

# FOCUS STRATEGIES IN CHADIC – THE CASE OF TANGALE REVISITED\*

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*Abstract.* The present article offers a detailed study of focus strategies in some Chadic languages, paying special attention to the focus system of Tangale. It discusses two dimensions of variation with respect to the realization of focus. First, there is a striking variety of focus strategies across the Chadic languages. Second, focus can be realized in different ways within one and the same language: We show that Tangale has at least three focus strategies the application of which is governed by the verbal aspect, the valency of the focused verb, the category of the focus constituent, and the argument status of the focused DP. We conclude that purely syntax-based theories of focus marking reach their limits when confronted with the complex focus systems of the Chadic languages, and propose a prosody-based analysis instead.

## **1. Introduction**

This paper investigates the focus systems of some Chadic languages, in particular Tangale, a West Chadic language spoken in Northern Nigeria (Gombe State). We show that standard generative focus theories that are based on intonation languages (Jackendoff 1972, Selkirk 1984, 1995, Rooth 1992, Schwarzschild 1999) cannot account for the rich variety of focus phenomena found in the Chadic languages. These theories postulate the existence of abstract F-features, which mediate between the

prominence of a focus constituent in the interpretive component and a corresponding prominence at the PF-level. One way or other, all such *F-feature theories* assume that a focus must be marked (assumption 1): The presence of F-features must be overtly expressed in form of a special grammatical marking on or within the focus constituent (Jackendoff 1972). A second assumption (assumption 2) of these theories is that focus is marked uniformly, i.e. in the same grammatical way, across grammatical functions and categories, be it by main accent, or by syntactic movement, or by a combination thereof.

The behaviour of focus marking in the Chadic languages challenges both these assumptions: It shows that some Chadic languages employ a variety of focus marking devices (movement, morphological marking, prosodic phrasing), but they do not do so in a uniform manner, arguing against assumption 2: In Tangale, for instance, focus is not marked uniformly, but the formal means of focus marking depend on the grammatical function or syntactic category of the focus constituent. Concerning assumption 1, focus marking in Tangale deviates from the standard view in two respects: First, focus is not always marked *on* the focus constituent, but on an adjacent out-of-focus constituent. Second, in certain syntactic environments grammatical focus marking is absent altogether.

The article is structured as follows: Section 2 provides a definition of focus and spells out the basic assumptions of F-feature theories in some more detail. Section 3 discusses focus marking in languages of the Chadic family and shows that some of them do not mark focus in a uniform manner. The same is shown in a detailed study of predicate focus in Tangale in section 4. Section 5 shows that only subjects must always be marked for focus in Tangale, presumably because canonical subjects receive a default interpretation as topic in this language. In contrast, focus on all other

constituents is only sporadically marked. Its resolution is therefore in need of strong support from the pragmatic system. This suggests that a proper account of focus marking in Tangale will have to consider the topic-comment distinction in addition to the focus-background distinction, as will be shown in section 6, where we also propose a tentative unifying analysis of the various focus realizations in terms of prosodic structure.

## 2. Theoretical background

### 2.1. A definition of focus

We adopt the following semantic definition of focus for tone and intonation languages, which is independent of grammatical focus marking: Focus on a constituent  $\alpha$  ( $[\alpha]_F$ ) invokes a set A of alternatives to  $\alpha$ , indicating that members of A are under consideration (Rooth 1985). Depending on the interaction of  $\alpha$  with other alternatives, a semantic focus can receive various pragmatic readings: For instance, a focus is *corrective* if  $\alpha$  replaces an element of A previously introduced into the common ground (CG), i.e. the linguistic context preceding  $\alpha$ , see (1a). A focus is *selective* if  $\alpha$  introduces an element of A into the CG and some elements of A are made explicit, see (1b). A focus expresses *new-information* if  $\alpha$  introduces an element of A into the CG and the members of A are left implicit, see (1c).

- (1) a. (Peter painted his bicycle red.) No, he painted it  $[\text{blue}]_F$ .  
 b. (Did Peter paint his bicycle red or blue?) He painted it  $[\text{blue}]_F$ .  
 c. (Which color did Peter paint his bicycle?) He painted it  $[\text{blue}]_F$ .

- d.  $\alpha = \text{blue}$ ,  $A = \{\text{blue, red, green, pink, ...}\}$

The alternative sets for (1a-c) are identical as shown in (1d). This shows that the foci do not differ semantically, but only pragmatically in the sense illustrated above (cf. e.g. Rooth 1992). In our view, focus as defined above is a universal category. The grammatical devices for marking focus, however, vary considerably across the world's languages. This paper investigates means of focus marking in some Chadic languages and compares them to focus marking in intonation languages.

## 2.2. *F-feature theories*

F-feature theories of focus are commonly based on the properties of intonation languages. This bias towards a certain typological class of languages has accompanied the development of focus theories since focus became a subject of scientific interest. In a nutshell, standard focus theories make the following two assumptions: Firstly, focus must be grammatically marked on or within the focus constituent. In intonation languages, the primary focus marking device is a nuclear accent, which may be accompanied by syntactic reordering. Secondly, the same grammatical device is used to mark focus constituents of various grammatical functions or categories in a uniform manner.

Jackendoff (1972) already states that: "If a phrase P is chosen as the focus of the sentence S, the highest stress in S will be on the syllable of P that is assigned highest stress by the regular stress rules." (p. 237). Following Jackendoff, the relation between the (pragmatically determined) size of a focus and placement of stress is mediated by a

syntactic focus (F-) feature. The F-feature marks the focus of a sentence. The stress must be realized within the F-marked constituent (Jackendoff 1972:240f).

F-features also form the backbone of Selkirk's focus theory (Selkirk 1984, 1995). In this approach, F-feature assignment is not primarily triggered by pragmatics, but by phonetic conditions: the constituent carrying the main accent receives an F-feature (the *Basic Focus Rule*, Selkirk 1995:555). The F-feature can project along the functor-argument structure. If the accented constituent is a complement, it projects to the selecting head. If it is a head, it projects to the head's maximal projection (*Focus Projection*, Selkirk 1995:555). Focus projection thus enables a constituent that is bigger than the accent bearing unit to be the focus of a sentence. On the semantic side, constituents which are F-marked (and do not constitute an all-new sentence focus) are interpreted as new in the discourse (Selkirk 1995:556). The following examples illustrate the working of Selkirk's theory. The accented constituent is printed in capitals:

(2) a. What did Carolin bring to the party?

She brought [<sub>NP</sub> SALAD]<sub>F</sub>

b. What did Carolin do?

She [<sub>VP</sub> brought<sub>F</sub> [<sub>SALAD</sub>]<sub>F</sub>]<sub>F</sub>

In (2a), the accented object is F-marked. It is the focus of the sentence since it replaces the *wh*-word of the question. In (2b) the *wh*-question requires a predicate focus. Again, the accented object receives an F-feature, which projects across V to VP, thereby defining the focus of the sentence.

Schwarzschild (1999) and Büring (2006a) show that Selkirk's focus projection rules are empirically inadequate. At the heart of their argument lies the observation that any accent within an XP can project focus given an appropriate context. Thus, F-marking of XP does not require an accent on  $X^0$  or on the complement of  $X^0$ . This is shown in (3), taken from Büring (2006a:327), where the focus projects from an unergative subject, a possibility excluded in Selkirk's theory as the subject is neither complement nor head of the clause.

(3) Q: Why did Helen buy bananas?

A: [Because JOHN bought bananas]<sub>F</sub>

Büring and Schwarzschild maintain the assumption that a focus must be maximally prominent and that it must be marked somewhere *within* the focused constituent (see also Reinhart 1995, Truckenbrodt 1995, 1999). However, the position of the nuclear accent depends on argument structure in a more indirect way than previously assumed.

To summarise, F-feature theories assume that focus is grammatically marked in a uniform way on all constituents. In most intonation languages, the single grammatical factor to be considered in focus interpretation is prosodic accent, in Hungarian it is syntactic movement to a preverbal focus position (Brody 1990). Notice that many languages allow for additional means of highlighting a focus, for instance movement in addition to accent (German), or accent in addition to focus movement (Hungarian). Crucially, though, the primary focus marking device is always present in these cases as well, as witnessed by the following example:

- (4) a. A BOOK, Peter bought (not a REcord).  
b. It is a BOOK that Peter bought (not a REcord).

