A phase-based approach to Russian free word order
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7.1 Extension to other languages

Crosslinguistic investigation on the expression of IS reveals a certain diversity in how Topic and Focus are encoded. Nevertheless, all languages have means to express discourse-related information. In the present work, I followed the assumption that IS is encoded at the phase Edge. Each of the two clausal phases, vP and CP, were argued to include this IS-related domain. In principle, given that the bi-phrasal architecture of the clause has proven to be universal, both Edge domains can be expected to be available in all languages. However, in order to understand the crosslinguistic variation we can hypothesize that the extent to which the two peripheries are utilized in various language is different.

Such an idea has been recently postulated by Aboh (2007b) on the basis of the position of focus and \textit{wh}-words in Gungbe, Aghem, and Italian. As we have seen above, Gungbe has well-defined Topic and Focus positions inside the left periphery of the clause signaled by the dedicated morphemes \textit{yà} and \textit{wè}, respectively. However, Aboh proposes that the language also resorts to the vP periphery to encode object or adjunct focus. This follows from the observation that a focused object/adjunct does not always occur at the left-periphery (1a) but can also occupy a low position (1b).

(1) (Context: What did Kofi eat?)
\begin{itemize}
  \item a. Lësì wè Kòfì dù.  \hspace{1cm} b. Kòfì dù lësì.
  \textit{rice FOC Kofi eat} \hspace{1cm} \textit{Kofi eat rice}
\end{itemize}

\begin{itemize}
  \item ‘Kofi ate RICE.’
  \item ‘Kofi ate RICE.’
\end{itemize}

The author analyzes focus in (1b) as moving to the specifier of the low FocP dominating the verb phrase. Although this movement is always string vacuous in Gungbe, Aboh assumes that it indeed takes place because it is more obvious in languages like Italian and Aghem.

Italian, unlike Gungbe, requires focused subjects to stay low (2). This fact has been taken as evidence that movement to the low FocP is visible not only at LF but also at PF (Belletti 2004).

(2) (Context: Who spoken?)
\begin{itemize}
  \item Ha parlato \textbf{Gianni.}
  \textit{has spoken Gianni}
\end{itemize}

\begin{itemize}
  \item ‘GIANNI spoke.’
\end{itemize}

Aghem provides further support to the existence of the low FocP, for in this language it is the only focus position available. The base order in Aghem is S-Aux-V-DO-IO-Adv (Watters 1979). Aghem was shown to possess an immediately post-verbal focus position (Watters 1979, Hyman 2007): any focused constituent (4) as well as a \textit{wh}-phrase (3) must be right-adjacent to the verb.
Based on data like (1-4) Aboh (2007b) comes to the following generalization. There are two focus positions in the clause: one at the left periphery and one clause-internally, dominating the verb phrase. Languages vary depending on whether the high FocP, the low FocP, or both are used in a given language. According to his classification, Gungbe and Italian have both FocPs active. Aghem employs only the low one.

I would like to take Aboh’s generalization one step further and propose that not only are both peripheries accessible in all languages, but that the structure of the peripheries is quite similar crosslinguistically with regard to the topic-focus articulation (Belletti 2001, 2004). The higher phase Edge has the structure corresponding to (5) and the lower phase Edge is structured as shown in (6).

$$
(5) \quad [\text{ForceP } \text{Force}^o [\text{FrameP } \text{Frame}^o [\text{InterP } \text{Inter}^o [\text{TopP } \text{Top}^o [\text{FocP } \text{Foc}^o ([\text{topP } \text{top}^o ])\text{FinP}]])]])
$$

$$
(6) \quad ([\text{topP } \text{top}^o ]\text{Foc}^o ([\text{topP } \text{top}^o ])\text{vP}])]
$$

In the spirit of Aboh (2007b), I assume variation to follow from the extent to which the two phase Edges are used for the purposes of IS encoding. I formulate it as the parameter given in (7).

$$
(7) \quad \text{Edge Activation Parameter}
$$

Languages are parameterized with respect to whether the higher phase Edge, the lower phase Edge or both are utilized to encode scope-discourse properties.

In what follows I aim to show two things. First, I further substantiate the Edge Activation Parameter, concentrating mostly on languages that exhibit encoding of IS at the lower phase Edge. The evidence for IS encoding at the left-periphery of the clause is abundant in literature. Second, as the discussion evolves, I provide support for the universal structures presented in (5) and (6).
7.2 IS encoding at the lower phase Edge

7.2.1 Aghem

Some facts about Aghem have already been mentioned above. However, I would like to discuss IS encoding in this language in some more detail because it provides some empirical support for the claims made earlier in this work. This description is based on works by Watters (1979) and Hyman (2007)\textsuperscript{50}.

As shown above, Focus in Aghem is encoded consistently in the Immediately After the Verb (IAV) position. Interestingly, this position must be filled in syntax. If there is an argument or an adjunct that is focused it occurs in this slot. This was shown in (3) and (4) and some more examples are provided below.

(8) a. énáo mò ñì ghè  
\text{Inah PST run where} 
\text{‘Where did Inah run?’}

b. énáo mò ñì á kìbé  
\text{Inah PST run in compound} 
\text{‘Inah ran in the COMPOUND.’}

(9) a. énáo mò ñì ènzín  
\text{Inah PST run how} 
\text{‘How did Inah run?’}

b. énáo mò ñì tsúitsúi  
\text{Inah PST run quickly} 
\text{‘Inah ran QUICKLY.’}

If no argument or adjunct follows the verb, e.g. in intransitive constructions, the IAV position is obligatorily filled by the morpheme nô, which Watters (1979) as well as Hyman (2007) treat as a focus marker (10)\textsuperscript{51}.

