Review

Kanuri DP Hypothesis: A Minimalist Approach

Baba Kura Alkali Gazali[1]

[1]*Department of Languages and Linguistics, University of Maiduguri, Nigeria*

A B S T R A C T

This paper examines the structure of Kanuri DP (structure) Hypothesis within the framework of Abney (1987) and Chomsky (1995) Minimalist Programme (MP). In conducting the research, the researcher uses his native speaker intuition and other three competent native speakers of Kanuri to validate the data of this study. The study identifies Kanuri determiners as post head modifier language. The study identifies also two types of demonstrative modifiers –near and far demonstratives. The near demonstratives agree with their head nouns while the far demonstratives take both singular and plural head nouns. The far demonstratives do not show any form of agreement morphology between the nouns and their demonstrative modifiers. The analysis of DP Hypothesis shows the NP complement moves to the specifier position in the surface syntax which give rise to complement-head (C-H) order. The study further analyzes possessives, demonstratives and quantifiers under the DP hypothesis. The outcome of the study reveals that possessive determiner 'nde' (our) is base generated at the possessive position, moves and fills the D position under the DP in Kanuri while the far demonstrative 'tudu' (that) is also base generated at the Dem. Position of the determiner phrase (DP) -hence the D position is strong head position moves and fills the D position and the noun 'fato' (house) moves to the specifier position of the determiner phrase (DP) in order to check agreement feature in Kanuri.

I. INTRODUCTION

Kanuri is a member of the Saharan branches of the Nilo-Saharan phylum of African languages (Greenberg, 1963) Bendo (2000:44) presents the Saharan branch according to the following grouping: Saharan: Kanuri- Kanumbu, Daza, Teda-Tubu, Zaghawa-Bedeyat-Berti. The Kanuri language according to Cyffer (1998), is the widest spread language in the Lake Chad region and is spoken in all the countries bordering the lake (Cameroon, Chad, Niger and Nigeria). Bulakarima and Shettima (2012) observe that Kanuri is the major language of the people of present day Borno and Yobe states in Nigeria. The Kanuri speaking groups are also evident in other parts of Nigeria e.g. Alkaleri, Azare, Gamawa and Misau local

government area in Bauchi state, Lafia in Nasarawa state, Bojoga in Gombe state. In Niger Republic, the major groups or dialects of Kanuri are Bilma, Dagǝra and Manga. Kanuri is spoken by quite a large majority of people in the area stretching from Zinder in the west down to the Lake Chad region in the east. In the Republic of Chad, the Kanuri speakers are concentrated in the Kanem region. In the Republic of Cameroon also live a substantial number of Kanuri speaking community in the towns of Kolofata, Marwa, Kusuri, Mokolo and Ngaoundere Bulakarima and Shettima. Kanuri is an amalgamation of several ethnic groups. The ethnic groups that constitute Kanuri language according to Bulakarima and Shettima (2012) are twenty different ethnic groups. The speech forms of the Kanuri ethnic groups are further classified

into six major dialects. The classification of these six major dialects is based on their phonological, phonetic, morphological and semantic differences. The six major dialects according to Bulakarima (1991), Bulakarima and Shettima (2012) are:

Manga	(iv)	Dagəra
Mowar	(v)	Bilma
Suwurti	(vi)	Yerwa

This paper analyzes the DP hypothesis of the Yerwa dialect of Kanuri of Kanuri which is the standard form of Kanuri and the standard Kanuri orthography (SKO) is written in Yerwa dialect of Kanuri (Cyffer, 1991).

Crystal (2008:140) defines determiner as 'a term used in some models of grammatical description, referring to a class of items whose main role is to co-occur with nouns to express a wide range of semantic contrasts, such as quantity or number. In some generative grammar theories, determiner is regarded as the head in combination with a noun, to produce a determiner phrase (DP). The DP hypothesis is the proposal that noun phrases are projections of the determiner'. The noun phrase is a common structural unit, which is usually headed by a noun, or another word which can act as a noun in Kanuri. The noun takes modifiers of different categories. These categories are mostly optional. Modifiers have the function to describe or qualify the head noun. The demonstratives (DEM) in Kanuri have determiner function and constitute rich source of Kanuri DP (Cyffer 1991, 1998) Fannami et al (1999) Bulakarima and Shettima (2012) Gazali & Gombe (2020). This paper examines the structure and the ordering of the determiner as specifier adopting Abney (1987) DP Hypothesis as theoretical approach.