Given the omnipresence of the primary focus marking device, we will therefore continue to assume that the identification of focus essentially relies on only one grammatical factor in such languages.

### **3. Focus in Chadic languages**

#### *3.1. Term focus in Chadic*

Term focus, i.e. focus on DP- or PP-constituents, is well-documented for Hausa (see Tuller 1986, Newman 2000, Jaggar 2001) and for a range of other Chadic languages (see Tuller 1987, 1992, Frajzyngier 1989, 1993, 2001, 2002, Schuh 1998, 2004). The following is an exemplary discussion of a number of strategies for marking term focus in a range of Chadic languages.

### 3.1.1. Focus movement

A common strategy of focusing DP- or PP-terms in Chadic is to move them to a designated position. Often, the resulting structure has a cleft-like nature and a lexical focus marker, often formally identical to the copula or the relative marker. Movement may also be accompanied by high tone raising of the fronted constituent (Hausa, see Leben et al. 1989), or by a change in the form of the aspectual marker, e.g. in Hausa (Tuller 1986), or in Hdi (Frajzyngier 2002). Focus movement can target several positions, namely the sentence-initial position, or a postverbal position, or the sentence-final position. We will consider each kind in turn.

In Hausa, an SVO language, focused DPs are fronted to the sentence-initial position (cf. Newman 2000). The fronted constituent can optionally be followed by a focus marker (FOC). (7a) is an example with neutral (i.e. all-new) focus. In (7b), the object is focused and appears sentence-initially.

- (7) a. Bintà zaa tà biyaa teelà (neutral)  
 B. FUT 3sg.f pay tailor  
 ‘Binta will pay the tailor.’
- b. teelà<sub>1</sub>(nee) Bintà zaa tà biyaa t<sub>1</sub> (OBJ-focus)  
 tailor FOC B. FUT 3sg.f pay  
 ‘Binta will pay the TAILOR.’

Focus fronting also occurs in Hdi, a VSO language documented in Frajzyngier (2002). (8a) is a neutral example again. In (8b), the focused object is fronted. In addition to



fronting, the form of the aspectual marker changes (see Frajzyngier 2002:408; SO = point of view of reference, REF = referential, SEQ = sequential marker).

(8) a. kà ks-ú-tá ùvá tá vázák (neutral)

SEQ touch-SO-REF cat OBJ rooster

‘And Cat devoured Rooster.’

b. [ghùz-á xiyá]<sub>1</sub> yà tà sə mbítsá t<sub>1</sub>

beer-GEN guinea cornDEMIMPF drink M.

‘It is the corn beer that Mbitsa drinks.’ (OBJ-focus)

Focused constituents are also fronted to the sentence-initial position in Kanakuru (Tuller 1992) and Pero (Frajzyngier 1989).

The second strategy of focus movement observed in the Chadic languages is movement to a postverbal position. For an illustration of this strategy, consider the following Tangale data from Kidda (1993:30f):

(9) a. Lak padu-g landá (neutral)

L. buy-PERF dress

‘Laku bought a dress.’

b. padu-g landá nóŋ tom Tijo? (SUBJ-focus)

buy-PERF dress who from T.

‘Who bought a dress from Tijo?’





(Mupun, Lele, Guruntum), by changes in the verbal aspect (Miya), or by a difference in prosodic phrasing (Pero). Languages that mark focus by movement sometimes use morphological marking or a change in the form of the aspectual marker in addition. This mirrors the situation found in many intonation languages where focus marking by accent is sometimes accompanied by overt movement.

### 3.2. *Predicate focus*

Concerning the realization of predicate focus, the Chadic languages differ as to whether or not they employ a uniform strategy for the expression of focus on all sentence constituents: While some languages mark term and predicate focus in the same way (e.g. Hausa in (14) and (15)), others use different strategies for the expression of term and predicate focus (e.g. Mupun in (16) below).

Hausa and Hdi are representatives of the first type. These languages have a unified strategy based on the movement strategy for nominal focus (see (7) and (8) above). Predicate focus, i.e. V- or VP-focus, is marked by assimilation to the nominal strategy used for term focus. In Hausa, focused verbs have to be nominalized before being fronted (Newman 2000). (14a) is a neutral sentence. In (14b), the VP is nominalized (indicated by lengthening of the final vowel) and moved to the sentence initial position. (14b) also illustrates the appearance of a special aspectual marker in Hausa (glossed as *REL(ative)*), which is contingent on the application of overt A'-movement (cf. Tuller 1986, Haïk 1988, Chung 1982).

- (14) a. su-n      bázamà      (*neutral*)  
 3pl-PERF bolt.away  
 ‘They bolted away.’
- b. bázamàa      su-kà      yì      (*VP-focus*)  
 bolting.away 3pl-PERF.REL do  
 ‘They BOLTED AWAY.’ (lit. ‘Bolting away, they did.’)

Hdi inserts a cognate object that is fronted when the verb is in focus (Frajzyngier 2002), cf. (15b) (D:SO = distal extension, point of view of source).

- (15) a. mbàzá-ùgh-mbàzá Pghinta tá mbàzá      (*neutral*)  
 wash-D:SO-wash P. OBJ wash  
 ‘Phinta washed.’
- b. mbàzá mbàzá-ùgh-mbàzá Pghinta      (*V(P)-focus*)  
 wash wash-D:SO-wash P.  
 ‘Phinta WASHED.’ (lit. ‘Wash, Phinta washed.’)

The second group of languages employs different strategies for marking term and predicate focus. In Mupun and Tangale, for instance, focus on DP- or PP-term constituents is expressed differently from focus on verbs and VPs. In Mupun, focused terms carry a focus marker ‘a’ (see (11)), whereas focused verbs reduplicate in addition (Frajzyngier 1993):

- (16) mo cet a cet lua ne ba mo sur(a)sur kas (V(P)-focus)  
 3pl boil FOC boil meat the NEG 3PL fry FOC fry NEG  
 ‘They BOILED the meat, they didn’t FRY it.’

As we will show in section 4, in Tangale, at least some focused term constituents move to a postverbal focus position (see (8b) above), whereas focused verbs (and VPs) show no sign of movement. Again, there seem to be at least two strategies for focusing a constituent.

The data discussed in this section lead us to conclude that some Chadic languages mark term and predicate focus in different ways. These languages thus differ from intonation languages, which typically have a uniform basic strategy for marking focus on all constituents, irrespective of their syntactic category.

Finally, notice that the Chadic languages discussed here are not unique in having two different strategies for marking term and predicate focus as shown by the following data from Tupuri (Niger-Congo). In Tupuri, term focus is indicated by an ex situ (cleft) strategy (17a) (Ruelland 2000). Predicate focus on V, on the other hand, is marked by reduplication of the verb (17b) (our data, unfortunately without tones).

- (17) a. t<sub>1</sub> wō dē púy tí dārgè dīŋ táktíbáy<sub>1</sub>  
 go with hyena to hunt COP bat  
 ‘It is Bat that will go hunting with Hyena.’

- b. a juujuu gi, a ri súu ga  
 he drink-drink ?? he ate yesterday NEG  
 ‘He DRANK, but he didn’t eat yesterday.’

In the next section we turn to a more detailed analysis of focus marking in Tangale, in particular of predicate focus, which has been hitherto neglected in the literature. We will show that Tangale, too, has a number of focus marking strategies applying to different syntactic constituents. However, the choice of focus strategy in Tangale is not conditioned by the distinction between term and predicate focus, but by other factors that appear to be orthogonal to this distinction (intransitive vs. transitive verb, subject vs. non-subject term).

#### **4. Focus in Tangale**

In this section, we take a closer look at the grammatical realization of focus in Tangale, a Western Chadic language from the Bole-Tangale subbranch.<sup>1</sup> In section 4.1 we look at term focus on DPs and PPs and briefly review the existing accounts of focus in Tangale. In section 4.2 we consider predicate focus, i.e. V- and VP-focus, which has not been discussed in previous literature, to the best of our knowledge.

