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THE SYNTAX OF POSTVERBAL FOCUS
CONSTRUCTIONS IN CHADIC*

1. INTRODUCTION

Various Chadic (Afroasiatic) languages have a construction in which fo-
cused elements, including WH-phrases, occupy a position after the verb.
Examples (1a–d), from Western Bade, illustrate this construction (the
focused element is in boldface):

(1)a.　Saaku aa　bəna **kəm**

　　　Saku　Infl cook what

　　　What will Saaku cook?

　　　cf. Saaku aa　bəna kajluwaan

　　　　Saku　Infl cook tuwo

　　　Saku will cook tuwo [no focus]

　b.　tləmpətəŋ **kəm** zaneenii　　zaneeŋaa, tləmpətə-g **dəmaan**

　　　tore　　what gown-your　gown-my　tore　　　wood

　　　What tore your gown?　My gown, WOOD tore it

　c.　gafa-n **ke**　viiriidgwarən

　　　caught who giant-rat

　　　Who caught a giant rat?

(1)d.   ga   bar   **ii-te**   tagda-w
         you give to who money

         Who did you give the money to?

In this paper I will study the syntax of these constructions, proposing
that a syntactic feature [+FOCUS] is associated with the category Infl and
that, in order for a constituent to be focused, in Chadic, it must move
into the domain of such an Infl and receive the feature [+FOCUS]. A
variety of parametric differences between languages with respect to the
exact position of the focused element are explained in terms of the mode
of [+FOC] assignment (direct assignment vs. Spec-head agreement) and
the (independently motivated) possibility of Case chains (whether trace
of V assigns Case or not). The data reported here are taken from various
written descriptions of focus constructions of the languages in question as
well as, in the case of Tangale, from my own field notes.

I begin in Section 2 with an overview of the typology of postverbal
focus constructions in Chadic, showing that these divide into basically
two types: those where the focus position is immediately after the verb
('Type A') and those where the direct object obligatorily intervenes be-
tween the verb and the focus position ('Type B'). In addition, Type B
focus languages show variation with respect to whether the entire direct
object or just the head intervenes, a phenomenon referred to as 'direct
object splitting'.

I propose in Section 3 an analysis of the syntax of these constructions
which revolves around [+FOCUS] as a feature of Infl and movement of
constituents to A'-positions where they may receive this feature. A par-
ameter behind the capacity of chains to transmit Case is argued to account
for the Type A/Type B division. This account will be seen to correctly
predict VSO postverbal focus languages to be of Type A only. The vari-
ation observed among Type B languages with respect to direct object
splitting will be shown to be derived from the posibility of SPEC, CP
focus, taken to be the result of assignment of [+FOCUS] by SPEC-head
agreement, as an alternative focus construction in some of these languages
(analogous to languages having both WH-*in situ* and WH in SPEC,CP).

In Section 4, a possible alternative analysis of postverbal focus is dis-
cussed which involves multiple rightward extraposition. It is argued that
this account, while plausible for Italian, cannot be extended to the Chadic
data. We conclude in Section 5 with a brief discussion of the status of
the feature [FOCUS] and various other questions raised by the proposed
analysis.

2. Type A and Type B Postverbal Focus

Several languages of the West and Biu-Mandara branches of Chadic have focus constructions in which the focused constituent (WH or non-WH) appears in a position after the verb,[1] though detailed syntactic descriptions for most of these are lacking. I will concentrate on Bade and Ngizim (closely related West B languages), Tangale and Kanakuru (closely related West A languages), and Podoko (a Biu-Mandara A language), languages for which more detailed information is available to me.[2] Two striking types of variation emerge from the Chadic data on postverbal focus constructions regarding the linear position of the focused constituent with respect to the direct object and, among languages displaying the order *V DO FOCUS*, whether a complex DO is obligatorily split by the focused element.

2.1. *Type A Postverbal Focus: V FOCUS DO*

Many languages have a special focus position immediately adjacent to the verb (e.g., Hungarian, Basque, Aghem, Georgian, Italian). Among Chadic languages, Western Bade (cf. (1)) and Podoko (cf. (2)) illustrate this situation.

> (2)a.   a təla **hawə** ndi slə 6ə nda
>   *cook where one meat int.*
>   Where did one cook the meat?
>
>   b.   a təla **də ʸkwədəgə** malə   slə6ə
>   *cook in kitchen   mother-my meat*
>   My mother cooked meat IN THE KITCHEN

In each case the focus occurs directly after V. I will refer to this type of focus construction as 'Type A Postverbal Focus':

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[1] I know of no cases of postverbal focus in the other two branches of Chadic (Masa and East). (I am assuming here the Newman (1977) classification of Chadic languages.) Many Chadic languages have in situ focus, and many have S-initial focus (either obligatorily, as in Hausa or Gude, or as an option, as in Ga'anda). See Tuller (1989) for discussion.

[2] Sources for the data on these languages are as follows: for Bade, Schuh (1971, 1982), and p.c.; for Ngizim, Schuh (1971, 1972, 1982), and p.c.; for Tangale, Kidda (1985), Kenstowicz (1985), and my own field notes; for Kanakuru, Newman (1974); and for Podoko, Jarvis (1981). These languages, like all other Chadic languages, are tone languages. For reading ease, tone is not marked on examples in this paper, however, as it plays no role in the subject under study. We follow the Chadic tradition in representing alveo-palatal affricates as *c* and *j*, a voiceless lateral fricative as *tl*, and [ɨ] as ə.

(3)   Type A Postverbal Focus: 'V FOCUS DO' (W. Bade, Podoko,
         Aghem, etc.)

2.2. *Type B Postverbal Focus: V DO FOCUS*

In several other Chadic languages with postverbal focus constructions, the
linear position of the focused constituent is not immediately after the
verb, but rather immediately after the direct object. Tangale, Kanakuru,
and Ngizim (and the other two dialects of Bade, Southern Bade and
Gashua Bade), among others (cf. Tuller 1989), all have focus constructions
of this type. All of these languages are strictly SVO, in the absence of
any focused element.

In Tangale, for example, it is ungrammatical for a focused constituent
(whether WH or non-WH) to intervene between the verb and the direct
object.[3] Rather, the focus appears immediately to the right of the direct
object (4a) or the locative goal of a verb of motion (4b). This pattern is
observed no matter what position is focused: subject focus (4a,b), direct
object focus (4c), indirect object focus (4d), or adjunct focus (4e). (An-
swers to these Wh-questions have the exact same structure.)

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[3] There are sentences which superficially violate this restriction:

(i)   paduɡɔ **nuŋ**, ayaba?

            Who bought a banana?

(ii)   paduk ayaba **nuŋ**?

            Who bought a banana?

However, several facts argue that these involve right dislocation of the direct object occurring
after the focus: (1) such sentences are quite marginal for some speakers, (2) contain an
obligatory, heavy pause between the focus and the DO (indicated in the examples by a
comma), and (3) are limited to cases where no other constituent appears to the right of the
direct object cf. (iii)).

(iii)   *wa   patʊn **nuŋ** shɔgɔlɔ dooji

            FUT buy   *who fish   tomorrow*

            Who will buy fish tomorrow?

Such sentences thus do not represent exceptions to the generalization that a focus may not
intervene between the verb and the direct object in Tangale.

   Schuh (1982, p. 164) notes that in Bade there is a tendency to avoid the question of the
relative order of the focus and the DO in a similar fashion by left dislocating the DO (as in
the example (1b) in the text). (N.B. Bade has zero direct object pronouns, as does Tangale.)

   (Elision of the final vowel of the verb in Tangale is blocked by a postverbal focus: compare
(i), where a focused element follows V, with (ii), where an unfocused direct object follows
V. This sandhi process and its implications for the syntax of focus constructions is the subject
of Section 3.1.1).