(10) énáo mò ñì *(nô) 
\text{Inah PST run FOC} 
\text{‘Inah ran.’}

Besides its obligatory occurrence after adjunctless intransitive verbs, nô is also used to encode focus on the lexical meaning of the verb in transitive constructions (11).

\textsuperscript{50} The system of spelling used for Aghem differs between Watters (1979) and Hyman (2007), e.g. nô in Watters versus nó in Hyman.

\textsuperscript{51} But see Hyman and Polinsky (2007) who propose a different analysis for nô.
(11)  tí-bvú tí-bghá mò ñó ³bé ḳó    [Hyman 2007: 6]
dogs two PST eat FOC fufu DET
‘The two dogs ATE fufu’.

The authors call the use of nó after an intransitive verb neutral because, unlike (11),
(10) can be a felicitous answer to the question *what did Inah do?* as well as to the
question *what happened?* (10) shows that the realization of the low FocP is
obligatory in the language. In this respect, Aghem is one of the strongest cases
proving the existence of the lower phase Edge. As will be shown shortly, this
concerns not only FocP.

With non-verbal focus, the use of nó after the focused constituent is
optional. I assume that the obligatoriness of nó with verb focus signals the presence
of the null focus Operator in the Spec position of the low FocP. This means that, as
proposed for Russian, a focused verb in Aghem occupies its canonical position
rather than SpecFocP or Foc°.

Apart from the neutral use with intransitives, nó also
functions as an exhaustive operator, akin to *only*. For instance, (11) means that the dogs only ate
fufu and did nothing else with it. Similarly, although (12) is acceptable with or
without nó, the meaning changes accordingly.

(12)  énáo mò  ñì  á  kibé  (nó)
Inah PST run in compound FOC
‘Inah ran (only) in the COMPOUND.’

The discussed Aghem data underscore another important fact: namely, that the
typology of Focus into New Information versus Exhaustive/Contrastive is not
syntactically motivated. The postverbal position in Aghem is not sensitive to the
distinction.

There is an apparent violation of the condition on non-verbal focus
encoding in Aghem. Watters (1979) states that in ditransitive constructions with a
Goal argument the Goal and the Theme can switch places (13). Recall that the
unmarked order of internal arguments in Aghem is DO > IO.

(13)  ó  mò  fúo  kí  bghá  á  fú-kó     [Watters 1979: 156]
he PST give leopard to rat
‘He gave the RAT to the leopard.’

Unexpectedly, such a switch in the word order results in narrow focus on the
Theme argument and not on the IAV Goal. Instead of analyzing (13) as an
exception to the Aghem focus rule, I propose to treat this example as an indication
that the clause-internal IS-related domain in the language is larger that just FocP.
The IO in (13), I assume, instantiates the low topP dominating the low FocP, so that
(13) gets the representation shown in (14). Following Aboh (2007b), I assume that
the verb in Aghem undergoes V-to-Asp movement.

(14)  [TP ó [t₈ mò] [AspP fúo [topP kí bghá á  top° [FocP fú-kó Foc° [vP ]]]]]
This analysis allows us to treat the IAV focus in (8-9) as well as the focus in (13) in a uniform way. This seems desirable given the consistency with which the IAV position is employed for Focus encoding in Aghem. The weak topic status of the inverted Goal is obvious given that this constituent can occur not only in between the verb and the focused DO, but also be preposed to the pre-verbal position with no effect on the interpretation (15).

friends SM PST dogs give to fufu
'The friends gave the dogs FUFU.'

In Aghem, movement of a post-verbal constituent into the area between the auxiliary and the verb, i.e. into the middle field, indicates that the moved constituent refers to an entity highly accessible from the preceding discourse. In the terminology used in the present work this constituent is (strongly) D-linked. It remains to be explained why the low topP can only host a Goal IO and no other element. For instance, in a ditransitive construction with a Beneficiary IO in the IAV position, only the latter can get the Focus interpretation (16).

(16) fūl á mó zōm â bāʔtóm nzāŋ [Watters 1979: 153]
friends SM PST sing for chief Nzaŋ
'The fiends sang Nzaŋ for the CHIEF.'

(16) contrasts with (13) in that it can never have the reading wherein the DO Nzaŋ gets focused and the IO â bāʔtóm is interpreted as D-linked. The difference between the IO in (13) and that in (16) is not only semantic (Goal in (13) but Beneficiary in (16)), it is also syntactic. Namely, in (13) the IO is a true argument while in (16) it is more of an adjunct. The generalization that emerges is that only an argument can move to the low topP in Aghem. I do not have a proper explanation for this fact, but it can have something to do with the impossibility to extract out of adjuncts versus the legibility of extraction out of complements. The reason for such a speculation is the following. As can be observed in the above examples, an IO in Aghem is a PP headed by the preposition â. The base order inside an IO PP (both for Goals and Beneficiaries) corresponds to â > IO. This is the order we see in (16). In (13), on the other hand, the order is reversed. And this is what always happens when the interpretation shown in (13) is aimed at. If the Goal PP occurred in the IAV position in its base â > IO order, the interpretation would change, as shown in (17).

(17) ò mò fūo â kī bīghā fū-kó
he PST give to leopard rat
'He gave the rat to the LEOPARD.'

