horse-catching'
- (51) Riira-r fartanyaa (derived)
  'hoe-forging'

Our discussions above show explicitly that the syntactic behavior of the derived nominal 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 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.

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

- (52) ban soo <u>zaunaawar Audu minti 'uku a kan kujera-r maalam ba</u>
  'I did not like Audu's sitting for three minutes on the
  teacher's chair'
- (53) daawoowar Audu gidaa kullum da tsaka-r dare baa shi da kyau 'Audu's always returning home at midnight is not 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.<sup>8</sup>

I shall now look into the operations which reorder 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 observation. 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 any evidence for or against putting some of the adverbials within the VP.9

Tense and aspect are normally neutralized in the nominalized sentence. 10 Thus the embedded sentences in examples (54) - (56) are all rewritten as zuwa-n Audu 'Audu's coming' in examples (57) - (59).

- (54) n naa zato(-n)  $\left[\left[\frac{\text{Audu}}{\text{Zai}} \frac{\text{Zoo}}{\text{Zoo}}\right]_{\text{S}}\right]_{\text{NP}}$ 'I think Audu will come'
- (55) naa tabbataa  $[[\underline{Audu} \ yaa \ zoo]_S]_{NP}$ 'I am certain that Audu has come'
- (56) baa naa so(-n) [[Audu ya zoo]<sub>S</sub>]<sub>NP</sub>
  'I do not want Audu to come'
- (57) n naa zato-n <u>zuwa-n Audu</u>
  'I anticipate Audu's coming'

<sup>&</sup>lt;sup>8</sup>Cf. Galadanci [1969].

<sup>&</sup>lt;sup>9</sup>Cf. Chomsky [1965:102] 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.

<sup>10</sup>Cf. Section 2.c. Relatival nominalization, below, in which the gerund is modified by a relative clause.

- (58) naa tabbataa da <u>zuwa-n Audu</u>
  'I am certain of Audu's having come'
- (59) baa naa so-n <u>zuwa-n Audu</u>
  'I do not like Audu's coming'

Adverbs of time, manner, place, etc., can occur freely with the gerundive nominal together with the other elements of the VP (i.e. the object(s), adverbials of duration, frequency, etc.) e.g.

- (60) daawoowa-r Audu yanzu yaa baa ni maamaakii
  'Audu's having returned now has surprised me'
- (61) karantaawa-r Audu <u>da-ƙarfii</u> yaa firgitaa ni
  with vigour frighten
  'Audu's reading loudly frightened me'
- (62) zaunaawa-r Audu <u>a kan kujeera-r maalam</u> baa daidai ba nee right

'Audu's sitting on the teacher's chair is ill-mannered (is not right)'

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(s) and the nominalized verb). Thus examples (63a - f) all have the same meaning (with perhaps a slightly different focus of emphasis with some speakers).

- (63a) (i) zaman Audu <u>wataa 'uku 'a Kano baara</u>
  month 3 last year
  - 'Audu's staying for 3 months at Kano last year'
  - (ii) Audu yaa zaunaa wataa 'uku 'a Kano baara
    'Audu stayed for 3 months at Kano last year'
- (63b) (i) zaman Audu wataa 'uku baara 'a Kano
  'Audu's staying for 3 months last year at Kano'

- (ii) Audu yaa zaunaa wataa 'uku baara 'a Kano
  'Audu stayed for 3 months last year at Kano'
- (63c) (i) zaman Audu <u>'a Kano baara wataa 'uku</u>
  'Audu's staying at Kano last year for 3 months'
  - (ii) Audu yaa zaunaa 'a Kano baara wataa 'uku
    'Audu stayed at Kano last year for 3 months'
- (63d) (i) zaman Audu <u>'a Kano wataa 'uku baara</u>
  'Audu's staying at Kano for 3 months last year'
  - (ii) Audu yaa zaunaa 'a Kano wataa 'uku baara
    'Audu stayed at Kano for 3 months last year'
- (63e) (i) zaman Audu <u>baara 'a Kano wataa 'uku</u>
  'Audu's staying last year at Kano for 3 months'
  - (ii) Audu yaa zaunaa <u>baara 'a Kano wataa 'uku</u>
    'Audu stayed last year at Kano for 3 months'
- (63f) (i) zaman Audu baara wataa 'uku 'a Kano
  'Audu's staying last year for 3 months at Kano'
  - (ii) Audu yaa zaunaa baara wataa 'uku 'a Kano 'Audu stayed last year for 3 months at Kano'

Most Hausa speakers will generally accept (63a - f) as perfect. 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 adverbials 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, the (a) sentences below are grammatical while the (b) ones are not.

- (64a) jiya Audu yaa komaa Kano
  'yesterday Audu returned to Kano'
- (64b) \*jiya koomaawa-r Audu Kano
  'yesterday Audu's returning to Kano'

- (65a) 'a Kano Audu yaa yi sheekaraa 'uku 'at Kano Audu spent three years'
- (65b) \*'a Kano yi-n Audu sheekaraa 'uku
  'at Kano Audu's staying for three months'

However, I shall assume that in Hausa, the natural place for all the adverbials (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 (64a, 65a) and (64b, 65b) is then naturally accounted for if we assume that nominalization is cyclic and that adverb shift is last cyclic.