(4)   Tangale

b.   wa patʊ ayaba **nuŋ**   ta luumo dooji
     I   V   DO   FOC PP   Adv

        *nuŋ   ayaba
        FOC DO

Who will buy bananas at the market tomorrow?

b.   wad Billiri **nuŋ**   dooji / *wadu **nuŋ**   Billiri / **nuŋ** wad Billiri
     V   LOC FOC Adv   V   FOC LOC   (echo only)

Who will go to Billiri tomorrow?

c.   ʊnʊg ʊ **naŋ**   ti lɔwei / *ʊnʊgʊ ti lɔwei **naŋ**   / ***naŋ**
     V   FOC IO   V   IO   FOC   FOC

     ʊnʊg   ti lɔwei
     V   IO

What did she give to the child?

d.   mela pad k landan **tu nuŋ** ta luumo / *Mela padʊko
     S   V   DO   FOC PP   S   V

     tu nuŋ landa . . .
     FOC   DO

Who did Mela buy the gown for at the market?

e.   ka pad landan **gaka** dooji
     I   V   DO   FOC Adv

How will you buy the gown tomorrow?

The description of focus constructions in Newman (1974) points to the same linear position of postverbal focus in Kanakuru.

(5)   Kanakuru

a.   are   lowoi   **jewoi**   la lusha
     bury boy-the slave-the in bush

THE SLAVE buried the boy in the bush

b.   na dibəre gami   **mandai**
      buy   ram-the who

Who will buy the ram?

(5)c.   kaa nai **mandai**

you call *who*

Who are you calling?

d.   a wupə-(ro) landai   **gən shire**

he sold-Cl   cloth-the with her

He sold the cloth TO HER

(cf. a wupə-ro landai 'He sold the cloth to her' [no focus])

Likewise, Schuh (1972) makes clear that in Ngizim the postverbal focus may not appear between V and DO.[4]

(6)   Ngizim

a.   taatkə ɗaa-n **tai**   ii magərafcin

showed town who to visitors

Who showed the town to the visitors?

b.   ɗəbdə karee-n **Audu** aa aasək

sold   goods   Audu in market

AUDU sold the goods in the market

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[4] Schuh (1971, 1982) notes that in Ngizim, Bade, Duwai, and Karekare, all of which have postverbal focus constructions, there is an obligatory focus marker which appears suffixed to the word preceding the focus constituents, but only when the subject is focus. (This is a nasal in the Ngizim examples in the text.) In Tangale, we found that there was a marker of focus (also a nasal) which appeared optionally and with all types of focus constituents. Although these are similar to copular morphemes in these languages (in that they also contain an *n*), I do not believe that this entails a synchronic cleft analysis. In Tangale, there is a (separate) cleft construction, in which a focus element appears after the copula and before a following relative clause. Postverbal focus constructions do not contain a relative clause, and the focus marker does not have the same form as the copula (**ana** in non-elided form) and is not obligatory.

(i)   **an**   nɔ   um   wa warɔ dooji?

COP who REL will come tomorrow

Who is it that will come tomorrow?

(ii)   wa warɔ **n** nɔŋ dooji?

Who will come tomorrow?

See also Schuh (1972, pp. 235–6) for arguments that Ngizim focus constructions cannot be analyzed as synchronic reduced clefts of some sort.

(6)c.   rauree aci-n **tai**   / *raure-n **tai**   aci

       called him who   called who him

       Who called him here?

   d.   kaa dadam mətka **ii   tai**

       you fixing   car   for who

       Who are you fixing the car for?

In each of these cases, the focus occurs directly after the direct object. I will refer to this situation as 'Type B Postverbal Focus'.

(7)   Type B Postverbal Focus: 'V DO FOCUS' (Southern Bade, Tangale, Kanakuru, Ngizim, etc.)

2.3. *'DO Splitting' in Type B Languages*

Languages having Type B postverbal focus display a phenomenon in which the direct object is split in two by the focused constituent when the direct object is complex, for example when the head is modified by a relative clause or by a conjoined NP. In such cases, the nominal head of VP appears before the focus with the remainder appearing after:

(8)   V – N – Focus – Relative/Conjoined NP

This 'splitting' of a complex direct object is obligatory in some Type B languages, but optional in others. Thus in Kanakuru, the order in (8) is required whenever the direct object is complex.[5] This is illustrated by the examples in (9) (where RM = relative marker).

(9)a.   aɗe [shiruwoi] **ŋgadlai** [mə shee wura] ane

       ate fish-the   cat-the RM she fried up

       THE CAT ate the fish that she fried up

   b.   ma-no   [boi] **nani** [mə mən ala ra]

       returned-AGR place I   RM we   saw her

       I returned to the place where we saw her

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[5] The Chadic direct object splitting facts should not be confused with the prohibition on right-branching recursion on pre-V elements in Hungarian (cf. Horvath (1986: Section 1.7). While the latter is concerned with the complexity of the focused constituent itself (Chadic has no such restriction), the former is concerned with the complexity of the direct object intervening between the verb and the focused constituent. (In Hungarian, nothing may intervene between the two.)

By contrast, in Tangale and in Ngizim a complex direct object may either be 'split' showing the order of (8), or contiguous, showing the usual Type B order of (7), as examples (10–12) from Tangale illustrate. Schuh (1972, p. 155) reports the same facts for Ngizim.

(10)a.   shag [wamunjaanan] nɔŋ [nam Aisha ɗikɔ
       ate food-RM   who RM Aisha prepared

      Who ate the food that Aisha prepared?

   b.   shag [wamunjaanam Aisha ɗikɔn]   nɔŋ
       ate   food-RM   Aisha prepared who

(11)a.   padʊgɔ [tarkin] nɔŋ [nam lakido]
       bought cap-RM   RM small

      Who bought a small cap?

   b.   padʊgɔ [tarkim   lakidon] nɔŋ
       bought cap-RM small

(12)a.   shag [lɔm telci] nɔŋ [ka lɛshIn shandʊm]
       ate   shish kebab who with bean cakes

      Who ate the shish kebabs and bean cakes?

   b.   shag [lɔm telci ka   lɛshIn shandʊm] nɔŋ
       ate   shish kebab with bean cakes   who

3. ANALYSIS

3.1. *The Nature and Position of Focus*

3.1.1. *V and Focus*

Horvath (1986) has argued on the basis of data from Hungarian (and also Aghem and Basque) that focus is a syntactic feature similar to Case, and that since features are standardly assigned under government and adjacency, it follows that the focus constituent will be adjacent to V (to its left or to its right, depending on the direction of government). Under this view (cf. also Rochemont (1986)), which appears plausible for the Chadic data as well, focused phrases are within VP adjacent to V: [$_{VP}$ V FOC . . .]. As it turns out, however, this analysis faces empirical problems when extended to the Chadic data and also contains quite general conceptual and theoretical shortcomings.

Kenstowicz (1985) cites evidence involving two sandhi processes in Tangale, final vowel elision and tone delinking, which strongly suggest that the focus position cannot be assimilated to the direct object position and thus cannot be contained within VP. These two rules apply to a word A in close connection with a folowing word B. Typical sandhi-type restrictions are found. B, the triggering word, may not be a non-lexical word (such as Infl or P), and the two words are in a government relation (specifically, the target c-commands the trigger). Thus, sandhi is observed between a lexical head and a following complement (e.g., N and a complement NP, V and a direct object), but not between an NP and a PP or the object of a preposition and a following NP. These facts are illustrated in the examples in (13), for vowel elision (elided words are in boldface).

(13)a.   **ar**   melaa
         hand Mela

         Mela's hand (cf. **ara** 'hand')

   b.   **kwal**   bome
        calabash Bome

        'Bome's calabash' (cf. **kwali** 'calabash')

   c.   **kul** tɛpʊkʊk saba   / *sab tu bome
        Kulu tell-PERF speech   to Bome

        Kulu told the news to Bome (cf. kul **tɛp** **k** gɔ 'Kulu told')

   d.   roda / *rod wadɛn **pad** ayaba / *ayab ta
        Roda   will FUT buy banana   at

        luumo / *luum dooji
        market   tomorrow

        Roda will buy bananas at the market tomorrow

Sandhi between a subject NP and a perfective verb (e.g. (13c)) can be attributed to raising of V to Infl, the analogue of affix-hopping in Tangale, with V adjoined to the left of Infl, especially since (as Kenstowicz points out) the order of morphemes is verb-Cl-PERF (e.g., *kas-un-go* 'cut-me-PERF'). Elision is possible since after V-to-I, the subject NP c-commands and is adjacent to V, the triggering word. Lack of sandhi of the subject in other aspects (e.g. (13d)) can be attributed to V adjoining to the right of non-perfective I: the intervening I blocks sandhi between the subject

and V (and Infl, not being lexical, cannot trigger sandhi). The order of morphemes in these cases is Infl-V-Cl.

