

Focus Projection in Nt̥eʔkepmxcin (Thompson River Salish)

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1. Introduction

Leading accounts of the marking of focus all have in common the correspondence between stress and focus: in stress languages, the focused constituent is marked by carrying the main stress of the clause (Selkirk 1995, Reinhart 1995, Vaissiere 1995, Schwarzschild 1999, Szendrői 2003, Féry and Samek-Lodovici 2006, etc.). Though it is a stress language (Thompson and Thompson 1992), Nt̥eʔkepmxcin presents an interesting counterexample to the apparent stress-focus universal (see also Lindström and Remijsen 2005 on Kuot, Rialland and Robert 2001 on Wolof). In Nt̥eʔkepmxcin, narrow focus is structural, closely akin to English clefts (*It was MONIQUE that I saw*). Moreover, clefted focus constituents are generated in situ, and are not moved to a Focus Projection (Kroeger 1997, 1999). While clefted focus constituents are at the left edge of the Nt̥eʔkepmxcin clause, the main stress is, strikingly, at the right edge. Clefted foci do not bear additional pitch accent when compared to non-clefted arguments.

This paper explores the consequences of such a structural focus system for common prosodic accounts of focus. I distinguish listener and speaker-oriented accounts. In speaker-oriented accounts, constraints like STRESS-FOCUS (Féry and Samek-Lodovici 2006) ensure that speakers place the dominant stress on the focus constituent. In listener-oriented systems, a Basic Focus Rule like “An accented word is F(ocus)-marked” (Selkirk 1995: 555, 561) allows perceivers to reconstruct discourse information about what the focus is; this is aided by additional rules of focus projection.

On the speaker side, I recast STRESS-FOCUS constraints in terms of Generalized Alignment (McCarthy and Prince 1993; Truckenbrodt 1999 on Chichewa), such that for languages like English, focus aligns with prosodic heads (i.e. “stress”). Next, I argue that Nt̥eʔkepmxcin’s *structural* focus can also (perhaps surprisingly) be captured in *prosodic* terms: in Nt̥eʔkepmxcin, focus aligns with prosodic phrase edges (the left edge of the clause), and not with prosodic heads.

For perceivers, the Basic Focus Rule for Nt̥eʔkepmxcin must be different from English, since focus and stress are not correlated. Because focus constituents are at the left edge, the Basic Focus Rule might be something like “The leftmost lexical word in the intonational phrase is F(ocus)-marked.” However, I shall show that focus projection rules do not work, and favor abandoning them for free assignment of focus marking (Schwarzschild 1999).

2. Background: Nt̥eʔkepmxcin

2.1 Syntax: VSO

Nt̥eʔkepmxcin is a predicate-initial language, with a basic transitive word order of verb-subject-object (VSO) (Koch 2006b), as shown in example (1). Auxiliaries, or light verbs, like ‘progressive’

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ʔex in (2), often precede the main verb. Second-position clitics, including evidentials, the yes/no question marker, clause-typing morphology, and discourse level deictics (such as the ubiquitous demonstrative *xeʔ* in (1) and (2)), immediately follow the first prosodic word. Nuclear (or primary) stress appears on the rightmost lexical constituent, typically the object in a basic transitive sentence, or the subject in intransitive cases. I show this by underlining it in (1) and (2).¹ This basic predicate-initial word order is the one used in wide-focus cases (CP or VP focus), as well as for narrow verb-focus.²

(1) V [2nd position clitic] S O
 kən-t-Ø-és xeʔ e skíxzeʔ-kt e sínciʔ-kt
 help-TRANS-3O-3TS DEM DET mother-1PL.POSS DET younger.brother-1PL.PS
 “Our mother helped our brother.” / (*“Our brother helped our mother.”)

(2) Aux [2nd position clitic] V S
 ʔéx xeʔ cw-úm † n-ʔímc.
 PROG DEM work-MDL DET 1SG.POSS-grandchild
 “My granddaughter is working.”

2.2 Stress and nuclear stress in *Nʔeʔkepmxcin*

At first glance, *Nʔeʔkepmxcin* is a classic stress system. In their grammar of the language, Thompson and Thompson remark that stress “seems to manifest itself as a complex of loudness, force, and pitch differences, rather similar in type to the phonetic reality of English stress” (1992: 21). Egesdal in his dissertation also identifies *Nʔeʔkepmxcin* as a “stress-timed language” (1984: 109), and finds that correlates of stress (duration, pitch and amplitude) are manipulated by storytellers as “rhetorical or performative devices” (1984: 6). It is perhaps all the more surprising, then, that stress is not employed to mark discourse salience, but this is precisely what I will demonstrate.

