

## Focus as a morphosyntactic and morphosemantic feature

Irina Nikolaeva, SOAS, London

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### Abstract

A typology of grammatical features offered in Corbett (2012) and Kibort & Corbett (2008, 2010) makes a crucial distinction between two types of interface features reflected in morphology: (i) morphosemantic features, which affect semantics but do not participate in syntax, (ii) morphosyntactic features, which are both semantically charged and relevant to syntax. In neutral terms, for a feature to be relevant to syntax means that at least some of its values must be determined through a syntactic relation with another word.

Although focus was listed as a possible candidate for a grammatical feature, its status within this typology remained unspecified. If it is a feature, it is an interface feature since it tends to affect syntax and carries an instruction to phonology and semantics, but for most languages the focus feature is purely abstract and irrelevant for morphology. If focus is expressed by a dedicated morphological marker, there is typically no evidence that it is relevant for agreement or government, so at best we can view focus as a morphosemantic feature.

This paper contributes to the typology of grammatical features by analysing how focus works in Tundra Nenets (Uralic). I argue that this language has a dedicated marker of exclusive focus which is fully integrated into the morphology of the word of which it is a part. It appears to be the exponent of two different features which do not necessarily overlap: a morphosemantic focus and a morphosyntactic focus. The latter participates in ‘focus spreading’, i.e. some kind of feature transmission partly similar to the phenomenon of ‘definiteness spreading’. Focus spreading shows at least some canonical properties of grammatical agreement. Based on this, I will conclude that Tundra Nenets comes as close as possible to a language in which postulating a marginal morphosyntactic feature ‘focus’ may be justifiable.

### 1. The focus feature

Grammatical features have long been known to provide a convenient tool for the expression

of linguistic generalizations and have also been claimed to have a certain level of psychological reality. A useful typology of features was offered in Kibort & Corbett (2008, 2010) and Corbett (2012). One parameter of classification concerns the component of grammar in which the feature operates, i.e. phonology, morphology, syntax or semantics. For instance, a morphological feature only has a role within morphology and cannot be accessed by syntactic and/or semantic rules. A typical example is inflectional class.

We also find interface features which operate across components. Here a crucial distinction is made between morphosemantic features, on the one hand, and morphosyntactic features, on the other hand. Morphosemantic features are reflected in morphology and are semantically charged but are not relevant to syntax, while morphosyntactic features are semantically charged and relevant to both morphology and syntax. What counts as syntactic relevance, strictly speaking, depends on the particular view of syntax, but in neutral terms, for a feature to be relevant to syntax means that at least some of its values come from another syntactic entity, not the word the feature is marked on. In other words, a syntactically relevant feature is involved in the relation of agreement or government. With this definition, a typical example of a morphosemantic feature is tense: canonical tense is characterized as inherent inflection, which means that its value is not dictated by syntax. Number occurring only on nouns is morphosemantic too. The common morphosyntactic features are person, number, gender and case when involved in agreement, e.g. on attributive adjectives, but case is also assigned to nouns through government. This means that the role of the same feature may differ across languages and even across constructions within the same language (Corbett 2012: 49). It is also worth noting that morphosyntactic features are typically associated with unique morphological material, but Corbett (2012: 239–251) shows that in some situations they can be justified even though they are not expressed by a dedicated morphological form.

Turning now to focus, although Kibort (2008) lists it as a possible candidate for a

grammatical feature, its status within the typology outlined above remained unspecified.

Focus is usually understood as a semantic or pragmatic property that plays a role in syntactic processes. There have been suggestions to integrate it into core syntax by postulating a relevant functional head which carries the semantic content of focusing, or as a syntactic feature assigned to a particular node in the phrase-structure representation (for an overview see Aboh 2016; Surányi 2016). Syntactic focus is often responsible for movement. In focus-prominent languages, such as Hungarian, a focused item has to move to a designated position because a strong focus feature has to be overtly checked (Brody 1995; É. Kiss 1998, among others). Languages like German have no obligatory focus movement, but a (weak) focus feature has been postulated for such languages too (e.g. Jacobs 1993; Rosengren 1993).

The syntactic focus feature carries an instruction to phonology and semantics (Rooth 1992; Selkirk 1996; Krifka 2006, among others), and in this sense it can be viewed as a kind of interface feature, but it is generally assumed to be purely abstract and therefore irrelevant for morphology. Yet in some languages it may be overtly expressed; so the question is then whether there is evidence for a focus feature in morphology too. Consider for instance the so-called ‘term focus’, i.e. the focus that scopes over a non-verbal element. It may be expressed:

by a morphological marker, including free-standing particles or case markers, which flag a non-verbal element as being focused, e.g. in Chickasaw (Munro & Willmond 1994), or a special form of the verb, e.g. conjoint forms in Makuwa (van der Wal 2011);

or

by interaction with other features relevant for morphology indicated either on a non-verbal element itself, e.g. interaction with noun classes in Aghem (Watters 1979, and

others), or on the verb, e.g. interaction with agreement features in Khanty (Nikolaeva 1999) or with TAM in Noon (Soukka 2000).