One context where I have found that speakers vary as to whether sandhi is possible or not is where the target is in within the same minimal maximal projection as the trigger (i.e. the trigger governs the target), yet the target does not c-command the trigger. This is the case when the target is a verb and the trigger a following adjunct, as in (14a), or when the target is a direct object and the trigger an adjunct, as in (14b). It appears that at least some speakers (and marginally, others) do not adhere to the c-command requirement, but require only that the word subject to sandhi be contained in the same minimal maximal projection as the word triggering sandhi. In (14a), for example, although V c-commands the sentential adverb (since V is merged with I under I' and the adverb is an IP adjunct outside of I'), it is contained in the adverb's minimal maximal projection (viz., IP).

(14)a. shiigii   [$_I$, shinadugo   / %**shinadug**] wɔnɔ
        grandmother   return-PERF   yesterday

        Grandmother came back yesterday

   b. roda wa   pad ayaba / %**ayab** dooji
       Roda FUT buy banana   tomorrow

       Roda will buy bananas tomorrow

   c. roda wa   **pad** ayaba / %**ayab** meemo
       Roda FUT buy banana   quickly

Now, what is interesting is that, although 'V + DO' is, for all speakers, a sandhi context, 'V + focused DO' is never a sandhi context for any speakers.

(15)a. ʊn g lɔshɔgɔlɔ ti lɔwei
        gave fish   to child-the

        She gave fish to the child [no focus]

   b. ʊnʊg*(ɔ) **nan** ti lɔwei
       gave   what to child-the

       What did she give to the child?

Kenstowicz's conclusion is that focused direct objects cannot be in the same syntactic position as unfocused direct objects, despite their identical

linear positions, and thus that focus involves syntactic movement (which is string vacuous for direct objects). In light of the evidence in (14), compared with that of (15) and (13), we may go a step further and conclude that the minimal maximal projection dominating FOC does not contain V. This means that a structure in which both the focus position and V are within VP, as in the Horvath and Rochement proposals, cannot be the appropriate structure for Tangale postverbal focus.[6]

These analyses also face a major theoretical problem in that they represent violations of the core idea of the Projection Principle (Chomsky 1981), which requires lexical properties to be present at all levels of representation. The projection principle entails that no element may appear as sister to V unless it is theta-marked by V, since theta-marking is a lexical property. Now, obviously, focused constituents are not theta-marked by V, except where the direct object is focused, and thus their

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[6] Farkas (1986) argues, on the basis of sentences involving both focus and coordination that the focus position in Hungarian cannot be a sister to V either, but rather must be a sister to VP or to S.

Horvath (1986, p. 147, fn. 40) notes that an alternative to her analysis of FOCUS in Hungarian as substitution into a base-generated pre-V position under V' merits investigation. The alternative she mentions, left adjunction to VP (or left adjunction to I' with V movement to I), is in fact the hypothesis explored in the present study, as in Farkas (1986). Horvath, after noting an argument for this alternative regarding parasitic gaps, points out problems with this proposal for Hungarian, both centered on parallel behavior between a pre-V focus and a base-generated pre-V element (both prohibit free right-branching recursion and both have an effect on aspect interpretation). I have no solution to offer for these problems. (Farkas sketches a possible analysis of the second problem, but does not mention the first.)

Both Horvath and Farkas take Hungarian to be a configurational language. A different view is taken by K. Kiss and others in Abraham and de Meij (1986). Various papers in this work argue that there is a correlation between special focus position and free word order. De Meij and Maracz argue that since free word order languages do not have configurationally defined positions, but every sentence has a V, reference to V is "an entirely natural way to single out a position in a sentence", Abraham et al., in the introduction to this volume, state that languages which have a fixed, syntactic focus position (which, according to them, either immediately follows or precedes the finite V or Infl) are "all free word order languages" and thus this correlation "leads to the assumption that focus prominent languages [= languages with a fixed, syntactic, focus position] tend to be nonconfigurational", I do not think there is any reason to believe this second claim. All of the Chadic languages with a special focus position have rigid SVO (or VSO) word order. Thus, the most crucial property of so-called nonconfigurational languages – apparent free word order – is absent in these languages.

appearance as sister to V would constitute a violation of this principle.[7]
This type of approach therefore constitutes a weakening of a fundamental
principle of the theory.

Accounts in which the position of focus is directly associated with the
position of V raise an important conceptual question as well, namely, why
is focus linked to V? Other lexical categories are also feature-assigners.
P assigns Case just as V does, for example, and thus why shouldn't we
expect V to be replaced by P as the assigner of FOCUS (in some lan-
guages)? What is the privileged relation betweeen Focus and V? In all
analyses that I am aware of (Horvath 1986, Rochemont 1986, Farkas
1986), this association is simply stipulated, rather than explained.[8]

3.1.2. *FOCUS as a Feature of Infl*

I believe that an empirically adequate and conceptually revealing account
of the facts can be obtained by retaining Horvath's view of FOCUS as a
syntactic feature similar to Case, but at the same time shifting its origin
from V to Infl (a possibility mentioned by Horvath, but not developed).
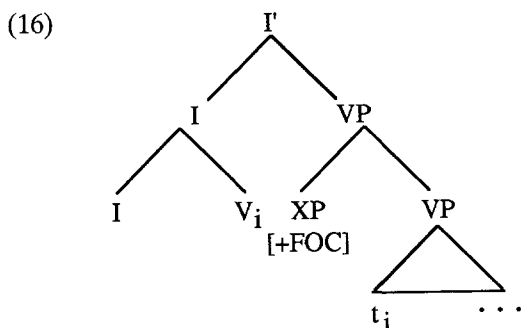Assuming that in order to assign the feature FOCUS, Infl must be verbal –

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[7] Rochemont (1986, p. 155) makes this violation of the Projection Principle an integral part
of his Cleft Focus Principle, which identifies a contrastive focus as an element XP governed,
but not th-marked by V. It is suggested that it is precisely the violation of the Projection
Principle that identifies these structures as being cleft focus constructions. In other words,
exceptions to the Projection Principle are restricted to cases where there is a contrastive
focus interpretation and thus this latter is triggered for the language learner by the very
presence of a Projection Principle violation, through the Cleft Focus Principle.

A question arises concerning the situation in which the XP in question is th-marked by
V, as is the case in postverbal focus langauges whenever an internal argument is focused.
Rochemont's principle would seem to predict that such constituents either cannot be focused
or cannot receive the same type of focus as elements not th-marked by V. This is, however,
clearly not the case.

[8] In Rochemont's (1986) analysis, there is no a priori reason why V in his Cleft Focus
Principle (cf. note 7) is not P or N instead. In Farkas (1986) the position of FOC with respect
to V is stipulated in the form of a Linear Precedence (LP) statement.