##### *4.1. Term focus in Tangale*

There are several accounts of focus in Tangale (Kenstowicz 1985, Tuller 1992, Kidwai 1999), which all have in common that they only consider term focus.

Kenstowicz and Tuller take focus to be realized syntactically: The focused DP or PP is moved to a designated postverbal position.

In Kenstowicz (1985:86), focused (DP-) constituents move to the right and adjoin to S (or S'). In the neutral, all-new sentence (18a) (Kenstowicz's ex. (18a)), the subject is in its unmarked sentence-initial position, preceding the verb. When focused, however, the subject moves to a postverbal position (18b) (Kenstowicz's ex. (18c)).<sup>2</sup>

- (18) a. [S Malay [VP múdúd-gó]] (neutral)  
           M.           die-PERF  
           'Malay died.'
- b. [S t<sub>1</sub> múdúd-gó] nóη<sub>1</sub> (SUBJ-focus)  
           die-PERF    who  
           'Who died?'

In transitive clauses, too, SUBJ-focus is marked by means of syntactic reordering. The focused subject in (19) is realized in postverbal position, following the direct object.

- (19) t<sub>1</sub> way-ug    land-í    nóη<sub>1</sub> ? (SUBJ-focus)  
           sell-PERF dress-the who  
           'Who sold the dress?'

In parallel fashion, direct objects are assumed to move vacuously for reasons that have to do with the different phonological realization of the perfective aspect marker as *-ug* or *-go*, as illustrated in (20ab) (Kenstowicz's exs. (15bc)):



- (20) a. [S Kay<sub>[VP dob-ug Málav]] (neutral)  
 K. call-PERF M.  
 ‘Kay called Malay.’</sub>
- b. [S Kay<sub>[VP dob-gó t<sub>1</sub>] nóŋ<sub>1</sub>] (OBJ-focus)  
 K. call-PERF who  
 ‘Who did Kay call?’</sub>

While focused (DP-) constituents move in Tuller’s (1992) analysis as well, the direction of movement is to the left and the focused material left-adjoins to the VP-projection. Since the perfective verb has to move to the inflectional head I<sup>0</sup> for independent reasons, focused constituents nevertheless surface in a postverbal position, as shown for a focused object in (21) (cf. (20b)).<sup>3</sup>

- (21) [S [IP Kaydob-gó [VP nóŋ<sub>1</sub> [VP t<sub>v</sub> t<sub>1</sub> ]]]] (OBJ-focus)  
 K. call-PERF who

As indicated above, there is only indirect evidence for the vacuous focus movement of objects in form of a prosodic phrase boundary. For illustration, consider the examples in (22ab):

- (22) a. Áudu mad-ug littáfi. (neutral)  
 A. read-PERF book  
 ‘Audu read a book.’

- b. Q: Áudu mad-gó/\*mad-ug nán? A: Áudu mad-gó/\*mad-ug líttáfi.  
 A. read-PERF what A. read-PERF book  
 ‘What did Audu read?’ ‘Audu read A BOOK.’

In the neutral clause (22a), there is no prosodic boundary intervening between the verb and its object DP (cf. also (20a)). When the object is in focus, however, as in (22b), it is separated from the verb by a prosodic boundary (cf. also (20b)). The presence of this prosodic phrase boundary effects the blocking of a number of phonological processes, among them *vowel elision* and *left line delinking*.<sup>4</sup> Vowel elision (VE) deletes the final vowel of a stem or a word when it occurs in close syntactic connection with some following phonological material (Kenstowicz 1985:80). Left line delinking (LLD) has the same domain of application as VE in the postverbal domain (Kenstowicz 1985:82). It detaches tones that have spread to the right from their original tone-bearing unit (Kenstowicz 1985, Kida 1993).

The application of VE and LLD in the neutral clause (22a) affects the surface realization of the underlying verb *mad-gó* ‘call-perf’: VE deletes the final vowel of the suffix *-gó*. LLD detaches the H-tone of the suffix *-gó* after this has spread onto the following object. The resulting surface form is (after vowel epenthesis of *u* for phonotactic reasons) *madug*. The application of both processes is illustrated in (23):

- (23) mad-gó líttáfi (H-tone spreading)  
 → mad-go líttáfi (LLD)  
 → mad-g líttáfi (VE)  
 → mad-ug líttáfi (epenthesis)

In (22b) with object focus, VE and LLD do not apply. The resulting surface form is *mad-gó líttáfi*. The blocking of VE and LLD before focused objects therefore indicates the presence of a prosodic boundary. As mentioned above, it is this prosodic phrase boundary that Kenstowicz and Tuller take as evidence for vacuous movement of focused objects.<sup>5</sup>

Kidwai's (1999) analysis differs from the other two, in that she does not assume focus movement. Rather, focused DP- and PP-terms remain in situ (Kidwai 1999:235). Focused subjects are located in Spec,vP, where their FOC-feature is licensed by the verb in T<sup>0</sup> under (a special notion of) adjacency. Some aspects of Kidwai's analysis are worth pursuing and will be taken up again in section 5.4. As it stands, though, Kidwai's analysis has nothing to say on the presence of a prosodic phrase boundary before focused objects in situ (Kidwai 1999:235, fn.18). Nor does it seem to account for the postverbal occurrence of focused subjects in the progressive aspect (see section 5.2), where T<sup>0</sup> is overtly filled by a TAM-marker, blocking verb movement to T<sup>0</sup> (cf. Tuller 1992).

Neither Kenstowicz, nor Tuller, nor Kidwai discuss instances of V- or VP-focus, to which we turn in the next section. It will emerge that prosodic phrase boundaries blocking VE and LLD play a more general role in the focus marking of Tangale than so far assumed. In addition, the new data argue against generalized focus movement à la Kenstowicz (1985) and Tuller (1992). Rather, the data provide evidence for an *in situ* analysis of focused non-subjects, hinted at in Kidwai (1999).

#### 4.2. *Predicate focus in Tangale: Evidence for different focus strategies*

In this section, we show that predicate focus on the verb or the VP in Tangale is sometimes marked differently from term focus. Unlike SUBJ-focus, predicate focus in Tangale does not involve movement to a postverbal position. Instead, it is sometimes expressed morphologically by means of a verbal suffix (4.2.1.), or prosodically through the insertion of a prosodic boundary (4.2.2.). Hence, there seem to be at least three strategies of marking focus in Tangale: syntactic reordering (with subjects), suffixation, and prosodic phrasing. In addition, we show that V-, VP- and OBJ-focus are realized identically, to the exclusion of SUBJ-focus, arguing against Kenstowicz's (1985) and Tuller's (1992) analyses of OBJ-focus as involving vacuous movement (4.2.3.). In subsection 4.2.4., we conclude that this surprising focus ambiguity follows from a categorial restriction concerning the placement of the prosodic boundary, which can only be inserted before a nominal category.

In eliciting the various focus markings in Tangale, we used contexts invoking different pragmatic foci as defined in section 2.1, namely corrective, selective, and new-information focus. The elicited data do not show variation across focus types, suggesting that focus marking in Tangale is insensitive to such pragmatic distinctions.

##### 4.2.1. *Morphological focus marking*

With some intransitive verbs, V(P)-focus is morphologically marked by means of a verbal suffix *-i*.<sup>6</sup> This is shown in (24b), where the verb, or the entire VP, is in focus and the suffix is added to the perfective suffix *-go*. In contrast, no special focus-suffix is added in neutral, all-new sentences (cf. 24a):

- (24) a. Fátíma wur-go. (neutral)  
 F. laugh-PERF  
 ‘Fatima laughed.’
- b. Q: Mairo yaa-gó náŋ? A: Mbáastám wur-gó-i. (V(P)-focus)  
 M. do-PERF what she laugh-PERF-FOC  
 ‘What did Mairo do?’ ‘She LAUGHED.’

This focus strategy differs from the one observed for focused subjects, which involves their dislocation to a postverbal position, as shown in (17b).<sup>7</sup> Unlike in intonation languages, we thus find at least two focus strategies in Tangale, one of them, namely *i*-suffixation, seemingly reserved for intransitive verbal predicates.