In the former case, we are dealing with a dedicated focus form clearly realized by morphology, but typically there is no evidence that the focus feature is relevant for agreement or government, so at best we can view focus as morphosemantic. In the latter case, focus may be more appropriately characterized as a condition on the use of other morphosyntactic features, i.e. an independent factor which affects the values of other features but is not a feature itself (Corbett 2006: 116–122). For instance, in Khanty the availability of object agreement in number depends on whether the object is focused or not, but focus is not actually expressed in the agreement paradigm.

Convincing examples of double focus marking conveying the same semantic content are more difficult to find, because some instances of term focus being marked both on the term and the verb have been analyzed as biclausal, as e.g. in Byali (Reineke 2007). If monoclausal examples existed, it would perhaps be natural to treat them as a kind of agreement. This, in turn, will require a morphosyntactic focus feature. However, we may also ask whether we are dealing with some kind of multiple representation that does not result from the syntactic process of agreement but rather reflects the speaker's pragmatic decision to represent the same information several times independently of other instances.

The present paper aims to contribute to this discussion by analyzing how the focus feature works in Tundra Nenets.<sup>1</sup> I will argue that this language comes as close as possible to a

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<sup>1</sup> Tundra Nenets is a Uralic language spoken in the Arctic part of European Russia and north-western Siberia by about 20,000 people. Fieldwork on Tundra Nenets was conducted in 2003-2016 and supported by an ELDP grant awarded to Tapani Salminen in 2003, a grant from the Academy of Finland awarded to Larisa Leisiö in

language in which postulating a residual morphosyntactic focus feature may be justifiable. Section 2 shows that Tundra Nenets has a morphological marker of exclusive focus and describes its basic semantics, syntactic distribution and morphological properties. The morphological behavior of the focus marker appears to be unique for Tundra Nenets grammar. In the following two sections I show that it has a number of interesting syntactic properties too. In this paper I will only discuss the behavior of focus in the nominal domain and take it to correspond to a DP phrase. Section 3 addresses the multiple representation of focus within this phrase, while Section 4 argues that focus is also involved in an agreement-like process which I refer to as ‘focus spreading’. In Section 5 I will speculate on the typological status of the Tundra Nenets focus feature.

## **2. The focus marker**

As is well known, the notion of focus is subject to multiple understandings, but in this paper I will be assuming the basic idea of the influential Alternative Semantics approach (Rooth 1992; Krifka 2007; Krifka & Musan 2012, among others). In the words of Krifka & Musan (2012: 7), “[f]ocus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions”. This general definition highlights the fact that the main function of focus consists in triggering a Common Ground update via invocation of

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2009 (project number 125225), and an AHRC grant awarded to Irina Nikolaeva in 2015 (Ref. AN/M010708/1).

The transcription is based on Nikolaeva (2014), where more information on Tundra Nenets grammar can be found. The sign ´ indicates palatalization, while ° stands for an extra-short reduced vowel. The nominative case and singular number on nouns, as well as the 3<sup>rd</sup> person singular subject agreement and the present tense on verbs are formally unmarked and therefore I do not indicate them in glosses.

relevant alternatives.

The focus semantic value is a set of propositions that differ from each other in that the denotatum of the focused expression is replaced by another object of the same type. These alternative propositions are evaluated as not true, so the role of focus is to exclude alternatives, either partially or fully. The so-called ‘strong exclusive focus’ indicates that all relevant alternatives are excluded; in contrast, ‘weak exclusive focus’ indicates that there is at least one excluded alternative, possibly more (cf. van der Wal 2011). Exclusive particles of the *only*-type correspond to a universal quantifier which scopes over all alternatives generated by focus (König 1991; Horn 1996; Krifka 1998); they are therefore associated with strong exclusive focus. However, I will assume following the literature mentioned above that the distinction between ‘strong’ and ‘weak’ focus is a matter of degree and depends on other factors such as the size of the alternative set and its explicit mention vs. implicit presupposition (for an extensive discussion see Repp 2010). The semantically weakest type of focus is simply associated with the function of introducing new information into a discourse and is only related to the presence of alternatives in a rather indirect sense: the set of alternatives is entirely open.

Tundra Nenets has a focus marker *-r'i/-l'i*. It is fully integrated into a word’s phonology and triggers the same phonological processes as regular suffixes in the language. The alternation *-r'i ~ -l'i* is phonologically conditioned by the quality of the preceding segment. The variant *-r'i* is used after a vowel, e.g. *xasawa-r'i* (man-FOC). The change  $r' > l'$  is parallel to  $r > l$  and regularly takes place after a consonant, cf. the change in the 2<sup>nd</sup> person singular possessive inflection *-r<sup>o</sup>* as in *n'um-l<sup>o</sup> < n'um-r<sup>o</sup>* (name-2SG) and in the focus marker as in *n'um-l'i < n'um-r'i* (name-FOC).