Ortiz de Urbina (1989) analyses the connection between (preverbal) focus and V in Basque
as being the result of verb movement to a head-initial COMP (via Infl) which is triggered
by movement of focused constituents (WH or not) to an initial SPEC,CP. This account
correctly predicts that any arguments preceding the focus will correspond to topics. In this
it is similar to Antinucci and Cinque's (1977) analysis of postverbal focus in Italian. As
argued below in section 4, none of the motivation for this analysis of Italian holds for the
Chadic languages. The same is true of Ortiz de Urbina's analysis based on Basque. In VSO
Podoko (cf. section 3), the order of V and FOC does not follow from the positions of
SPEC,CP and CONP (which would predict the order 'FOC V', when in fact only the order
'V FOC' is found). In the SVO Chadic postverbal focus languages, both the subject and the
verb precede FOC, yet no special intonation is required to set them off from the rest of the
sentence. The facts are the same for a hypothetical final SPEC,CP (cf. section 4).

i.e., V must raise to Infl[9] – and that Infl assigns FOCUS under government and adjacency at S-structure, it follows that an element XP must be adjoined to the left of VP in order to receive [FOCUS]. The result is Type A postverbal focus such as that found in Western Bade (cf. (1) above):

(16)

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                      I'
                     / \
                    /   \
                   I     VP
                  / \   / \
                 /   \ /   \
                I   Vᵢ XP   VP
                   [+FOC]  / \
                          /   \
                         tᵢ  . . .
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By taking Infl to be the assigner of the feature FOCUS, we in fact keep the generalization that the focus position is associated with V, since V and Infl end up fused. However, while positing V to be the locus of the feature FOCUS amounts to little more than restating the fact that V and the special focus position are adjacent in these languages, positing Infl to be the position of the FOCUS feature does have some independent motivation. Focused constituents are quite commonly analyzed in the literature as operators.[10] Infl, which we assume to be the head of S (cf. Chomsky (1986a) and references cited there) is typically the S-structure locus of operators whose scope is the sentence (i.e., I^{max}). Tense and negation, for example, generally are features of INFL. It would seem natural in this light that FOCUS should also be a feature of INFL. Languages displaying the phenomenon variously referred to as 'relative aspect marking' or 'WH-agreement' provide morphological support for the hypothesis that Infl is bearer of a feaure [FOCUS]. In these languages Infl

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[9] This is reminiscent of work by Koopman (1984), who suggests that verb raising to Infl is required so that Infl is strong enough to assign (nominative) Case. Both cases point to a requirement of feature-assigners that they be lexical.

[10] This is the position argued for in Horvath (1986). See also, for example, Haïk, Koopman and Sportiche (1986), Laka and Uriagereka (1987), and Ortiz de Ubina (1989). For arguments that this is not the case, see Rooth (1985). The analysis of focus constructions presented here does not hinge on treating focused constitutents as LF operators of some sort; rather I merely suggest that the association of a syntactic feature [FOCUS] with the position Infl can be motivated by this being the locus of other sentential operators such as tense and negation, assuming that focus is also a sentential operator.

bears a special form in focus constructions. [11] We return to this property below in Section 3.3.

Notice finally that the special focus position in (16) is next to V, yet it is not a sister of V, or in an A-position at all, and there is thus no Projection Principle violation. (16) also provides an account of the Tangale sandhi facts since V is not contained by the minimal maximal projection containing the focused constituent. [12] The full account of the Tangale data will become clear as we consider, in the following sections, how (16) provides a basis for Type B postverbal focus constructions.

3.2. *Type B Postverbal Focus*

3.2.1. *The Ungrammaticality of 'V FOC DO'*

The variation between Type A and Type B postverbal focus constructions revolves around the position of the direct object with respect to V and FOC. The relation of a direct object to V is different from that of other elements of VP to V in that a direct object must receive Case from V. Case assignment is standardly assumed to take place at S-structure under government and strict adjacency. Consider first how a direct object receives Case in a Type A language focus construction. The relevant S-structure was given in (16). In (16), a direct object would no longer be governed by V_i, which has raised to I. However, it is governed by the trace of V, t_i, which may assign V's Case, just as in verb movement languages such as Vata (Koopman 1984) and French (Emonds 1978).

Why, then, is the order 'V FOC DO' unacceptable in Type B langages? The simplest answer would seem to be that in these languages, the trace of the raised V may not assign Case, and thus the direct object has no way of getting Case. In other words, the fundamental difference between

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[11] Discussion of this phenomenon can be found in, for example, Givon (1975), Hyman and Watters (1984), Clements (1985), Chung (1982), Tuller (1986), and Haïk (1988).

[12] One could assume that the landing site of focused constituent is SPEC,VP, if the view of adjunction argued for in May (1985) is accepted. May argues that adjoined elements are not dominated by the maxlmal projection to which they adjoin, a view also incorporated into Chomsky's (1986a) Barriers model. The sandhi facts require that V does not share the same minimal maximal projection as the focused constituent, which is not the case for elements adjoined to VP under May's theory of adjunction, but which is the case for elements in SPEC,VP. As will be shown directly, there is evidence suggesting that direct objects (or, at least their heads) raise to V; this explains their availability as triggers for sandhi of the preceding verb.

An alternative to the analysis of FOCUS as a feature of Infl would be to treat FOCUS as a head along the lines of Pollock's (1989) analysis of NEG and other members of Infl. This line of inquiry will not be explored here.

Type A languages and Type B languages is whether or not the trace of V may assign Case.

In recent work on the syntax of Bambara, Koopman (1987) has proposed that preciseiy this difference is responsible for word order differences found between Bambara and languages like Vata.

> (17)   Parameter of Case transmission (Koopman 1987)
>   a.   Given an (A)-chain V . . . t, V **cannot** transmit its Case properties to t. (Bambara)
>   b.   Given an (A)-chain V . . . t, V **can** transmit its Case properties to t. (French, Yiddish, Vata)

While Vata has general verb raising, in Bambara, it is argued, V raises only when it has no Case-dependent argument (intransitives, unaccusatives and transitive verbs subcategorizing only for a PP vs. transitive verbs taking an NP complement). This behavior follows by positing that the trace of V may not assign the Case of V. The same type of generalization seems to be at work in Tangale, etc.: the order 'V FOC' is ungrammatical just in case V has a Case-dependent NP – either a direct object or the (NP) goal complement of a verb of motion. (Goal complements of motion verbs in many Chadic languages are NPs rather than PPs and behave in this and other ways as if they were Case-marked by the verb of motion – cf. Tuller (to appear).)
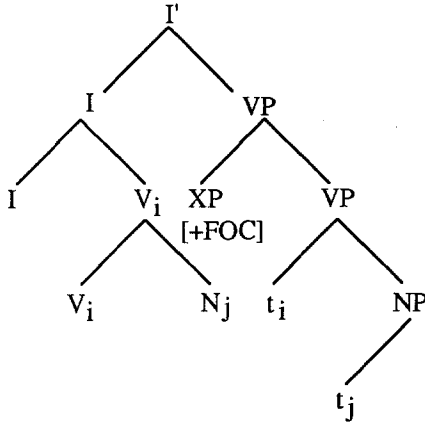
3.2.2. *The Grammaticality of 'V DO FOC'*

A reason for the impossibility of 'V FOC DO' in Type B languages has been given; consider now the derivation of the grammatical 'V DO FOC' Type B focus construction. Given that 'V FOC DO' is ruled out in these languages by the Case Filter, we can view the 'V DO FOC' order as a way of avoiding a Case Filter violation. In other words, suppose that this order is a result of the direct object moving up to the right of the verb in order to be assigned Case. What is the landing site of a raised direct object? It cannot be adjoined to the left of VP, since this would lose the structural difference between 'V + DO' and 'V + FOC', necessary to account for the sandhi facts of Section 3.1.1, and, furthemore, if both focalization and DO-raising are adjunction to VP, nothing would prevent the order 'V FOC DO' (since V governs both positions).

The only alternative would appear to be right adjunction to V itself (either before or after V raises). According to adjunction theory (Chomsky 1986a), however, only heads may adjoin to heads. Thus, if raising of the direct object is adjunction to V, adjunction theory would require that only

the head of the direct object be raised, a case of incorporation (adjunction of a word to a word) in the work of Baker (1988). (The trace created by this process, t_j, satisfies the ECP since it is head-governed and identified by the trace of V – cf. Stowell (1985).)

