

In Place – Out of Place: Focus in Hausa

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1. Introduction

1.1 Claims and Structure of the Article

For a speaker of an accent language it is completely natural to mark grammatical focus consistently on all syntactic categories. In light of this regularity, the linguist's conclusion that focus must be marked universally is not far-fetched. If the linguist is typologically interested, he will assume that focus is marked at different grammatical levels in different languages. Thus, a language may use syntactic, morphological or prosodic devices to mark a focus, or sometimes even a combination of these.

In this article, we argue that this conclusion is not correct. The obligatory focus marking exhibited by accent languages is not a manifestation of a linguistic universal but a specific property of these languages. We present a detailed empirical investigation of the focus strategies in Hausa, an Afro-Asian tonal language, mainly spoken in the north of Nigeria. This language clearly falsifies the universalist position. In Hausa, focus marking is not obligatory and inconsistent. If it occurs, it is not driven by the information-structural category *focus* directly, but relies on the pragmatic notion of emphasis, which in turn implies focus status.

The paper is structured as follows: In section 2, we investigate the two syntactic focus strategies in Hausa, namely the *ex situ* and the *in situ* strategy. While the *ex situ* strategy is well researched in the literature, the *in situ* strategy has attracted interest only recently. In section 3, we show that there is no strict correlation between the choice of the *ex situ* or *in situ* strategy and a particular interpretation. Both strategies can be used for new information focus or contrastive/exhaustive focus interpretations (even though there is a tendency to express new-information focus *in situ*). In section 4, it is shown that the choice of the *ex situ* strategy does not always result in an unambiguous identification of the focus constituent, since more or less than the focus constituent can be moved. Such *focus pied-piping* and *partial focus movement* is also known from other languages, as for instance German and Hungarian, which are also discussed in section 4. In section 5, we discuss whether *in situ* focus, which is marked neither syntactically nor morphologically, is prosodically prominent. We present the results of a phonetic pilot study that clearly shows that *in situ* focus is also prosodically unmarked. Hausa thus provides evidence against the above mentioned claim that focus on a constituent must be marked somehow. In section 6, we raise the question of what motivates *ex situ* focus in Hausa. We answer this question by assuming that overt focus fronting is driven by the pragmatic notion of emphasis (corresponding to unexpectedness in a discourse situation) which implies focus status. In the final part of the paper, we discuss several alternative strategies that Hausa employs in order to compensate for the lack of expressiveness resulting from inconsistent focus marking. Among these strategies are a reliance on topic marking constructions as well as the use of several extra-sentential markers that structure larger discourse units. Section 7 concludes.

1.2 Focus: A Discourse-Semantic Category

Following Jackendoff (1972) and many others, we take *focus* to be a discourse-semantic category. On this analysis, focus denotes that part of the information conveyed in an utterance that is assumed by the speaker not to be shared by him and the hearer. In other words, focus constitutes the 'new' or 'important' information which contributes to an updating of

Stalnaker's (1978) *Common Ground*. Semantically, focus can be taken to induce the hearer of an utterance to entertain alternatives to the focus constituent. Following Rooth, focus on a constituent $\alpha_{\langle\beta,\gamma\rangle}$ (represented in bold face: $\alpha_{\langle\beta,\gamma\rangle}$, with the subscript $\langle\beta,\gamma\rangle$ representing α 's ontological domain) introduces a set of alternatives A the members of which are elements from the same ontological domain as the focus constituent ($A = \{x \mid x \in D_{\langle\beta,\gamma\rangle}\}$, cf. Rooth (1985, 1992).

Focus on a focus constituent is often encoded grammatically, i.e. by syntactic, morphological or prosodic means. However, as we will see in this article, consistent focus marking is not obligatory cross-linguistically. Hence, it is important to keep apart the two notions of *focus* (an information-structural category) and *focus marking*.

As is well-known, focus marking of a constituent is sensitive to the linguistic context that (usually) precedes the sentence containing the focus (the *focus clause*). The structure of the respective context may give rise to several pragmatic interpretations of the focus. It is said that the context *controls* the focus (Uhmann 1991). There are four typical contexts for focus control in the focus clause. The first and most prominent one involves *wh*-questions, which trigger a focus in the answer (*new-information focus*, (1a)). The second involves contexts that are partially corrected in the focus clause (*corrective focus*, (1b)). Third, contexts may provide a set of items one of which is selected in the focus clause (*selective focus*, (1c)). Finally, focus status is assigned to two or more elements of the same syntactic category and the same semantic word field that co-occur within one or across two adjacent utterances (*contrastive focus*, (1d)). The respective focus constituents are represented in bold face.

- (1)a. Who was liberated yesterday? **Simona** was liberated yesterday.
 b. Peter bought a Mercedes. No, he bought a **Toyota**.
 c. Did you have bagels or muffins for breakfast? I had **bagels** for breakfast.
 d. An American **linguist** chided an American **politician**.

We would like to emphasise that, in our view, focus in all the above instantiations is a semantically uniform phenomenon. That is, the four foci exemplified in (1) (new-information, corrective, selective, and contrastive focus) do not instantiate different *semantic* types of focus, but only different *pragmatic* uses of focus. Semantically, the foci are identical. Each focus represents a set of alternatives as outlined above.

1.3 Background Information on Hausa

Hausa is by far the biggest of the Chadic languages. These languages are spoken in the vicinity of Lake Chad, a lake with adjoining borders to Nigeria, Chad, Niger, and Cameroon. They belong to the Afro-Asian languages. Hausa is spoken by more than thirty-five million speakers. It is the first language of the ethnic Hausas in northern Nigeria as well as in the south of Niger. Hausa is also used as a lingua franca in many northern regions of Nigeria where it is establishing itself as a mother tongue in many cases (cf. Newman 2000).

Hausa is an SVO language. The subject can be dropped. We assume that the verb always appears in its infinitival form. Temporal and aspectual information as well as subject agreement are encoded in a separate morpheme, which we will refer to as the *auxiliary*. The auxiliary is usually left-adjacent to the verb. This is illustrated in (2). Where possible, we indicate the border between person marking and aspectual marking within the auxiliary by a hyphen. A dot between two morphemic translations (e.g. *3sg.perf*) indicates that the glossed unit is a porte-manteau morpheme, which cannot be further analysed.¹

¹ We use the following abbreviations in the glosses: 1,2,3,4 = person number markers, sg = singular, pl = plural, perf = perfective, rel.perf = relative perfective, cont = continuous, rel.cont = relative continuous, subj = subjunctive, fut = future, fem = feminine, NEG = negation, PRT = particle, TM = topic marker, DEF = definite, VENT = ventive.

- (2) *Kandè* *taa* *dafà* *kiifii*.
K. *3sg.perf* *cooking* *fish*
 ‘Kande cooked the fish.’

Hausa is a tone language. It differentiates three lexical ones. It has a high tone, which is not marked in the examples, a low tone (à), and a falling tone. Falling tones (â) appear only on heavy, bimoraic syllables. A circumflex on an open vowel, which is always long, indicates tone and length (*sôo* ‘liking’ is represented as *sô*). The language has no rising tone.

2. Hausa Focus Strategies

Hausa has two strategies for expressing focus. A focus constituent can either be fronted (the *ex situ* strategy), or it can remain in its base-position (the *in situ* strategy, cf. Jaggat 2001, 2004, Green & Jaggat 2003, Hartmann 2004). This section presents the syntactic and morphological differences between the two strategies.

2.1 Ex Situ Focus

It is traditionally assumed in the linguistic literature on Hausa that focus constituents are fronted to the sentence-initial position (cf. Wolff 1993:504, Green 1997:110, Newman 2000:178, and Jaggat 2001:500f).² The fronted constituent has to be a maximal projection, which is optionally followed by a focus-sensitive particle (*nee/cee/nee* for masculine/ feminine/ plural, with polar tone, i.e. with low tone if the immediately preceding syllable is high, and with high tone if the preceding syllable is low).³ As the following examples show, subjects and objects (3), prepositional arguments and adjuncts (4), adverbials (5), as well as entire clauses (6) can be focused by fronting them. The examples in (4) and (5) are from Newman (2000:188-192), (6) is from Jaggat (2001:500). In the English glosses, the focus exponent (i.e. the word carrying the pitch accent within the focus constituent) is given in capitals. In two of the Hausa verbal aspects (the perfective and the continuous), the auxiliary has two forms, traditionally referred to as the *absolute* and the *relative* form. The absolute form appears in basic declarative sentences. The relative form appears in connection with *wh*-question formation, focus fronting, and relativisation, i.e. it can be taken to indicate A'-movement. We take the absolute form to be the default form, which therefore does not appear in the glosses. In other words, *1pl.perf* reads as ‘1st person plural, absolute perfective’, *1pl.rel.perf* as ‘1st person plural relative perfective’.

- (3)a. [_{DP} **Kandè**] *cee* *ta-kèè* *dafà* *kiifii*.
K. *PRT* *3sg-rel.cont* *cooking* *fish*
 ‘KANDE is cooking the fish.’

² An *ex situ* focus is only initial if there is no topic involved. If a sentence has a topic and an *ex situ* focus, the focus always follows the topic, cf. (i) from Newman (2000:118).

(i) *Audù* *fà*, *hùulaa* *cèè* *ya* *sàyaa*.
A. *TM cap* *PRT* *3sg.rel.perf* *buy*
 ‘As for Audu, it was a cap which he bought.’

³ There are several proposals in the literature concerning the nature of this particle. The first goes back to McConvell (1973) and Jaggat (1978) who treat the particle as a copula since it also appears in copula constructions. Tuller (1986), followed by Green (1997), reanalyses the particle as a focus marker. Green (1997, 2004) presents a unified account of focus and copula constructions assuming that the particle is a focus marker in both. In Hartmann & Zimmermann (in prep.) we argue that the occurrence of the particle is far from being optional. It appears primarily with exhaustively interpreted focus constituents. Therefore we treat the particle as an exhaustivity marker. Since nothing hinges on the right choice here, we use the neutral gloss *PRT* (particle) throughout the article.

- b. [_{DP} **Kiifii**] nèe Kande ta-kèè dafàawaa.
fish PRT K. 3sg-rel.cont cooking
 ‘Kande is cooking the FISH.’
- (4)a. [_{PP} **Baayan bishiyàa**] ya-kèè.
behind tree 2sg-rel.cont
 ‘He is behind the TREE.’
- b. [_{PP} **Dà wuƙaa**] nèe ya sòokee shì.
with knife PRT 3sg-rel.perfstab him
 ‘He stabbed him with a KNIFE.’
- (5)a. [_{AdvP} **Maza-maza**] nèe su-kà gamà aiki-n.
quick-quick PRT 3pl-rel.perf finish work-DET
 ‘Very QUICKLY, they finished the work.’
- b. [_{AdvP} **Jiyà**] nee su-kà zoo.
yesterday PRT 3pl-rel.perf come
 ‘They came YESTERDAY.’
- (6) [_{CP} **Don in biyaa kà kuɗin**] nee na zoo
in.order.to 1sg.subj pay you money PRT 1sg-rel.perf come
 ‘It’s in order to pay you the MONEY that I’ve come.’

Notice that the focus interpretation of (4a) is ambiguous. The sentence can be interpreted as an answer to the questions *Inaa yakèè?* (‘Where is he?’) or *Baayan mee yakèè?* (‘Behind what is he?’). In the latter case, it is not possible to front only the focus constituent *bishiyàa* (‘tree’) due to a ban on preposition stranding in Hausa. Pied-piping of the backgrounded preposition becomes obligatory. The same holds for (4b), which answers either the question *Yàayàa ya sòokee shì?* (‘How did she stab him?’) or *Dà inaa ya sòokee shì?* (‘With what did he stab him?’). Again, the preposition is fronted together with the focus constituent, although it is part of the background in the second question. See section 4 for a thorough discussion of this phenomenon, which we call *focus pied-piping*, borrowing the term from Roberts (1998).

Focused verb phrases can also appear *ex situ*, but only in their nominalised form, cf. (7). In the following examples (from Newman 2000:193), the fronted verbs carry nominal inflection, i.e. the genitive morpheme *-n* which connects them to the following objects. This is evidence that the fronted predicates are nominal indeed.

- (7)a. [**Biyà-n hãraaji-n**] (nee) Tankò ya yi.
paying-GEN taxe-DET PRT T. 3sg-rel.perfmake
 ‘It was paying the TAXES that Tanko did.’
- b. [**Tàimako-n juunaa**] zaa mu yi.
helping-GEN together fut 1pl make
 ‘It is help one ANOTHER that we are going to do.’

Since focus fronting is analysed as movement to a sentence initial position, the *ex situ* strategy always requires a syntactic transformation of the basic word order. This holds for all sentences containing a focus, as long as it is not the subject. Focused subjects cannot be identified by means of their syntactic position. They occupy the same linear position whether focused or not. The only overt indication of *ex situ* subject focus, at least in the perfective and the continuous aspect, is the relative morphology on the auxiliary. In all other aspects (i.e. future, habitual and subjunctive), the verbal morphology is not sensitive to A'-movement. Moreover, the focus sensitive particle *nee/cee* is not a reliable indication of subject focus either, since it is not obligatory. Therefore subject foci are syntactically and morphologically unmarked in the future, habitual and subjunctive aspects. This is illustrated in (8) for the future aspect.

- (8) Q: Wàaneenè zài tàfi Jamùs?
who FUT.3sg go Germany
 ‘Who will go to Germany?’
 A: **Audù** zài tàfi Jamùs.
A. FUT.3sg go Germany
 ‘Audu will go to Germany.’

Notice that the possibility that focused subjects are prosodically marked in these cases still exists. We will return to this point in section 5.

2.2 In Situ Focus

Focus constituents may be fronted, but fronting is not obligatory. As Jaggar (2001), (2004), Green & Jaggar (2002) and Hartmann (2004) show, Hausa also allows for *in situ* focus. If a constituent is focused in its base-position, nothing is moved, and the auxiliary does not undergo the morphological change in the perfective and continuous aspect. The focus sensitive particle *nee/cee* may now appear in sentence final position, but its presence is again not obligatory. Notice that without this particle, *in situ* focus is generally unmarked. The situation parallels to some extent that found with *ex situ* subject focus in the future, habitual and subjunctive aspect. Remember from the preceding section (2.1) that these were not syntactically or morphologically marked either.

2.2.1 Non-Subjects

The data we elicited confirm the findings of Jaggar (2004), who incidentally investigated the distribution of *in situ* focus at the same time as we did. The data in (9) illustrate object *in situ* focus. Note that the auxiliary is relative in the *wh*-question (*sukà* = 3rd person plural relative perfective), but absolute in the answer containing an *in situ* focus (*sun* = 3rd person plural absolute perfective).

- (9) Q: Mèe su-kà kaamàa?
what 3pl-rel.perf catch
 ‘What did they catch?’
 A: Sun kaamà [NP **dawaakii**] (nè). OBJ-NP
3pl.perf catch horses PRT
 ‘They caught HORSES.’

In situ focus is also possible with prepositional objects (10a), as well as with the NP-complements of locative (10b) and instrumental (10c) PPs.

- (10) a. Q: (À) cikin mée su-kà sâa kudî-nsù?
at inside-of what 3pl-rel.perf put money-their
 ‘Where did they put their money?’
 A: Sun sâa kudî-nsù cikin [NP **àkwàatì**]. PO-NP
3pl.perf put money-their inside-of box
 ‘They put their money into a BOX.’
- b. Q: Dàgà inaa su-kà kaam-o naamà-n?
from where 3pl-rel.perf catch-VENT meat-DET
 ‘From where did the catch the wild animal (and brought it here)?’
 A: Sun kaam-o naamà-n dàgà [NP **daajii**] (ne). LOC-NP
3pl.perf catch-VENT meat-DET from bush PRT
 ‘They caught the wild animal from the BUSH (and brought it here).’

- c. Q: Dà mée ya sòokee shì.
with what 3sg.rel.perfstab him
 ‘With what did he stab him?’
- A: Yaa sòokee shì dà [NP **wufkaa**]. INSTR-NP
3sg.perf stab him with knife
 ‘He stabbed him with a KNIFE.’

The examples in (11), (12) and (13) exhibit VP-, V- and sentential focus *in situ*. In contrast to *ex situ* focus, predicates do not have to be nominalised when focused *in situ*.

- (11) Q: Mée Audù ya yi jiyà?
what A. 3sg.rel.perfdo yesterday
 ‘What did Audu do yesterday?’
- A: Jiyà Audù yaa [VP **tàfi tashàa**]. VP
yesterday A. 3sg.perf go station
 ‘Yesterday, Audu went to the STATION.’
- (12) Q: Mée Tankò ya yi wà hàraaji-n?
what T. 3sg.rel.perfdo to taxes-DET
 ‘What did Tanko do with the taxes?’
- A: Tankò yaa [V **biyaa**] hàraaji-n (ne). V
T. 3sg.perf pay taxes-DET PRT
 ‘Tanko PAID the taxes.’
- (13) Q: Mèeneenèe ya fàaru? IP
what 3sg.rel.perfhappen
 ‘What happened?’
- A: [IP Tankò yaa biyaa hàraajin (ne)].
T. 3sg.perf pay taxes PRT
 ‘Tanko paid the TAXES.’

In section 2.1 it was pointed out that only maximal projections can be focused *ex situ*. In case a non-maximal constituent is focused, the backgrounded remaining part of the constituent has to be pied piped along with the focus. The *in situ* strategy, on the other hand, allows for focusing of non-maximal constituents. The answer in (14) contains a (selective) focus on the locative preposition, which appears in its base position. In (15), the question presupposes that some kind of work is being done and inquires the exact kind of work. In the answer, only that part of the complex NP that further specifies the work is focused. Notice that the *ex situ* counterparts of the *in situ* foci in (14A) and (15A) both require focus pied piping (*K’arkashin teebùr̃ nee fensir yakèe* and *Aikin goonàa nee mukèe yi*), see also section 4.