As for the nuclear (or primary) stress in the *Nʔeʔkepmxcin* clause, Thompson and Thompson in their grammar (1992: 148) describe the final position in the *Nʔeʔkepmxcin* clause as having “emphatic force,” or being “mildly emphatic.” In this paper, I explicitly formalize this observation as a case of rightmost nuclear stress. Given the surface verb-object order, this is not surprising: we expect main stress to fall on the object, since cross-linguistically stress falls on arguments (i.e. the object) rather than heads (i.e. the verb) (eg. Schwarzschild 1999: 127 ‘HEADARG’ constraint, and references therein; Kahnemuyipour 2004; Selkirk and Kratzer 2007).

3. Background: focus theories and predictions for *Nʔeʔkepmxcin*

In this section, I give a brief typology of possible focus strategies in stress languages. For the purposes of this paper, I will adopt the fairly common diagnostic that a focus is the answer to the wh-word in a question (i.e. Jackendoff 1972, Selkirk 1995, etc.). The idea that focus is universally marked

¹ Data are presented in the orthography developed in Thompson and Thompson (1992, 1996), and Kroeber (1997). The phonemic key to the *orthography* is as follows: *c* = [tʃ] or [č], *ç* = [ts], *č* = [tʃ], *e* = [e, æ, a, ε, ə], *ə* = [ʌ], *i* = [i, ei, ai], *o* = [o, ɔ], *s* = [ʃ] or [š], *š* = [s], *u* = [u, o, ɔ], *y* = [y, i]. See Thompson and Thompson (1992) in particular for the phonetic realizations of phonemic vowels across contexts.

Abbreviations used in the gloss (based on Thompson and Thompson 1992, 1996, Kroeber 1997, Jimmie 2002, 2003) are: ‘-’ = affix or clitic, ‘=’ = lexical suffix, APPL = applicative, AUG = augmentative reduplicant, CAUS = causative, DEM = demonstrative, DET = determiner, DIM = diminutive, EMPH = emphatic, EVID = evidential, FUT = future, CLEFT = cleft predicate, IRL = irrealis, MDL = middle, NOM = nominalizer, O = object, OBL = oblique, PERS = persistent (emphatic particle), PL = plural, POSS, PS = possessive, PROG = progressive, SG = singular, STAT = stative prefix, SUBJEXTR = subject extraction suffix, TRANS/TR = control transitivizer, TS = transitive subject.

² I will refer to the basic verb-initial word order as VSO, though V(S)(O) is more accurate since data includes intransitive cases, null subjects or objects, and also morphological intransitives with oblique objects.

by pitch accent in stress languages is reflected in the discourse-phonological constraints proposed in theories of focus (3). They have in common the link between stress (accent) and focus.

(3) Proposals on the marking of focus

- a. Basic Focus Rule: An accented word is F(ocus)-marked. (Selkirk 1995:555)
- b. Stress-Focus Correspondence Principle: The focus of a clause is a(ny) constituent containing the main stress of the intonational phrase, as determined by the stress rule. (Reinhart 1995:62)
- c. FOCUS: A Focus-marked phrase contains an accent. (Schwarzschild 1999:173)
- d. STRESS-FOCUS: a focused phrase has the highest prosodic prominence in its focus domain (Féry and Samek-Lodovici 2006:135-6)

There are a few ways that these discourse level prosodic constraints can be satisfied. In English, focused items attract main stress without a change in word order (Selkirk 1995, etc.). *Karsten* is the focus in (4b), since it answers the question *who* of (4a), and *Karsten* thus attracts the main stress. Putting the main stress on the verb *wrote* or on the object *paper* is not licit for a subject focus question.

- (4) a. Who wrote this paper? [narrow subject focus question]
 b. KARSTEN wrote this paper. (# Karsten WROTE this paper / # Karsten wrote this PAPER).