(18)

```
              I'
            /    \
          I        VP
        /   \     /   \
       I    V_i  XP    VP
            /\  [+FOC] /  \
          V_i    N_j t_i   NP
                              \
                              t_j
```

In fact, there is evidence that this is exactly what happens. Recall the dicussion of 'direct object splitting' from Section 2.3. We saw that complex direct objects in Kanakuru are obligatorily 'split' by the focused element. Example (9) is repeated here as illustration:

(19)a.　　adе [shiruwoi] ŋgadlai [mə shee wura] ane
　　　　　ate fish-the　cat-the　RM she fried　up

　　b.　　ma-no　　　　[boi] nani [mə mən ala ra]
　　　　　returned-AGR place I　　RM we　saw her

　　　　　I returned to the place where we saw her

In terms of the analysis being developed here, it is only the head of the direct object which is raised. [13] This fits with our analysis of the 'V DO FOC' order as a result of Case theoretic considerations: only the head of the direct object raises to V since only it needs Case (the relative clause is a CP). [14] As required by adjunction theory, this is an instance of adjunction of X^0 to X^0.

Direct object splitting is also obligatory with conjoined NPs:

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[13] Assuming a DP analysis of argument NPs (cf. Abney (1986), it is the head of DP, the definite article -*i* in these examples, to which N has adjoined (Det is a clitic in Kanakuru), that raises to V.

[14] The original version of the Case Filter is being assumed here (*N, where N has no Case) in which Case is assigned to the maximal projection and 'drips' to the head (Cf. Rouveret and Vergnaud 1980).

(20)a.   na ange [Balau] **shi** [gən lo mani]
              pay   Balau HE   with boy-his

         HE is paying B and his son

   b.   wupe [dowi]   **məni** [gən lai]
         sold   horse-the WE   with cow-the

         WE sold the horse and the cow

This is not surprising since what is translated as 'and' here is actually the preposition 'with', a source of Case for the second conjunct. (I assume that the structure is actually that of an N with a PP complement here.)

Elements of NP which are themselves dependent on the head, either for Case (as in genitive constructions) or because they are clitics (e.g., the definite article *-i*, which is a suffix on N) may not be split from N in focus constructions, as is illustrated in (20). The case of clitics is clear. Case dependents of N may not be left behind for the same reason that N itself may not remain in VP: Case is not transferred in A-chains.[15]

(21)a.   tui [worom mono] **shire**
         ate bean   my   she

         SHE ate my beans

   b.   kur   [kəran yawei]   **mandai**
         refuse tending chicken-the who

         Who refused tending the chicken?

A prenominal adjective must also raise with the head noun, as in (20).

(22)   ɗək[pe mənai] **amnai**
         V   Adj N   FOC

         THE CHIEF built the new house

The fact that prenominal adjectives do not manifest agreement with the noun they modify (compare Adj + N *pe lemen* 'new nets' with N + Adj *lemen pe-wu* 'new nets') may be taken as preliminary evidence that 'Adj-

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[15] Unfortunately, I lack the necessary data to determine it if is only the head of the genitive complement which raises with N (as would be expected given adjunction theory). Specifically, one would need an example in which the genitive complement is itself complex (e.g., 'Who refused tending the chicken that she will fry up tomorrow?').

N' sequences constitute compounds (cf. English *hat(*s) boxes*, French *timbres-poste(*s)*, etc.) and hence their resistance to 'DO Splitting'.[16]

As a final argument for the connection between direct object splitting and the assignment of objective Case, consider the situation in which V has a complement which does not need Case, as arguably is true for CP complements.[17] My analysis predicts that 'splitting' of the complement will be unnecessary and thus that the sequence 'V FOC CP' should be possible. This is exactly what is found, as the Tangale examples below illustrate:

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[16] Two other cases are less clear to me. Newman (1974, p. 64) states that both postnominal adjectives and numerals (and, I assume, other quantifiers as well), which are also postnominal, may either raise with the head noun or remain in NP, though the former is 'strongly preferred'.

(i)a.   nai   [gwa m   ɗwali] **nani**
       drank water RM cold-the I
       I drank cold water

   a'.   nai   [gwai]   **nani** [mə ɗwal]
        drank water-the I   RM cold

   b.   wupe [landaŋgin rap] **məni**
       sold gowns   two we
       WE sold two gowns

  b'.   wupe [landaŋgin] **məni** [rap]
       sold   gowns   we   two

Lacking extensive data on the internal structure of NPs in this language, I have no analysis to offer of (i), leaving this as a problem for further study.

Perhaps the variation in the position of the postnominal adjective has to do with whether these are taken to be synchronic relative clauses or not (a' as opposed to a). It would appear as though modification requires the modified constituent to be within the c-command domain of the modifier. Presumably the relative pronoun mə may fill this role. Perhaps related to this is the fact that quantifiers may appear on either side of a relative clause as well (compare (ib–b') with (iia–a')), with mə being obligatory when the quantifier is not adjacent to the head N:

(ii)a.   lanjin parau (mə) shii wupa
       cows fòur RM he sold
       the four cows he sold

   a'.   lanjin *(mə) shii wupa parau
        cows RM he sold four

[17] Thanks to an anonymous NLLT reviewer for pointing out this prediction to me.

(23)a. yɪmbɛn **nuŋ** [ka bome watʊgɔ Billiri]
       think   who that Bome went   Billiri

      Who thinks that Bome went to Billiri?

    b. neigon **nuŋ** [ka Aish watʊg Billiri]
       said   who that Aisha went Biliri?

      Who said that Aisha went to Billiri?

Whereas the order 'V FOC DO' is never found in the Type B languages such as Tangale, the order 'V FOC CP' is, as expected.

Though questions remain, the direct object splitting facts provide at least initial support for the conclusion that the distinction between Type A and Type B postverbal focus stems from Case theoretic considerations. Yet to be explained is the apparent optionality of direct object splitting in Tangale and Ngizim; we turn to this matter now.

3.3. *Optional Direct Object Splitting in Tangale and Ngizim and [SPEC,CP] Focus*

As was seen above in Section 2.3, direct object splitting in Tangale and Ngizim, unlike in Kanakuru, appears to be optional in that the focused constituents may appear either between the head of the direct object and its complements (as in Kanakuru) or after the entire complex direct object. How can this be under our analysis? The latter possibility would seem to involve raising of the entire direct object to V, which would be adjunction of a maximal projection to a lexical category. Schuh (1972) sees direct object splitting as part of extraposition from NP, a quite regular process in Ngizim. This, however, leaves unexplained the difference with Kanakuru, where it would look as though extraposition is obligatory, but only for direct objects in focus constructions, since elsewhere extraposition from P is optional, as it is in Ngizim.

I propose to tie this difference with respect to direct object splitting between Kanakuru, and Ngizim and Tangale to another difference between these languages. It has been shown that focused constituents appear immediately after the direct object in these langauges. However, in both Ngizim (e.g. (24)) and Tangale (e.g. (25)) focused constituents may also appear at the very end of S.

(24)a. taatkə ɗaa ii magərafcin-**nən tai**

      Who showed the town to the visitors? [cf. (6a)]

(24)b   ɗəbdə karee aa aasək **nən Audu**

AUDU sold the goods in the market [cf. (6b)]

(25)a.   Wa patu ayaba ta luumo dooji **nuŋ**

Who will buy bananas at the market tomorrow? [cf. (4a)]

b.   Mela padʊk landa tu luumon **ti nuŋ**

Who did Mela buy the gown for at the market? [cf. (4d)]

The only cases encountered in Tangale of a focus constituent occurring
in a position other than either immediately after the direct object or at
the right periphery of S were sentences where the focus was at the end,
but followed by a single constituent (cf. also fn. 3):

(26)a.   Wa   pad yalam ti pɔ luumo **noŋ**, dooji
FUT buy oil   at market   who tomorrow
Who will buy oil at the market tomorrow?

b.   Wa pad yalam dooji **noŋ**, ti pɔ luumo
Who will buy oil at the market tomorrow?

The intonation associated with these sentences and their extreme mar-
ginality for some speakers suggest that they involve right dislocation and
thus are compatible with the description of focus as occurring either
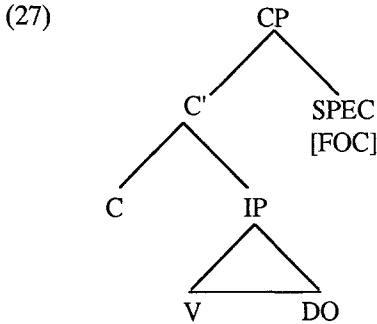immediately after the direct object or at the end of S.