- (14) Q: Ìnaa fensir? Ya-nàa à kân teebùr̃ koo kàrkashin teebùr̃?
where pencil 3sg-cont at head table or underside.of table
 ‘Where is the pencil? Is it on top of the table or under the table?’
- A: Fensir̃ ya-nàa [P **kàrkashin**] teebùr̃. P
pen 3sg-cont underside.of table
 ‘The pen is UNDER the table.’
- (15) Q: Aiki-n mée ku-kèe yii a nân?
work-of what 2pl-rel.cont do at here
 ‘What kind of work are you doing here?’
- A: Mu-nàa aiki-n [N **goonaa**] nè. N
1pl-cont work-of farm PRT

‘We are doing FIELD work.’

Not only foci, but also *wh*-words can appear *in situ* and *ex situ*. The two strategies do not have to be identical in a question and the corresponding answer. In other words, it is common, but not obligatory that the answer to an *ex situ* question contains an *ex situ* focus. This is shown in the following example, taken from *Hausar Baka* (HB), a collection of every day dialogues by Randell, Bature and Schuh (1998). In this example, speaker A directs an *ex situ* question to speaker B. Speaker B answers with an *in situ* focus. Not having understood correctly, A poses his question again, this time as an *in situ* echo-question. Interestingly, the focus in B’s answer is now realised *ex situ*. The *ex situ* / *in situ* dichotomy is nicely reflected by the variation in the auxiliary form. With all *ex situ* occurrences, the relative auxiliary appears. With *in situ* sentences, the auxiliary is absolute.

- (16) Q: Yanzù wannàn m̀èè ka-k̀èè ỳí? *ex situ wh* (HB 3.16)
now this what 2sg-rel.cont doing (relative AUX)
 ‘Now, with this, what are you doing?’
 A: Wannàn inàa sh̀â ne. *in situ focus*
this 1sg.cont drinking PRT (absolute AUX)
 ‘This, I am DRINKING.’
 Q: Kanàa m̀èè? *in situ wh (echo)*
2sg.cont what (absolute AUX)
 ‘You are doing WHAT?’
 A: Sh̀â na-k̀èè. *ex situ focus*
drinking 1sg-rel.cont (relative AUX)
 ‘I am DRINKING.’

2.2.2 Subjects

Turning to focused subjects, it has been observed that subjects cannot be realised *in situ* (Jaggar 2001, Green & Jaggar 2003). The auxiliary obligatorily appears in the relative form, thereby indicating (vacuous) subject movement. The following example illustrates the impossibility of focusing a subject *in situ*. A1 with *ex situ* focus is the only felicitous answer to the question. The *in situ* answer A2, with an absolute auxiliary, is infelicitous.

- (17) Q: Wàa ya-k̀èè kirà-ntà?
who 3sg-rel.cont call-her
 ‘Who is calling her?’
 A1: [NP Daudàa] (nee) ya-k̀èè kirà-ntà.
D. PRT 3sg-rel.cont call-her
 ‘Dauda is calling her.’
 A2: * [NP Daudàa] ya-nàa kirà-ntà.
D. 3sg-cont call-her

We summarise: Hausa *in situ* focus differs from *ex situ* focus in three major respects. First, it is neither categorically nor structurally restricted. Any syntactic category, including verbal predicates, allows for *in situ* focus. *In situ* foci do not have to be maximal projections. Heads and even parts of complex NPs can be focused *in situ*. In particular, *in situ* focus is not subject to any restrictions in terms of phonological heaviness or syntactic branching (pace Frascarelli 2000:68ff)⁴. As we will show in section 5, *in situ* focus is not conditioned by prosody at all (against Frascarelli again).

⁴ Frascarelli’s analysis is based on the incorrect assumption that the particle *fa* is a focus marker (ibid:68). This assumption is not found elsewhere in the literature on Hausa, where *fa* is generally considered a topic marker (see Newman 2000:616). The misconception of *fa* as a focus marker has grave consequences for her entire analysis of focus in Hausa, since topic markers do not have the same syntactic distribution as focus markers.

Second, *in situ* focus is not marked syntactically (no word order variation) or morphologically (no morphological change of the auxiliary). The only indication of *in situ* focus is the sporadic presence of the sentence final focus sensitive particle *nee/cee*. Since this particle is not obligatory, and its occurrence rather rare, it is not a reliable indicator of *in situ* focus in general.

Third, subjects cannot be focused *in situ*. The auxiliary necessarily appears in the relative form which is indicative of (vacuous) movement. In other words, focus marking is obligatory on subjects in Hausa. In this respect, Hausa behaves like other Chadic languages such as Tangale, Bole, and Miya. In Tangale, the only constituent that is unambiguously focus marked is the subject, which (visibly) moves (Hartmann & Zimmermann 2004) to a postverbal position. Similarly, focused subjects must move in Bole, whereas focused objects appear to remain *in situ* (Schuh 2004). Miya generally employs *in situ* focus for new information (Schuh 1989). Object foci can only be identified by the absence of a morphological marker indicating totality. Subject foci, on the other hand, are special in that they appear with a special auxiliary, similar to the relative auxiliary in Hausa.

This raises the question of why overt focus marking is obligatory with and only with subjects in these and many other languages?⁵ Intuitively, the reason for this subject bias in the focus systems of these languages seems clear. The (default) preverbal subject position triggers a topic interpretation (see Givón 1976). Therefore, if a subject is to be interpreted as focus (and not as topic) something special has to be done. The subject has to be dislocated, which is reflected by a change in the morphological form of the auxiliary.

2.3 Co-Occurrence of In Situ and Ex Situ Focus

The existence of two focus strategies in Hausa is further illustrated by their joint application in multiple questions and their corresponding answers. Since there is only one syntactic position for a fronted focus, not all foci in such multiple focus constructions can occur *ex situ* (18a). Instead, only one focus is fronted, while the other(s) remain(s) *in situ* (18b). Of course, it is also possible to realise all foci *in situ*, as shown in (18c).

- (18) Q: **Suwàa** sukà gani à **inaa**?
who.pl 3pl.rel.perf see at where
 ‘Whom did they see where?’
- a. A1: ***Musa** nèe à **kàasuwaa** cèe na ga,
M. PRT at market PRT 1sg.rel.perf see
Hawwà cee à **cikin gidaa** nèe na ga.
H. PRT at inside house PRT 1sg.rel.perf see
- b. A2: Musa nèe na ga à kàasuwaa, Hawwà cee na ga à cikin gidaa.
- c. A3: Naa ga Musa à kàasuwaa, naa ga Hawwà à cikin gidaa.
 ‘I saw MUSA at the MARKET, I saw HAWWA inside the HOUSE.’

2.4 Conclusion

In this section, we have established that there are two focus positions in Hausa. The existence of the two focus positions raises three interesting questions that we will address in the following sections. First, are the two syntactic focus positions linked to different interpretations of the foci? Second, is *in situ* focus, which has not received any attention until recently (Jaggar 2001, 2004, Green & Jaggar 2003, Hartmann 2004), a marked exception or is

⁵ A comparable special status for focused (*wh*-) subjects has also been observed for a number of languages outside the Chadic language family. For instance, in the Bantu languages Kinyarwanda, Dzamba, and Kitharaka, and also the Austronesian languages Malagasy, Tagalog, and Javanese, *wh*-subjects have to move, whereas *wh*-objects can remain *in situ* (see Sabel & Zeller, to appear, and references therein).

it a regular means of expressing focus? Section 3 will provide answers to these two questions. Third, is *in situ* focus, which is neither syntactically nor morphologically marked, perhaps prosodically prominent? This issue will be resolved in section 5 where we present a phonetic study of Hausa focus.

3. Syntax and Interpretation

This section has three subparts. In the first part, we introduce the hypothesis that, if a language has several syntactic focus positions, the interpretation of the focus constituent depends on the syntactic position it occurs in. If a focus is dislocated from its base-position, it often takes on a meaning that it lacks *in situ*. This interpretational difference concerns more or less exhaustive and contrastive readings. Such foci are said to be of a different semantic kind. In the second subsection, we show that in Hausa there is no evidence for a strict 1:1 correlation between structure and interpretation. Thus, we find exhaustive interpretations with both *ex situ* and *in situ* foci. Likewise, a focus may appear *in situ* as well as *ex situ* in Hausa in all the different pragmatic contexts that were given as instances of focus control in section 1.2 (i.e. new information, corrective, selective and contrastive focus). In the third subsection we present a quantitative pilot study, which shows that, although there is no strict correlation between structure and interpretation, there is nonetheless a clear tendency for new information focus to be realised *in situ* and for corrective, selective, and contrastive focus to appear in the *ex situ* position.

3.1 The Meaning-Structure Mapping Hypothesis

Many studies of information structure distinguish between different semantic types of focus. To give two prominent examples: Vallduví and Vilkuna (1998) differentiate *rheme* (which corresponds to new information focus as in (1a)) from *kontrast*, a cover term for several foci, mainly exhaustive and contrastive foci, that are interpreted as operators. Following Vallduví and Vilkuna (1998), only *kontrast* introduces a set of alternatives, thereby differing semantically from *rheme*, which represents the complementary part of the theme and describes the update potential of a given utterance. Kiss (1998) distinguishes informational from identificational focus, the latter often but not necessarily involving exhaustive focus.

Very often, the differentiation between two focus types is said to have a syntactic reflex. As Vallduví and Vilkuna (1998:79) put it, ‘The pairing of interpretative categories and structural categories (the meaning-structure mapping) is complex and cross-linguistically diverse.’ The authors show for Finnish (19) (= their examples (11) and (12)) and Hungarian that *kontrastive* expressions are realised in a different syntactic (i.e. fronted) position than purely *rhematic* ones, which stay in the core-part of the sentence. Kiss (1998) argues for Hungarian (20) (= Kiss’ example (5)) that dislocated focus is exhaustively interpreted (identificational focus) while a focus constituent in its base-position provides non-exhaustive new information (informational focus).

- (19) a. What things did Anna get for her birthday?
 Anna sai **kukkia**. → rheme
A. got flowers
 b. What is it that Anna got for her birthday?
Kukkia Anna sai. → rheme, kontrast
- (20) a. Tegnap este **Marinak** mutattam be Pétert. → identificational
last night Mary.DAT introduced.I PERF Peter.ACC
 ‘It was to MARY that I introduced Peter last night.’
 b. Tegnap este be mutattam Pétert **Marinak**. → informational

‘Last night I introduced Peter to MARY.’

To sum up, if a focus constituent appears *ex situ*, it has a meaning (i.e. exhaustivity, identification, contrast etc.) that is typically missing if the focus remains *in situ*. This state of affairs is summarised in form of the Meaning-Structure Mapping Hypothesis in (21).

(21) Meaning-Structure Mapping Hypothesis

Different focus positions are linked to different semantic interpretations.

In the following subsection, we show that this hypothesis does not hold for Hausa. It is not supported by Hausa, where we do not find a strict 1:1-correlation between focus position and focus interpretation.

3.2 Hausa – A Counterexample to the Meaning-Structure Mapping Hypothesis

As outlined in section 2, Hausa has two positions for focus constituents, the base-generated *in situ* position and the sentence-initial *ex situ* position. This section serves the purpose of showing that in Hausa there is no strict correlation between the two syntactic focus positions and particular semantic interpretations, as is predicted by the Meaning-Structure Mapping Hypothesis (see also Green & Jaggar 2003, who come to the same conclusion). We show that an *ex situ* or *in situ* realisation is possible for all instances of contextually controlled focus (new information, selective, corrective and contrastive focus, cf. section 1). The reader should recall that we use these different categories only as descriptive labels referring to the use of a focus in a discursive context. In addition, an exhaustive interpretation is available for focus constituents in the *ex situ* and in the *in situ* position.

3.2.1 New Information Focus

Focus can be used to express new information both *ex situ* (22) and *in situ* (23). In both examples, the focus is controlled by a preceding *wh*-question. This finding repeats the main insights of Jaggar (2001), (2004), Green & Jaggar (2003) and Hartmann (2004), see also section 2.2.

(22) Q: Mèenee nèe Kandè ta-kèè dafàawaa?
what PRT K. 3sg-rel.cont cooking
‘What is Kande cooking?’

A: **Kiifii** nèe Kandè takèè dafàawaa.
fish PRT K. 3sg-rel.cont cooking
‘Kande is cooking the FISH.’

(23) Q: Dàgà wàné gàrii ka zoo? (HB 1.11)
from which city 2sg.rel.perf come
‘From which city do you come?’

A: Naa tahoo dàgà **Bīrnin** **ƙwànni**.
1sg.perf come from Birnin Konni
‘I came from BIRNIN KONNI.’

3.2.2. Corrective Focus

Focus can be used to replace a constituent that has been previously asserted. In this case, focus is interpreted as a correction. Corrective focus can appear *ex situ* as shown in (24). The answer negates the statement of the yes/no-question and replaces the subject of the question with the focus constituent. Since the auxiliary appears in the relative form, the subject focus constituent must be realised *ex situ*.

(24) Q: Tsoohowāĩ-sà cee ta mutù?
mother.of-3m PRT 3sg.rel.perf die
 ‘Was it his mother who died?’

A: Aa’aa, màataĩ-sa cèè ta mutù.
no wife.of-3m PRT 3sg.rel.perf die
 ‘No, it was HIS WIFE who died.’

The example in (25) illustrates corrective *in situ* focus. The amount of Naira that should be paid is corrected in the second speaker’s utterance.

(25) A: Naĩràa àshĩrin zaa kà biyaa in yaa yi makà.
naira twenty fut 2sg pay if 3sg do for.you
 ‘It is twenty Naira that you will pay if he makes it for you.’

B: A’a, zân biyaa **shâ biyaĩ** nèè. (HB 3.03)
no fut.1sg pay fifteen PRT
 ‘No, I will pay FIFTEEN.’

3.2.3 Contrastive Focus

When two elements belonging to the same syntactic category and the same semantic word field are contrasted, either within one sentence, or across two sentences, we speak of contrastive focus. In Hausa, contrastive focus can be realised *in situ* or *ex situ*.⁶ The *in situ* option is illustrated in (26), where the locative PP of the first speaker’s utterance is contrasted with an other locative PP in the second speaker’s question.

(26) A: In mùtùm yanàa yîn sallàa, baa àa bì ta **gàbansà**. (HB 1.10)
if man 3sg.cont make prayer 4sg.cont follow in front.of.him
 ‘If a man is praying, you shouldn’t pass in front of him.’

B: Tô, zân iyà bì ta **baayansà**?
alright 1sg.fut can follow in back.of.him
 ‘Alright, but can I pass BEHIND him?’

In the *ex situ* example in (27), the nominalised verb *hiiĩra* (‘chatting’) is contrasted with another nominalised *ex situ* predicate in the paratactically connected second part of the sentence (*cĩ* ‘eating’). In addition to having a contrastive reading, this second focus is also exhaustively interpreted, due to the focus sensitive particle *kawàì* (‘only’).

⁶ In Miya, a western Chadic language, the state of affairs with respect to *in situ* focus is identical to the situation in Hausa: ‘Miya can express contrastive focus with a pseudo-cleft construction, but the regular focus construction used to answer questions can also express contrastive focus.’ (Schuh 1998: 332). In contrast, *ex situ* focus is always understood contrastively: This is illustrated below. Following Schuh, the subject in (i) as well as the object in (ii) are contrastive foci.

(i) *mæn jíy baa dæ ra-tlæn aa wàshasham*
 I FM one.who perf exceed-them with years
 ‘I am the one who has spent longer than (any of) them.’

(ii) *Tæ jíy ba faarà zahíya-yá gwalʃæ ta miyà*
 he FM one.who do.first make-into.him leadership of Miya
 ‘He’s the one to whom they gave the leadership.’

- (27) Koo hiĩra baa àa yĩ, sai dai **ci** kawàì a-kèè ta yĩ.
and chatting neg4sg.cont do PRT PRT eat only 4sg-rel.cont keep.on do
 ‘And no one is chatting, it is only EATING that is going on.’ (HB 2.03)

The dialogue in (28), taken from an interview in the journal *Garkuwa* (#18, October 2001: 30f.), is another interesting example where the *in situ* focus position is utilised to realise different pragmatic uses of focus. The first part of the answer contains a new information focus *in situ*. In the second part, the focus constituent occurs also *in situ* and is contrasted with the preceding new-information focus.

- (28) Q: Wàné irin mijii ki-kèè sô ki àuraa?
which kind man 2sg-rel.perf like 2sg.subj marry
 ‘Which kind of man would you like to marry?’
 A: Naa fi sôn **màì gàskiyaa dà rikòn àmaanàa**,
Isg.perf exceed like owner.of truth and keeper.of trust
 baanàa sôn **màì ci àmaanàa**.
Isg.cont like man.of eat trust
 ‘I prefer someone TRUTHFUL and TRUSTWORTHY, I don’t want somebody who BREAKS THE TRUST.’

3.2.4 Selective Focus

Focus may also serve to select one from two or more explicit alternatives. In Hausa, selective focus is not linked to a special syntactic position. It can be realised in both focus positions. (29) exemplifies selective *ex situ* focus. Here, the hearer is given the choice between half or the whole quantity of something. He decides to have it all.

- (29) Q: Gùdaa koo baarii? (HB 1.10)
whole or half
 ‘(Do you want) a whole or a half?’
 A: **Gùdaa** nakèè sô!
full Isg.rel.perf want
 ‘I want a WHOLE.’