Cyffer (1991:38) identifies three categories of determiners in Kanuri –definite, demonstrative: near speaker and demonstrative: far from speakers in Kanuri. The study further identifies singular determiners used as both in singular and plural context to modify different nouns in Kanuri. Consider the following examples in (1a, b and 2a b) below

1. a. fər   adə
     horse this
     'This horse'

   b. fe   tudu
      cow that
      'That cow'

2. a. fər-wa anyi/adə
      horse-PL those/this
      'These horses'

   b. fe-wa tunyi/tudu
      cow-PL those/ tudu
      'Those cows'

The above examples in (1a,b and 2a b) show distance and number relationship express by determiners 'adə' (this) and 'tudu' (that) in Kanuri. In example (1a and b) the determiner 'adə' (this) and 'tudu' (that) modify singular nouns while in examples (2a and b) modifying both singular demonstrative and plural demonstrative modifying plural nouns but this study fail short of subjecting near demonstrative in terms of their agreement with nouns they modify.

On the relationship between the determiners and their head words in Kanuri, Cyffer (1991) observes that determiners in Kanuri follow the head noun. He further opines that when a noun phrase contains additional modifiers, the determiner stands at the end and concludes the noun phrase. Consider the following examples from Cyffer (1991:38) in examples (3a-f) below.

3. a. fato   adə
     house   this
     'This house'

   b. fato kura
      house big
      'Big house'

   c. fato kura tudu
      house big that
      'That big house'

   d. kulwu-də
      gown- the
      'The gown'

   e. kulwu bəlin-də
      gown new- the
      'The new gown'

   f. fato-wa kura yakkə anyi
      house-PL big   three these
      'This big three houses'

The above examples in (3a-f) show determiners and adjectives in Kanuri post modify the head nouns in Kanuri. The definite article 'də' (the) as clinic attaches to whatever word comes last in the phrase, it can attach to a word of any class as in example (3d) it attaches to noun 'kulwu' (gown) and in (3e) it attaches to adjective 'bəlin' (new). In example (3f) contains complex noun phrase noun plural marker, adjective of size, numerical and determiner which are arranged in linear order. The determiner 'anyi' (these) near determiner agrees with the head noun in plural form 'fato-wa' (houses) in the above examples. The above study provided us with structural guide on how we analyze the determiner structure in Kanuri DP hypothesis.

Fannami et al (1999:20) observe that the pre-head and post-head slots contain optional modifiers/ specifiers whereas the head slot contains the obligatory element noun or pronoun. Consider the following examples in (4a,b and 5a,b) of the pre-head and post-head slots below.

4. a. adə   fər
      this   horse
    'This is (a) horse'

   b. adə   tada-nyi
      this   boy-my
    'This is my boy'

5. a. tada –nyi
      boy- my
    'My boy'

   b. kel –nyi
      trap –my
    'My trap'

The above examples (4a and b) are rather sentences than a phrase –placement of the modifier 'adə' (this) pre-head slot before the head word the structure becomes a copular sentence while examples (5a and b) post-head slot is a noun phrase which consists of the head word and post modifier in Kanuri. This paper analyzes the structure of determiners in relation to their heads in Kanuri as specifier or complement, noun phrase or determiner phrase.

Gazali and Gombe (2020) examine the structure of determiner phrase and noun phrase in Kanuri within the framework of Minimalist approach and their study identify Empty Projection Principle [EPP] in

a specifier position under the DP in order to check the Phi –features and constraints in moving PP node which cannot be merged as specifier in Kanuri and their study identifies Kanuri as post head initial language –where all determiners occur post head in Kanuri. This paper examines the position occupies by the determiners and noun phrase as specifiers and complements adopting the Abney (1987) DP Hypothesis as theoretical model.