Schuh (1972, p. 223) states that the postverbal focus position in Ngizim
is "fairly free with respect to predicate adverbs and indirect objects";
however, all of the examples given are either of the form 'V DO FOC'
or 'V DO . . . FOC'.[18]

It seems, in other words, that Ngizim and Tangale have two focus
positions. We have argued that one is left-adjoined to VP, the same one
found in other postverbal focus languages. Suppose that the S-final focus
position, on analogy with the S-initial focus position found in many lan-

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[18] It should be noted that Schuh speaks only of focus subject postposing, though examples
like (6d), especially compared with Bade (1d), suggest that other elements may appear in
the postverbal focus position. A complicating factor is that Ngizim apparently has in situ
focus as well, though in situ focused subjects are ungrammatical – a not uncommon asym-
metry (see, for example, Koopman and Sportiche (1986) on Vata and Clements (1985) on
Kikuyu). It may very well be that since in situ focus is possible, it is also preferred (where
possible). The characterization of 'Move-α' as a 'last resort' seems appropriate. See discussion
in Section 3.5.

guages (e.g., Arabic, Hausa, etc.), is [SPEC,CP]. This means that [SPEC,CP] must be final in Tangale and Ngizim .[19]

Notice now that this provides an immediate answer to the direct object splitting facts of these languages. The optionality of direct object splitting is only apparent. Where the entire direct object appears in between V and FOC, it is because the focused constituent is actually in [SPEC,CP]:

(27)

```
                    CP
                   /  \
                 C'    SPEC
                / \    [FOC]
               C   IP
                  /  \
                 V    DO
```

_____

[19] There is clear evidence for unbounded movement to the left-adjoined-to-VP focus position in Tangale (the sources for the other languages contain no relevant data on this point), at least for some speakers (/dialects?). (ia) is from a Billiri Tangale speaker and (ib), where the focussed constituent has remained in the embedded clause focus position, and (ic), where it has moved up to the matrix left-adjoined-to-VP focus position, are from a Kaltungo Tangale speaker.

(i)a. Maamo Mela yımbɛ **nuŋ** [ka weigɔ Billiri wɔnɔ]
       now   Mela think who that went B   yesterday
       Who does Mela now think went to Billiri yesterday?

   b. Musa ni yımbʊfı maamu [ka war Billiri **nɔŋ** wɔnɔ]
       Musa   think   now   that went B   who yesterday
       Who does Mela now think went to Billiri yesterday?

   c. Musa ni yımbʊfı **nɔŋ** maamu [ka war Billiri ɔnɔ]
       Musa   think   who now   that . . .

M. Kidda, a speaker of the Shongom dialect, does not accept such structures,

(ii)a. *Musa yımbɛ **nɔŋ** meemo [ka waruk Billiri ɔnɔ]?
        Musa thinks who now   that go   Billiri yesterday
        Who does Musa now think went to Billiri yesterday?

    b. *Musa yımbɛ meemo **nɔŋ** [ka waruk Billiri ɔnɔ]?

producing instead only structures like those in (iii).

(iii)a. Musa yımbɛ meemo [ka waruk Billiri **nɔŋ** ɔnɔ]?
     b. Musa yımbɛ meemo [ka waruk Billiri ɔnɔ **nɔŋ**?

(iiia) is identical to (ib). The focused constituent in examples like that in (iiib) is ambiguous as to whether it is in the SPEC,CP of the embedded clause or that of the matrix clause.

We can now say that direct object splitting is identical in Kanakuru, Tangale, and Ngizim. That is, when focused constituents are in the position left-adjoined to VP (in Type B languages), the head of the direct object must raise to V in order to receive Case, leaving behind any CP or PP complement.

What prevents Kanakuru from taking the option sketched in (27) and thus permitting non-split complex direct objects? In fact, Kanakuru, like Tangale and Ngizim, does have a second focus construction; however, instead of focus appearing at the very end of S, it appears at the very beginning of S:

(28)a. **Basha** shee tupa ya
        FOC 2perf V   DO

        BASHA sent him

   b.   **shire** shii wupǝ-ra landai

        HER he sold to her the cloth

   c.   **shi** mǝn tupa

        We sent HIM

Significantly, there are no cases of focus appearing in what is clearly an S-final position (as opposed to the position immediately after the direct object, which just happens to coincide with the end of the sentence). Thus, for example, the totality particle (= English *up*), whose normal position is after internal arguments but before adjuncts, cannot occur between a direct object and the postverbal focus:

(29)a. at ɗenoi   **shire** ane
        ate peanut-the she   up

        SHE ate up the peanuts

   b.   *at ɗenoi ane **shire**

The reason direct object splitting is obligatory in Kanakuru is because [SPEC,CP] is initial, rather than final. [20,21]

I have argued here for an analysis of constructions containing a special focus position which is centered around the idea that a syntactic feature FOCUS is generated as a feature of Infl. This feature is assigned by Infl, at S-structure, to a governed XP, to which it thereby confers operator status at LF. It was suggested that the association of FOCUS with Infl is

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[20] A Kanakuru speaker we worked with in Kano, Etham Joshua (born in Kumbo), in fact, always gave focus constructions with initial focus first and often rejected postverbal focus presented to him (WH as well as non-WH). This may very well be an influence from Hausa which is strictly focus-initial, though our speaker spent the first 20 years of his life in a Kanakuru village near Shellen, and though he lives in Hausa-dominant Kano, he speaks Kanakuru to his wife (who is also Kanakuru) and his children.

[21] While Kanakuru and Tangale both have SPEC,CP focus as well as Type B postverbal focus, there is an interesting difference between the two languages: while any constituent may focused in SPEC,CP in Kanakuru, in Tangale direct objects (and locative goals of motion verbs) are excluded from this position. (Cf. note 17 regarding Ngizim.) Thus, compare the Kanakuru example in the text (28c) with the Tangale examples in (i).

(i)a.   *ʊnʊg riʊlɔwei   **naŋ**
          gave   to child-the what
          What did she give to the child?

   b.   *na   wanɔ dooji   Billiri
          FUT go-I   tomorrow Billiri
          I will go to BILLIRI tomorrow

It is generally assumed that NPs in A'-positions have Case by virtue of the Case assigned to their argument position trace. It has been suggested here that Tangale and Karakuru do not allow Case transfer when V raises (i.e., the trace of V cannot assign Case). V-raising of this type arguably forms an A-chain (cf. Koopman (1984)) and thus the more general claim is that A-chains are not Case chains in these languages. Does this restriction extend to A'-chains? Koopman (1987) argues that in Bambara this is the case, explaining in this way the total lack of WH-movement in this language.

The Kanakuru facts suggest that Case is transferred in A'-chains since any constituent may appear in SPEC,CP. We might then view the restricted SPEC,CP focus in Tangale as the result of its lacking A' Case chains. (Relative clauses in Tangale involve no overt WH element in need of Case – cf. Kidda (1985, pp. 48–50).) This immediately excludes direct objects (and locative goals of motion verbs), which are NPs, from moving to SPEC,CP. (These can, however, be adjoined to the left of VP for focus since, here, they may receive Case directly from the raised V.) PPs, on the other hand, can be moved to SPEC,CP without problem (e.g. (25b)), because, not being NPs, they are not subject to the Case Filter.

This leaves only subjects, which also may appear in SPEC,CP in Tangale (e.g. (25a)), though they are NPs. A possible line of explanation would be the existence of a rule of default nominative Case assignment to A'-positions, restricted to subject, perhaps by a general principle excluding more than one nominative argument per clause. The morphological effects of a rule of this sort can be seen in Standard Arabic, where there is a default nominative Case available to topicalized NPs (cf. Borer and Tuller (1985, pp. 31–2)) as well as to left dislocated NPs.

natural since Infl is the location of other sentential operators such as tense
and negation. A question we wish to ask now is, what is the link between
FOCUS and SPEC,CP, if FOCUS is associated with Infl?