Selective focus is realised *in situ* in both (30) and (31). The alternative question in (30) offers a choice between two drinks, one from which is chosen in the answer. The same applies for the selective focus *fijô* ‘Peugeot’ in (31).

- (30) Q: Kòofii zaa-kà shaa koo kùwa shaayii? (Jaggar 2001:498)
coffee fut-2sg drink or else tea
 ‘Will you drink coffee or tea?’
 A: Zân shaa **shaayii**.
fut.Isg drink tea
 ‘I will drink TEA.’
- (31) Q: Tô, bâs zaa-kà hau koo kùwa Fijô?
well bus fut-2sg climb or PRT peugeot
 ‘Well, will you go by bus or by Peugeot?’
 A: A nii naa fi sôn hawaa **Fijô**. (HB 3.04)
Isg Isg exceed want climb Peugeot
 ‘Me, I prefer to take the PEUGEOT.’

3.2.5 Exhaustive Focus

The last four subsections showed that focus can be realised both *in situ* and *ex situ* with all instantiations of contextual focus control, namely new information focus, corrective, contrastive and selective focus. In this subsection, we show that the same holds for instances of exhaustively interpreted focus, which can also occur in their base or in a dislocated position in Hausa. In our opinion, exhaustive focus is not structurally encoded, but induced by focus sensitive particles, such as *kawàì* or *kaɗàì* ('only'), and also by *nee/cee* (see footnote 3). (32) illustrates exhaustive focus *in situ* (a) and *ex situ* (b). (33) is another example of exhaustive *in situ* focus.

- (32) a. D'àalibai sun sàyi **littàttàafai** kawàì.
students 3pl.perf buy books only
'The students bought only BOOKS.'
b. **Littàttàafai** kawàì d'àalibai su-kà sàyaa.
books only students 3pl-rel.perfbuy
'The students bought only BOOKS.'

- (33) A: Nii kò, bà ni sòn dooyàa. (HB 2.03)
I PRT NEG 1sg.cont like yam
'As for me, I don't like yams.'
B: Tòò bà sai kì ci **shìnkaafaa** kawàì ba?
PRT NEG PRT 2sg.subj eat rice only NEG
'Well, but you don't eat only rice, don't you?'

Summing up, this section has shown that different pragmatic uses of focus as well as the purported various kinds of semantic interpretations argued for in the literature do not depend on the syntactic position of the focus constituent in Hausa. This result matches the conclusions of Green & Jaggar (2003). The Hausa data therefore suggest that the proposed strict one-to-one correspondence between syntactic structure and focus interpretation is not a language universal. Notice that this result obtains independently of the question of whether or not there really are different kinds of semantic focus in languages like Hungarian. However, the Hausa data fit in nicely with analyses - such as ours - that assume only one basic semantic representation in terms of alternatives for all instantiations of focus.

Notice further that this result is also in line with the fact that focused subjects do not occur *in situ* in Hausa in general (see section 2.2.2). To say that there is a strict correlation between structure and semantic interpretation would predict that focused subjects should always have a specific (exhaustive, contrastive) interpretation associated with the *ex situ* position, contrary to fact.

This answers the first of our questions about *in situ* focus from the end of section 2. In the following subsection, we turn to the second question concerning the relative frequency of *in situ* foci in comparison to their *ex situ* counterparts. In this connection, it will emerge that even though the Meaning-Structure-Mapping Hypothesis does not hold for Hausa in its strict form, there are nonetheless certain observable tendencies for specific uses of focus to be realised in a particular syntactic position.

3.3 Ex Situ versus In Situ: A Quantitative Study

Having established that focused non-subjects can occur both *in situ* and *ex situ* in Hausa, the question remains how often the *in situ* variant is actually chosen in natural spoken language. In order to establish this fact, we have carried out a little quantitative study that is based on the transcripts of the *Hausar Baka* course videos by Randell, Bature, and Schuh (1998).⁷ The

⁷ For the importance of such quantitative studies, see Jaggar (2004).

language in these videos is ordinary language as used in everyday activities (going to school, market scenes, in the bus). We therefore take it to represent an adequate sample of present day Hausa as spoken in Northern Nigeria.

In order to come to a reliable quantitative measurement, we adhered to the following counting procedure:

1. We counted all *wh*-questions, both *ex situ* and *in situ*, which are easily identified by their *wh*-expression.
2. We counted all *ex situ* and *in situ* answers to *wh*-questions as instances of new information focus. The *in situ* answers came in three types: *direct* answers that repeat the structure of the preceding *wh*-question with the focus constituent in situ; *direct thematic answers*, where the new information is provided in form of a thematic statement involving the phrases *àkwai* ‘there is’, *baabù* ‘there is not’ and *ga* ‘here is’; and *delayed* answers, where there is intervening material between *wh*-question and answer, but where the answer refers unmistakably back to the question.
3. We counted all other *ex situ*-constructions that were identifiable on the base of a change in word order and/or verbal aspect (see section 2)
4. We counted all occurrences of *in situ* focus that were identifiable on the base of contextual focus control as defined in section 1.2: These included (apart from Q/A-pairs) instances of selective, corrective, and contrastive focus.⁸

Notice that we did not consider other instances of new information in sentences with normal word order, such as story openers, answers to Y/N-questions, responses to requests for directions etc. This means that we did not capture all *in situ* occurrences of new-information focus. As a result, the present number of occurrences of *in situ* focus only indicates the lower boundary of the actual number of *in situ* foci. As table 1 shows, even this lower boundary is far from being insignificant.

Table 1: Occurrences of *ex situ* and *in situ* focus

	<i>ex situ</i> focus	<i>in situ</i> focus	Σ
<i>occurrences</i>	354	140	494

Table 1 shows that almost one third ($140/494 = 28\%$) of all instances of focus that are clearly identifiable on the base of syntactic (*ex situ*), morphological (*wh*-expressions) or pragmatic criteria (focus control), are realised *in situ*. In light of this, it seems surprising that the possibility of *in situ* focus has escaped the researchers’ attention for so long (see Jaggar 2004 for discussion of this point). A closer inspection suggests a potential reason for this lack of attention, though. Table 2 presents a more fine-grained classification of *ex situ* and *in situ* focus in *wh*-questions, answers (to *wh*-questions) and other (i.e. selective, corrective and contrastive) instances of focus respectively. The figures show that *ex situ* and *in situ* foci are not evenly distributed over these three categories:

Table 2: Occurrences of *ex situ* and *in situ* focus in *wh*-questions, answers, and other instances of focus

	<i>ex situ</i>			<i>in situ</i>			$\Sigma_{ex\ situ}$	$\Sigma_{in\ situ}$
	<i>wh</i>	<i>answer</i>	<i>other</i>	<i>wh</i>	<i>answer</i>	<i>other</i>		
<i>occurrences</i>	175	25	154	29	99	12	354	140

⁸ We considered both verbal and verbless clauses. In identifying *in situ* and *ex situ* occurrences of focus in verbless clauses, we adhered to Jaggar’s strategy according to which an element counts as being realised *in situ*, when it occurs in its normal (non-initial) base position. In contrast, *ex situ* elements are those that have been fronted from their unmarked position to a clause-initial position.

Table 2 shows that more than two thirds of all *in situ* foci, namely 99 out of 140, are used to provide new information in Q/A-pairs. Even more striking is the fact that the number of *in situ* answers (99) exceeds the number of *ex situ* answers (25) by factor 4. From this, it can be concluded that the *in situ* strategy is indeed the prominent strategy to provide new information in Q/A-pairs. In contrast, the *ex situ* strategy is the prominent strategy to realise *wh*-questions (175 *ex situ* vs 29 *in situ*). *Wh*-questions also constitute the largest subgroup (about ½) of all *ex situ* constructions, whereas they only make up about 1/5 (29 out of 140) of all *in situ* constructions (mostly with the questions words *nàwà* ‘how many’, *inaa* ‘where, how’ and *yàà* ‘how’). Finally, the most striking difference between *ex situ* and *in situ* strategy concerns the realisation of selective, corrective and contrastive focus. Here, we find that the vast majority of all such cases is realised by means of the *ex situ* strategy (154 *ex situ* vs 12 *in situ*, i.e. more than 90%!). Instances of selective, corrective, or contrastive focus constitute more than 40% of all *ex situ* constructions, whereas they constitute less than 10% of the *in situ* cases.

Summing up, the quantitative analysis shows that instances of *in situ* focus make up a significant proportion of all focus occurrences. This finding is in line with Jaggar’s (2004:4) observation that *in situ* focus is indeed more frequent than previously thought. Furthermore, the following tendencies concerning the realisation of focus have emerged: First, *wh*-questions are mostly realised *ex situ* (see also Jaggar 2004:5). Second, answers in Q/A-pairs are mostly realised *in situ*.⁹ And third, instances of selective, corrective, or contrastive focus are predominantly realised *ex situ*.

In our view, the last observation provides an explanation as for why the phenomenon of *in situ* focus has so often been overlooked. Corrective and contrastive focus in particular are pragmatically more prominent as new information focus in Q/A-pairs in the sense that they are unexpected, hence more surprising. Unlike with answers, which are by necessity introduced into the discourse by a preceding question, the preceding discourse does not prepare for the occurrence of a corrective or contrastive focus in the same way. It may be due to this higher potential for inducing a moment of surprise or attention on the side of the hearer that corrective and contrastive foci are easier noticed as focused elements. And it may well be that Hausa has a tendency to realise focus constituents that are pragmatically more prominent in the sense described here in a syntactically more prominent position, namely *ex situ*. We will take up this issue again in section 6. There we will see more evidence for the claim that elements that are pragmatically prominent in the sense that they are surprising or unexpected are often realised by means of the *ex situ* strategy.

This being said, we would like to stress once again that the observed generalisations are mere tendencies and that none of the discussed instances of focus is categorically excluded from occurring either *in situ* or *ex situ*. Hence, there is no grammatical condition that would enforce movement of a focus constituent to an *ex situ* position (pace Green 1997). The optionality of such movement with non-subjects rather seems to suggest that fronting of focused non-subjects is conditioned by pragmatic factors. In the next section, we will look at focus fronting in more detail.

4. The Ex Situ Strategy: Focus Pied-Piping and Partial Focus Movement

The preceding two sections have established the following three facts about the syntactic realisation of focus in Hausa: First, Hausa exhibits an asymmetry between subjects and non-subjects in that focused subjects must be realised *ex situ*. Second, instances of *in situ* focus

⁹ This tendency is also reflected in the set-up of many grammatical question-answer drills in textbooks (Cowan and Schuh 1976, Jungraithmayr and Möhlig 1986), where *ex situ* questions are frequently to be answered by an *in situ* focus

exist next to instances of *ex situ* focus with non-subjects. That is to say, focus on non-subjects is not always marked syntactically in Hausa. Third, there is no strict correlation between the *ex situ* realisation of a focus and a specific pragmatic usage and/or a specific semantic interpretation. The question arises, then, as to what motivates movement of focused non-subjects to an *ex situ* position at all? In this section, we show that under certain conditions more than or less than the focus constituent can be fronted. It follows that the *ex situ* position is not a fully reliable diagnostic for focus constituents. Therefore, movement to the *ex situ* position is not primarily triggered by focus as such. Instead, we propose that it is triggered by independent pragmatic factors such as the *First-Things-First Principle* of Gundel (1988).

A *prima facie* plausible alternative hypothesis would be that focus movement of non-subjects leads to a resolution of focus ambiguity by moving the focus constituent to a designated focus position:

(34) *Ex Situ Generalisation (to be rejected):*

Focus Movement in Hausa, where it applies, moves the and only the focus constituent to an *ex situ* position.

As a result, it would be easier for the listener to identify the focus constituent and to derive the corresponding presuppositions concerning the possible contexts of the utterance. According to this line of thought, the sentence in (35a) with *in situ* focus would allow for focus on object, V, VP or the entire sentence (IP) in principle. In contrast, the variant in (35b) with the object overtly fronted should only allow for focus on the object. In other words, the moved constituent in the *ex situ* position would be the unambiguous focus of the sentence.

- (35) a. Hàliimà taa yankà naamàa
 H. 3sg.perf cut meat
 ‘Halima cut meat’
 b. **Naamàa** (nee) Hàliimà ta yankàa
 meat PRT H. 3sg.rel.perf cut
 ‘It is MEAT that Halima cut.’

In this section, we show that this argument from parsing economy does not go through. We show that the situation in Hausa is more complex than sketched in (34) and (35). In particular, the claim that any constituent that is realised *ex situ* automatically equals the focus constituent turns out to be not quite correct.

In section 4.1, we show that more than the focus constituent can move to the *ex situ* position (*focus pied-piping*). In section 4.2, we show that only part of the focused constituent can move to the *ex situ* position (*partial focus movement*). Section 4.3 shows that movement of a constituent to the *ex situ* position is not totally arbitrary and depends on the focus of the sentence in that the fronted constituent must contain at least part of the focus of the sentence. In all the data presented, focus is controlled for by means of a preceding *wh*-question. Finally, section 4.4. relates our findings for Hausa to similar instances of focus pied-piping and partial focus movement in two typologically unrelated languages, namely German and Hungarian. In the discussion of these languages, it will emerge that focus identification with focus pied-piping and partial focus movement depends on a second, non-syntactic focus-marking device, namely prosodic marking. This leads quite naturally to the question of whether or not such an additional strategy of prosodic focus marking is also available for Hausa, the subject of section 5.

4.1 Focus Pied-Piping in Hausa

In section 2.1, overt movement of a focus constituent was argued to be an instance of A'-movement. As such it is subject to structural restrictions, such as syntactic island constraints (Tuller 1986).

In addition, overt movement of focus constituents is subject to a second structural constraint, also typical of A'-movement: The *structure preservation principle* (Emonds 1976) demands that only full XPs may be moved to the *ex situ* position. In contrast, non-maximal projections, such as prepositional heads (cf. (36)), repeated from section 2.2.1), parts of nominal N-of-N complexes (cf. ex. (15) in section 2.2.1), adjectival heads (37), or transitive verbs (38) cannot move to the *ex situ* position in isolation when focused, as illustrated by the A1-answers. Instead, they must pied-pipe the next higher maximal projection, as shown in the A2-answers. Following Roberts (1998:136), we refer to this instance of pied-piping as *focus pied-piping*.

(36) *Focus pied-piping of PP with prepositional heads:*

- Q: Ìnaa fensĩr? Ya-nàa à kâ-n teebũr kò karkashi-n teebũr?
where pen 3sg-cont at head-of table or underside-of table
 'Where is the pen? Is it on top of the table or under the table?'
 A1: *(À) **karkashi-n**₁ nèe fensĩr ya-kèe t₁ teebũr
at underside-of PRT pen 3sg-rel.cont table
 A2: [(À) **karkashi-n** teebũr]₁ nee fensĩr ya-kèe t₁.
at underside-of table PRT pen 3sg-rel.cont
 'The pen is UNDER the table.'

(37) *Focus pied-piping of NP with adjectival head (modifier):*

- Q: Kun sàyi bakà-r mootàa?
2pl.perf buy black-of car
 'Did you (pl.) buy a black car?'
 A1: *Aa'aa, **faraa**₁ (cèe) mu-kà sàyi t₁ mootàa.
no, white PRT 1pl-rel.perf buy car
 A2: Aa'aa, [**farà-r** mootàa]₁ (cee) mu-kà sàyaa t₁.
no, white-of car PRT 1pl-rel.perf buy
 'No, we bought a WHITE car.'

(38) *Focus pied-piping of VP with transitive verbs:*

- Q: Mèeneenèe ya yi dà wàsiikàa?
what 3sg.rel.perf do with letter
 'What did he do with the letter?'
 A: **Kàràatun** wàsiikàa cee ya yi.
read letter PRT 3sg.rel.perf do
 'He was READING a letter.'

Given the standard assumption that material in the *ex situ* position is the focus constituent of the sentence (see e.g. Green 1997, Newman 2000, Jaggar 2001), it could be argued that focus pied-piping in (36) to (38) is an instantiation of *overfocus*, (see Krifka 2001, 2004). Overfocus in the answer makes question-answer pairs incongruent, since the backgrounds of questions and answer do not match one another. By way of illustration, (39) shows that the backgrounds of question and (overfocused) answer in (36), which are underlined, do not match (we use the formalism of the structured meaning account of focus, *R* stands for a variable over 2-place relations, *P* for a variable over 1-place predicates, see von Stechow 1991, Krifka 2001 for more discussion):

- (39) Q: <λR.[R(pencil)(table)], SPATIAL RELATION>
 A: <λP.[P(pencil)], LOCATION>

This result is interesting because overfocus is argued to be impossible in accent languages where focus is marked by pitch accent (Krifka 2001). Indeed, marking the entire PP for focus in the English counterpart to (36), by assigning pitch accent to the most deeply embedded and rightmost element *table* results in an incongruent question-answer pair.

(40) Q: Is the pencil ON or UNDER the table?

A: *The pencil is [on the TABLE]_{FOC}.

On the other hand, we have seen that overfocus in (36)-(38) is conditioned by structural factors that constrain the application of overt syntactic movement, in this case the need to avoid a violation of the *structure preservation principle*. In this respect, Hausa does not differ from accent languages, which also exhibit pied-piping whenever focus is expressed by overt syntactic movement (in addition to pitch accent):

- (41) a. ON the table, I have put the pen (not UNDER).
 b. *ON, I have put the pen the table.