Example (5d) illustrates the phenomenon of focus projection. Nuclear, or default, stress, falls rightmost in English (Chomsky and Halle 1968, Cinque 1993). The nuclear stress on *paper* in (5d) can be used to answer any of the questions in (5a-c), which mark CP, VP, or narrow object focus. This is what Selkirk (1995) identified as focus projection: the primary stress indicates an F-mark on the object in (5d), by the rule in (6). This F-mark can optionally “project” upwards through the syntax from the object, to the verb, to the VP, and all the way to the CP, by the rules in (7). The focus is identified by the rule in (8). Thus, focus projects from the nuclear stress position.

- (5) a. What happened? [sentence-wide CP focus question]
 b. What did Karsten do? [wide VP focus question]
 c. What did Karsten write? [narrow object focus question]
 d. [Karsten [[wrote_F [this PAPER<sub>F]]]_F]_{F, FOC}.
 [optional focus projection]</sub>

(6) Basic Focus Rule (English): “An accented word is F-marked.”

(7) Focus Projection

- (a) F-marking of the *head* of the phrase licenses the F-marking of the phrase
- (b) F-marking of the *internal argument* of a head licenses the F-marking of the head

(8) Defining the Focus

The Focus of a sentence is defined as an F-marked constituent not dominated by any other F-marked constituent.

(Selkirk 1995: 555, 561)

Whereas English marks focus *in situ*, Hungarian uses movement to get the focus into the nuclear stress position. In Hungarian, default stress is leftmost, on the verb (i.e. Szendrői 2003). Focus phrases move into a focus projection at the left edge of the clause; this has been conceived of as syntactically driven movement to satisfy a [+Focus] feature (Bródy 1995), or as phonologically driven movement (Szendrői 2003). Under either account, the grammar conspires to produce a focused constituent in a position that receives primary stress.

Thus, we have the following predictions for focused constituents in N_{te}?kepmxcin, a VSO system with rightmost nuclear stress. If N_{te}?kepmxcin is an English-type system, we expect no change in word order; the nuclear stress should just shift to the focused constituent. In a Hungarian-type system,

we expect the focus to move to a focus projection coinciding with the right edge, where the default nuclear stress is. In the next section I show that neither prediction is borne out.

4. Focus in Ntɛʔkepmxcin

4.1 Narrow focus is structural: clefts in Ntɛʔkepmxcin

Clefts are typically employed to mark narrow focus in Ntɛʔkepmxcin (Kroeger 1997). Moreover, the focused cleft heads are base generated, and not moved to the left edge (Kroeger 1997, 1999).

There are two types of clefts: ‘bare’ clefts, and ‘introduced’ clefts (terms from Kroeger 1999). ‘Introduced’ clefts consist of a cleft predicate *ɕe* or *ʔe* which ‘introduces’ the focused DP (the head of the cleft), and then a cleft clause (or ‘residue clause’). The cleft clause is typically introduced by a determiner/complementizer³ and carries subordinating morphology (see Kroeger 1997, 1999). In (9B), the DP *e Flora* is the subject focus, and follows the cleft predicate *ɕe* and the second position clitic *xeʔ*. In the residue clause, the verb *sʔumstemus* ‘wear’ is preceded by a complementizer *e* and carries *-emus* ‘extraction’ morphology (Kroeger 1997). When a DP or demonstrative is the focus, the use of introduced clefts is obligatory; presumably this is because DPs and demonstratives cannot be predicates in Ntɛʔkepmxcin, so they require a functional element (the cleft predicate) to occupy the initial predicate position (recall that Ntɛʔkepmxcin is a predicate-initial language).

- (9) A: ʔe swét xeʔ k s-ʔúm-s-t-Ø-emus e ʔestúptept te n̄knpáxn.
 and who DEM COMP STAT-wear-CAUS-TR-3O-SUBJ.EXTR DET black OBL vest
 “Who is wearing the black vest?”
- B: ɕe xeʔ [e Flóra]_{FOC} e s-ʔúm-s-t-Ø-emus
 CLEFT DEM DET Flora COMP STAT-wear-CAUS-TR-3O-SUBJ.EXTR
 e ʔestúptept te n̄knpáxn.
 DET black OBL vest
 “[FLORA]_{FOC} is the one wearing the black vest.”
 (literally “It is [FLORA]_{FOC} that is wearing the black vest.”)