Consider first how our analysis of focus encompasses in situ focus con-
structions, where any argument may be focused in its D-structure position.
Horvath's analysis of FOCUS as a syntactic feature analogous to Case has
been adopted. It is assumed therefore that FOCUS, like Case, may be
either structural or inherent (cf. Chomsky 1986b). In situ focus can be
thought of as FOCUS being an inherent feature of any lexical category,
in the sense that it may be a D-structure feature. (Negation, too, varies
from language to language as to whether it is a feature of Infl and/or a
feature of a word.) As Horvath points out, there is morphological evidence
for the postulation of an in situ FOCUS feature in the form of the wide-
spread focus markers that occur on such constituents in many languages
(e.g., Amharic, Aghem, Mahou).

Now, suppose that FOCUS, when a feature of Infl, may also be either
structural (since Infl is an X^0) or inherent. When FOCUS is a structural
feature of Infl, it is assigned, like structural Case, in the manner just
described. When a feature is inherent, it is not assigned, but rather only
propagates by agreement. Agreement of syntactic features of this type
can be seen, for example, in languages with rich Case systems; thus,
determiners show Case agreement with the head noun they specify, for
example. Suppose that FOCUS works basically the same way. One differ-
ence, however, is that while Case agreement is a PF-type phenomenon,
it is natural to hypothesize that FOCUS agreement would be an LF
phenomenon if the feature FOCUS ultimately triggers operator status on
an XP which bears it.[22] Assuming with den Besten, Stowell, and others
that Infl moves to C at LF (in keeping with the hypothesis that scope is
indicated by c-command), this means that Infl/C undergoes head-specifier
agreement with the SPEC,CP. Thus, the feature FOCUS is shared by
SPEC,CP, and an XP appearing in such a SPEC,CP gets interpreted as a
focus operator at LF. SPEC,CP, focus, then, is FOCUS as an inherent
feature of Infl.

Just as there is morphological evidence that FOCUS is a feature of in
situ focused constituents, there are also morphological facts which can be
taken as evidence that FOCUS is a feature of Infl at S-structure in

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[22] The restriciton of FOCUS operators to XP would prohibit the I/C from being interpreted
as the focused constituent, a potential problem if both have the feature [Focus], as pointed
out to me by J. Horvath. Alternatively, it could be simply assumed that the feature [Focus]
is an inherent feature of SPEC,CP in these languages.

SPEC,CP focus constructions. As mentioned above, many languages exhibit a phenomenon variously referred to as 'relative aspect marking' or 'WH-agreement' which consists of a special Infl form which appears in constructions in which a focused constituent (WH or non-WH) is an S-structure operator governing Infl. What is of interest to us here is that this phenomenon coincides with SPEC,CP focus. Thus, in Kanakuru, for example, which has both postverbal focus and SPEC,CP focus and which also has special Infl-marking, the special Infl form appears only in the latter constructions. I take this as evidence for the SPEC,CP-Infl link proposed here.

3.4. *Postverbal Focus in VSO Languages*

Most VSO languages have focus constructions in which the focused element appears at the beginning of S (= Greenberg's (1963) generalization #12). Another significant property of languages having a dominant VSO order is that these languages typically also have an alternative SVO order (= Greenberg's generalization #6). Emonds (1980) proposes to account for both of these properties by analyzing VSO order as being derived from a basic SVO order through movement of V to an initial COMP. Since, under this analysis, COMP must be initial in order for a language to be VSO (since V in initial position can only be a result of movement of V to COMP), it followed that WH-elements also appear at the beginning of S, assuming that WH-movement necessarily involves movement to COMP.

Under current versions of X-bar theory these two processes are no longer linked. With the regularization of the category COMP (= C) into X-bar theory, SPEC of CP, a separate position from C, is argued to be the landing site of WH-movement and thus V and WH no longer have the same landing site. Furthermore, the phenomenon of 'special focus position languages' under discussion in this study makes it clear that WH-movement is not even restricted to [SPEC,CP].

Considerable empirical support for a common D-structure for SVO and VSO languages has appeared in the literature and, more generally, for the existence of a VP in VSO languages. The basic word order facts of VSO languages (SVO order in non-finite clauses, Infl-SVO order in clauses containing an auxiliary, and VSO order elsewhere) have motivated a rule of V-raising (to Infl, and then to C) linked to nominative Case assignment, which is now commonly assumed.

It turns out, however, that not all VSO languages have S-initial focus, contrary to generalization #12. At least one VSO Chadic language,

Podoko, requires focus elements to appear in a postverbal position. Thus, the separation of the position of C (and hence the landing site of V-raising in VSO languages) from the landing site of WH-movement, and which is forced by the regularization of X-bar theory, is a positive result (cf. also Koopman (1984)).

My analysis of postverbal focus makes a very clear prediction about postverbal focus constructions in VSO languages. Assuming that VSO word order is indeed the result of V-movement from an underlying VP to an initial COMP, via Infl, it is clear that VSO languages necessarily have a positive setting for the Case chain parameter. The trace of V must be a Case-assigner or the order VSO could never arise. Now, if the 'special focus position' is a result of Infl assigning FOCUS at S-structure and if a Type B focus construction arises only where the trace of V is not a Case-assigner, it follows that in VSO languages the 'special focus position' will be immediately next to V – i.e., Type A, rather than Type B.

This is precisely what is found in Podoko. Assuming once again that the XP to be focused must appear in an A'-position to which Infl may assign the feature FOCUS, in Podoko this position is left adjoined to IP:
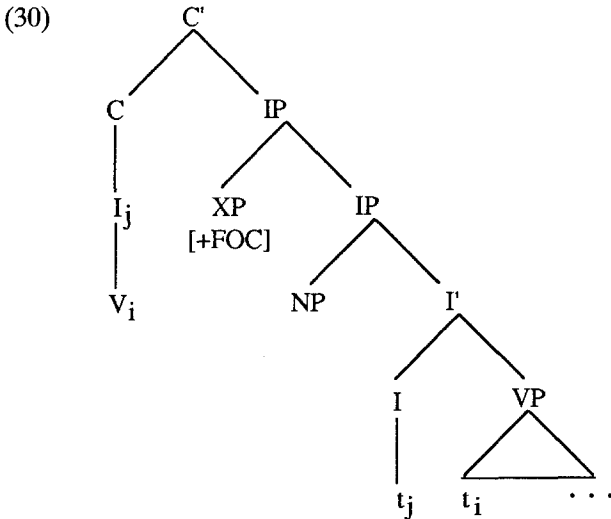
(30)

e.g. təla   də ᵞkwədəgə malə   sləɓa
       cook in kitchen   mother-my meat

My mother cooked meat IN THE KITCHEN

Alternatively, if one takes the view proposed by various researchers (Koopman and Sportiche, Kitagawa, Kuroda) that subjects originate in VP, then the position of focused constituents in both VSO and SVO

languages would be identical – viz. that created by left-adjunction to VP. What is important here is that the Case chain parameter predicts that VSO languages, since they crucially involve movement of V to a position to the left of the subject (and thus necessarily have a positive setting for Case chains), have Type A postverbal focus, postverbal focus without an intervening direct object.

VSO Turkana (cf. Dimmendaal 1983) and Nandi (cf. Creider and Creider 1983), both Nilotic languages, also have Type A postverbal focus constructions.[23] I know of no cases of Type B focus in a VSO language; the expected order would be 'V O FOC S'. Chomsky (1986b, p. 143) suggests that the proper way of looking at 'Move-α' may be as a 'last resort': a constituent is moved only when this is required (in order to be interpreted as FOCUS, for example, or, to escape a violation of some principle). Assuming that 'Move-α' is indeed a 'last resort', a language will have direct object adjunction to V (= a Type B focus construction) only where the direct object cannot receive Case in its D-structure position from the trace of V, which is never the case in a VSO language.