In (41a), too, more than the focus constituent *on* must move to initial position for structural reasons.¹⁰ In light of the fact that focus pied-piping is triggered by structural considerations, it is possible to uphold the claim that focus movement moves the and only the focus constituent in Hausa (cf. (34)) modulo one qualification:

(34') *Ex Situ Generalisation, modified (still to be rejected):*

Focus movement in Hausa, where it applies, moves the and only the focus constituent, unless overruled by structural considerations, such as the structure preservation principle.

As we will see in the next section, even this weaker formulation turns out to be problematic for Hausa.

4.2 Partial Focus Movement in Hausa

Next to cases in which more than the focus constituent is moved (for structural reasons), there are also cases in which not the entire focus constituent, but only a subconstituent is overtly moved. The following example is again taken from Hausar Baka:

(42) Q: Mèe ya fàaru? (HB 4.03)

what 3sg.rel.perf happen
 'What happened?'

A: **ƙàràayii** nèe su-kà yi mìn saatàa.
robbers PRT 3pl-rel.perf do to.me theft
 'ROBBERS have stolen from me!'

As is clear from the controlling *wh*-question ('What happened?'), the entire answer clause must be interpreted as new-information focus. Nonetheless, only the subject of the utterance moves to the left-peripheral "focus" position. This is clear from the accompanying particle *nèe* and the relative form of the aspectual marker. A parallel case is found in our own elicited data:

¹⁰ The literature on pied-piping offers several syntactic possibilities for the interpretation of cases like (41a). Assuming a copy theory of movement (Chomsky 1993), all but the focus constituent *on* in the upper copy (here: the overtly moved PP) is deleted at LF. Alternatively, one could assume reconstruction (Guéron 1984, Clark 1992), followed by feature movement of the operator features of the focus constituent at LF (Chomsky 1995).

- (43) Q: Mèeneenee yà fàaru?
what 3sg.rel.perf happen
 ‘What happened?’
- A: **Dabboobi-n jeejii** nee mutàanee su-kà kaamàa.
animals-of bush PRT men 3pl-rel.perf catch
 ‘(The) men caught WILD ANIMALS.’

As in (42), the new-information focus is made up by the entire sentence. However, only a subconstituent, in this case the direct object, is moved to the initial position.¹¹ Now, if the *ex situ* strategy was the only means to realise focus in Hausa, we could rightfully treat the examples in (42) and (43) as instances of *underfocus* (see e.g. Krifka 2001, 2004). However, given that the possibility of realising focus *in situ* has been independently established for Hausa, it may be more appropriate to speak of *discontinuous focus*, or *partial focus movement* instead. The possibility of partial focus movement shows that the modified generalisation in (34’) is still too strong.

When asked as to why only the object could be fronted, both our informants indicated that the object provided the *interesting* or *surprising* part of the utterance. This is reminiscent of an observation made by Xu (2004) for Chinese, who shows that the relative *informativity* or *relevance* of several new-information focus constituents governs the linear order of these constituents, with the most informative or relevant constituent coming last. Indeed, the ungrammaticality of example (i) in footnote 11 indicates that the possibility of partial focus movement does not depend on structural factors alone. If so, this may be additional evidence for the claim that overt focus movement with non-subjects is subject to pragmatic, next to strict grammatical factors (see also the end of section 3).

The observed tendency to realise material that is more surprising, more important, or more relevant in some sense is reminiscent of Gundel’s (1988) *First Things First Principle* as well as Givón’s (1988) principle *Attend to the most urgent task first*. Applied to example (43) above, the option for partial focus seems to indicate a particular attitude on the side of the speaker: The fact that *wild animals* were caught is presented as the most exciting or surprising part of the information conveyed (either for the listener or for both speaker and listener), irrespective of the focus-background structure imposed by the context. As vague as these communicative or functional principles may appear at first sight, they seem to provide a more adequate account of focus movement in Hausa than accounts that rely on purely grammatical mechanisms. In section 6.1, we will take up this issue again.

4.3 Conditions on Focus Movement

The preceding discussion may have led to the erroneous impression that what we refer to as focus movement is a largely arbitrary process not subject to any structural conditions. The following data show that this impression is incorrect and that there are some, albeit weaker criteria for question-answer congruence with *ex situ*-constructions that justify our continued use of the notion *focus movement*.

The first criterion for *ex situ*-answers is that even though the fronted constituent does not have to be identical with the focus of the answer, it must at least overlap in order for a sequence of *wh*-question and *ex situ* answer to be well-formed. The data in (44) and (45) show that a Q/A-pair is not well-formed if the fronted element does not contain at least part of the new-information focus:

¹¹ For reasons unclear to us, such partial focus movement is not always possible. According to our informant, the following Q/A-pair is not felicitous:

(i.) Q: Mèe Audù ya yii? A: #Fĩrjii nee ya sàyaa.
what A. 3sg.rel.perf do fridge PRT 3sg.rel.perf buy
 ‘What did Audu do?’ ‘He bought A FRIDGE.’

- (44) Q: Wàa ya sàyi taabàa?
who 3sg.rel.perfbuy cigarette
 ‘Who bought a cigarette?’
 A: #**Taabàa** cee Audù ya sàyaa.
cigarette PRT A. 3sg.rel.perf buy
 ‘Audu bought a CIGARETTE.’
- (45) Q: Mèeneenèe Bàlaa ya yii?
what B. 3sg.rel.perf do
 ‘What did Balaa do?’
 A: #**Bàlaa** nèe ya gyaarà mootàa.
B. PRT 3sg.rel.perfrepair car
 ‘BALA repaired the car.’

In (44), the direct object is fronted even though it is the subject *Audù* that is the new-information focus. In (45), the subject is fronted even though it is the VP *gyarà mootàa* that is the new-information focus. The ill-formedness of both Q/A-pairs suggests that focushood is still a necessary condition for the *ex situ* strategy movement in that (at least part of) the fronted constituent must be in focus.

An additional condition on the realisation of *ex situ* focus in Q/A-pairs demands that the fronted focus constituent in the answer must be in the domain of the *wh*-element of the preceding question. The *wh*-word *wàaceecèe* ‘who (f.)’ in (46) introduces a presupposition to the effect that the questioned constituent be of feminine gender. This presupposition clashes with the masculine gender of the fronted subject in the answer:

- (46) Q: Wàa-ceecèe ta daawoo dàgà Ìkko?
who-female 3sg.fem.rel.perf return from Lagos
 ‘Who (of female sex) returned from Lagos?’
 A: #**Musa** (nèe) ya daawoo dàgà Ìkko.
M. PRT 3sg.masc.rel.perfreturn from Lagos
 ‘Musa returned from Lagos.’

In conclusion, we have seen that despite the possibility of focus pied-piping and partial focus movement, there are nonetheless clear criteria for the well-formedness of *ex situ* structures in Q/A-pairs in Hausa. This gives rise to the following generalisation for *ex situ* constructions:

- (47) *Ex Situ Generalisation, final version:*
 The fronted constituent in an *ex situ*-construction must
 (i) Overlap with or be identical to the focus constituent
 (ii) Satisfy additional presuppositions on the focus constituent as introduced by the preceding linguistic context, e.g. by *wh*-elements.

The condition in (i) ensures that every *ex situ* constituent relates directly to the focus constituent of the clause in either of three ways (identity, superpart, subpart). The important role played by focus in the conditions (i) and (ii) is reflected by our continued use of the label *focus movement* for the movement operation involved in the *ex situ* strategy. The reader should recall from section 2.2, though, that movement of a focus constituent is not obligatory (i.e. not forced by structural factors) unless it is the subject of the clause.

Interim summary: More than or less than the focus constituent can be realised *ex situ* in Hausa, as long as part of the moved constituent is in focus, or as long as the moved constituent makes up part of the focus. It follows that even though the *ex situ* position is always correlated with the focus of a clause, it is not a 100% reliable diagnostic for focus. For

this reason, it seems incorrect to refer to this position as the *focus position*. Rather, the *ex situ* position seems to provide a slot for constituents which must be (part of) the focus, but which are pragmatically prominent in the sense that they are ‘surprising’, ‘most relevant’, or ‘emphasised’ in the traditional Africanist usage (see section 6 for further discussion).

4.4 Focus Fronting in Other Languages

Concluding this section, we briefly discuss two typologically unrelated languages that also exhibit overt focus movement and that display a number of similarities to *ex situ* focus and *in situ* focus constructions in Hausa. In German, overt movement is an optional device for focus marking in addition to focus marking by pitch accent. In Hungarian, overt focus movement is also accompanied by prosodic marking either on the moved constituent or elsewhere in the clause. The purpose of this section is to demonstrate that it is possible and probably quite common for a language to employ prosodic focus marking in addition to syntactic focus marking (Hungarian), or vice versa (German). This will lead us to the question of whether Hausa also employs prosodic focus marking in addition to syntactic focus marking by movement.

4.4.1 German: Prosodic Focus Marking plus Optional Focus Movement

Being an accent language, German realises focus constituents mainly *in situ*. The focus constituent is obligatorily marked by a H*+L pitch accent on a designated syllable contained in the focus constituent, the so-called *focus exponent* (cf. 48) (see Uhmann 1991, Féry 1993):

(48) Q: What happened? / What did Peter do? / What did Peter read?

A: Peter hat ein BUCH gelesen.

P. has a book read

‘Peter has read a BOOK.’

As indicated by the range of questions that can be answered by (48A) with H*+L pitch accent on the direct object, focus marking by pitch accent often gives rise to focus ambiguities. In the case of (48), focus marking on the object indicates focus on either the object, the VP, or the entire clause (= all-new focus), i.e. on any of the constituents that contain the focus exponent (see Uhmann 1991, chapter 5).¹² That is, the focus structure of a given utterance in German is not always unambiguously identifiable by locating its pitch accent, but often requires contextual resolution (this point is particularly stressed in Büring 2004).

In addition to prosodic marking, the focused constituent can be optionally highlighted by movement to a left-peripheral position in the *Vorfeld*, which would be SpecCP in standard generative analyses of German following Thiersch (1978). If such optional focus fronting takes place, we encounter the same phenomena that were discussed in connection with the *ex situ* strategy in Hausa, namely focus pied-piping for structural reasons and partial focus movement. As in Hausa, focused heads cannot move on their own. They must pied-pipe the immediately dominating maximal projection, the PP in (49):

(49) Q: Ist das Buch AUF oder UNTER dem Tisch?

is the book on or under the table

‘Is the book on the table or under the table?’

A: [PP UNTER dem Tisch]_i ist das Buch t_i.

under the table is the book

¹² In a nutshell, the relation between focus exponent and focus constituent is mediated syntactically along the projection line, subject to so-called focus projection rules (Selkirk 1984, 1995). The projection rules say that focus can project from arguments to their selecting heads (but not from heads to their selected arguments!), and from heads upward to their maximal projections. Applied to (48), this means that focus can project from the direct object (the focus exponent) to the verb, and from the verb to VP (resulting in VP-focus), or further via I, IP, and C, to CP (resulting in all-new focus).

‘The book is UNDER the table.’

As in Hausa, only part of the focus constituent can be focused as long as it contains the focus exponent. For instance, in sentences with VP-focus only the direct object NP can be fronted (50) (focus is bold, pitch accent is indicated by small caps).

- (50) Q: Was hat Peter gemacht?
what has Peter done
‘What did Peter do?’
A: [**Ein BUCH**]₁ hat Peter [_{VP} t₁ **gelesen**]_{FOC}.
a book has P. read
‘A BOOK, Peter read.’

The fact that this kind of movement targets constituents smaller than the actual focus constituent indicates that it is not the focus status of a constituent that is directly responsible for this movement (in addition to the fact that focus constituents do not *have* to move anyway). In a recent analysis, cast in the minimalist framework (Chomsky 1995), Fanselow (2004) argues that the factors behind partial focus movement (his *pars pro toto* (*ptt*) movement) are structural, and not semantic or pragmatic in nature. His analysis capitalises on the fact that the moved part of the focus constituent must contain the focus exponent, i.e. it must contain the constituent with the H*+L pitch accent. As a result, the following Q/A-pair is not well-formed:

- (50’) Q: Was hat Peter gemacht?
what has P. done
‘What did Peter do?’
A: # [**Ein Buch**]₁ hat Peter [_{VP} t₁ **GELESEN**]_{FOC}.
a book has P. read
‘A book, Peter READ.’

Since the moved constituent in partial focus movement always contains the H*+T pitch accent, Fanselow suggests that this kind of movement is triggered by a formal, namely phonological feature α on the functional head C, rather than a discursive feature such as [+FOC]. This formal feature α is uninterpretable at LF and must be checked by a pitch accent before SpellOut in order to ensure interpretability (see Chomsky 1995). The fact that α is optionally assigned to C accounts for the optionality of partial focus movement. Furthermore, since focus in German is obligatorily marked by pitch accent, partial focus fronting is predicted to be available in general, independent of pragmatic factors.

Finally, when partial focus movement takes place, the focus constituent can be calculated starting from the trace of the moved and accented constituent (or after reconstruction of the accented material using the same focus projection rules as in the case of (48) above). Due to this, (50’’A) with pitch accent on the fronted verb is a well-formed reply to the *wh*-question only if the object NP *ein Buch* ‘a book’ is given in the preceding context. Because of the head-argument asymmetry in the focus projection rules, focus projection from the accented verb onto the argument NP *ein Buch* is impossible (see footnote 12). As a result, the VP in (50’’A) cannot be entirely new.

- (50’’)Q: Was hat Peter gemacht?
what has P. done
‘What did Peter do?’
A: # [**GELESEN**]₁ hat Peter [_{VP} [_{NP} **ein Buch**] [t₁]_{FOC}]_{FOC}.
read has P. a book
‘READING Peter did to the book.’

In other words, the focus possibilities after partial focus movement are the same as before movement. As in Hausa, then, partial focus movement does not lead to a decrease in focus possibilities. This is in line with Fanselow’s conclusion that the relation between optional focus movement and the focus of the clause is only indirect: Focus movement always targets the constituent with H*+L pitch accent, and the H*+L pitch accent always indicates focus. It follows that partial focus movement always targets (part of) the focus constituent.

Summing up, German marks the focus constituent by prosodic means. These are optionally accompanied by syntactic movement. Focus movement in German shares a number of properties with focus movement of non-subjects in Hausa (optionality, focus pied-piping, partial focus movement). Finally, prosodic marking is the dominating factor in the focus marking system of German. It is obligatory, and it is ultimately responsible for optional movement through the assignment of a H*+L pitch accent to part of the focus constituent. Given the observed parallels with focus movement of non-subjects in Hausa, the question arises whether prosodic factors also play a role in marking focus marking in this language.

4.4.2 Hungarian: Focus Movement Plus Prosodic Focus Marking

Hungarian is another language that exhibits syntactic movement of a focus constituent to a designated preverbal focus position. (51) illustrates focus movement in Hungarian (see e.g. Kiss (1998) and references).

- (51) Q: Kit hivta-l meg?
who invite-2sg PFX
 ‘Who did you invite?’
 A: **Jánost** hivta-m meg.
J. invite-1sg PFX
 ‘I invited JOHN.’

Even though it is typologically not related, Hungarian shares a number of properties with Hausa when it comes to the realisation of focus (the following discussion draws heavily on the discussion in Roberts (1998)).

First, even though the *ex situ* (movement) strategy is often perceived to be the default strategy for marking focus in Hungarian, the realisation of focus *in situ* is also possible at least for instances of new-information focus in answers to *wh*-questions (in particular when the focus constituent is VP or IP) (see e.g. Kenesei 1996, Kiss 1998, Vallduví & Vilkuna 1998, Roberts 1998, Szendrői 2003). The question in (51) (repeated) could also be followed by the answer in (51’) (taken from Roberts 1998:133).¹³

- (51’) Q: Kit hivta-l meg?
who invite-2sg PFX
 ‘Who did you invite?’
 A: Meg- hivta-m peldaul **Jánost**.
PFX invite-1sg for-example J.
 ‘I invited JOHN, for example.’

Second, as in Hausa, there seems to be a subject-object asymmetry concerning the availability of *in situ* focus (section 2.2). Roberts (1998:134) notes in passing that the *ex situ* strategy is consistently preferred for focused subjects even if these occur as new-information focus in answers to *wh*-questions.

Third, in case a sentence contains multiple foci, only one constituent may be moved to the preverbal position, presumably for syntactic reasons. The second focus constituent must be

¹³ As discussed in section 3.1, Kiss (1998) assumes that the different realisation as *in situ* or *ex situ* focus corresponds to a difference in meaning: *Ex situ* focus is interpreted exhaustively, whereas *in situ* focus is not. See Szendrői (2003) and references therein for an opposing view.

realised *in situ* (ibid.:136). While the answer to the multiple question in (52a) is slightly marked, there are other cases of multiple focus that are clearly unmarked, cf. (52b) from Kiss (1998:11).

- (52) a. Q: Ki mit adott el?
who what sold PFX
 ‘Who sold what?’
 A: **János** el adta **a televízióját**, **Mari** **a új kabátját**, és **István** **a kameráját**.
J. PFX sell the TV M. the new coat and I. the camera
 ‘Janos sold his television, Mari her new coat, and István his camera.’
- b. **János** evett meg **csak két süteményt**.
J.-nom ate-3sg PFX only two cookies-acc
 ‘It was John who ate only two cookies’

Parallel facts were observed for Hausa in section 2.3.

Fourth, and most importantly for our present purposes, the fronted constituent does not always equal the focus constituent of the clause (ibid.:136). As in Hausa, there are two subcases to be distinguished. First, since focus movement is subject to general syntactic constraints, focused heads and NP-modifiers cannot move to the focus position in isolation because of the structure preservation principle. Instead, they have to pied-pipe the next higher maximal projection, as illustrated in (53) (Roberts’ example (27)) (we will turn to the reason for why *unalmas* is bold-faced directly):

- (53) János [az **unalmas** jelentéseket] olvassa fel
J. the boring reports-ACC read PFX
 ‘It is the BORING reports that John read(s).’