Note that in (9B), the focus *Flora* is the leftmost lexical element, and not rightmost as predicted by the stress-focus accounts outlined in the previous section. The nuclear stress continues to surface at the right edge (this claim will be supported by phonetic evidence for object focus cases in the next section). Thus, we have a divergence of stress and focus; that is, focus is marked structurally and not prosodically, despite the otherwise typical properties of the Ntɛʔkepmxcin stress system.

The second type of cleft is a ‘bare’ cleft. In ‘bare’ clefts, a bare noun or adjective acts both as the matrix predicate and as the focus (the cleft head), and takes the residue clause as its subject. Just like in introduced clefts, the residue clause is introduced by a complementizer and carries subordinating morphology. In example (10B), the bare noun *pinš* is both the predicate and the object focus; the subordinated verb *ʔaʔxans* ‘eat’ is introduced by a complementizer *e* and prefixed with nominalizing morphology *n-s-*.⁴

- (10) A: Stéʔ xʷúy k s-ʔaʔxáns-əp tk ʂáap.
 what FUT COMP NOM-eat-2PL.POSS OBL.IRL evening
 “What are you people going to eat this evening?”

³ Determiners in Ntɛʔkepmxcin also serve as complementizers (see Kroeger 1997, 1999, and Koch 2006a). I will gloss these as COMP ‘complementizer’ in Ntɛʔkepmxcin clefts, for easier comparison with English clefts.

⁴ The position of the future marker *xʷúy* is also somewhat anomalous in (10B), coming before the complementizer of the clause it associates with; but Kroeger (1997, 1999:390) has noted that cleft residues with future markers are sometimes not introduced by a determiner at all, or sometimes only erratically, with the consultants he has worked with. I concur with this finding, adding that sometimes consultants will have the future marker preceding the complementizer, as in example (10B). Similarly, my consultants sometimes omit the complementizer introducing residue clauses beginning with another auxiliary, progressive (*w*)ʔex.

B: [pínʃ]_{FOC} nceʔ x^wúy e n-s-~~1a~~ʔxáns.
 beans 1 SG.EMPH FUT COMP 1 SG.POSS-NOM-eat.
 ‘I’m gonna’ eat [BEANS]_{FOC}.’ (literally ‘It’s [BEANS]_{FOC} that I’m gonna’ eat.’)

Again, there is a divorce of primary stress (rightmost) from focus (leftmost). This divorce is particularly striking for focused objects, since their default position in VSO order is at the right edge, in the nuclear stress position. Thus, we would not expect these objects to abandon the rightmost position if stress were used to mark focus, let alone be generated at the opposite end of the clause.

A corpus analysis which coded different focus types for their syntactic structure (either VSO order, or a cleft) confirms that clefts are the dominant form employed for marking narrow focus (except for narrow verb focus, since verbs are already in the leftmost focus position when in basic VSO order). The corpus consists of conversations and conversational data collected during fieldwork with two female speakers, and the survey below comprises 338 focus cases. Wide (CP) focus, VP focus and verb focus overwhelmingly retain the basic verb-initial order, while narrow focus on objects, subjects and quantifiers results in a cleft construction with the cleft head corresponding to the focus.⁵

Table 1: Focus type and syntactic realization – a corpus study of 338 focus cases

<i>Focus Constituent</i>						
	CP	VP	Verb	Object DP	Subject DP	QP
<i>Word order</i>						
V(S)(O)	58 (90.6%)	76 (98.7%)	19 (100%)	11 (20.4%)	4 (7.1%)	1 (1.5%)
Cleft	6 (9.4%)	1 (1.3%)	0 (0%)	43 (79.6%)	52 (92.9%)	67 (98.5%)

4.2 Cleft heads are not moved

Although subordinated verbs in the residue clauses are marked by subordinating morphology, like *-emus* in (9B), it is not the case that focused cleft heads are extracted from residue clauses. Under such an analysis, cleft sentences would be single CP structures – simple relative clauses, in essence, with the focused cleft head corresponding to the head of the relative clause. Kroeber (1997:388-389, 1999) gives convincing evidence that clefts are biclausal; the embedded example below parallels ones noted by Kroeber (1997:388, 404, 1999:265).