Thus an IO Goal can have a presuppositional meaning only in the inverted (IO > â) but not in the base (â > IO) order. Suppose that the top' head in Aghem can only agree with a DP. Thus in order to be visible for top', the DP inside the Goal PP
must be extracted to some higher position. If this is the case, the derivation of (13) up to this point will be something like (18).

\[(18) \quad \text{[VP fú-kó [XP kí bīghāi [PP [P' \text{ā t]}}]}}\]

As it emerges from (18), what moves to topP is not the PP but some larger constituent, XP. This extraction out of PP can only happen if the PP is a true argument, i.e. only with Goals. Adjuncts, on the other hand, are opaque for extraction. Therefore the additional derivational step shown in (18) is unavailable for an adjunct Beneficiary PP, or any other adjunct PP for that matter. Therefore top⁹ cannot attract it. As a result, no other element but an inverted Goal IO can get the presuppositional reading when it directly follows the verb. Of course, the issue requires some further investigation for it to become clearer.

I have shown that Aghem provides evidence for the lower phase Edge. In the schema of the Edge in (6) I included two topPs: one preceding and one following FocP. I have presented evidence for the higher of the two topPs. That the lowest topP is also active in Aghem also seems plausible. As shown in (11) and (16-17), there can be some elements following the IAV focus position. I tentatively assume that they occur in topPs following FocP. A partial support for this idea comes from the fact that nouns following the focus always show a special morphology.

Nouns in Aghem have two morphological forms, known as A and B. In the A-form a noun consists of a noun class prefix and a stem. In the B-form the noun class prefix is missing and, instead, the stem is accompanied by a clitic which either encliticizes to the stem or procliticizes to the word following the noun stem. The A and B paradigms for the nouns *rat* and *bird* are given in (19).

\[(19) \quad \text{(Hyman 2007: 8)}\]

<table>
<thead>
<tr>
<th></th>
<th>A-form</th>
<th>B-form</th>
</tr>
</thead>
<tbody>
<tr>
<td>prefix</td>
<td>stem</td>
<td>Stem</td>
</tr>
<tr>
<td>kí</td>
<td>fú (rat)</td>
<td>fú =kó</td>
</tr>
<tr>
<td>fí</td>
<td>nwí (bird)</td>
<td>nwí =fó</td>
</tr>
</tbody>
</table>

The distinction between the A- and the B-form, according to Hyman (2007), boils down to the [+focus] versus [-focus] distinction. A noun occurring in the IVA position is always in the A, i.e. the focused, form. The B-member of the paradigm is used when the noun is excluded from Focus.

If we go back to our examples, we see that a noun following the focus is always in the B-form. For instance, in (17) the DO following the focused IO takes this form. Therefore it is a plausible assumption that the DO in (17) occupies the topP dominated by low FocP.

However, the A/B distinction is far from being that simple. The B-form might turn out to be marking referential giveness rather than non-focality. What makes me think so is the data in (15), repeated below as (20).
Both nouns, dog and fufu, are in the B-form. Nevertheless the one that remains post-verbal gets focused. Constructions like (20), i.e. those with preposing to the middle field, are used in corrections (Watters 1979). This sentence is felicitous in a context like I think that the friends gave some corn to the dogs. That is, all the constituents in the response are D-linked: focus via the set-relation with the noun corn, the rest of the constituents via prior mentioning. This, to my mind, explains the B-form of the focused DO.

To conclude, the morphological evidence for postulation of topP below FocP in Aghem might be not too strong, but it can still hold, if we assume an indirect correlation between givenness and topicality.

Although Aghem has been assumed to be a language where only the lower phase periphery is activated (Aboh 2007b), I think we have some evidence for the activation of the higher phase periphery as well. Aghem has a special construction for encoding polarity Focus. Focus on the truth value is encoded exclusively on the non-future tense auxiliary. Depending on IS, the auxiliary appears in one of the forms shown below (Hyman 2007:5).

(21)          [-focus]       [+focus]
       Present Perfect   Ø       nt
       Today Past       mò       màa
       General Past     ’mò       mà’á

A sentence with Focus on the truth value necessarily has an auxiliary in the focused form (22). Note that in such sentences the nouns are always in their B-forms and can be preposed to the middle field (23).

(22)   tì-bvù   tì-bìghà   màa   zi   ’bè   ’kò   [Hyman 2007: 6]
       dogs   two     PST.FOC   eat   fufu   DET
       ‘The two dogs DID eat fufu’.

(23)   fùł   á   mà’á   bvù-tì-   á   bè-’kò   fùo   [Watters 1979: 157]
       friendsSM   PST.FOC   dogs   to   fufu   give
       ‘The friends DID give the dogs fufu.’

As shown in (23), in sentences with polarity focus the IAV position can remain completely empty. In this respect (23) contrasts sharply with (10), repeated below for convenience.

(24)   énàò   mò   *ñèg   *(ñò)   [Watters 1979: 144]
       Inah   PST   run   FOC
       ‘Inah ran.’
I assume that polarity Focus in Aghem involves activation of the higher phase FocP. Namely, I analyze the focused form of the auxiliary as indicating the agreement between T^{o} and the high Foc^{o}. The motivation for assuming agreement with the higher rather with the lower Foc^{o} is the following. First, when no element occurs within the lower FocP its head is always overtly realized as nô (24). If the auxiliary in (22-23) agreed with the lower Foc^{o} we would expect the latter to be PF visible. This implies that I take the low FocP in (22-23) to be totally de-activated. And secondly, polarity focus is encoded high-up across languages. Given my assumptions on the interpretive differences between the lower and the higher phase Edges (section 5.3.3), the analysis of (22-23) in terms of the left-peripheral FocP gains some credence. If only the higher phase is the locus of propositionality, polarity Focus, which crucially needs a proposition and a truth value, can only be encoded by the left-peripheral Foc^{o}.