Second, partial focus movement is also possible in Hungarian. Attributing this observation to Kenesei, Roberts (ibid.:137) observes that only part of a focused VP or IP may move to the focus position, quite parallel to what we observed for Hausa in section 4.2. Thus, next to (54a) with the entire focused VP *in situ*, there is the possibility of (54b) with syntactic movement of the object to the preverbal position (the focus constituent is indicated by brackets):

- (54) a. Péter [**fel-olvastaa Hamletet a kertben**] (nem pedig úszott)
Peter PFX-read the Hamlet the garden-INE not rather swim
 b. Péter [**a Hamletet olvasta fel a kertben**] (nem pedig úszott)
Peter the Hamlet read PFX the garden-INE not rather swim
 ‘What Peter did was read Hamlet in the garden (rather than swim).’

The examples in (53) and (54) show clearly that Hungarian is similar to Hausa in that the fronted constituent is not necessarily identical to the focus constituent. As in Hausa, either more than the focus constituent can be moved (focus pied-piping), or only a part of the focus constituent can be moved (partial focus movement).

Nonetheless, it is possible to identify the focus constituent in (53) and (54b) because Hungarian has a second focus marking device at its disposal, prosodic marking: In (53), the narrow focus on the modifier *unalmas* ‘boring’ is prosodically marked by a pitch accent (ibid.:138). If the entire fronted NP was in focus, pitch accent would be on the head noun *jelentéseket* ‘reports’. Likewise, VP-focus in (54b) is indicated by prosodic prominence both on the fronted element and on that part of the focus constituent that remains *in situ*. In other words, prosody supports the syntactic component in marking focus in Hungarian.¹⁴

¹⁴ Roberts proposes a more radical analysis on which prosodic factors play the chief role in focus marking. On her analysis, overt focus movement is triggered by prosodic factors. The focus constituent is a left-peripheral

In conclusion, prosody play an important role in connection with *ex situ* focus constructions in both German and Hungarian: In German, prosody is the all-important factor that determines which part of the focus element can be fronted (optionally). In Hungarian, prosody helps the syntactic component in cases where the syntax fails to identify the focus constituent precisely. It marks the narrow focus constituent in focus pied-piped constructions, and it marks that part of the focus constituent that remains *in situ* in case of partial focus movement. In light of the parallels concerning focus movement between Hausa on one hand and German and Hungarian on the other, the questions arises as to whether prosody plays a role in Hausa focus marking as well. More generally, this question is of importance because focused non-subjects do not *have* to move in Hausa, and are therefore not syntactically marked for focus. The question is thus whether such focus constituents are focus-marked by prosodic means, or whether they are not focus-marked at all.

5. Prosodic Marking of In Situ Focus in Hausa?

In sections 2 to 4, two things have emerged. First, unless a focus constituent is the subject of the clause, it does not have to move at all in Hausa. It can remain *in situ*, i.e., it is not syntactically marked for focus (see sections 2 and 3). Second, even if focus movement applies, it will not necessarily lead to an unambiguous identification of the focus constituent (section 4). The discussion of German and in particular Hungarian in the preceding section has shown that these languages employ a second grammatical device, namely prosody for marking focus in such cases. Work on Chinese has shown that at least some tone languages make use of intonation in addition to syntactic means in order to mark focus (Xu 1999 and Xu 2004). Furthermore, prosodic prominence is sometimes argued to be a near universal focus-marking device (Gundel 1988). All this, together with the fact that prosody is known to play a role in connection with *ex situ* focus in Hausa (Leben et al. 1989, see below), leads one to expect that it should also play a role in marking *in situ* focus in Hausa.

In this section, we show that this expectation is not borne out.¹⁵ Instead, it appears that *in situ* focus in Hausa is not marked at all, at least when it comes to new-information focus in Q/A-pairs. This result is remarkable in light of the fact that grammatical focus marking is often taken to be obligatory in the theoretical literature on focus.

In what follows we give a brief introduction to the intonational phonology of Hausa in section 5.1. In 5.2, we show - based on qualitative, quantitative and perceptual analyses - that *in situ* focus is not marked at all, neither syntactically nor prosodically. In 5.3, it will emerge that the absence of prosodic focus marking with *in situ* focus is not a peculiarity of Hausa, but is also found in other African languages from within and outside the Chadic language family.

5.1 Hausa Intonational Phonology

Leben et al. (1989) and Inkelas and Leben (1990) identify a number of intonational processes in Hausa. Like other tone languages, Hausa exhibits the phenomenon of *downdrift*: In the course of an utterance, the absolute pitch of H tones and L tones decreases with the result that a late H tone may be lower (in absolute terms) than an early L tone. The effect of downdrift is illustrated schematically in (55) (an example adapted from Leben et. al 1989: 50). Each H tone is lower than the preceding H tone, and each L tone is lower than the preceding L tone:

position such that it can be assigned main stress according to the stress assignment rules that are operative in Hungarian. This view is shared by Szendrői (2003), who argues convincingly for a stress-based analysis.

¹⁵ We have only looked at pure instances of *in situ* focus. We have not looked at prosodic marking with focus pied-piping, nor at focus marking with partial focus marking. Regarding the latter, we suspect that - since prosodic focus marking is absent with *in situ* focus in general - it should also be absent in such cases where only part of the focus remains *in situ*.

(55)
f0

H L H L L L H L
A-nàa ãrubùutà wàsiikàa ‘One is writing a letter.’
3sg-contwriting letter

While downdrift is a global rule that usually affects the entire utterance, there are also more local rules that apply within a more restricted domain, the *intonational phrase* (ibid.:46). Longer Hausa utterances usually divide into several such intonational phrases. Quite generally, there appear to be intonational phrase boundaries between an *ex situ* focus constituent and the rest of the clause, between a subject and the rest of the clause, and between the direct object and subsequent embedded clauses and/or adverbials. The three phrase boundaries are marked by a slash in (56ab):

- (56) a. **Maalàm Nuhù** nee / ya hanà Lawàn / hiĩra dà Hàuwa.
Malam Nuhu *PRT* *3sg.rel.perfprevent* *Lawan* *chat with* *Hawwa*
‘It was Malam Nuhu / who prevented Lawan / from chatting with Hawwa.’
b. Maalàm Nuhù / yaa hanà Lawàn / hiĩra dà Hàuwa.
Malam Nuhu *3sg.perf prevent* *Lawan* *chat with* *Hawwa*
‘Malam Nuhu / prevented Lawan / from chatting with Hawwa.’

It is worth pointing out that there is no intonational phrase boundary between the verb and the object NP, suggesting a close structural relationship between the two constituents.

Leben et al. (1989) further isolate three prosodic processes that can serve as diagnostics for intonational phrase boundaries (ibid.:47-49). First, there is an optional process of *Low Raising*. It assimilates an L tone between two H tones upward and cannot apply across intonational phrase boundaries. For instance, the low tone on *Lawàn* in (56ab) cannot be raised since it occurs immediately before a phrase boundary. Second, *High Raising*, which raises the second H tone in a HHL sequence, is also blocked at intonational phrase boundaries. In contrast, *High Base Value Resetting* only applies at intonational boundaries. It (re)sets the pitch of the first H tone in an intonational phrase independently of the pitch of the preceding H tone. In effect, High Base Value Resetting interrupts the downward trend induced by downdrift, bringing the pitch back to a higher value from where it can downdrift again. We will see graphic illustrations of some of these processes in the next section. What is important for our purposes is that the application or blocking of these processes constitutes a suitable diagnostic for the presence or absence of an intonational boundary. As shown by Kanerva (1990), Truckenbrodt (1995), Downing (2002), and many others, prosodic boundaries are often used in place of pitch as a prosodic focus marking device in African tone languages.

Turning to pitch, Leben et al. (1989) discuss another interesting effect of immediate relevance in the context of focus marking in Hausa. This is a local prosodic process ‘where a single High tone on an individual word *is raised to highlight that word*’ (ibid.:46, our italics). An example in question is the H tone on *Nuhù* in the *ex situ* phrase *Maalàm Nuhù* in (56a). The existence of local H raising for highlighting purposes in *ex situ* contexts is reminiscent of comparable processes in non-tonal languages such as German (see section 4.4 and 6.1.2), and shows that Hausa has the prosodic means to highlight, or focus a constituent if this constituent

is realised *ex situ*.¹⁶ Nonetheless, we will see shortly that local H raising is not attested with instances of *in situ* focus.

5.2 No Prosodic Marking of *In Situ* Focus in Hausa

Except for two short footnotes in Green & Jaggard (2003) and Jaggard (2004) we are not aware of any discussion of the prosodic properties of *in situ* focus in Hausa. Both Green & Jaggard and Jaggard report impressionistic judgments that the *in situ* focus constituent is marked prosodically. In a pilot study of the prosodic properties of *in situ* focus, however, we could find no evidence for any prosodic prominence whatsoever. Neither a qualitative analysis (section 5.2.1), nor a quantitative analysis (section 5.2.2), nor a follow-up perception experiment (section 5.2.3) delivered evidence for a prosodic prominence of *in situ* foci in terms of pitch or phrase boundaries.

5.2.1 *In Situ* Focus Qualitative

In this section we report the results from a qualitative analysis of our recorded material. In order to check for the prosodic properties of *in situ* focus constituents, we had one native speaker of Hausa read a total of 16 Q/A-pairs, where the answers were of the form *Hàliimà taa yankà X* ‘Halima 3sg.perf cut X’.¹⁷ The answers differed along two dimensions. They differed in the scope of the focus induced by the preceding question (IP= all-new focus: *What happened?*, VP-focus: *What did Halima do?*, OBJ-focus: *What did Halima cut?*, and V-focus: *What did Halima do with X?*).¹⁸ This variation served the purpose of checking whether a difference in focus structure resulted in a difference in prosodic structure (either in pitch or in phrasing). The second variation concerned the tonal pattern of the object constituent *X*. We chose four NPs with the tonal patterns HH (*kiffii* ‘fish’), HL (*naamàa* ‘meat’), LH (*kàazaa* ‘chicken’), and LL(L) (*àyàbà* ‘banana(s)’) respectively. This was done in order to check for potential interactions between the lexical tone structure of the object NP and certain suprasegmental effects as discussed in the preceding section.¹⁹ The sentences were recorded in a sound-proof acoustic lab. Subsequently, we identified their f_0 -contour, using *praat*.

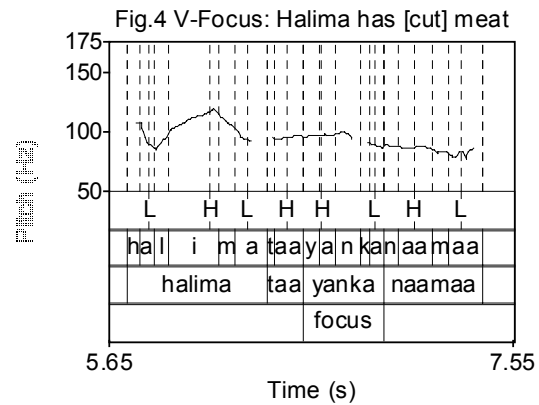
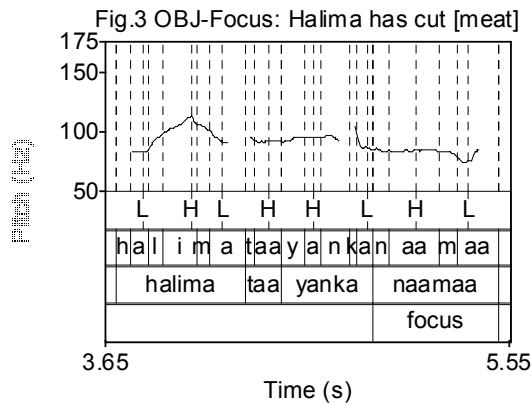
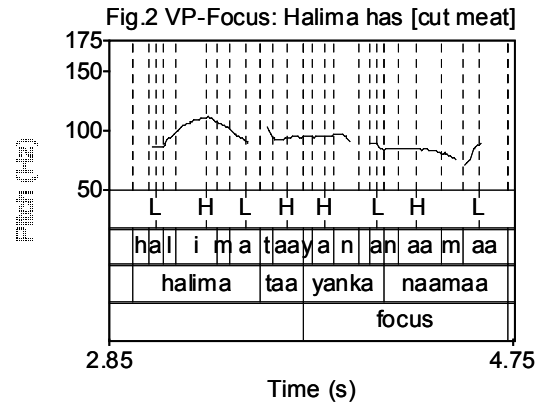
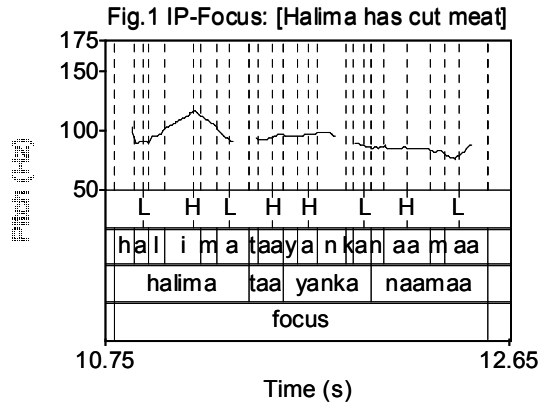
Figures 1 – 4 show exemplarily that there are no striking differences in the pitch contour of the recorded sentences, in particular not on or around the focus constituents. This holds no matter whether the focus comprises the entire clause (all-new or IP-focus), the VP, the direct object NP, or the verb alone. We chose the sentence *Hàliimà taa yankà naamàa* ‘Halima has cut meat’ for illustration because of its segmental make up. It has the smallest number of voiceless obstruents, which are known to disturb the pitch contour.

¹⁶ Unfortunately, the discussion of local H raising in Leben et al. (1989) is empirically restricted and leaves open a number of questions, among these what happens if the fronted constituent only contains L-toned syllables, hence no target for H raising, as in *àyàbà Hàliimà tà yankà* ‘It is bananas that Halima has cut’, or whether it only applies to *ex situ* subjects or to other constituents as well. We plan to address these issues in future research.

¹⁷ The total number of recorded Q/A-pairs was 160. The remaining sentences were partially included in order to test for the prosodic properties of *in situ* focus with another verb, *gaanii* ‘to see’, and for other grammatical conditions (presence or absence of sentence-final particle *nee/cee*, the prosodic realisation of *ex situ* focus with and without focus particle, and with and without relative morphology). In addition we included 32 arbitrary Q/A-pairs, both *in situ* and *ex situ*, as distractors. The 160 Q/A-pairs were divided in four blocks of 40 each. In between blocks, the native speaker was asked to read a longer dialogue taken from *Hausar Baka* as well as sections of two interviews from two Hausa journals.

¹⁸ In this, we followed the experimental set up in Uhmman (1991), where the focus of an utterance is controlled by a preceding question.

¹⁹ A second set of test sentences contrasted only instances of OBJ-focus and V-focus: The questions *Who did you see?* and *Did you see or hear (from) Audu?* were followed by answers of the form *I saw X*.



Since there is no evidence for pitch raising or pitch lowering directly on the focus constituent (nor in the surrounding environment), we tentatively conclude that pitch is not used to mark *in situ* focus in Hausa. This conclusion is supported by our findings for the realisation of V- and OBJ-focus in the second set of test sentences (see fn.19).

Looking at figures 1-4 in more detail, we see that they provide evidence for several of the tonal processes identified by Leben et al. (1989). All four sentences exhibit the phenomenon of downdrift: The H tones towards the end of the clause are realised with a lower pitch than those at the beginning. In addition, the data provide evidence for two of the three tonal processes that were argued to provide evidence for the absence or presence of intonational phrase boundaries.

Low Raising is instantiated on the second syllable of the verb *yan-kà*. The L tone of this syllable is located between two H tones. Consequently, its pitch is raised in assimilation to the H tones. The application of Low Raising results in a relatively flat structure and shows that there is no intonational boundary between the verb and the object NP. Crucially, Low Raising is also attested in Figure 3, which shows the realisation of narrow (*in situ*) focus on the direct object. This suggests that *in situ* focus on an object NP in Hausa is not indicated by a prosodic boundary before the object NP.

High Raising is instantiated on the first syllable of the verb *yan-kà*. It realises the second H tone in a HHL sequence, and consequently this H tone is raised higher than that of the preceding auxiliary *taa* ‘3sg.perf’. The application of High Raising shows that there is no intonational boundary between the auxiliary and the verb. Crucially, High Raising is also attested in Figure 4, which shows the realisation of narrow (*in situ*) focus on the verb. This suggests that *in situ* focus on a verb in Hausa is not indicated by a prosodic boundary *before* the verb either (the same applies to VP-focus in Figure 2). Since there is no evidence for an intonational boundary preceding or following the focus constituent, we tentatively conclude that prosodic boundaries are not used for marking *in situ* focus in Hausa, contrary to what we

find in some Bantu languages.²⁰ This conclusion is supported by our findings for the realisation of V- and OBJ-focus in the second set of test sentences (see fn.19).

This section has shown that a qualitative analysis does not provide any evidence for prosodic marking of *in situ* focus in Hausa. In particular, sentences with narrow focus on the object NP (Figure 3) and sentences with narrow focus on the verb (Figure 4) are not prosodically distinguished. Neither is the focus constituent realised with a particular (raised) pitch, nor is there a prosodic boundary preceding or following the focus constituent. These conclusions are supported by a quantitative analysis of the recorded sentences.