II. THEORETICAL FRAMEWORK

One of the recently introduced concepts in the tradition of syntactic analysis is the notion of the determiner phrase hypothesis (hence forth, DP hypothesis). This hypothesis claims that what was traditionally referred to as a noun phrase (NP) [e.g., the tall boy] has the determiner as its head, not the noun. In this kind of analysis, the NP is a complement under the DP. Radford (2009:454) states that within this hypothesis 'all definite expressions have the status of DP –not nominal like *the President* which contains an overt determiner, but not proper names like John'. DP hypothesis was formally introduced in the MIT doctoral dissertation of Steven Abney (1987). Within the framework of Minimalist syntax, this hypothesis has become the standard for syntactic analysis. The difference between these two analyses is illustrated in analyzing the phrase [all the old men] as shown in (6a and b) below:

6. a

Traditional NP Analysis

b

Minimalist DP Analysis
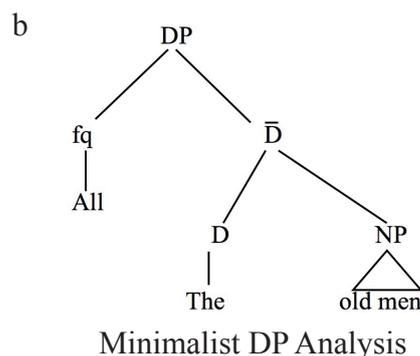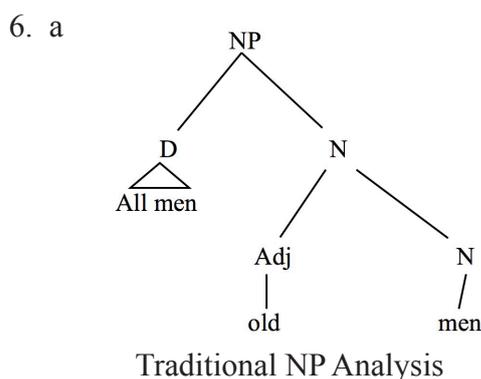
The above diagrams in (6a and b) explicate some of the key arguments for the DP hypothesis. The goal is to show that within the framework of current formal syntactic analysis, the DP hypothesis is not an alternative but a mandatory hypothesis for consistent and valid syntactic analysis of sentences in natural languages. Coene and D' hulst (2003:1) summarize the significance of the DP hypothesis as thus 'The basic insights provided by the DP hypothesis have paved the way for fruitful line of research, engaged in unraveling the fine syntax and semantics of nominal constituents in area's related to the typology of determiner, the relationship between determiners and nouns, adjectival modification, the expression of possessive, the morpho-syntactic relationship between clitics and determiners, the status of number features and many more.' The DP hypothesis was an attempt and indeed a proposal by Abney (1987) who after working on Turkish, Hungarian and English data, came up with a proposal that there is an AGR functional head in the NP. Abney analogized that just like the clausal INFL –head, the NP can also have its equivalent, and this was to be the Det(ermine) –head which forms the functional category –DP. Zamparelli (2000:19) captures this thus 'the determiner projection becomes the category that introduces the noun phrase, much like IP introduces the sentences; NPs corresponding to VPs, are embedded inside it.' It is with this background and initiative by Abney that saw the emergence of the DP with the D –heads as its functional element which has selectional properties that enable it to select the NP complement or stand on its own' The Kanuri NP thus is not left out in the argument that having projected functional DP, it turns out to be complement in the structure (7) below.

7.
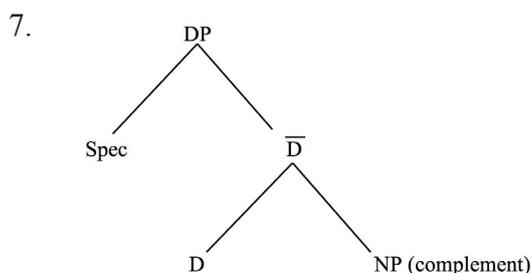
Adopting the Abney (1987) framework, the Kanuri DP could generate a structure such as (8) below.