#### 4.2.2. Prosodic focus marking

Prosodic focus marking is attested with transitive verbs or VPs in the perfective aspect. It turns out that the phonological processes of vowel elision (VE) and left line delinking (LLD) on perfective verbs fail to apply not only in case of OBJ-focus (see section 4.1), but also in case of V- or VP-focus. (25a) is an already familiar example with OBJ-focus. The crucial cases are (25b), with VP-focus, and (25c), with V-focus.

- (25) a. Q: What did Laku sell? (OBJ-focus)  
 A: Lak wai-gó lándá  
 L. sell-PERF dress  
 ‘Laku sold A DRESS.’

b. Q: What did Laku do? (VP-focus)

A: Lak waig-ó lándá

L. sell-PERF dress

‘Laku SOLD A DRESS.’

c. Q: What did Laku do at the market? (V-focus)

Did she buy a dress or did she sell a dress?

A: Lak wai-gó lándá

L. sell-PERF dress

‘Laku SOLD a dress.’

In each case, the final vowel of the verb *wai-gó* is not elided (under VE) and is not detached from its H-tone (under LLD). The blocking of VE and LLD therefore indicates the presence of a prosodic phrase boundary after the verb, which would make the three instances of focus identical at least at the level of prosodic structure. In section 4.2.3, we show that the three foci in (25a-c) are indeed identical and cannot be distinguished by considering additional prosodic factors, such as pitch contour, prosodic breaks etc..

Notice that the prosodic phrase boundary following the verb in (25b) cannot be the result of moving the focused VP as a whole à la Kenstowicz (1985) or Tuller (1992), as it occurs inside the VP. Nor can the prosodic phrase boundary in (25c) be the result of verb movement for principled reasons. Obviously, the verb in (25c) has not moved to the right on its own, adjoining to S (cf. Kenstowicz 1985). It could have pied-piped its VP along, assuming a phrasal nature of focus movement, but once again we would expect the prosodic phrase boundary resulting from such movement to the left of the

verb, and not inside the VP. What about movement to the left, say to the head of a functional projection FocP? According to Tuller (1992), all perfective verbs, focused or not, must move to the inflectional head  $I^0$  in order to support the perfective suffix *-gó*. In addition, Tuller (1992:317) assumes that verb traces in Tangale are unable to assign case to their direct object. Therefore, whenever the verb moves, the object has to move along with it for case reasons. Hence, if the verb moved to Foc<sup>0</sup> on its way to  $I^0$  in (25c), the object would have to move along as well, preserving the close syntactic relationship between the two elements. As VE applies between locally related elements, it should therefore not be blocked in (25c).

Now assume that that focused verbs moved to  $I^0$  on their own (*pace* Tuller 1992), leaving the object behind in base position. This assumption makes wrong predictions as well: After V-(to-Foc-)to-I movement, verb and object would no longer stand in a close syntactic relationship, correctly blocking VE. However, given that verb movement to  $I^0$  is assumed to apply no matter whether the verb is focused or not, one would expect VE to be blocked in all perfective sentences. This prediction is falsified by (26), from Kidda (1993:122), where VE applies in an all-new sentence:

- (26) Lak šwad-ùg yiláà  
 L. hit-PERF Y.  
 ‘Laku hit Yila.’

We conclude that the prosodic phrase boundary that is inserted to the right of the verb with instances of predicate focus does not result from syntactic movement of the focused verb or the VP. Rather, the phrase boundary is a focus marking device

independent of movement: Predicate focus in (25b) and (25c) is marked by inserting a phrase boundary at PF, with no previous syntactic movement necessary. But given this, we no longer have to assume that the prosodic phrase boundary showing up with OBJ-focus in (25a) is the result of vacuous movement, as argued by Kenstowicz (1985) and Tuller (1992) (see section 4.1). Rather, V-focus, VP-focus and OBJ-focus seem to be marked in identical fashion: A prosodic phrase boundary is inserted to the right of the verb, signaling that some element of the VP, or the entire VP is in focus. We will turn to the question of why the prosodic phrase boundary always follows the verb in section 4.2.4.

Finally, notice that the identical realization of OBJ-, V-, and VP-focus sets Tangale apart from intonation languages, where focus ambiguity between narrow V-focus and narrow OBJ-focus is unattested. Due to the restrictions on focus projection (see e.g. Selkirk 1984, 1995, Büring 2006a) focus accent on a category  $\alpha$  can never express narrow focus on an adjacent category  $\beta$ , without  $\alpha$  being in focus as well. It follows that narrow verb focus and narrow OBJ-focus are always realized differently in these languages, namely by accent placement on the verb or the object, respectively.

#### *4.2.3. Further evidence for the identical realization of V-, VP- and OBJ-focus*

In the previous section, it was shown that a prosodic phrase boundary immediately following the verb marks V-, VP-, and OBJ-focus alike. Given that this kind of focus ambiguity is unattested in intonation languages, the question arises as to whether there are any other prosodic differences between the three foci, such as for instance intonation breaks, boundary tones, tone raising, register height etc.



In order to identify potential prosodic differences between structures with VP-, V-, or OBJ-focus, respectively, we conducted a production experiment that consisted in the recording of a total of 170 sentence pairs under different focus conditions (VP-, V-, OBJ-, and all-new focus) in different aspects (perfective, progressive, future).<sup>8</sup>

Looking at the phonetic realization of the 42 perfective sentences recorded, we could find no significant prosodic differences in the realization of V-, VP-, and OBJ-focus. The three pitch contours for (25a-c) are shown in figures 1-3.

INSERT FIGURES 1 – 3 HERE

The three tone contours are virtually identical.<sup>9</sup> In each case, H-tone has spread from the perfective marker *-gó* onto the first syllable of the object *lánda*, without being detached from its original tone-bearing unit *-gó*. The three low tones are either lexical tones (*lak*), or derived by two general tone rules: *m(orphological)-lowering*, lowering the tone of the verbal stem, and *p(honological)-lowering*, lowering the second tone of the object before a pause, presumably due to a boundary tone L% at the edge of the intonational phrase, see Kidda (1993) for discussion. Furthermore, there is no evidence for any of the intonational processes that tone languages commonly make use for indicating structural, in this case information-structural, differences (see Yip 2002:260). Pitch register and pitch range of the three utterances are identical. Also, there is no sign of additional boundary tones inserted at the edge(s) of the respective focus domains. Finally, there are no intonation breaks either before or after the focus domain, nor are there any differences in vowel length.<sup>10</sup>

Figures 4-6 show the same for the sentence *Lak saa-gó foo* ‘L. eat-PERF mush = Laku ate mush’, with a mono-syllabic object: The F0-contours are identical under the relevant focus conditions.

INSERT FIGURES 4 – 6 HERE

Finally, figures 7-9 show the same for a sentence with a tri-syllabic object, *Lak bal-gó wásíika* ‘L. write-PERF letter = Laku wrote a letter’: Once again, the three F0-contours are identical.

INSERT FIGURES 7 – 9 HERE

Based on the evidence in figures 1-9, we therefore conclude that V-, VP-, and OBJ-focus are not formally disambiguated by prosodic means in perfective sentences in Tangale. Section 5.2 will show the same for the progressive aspect.

#### 4.2.4. *On the placement of focus-marking phrase boundaries in Tangale*

We would like to conclude this subsection by adding a few remarks on the positioning of the focus-marking prosodic phrase boundary that is inserted before the direct object with V-, VP-, and OBJ-focus in Tangale.