5.2.2 *In Situ* Focus Quantitative

A quantitative analysis of the acoustic parameters pitch, duration, and intensity provided no evidence for prosodic marking of *in situ* (new-information) focus either. The focus constituent is not realised with a particular pitch, nor with a particular intensity, nor is it lengthened. Even though the study has no statistical significance (only one speaker, each sentence was read only once), we feel justified in taking these finding as support for the central claim of this section, namely that *in situ* focus is not marked prosodically in Hausa.

In the quantitative study, we measured five acoustic parameters (mean pitch, maximum pitch, minimum pitch, duration, and intensity) for each of the four constituents *Hàliimà* (SUBJ), *taa* (AUX), *yankà* (V), and *naamàa / àyàbà / kiifii / kàazaa* (OBJ) of our sample sentence *Hàliimà taa yankà X* ‘Halima cut X’ in each focus condition (OBJ-focus, VP-focus, V-focus, all-new focus). Measurements were taken for a pitch range from 75 Hz to 300 Hz, the standard pitch range for male speakers (see Boersma & Weenink 2003).

The following tables present the average values for each parameter of the four instantiations of *Hàliimà taa yankà X* in each focus condition. By considering only average values, we hope to neutralise the potentially misleading effects of incidental paralinguistic differences, e.g. the effects of a raised voice (see e.g. Ladd 1996:270). At the same time, the average values should bring out more clearly (i.e. not obscured by incidental paralinguistic effects) any categorical, focus-related differences, if they exist. For instance, if a particular focus constituent, say the verb, was prosodically prominent in some way, say, if it was realised with higher pitch, or with a longer duration, or with a higher intensity, this should show in the average values. The average values for mean pitch, maximum pitch, minimum pitch, intensity, and duration are given in tables 3 – 7. The reader should pay special attention to the shaded cells, which give the values for verb and object on the respective narrow focus conditions, i.e. verb focus and object NP focus respectively. If (narrow) *in situ* focus was highlighted prosodically, we would expect a significant aberration in these cells.

Table 3: Average mean pitch of constituents in ‘*Hàliimà taa yankà*’ *X* (in Hz)

	<i>SUBJ</i>	<i>AUX</i>	<i>V</i>	<i>OBJ</i>
<i>OBJ-focus</i>	100.05	95.85	94.90	84.27
<i>VP-focus</i>	102.39	95.86	95.65	85.51
<i>V-focus</i>	104.02	97.47	96.91	84.03
<i>all-new focus</i>	100.79	95.45	95.24	83.86

Table 4: Average maximum pitch of constituents in ‘*Hàliimà taa yankà X*’ in (Hz)

	<i>SUBJ</i>	<i>AUX</i>	<i>V</i>	<i>OBJ</i>
<i>OBJ-focus</i>	114,71	115,90 ²¹	105,01	91,27
<i>VP-focus</i>	117,98	107,98	100,67	96,46

²⁰ Our data further suggest that the intonational phrase boundary after *in situ* subjects postulated by Leben et al. (1989) (see 56b) is optional rather than obligatory. Low Raising does not seem to be blocked on the final L tone of the subject *Hàliimà*. In addition, a pause after the subject occurs only in 2 out of 16 cases. On the other hand, if a pause occurs at all in the recorded material it occurs immediately after the subject and before the auxiliary. This gives further support to our conclusion that there are no intonational boundaries before the verb or the object when these constituents are focused.

²¹ We take the high values in this column to be the result of a disturbance created by the plosive /t/ in *taa*.

<i>V-focus</i>	120,79	113,52	104,48	92,83
<i>all-new focus</i>	114,92	108,75	103,65	101,18

Table 5: Average minimum pitch of constituents in ‘Hàliimà taa yankà’ X in (Hz)

	<i>SUBJ</i>	<i>AUX</i>	<i>V</i>	<i>OBJ</i>
<i>OBJ-focus</i>	83.33	92.70	80.25	77.19
<i>VP-focus</i>	85.28	93.58	82.35	76.43
<i>V-focus</i>	86.25	94.23	82.20	76.42
<i>all-new focus</i>	85.15	91.63	83.57	75.84

Table 6: Average intensity of constituents in ‘Hàliimà taa yankà X’ in dB

	<i>SUBJ</i>	<i>AUX</i>	<i>V</i>	<i>OBJ</i>
<i>OBJ-focus</i>	67.86	63.58	67.83	63.36
<i>VP-focus</i>	68.69	72.33	68.65	62.43
<i>V-focus</i>	69.58	61.69	69.42	64.20
<i>all-new focus</i>	69.05	67.16	68.62	62.16

Table 7: Average duration of constituents in ‘Hàliimà taa yankà’ X (in s)

	<i>SUBJ</i>	<i>AUX</i>	<i>V</i>	<i>OBJ</i>
<i>OBJ-focus</i>	0.67	0.20	0.48	0.57
<i>VP-focus</i>	0.63	0.195	0.41	0.55
<i>V-focus</i>	0.66	0.17	0.43	0.52
<i>all-new focus</i>	0.675	0.2	0.45	0.56

Looking at the pitch values in tables 3-5 first, these nicely illustrate the effects of downdrift. In general, the values in the more rightward columns are lower than the values in the more leftward columns. On the other hand, the pitch values do not differ significantly within the respective columns. With the exception of the second column in table 4 (cf. fn.21), the variation of mean, maximum and minimum pitch within each column is small (2-5 Hz), and seems to lie below the perceptual threshold (see also the following section). Neither is it the case that the mean or maximum pitch of a constituent is higher, let alone significantly higher when this constituent is focused. While the average pitch on narrowly focused verbs is minimally higher than on verbs that are not in focus, or part of a wider focus (cf. table 3), the same cannot be said for their maximum pitch, nor for mean or maximum pitch on narrowly focused objects (cf. tables 3 and 4). Pending a statistically more grounded investigation, we tentatively conclude that (new-information) *in situ* focus is not marked by a change in pitch.

The intensity and duration data in tables 6 and 7 show that new-information focus is not indicated by *stress* either, where stress is to be understood as phonetic salience in terms of loudness or duration (Ladd 1996:58). While narrowly focused verbs are realised with a slightly higher (<0,8 db) intensity, this does not hold for narrowly focused objects (cf. table 6). And while the duration of narrowly focused objects is minimally longer (0,1 s), this does not hold for narrowly focused verbs (cf. table 7).

Summing up, the quantitative analysis confirms the results of the qualitative analysis: In Hausa, *in situ* (new information) focus is not prosodically marked. This result is further confirmed by a perception experiment to which we turn now.

5.2.3 A Perception Study of *In Situ* Focus

In order to make sure that there are no subtle prosodic cues that have escaped a qualitative or quantitative analysis, but which nonetheless enable native speakers of Hausa to identify instances of *in situ* focus, we have conducted a perception experiment that consisted of two parts.

In the first part of the experiment, the (same) Hausa speaker had to listen to 16 target structures in form of simple Q/A-pairs: Each of the four focus-controlling questions *What did you see at home?* (all-new), *What did Halima do?* (VP), *What did Halima cut?* (OBJ), and

What did Halima do with the meat? (V) was combined with the four instantiations of the sentence *Halima has cut meat* under all-new, VP, OBJ, and V-focus control.²² The speaker was instructed to judge for each question-answer sequence whether it was (a.) well-formed, (b.) not well-formed, or (c.) whether he was not sure. The expectation was that the speaker should reject all but the four *matching* structures (i.e. V-V, VP-VP, OBJ-OBJ, all-new-all-new) of the 16 target structures if there were subtle prosodic differences in the realisation of the various *in situ* foci. Instead, he judged twelve combinations (V-V, V-VP, V-OBJ, V-all-new, OBJ-OBJ, OBJ-V, OBJ-VP, OBJ-all-new, VP-VP, VP-V, VP-OBJ, VP-all-new) as being well-formed. In addition, he assigned the four remaining Q/A-pairs that were introduced by the all-new question *What did you see at home?* the same slightly degraded status, commenting on all of them that the answer to such a question should be introduced by *Na ga ...* ‘I saw (that) ...’. In short, the native speaker could hear no difference at all between the various instantiations of the same sentence with different *in situ* foci.

The experimental set up of the second part of the experiment was slightly different. Instead of listening to one question and one answer in isolation, the speaker was presented with two potential answers to each question. One of these answers was the original answer to that question. The second answer was taken from another focus-context (i.e. it was originally the answer to a different question). This set up in terms of minimal answer pairs was chosen in order to focus the speaker’s attention on possible subtle differences in the realisation of different focus structures. Using the recordings of the answer *Audu yaa ga Maanii* ‘Audu 3sg.perf see Mani’ in response to the four questions *What happened?*, *What did Audu do?*, *Whom did Audu see?*, and *Did Audu see Mani or did he hear (from) him?*, we constructed 12 target structures.²³ The speaker was instructed to specify which of the two alternative answers was more appropriate in the given context, or whether both were equivalent. The expectation was that the speaker should choose one of the two alternative answers as more appropriate if there were subtle prosodic differences in the realisation of the various *in situ* foci. Instead, he judged the answers to be equivalent in 10 out of 12 cases.²⁴ In the two cases where the answers were judged to be different, he chose the second answer as more appropriate, possibly an effect of Labov’s problem (see footnote 23). So, once again, it seems that native speakers perceive no difference in the realisation of different *in situ* foci. The perception experiment thus gives support to the claim that *in situ* focus is prosodically unmarked in Hausa.

5.3 No Prosodic Marking of *In Situ* Focus in Hausa

²² The 16 target structures were part of an overall number of 38 Q/A-pairs, all formed out of previously recorded material. The rest of the pairs, both matching and non-matching Q/A-pairs, were used as fillers. The Q/A-pairs were given in random order, with three filler pairs introducing, and three filler pairs concluding the main test (in order to counter potential effects of initial confusion or fatigue). The fillers served the second function of making sure that the test person did not answer randomly. Indeed, the test person judged 19 out of the 22 fillers (> 86%) correctly as well-formed or not well-formed, indicating that the reliability of the test results is quite high.

²³ The 12 target structures were part of an overall number of 28 Q/doubleA-pairs, all formed out of previously recorded material. The rest of the pairs, both matching and non-matching Q/A-pairs, were used as fillers. The Q/A-pairs were given in random order, with two filler pairs introducing, and two filler pairs concluding the main test (in order to counter potential effects of initial confusion or fatigue). For methodological reasons, each Q/doubleA-pair was presented in the following way: Q – A1 – Q – A2, i.e. the question was repeated before the second answer was given. In order to counter possible effects of what is referred to as *Labov’s problem*, i.e. the tendency observed in test persons to judge the second of two alternatives as better, we gave the original answer as A1 in half of the cases, and as A2 in the other half. Again, the fillers served the second function of making sure that the test person did not answer randomly. Indeed, the test person correctly identified the correct answer, or correctly specified that both answers were equivalent in 14 out of the 16 fillers (= 87,5%). Again, we take this as indicating that the reliability of the test results is quite high.

²⁴ Although he had produced them in the recording session, the speaker indicated in the perception experiment that he did not consider sentences of the form *Audu saw X* as good responses to the VP-question *What did Audu do?*, a question for an activity. Therefore, he judged both the original answer and the alternative answer (from an all-new, OBJ-, or V-focus context) as equally bad in the context of this question.

In the previous section, it was established that *in situ* focus is not marked prosodically in Hausa. As surprising as this may seem from a European, accent-based perspective, it shows that the absence of focus marking is not restricted to Hausa, nor to the Chadic family.

The focus marking system of Tangale, another Chadic language spoken in Northern Nigeria, resembles that of Hausa in several respects. First, the subject is the only syntactic constituent that is consistently marked for focus. Second, even though Tangale has a prosodic focus marking device for *in situ* focus on other syntactic constituents (sentence, VP, V, OBJ) in form of a prosodic boundary before the direct object NP, focus marking on these constituents is systematically lacking in a number of syntactic contexts, e.g. in the progressive aspect. The following sentence could be used as an out-of-the-blue utterance (all-new focus), or in response to the questions *What is Laku doing?* (VP-focus), *What is Laku writing?* (OBJ-focus), or *Is Laku reading a letter or writing a letter?* (V-focus) (see Hartmann & Zimmermann 2004 for details).

- (57) Lakú n ball wasíka
 L. PROG writing letter
 ‘Laku is writing a letter.’

Looking at other language families, in the Bantu language Northern Sotho, the realisation of different *in situ* foci seems to be formally identical (Sabine Zerbian, p.c.). The following example from Zerbian (in prep.), could involve either verb focus or focus on the locative phrase, with no phonetic or perceptual difference:

- (58) Ke tla shóma polase-ng.
 1st FUT work cl9.farm-Loc
 ‘I will work on the farm.’

Finally, the Kwa-language Ewe also does not mark *in situ* focus, i.e. neither syntactically nor prosodically (Ines Fiedler, p.c.).

- (59) Q: What did the woman eat?
 A: nyónù á d̀ù àyĩ máwó.
 woman the eatbeansthat.PL
 ‘The woman ate the BEANS.’

5.4 Conclusion

In this section, we have shown that *in situ* focus is not marked prosodically in Hausa. We have further shown that the phenomenon of absent focus marking is not restricted to Hausa, but that it is also found in other African languages from different families (Chadic, Bantu, Kwa). We will return to the theoretical implications of the absence of focus marking in section 6.2.

6. On Pragmatically Induced Movement and the Absence of Focus-Marking

The preceding sections have identified two interesting properties of focus (marking) in Hausa: (i.) syntactic focus movement seems to be subject to pragmatic factors; and (ii.) focus need not be marked (when *in situ*). These findings have interesting theoretical consequences that we discuss now.

6.1 Pragmatic Movement

6.1.1 Partial Focus Movement Again

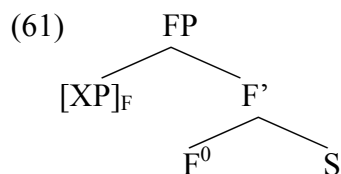
Let us begin by recapitulating an interesting property of *ex situ* focus in Hausa. In section 4.2, we observed that it is sometimes possible to distribute the focus over the two focus positions, i.e. the *ex situ* and the *in situ* position. In other words, only part of the focus is fronted in such sentences. This *partial focus movement* is illustrated in (60), repeated from section 4.2.

- (60) Q: Mèeneenee yà fàaru?
what 3sg.rel.perf happen
 ‘What happened?’
 A: **Dabboobi-n jeejii** nee mutàanee su-kà kaamàa.
animals-of bush PRT men 3pl-rel.perf catch
 ‘(The) men caught WILD ANIMALS.’

The *wh*-question determines that the entire answer constitutes the new-information focus. Nonetheless, only the object is fronted in (60). That the moved constituents are viewed as partial foci is evidenced by our two reliable indicators of focus: In both examples, the auxiliary appears in the relative form, and the moved constituents are followed by the focus sensitive particle *nee*.

In view of these data, the legitimate question arises why these constituents move. After all, since new information focus (as induced by the *wh*-question in (60)) is preferably realised *in situ* (see subsections 2.2 and 3.3), the update of the common ground as required by the question would have been satisfied if everything remained in its base-position. One might object that new-information focus *may* appear in the *ex situ* position (see section 3.2). But even then, it remains mysterious why only a part of the new information focus moves to the sentence-initial position.

Last but not least, it is not clear what triggers partial focus movement syntactically. Following Green (1997), *ex situ* focus is triggered by a focus feature in F^0 , the head of the focus phrase FP. This feature attracts the focus, causing it to leave its base-position. This is illustrated in (61):



This mechanism accounts for all cases where the entire focus moves to the initial position. However, it fails to account for cases of partial focus movement. It is unclear to us how the focus feature should be specified in such a way that its morpho-syntactic requirements can be checked by the entire focus constituent in some cases, but by a subpart thereof in others. We therefore have to look for an alternative solution to this problem. We propose that *ex situ* focus in Hausa is always pragmatically triggered. A focus constituent (or part of it) is fronted if and only if the speaker considers it to be pragmatically salient, i.e. if he wants to emphasise it. Before we lay out our views in more detail, we take another brief look at accent languages to see how these languages express emphasis.

6.1.2 Emphatic Intonation in Accent Languages

Focus in accent languages is realised by an H*+L tone on the focus exponent, i.e. on the prosodically most prominent syllable within the focus constituent (cf. section 4.4). This tonal accent is used for all focus types defined in section 1.2, i.e. new information, corrective, contrastive, selective focus, etc. However, it has often been claimed that the quality of the

H*+L tone may vary depending on the type of focus it realises. Thus, with corrective, selective or contrastive focus, the tonal accent is said to involve a higher pitch range, a steeper local rise of the basic F0 frequency, or extra length compared to the realisation of simple new information focus.²⁵

For an illustration of this difference, consider the two following pitch tracks from Alter et al. (2001). These figures show the difference between the fundamental F0 frequency of two identical German sentences (*Sie fuhr zum Bahnhof* – ‘She went to the station’) realised in two different contexts. In the first context (fig. 5), the entire sentence provides new information. The default accent is realised on the prepositional complement (*Bahnhof*). The second context (fig. 6) licenses a contrastive focus on the same constituent.