8.
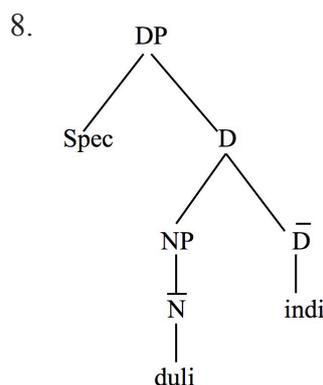
III. DISCUSSION

3.1 The Syntax of DP in Kanuri

Demonstratives in Kanuri DP: Demonstratives (DEM) in Kanuri have determiner function and constitute rich source of Kanuri DP (Hutchison 1976, 981, Cyffer (1991), (1998) Fannami (1999), Bulakarima and Shettima (2012) Gazali and Gombe (2020) to mention a few. This paper discusses their syntactic occurrences for the same function of identity and referenciality of such items. The demonstrative modifiers post modify the head words in Kanuri and the near demonstrative modifiers agree with their head noun while the far demonstrative modifiers do not agree with their head nouns in Kanuri. Consider the following examples in (9a, b and c) below.

9. a. fero adǝ
      girl this
      'This girl'

   b. *fero-wa adǝ
      girl –PL this
      'This girls'

   c. fero-wa anyi
      girl-PL these
      'These girls'

The above examples show demonstratives in Kanuri occupy the rightward position. In examples (9a and c) the demonstrative determiner 'adǝ' (this) and 'anyi' (these) agree in number with their head nouns but example (9b) is ungrammatical because the plural noun with plural marker -wa does not agree with the singular demonstrative 'adǝ' (this) in Kanuri. The demonstratives occupy rightward position in Kanuri. The nouns are pre-post before the demonstratives. In examples (9a, b and c) thought (9b is ungrammatical in terms of agreement) the demonstratives are post modifiers

while the 'fero' (girl) is noun (n) right adjoins but still the nouns are the head of the functional category. Kanuri operates head complement order as it deviates from the Universal grammatical forms complement head orders especially English other indo- European languages. Since Kanuri demonstratives especially far demonstratives do not show any form of agreement morphology between the nouns and their associated functional categories, the NP complement moves to the Spec. position in the surface syntax and given rise to the C-H order. Following the Abney (1987) DP hypothesis, the determiner Det. Head takes an NP as is specifier. This can be structurally presented in below:
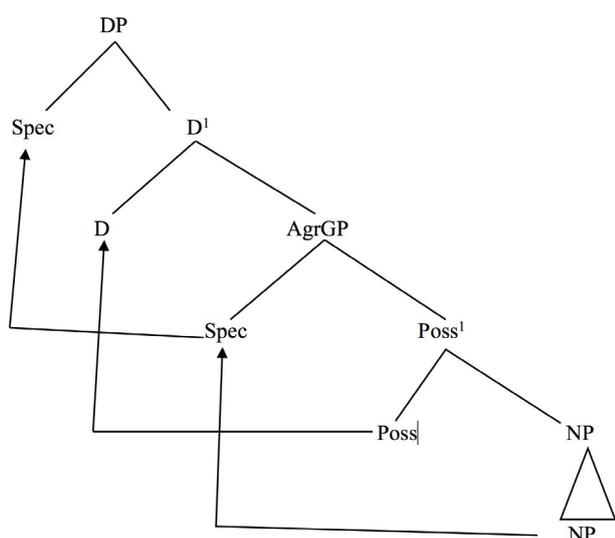
The DP hypothesis argument here is that the NP is base generated under the possessive phrase and moves to the specifier position under agreement phrase in oreder to check the possessive feature. The NP further moves under the agreement phrase to the specifier position under the DP in order to check number features. This study analyzes the Kanuri DP within the purview of Abney (1987) and Chomsky' Minimalist programme.

## 3.2 The Minimalist Account of DP Structure in Kanuri

An attempt has been made to use the minimalist programme to analyze the DP in Kanuri. In doing so thus, our concern is on the elements that form the DP structure in Kanuri. These elements are possessives, demonstratives and quantifiers. The movements of elements to D and specifier positions are also analyzed and discussed. The analysis has been done by drawing the minimalist trees and paying special attention to the two main operations of merge and move.

3.2.1. Possessives

Possessives show ownership and are determiners in a Kanuri DP. Chang (2003) observes that possessives are universally based-generated in the specifier position of an intermediate FP between DP and NP, and then moves up as functional projection; the so-called (AgrGenitive Phrase) immediately dominated by DP, for [+Poss] feature checking. Change (ibid) studies DP hypothesis in Korean language which is similar to Kanuri as S.O.V. language structure (see Gazali 2014). In Kanuri, possessives behave the same way as illustrated in example (10) below.