In principle, tone languages can express focus by means of prosodic phrase boundaries, as is well known from Kanerva’s (1990) discussion of Chichewa. It is therefore unsurprising that Tangale should mark focus by means of prosodic phrase boundaries, too. What is peculiar about prosodic focus marking in Tangale, though, is

that the relative order of phrase boundary and focus constituent is not constant, but differs for V-focus and OBJ-focus, respectively: The phrase boundary occurs to the left of focused objects, but to the right of focused verbs.<sup>11</sup> Instead of postulating arbitrary alignment constraints for different focus constituents, we would like to briefly discuss two alternative accounts that appear to be more promising:

On the first account, the prosodic phrase boundary is the phonological reflex of an abstract focus marking morpheme FOC that is always inserted *before* the focus constituent. In the case of V- (and VP-) focus in perfective clauses, the relative order of FOC and focus constituent is affected by later syntactic movement of the verb to I<sup>0</sup>, or T<sup>0</sup> in current terminology. This is shown schematically in (27):

- (27) a. [TP... T<sup>0</sup> [VP FOC V ...]] (underlying structure)  
 b. [TP... V+T<sup>0</sup> [VP FOC tv ...]] (after V-to-T-movement)

After V-to-T-movement in the perfective aspect, the prosodic phrase boundary occurs to the right of the verb, even if only the verb is in focus, see also Büring (2006b) for a proposal along these lines.

The second account is based on Hartmann & Zimmermann's (to appear-a) analysis of focus marking in Guruntum, another West Chadic language. Unlike Tangale, Guruntum realizes focus morphologically by means of a focus marker *a*, which precedes the focus constituent in case of term focus. Crucially, though, Guruntum resembles Tangale in that V-, VP-, and OBJ-focus are marked alike by placing the focus marker in a position preceding the direct object. Consequently, the Guruntum sentence in (28) is ambiguous between a V-, VP-, or OBJ-focus reading.

(28) Tí ba romb á g<sup>w</sup>éi.

3SG PROG gather FOC seed

‘He is gathering the seeds.’

As for why the focus marker in Guruntum must precede the object DP in all three cases, Hartmann & Zimmermann (2006) argue against an account in terms of verb movement. They present independent evidence to the effect that the focus marker can only be expressed on non-verbal categories, i.e. DP- or PP-constituents. The restriction of focus realization to DP- or PP-terms is reminiscent of the bias for a nominal focus marking strategy exhibited by many Chadic languages, which was observed in section 3.1.<sup>12</sup> In addition to this categorial constraint on the realization of focus, there is a locality constraint requiring the focus marker to be realized as close as possible to the focus constituent. In the case of V-focus, this effects the realization of the focus marker on the following object, this being closer to the verb than the subject. See Hartmann & Zimmermann (2006), and in particular Zimmermann (2006a) for a constraint-based analysis of these phenomena.

Summing up, there are two *prima facie* plausible accounts as for why V-focus in Tangale is prosodically realized on the following object: (i.) the verb movement account, and (ii.) the account in terms of categorial restrictions on the realization of focus. We will not take a definite stand on which analysis will ultimately turn out to be more adequate for the Tangale data. However, the evidence against the verb movement account and for categorial restrictions on the placement of focus markers in Guruntum on the one hand, and the observed bias for grammatical focus marking on non-verbal expressions in other Chadic languages on the other, both seem to argue in favour of a

uniform account which restricts the occurrence of morphological and prosodic focus markers in Guruntum and Tangale, respectively, to non-verbal categories.

#### 4.3. *Focus theories revisited*

Having discussed that focus in Tangale has repercussions on several grammatical modules, the present sub-section argues that focus theories considering only one grammatical factor (see section 2) do not easily extend to the complex focus system of Tangale.

Section 2 showed that focus in intonation languages can be captured by means of a fairly simple analysis that only considers accent.

(29) Focus in intonation languages (based on Selkirk 1995):

CONSTITUENT STRESSED → focus/new, otherwise old information

In sections 3.1 and 3.2, it was then shown that this mono-factorial account is extendable to some Chadic languages, such as Hdi. In Hdi, focus marking of all categories is assimilated to the nominal strategy, such that only reordering has to be considered:

(30) Focus in Hdi:

CONSTITUENT REORDERED → focus/new, otherwise old information

Due to the lack of information on predicate focus in most Chadic languages, it remains to be seen whether a mono-factorial analysis can be extended to those languages that employ only one strategy for marking term focus (see 3.1).

The discussion in sections 4.1 and 4.2 provided evidence that the Tangale focus system is more complex. Therefore, any account of focus marking in Tangale would have to make reference to at least three grammatical factors, as shown in (31):

- (31) Focus in Tangale:
- i. CONSTITUENT REORDERED → SUBJ-focus
  - ii. *i*-SUFFIXATION → intransitive V(P)-focus
  - iii. PROSODIC BOUNDARY → V, VP-, OBJ-focus

It appears, then, that the Tangale data require an account of focus marking that is more complex than the one typically assumed by F-feature theories (see section 2.2).

#### 4.4. Conclusion

It was shown that there are at least three focus strategies in Tangale, namely syntactic reordering, *i*-suffixation, and prosodic phrasing. These strategies are in part dependent on the syntactic category or the grammatical function of the focused constituent.

Syntactic reordering seems to be reserved for focused subjects, while *i*-suffixation is reserved for (intransitive) verbal predicates. With transitive verbs, instances of V-, VP- and OBJ-focus are realized in a uniform way, resulting in focus ambiguity between V- and OBJ-focus. This ambiguity is unattested in intonation languages, and not predicted to exist on existing accounts of focus projection (Selkirk 1984, 1995, Schwarzschild 1999, Büring 2006a). Finally, we have proposed two possible ways to account for the observed focus ambiguity on principled grammatical grounds.

## 5. The special status of focused subjects in Tangale

This section discusses two remaining empirical properties of the focus system in Tangale. Having discussed that focus marking on non-subjects often results in multiple ambiguity in the last section, we show that focus marking in Tangale is sensitive to the verbal aspect in addition: focused non-subjects are unmarked in the progressive aspect. We then go on to show that subject focus, in contrast, is always marked across all aspects. The special status of focused subjects is supported by data from association with focus. Finally, the chapter closes with a cross-linguistic look at interesting parallels to focused subjects in other languages.

### 5.1. Focus in the progressive aspect: Absence of focus marking

The picture of focus marking in Tangale gets more complex when we look at aspects other than the perfective. Looking at sentences in the progressive aspect, it shows that V-, VP-, and OBJ-focus are not grammatically marked at all: There are no discernible differences whatsoever between neutral, i.e. all-new sentences on the one hand (cf. 32), and sentences with OBJ-focus, or VP-focus, or V-focus, on the other (cf. 33a-c). In each case, VE is obligatory, deleting the final vowel on the verbal noun *balli* > *ball*.

- (32) Lakú n ball wasiika (neutral)  
 L. PROG writing letter  
 ‘Laku is writing a letter.’

(33) a. Q: Lakú n ball náj? A: Lakú n ball wasiika (*OBJ-focus*)

L. PROG writing what L. PROG writing letter

‘What is Laku writing?’ ‘Laku is writing A LETTER.’

b. Q: Lakú n yaaj náj? A: Lakú n ball wasiika (*VP-focus*)

L. PROG doing what L. PROG writing letter

‘What is Laku doing?’ ‘Laku is WRITING A LETTER.’

c. Q: Lakú n ball wasiika yá mad wasiika?

L. PROG writing letter or reading letter

‘Is Laku WRITING a letter or READING a letter?’

A: Lakú n ball wasiika (*V-focus*)

L. PROG writing letter

‘Laku is WRITING a letter.’

It is worth pointing out that the elicited data presented here are not in accordance with Kidda’s claim (1993:127), based on her native Shongom dialect, that VE in the progressive is blocked before focused objects, as it is in the perfective. However, our Kaltungo-based data are in line with several naturally occurring examples from a corpus of Tangale folktales (Jungrathmayr 2002), one of which is shown in (34):

(34) si wána n yaaz nân?

2sf go-VPF PROG do-VN what

‘She had come here to do what?’



That there is no prosodic boundary before the focused *wh*-object in (34) can be seen from the fact that vowel elision (VE) applies to the last vowel of the preceding verb, reducing the underlying form *yaazi* to *yaaz* (cf. Zimmermann 2006b). In light of this supporting evidence, we continue to assume that focus on non-subjects is not realized in the imperfective aspect, at least in some dialects of Tangale, delegating the issue to further research.