The category (Neg) is realized, under nominalization, by the negatival-noun rashii 'lack (of)', and not by the negatival particle(s) ba ... (ba). The negatival noun always precedes the gerundive nominal to which it is joined by the genitive -n.

- (68) [[Audu bai daawoo ba]<sub>S</sub>]<sub>NP</sub> ===>
  'Audu has not returned'
- (69) rashi-n daawoowa-r Audu
  'Audu's having not returned'

Emphatic elements such as har 'abadaa 'never', har yanzu 'not yet', koo kaɗan '(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.

#### 2. Nominalization rules

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

- (i) T-Nom (T-Nominalization One)
- (ii) T-Nom (T-Nominalization Two)
- (iii) T-Rel. Nom (T-Relatival Nominalization)
- a. <u>T-Nominalization</u>. 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 without the genitive link. This transformation can be formalized in the following way:

T-Nom

SD: 
$$X[[NP \quad AUX \quad V \quad Y]_S]_{NP} \quad Z$$
  
1 2 3 4 5 6  
SC: 1 Ø Ø 4 +r 2 5 6  
[+NOM]

Condition: 5 cannot contain Emphasis.

### Examples:

- (70a) Audu yaa zaunaa 'a kan kujeeraa ===>
  'Audu sat on a chair'
- (70b) zaunaawa-r Audu 'a kan kujeeraa
  'Audu's sitting on the chair'
- (71a) Audu yaa keera fartanyaa ===>
  'Audu made a hoe'
- (71b) keeraawa-r Audu fartanyaa
  'Audu's making the hoe'
- (72a) Audu yaa yarda da Garba 'Audu trusts Garba'
- (72b) yarda-r Audu da Garba 'Audu's trusting Garba'
- (73a) sarkii yaa naɗa Audu haakimii
  appoint lord
  'the king made Audu a lord'
- (73b) naɗaawa-r sarkii Audu haakimii 'the king's making Audu a lord'
- (74a) Audu yaa sayar da dookii wa Garba sell 'Audu sold a horse for Garba'

(74b) sayarwa-r Audu dookii wa 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.

b. T-Nominalization<sub>2</sub>. This rule is restricted to single transitive verbs only, i.e. to sentences with verbs which take only one object. Here the whole VP is considered as a single item and nominalized accordingly. The nominalized VP occurs as the left most 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:

T-Nom

SD: 
$$X [[NP AUX V (da N)_{NP} (ADV)]_S]_{NP} Y$$
  
1 2 3 4 5 6  
SC: 1 Ø Ø 4 + GL + 2 5 6  
[+NOM]

- Conditions: (1) the object NP contains no modifiers
  - (2) the embedded sentence does not contain emphasis

## Examples:

- (75a) Audu yaa keera fartanyaa ===>
  'Audu made a hoe'
- (75b) Reera fartanya-r Audu
  'Audu's making the hoe'
- (76a) Audu yaa yarda da Garba ===>
  'Audu trusts Garba'
- (76b) yarda da Garba-n Audu 'Audu's trusting Garba'

When any kind of modifier follows the object this transformation is not possible. Therefore (77) is ungrammatical.

(77) \*keera fartanyaa kyakkyaawa-r Audu 'Audu's making the beautiful hoe'

from Audu yaa keera fartanyaa kyakkyaawaa 'Audu made a beautiful hoe'. The occurrence of a modifier necessitates the application of T-Rel. Nom.

c. <u>T-Relatival Nominalization</u>. This rule, like T-Nom<sub>1</sub>, also operates on double transitive, single transitive, and intransitive sentences. But here it is the whole VP (as in T-Nom<sub>2</sub>) 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-Nom<sub>1</sub> or T-Nom<sub>2</sub>. In T-Nom<sub>1</sub> or T-Nom<sub>2</sub> 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: 
$$X [[NP_1 AUX V NP_2]_S]_{NP} Y$$
  
1 2 3 4 5 6  
SC: 1 5 da + 2 3 4 Ø 6

#### Examples:

(78) koomaawaa gidaa da Audu zai yi
'returning home which Audu will do'

from Audu zai (yi) koomaa gidaa 'Audu will do return home'.

(79) Reera fartanyaa da Audu ya yi
'making the hoe which Audu did'

from Audu yaa (yi) keera fartanyaa 'Audu did make a hoe' (cf. (71) ).

(80) nada Audu haakimii da sarkii ya yi 'making Audu a lord which the king did'

from sarkii yaa (yi) nada Audu haakimii (cf. (73)). The relative clause retains the tense of the embedded sentence, as shown in the examples above.

If the nominalized sentence contained adverbials, these adverbials will occur either just before or just after the relative clause which modifies the gerundive nominal, e.g.

- (81a) Reera fartanyaa da Audu zai yi goobe
  'making the hoe which Audu will do tomorrow'
- (81b) keera fartanyaa goobe da Audu zai yi (same meaning as (81a))

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 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 (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.

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