To sum up, I have shown that IS encoding in Aghem can be successfully analyzed if the lower phase periphery is assumed to exist. The data discussed in this section allow me to maintain the proposed structure of the lower phase Edge, i.e. topP > FocP > topP. Furthermore, I have shown that despite its clear clause-internal orientation in what concerns IS expression, Aghem also uses the clausal left periphery to encode certain pragmatic information, namely polarity Focus.

7.2.2 Kabiye
Another language which exhibits extensive use of the vP periphery is Kabiye. Kabiye is a Gur language spoken in Togo. I have already referred to Kabiye when discussing verb focus in Russian (section 5.3.5). It was shown that focusing a verb results in verb doubling. The relevant example is repeated below.

(25) esô yá-ki kákósi ki yáb-u
Esso buy-IMPF bean.cakes KI byu-INF
‘Esso is just BUYING bean cakes.’
[Collins and Essizewa 2007: 192]

Doubling as a strategy to involve the verb into IS encoding is well-attested crosslinguistically. However, as a rule, the order of the finite and non-finite copies

52 The present analysis of Aghem follows the baseline of the analysis proposed for this language by Aboh (2007b, 2007c). Hyman and Polinsky (2007) argue against the low FocP approach and claim, instead, that the IAV placement of Aghem focus is a surface effect and does not signal a uniform syntactic position. According to the authors, focus in Aghem is encoded in situ with the relevant constituent being bound by an Operator[+focus] situated in SpecCP. This Operator is sensitive only to the constituent which is the lowest in the VP. The marker nô is completely dissociated from focus and is assumed to optionally “mark off the right edge of the verb phrase” (Hyman and Polinsky 2007: 32). Hyman and Polinsky’s analysis heavily relies on right adjunction. Therefore it is incompatible with the theoretical ideas adopted in the present work. Moreover, the analysis pursued in this thesis provides a more reasonable explanation for the distribution of the marker nô.
is the reverse of that shown in (25). Some examples from other languages using Predicate Clefts are given in (26-28).

(26) lirkod Gil lo yirkod ba-xayim. [Hebrew, Landau 2006]  
    to-dance Gil not will-dance in-the-life  
    ‘As for dancing, Gil will never dance.’

(27) Essen fish est Max hekht [Yiddish, Kandybowicz 2006]  
    to-eat fish eats Max pike  
    ‘As for eating fish, Max eats pike.’

(28) wá yé wá [Gungbe, Aboh 2004]  
    arrive they arrive-PRF  
    ‘They ARRIVED.’

The pragmatic import of the Predicate Cleft varies cross-linguistically. For instance, in Hebrew and Yiddish it is used to topicalize the event, while in Gungbe, as in Kabiye, its function is to focus the verb. The analyses of constructions like (26-28) follow a similar line. Namely, the pragmatic information is assumed to be expressed by the non-finite form occurring at the left periphery of the clause.

If we compare (26-28) to (25), we see immediately that they differ with respect to the position of the non-finite doublet. Assuming that the focus exponent in (25) is also a non-finite verb, Kabiye stands out as a language that encodes IS at the lower part of the clause. Analyzing (25), Collins and Essizewa (2007) argue that Kabiye has a dedicated focus position at the periphery of the verb phrase. Thus the form yáb-u in (25) is claimed to be situated within the low FocP. The analysis proposed by Collins and Essizewa for (25) is reproduced in (29).

(29) The verb undergoes movement to SpecFocP dominating the VP, where it is spelled out as an infinitive. Then the whole VP is remnant-moved to SpecKiP. The fact is that the infinitival doublet in Kabiye Predicate Clefts must obligatorily be preceded
by the morpheme *ki*. Its absence would render (25) unacceptable. The authors are not sure about the exact function of *ki* and assume it to be a special projection subcategorizing for the focused verb. The role of this projection is also to provide a landing site for the fronted VP. The VP is fronted in order to bring the verb closer to the inflectional head. For Collins and Essizewa, moving the verb directly from V to I violates Locality: the verb in specFocP is a closer goal.

I would like to slightly modify this analysis along the lines of the Parallel-Chain approach. First, I assume that *ki* is generated not on top of FocP but rather within the VP. Suppose that it selects VP. On this assumption it is easier to account for the fact that *ki* can accompany only the verb (phrase) and not any other focused category. If it selects for FocP, as in Collins and Essizewa’s analysis, the close relation between the verb and the morpheme sounds somewhat ad hoc. The object, I assume undergoes movement into the middle field, suppose it scrambles. Following our analysis of Predicate Clefts in Russian and Gungbe (Aboh and Dyakonova 2009), I propose that (25) is derived by parallel chains, with a proviso that the A’-movement targets the low and not the high FocP. In particular, the verb enters into two types of checking relations simultaneously: with I’ (Agree-type) and with Foc’ (Edge-type). The Agree-type checking forces V’-to-I’ movement, while the Edge-feature checking triggers phrasal movement of the KiP embedding the verb into SpecFocP. The derivation proceeds as shown in (30).

(30)

On the present analysis what moves to SpecFocP is not just V, but the entire KiP. Evidence for the phrasal movement comes from the fact that in certain contexts an object can follow the verb, as in (31).
Sentences like (31) are acceptable in a situation when the entire VP and not just the verb is focused, e.g. when you want to say that *Esso just bought bean cakes, but he did not steal any money from the seller*. The fact that an object can be trapped inside the KiP means that there is no obligatory Object Shift in Kabiye. This allows me to conclude that in (30) the object undergoes an Edge-type rather than an Agree-type movement. One possibility is that the XP in (30) corresponds to topP. However, at the moment I do not have enough data to prove it.