When embedded, clefts take clause-typing morphology on the focused cleft head, while the verb in the residue clause retains its own clause-typing morphology. As Kroeber has noted, this fact suggests there are two CPs present in clefts. In (11), both the cleft head *piʔéyeʔ* ‘one’ and the embedded verb *wʔxúm* ‘have’ are marked with subordinating nominalization *s-* and possessive clause inflection *-s*. Kroeber also notes that both the cleft head and the residue are introduced by complementizers. Again, this suggests that we are dealing with two CPs here. Thus, clefts are biclausal, with the cleft head generated *in situ* and not moved from within the cleft clause to some kind of Focus Projection. For further arguments against a movement analysis of clefts in Salish, see Davis et al. (2004), and Koch (2007b).

(11) ʔéx xeʔ qeʔním-Ø-Ø-ne [CP₁ k [s-piʔéyeʔ-s]_{FOC} ʔuʔ
 PROG DEM hear-TR-3O-1SG.TS COMP NOM-one[DIM]-3.POSS only
 tk móʃmoʃ [CP₂ k s-wʔx-úm-s xeʔ e Tóm]].
 OBL.IRL cow COMP NOM-PROG-MDL-3.POSS DEM DET Tom
 ‘I heard that Tom only has [ONE]_{FOC} cow.’
 (literally ‘I heard that it is only [ONE]_{FOC} cow that Tom has.’)

⁵ For possible reasons for the higher rate of exceptions for object focus cases (20.4% fail to use clefts, and employ basic VSO order), see Koch (2007a). One reason seems to be prosodic: “heavy” objects (for example, conjoined objects, or nouns modified by adjectives) comprising more than one foot tend to seek the rightmost nuclear stress position, and resist clefting.

4.3 Phonetics: cleft heads get no additional pitch accent

In this section I report the results of a phonetic experiment which compared pitch accent patterns in wide (CP) focus cases with object focus cases. In CP focus utterances, we expect a default stress pattern to emerge, which we have seen is a rightmost nuclear stress in Nt̥eʔkepmxcin. Tokens were considered only if they were uttered in one breath group (to avoid effects of declination resetting). This yielded 38 tokens of CP focus, which were compared with 24 tokens of clefted object focus. Within each utterance, I measured the maximum pitch of the leftmost stress (the verb in CP focus cases, and the focused object cleft head in object focus cases) and the maximum pitch of the rightmost stress. I then subtracted these two figures to calculate the change in pitch within each utterance.

In wide (CP) focus cases, I found an average declination of -23.12 Hz. Recall that nuclear stress in these cases is rightmost. So, even though the rightmost pitch accent is less in absolute value, it is still perceived as bearing a greater pitch accent due to declination effects (Strik and Boves 1995). The leftmost stress in the wide focus cases had an average overall pitch of 188.81 Hz.

Using the CP focus case as the baseline, we can now compare what happens when focused objects are clefted. Under a stress-focus account, we would still expect the focused, clefted object to receive the dominant pitch accent of the utterance (as is the case in English clefts). In this case, the declination in object focus cases ought to be greater than in CP focus sentences; and, the average pitch on focused objects at the left edge ought to be higher than the pitch on the leftmost stress in CP focus utterances. Just how much greater the pitch accent should be is a matter for debate; here, I have tentatively chosen the value of 15 Hz, since this is the universal intrinsic F-zero difference among different types of vowels for females (Whalen and Levitt 1995), and thus seems to have some perceptual validity as a minimally noticeable difference. So, the null hypothesis is that clefted objects will have an average pitch of 203.81 Hz or more; and that declination in object focus sentences will be 38.12 Hz or greater.

In fact, leftmost focused objects had an average pitch of 174.79 Hz, a lower absolute value than the left edge stress of wide focus sentences. The declination in object focus sentences was -21.36 Hz, very similar to the -23.12 Hz found in CP focus utterances. T-tests comparing CP focus with object focus utterances indicate that both the non-difference in declination ($t = -3.40$, $*p < 0.05$) and in absolute left edge pitch ($t = 4.22$, $*p < 0.05$) is significant. Therefore, I reject the null hypothesis that focused objects clefted at the left edge receive the dominant pitch accent in Nt̥eʔkepmxcin. I conclude that pitch accent is not employed by Nt̥eʔkepmxcin speakers to mark focus; rather, structural focus is used. Clefts thus seem to retain the same default stress marking found in standard wide focus VSO clauses, where nuclear stress falls rightmost.