Fig. 5

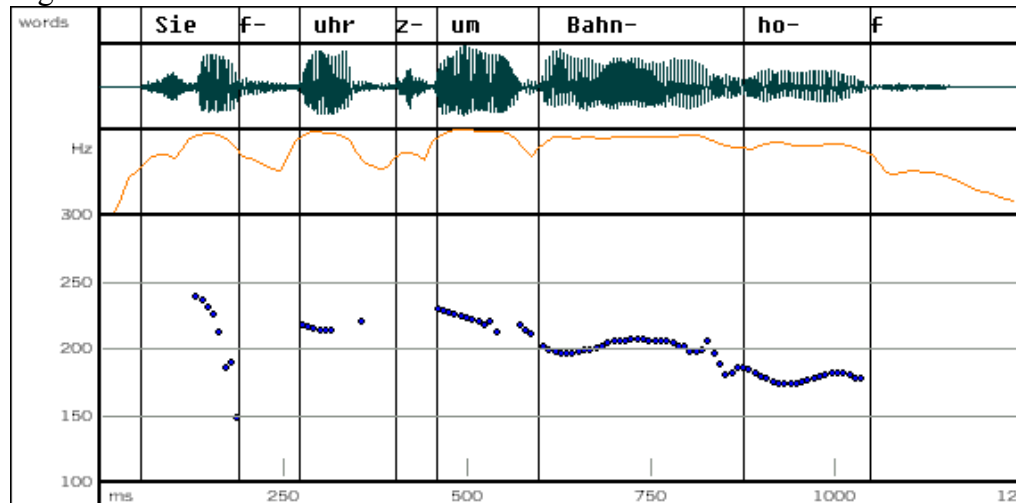
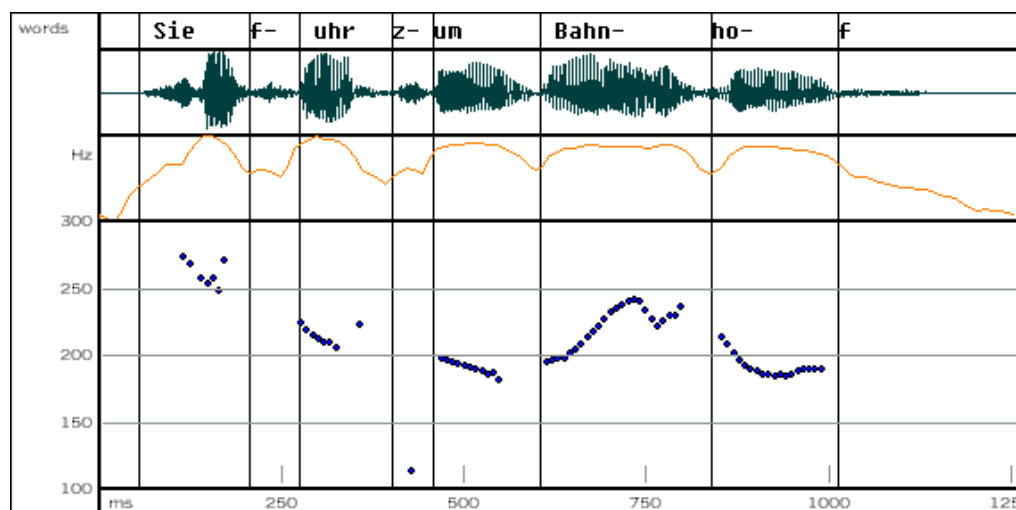


Fig. 6



The pitch tracks show very clearly that the accent that realises new information focus (fig. 5) is embedded within the general downdrifting intonation contour. If a contrastive focus is realised, the outline of the accent is much stronger: It has a steeper rise, a lower onset and a higher peak (see Alter et al. (2001) for further details).

Other studies come to similar results: It seems as if a contrastive focus is realised with more emphasis than a new information focus (see Chafe 1976, Couper-Kuhlen 1984, Bannert 1985, Wagner 1999). However, as interesting as this insight may be, it is not clear whether the

²⁵ Sometimes it is also said that the contrastive function of accent may be accompanied by a different nuclear tone (Gibbon 1998, Alter et al. 2001). A precise analysis of this tone has to await further research.

distinction is categorical or not, i.e. if a grammatical category *contrastive accent* really exists, or if the realisation of the H*+L accent is gradient (Bolinger 1961, 1989, Lambrecht 1994, Gibbon 1998). The results of a perception study, also carried out by Alter et al. (2001), support the latter view. The authors show that *contrastive accents* are usually accepted in contexts which license new information foci. The reverse, i.e. the acceptance of *new information accents* in contexts triggering a contrastive focus seems less felicitous. The judgments depend on the structure of the context provided and are far from clear. Furthermore, as Gibbon (1987) shows, there is often no striking acoustic difference between a contrastive focus and a background constituent with respect to its tonal realisation. The example he gives is the following.

- (62) Kennen Sie Herrn Buschkamp? Ja, ich KENNE Herrn Buschkamp.
,Do you know Mr. Buschkamp? Yes, I know Mr. Buschkamp.'

All constituents in the answer are given (*anaphoric* in Gibbon's terminology). The pitch accent is realised on the verb. Its quality does not differ from a contrastive focus accent.

More emphasis is also put on an accent if the speaker wants to express emotional states such as surprise, irritation or incredulity. According to Bannert (1985), the tonal manifestation of this accent in German is similar to the tonal realisation of a contrastive focus. As Gibbon (1998:91) puts it: 'Emphatic, or emotive accents are not necessarily different in kind from other accents, but basically just have 'more of everything'. In particular, they have broader pitch modulation and more extreme syllable lengthening than non-emphatic accents, as in /{ø::n/ *Schön!* 'Lovely!', where the *ö* may be extremely long.'

To conclude, in German, as well as in English, the H*+L focus accent can be realised with more or less emphasis along a gradient scale. A more emphatic realisation does not necessarily indicate anything. But it can indicate a contrastive (or selective/corrective) focus, or it can express an emotional state. In the next subsection, we turn back to Hausa and show how a tonal language expresses emphasis.

6.1.3 Pragmatically Driven Movement in Hausa

Recall from section 3.3 that in Hausa exhibits a clear tendency to realise new information focus *in situ*, whereas corrective, selective and contrastive focus are mostly realised *ex situ*. Thus, while accent languages use prosodic emphasis to differentiate between various pragmatic uses of a focus, a tonal language such as Hausa uses syntactic means to highlight the differences between them (new information focus on one hand vs. contrastive, corrective, selective focus on the other).

In this section we would like to further motivate the claim that focus fronting in Hausa is always pragmatically induced. A focus constituent is fronted if the speaker considers this move to be important for some reason. Notice that this notion of importance or emphasis is independent of, and superimposed on the basic semantic effects of focus. As discussed in section 1.2, these basic effects consist in separating presupposed from non-presupposed information and in introducing alternatives to the focus constituent. In our view, a focus constituent (or part of it) appears *ex situ* in order to mark its content or discourse function as unexpected or surprising in a given discourse situation.

Answers containing information focus are prototypical instances of discourse moves that are *unsurprising*. At the point in a discourse where a question has been asked, the most likely continuation of the discourse will be an answer providing the requested new information. In other words, the presence of new information that constitutes the focus can be anticipated by the preceding question. It is expected (even though its specific lexical content is yet unknown), and therefore need not be specifically marked. In our view, it is this basic characteristic of answers as anticipated discourse moves that is responsible for the tendency to realise information focus in answers *in situ* (see section 3.3). The hearer's awareness does not have to be directed to the information focus by syntactic movement since this information is what he has asked for anyway.

Given that the hearer's awareness need not be directed to the information focus in answers *per se*, syntactic movement can be employed to direct his attention to those parts of the new information that the speaker judges as particularly important. This strategy is chosen whenever a new-information answer is realised *ex situ*, or with instances of partial focus movement. In example (60) from section 6.1.1, it is not surprising that there is an answer to the question, nor that the men caught something. Unexpected, however, is the fact that they caught *wild animals* (*dabbobi-n jeejii*). Therefore, although the whole IP is in focus in the given question-context, only the object is fronted, thereby giving it more emphasis.

The prototypical discourse move following a declarative statement consists in the indication of agreement with what was said (often in form of a short *yes, hmmm*, in Hausa *tô*). In contrast, the unexpected move in such a situation is a rejection and correction of the previously made statement. According to this line of thinking, the overwhelming tendency to realise corrective focus *ex situ* observed in section 3.3 is simply a reflex of the marked status of corrections as unexpected discourse moves. Fronting of the corrective focus constituent furthermore helps to identify the exact location of the disagreement.

It should be clear that this notion of emphasis as directing the hearer's awareness to unexpected discourse moves and/or unexpected contents of the focus constituent is likely to be subject to subjective factors (what a certain speaker finds important or relevant at a given discourse stage) as well as to intercultural factors (what counts as unexpected in a culture). That such discourse expectations can be subject to intercultural variation is illustrated nicely by example (63), repeated from section 3.2.2.

(63) A: Nair̄aa àshīrin zaa kà biyaa in yaa yi makà.
naira twenty fut 2sg pay if 3sg do for.you
 'It is twenty Naira that you will pay if he makes it for you.'

B: A'a, zân biyaa **shâ biyaĩ** nèe. (HB 3.03)
no fut.1sg pay fifteen PRT
 'No, I will pay FIFTEEN.'

Here, speaker B corrects A's previous statement. We expect that in a non-bargaining culture, B's response would come as a surprise. Accordingly, the focus would have to be emphasised. In the cultural context of Hausa speakers, however, this kind of negotiation is the norm. The fact that speaker B corrects the requested amount of Naira *in situ* clearly shows this. In the cultural setting of Northern Nigeria, nobody would be surprised by B's intention to pay less than he was asked for. Therefore, the corrective focus constituent can remain *in situ*.

Finally, contrastive and selective foci can also be considered pragmatically more important than new information foci. Selective foci always have to do with choosing between alternatives laid out by the hearer. Contrastive foci indicate that an alternative in the alternative set is still active in the same discourse sequence. Consequently, both uses of focus also tend to be realised *ex situ*, as also shown in section 3.3.

The observed tendency to realise material that is more surprising, more important, or more relevant *ex situ* is reminiscent of Gundel's (1988) *First Things First Principle* as well as Givón's (1988) principle *Attend to the most urgent task first*. These are pragmatic principles, which are possibly weaker than hard grammatical constraints. In view of the Hausa focus data, however, they make better predictions. *Ex situ* focus is the *preferred* option to express emphasis, but it is not *obligatory*. While feature driven accounts run into notorious problems when faced with optional movement, pragmatic principles such as Gundel's or Givón's appear to be more adequate. It seems, then, that focus movement in Hausa is determined by pragmatic factors, such as emphasis. Saying that syntax is not blind to pragmatic considerations has far-reaching consequences for the architecture of the grammatical system as a whole. In particular, it is incompatible with grammatical models that assign syntax a predominant role in that it feeds both the phonological as well as the semantic/pragmatic component (Chomsky 1995). It is compatible, however, with claims in the recent literature (see e.g. Krifka 1998, Szendrői 2003 and references therein) that syntax is not entirely blind

to properties of the phonological interface, at least what concerns prosodic requirements. It could be, then, that syntax is sensitive to requirements of the semantic/pragmatic interface, too. That this is indeed the case, at least with genuine semantic phenomena such as quantifier scope, has been argued by Fox (1995). Along the same lines, syntax might well be sensitive to other semantic-pragmatic factors, such as emphasis. Ultimately, then, the Hausa data may provide evidence in favour of a grammatical model that postulates separate grammatical semantic-pragmatic, syntactic, and phonological modules that are connected by correspondence rules (see e.g. Jackendoff 1997).

6.1.4 Conclusion

Apart from the universal discourse-semantic property of focus to partition utterances into a focus and a presupposition, languages have the possibility to mark a focus more or less. One factor that seems to influence the grade of expressiveness in focus marking is emphasis. If a focus constituent is more surprising, more important, or more relevant, the focus is usually stronger marked. Languages differ typologically in their means to express a focus and consequently to express emphatic focus. Accent languages use prosody: emphasis is achieved by stronger stress. In contrast, tone languages employ pragmatically-driven syntactic movement for expressing emphasis: A more emphatic focus is realised *ex situ*, a less emphatic one remains in its base-position (if it is not the subject). These two ways of marking emphatic focus differ in that prosodic emphasis is gradient, while syntactic movement is categorical in nature.

6.2 On the Absence of Focus-Marking

The aim of this section is to discuss the theoretical consequences of the (partial) absence of focus marking in Hausa. The result of this discussion will be that our empirical findings for Hausa are not compatible with standard focus theories of focus, which therefore cannot lay claim to universality.

Standard theories of focus that were mostly designed for accent languages (from Jackendoff 1972 to Schwarzschild 1999) generally assume that focus must be marked, e.g. by pitch accent. In addition, there is a systematic relation between the focus of a sentence and the location of the pitch accent. This connection is usually established by a syntactic focus feature, which, following e.g. Selkirk (1995), is assigned to a word carrying a pitch accent (her *Basic Focus Rule*). The F-feature projects up the argument structure (*Focus Projection*), such that the F-marked constituent that is not dominated by any other F-feature corresponds to the pragmatically expected focus of the sentence (see also footnote 10). This is illustrated in (64) for English.

(64) Q: What did Mary do?

A: She [_{VP} talked_F [_{PP} to_F [_{NP} her_F [_N SISTER]_F]_F]_F].

Regarding the Hausa facts, Selkirk's theory and variations thereof run into serious problems: Since *in situ* focus is not marked at all in Hausa (cf. section 5), there is no prosodic (or syntactic) cue for the Basic Focus Rule to apply. As a consequence, there is no *starting point* for focus projection. But without focus projection, Hausa grammar does not have the possibility to mark the internal focus structure of a phrase. It follows that a calculation of a constituent's information status as given or new (Schwarzschild 1999), depending on the presence of absence of F-features, is impossible in Hausa.

The situation does not improve even if we restrict ourselves to instances of *ex situ* focus. As shown in sections 4.2 and 6.1.1, syntactic movement is not a reliable focus marker either. There, it was shown that the fronted constituent may also comprise just a part of or more than the focus constituent. Since the fronted (*ex situ*) constituent is not necessarily identical to the focus of the clause, we cannot simply assign it a focus feature. In addition, since focus movement is obligatory only for subjects, syntactic movement cannot be a general focus

marking device either. To conclude, it appears that focus in Hausa is marked inconsistently and even if it is marked there is no simple way to indicate the precise internal focus structure of the focus constituent.

In principle, there appear to be two ways to make sense of the lack of consistent focus marking in Hausa. First, one could argue that focus does not exist as a grammatical category in Hausa, which is reflected by a lack of formal F-features. From this, it follows that focus is need not be marked grammatically (e.g. in the *in situ* case). The lack of focus as a grammatical category is partly compensated for by a category of *emphasis*, which resembles Valduví & Vilkuna's (1998) notion of *kontrast*, and which is responsible for syntactic movement. There are, however, a number of arguments against this first alternative. First, focus plays a grammatical role in the case of focused subjects, which must be fronted (see section 2.2). Focus plays a second grammatical role in that it negatively constrains focus movement. In section 4.3, it was shown that not just any category can be fronted: A realisation *ex situ* is restricted to those constituents that form part of, or contain, or are identical to the focus constituent. Third, without the notion of *focus* as a grammatical category it would be impossible to account for the fact that constituents that provide new-information form a natural class with selectively, contrastively and correctively used constituents. These are all the constituents that *can* undergo syntactic movement to the designated initial position. Finally, giving up the notion of focus (as inducing alternatives) would require a reanalysis of those elements that are commonly known as focus-sensitive elements. As shown in section 3.2.5, such elements exist in Hausa, and they can combine with *in situ* and *ex situ* expressions alike. We therefore conclude that focus does exist as a grammatical category in Hausa even though it is not consistently marked.

An alternative and – in our view – more promising solution is to count Hausa among those languages that do not require obligatory focus marking. This characterisation of Hausa is reminiscent of the distinction between obligatory and non-obligatory focus-marking systems in Heine & Reh (1983) (see also Bearth 1999:127f.).²⁶ On this analysis, focus is present as an underlying grammatical category in Hausa (and possibly in form of a formal feature F), but it is not marked consistently. It follows that it can be grammatically marked, e.g. in the case of focused subjects. Furthermore, the category *focus* constrains the application of focus movement for reasons of emphasis. The *ex situ* realisation of an emphasised constituent gives an indirect indication of its status as being focused. The assumption of a category *focus* also accounts for the fact that expressions providing new-information behave like selectively, contrastively, or correctively used expressions in that they can undergo focus movement. Finally, an analysis in terms of non-obligatory focus-marking directly accounts for the existence and semantic behaviour of focus-sensitive particles.

We therefore conclude that focus is a grammatical category in Hausa, but that it does not have to be marked, except on subjects. As a result of the absence of focus marking, existing theories of focus that are based on accent languages fail to apply to Hausa and cannot lay claim to universality.

6.3 Compensating for the Lack of Focus Marking

Given the conclusions of the preceding section, the question arises as to whether the information structure is hopelessly underspecified in Hausa, or whether it can achieve the same degree of expressiveness as languages with obligatory focus-marking. In this section we argue for the latter option. We discuss two alternative strategies of information-structuring, *topic marking* and *inter-sentential marking*, which allow for the indirect identification of a focus constituent in the absence of explicit focus marking within the clause.

Turning to topic marking first, the prominent status of topics in Hausa is reflected by the fact that there is a default position for topics, the *in situ* subject position. As argued in section 2.2, a subject in base position is automatically understood as a topic. This accounted for the

²⁶ The discussion in Heine & Reh (1983) is restricted to languages that mark focus morphologically. However, the distinction seems to hold more generally when other focus marking devices are considered, too.

fact that focused subjects have to move (compare the identical situation in Tangale, cf. Hartmann & Zimmermann 2004). The rich inventory of topic markers (*dai, fa, kàm, kùwa, kò, maa*, translation not always clear), which are used all-pervasively in the language, also shows that Hausa is a *topic-prominent language*. As pointed out by Bearth (1999:135), the topic-prominence of Hausa is of relevance to the discussion of focus marking because topic and focus interact closely in determining the information-structure of a clause. In particular, the presence of topic markers allows for indirect focus marking in the following way: Marking a constituent as topic disqualifies it as a possible candidate for the focus constituent. The focus constituent must then be among those constituents that are not marked for topic.²⁷

The following examples show that topic marking is a particularly effective means of indirect focus marking in Hausa since more than one constituent can be marked as topic in the left periphery of the clause. In (65a), from Newman (2000:617), narrow focus on the *in situ* verb is indirectly marked by marking both subject and object as topic.