As shown in (29-30), the head of FocP can be overtly realized as *na*. This is a focus marker in Kabiye. With verb (phrase) focus it is optional. When SpecFocP is filled by a nominal element, *na* becomes obligatory (32).

(32) ma-ní-υ [Collins and Essizewa 2007: 193]
   Kabiye-FOC 1SG-understand-IMPF
   ‘I understand KABIYE.’

There is an alternative strategy for focusing the object, which is fronting to the clause-initial position, as in (33). Note that in this position *na* is excluded. Instead, there is lengthening of the final vowel.

(33) (Context: What language do you understand?)
    Kabiye-FOC 1SG-understand-IMPF
    ‘I understand KABIYE.’

This phonological modification, according to Collins and Essizewa, is an evidence for the left-peripheral Foc⁶, which carries a phonological feature giving rise to lengthening.

The data discussed above clearly show that in Kabiye both phasal Edges are active. Nevertheless, the VP periphery is definitely more prominent. First, only the low FocP can be involved in V(P) focusing. Second, Focus on the subject can also be encoded using exclusively the low Foc⁶. The subject focus construction in Kabiye is especially interesting. Focus on the subject is expressed as shown in (34).

(34) (Context: Who understands Kabiye?)
    a. esó  ní-υ na kabiye  
       Esso  understand-IMPF FOC Kabiye
    b. *esó-ó  ní-υ (na) kabiye:  
       Esso-FOC understand-IMPF Kabiye

    ‘ESSO understands Kabiye.’  [Collins and Essizewa 2007: 194-195]
Subject focus requires the presence of the focus marker *na*. However, the subject cannot stay at the vP periphery but moves to its canonical position. The subject in (34a) cannot be considered to occupy the left-peripheral FocP, because as shown by the ungrammaticality of (34b) its final vowel cannot be lengthened, a hallmark of movement to the high FocP.

The subject focus pattern in Kabiye is the reverse of how the subject is focused in some other African languages, e.g. in Gungbe. Recall that in Gungbe Focus on the external argument can only be expressed at the left periphery, while the object can occupy any of the two FocPs. This Subject/Object asymmetry is accounted for with reference to the EPP: the subject has to satisfy the requirement on SpecTP being filled. The data in (34) indicate that the EPP must be operative in Kabiye as well, forcing the subject to move to SpecTP. Assuming that SpecTP is a Criterial position, the subject cannot move any further. Consequently, the left-peripheral FocP cannot be reached. The presence of *na*, on the other hand, indicates that the low FocP must be activated. However, the subject cannot remain in SpecFocP, because otherwise the EPP is violated. Collins and Essizewa propose that the subject, when focused, moves to SpecTP via SpecFocP. I cannot adopt this idea since I have followed the Criterial Freezing throughout this work. Therefore I resort again to the parallel-chain derivation. The subject in the first-merge position is attracted by two probes independently: T₀ and Foc₀. This results in two parallel chains: SpecP-SpecTP, and SpecP-SpecFocP. Out of the two chains only the head of the A-chain is spelled out. The A’-chain remains silent. At first sight, it might seem suspicious, given that usually a copy at the Edge is PF visible. I propose that the obligatory presence of the focus morpheme in (34a) signals the presence of a null Operator in SpecFocP position. That is why the subject can appear in SpecTP while retaining its focus interpretation. The contrast between Kabiye and Gungbe subject focus is explained by the null Operator strategy being available in Kabiye but not in Gungbe. Recall that in Gungbe a focused subject cannot occur in SpecTP but has to move to the higher SpecFocP.

The description of Kabiye focus constructions is of crucial importance for us because this language does at the vP periphery what many other languages do at the clausal left-periphery. At the same time, the role of the higher phase Edge cannot be neglected, because it also participates in IS encoding, albeit to a lesser degree.

7.2.3 Chadic Languages
Chadic languages, West Bade, Kanakuru, Tangale and Ngizim, are also potential candidates for the double periphery account. As described in Tuller (1992), focus encoding in Chadic languages is of two main types: S-V-FOC (A-type) and S-V-DO-FOC (B-type). Out of the mentioned languages West Bade is a representative of the A-type, while Kanakuru, Tangale and Ngizim are of the B-type. As we can see, in both groups a focused constituent follows the verb. But in the B-type a DO intervenes between the verb and the focus. The examples are provided below.
Type B focus constructions are further classified according to the ability of a complex DO to occur between the verb and the focus. Kanakuru does not allow for a complex DP intervener and resorts to the object split shown in (37). Ngizim and Tangale, on the other hand, can either split the object or leave it intact (38).

(37) ma-no [boi] nani [mə mən ala ra]
    returned-AGR place I REL we saw her
    ‘I returned to the place where we saw her.’
    [Kanakuru, Tuller 1992: 309]

(38) a. padugo [tarkin] noŋ [nam lakido]
    bought cap who REL small

b. padugo [tarkim lakidon] noŋ
    bought cap-REL small who
    ‘Who bought a cap which is small?’
    [Tangale, Tuller 1992: 310]