10.   rawa-wa   nde
        Uncle-Pl   our
        'Our uncles'
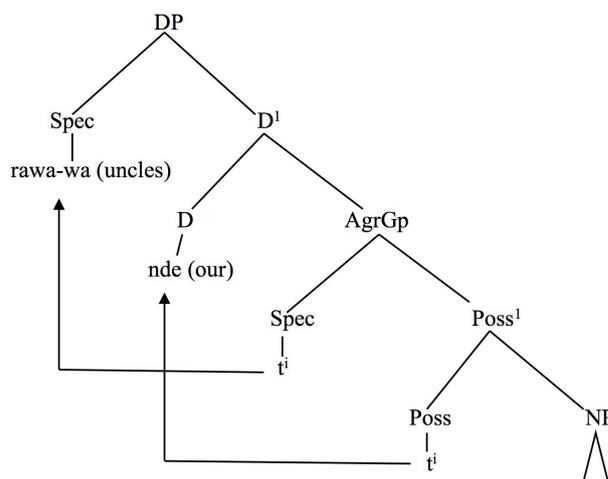
The above example (10) shows that the D position is strong head which has to be filled with the possessive '-nde' (our). The possessive determiner '-nde' (our) is base generated at the possessive position moves and fills the D position. Kanuri possessives are post nominal. This forces the NP 'rawawa' (uncles) to move upwards to check the possessive feature and then the number features.

Possessives plus Quantifiers in Kanuri

Another grammatical structure function under the DP in Kanuri is the noun plus the determiner and quantifiers. These elements are arranged in linear order. This can be illustrated in example (11) below'

11. kərami-wa-nza   samma
     Brother-Pl-Poss   all
     'All their brothers'
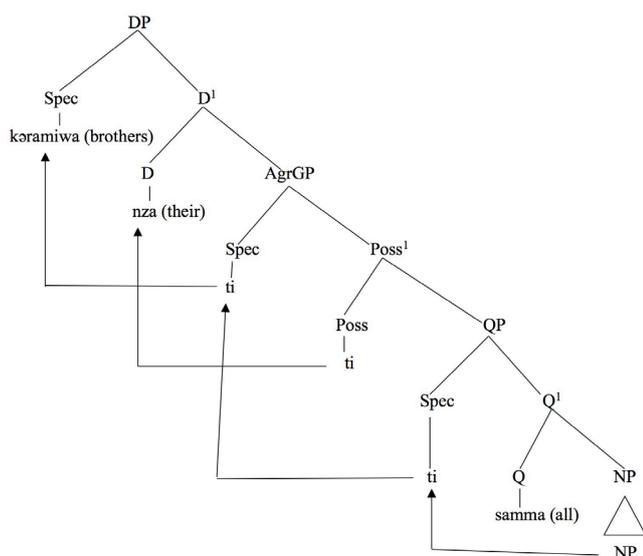
The above structure shows that The NP 'kəramiwa' (brothers) moves to the specifier position of the QP to check argument features within the quantifier. The demonstrative 'nza' (their) further moves to the specifier of the Poss D to check the possessive argument, after which the NP finally lands in the specifier position of the DP to check the number features –determiner 'nza' (their) plural (+Plural) and the noun 'kəramiwa' (brothers) +plural feature. The quantifier 'samma' (all) does not move because it doesn't require feature checking which adheres to the principle of Greet which states that '….. an element will not move unless it wants to check its own feature (Zwart 1998:2). As such the quantifier 'samma' (all) in Kanuri remains in situ while the possessive 'nza' (their) moves to occupy the strong head D which must be filled.

3.2.2. Demonstratives in Kanuri

Kanuri language has two forms of demonstratives – near and far demonstratives. The near demonstratives agree in number with their head nouns while far demonstratives do not agree in number with their head nouns –they take both singular and plural (Cyffer 1991, 1998). Theoretically Giusti (1992) proposes that demonstratives are generated in the determiner position which is projected below the determiner phrase (DP) and they move to D position which is a strong head position. This paper confirms to Giusti's hypothesis. Kanuri demonstratives exhibit similar DP movement to D position which is stronger. Consider the following structure in example (12) below.