In our view, the formal identity between (32) and (33a-c) follows from the specific syntactic structure of the progressive, together with general conditions on the application of VE. When combined, these two factors effect a bleeding of the focus marking device for OBJ-focus and V(P)-focus, i.e. the insertion of a prosodic phrase boundary between verb and object (see 4.2): As in Hausa, Tangale verbs are nominalized and form an N-N-complex with their direct object in the progressive aspect. Kenstowicz (1985:85) shows that VE is obligatory in such N-N-configurations, presumably because the two N-elements stand in a close syntactic relation. But if VE is obligatory in these contexts, its presence or absence can no longer serve to mark OBJ-focus and V(P)-focus.<sup>13</sup>

Again, this conclusion is supported by a closer inspection of the pitch contours associated with the different focus structures in (31) and (32a-c). As shown in the following figures, the pitch contours of neutral focus (fig.10), OBJ-focus (fig. 11), VP-focus (fig.12) and V-focus (fig.13) appear to be identical in all relevant aspects.

INSERT FIGURES 10 – 13 HERE

It seems, then, that grammatical focus marking in Tangale exhibits systematic gaps.

In certain aspects, narrow focus on object, verb, or VPs is not grammatically marked at all. This is a surprising result given that the F-feature theories of focus generally assume that focus must be marked somewhere on the focused constituent.

Interestingly, the only constituent in Tangale that is unambiguously marked for focus even in the progressive and future aspect is the subject. As in (18b) and (19) above, the subject occurs again in a postverbal position.<sup>14</sup>

- (35) Q: bal wasíika-i nóŋ? A: (wasíika-i) ball-í Músa  
 writing letter-DEF who letter-DEF writing-it M.  
 ‘Who is writing the letter?’ ‘MUSA is writing the letter.’

The data in (32)-(35) thus give rise to the following empirical generalisation:

- (36) In Tangale, focus marking is fully grammaticalised only on subjects. On all other constituents, focus is only sporadically marked and relies heavily on pragmatic resolution.

The generalisation in (36) is a more drastic version of the hypothesis that focus on different syntactic categories is marked differently, which was put forward in sections 3 and 4: On some syntactic categories, focus may be left unmarked.

According to (36), the subject is the only constituent that is always, and unambiguously marked for focus (by reordering). Looking back at (31), we are therefore led to conclude that the focus marking system of Tangale is strongly biased in favour of marking focused subjects (cf. 31i), whereas the marking of focused non-

subjects is not as important and therefore often absent. Interestingly, there is additional evidence in favour of the special status of focused subjects concerning focus marking in Tangale. This evidence comes from the behaviour of the focus particle *núm* ‘only’, to which we turn now.

### 5.2. Association with focus

The hypothesis that focus marking in Tangale does not differentiate between V-, VP, and OBJ-focus in most cases is supported by the behaviour of the focus particle *núm* ‘only’. Semantically, *núm* can associate either with a focused object (37a), or with a focused VP (37b), or with a focused verb (37c). Syntactically, however, it can only combine with nominal (DP) expressions like its Hausa counterpart *sáí* (Kraft 1970, Zimmermann 2006c) and unlike its English counterpart *only*. For this reason, the different narrow foci in (37a-c) come with identical syntactic structures.

- (37) a. n fad-go *núm* littáfi-i, n fad-ug wam gáayi-m (*OBJ-focus*)  
 I buy-PERF only book-the I buy-PERF s.th. else-NEG  
 ‘I bought only THE BOOK, I bought nothing else.’
- b. n fad-go *núm* littáfi-i, n yaa-g wam gáayi-m (*VP-focus*)  
 I buy-PERF only book-the I do-PERF s.th. else-NEG  
 ‘I only BOUGHT THE BOOK, I did nothing else.’
- c. n fad-go *núm* littáfi-i, fon di n mad-go-m (*V-focus*)  
 I buy-PERF only book-the but yet I read-PERF-NEG  
 ‘I only BOUGHT the book, but I have not read (it) yet.’

In addition, the pitch tracks for (38a-c) in fig. 14-16 suggest, once again, that there are no prosodic differences either. In each case, presence of the focus particle *núm* effects a rise from the preceding H-tone on *-gó* to an extra high tone on *núm*. It also leads to a considerable raise in the pitch register of the utterance. Otherwise, *núm* appears to be tonally ‘opaque’ in that it does not spread its H-tone onto the next tone bearing unit *li*.

INSERT FIGURES 14 – 16 HERE

Setting aside the tonal properties of *núm*, we conclude that the presence of focus-sensitive particles such as *núm* does not help to distinguish OBJ-, VP-, or V-focus, neither syntactically nor phonologically.<sup>15</sup> The sentences in (38a-c) with *núm* are as ambiguous with respect to focus structure as are their counterparts without (see section 5.3).

In contrast, the focus particle *núm* can only combine and associate with focused subjects when these occur in postverbal position.

- (38) a.    *landa pad-go núm Laku*  
           dress buy-PERF only L.  
           ‘Only LAKU bought a dress. (Nobody else bought a dress).’
- b. \* *núm Laku pad-go landa*  
           only L.    buy-PERF dress

Concluding, the data from association with focus with the focus-sensitive particle *núm* support the hypothesis that there is a fundamental asymmetry between focus marking of subjects and focus marking of non-subjects. Only association with a focused subject is marked unambiguously by displacing the focused element. Association with other focused constituents (OBJ, VP, V) is marked ambiguously and left open for pragmatic resolution. Altogether, our findings support the claim that focus marking may not be fully grammaticalised in Tangale.

### 5.3. *The special status of subjects: Cross-linguistic parallels*

The generalization in (36) draws a sharp line between subjects and non-subjects when it comes to focus marking. It singles out focused subjects as being in special need of explicit focus marking. This special status of focused (wh-) subjects is not only testified in Tangale but has been observed for many languages both from within and outside the Chadic language family. For instance, a comparable special status for subjects has been observed for Vata (Koopman & Sportiche 1986). Similarly, in the Bantu languages Kinyarwanda, Dzamba, and Kitharaka, and also in the Austronesian languages Malagasy, Tagalog, and Javanese, wh-subjects have to move, whereas wh-objects can remain in situ (cf. Sabel & Zeller 2006, and references therein).

Looking again at the Chadic languages, Ngizim works exactly like Tangale (cf. Tuller 1992). Similarly, focused subjects must move in Bole, whereas focused objects appear to remain in situ (see fn. 5 in section 4.1). In Hausa, focused objects can remain in situ whereas focused subjects have to move (cf. Green & Jaggar 2003). Finally, focused subjects require special TAM's (tense-aspect-mood markers) in Miya, whereas

focused objects can only be identified indirectly by the absence of the totality marker (see example (12) in section 3.1.2 and Schuh (1998) for more discussion).

The reason for this subject bias in the focus marking systems of these languages becomes clear if one considers the information-structural status of subjects: In many languages, subjects are automatically interpreted as topics in their canonical, e.g. preverbal position (see Givón 1976). Therefore, if a subject is to be interpreted as focus and not as topic, a de-topicalization strategy has to be employed, which results in obligatory focus marking of the subject. Whether a focused subject is realized in a non-canonical position, or whether its status as non-topic is marked by other grammatical means, is subject to language-specific variation (cf. Fiedler et al. 2006). As shown above, Tangale makes use of the first option, realizing focused subjects in a non-canonical postverbal position. Grammatical objects, in contrast, are typically not associated with a topic interpretation. As a result, they can remain in their canonical postverbal position, and are often left unmarked for focus.

Notice, finally, that a similar asymmetry in the syntactic realization of focused subjects and objects also underlies Kidwai's (1999) analysis, who tries to provide a unified syntactic account of focus marking in terms of V-licensing under adjacency. As mentioned in section 4.1, Kidwai assumes that focused objects are realized in their canonical postverbal position, whereas focused subjects cannot be realized preverbally because of their information-structural status as non-themes, or non-topics in our terminology (Kidwai 1999: 234). For Kidwai, too, then, it is ultimately the subject's nature as topic or non-topic that is responsible for its pre- or postverbal occurrence. While this insight of Kidwai's is probably on the right track, her formal implementation in terms of focus licensing under (weakened) adjacency between focus constituent and

verb runs into serious problems when evaluated against a wider range of data. Apart from the problem of the intervening direct object between verb and focused subject that was mentioned in section 4.1, there are other configurations in which the focus constituent does clearly not stand in an adjacency relation to the verb, see e.g. (39ab) from Kidda (1993:31). In (39a), the focused subject follows both direct object and a PP and occurs in sentence-final position (cf. Tuller 1992: 321). In (39b), a focused temporal adjunct occurs in clause-final base position and is also separated from the verb by the direct object and a PP.