Tuller proposes the following analysis for the constructions illustrated above. She argues that the contrast between type A versus type B results from the difference in case-checking. In West Bade (A) the object does not need to move to be assigned Case, while in Tangale, Ngizim, and Kanakuru (B) Case assignment requires overt movement. Otherwise focus is derived in a similar way in both groups. Namely, Tuller associates [+Focus] feature with the inflectional head I. The verb undergoes V-to-I movement and then I assigns [+Focus] to the immediately following constituent, under Government. In order to become governed by I, a focused constituent must adjoin to VP. The A-type construction (V-FOC-DO) is derived by the combination of V-to-I movement plus focus adjunction to VP. In B-type constructions (V-DO-FOC), in addition to that, DO must incorporate into V in order to be case-marked. Object incorporation is forced because both Case and [+Focus] assignment crucially relies on Government.
The analysis is obviously out-dated for Government is non-existent as a syntactic operation anymore. But the gist of Tuller’s account seems to be correct. Following her line of reasoning, I assume that West Bade differs from Tangale, Ngizim, and Kanakuru only in the location of the object, with focus being encoded in one and the same position. As the reader might guess, I assume that focus in these languages occurs within the low FocP. However I deviate from Tuller in what concerns the DO position. First, I doubt that the adjacency between V and DO in Type B languages reflects object incorporation. As the author shows, even in Kanakuru, where complex DOs are split, elements which are dependants of the head of DO cannot be stranded. For example, a possessive (39a) or a complement of the participial DO (39b) cannot be taken away from their N head.

(39) a. tui [worom mono] shire
    ate bean my she
    ‘SHE ate my beans.’

b. kur [karan yawe] mandai
    refuse tending chicken-the who
    ‘Who refused tending the chicken?’

The assumption that the modified DOs in (39) are incorporated into the verb sounds dubious since Incorporation usually applies to bare nouns. Therefore I consider the intervening DO in type B languages to be moved to an independent position between IP and VP. This position can be either of the Agree-type or of the Edge-type. The following observation brings me to the conclusion that the position hosting the DO is most probably of the Edge-type.

Tuller assumes that a focused DO occupies the dedicated focus position, i.e. VP-joined, in contrast to an unfocused DO. This assumption is based on the fact that a focused object blocks vowel elision on the verb. The contrast between a neutral sentence, with vowel elision on the verb, and the one with the focused object, where elision is cancelled, is illustrated in (40).

(40) a. Áudu mad-ug littáfi
    Audu read-PRF book
    ‘Audu read a book.’

b. Áudu mad-gó/*-ug littáfi
    Audu read-PRF book
    ‘Audu read a BOOK.’

In (40a), as a result of elision, the final vowel ो in the perfective morpheme is deleted (u appears as an epenthetic vowel). In (40b), with Focus on the object, the reduction is blocked, and only the full form gó is allowed.

Assuming that Tuller is right and this phonological transformation is related to the fact that the DO in (40b) is in a different position as compared to

---

53 But see Massam (2001) and Ball (2005) on pseudo-noun incorporation.
(40a), these data indicate that an obligatory Case-driven movement is not a property of the B-type languages: if an object may not move to a Case-position under focusing, there are no obvious reasons for obligatory movement without focusing either. This allows me to propose that the object intervening between the verb and the focus in Ngizim, Kanakuru, and Tangale is not in a Case-related position. I rather assume that it occupies topP dominating the low FocP. There is, in fact, some empirical support for this assumption.

In Tangale and Ngizim focus can occur not only after the [V-DO] complex, but also clause-finally. This is illustrated in (41) for Tangale.

\[(41)\] d’oba karee-n aa aasak Ádu sold goods at market Audu ‘AUDU sold goods at the market.’

To account for constructions like (41), where more than one constituent intervenes between V and focus, Tuller suggests that there are in fact two structural positions for focus in Ngizim and Tangale: at the periphery of VP, and in SpecCP. The latter is assumed to host the focus in (41), with a proviso that SpecCP in these languages follows the head. The Spec-finality of CP in Ngizim and Tangale is also held responsible for the seemingly optional split of complex objects, shown in (38). The author proposes that, in reality, the object in (38b) is also split. The surface adjacency results from the focus being situated not in the adjoined-to-VP position but in SpecCP. In other words, the contrast between (37) versus (38) is not due to the different splitting possibilities in Kanakuru versus Tangale/Ngizim. It rather arises because Tangale and Ngizim are Spec-final in CP, while Kanakuru is Spec-initial. The latter idea is supported by the data in (42), showing that the CP-internal focus position is also available in Kanakuru, but it is clause-initial linearly.

\[(42)\] shi man tupa [Kanakuru, Tuller 1992:324] him we sent ‘We sent HIM.’

I agree with Tuller that (42) does support the existence of two focus positions in Kanakuru. However, I would like to analyze the data in (41) without resorting to Spec-final projections. I take this example to support the hypothesis about the availability of topP above the low FocP in Ngizim and Tangale. The variation between these languages and Kanakuru arises due to the activation of topP above FocP in the former but not in the latter.

There is, furthermore, a possibility of topP following the low FocP, at least in Tangale. Constructions like (43), although marginal, are reported to be attested in this language.

\[(43)\] wa pad yalam ti po luumo noj, dooji [Tuller 1991: 322] FUT buy oil at market who tomorrow ‘Who will buy oil at the market, tomorrow?’
The adverbial following the focus in (43) is reported by Tuller to have the intonation of a dislocated phrase, which is indicated in the example by the comma. If Belletti (2002) is right in her analysis of Right Dislocation, the post-focal constituent in (43) must be in topP below the low FocP.

To sum up, the data from the Chadic languages discussed in this section support not only the existence of the lower phase Edge, but also its structural similarity across languages.

7.3 The universal structure of the higher phase Edge

The existence of the clausal peripheral domain and its active role in IS encoding does not require additional empirical evidence. Indeed, the evidence is so robust that it can hardly be questioned (Aboh 2007a). Numerous studies on the subject revealed that the structural make-up of the clausal periphery is quite similar across languages and closely reminds that proposed by Rizzi (1997). Just to give a few examples.