- (65) a. Audù **fa**, hùulaa **kàm**, yaa sàyaa.
 Audu TOP cap TOP 3sg.m.perf bought
 ‘As for Audu, regarding his cap, he BOUGHT (it).’
- b. Shii **maa** askèewaa zaa-à yî. (HB 3.11b)
 3.sg.m TOP shaving FUT-4 do
 ‘It (the beard), one will SHAVE (it).’

In (65b), we find a combination of topic marking on the object and *ex situ* realisation of the (nominalised) verb. The net result is, again, narrow focus on the verb. What we find, then, is that topic marking in Hausa provides a possibility for unambiguously identifying focus constituents, both *in situ* and *ex situ*, by exclusion.

The second compensating strategy of inter-sentential marking is typically found with instances of all-new focus, where the entire content of the clause is presented as new. In such a situation, which typically obtains in narrative sequences, the information status of the clause as all-new is indicated by particles, such as *kuma* ‘also’, *sai* ‘then’, or subordinating sequences such as *naa gaa* ‘I saw ...’, *yaa cê* ‘he said’.²⁸ The main function of these particles and subordinating particles seems to be a discourse-linking function, indicating that the following material is new information. The following sequence from an interview in the journal *Majigi* (#2, June 2002:27) is a nice illustration of inter-sentential focus marking (and topic marking) in action: Inter-sentential particles are highlighted in bold, new information is highlighted by italics (notice that vowel length and tone are usually not marked in written Hausa texts).

- (66) Context: First, we would like you to begin with presenting yourself and also a short history of you.

- [1] Ni dai *suna-na* Sadi sidi sharifai
 I TOP name-my Sadi Sidi Sharifai
 ‘As for me, my name is Sadi Sidi Sharifai.’
- [2] **kuma** *am-haife* ni a cikin gari Kano anguwa-r sharifai,
 also 4.perf-give.birth me inside town Kano quarter-of Sharifai
 ‘(Also) I was born in the city of Kano in the quarter Sharifai.’
- [3] na yi karatu a makaranta-r festival primary school

²⁷ Bearth (1999:129) calls this indirect strategy of focus marking *subtractive morphological focus marking*. The same strategy seems to be the discourse-functional trigger for the syntactic process of scrambling in German. There, a constituent can be focused by moving any non-focal material intervening between the focus constituent and the verb to a scrambled (topic?) position.

²⁸ Interestingly, the auxiliary occurs in the relative form with some of these particles in the absence of overt A'-movement.

- 1sg-perf do school at school-of Festival primary school
 ‘I went to school in the school of Festival primary school.’
- [4] **kuma** *na yi sakandare a makaranta-r kwakwaci da ke Kano*
 also 1sg do secondary at school-of REL rel.cont Kano
 ‘(Also) I did secondary in the school of *k’wak’waci* that is in Kano.’
- [5] **kuma** *ni ba-n wuce dan shekara ashirin da ukuba*
 also I NEG-1sg pass year twenty-three NEG
 ‘(Also) I am 23 years old.’

To summarise, Hausa is a language that does not mark focus consistently. But this does not mean that Hausa information-structure is under-specified and that there are no alternative means to identify the focus of an utterance. We have shown that Hausa has at least two alternative strategies that compensate for the lack of overt focus marking. Topic marking can serve to mark a focus indirectly by exclusion. Inter-sentential particles link narrative sequences and mark the following material as all-new.

6.4 Conclusion

In this section, we have argued that focused non-subjects are realised *ex situ* for reasons of emphasis rather than because of their focus status. The *ex situ* strategy was argued to be the categorical counterpart to the gradient means of expressing surprise by a modulation of pitch, which is typically found in accent languages. Since movement of non-subjects in Hausa does not indicate focus status per se, and given that there is no focus marking on *in situ* foci, we concluded that Hausa does not mark focus consistently. Finally, it was shown that Hausa has alternative discourse-structuring strategies that compensate for the lack of (direct) focus marking (at least in part).

7 Conclusion

In this paper, we have provided a thorough discussion of focus and focus marking in Hausa. The most striking result from a typological perspective is that focus in Hausa, though present as a grammatical category, is not consistently marked – unlike in accent languages. It was shown that *in situ* focus is not marked syntactically, nor morphologically, nor prosodically. At the same time, we have shown that the *ex situ* realisation of a focused non-subject is determined by discourse-pragmatic factors, rather than by its focus status. The focus status of a constituent plays only an indirect role for overt movement in that element must be focused in order to be emphasisable in a given discourse situation.

The conclusion that focus is marked inconsistently in Hausa raises the question of whether or not a unified analysis of focus in Hausa *and* accent languages is possible. After all, the focus properties of accent languages suggest that focus in these languages is always marked somewhere on the focused constituent. Now, this impression may be wrong. Instead, the obligatory presence of a main ‘focus’ accent (in German and English the contour tone H*+L) could simply follow from a prosodic requirement: Place a main accent somewhere in the clause. A second requirement could then make sure that placement of the main accent not contradict information-structural requirements. This would guarantee that the main accent is placed somewhere within the focus constituent.

If these speculations are on the right track, the obligatory occurrence of the main accent in accent languages may not be the result of obligatory focus marking. Rather, its occurrence and placement could be the result of the interaction of various prosodic, information-structural, and syntactic constraints. Seen in this light, the Hausa data may very well be relevant for the discussion of focus marking in accent languages.

8 References

- Alter, Kai, Ina Mleinek, Carla Umbach and Rohe, Tobias (2002) Kontrastprosodie in Sprachproduktion und -perzeption. *Linguistische Arbeitsberichte (LAB)*, 77. 59-81, Leipzig.
- Bannert, Robert (1985) Fokus, Kontrast und Phrasenintonation im Deutschen. *Zeitschrift für Dialektologie und Linguistik* 52, 289-305.
- Bearth, Thomas (1999) The contribution of African linguistics towards a general theory of focus. Update and critical review. *Journal of African Languages and Linguistics* 20. 121-156.
- Boersma, Paul and David Weenink (2003). Praat Manual. <http://www.praat.org>
- Bolinger, Dwight (1961) Contrastive accent and contrastive stress. *Language* 37. 83-96.
- Bolinger, Dwight (1989) *Intonation and Its Uses*. Stanford University Press.
- Büring, Daniel (2001).
- Büring, Daniel (2004) Focus Projection and Default Prominence. To appear in: Valéria Molnár and Susanne Winkler (eds.) *The Architecture of Focus*, Berlin: Mouton de Gruyter.
- Chafe, Wallace (1976) Givenness, contrastiveness, definiteness, subjects, topics, and point of view. In Charles Li (ed.) *Subject and Topic*. London, New York: Academic Press. 25-56.
- Chomsky, Noam (1993) A Minimalist Program for Linguistic Theory. In Kenneth Hale and Samuel Jay Keyser (eds.) *The View from Building 20. Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge, MA: MIT Press. 1-53.
- Chomsky, Noam (1995) *The Minimalist Program*. Cambridge, MA: MIT Press.
- Clark, Robin (1992) Socpe Assignment and Modification. *Linguistic Inquiry*. 26: 547-570.
- Couper-Kuhlen, Elizabeth (1984) A new look at contrastive intonation. In: R.J. Watts and Urs Weidmann (eds) *Modes of Interpretation. Essays presented to Ernst Leisi on the occasion of his 65th birthday*. Tübingen: Gunter Narr. 137-158.
- Cowan, Ronayne and Russell Schuh (1976) *Spoken Hausa*. Ithaca: Spoken Language Service Inc.
- Downing, Laura (2002) Fitting focus phrasing into the Prosodic Hierarchy. *SOAS Working Papers in Linguistics* 12. 111-133.
- Emonds, Joseph (1976) *A Transformational Approach to English Syntax*. New York: Academic Press.
- Fanselow, Gisbert (2004) Cyclic Phonology–Syntax-Interaction: Movement to First Position in German. To appear in: Shin Ishihara, Martina Schmitz and Anne Schwarz (eds) *Interdisciplinary Studies on Information Structure. Working Papers of the SFB 632*.
- Féry, Caroline (1993) *German Intonational Patterns*. Tübingen: Niemeyer.
- Fox, Danny (1995) Economy and Scope. *Natural Language Semantics* 3. 283-341.
- Frascarelli, Mara (2000) *The Syntax-Phonology Interface in Focus and Topic Constructions in Italian*. Dordrecht: Kluwer Academic Publishers.
- Gibbon, Dafydd (1998) German intonation. In: Daniel Hirst and Albert di Cristo (eds) *Intonation Systems*. Cambridge: Cambridge University Press. 78-95.
- Givón, Talmy (1976) Topic, Pronoun and Grammatical Agreement. In: Charles Li (ed.) *Subject and Topic*. London, New York: Academic Press, 151-188.
- Givón, Talmy (1988) The Pragmatics of Word Order: Predictability, Importance and Attention. In: Michael Hammond, Edith A. Moravcsik and Jessica R. Wirth (eds) *Studies in Syntactic Typology*. Amsterdam: John Benjamins Publishing Company. 243-284.
- Green, Melanie (1997) *Focus and Copular Constructions in Hausa*. Ph.D. dissertation, SOAS, London.
- Green, Melanie (2004) *Predication, Equation and Information Structure: Evidence from Hausa Copular Sentences*. Ms. University of Sussex.
- Green, Melanie and Phil Jaggar (2003) Ex-situ and in-situ focus in Hausa: syntax, semantics and discourse. In: Jacqueline Lecarme, Jean Lowenstamm and Ur Shlonsky (eds.)

- Research in Afroasiatic Grammar 2 (Current Issues in Linguistic Theory)*, Amsterdam: John Benjamins. 187-213.
- Grewendorf, Günther (1988) *Aspekte der deutschen Syntax*. Tübingen: Günther Narr.
- Guéron, Jacqueline (1984) Topicalization Structures and Constraints on Coreference. *Lingua* 63. 139-174.
- Gundel, Jeanette (1988) Universals of Topic-Comment Structure. In: Michael Hammond, Edith A. Moravcsik and Jessica R. Wirth (eds) *Studies in Syntactic Typology*. Amsterdam: John Benjamins Publishing Company. 209-239.
- Hartmann, Katharina (2004) *Focus Constructions in Hausa*. To appear in: Valéria Molnár and Susanne Winkler (eds.) *The Architecture of Focus*. Berlin: Mouton de Gruyter.
- Hartmann, Katharina and Malte Zimmermann (2004) Focusing in Chadic - The Case of Tangale Revisited. To appear in: Shin Ishihara, Martina Schmitz and Anne Schwarz (eds) *Interdisciplinary Studies on Information Structure. Working Papers of the SFB 632*.
- Heine, Bernd and Mechthild Reh (1983) *Grammaticalization and Reanalysis in African Languages*. Hamburg: Helmut Buske Verlag.
- Inkelas, Sharon and William R. Leben (1990) Where Phonology and Phonetics Intersect: the Case of Hausa Intonation. In: Mary E. Beckman and John Kingston (eds.) *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. New York: Cambridge University Press. 17-34.
- Jackendoff, Ray (1972) *Semantic Interpretation in Generative Grammar*. Cambridge, MA: MIT Press.
- Jackendoff, Ray (1997). *The Architecture of the Language Faculty*. Cambridge, MA: MIT Press.
- Jaggar, Phil (2001) *Hausa*. Amsterdam: John Benjamins.
- Jaggar, Phil (2004) More on In Situ Wh- And Focus Constructions in Hausa. Ms., SOAS, London. To appear in: *Chadic Linguistics/Linguistique Tchadique/Tschadistik*, vol. 3, ed. by Dymitr Ibriszimow, Henry Tourneux & Ekkehard H. Wolff. Cologne: Rüdiger Köppe.
- Jungaithmayr, Hermann, and Wilhelm Möhlig (1986) *Einführung in die Hausa-Sprache*. Berlin: Dietrich Reimer Verlag.
- Kanerva, Jonni (1990) Focusing on Phonological Phrases in Chichewa. In: Sharon Inkelas and Draga Zec (eds) *The Phonology-Syntax Connection*. Chicago: CSLI. 145-161.
- Kenesei, Istvan (1996) Adjuncts and arguments in focus. Ms., Szeged.
- Kiss, Katalin E. (1998) Identificational Focus Versus Information Focus. *Language* 74: 245-273.
- Krifka, Manfred (1998). Scope Inversion under the Rise-Fall-Contour in German. *Linguistic Inquiry* 29. 75-112.
- Krifka, Manfred (2001) For a Structured Meaning Account of Questions and Answers. In Caroline Féry and Wolfgang Sternefeld (eds.) *Audiatur Vox Sapientia. A Festschrift for Arnim von Stechow* (= studia grammatica 52). Berlin: Akademie Verlag. 287-319.
- Krifka, Manfred (2004) The Semantics of Questions and the Focussation of Answers. In Chungmin Lee, Matthew Gordon and Daniel Büring (eds.), *Topic and Focus: A Cross-Linguistic Perspective*. Dordrecht: Kluwer Academic Publishers. 139-151.
- Ladd, Robert D. (1996) *Intonational Phonology*. Cambridge: Cambridge University Press.
- Lambrecht, Knut (1994) *Information structure and sentence form: Topic, focus, and the mental representation of discourse referents*. Cambridge: Cambridge University Press.
- Leben, William R., Sharon Inkelas & Marc Cobler (1989) Phrases and Phrase Tones in Hausa. In Paul Newman & Robert Botne (eds.), *Current Approaches to African Linguistics*. Dordrecht: Foris.
- Newman, Paul (2000) *The Hausa Language*. New Haven & London: Yale University Press.
- Randell, Richard and Abdullahi Bature and Russell Schuh (1998) <http://www.humnet.ucla.edu/humnet/aflang/hausarbaka/>
- Roberts, Craige (1998) Focus, the Flow of Information, and Universal Grammar. In Peter Culicover and Louise McNally (eds.) *The Limits of Syntax* (Syntax and Semantics 29). New York: Academic Press. 109-160.

- Rooth, Mats (1985) *Association with Focus*. Ph.D. dissertation, University of Massachusetts at Amherst.
- Rooth, Mats (1992) A Theory of Focus Interpretations. *Natural Language Semantics* 1: 75-116.
- Sabel, Joachim & Jochen Zeller. To appear. Wh-question formation in Nguni. In *Proceedings of the 35th Annual Conference on African Linguistics*.
- Schuh, Russell (1998) *A Grammar of Miya*. Berkeley, Los Angeles, London: University of California Press.
- Schuh, Russell (2004) Draft chapters and sections of a forthcoming Reference Grammar of Bole, downloadable at http://www.humnet.ucla.edu/humnet/aflang/Bole/bole_papers.html
- Schwarzschild, Roger (1999) GIVENness, AVOIDF and Other Constraints on the Placement of Accent. *Natural Language Semantics* 7: 141-177.
- Selkirk, Lisa (1984) *Phonology and Syntax. The Relation between Sound and Structure*. Cambridge, MA: MIT Press.
- Selkirk, Lisa (1995) Sentence Prosody: Intonation, Stress, and Phrasing. In: John Goldsmith (ed.) *Handbook of Phonological Theory*. Oxford: Blackwell. 550-569.
- Stechow, Arnim von (1991) Focusing and Backgrounding Operators. In: Werner Abraham (ed.) *Discourse Particles*. Dordrecht: Kluwer. 281-337.
- Stalnaker, Robert C. (1978) Assertion. In: Peter Cole (ed.) *Pragmatics*. New York: Academic Press. 315-332.
- Szendrői, Kriszta (2003) A stress-based approach to the syntax of Hungarian focus. *The Linguistic Review* 20. 37-78.
- Thiersch, Craig (1978) Topics in German Syntax. Ph.D. dissertation. MIT, Cambridge, MA.
- Truckenbrodt, Hubert (1995) *Phonological Phrases: Their Relation to Syntax, Focus, and Prominence*. Ph.D. dissertation. Massachusetts Institute of Technology.
- Tuller, Laurice (1986) *Bijjective Relations in Universal Grammar and the Syntax of Hausa*. Ph.D. dissertation. UCLA.
- Uhmman, Susanne (1991) *Fokusphonologie*. Tübingen : Niemeyer.
- Vallduví, Enric und Vilkuna, Maria (1998) On Rheme and Kontrast. In: Peter Culicover & Louise McNally (eds.) *The Limits of Sytnax* (= Syntax and Semantics 29). New York: Academic Press: 79-106.
- Wagner, Petra (1999) *The Synthesis of German Contrastive Focus*. Proceedings of ICPhS'99, San Francisco.
- Wolff, H. Ekkehard (1993) *Referenzgrammatik des Hausa*. (Hamburger Beiträge zur Afrikanistik, 2.) Münster: LIT.
- Xu, Liejiong (2004) Manifestation of Informational Focus. *Lingua* 114. 277-299.
- Xu, Yi (1999) Effects of Tone and Focus on the Formation and Alignment of F0 Contours. *Journal of Phonetics* 27. 55-105.
- Zerbian, Sabine (in prep.) Information structure in Northern Sotho, Ph.D. dissertation, Humboldt-Universität, Berlin.