- (39) a.    *padu-g*        *landá tom tíʒo noŋ*  
           buy-perf     dress from T.    who  
           ‘Who bought a dress from Tijo?’
- b.    *lak padu-g landa tom tíʒo dímín*  
           L.    buy-perf     dress from T.    when  
           ‘When did Laku buy a dress from Tijo?’

These data show clearly that adjacency to the verb is not required for focus licensing in Tangale. As attractive as Kidwai’s unified structural account of focus marking in Tangale may appear at first sight, then, it does not seem to be supported by the data.

## 6. Theoretical consequences and conclusions

The frequent absence of non-subject focus marking in Tangale, as well as the obligatory marking of subject foci across the board could lead one to the conclusion that

information structure in Tangale distinguishes topic from comment, rather than focus from background. It will be shown, though, that this assumption cannot be maintained. In section 6.1 we present arguments that the focus-background distinction cannot be dispensed with in Tangale. In section 6.2, we put our results together and outline a unified prosody-based account of focus in Tangale. Our proposal reveals interesting parallels between focus marking in Tangale and some Romance languages.

### *6.1. Focus-background or topic-comment?*

The foregoing observations have highlighted the importance of the topic vs. non-topic distinction with subjects in a range of languages including Tangale. In addition, section 4.2.2 has shown that the comment-part of short SUBJ-VP clauses is marked alike in Tangale perfective clauses, namely by a prosodic boundary preceding the object, irrespective of whether the verb, the VP, or the object are in focus. At first sight, then, such findings might be taken to imply that Tangale marks the topic-comment dimension, rather than the focus-background dimension of information-structure. This would naturally account for the fact that Tangale focus marking is often ambiguous or even absent, except when it comes to subjects. In our view, such a re-analysis in terms of topic-comment marking is unwarranted, however, as it would give rise to new questions and problems: First, a topic-comment system would be as inconsistent as the focus-background system, as the comment would be marked in the perfective, but not in the progressive aspect. Second, as pointed out by Tuller (1992) and Kidida (1993), Tangale exhibits focus-sensitive word order variation within the comment part of more complex clauses that contain not only a direct object, but additional material in form of indirect objects and adjuncts: If emphasized, “an adverbial phrase is reordered to



precede a prepositional phrase and may even be reordered to precede an indirect object” (Kidda 1993: 30). According to Tuller (1992: 306), the focus constituent appears immediately to the right of the direct object in such cases. This is illustrated by the following minimal pair from Kidda (1993: 31, exs. (33cf)). (40a) is a neutral sentence, (40b) a variant with focus on the locative adjunct.

- (40) a. lak        padu-g        landá sum tíʒo tá        lugmo ònò.  
           Laku        buy-perf        dress for Tijo at        market yesterday  
           ‘Laku bought a dress for Tijo at a market yesterday.’
- b. lak        padu-g        landá tá        *lugmo* sum tíʒo ònò.  
           Laku        buy-perf        dress at        market for Tijo yesterday  
           ‘Laku bought a dress for Tijo AT A MARKET yesterday.’

Alternatively, focused subjects may also appear at the very end of such clauses, cf. (39a) (Tuller 1992: 321). If the grammatical system of Tangale were only sensitive to the topic-comment distinction, it would be difficult to see what should be responsible for these word order variations. Contrasts such as the one in (40ab) therefore strongly suggest that the focus-background distinction *does* have an influence on the grammatical system in Tangale after all. We will come back to this in the next section.

Summing up, Tangale does not differ from intonation languages in that its grammatical system is sensitive to the information-structural dimensions of both topic-comment and focus-background (Jacobs 2001). Where Tangale differs from intonation languages is in the number of focus marking strategies and in the degree of under- or



- b. object/VP (cf. (25)): ((SUBJ V) (OBJ<sub>F</sub>))<sub>iP</sub>  
 c. adjunct (cf. (40b)) ((SUBJ V OBJ) (ADJ<sub>F</sub>))<sub>iP</sub>

This situation is reminiscent of focus marking in a totally unrelated group of languages, namely Romance languages, such as Spanish and Italian. In these languages, focus is prosodically marked by accent, but accent assignment is restricted to the clause-final position. As a result, subjects must invert and occur in a postverbal position *for prosodic reasons*, whereas focused objects, VPs, and adjuncts can remain *in situ*, as long as they are located at the right edge of the clause (cf. Zubizarreta 1998, Samek-Lodovici 2005). This is illustrated by the following examples from Spanish from Zubizarreta. Note that the basis word order in Spanish is SVO.

- (42) a. Comió una manzana Juan. (SUBJ-focus)  
       ate an apple J.  
       ‘JOHN ate an apple.’
- b. María puso sobre la mesa el libro. (OBJ-focus)  
       M. put on the table the book  
       ‘Mary put THE BOOK on the table.’
- c. Mariá puso el libro sobre la mesa. (neutral)

(42ab) illustrate that term foci appear in clause-final position in Spanish, resulting in subject inversion in (42a). The findings for Spanish are summarized schematically in (43).

- (43) a. subject: V OBJ SÚBJ<sub>F</sub>  
 b. object: SUBJ V ÓBJ<sub>F</sub>  
 c. adjunct: SUBJ V OBJ ÁDJ<sub>F</sub>

In light of the Romance facts, it is tempting to argue that in Tangale, too, there is a prosodically prominent position at the right edge of VP, or the entire clause, in which focused elements must occur. Unlike in Romance, though, this position is not prosodically marked by accent, but must be characterized in more abstract terms. Our preliminary findings suggest that it may be the rightmost phonological phrase within the intonational phrase containing the verb, see Zimmermann (2006a) for a formal account along these lines.<sup>17</sup> Applying this preliminary analysis to Tangale, we see that focused objects and adjuncts can remain in their base position, whereas focused subjects must invert to a position at the right edge of VP (or the clause), as sketched in (41). It follows that the postverbal realization of focused subjects is effected by two independent factors: First, focused subjects cannot be realized in the canonical preverbal position, as this is reserved for topics. Second, focused subjects must be realized in a prosodically prominent position reserved for focus constituents, typically at the right edge of VP. If correct, this analysis supports the assumption that both the topic-comment distinction and the focus-background distinction are grammatically active in Tangale.

## 7. Summary

The article investigates nominal and verbal focus marking in various Chadic languages, in particular in Tangale. Its main objective was to check to what extent commonly

assumed F-feature theories can be applied to this language group as well. While it seems possible to extend the mono-factorial analyses of intonation languages to some of the Chadic languages (e.g. to Hdi), the focus systems of other Chadic languages seem to be more complex. Our investigation of the Tangale focus system showed that the language uses three different focus marking strategies: morphological marking with (some) intransitive verbs, syntactic focus marking with subjects, and prosodic focus marking with non-subjects (in the perfective aspect). We also showed that narrow foci on OBJ and V, as well as on VP, are not formally distinguished in Tangale. In progressive sentences, a special focus marking on OBJ, V, or VP is absent altogether. At the same time, the focus system of Tangale is strongly biased towards focused subjects, which are always marked for focus. The relevant distinction in the Tangale focus system is thus one between subject and non-subject: With non-subjects, which are often unmarked, or ambiguously marked, the major burden of focus resolution is shifted to the pragmatic system. The strong subject bias in the focus marking system of Tangale was argued to be conditioned by two IS-related factors: First, focused subjects are non-topical and therefore banned from occurring in their canonical position preceding the verb, which is reserved for topics. Second, there seems to be a specific postverbal position for focused term constituents in Tangale, which can only be characterized in prosodic terms. Both factors conspire to force focused subjects to undergo inversion. A similar prosodic focus strategy can be found in some, genetically unrelated, Romance languages, in which focused constituents must also appear in a clause-final focus position. Further research will have to find out whether this cross-linguistic parallel bears closer scrutiny, which would be a most interesting result from a typological perspective.