Puskas (1997), following Rizzi (1997), argues that the CP in Hungarian ought to contain separate TopP and FocP, generated in the order TopP > FocP. She further claims that unlike FocP, which is unique, TopP can iterate. This conclusion is drawn on the basis of the contrast between (44a) versus (44b).

\[(44) \quad \text{a. * Tudom hogy TEGNAP ESTE AMARCORDOT látta János.} \]
\[\quad \text{I know that yesterday evening Amarcord saw John} \]
\[\quad \text{‘I know that John saw AMARCORD LAST NIGHT.’} \]

\[\quad \text{b. Tudom hogy tegnap este János AMARCORDOT látta.} \]
\[\quad \text{I know that yesterday evening John Amarcord saw} \]
\[\quad \text{‘I know that last night John saw AMARCORD.’} \]

A focused constituent in Hungarian is strictly left-adjacent to the verb, the fact that Puskas interprets as indicating V′-to-Foc′ movement. As shown by the ungrammaticality of (44a), FocP cannot contain more than one Spec or host another focus as an adjunct. At the same time, if another fronted constituent is instead topicalized, as in (44b), the sentence turns acceptable. Note also that both the subject János and the adverbial tegnap este are assumed to be topics in (44b). So this example illustrates iterability of topic as well as its position relative to focus. It is unclear from Puskas’ analysis whether the iteration is restricted to the pre-FocP area or there can be TopPs following FocP as well.

The articulated structure of the clausal Edge is most clearly instantiated by languages where IS functions are morphologically encoded. One such example is Gungbe which was referred to previously in this work. Another vivid illustration is Kikuyu, a Bantu language. It does not have a topic marker but there is a dedicated focus morpheme – ne. A focused constituent must leave its canonical position and move to the right of ne. This is shown in (45) (the base order in Kikuyu is S-V-IO-DO-Adv)
Schwarz (2003) analyzes *ne* as an overt instantiation of Foc° within the CP domain. The focused constituent is argued to move to Foc° and adjoin to *ne*. We can rectify the dubious XP-to-Xº movement and assume that a focused XP moves to SpecFocP and that *ne* has the phonological feature [+proclitic], so that at PF it pro-cliticizes onto the element over which it must scope.54 Importantly, if *ne* sits in the high FocP an element preceding the focus, e.g. the subject in (45), must also be within the Edge domain. That this is indeed the case is proven by (46), which shows that the subject can also stay after the focused constituent, i.e. in its canonical position (46a), and that other elements can precede the focus besides the subject (46b).

The data from Kikuyu patterns nicely with Hungarian in that both languages have a dedicated focus position preceded by a number of topic positions.

Languages exhibit a number of universal properties in what concern IS encoding. For instance, focus iteration seems to be precluded across the board. Left-peripheral position of the strong Topic is also attested in language after language. But some features appear to be languages specific. For instance, topic iteration is not a universal. As shown by the Gungbe examples in (47), the topic

54 Tame-Durrleman (2006) proposes for Jamaican Creole, a language that also exhibits focus marker >> focus ordering, that this sequence results from head movement of the focus marker from Foc° to some higher functional head. I leave this possibility open.
morpheme \( \text{yà} \) cannot follow more than one constituent (47a) or be multiplied (47b). Thus topic iteration of any sort is precluded in Gungbe.

(47)  
\[
\begin{align*}
\text{a. } & \text{[gólù ló] [àgbá ló] \text{ yà Kòfi zè-è dó é mè} \\
& \text{gold SPEC box SPEC TOP Kofi put-PRF-3SG LOC 3SG in}
\end{align*}
\]

\[
\begin{align*}
\text{b. } & \text{[gólù ló] yà [àgbá ló] yà Kòfi zè-è dó é} \\
& \text{gold SPEC TOP box SPEC TOP Kofi put-PRF-3SG LOC 3SG mè in}
\end{align*}
\]

‘As for the specific gold and the specific box, Kofi put it in there.’

[Aboh 2004: 299]

Among those languages that do permit multiple Topicalization the typology of Topics defended in this work is clearly observed. In particular, what I referred to as strong topic is always structurally higher than focus or a weak topic. Weak topics are always postfocal and follow the strong topic across languages. Consider the following Japanese examples borrowed from Vermeulen (2007: 192)

(48)  
\[
\begin{align*}
\text{a. } & \text{[sono inu-wa]}_T \text{[Bill-wa moo sudeni kyonen kandeiru]}_F \\
& \text{this dog-WA Bill-WA already last.year bite-PRF}
\end{align*}
\]

\[
\begin{align*}
\text{b. } & \text{[Bill-wa]_F [sono inu-wa]}_T \text{ moo sudeni kyonen kandeiru} \\
& \text{Bill-WA this dog-WA already last.year bite-PRF}
\end{align*}
\]

‘This dog has already bitten BILL last year.’

(49)  
\[
\begin{align*}
\text{a. } & \text{[# [sono inu-wa]_W [Bill-wa]_ST moo sudeni kyonen kandeiru]}_F \\
& \text{this dog-WA Bill-WA already last.year bite-PRF}
\end{align*}
\]

\[
\begin{align*}
\text{b. } & \text{[Bill-wa]_ST [sono inu-wa]_W moo sudeni kyonen kandeiru} \\
& \text{Bill-WA this dog-WA already last.year bite-PRF}
\end{align*}
\]

‘Bill, this dog has already bitten last year.’