Table 2: Pitch in CP focus and object focus utterances

Focus type	Average declination	Average pitch on leftmost stress
CP (wide) focus	-23.12 Hz	188.81 Hz
Narrow object focus	-21.36 Hz	174.79 Hz

5. Implications

5.1 Speakers: rethinking “stress-focus” accounts

Because Nt̥eʔkepmxcin uses a purely structural focus system, and does not mark focus constituents with the dominant pitch accent, stress-focus theories fail to account for focus marking in Thompson River Salish. However, that does not mean we have to abandon the idea that focus is not always marked prosodically. I will concentrate on a particular instance of the stress-focus idea, namely the optimality theoretic discourse constraint proposed by Féry and Samek-Lodovici (2006:135-6):

(12) STRESS-FOCUS: a focused phrase has the highest prosodic prominence in its focus domain.

What does “stress” mean here? Since stress is the manifestation of a particular prosodic category, namely prosodic heads, it is profitable to recast the constraint in (12) in terms of Generalized

Alignment (McCarthy and Prince 1993). The intuition is that, when we say “stress-focus,” what we mean is “align the focus (a syntactic category) with a prosodic head (a phonological category)” (see Truckenbrodt 1999:248, who mentions a similar alignment constraint for Chichewa). In English, focus attracts both the phonological phrase head, and the intonational phrase head. Thus, I propose the two constraints in (14), to subsume STRESS-FOCUS in (12).

(13) *Generalized Alignment* (McCarthy and Prince 1993)

Where Cat_1, Cat_2 are prosodic, morphological, or syntactic categories and $Edge_1, Edge_2 \in \{\text{Right}, \text{Left}\}$:
 $\text{ALIGN}(Cat_1, Edge_1; Cat_2, Edge_2) \Leftrightarrow$ For each Cat_1 there is a Cat_2 such that $Edge_1$ of Cat_1 and $Edge_2$ of Cat_2 coincide.

- (14) a. English: $\text{ALIGN}(\text{Foc}, \text{R}; \text{Phead}, \text{R})$
 “Align the right edge of the focus with the right edge of a prosodic phrase head.”
 b. English: $\text{ALIGN}(\text{Foc}, \text{R}; \text{Ihead}, \text{R})$
 “Align the right edge of the focus with the right edge of an intonational phrase head.”

Given the Generalized Alignment schema in (13), we now expect Focus to align with prosodic categories other than prosodic heads. In Ntɛʔkepmxcin, the focus aligns with the left edge of the clause – the left edge of the intonational phrase. This is particularly noticeable in the case of bare clefts (10B), where the focus *pinš* is the initial element in the sentence. Even in introduced clefts (9B), however, the focus *Flora* is the leftmost lexical element; a syntactic prohibition against DPs being predicates (recall that Ntɛʔkepmxcin is a predicate initial language) forces the use of the functional cleft predicate *čé* in the left edge predicate position. Thus, it is more important to have a predicate at the left edge than the focus at the left edge; a syntactic constraint trumps a prosodic one here, but the focus is still “as left as possible” (see Krifka 1998 on the syntactic constraint VERB-RIGHT competing with the discourse constraint FOCUS-RIGHT in German).

While focus thus aligns with the left *edge* of an intonational phrase in Ntɛʔkepmxcin, the prosodic *head* of this intonational phrase is elsewhere, namely at the right edge of the clause. Such language variation is expected when we recast STRESS-FOCUS in terms of Generalized Alignment.

- (15) Ntɛʔkepmxcin: $\text{ALIGN}(\text{Foc}, \text{L}; \text{I}, \text{L})$
 “Align the left edge of the focused constituent with the left edge of an intonational phrase.”

This leads us to the surprising conclusion that, although focus in Ntɛʔkepmxcin is structural, its motivation may still be prosodic (see Szendrői 2003 on prosodic considerations driving Hungarian focus movement). Moreover, the account presented here preserves the insight of the stress-focus accounts that focus is marked prosodically, but alters the type of prosodic category that can play a role, from prosodic *heads* to prosodic *edges*.

Still to be explored is the range of categories which focus can be aligned to in different languages. So far we have prosodic heads (English, German, Hungarian) and prosodic edges (Ntɛʔkepmxcin; Truckenbrodt 1999 on Chichewa).⁶ The interface between syntax and phonology may constrain which prosodic categories focus can align to (Selkirk and Kratzer 2007); further research is required here.