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## Endnotes

- \* This article was written within the project B2 “Focusing in Chadic Languages” funded by the German Science Association (DFG) as part of the SFB 632 „Information Structure“. We would like to express our gratitude to the DFG, as well as to our main Tangale consultant, Mr Sa’eed M. Omar (from Kaltungo), and to Jörg Dreyer (ZAS/Berlin) for help with the recordings in the ZAS lab. A preliminary version of this paper was presented at the 40<sup>th</sup> meeting of the Chicago Linguistics Society. We thank the CLS audience, as well as Katja Jasinskaja, Shinshiro Ishihara, Ewald Lang and two anonymous reviewers of *studia linguistica* for valuable comments and discussion. This article is dedicated to the late Mairo Kidida Awak in view of her merits for the research on the Tangale language.
- <sup>1</sup> For a general introduction into the grammatical system of Tangale, see Jungrathmayr (1956), as well as the two grammatical sketches in Jungrathmayr (1991) and Kidida (1993).
- <sup>2</sup> In the presentation, we abstract away from the open/closed distinction in vowel quality in Tangale.
- <sup>3</sup> Tuller does not spell out the consequences of her analysis for focused subjects, in particular how the focused subject ends up in VP-adjoined position. For instance, it could raise there from a VP-internal base position (Koopman & Sportiche 1991), or it could lower there from its canonical surface position in SpecIP. We therefore refrain from giving a precise structure of postverbal subject focus in terms of Tuller’s analysis.
- <sup>4</sup> Kidida (1993:110) speaks of a *strong boundary* in this connection. Apart from vowel elision and left line delinking, Kidida (1993:135) cites three more phonological processes, namely *right line delinking II*, *decontouring*, and *P-lowering*, that are also blocked at a strong boundary before a focused object.
- <sup>5</sup> By and large, similar facts obtain for subject and object focus in Bole, a closely related SVO-language (see Schuh 2004). Focused subjects appear in a postverbal VOS-configuration (ia), while focused objects (and other focused constituents) are often separated from the verb by a prosodic boundary (ib).

- (i) a. kappú mordó lo? kappú mordó Bámói  
 planted millet who planted millet B.  
 ‘Who planted millet?’ ‘BAMOI planted millet.’
- b. ítá a koná laawo lo? ítá a koná laawo Bámói  
 sheaux take(fut) child who she aux take(fut) child B.  
 ‘Whose child will she take?’ ‘She will take BAMOI’s child.’

As in Tangale, the presence of the prosodic boundary is indicated by the blocking of a phonological process, namely *low tone raising* (LTR), see Schuh (2004) for details.

- <sup>6</sup> This way of focus marking seems to be restricted to a subset of intransitive verbs, where the absence or presence of the *i*-suffix appears to be orthogonal to the ergative-inergative distinction. Also, *i*-suffixation is optional to a certain degree even with verbs on which it can occur in principle.
- <sup>7</sup> Alternatively, the *i*-marker could be a totality marker, given its formal resemblance to the totality marker *áy* in Miya. The latter is argued to have a focusing effect on the TAM-marker (Schuh 1998:172f.), see also Hyman & Watters (1984) on auxiliary focus. More recently, Schuh (2005) claims that the use of the totality marker for marking auxiliary focus or narrow focus on the verb is widespread among the Western Chadic languages of Yobe state (Karekare, Bade, Ngizim, Ngamo, Bole). Consequently, if *i* is a totality marker in Tangale (at least historically), its focusing function on the verb would not come as a surprise.
- <sup>8</sup> The individual pairs consisted of a trigger sentence and a target sentence. In most cases, the trigger sentence was a question determining the focus structure of the corresponding answer, the target sentence. For instance, the question *Lak yaa-go nang?* ‘L. do-PERF what = What did Laku do?’ determines that the answer will contain a VP-focus. The 170 sentences were randomly mixed with regard to focus condition and aspect in order to prevent repetitive effects. The consultant was then asked to read each sentence pair aloud. The recording was converted into a

WAV.-file, and then analyzed with PRAAT. For each target sentence, we extracted the F0 tracing in order to check for differences in intonation.

<sup>9</sup> In the analysis, we only looked for differences at the *phonetic surface*. This leaves open the possibility that there may be underlying phonological differences that - for some reason - are neutralized at the phonetic surface. However, it is unclear to us why prosodic focus marking in a language should be organised in such a way that its results are never, or hardly ever perceivable. Bear in mind, though, that a purely qualitative analysis as the one presented here may miss certain significant differences, and should be supplemented by quantitative and perception studies.

<sup>10</sup> The only discernible difference in Fig. 1-3 concerns the relative height of the two adjacent H-tones. Under VP-focus (fig.2), the second H-tone on *lán* seems to be lower than the first H-tone on *-gó*, whereas it seems to be slightly higher under OBJ-focus (fig.1) and V-focus (fig.3). One could therefore speculate whether the lower second H-tone in the case VP-focus is not the result of *downdrift/downstep* or *declination* (Yip 2002:262), which in this case would not be blocked by an intervening focus boundary. In the case of OBJ-focus and V-focus, the same process would then be blocked by an intervening focus boundary, resulting in a reset of the next H tone to the original level. Setting aside the fact that the realization of V-focus and OBJ-focus would still be identical (unlike in intonation languages), this hypothesis is not supported by additional data, see figs. 4 to 9.

<sup>11</sup> The fact that VP-focus is marked by a prosodic phrase boundary preceding the object is unproblematic and can be explained by resorting to Selkirk's (1984, 1995) mechanism of focus projection, according to which F-features can project from a focus-marked object DP to the containing VP.

<sup>12</sup> That focus cannot be marked on every grammatical category is not an exclusive property of the Chadic language family. Note that in intonation languages, focus marking pitch accents can only fall on the strong syllable of a metrical foot (cf. Selkirk 1984, 1995). If a semantic focus corresponds to the weak syllable of a foot, the pitch accent still falls on the adjacent strong syllable, even if it this syllable is part of the background, cf. (i), from Bolinger (1986:104).

- (i) You say it blasts easily? – No, it BLASted easily (\*blastED).

A focus can even consist of just a consonant, e.g. [m] and [t] in the contrastive pair *stalagmites* vs. *stalagtites* (cf. Artstein 2002, chap. 2). Since a pitch accent cannot be associated with the onset of a syllable, but only with its nucleus, focus is expressed again on a background constituent adjacent to the proper focus constituent (*stalagmites* vs. *stalagItes*).

<sup>13</sup> The same holds for the future, or long progressive, which is structurally identical.

<sup>14</sup> When the subject is focused, the word order (nominalised) V>O>S is often changed to O>V>S thus making the object the (optional) sentence-initial topic of the utterance. In this case, a pronominal suffix *-i* is added to the nominalised verb, as illustrated in the answer in (35). It remains to be seen if there exists more than an accidental homophonic relationship between the neutral pronominal suffix *-i* and the focus marker *-i* discussed in section 4.2.1.

<sup>15</sup> Association with focus with *núm* has other interesting characteristics with theoretical repercussions. Due to the fact that *núm* can only combine with nominal (DP-) expressions, association with focus does not seem to be subject to c-command in Tangale, and possibly Chadic languages in general. This means that the c-command requirement for association with focus (Büring and Hartmann 2001) cannot be a language universal. Possibly, the requirement only holds for intonation languages, which have the means to grammatically mark narrow foci individually.

<sup>16</sup> Gimba (2000:19) shows for Bole, a related West Chadic language, that there is a prosodic boundary between the object of transitive VPs, and any subsequent PP-adjuncts, i.e. at the right edge of the core VP:

- (i) ((SUBJ V OBJ) (ADJ))<sub>IP</sub>

<sup>17</sup> We hasten to admit that at present we lack a number of recordings that would be required for a more specific characterization of the prosodic structure of Tangale. In light of this, the preliminary analysis put forward in the main text is by necessity sketchy and most likely in need of further refinement.