The particle \( \text{wa} \) is usually considered to be a topic marker in Japanese. As we see from (48-49), there can be several \( \text{wa} \) in the sentence. In this situation though, the marked constituents are not interpretively similar. In (48), one of the \( \text{wa} \)-carrying elements is interpreted as Topic another one is included into the wide Focus. The use of \( \text{wa} \) as a focus marker is possible only if Focus has a contrastive meaning. In
both of the constituents having the marker seem to be interpreted as non-focal. The context provided in (49) indicates that *Bill-wa* gets a Contrastive Topic reading, which in my classification is a strong topic. In such a context, the order of the *wa*-constituents shown in (49b) is the only acceptable one. The reverse order will shift the strong topic interpretation to *sono inu-wa* ‘this dog’, which is infelicitous in the given discourse situation. Thus we conclude that the Japanese data in (49) favor the hypothesis that a strong topic always precedes a weak topic. Furthermore, as shown in (48), a strong topic cannot follow focus.55

55 Given the data in (48-49), it seems more accurate to analyze *wa* as marking referential giveness rather than topicality. This is the analysis advocated by Miyagawa (1987) and Vermeulen (2007), among others.
d. (Context: Who has eaten each of these fruits?)

Den Apfel hat HANS gegessen,
den Pfirsich hat MARIA
gegessen.

‘The apple, Hans has eaten, the peach, Maria has eaten.’

One of the ways to analyze (51) is to say that in a German clause the Edge is represented by a unique XP, which does not have any inherent IS properties and can unselectively host any type of constituent. In other words this XP is a mere place-holder. However, Frey (2006) argues that the German prefield does, in fact, have an articulated structure and the preverbal elements in (51) are not in one and the same position. The adverbial in (51a) is assumed to be base-generated in the highest available slot. The focus in (51c) and the topic in (51d) are argued to move to the position following that hosting discourse linkers. Finally, sentence adverbials in (51b) and non-contrastive topics are assumed to take the lowest of the Edge positions. The structure of the German prefield Frey proposes is given in (52).

(52) CP > KontrP > FinP

Discourse linkers contrastive topic/focus sentence adverbial non-contrastive topic

I am not going into the details of Frey’s analysis. I just want to follow his major idea that the specific feature of the German prefield is that out of the possible positions only one can be associated with the [EPP] feature responsible for PF visibility. The structure of the clausal periphery he proposes is different from the one assumed in this work. But it is not of crucial importance. The explanation in terms of visibility rather than in terms of severe deficiency makes it possible to treat German on a par with any other language we have discussed in this thesis.

Note that the restriction on how many Edge positions can be filled at a time, is not a distinguishing property of V2. Finnish, which is not a V2 language, shows the same behavior. As described by Vilkuna (1995) and Holmberg and Nikanne (2002), only one constituent is allowed to precede the subject in Finnish. The latter occupies the highest position within the inflectional field. The constituent moved to the Edge can be interpreted either as Topic or as Focus, depending on the context (53). The major requirement is that it must have a contrastive interpretation, that is why a semantically vacuous element, e.g. an expletive, cannot precede the subject in Finnish (54a), but can replace the subject in its canonical position, if the latter moves to the Edge (54b).
Artikkelista Annaa kehuttiin. [Vilkuna 1995: 253]
‘The paper, Anna was praised for it.’
‘It was the PAPER Anna was praised for.’

a. [Nama lapset] sita eivat olisi ikina oppineet uimaan.
   these children EXPL not.3PL have.COND ever learn.PART to.swim

b. *Sita [nama lapset] eivat olisi ikina oppineet uimaan
to.swim

‘These children, they would never have learnt to swim.’

[Holmberg and Nikanne 2002]

To sum up, the observed differences related to the realization of the CP domain between Gungbe and Russian, on the one hand, and German or Finnish, on the other, do not imply that the Edge heads available in the former are not available in the latter. The variation arises as a response to some IS-independent property of the language.

7.4 Conclusion

The major goal of the present chapter was to show that the analysis I proposed for the word order variation in Russian gains considerable support from data we find in other languages. It emerges from the above description that the Edge Activation Parameter, repeated below, might need some modification.

(55) **Edge Activation Parameter**
Languages are parameterized with respect to whether the higher phase Edge, the lower phase Edge or both are utilized to encode scope-discourse properties.

All languages seem to be using both phasal Edges for IS encoding. What is parameterized is the extent to which the vP and the clausal peripheries are activated.

Post-posing of new focal information is a universal tendency. It hints to the hypothesis that the low FocP is available in all languages. The variation we observe is the outcome of the competition between criterial and formal features. Recall the discussion on VS inversion. It was argued that only languages in which EPP can be satisfied by means other than movement of the grammatical subject allow for the subject to stay low, presumably in SpecFocP.
Furthermore, almost all languages have a construction in which a contrastive focus occurs at the left edge of the clause. Similarly, framing/scene-setting adverbials are sentence-initial across languages. This is a clear indication of the fact that the higher phase FocP and FrameP are active in all natural languages. The strong topic is also always fronted pointing to the universality of TopP. Languages differ simply with respect to how many of the peripheral positions can be simultaneously filled.

The only real difference in the Edge structure of various languages seems to be the availability of weak topic positions (topPs). This difference underlies the variation regarding the iteration of topics. Some languages seem to lack them completely, e.g. Gungbe. Others make wide use of them, as does Russian. However, weak topics are quite special. As we have seen earlier, they are not subject to Minimality. On a closer investigation, they might even turn out to be not exclusively restricted to peripheries. This is an issue that still has to be properly addressed in future.