4. RIGHT ADJUNCTION AND MULTIPLE EXTRAPOSITION

An alternative to the analysis developed in the preceding sections might be imagined in which focused constituents are right-adjoined to VP, as in English constructions such as 'John asked to dance with him, a girl in a blue SMOCK', discussed in Rochemont (1986). An analysis of post-verbal focus as adjunction to the right of VP (or IP, or CP) would, of course, also have to include some way of getting the verb and the focus to be next to each other. A plausible way of achieving this result is to posit multiple extraposition of all constituents between the two, this being obligatory by requiring the adjoined XP to be adjacent to V in order to be interpreted as focus.

In fact, this analysis is roughly what is proposed for Italian in work by Calabrese (1987). That Italian is also a language in which focused constituents appear after the verb is shown in a study of Italian word order by Antinucci and Cinque (1977). What is striking about Italian are the intonational correlates of this focus construction. A focus phrase appearing after the verb entails that all other constituents normally appearing after

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[23] These facts of Podoko, Turkana, and Nandi show incidently that there is no necessary incompatibility between postverbal focus and VSO word order, as I predict, but contra Calabrese (1987), who argues that the difference in focus constructions between SVO Italian, which has postverbal focus, and VSO Berber, which does not, follows from the word order difference between the two languages.

the verb be separated by a heavy intonation break from the focused constituent and from each other. Antinucci and Cinque refer to this process as 'emarginazione'. Another crucial fact they point out is that the order of the emarginated constituents is free. Thus, the sentence in (31a), an appropriate answer to 'Who brought the register to George this morning?', but not to 'What happened?', or 'What did George do?', has all of the equivalent orders in (31b).

(31)a. Ha portato **tuo fratello**, a Giorgio, il registratore, stamattina

b. Ha portato **tuo fratello**, il registratore, stamattina, a Giorgio
     Ha portato **tuo fratello**, a Giorgio, stamattina, il registratore
     Ha portato **tuo fratello**, stamattina, il registratore, a Giorgio
     Ha portato **tuo fratello**, stamattina, a Giorgio, il registratore

The facts are the same when other constituents are focused:

(32)a. Ho scritto **a Maria**, quella lettera

     I wrote that letter TO MARIA

b. Ho messo **nel cassetto**, quel libro

     I put that book IN THE DRAWER

Antinucci and Cinque argue that emargination is movement outside of S based on the free ordering among the emarginated elements (not normally possible within VP) as well as the fact that these elements are not in the scope of negation.

These facts all follow under the right adjunction plus multiple extraposition analysis sketched above. The intonation breaks mark each instance of extraposition. The free word order among constituents to the right of the focus is a result of the random, constituent by constituent extraposition.

None of the motivation for this analysis of postverbal focus in Italian is found in Tangale. And no data of this type are reported for any of the other Chadic languages examined, either. The only focus constructions with special intonation after the focus in Tangale were seen to be marginal sentences involving right dislocation, limited to a single constituent (cf. fn. 3 and discussion of (26)). In only these cases was there a heavy intonation break after the focused constituent. Moreover, it is not at all clear how extraposition could be triggered by a requirement that V and FOC be adjacent and at the same time account for the Type A/Type B difference and the full array of direct object splitting facts. I conclude

therefore that the right adjunction plus multiple extraposition analysis is not tenable for postverbal focus in Chadic.

Besides this lack of evidence for a right adjunction plus multiple extraposition analysis, it can be added that there is also evidence against any analysis which excludes the possibility of the focus position being inside the predicate. Predicate negation in Ngizim (cf. Schuh (1972), Chapter 10) is distinguished from sentential negation in that it is mutually exclusive with 'totality' verbal morphology and the sequential aspect, and it triggers a special Infl form in the subjunctive. Neither the subject nor sentential adverbs are in the scope of predicate negation. However, focused subjects do co-exist with predicate negation, as can be seen by the tests just mentioned. For a focused subject to be in the scope of predicate negation, it must be able to occur inside of the predicate, and thus this fact argues against an analysis of postverbal focus in which the special focus position is exclusively clause final and the proximity of focus to V is a result of multiple extraposition. [24]

5. DISCUSSION

This study of focus constructions in a number of Chadic languages has presented new data regarding 'special position' focus constructions previously studied in languages such as Hungarian, Aghem, Basque, and Italian. Several important facts about these constructions emerge: (1) the special focus position is not necessarily immediately next to V; in many languages, the direct object obligatorily intervenes between the two, (2) uncontroversially configurational languages may have 'special position' focus constructions, (3) the special focus position must be able to occur inside the predicate, yet cannot be a sister to V, and (4) proximity of focus to V cannot be generally tied to (multiple) extraposition to the right of a final Focus.

An analysis of these constructions was argued for in which the observed relation between Infl (/V) and the focused constituent stems from postulation of a syntactic feature [FOCUS] which is assigned to an XP by Infl.

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[24] This does not mean that postverbal focus necessarily includes downward movement. If an analysis in which the subject is base-generated as a sister to VP is adopted (as is proposed by various authors – cf. Koopman (1987) for one version), then movement to the focus position (perhaps the SPEC,VP) will be upward movement even for the subject. I do not think this hypothesis makes a crucial difference for the issues under discussion here, and thus have assumed the classic analysis in which subjects are generated as SPEC of IP. The VP internal subject hypothesis is entertained in Section 3.4 with respect to VSO postverbal focus languages.

The type of focus construction (postverbal focus or SPEC,CP focus) follows from the manner in which Infl assigns [FOCUS].

The feature [FOCUS] has both interpretive and morphological motivation, and, in this, is parallel to [+WH], also a feature that appears in the surface form within a word as well as being abstractly associated with the XP of which this word is the head (Chomsky 1986b). We might also consider that the relation between Infl and the focused constituent is best characterized as being analogous to the relation between a [+WH] C and a WH-phrase in non-WH-in situ languages. In what sense then is the feature [FOCUS] *assigned*, a property more habitually associated with the feature [Case]? There is, I believe, no contradiction. The relation between a [+WH] C and a WH-phrase in SPEC,CP is triggered by SPEC-head agreement (Chomsky 1986a), the mechanism responsible for nominative Case assignment and, it has been argued here, SPEC,CP focus constructions. The three features in this light can be considered analogous, though the relation between [+WH] and [+FOCUS] deserves deeper exploration.

The parameters proposed in this study raise various questions. Foremost among these is of course the question of what the correlates to any particular parameter setting are. Some of these have been explored here. For example, a VSO langauge necessarily has a positive setting for Case transmission in A-chains, and thus, if Infl has structural FOCUS, the result will be a Type A postverbal focus construction (i.e., FOC to the immediate right of V). But, what determines which FOCUS setting(s) will be selected in a given language?

Although some questions have remained unanswered, and new ones have been posed, it is hoped that the present work, in having presented some relevant data and arguments, will further stimulate study of the problems raised by the syntax of focus constructions.

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ABSTRACT

This study examines the syntax of "special position" focus constructions in a number of Chadic languages. Unlike such constructions in previously studied languages (e.g. Hungarian, Aghem, Basque, Italian), the designated focus position is not found exclusively next to V. In many Chadic postverbal focus languages, the direct object obligatory intervenes. It can, moreover, be shown that the focus position may appear inside the predicate, yet is not a sister to V. An analysis of these facts is developed based on the syntactic feature [+FOCUS] taken to be a feature of INFL in these languages. Expanding on Horvath's (1986) proposal that the properties of the feature FOCUS are parallel to those of the syntactic features Case and WH, the variation found with respect to the linear position of focus constituents is shown to follow from a parameter specifying the way in which FOCUS is assigned in combination with Koopman's (1987) parameter of Case transmission in chains. If FOCUS is assigned directly, a focus constituent appears in the domain of INFL. If it is assigned indirectly, via SPEC-head agreement, a focus constituent appears in SPEC, CP. If the trace of V cannot assign Case, heads of direct objects must raise to V, producing the observed 'V DO FOC' pattern. The facts of postverbal focus constructions in VSO languages are shown to pattern exactly as predicted by the analysis, developed on the basis of the (more frequently occurring) SVO Chadic languages.