12. Fato   tudu   (NP + Dem)
    house   that
    'That house'

The above example (12) shows demonstratives 'tudu' (that) is base generated at the Dem position of the determiner phrase (DP). Since the D position is a strong head position, the demonstrative moves to fill it overtly while the NP 'fato' (house) first moves to the specifier position of determiner phrase (DemP) to check agreement with the demonstrative after which it further moves to the specifier position of DP.

IV. CONCLUSION

The study observed that Kanuri is head initial language where determiners, demonstratives, quantifiers occur post head positions in Kanuri. The paper discusses the DP hypothesis in Kanuri in the light of Abney (1987) and Chomsky's (1995) Minimalist Programme (MP). We discovered that the DP in Kanuri is analyzable within the MP. We analyzed elements that can occur under Kanuri DP and draw diagrams to account for their descriptive and explanatory adequacies. The study identified elements that move and leave behind traces (presented as t^i) to show movements take place from where the elements have been generated as they move to occupy the Spec. and D positions in the trees. The outcome of the study shows that all possessives, quantifiers and demonstratives are all base-generated at the $Poss^1$, QP and DemP. Positions from where they move and land at their respective D positions which is considered strong head position. The strong head positions are the heads of those phrases called DP.

REFERENCES

Abney, S.P. (1987) The English noun phrase in its sentential aspect. PhD dissertation MIT, Press

Bender, M.L. (2000) 'African Languages'. In: Heine and Nurse (ed.) pp 43-73.

Bulakarima, S.U. (1991) A Study of Kanuri Dialectology, Phonology and Dialect Distribution in Mowar. Unpublished PhD. Thesis, Department of languages and linguistics, University of Maiduguri

Bulakarima, S.U. and Shettima, A.K. (2012) A Sketch of Kanuri Phonology and Tone. Desktop Publisher's co-operative society, Maiduguri.

Chomsky, N. (1965) *Aspect of the Theory of Syntax*. Cambridge, MA: MIT, Press.

Chomsky, N. (1981) *Lecutres on Government and Binding*. Dordrech. Foris.

Chomsky, N. (1995) *The Minimalist Program*. Cambridge. MA MIT, Press.

Coene, M. and Y. D' hulst (ed.) (2003). From NP to DP: Volume 11: the expression of Possession in noun phrases. Benjamins publishing company

Crystal, D. (2008) *A Dictionary of Linguistics and Phonetics*. Sixth ed. Basil Blackwell, UK

Cyffer, N. (1991) *We Learn Kanuri*. KÖln, Rudiger Koppe Verlag.

Cyffer, N. (1998) *A Sketch of Kanuri*. KÖln, Rudiger Koppe Verlag.

Giusti, G. (1992) Heads and Modifiers among determiners. Evidence from Romanian and German. University of Venice. Working paper on Linguistics. 2.1.4, 1-19.

Gazali, B.K.A. (2014) A Descriptive Analysis of the various functions of the Postpositions in Kanuri. PhD Thesis, Department of Languages and Linguistics, University of Maiduguri, Nigeria.

Gazali, B.K.A. & Gombe, M. (2020) The Structure of Determiner phrase and Noun phrase in Kanuri. Journal of Linguistics, Language and Culture. Nnamdi Azikewe University Awka, Nigeria.

Greenberg, J.H. (1963) *The Languages of Africa*. The Hague.

Greeberg, J.H. (1977) *The Languages of Africa.* The Hague.

Lewis, M. Paul (2009) *Ethnologue: Languages of the World.* 16th editions. Dallas. Online version: http://WWW.ethnologue.com/.

Keyne, R. (1994) *The Auto symmetry of Syntax*. Cambridge, Mass: MIT, Press

Radford, A. (2009) *The Sentence Structure of English Minimalist Approach*. Cambridge CUP.

Mose, E. (2012) The Structure and Role of the Ekegusii Determiner Phrase: A Minimalist Approach. Unpublished M.A. dissertation, Kenyatta University, Nairobi, Kenya.

Zamparelli, R. (1995) Layers in the Determiner phrase. PhD Thesis, University of Rochester.

Zwart, C. (1998) The Minimalist Program Journal of Linguistics 34 (1998), 213 -226 Cambridge University, Press.