5.2 *Perceivers: abandoning focus projection*

In Selkirk’s (1995) system, perceivers are able to recover what the focus of a sentence is, based on the prosody of the speaker. The Basic Focus Rule for English is “An accented word is F(ocus)-marked” (6). In Ntɛʔkepmxcin, the Basic Focus Rule would have to be different: “The leftmost lexical word is F(ocus)-marked.” Selkirk does allow for language-specific Basic Focus Rules. This focus rule

⁶ In fact, alignment to prosodic heads may be reducible to alignment to prosodic edges as well, assuming that prosodic categories are either left-headed or right-headed. Under this view, English focus would simply align with the right edge of prosodic phrases, which are independently right-headed.

straightforwardly accounts for cases like (9B) and (10B), where the focus is a single lexical word. In more complex sentences, a complex NP may be clefted (‘one cow’ in the embedded cleft in (11)), yet only a portion of that NP will be focused – possibly not the leftmost lexical element (‘one’ in (11)). In this case, we just need to allow the rule in (16) to be subject to certain syntactic constraints that prevent the “stranding” of portions of a complex NP outside of the cleft head (just as in English **It is only [ONE]_{FOC} that Tom has _____ cow.*) Thus, focus by rule (16) will be “as left as possible,” subject to certain syntactic constraints.

(16) Basic Focus Rule (Ntɛʔkepmxcin)

“The leftmost lexical word in the intonational phrase is F(ocus)-marked.”

The second part of Selkirk’s system allows focus marking to project upward through the syntax of the clause (5, 7). However, Selkirk’s rules of focus projection fail in Ntɛʔkepmxcin. We need just consider a wide focus case, which has VSO order. In the wide VP focus in (17), the verb is leftmost. By the rule in (16), the verb will be F-marked, which is expected since it is part of the focus. However, the direct object is also part of the focus. Assuming the object DP is sister to the verb head, we would have to “project” the F-mark on the verb to its argument, or downward in the syntax. Selkirk’s system does not allow for this type of downward focus “projection.” One solution is to propose language specific focus projection rules. On the other hand, I will take the problem outlined here as further support for Schwarzschild’s proposal to abandon rules of focus projection (1999). In Schwarzschild’s system, F-marks are freely assigned, subject to certain constraints that limit F-marking.

(17) A: *What did you do yesterday?*

[downward focus projection not permitted]

B: [CP [VP [V çən-xí-t-Ø-nɛʔ] [DP † n-sk^wúzeʔ_[Fʔ]]]_{F, FOC}....
 ring-APPL-TR-3O-1SG.TS DET 1SG.POSS-offspring
 “I [VP [called_F] [my daughter_F]]_{F, FOC}....”

6. Conclusion

In this paper, I have presented original data from Ntɛʔkepmxcin (Thompson River Salish) showing that, though it is a stress language, stress is not used to mark focus. This finding counters previous accounts of the marking of focus which link stress and focus (Selkirk 1995, Reinhart 1995, Vaissiere 1995, Schwarzschild 1999, Szendrői 2003, Féry and Samek-Lodovici 2006, etc.). Instead, narrow focus is marked structurally, in the form of clefts (Kroeber 1997, 1999); the focus corresponds to the base-generated cleft head, and is not marked with primary pitch accent.

However, I have suggested that this structural focus can still be described prosodically, in terms of a syntactic category (Focus, as identified by Selkirk’s 1995 F-marking system in (8)) aligning with a prosodic category. In English, Focus aligns with prosodic *heads*, while in Ntɛʔkepmxcin Focus aligns with the left *edge* of the intonational phrase, and not with prosodic heads. This suggests that a speaker’s syntactic derivation goes some way to satisfy a discourse prosodic constraint (Szendrői 2003 on Hungarian), though to what extent the syntactic derivation also satisfies requirements of the interface with semantic interpretation remains to be explored.

Finally, listeners in Ntɛʔkepmxcin are able to recover discourse information (what the focus is) with a language specific Basic Focus Rule that identifies the leftmost lexical word as being F(ocus)-marked. This rule is subject to syntactic constraints: since certain configurations (stranded possessors or adjectives, for example) are ruled out in the syntactic derivation, the focus is not always the leftmost element, but “as left as possible.” Selkirk’s rules of focus projection fail however, since they would need to “project” from left-edge verbs down through the syntax to objects in wide focus cases in Ntɛʔkepmxcin. Schwarzschild’s (1999) approach which regulates F-marking with constraints against excessive F-marking or F-marking of given material is better suited here.

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