The *-r'i/-l'i* marking is not obligatory on a focused constituent. It presupposes a

somewhat ‘stronger’ reading than the unmarked focus, so that *-r'i/-l'i* is termed ‘limitative’ in Salminen (1993–2012) and Nikolaeva (2014) and is often translated as ‘only; nothing else than’, suggesting a strong exclusive interpretation. In this paper it will be glossed as FOC, and its scope will be shown with square brackets as below: in (1a) it scopes over the subject and in (1b) over the predicate alone.

- (1) a. *sekunda-r'i wəyarə°*  
second-FOC pass.3SG  
‘Only [a second]<sub>F</sub> passed.’
- b. *ya-m p'ir'e-mpa-r'i-d°m*  
soup-ACC cook-DUR-FOC-1SG  
‘I only [cook]<sub>F</sub> the soup (I don’t eat it).’

It is not true, however, that *-r'i/-l'i* must always generate a strong exclusive reading. In the following example, where the focus scopes over an adverbial, the ‘only’ interpretation is hardly possible. Rather, the function of *-r'i-* appears to consist in some kind of emphasis,

expressing counter-expectation and filling in the informational gap.

(2) *n'is'a-w<sup>o</sup>*    *m'er<sup>o</sup>-r'i-h*    *yəŋkuma*

father-1SG    quick-FOC-GEN    die.3SG

'My father died [quickly]<sub>F</sub>.'

Example (3) demonstrates that the focus marker is compatible with the free-standing strong exclusive focus particle *walakəda* 'only'. The meaning of *walakəda* is essentially the same as 'only' in English; thus, it excludes all other alternatives.

(3) *t'on'a xaleq*    *s'ump<sup>o</sup>-r'i*    *walakəda*    *ŋəwornə*

fox    fish.GEN.PL    back-FOC[ACC.PL]    only    eat.3SG

'The fox only eats [the backs of the fish]<sub>F</sub>.'

For the purpose of this paper I take these facts to mean that the actual contribution of *-r'i/-l'i* is simply to indicate exclusive focus that evokes a set of alternatives against which the focus constituent is evaluated, but its strongest reading is either generated through implicatures or requires additional expression. Obviously, the semantics of *-r'i/-l'i* needs further investigation, but nothing in the following discussion crucially depends on it. In most cases I will continue translating the focus marker as 'only' for convenience.

The focus forms are fully productive; the distribution of the focus marker is not subject to any accidental gaps. The narrow focus takes a scope over any non-verbal constituent (1a)

or the verb alone to the exclusion of all other material (1b); such focus is morphologically marked on the respective constituent (subject to conditions discussed below).

Thus, the focus marker is not limited to one grammatical class but can occur on virtually all parts of speech without changing word-class membership. As far as its morphological status is concerned, it is therefore not an instance of derivation, if canonical derivation is taken to be category-changing (Spencer 2013: 58–63). In some sense the focus marker is not dissimilar to evaluative morphology, which is known to have properties of both inflection and derivation (Stump 1993, and references therein). Although not without exception, canonical evaluative morphology tends to be external with respect to derivation and internal with respect to inflection with respect to morphotactics. This is what is generally observed for Tundra Nenets focus. For instance, the noun *xan'e-ləwa* ‘hunting place’ is derived from the verb *xan'e-* ‘to hunt’ by means of the suffix *-ləwa*, which forms locational nouns from verbs in a rather productive manner. Just as for non-derived nouns, the focus on such nouns must precede any inflectional morphology, i.e. case, number and possessive agreement,<sup>2</sup> but it follows the derivational suffix, e.g. *xan'e-ləwa-r'i-xən-ta* (hunt-N-FOC-DAT-3SG) ‘only to his/her hunting place’, *xan'e-ləwa-r'i-q* (hunt-N-FOC-PL) ‘only the hunting places’. Adverbs and postpositions historically based on nouns exhibit the same distribution.

However, the morphotactic behavior of the focus marker is in fact more complex, as we can see on other parts of speech. Just as on nouns, the focus on verbs precedes

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<sup>2</sup> These often cumulate and therefore are not always separated in glosses.

unambiguous inflectional categories such as agreement and tense, as well as certain moods.

- (4) *xæ-r'i-ηku-waq*                    leave-FOC-FUT-1PL  
       *haqm°-r'i-s°ti-da*                catch-FOC-HAB-3SG>SG.OBJ  
       *wad'eq-l'i-w°na-waq*        tell-FOC-REP-1PL

Most verbs also have an oblique stem called ‘the general finite stem’ (initially by Salminen 1997). The oblique stem serves as the base of further inflection in the indicative present and past (except for the forms that express agreement with the plural object), as well as in the jussive mood. It is formed by adding either *ə* or *ηa* to the primary stem, largely depending on phonology. For instance, the verb *meq-* ‘to hold’ derives the following forms from its primary stem: *meq-y°-da* (hold-PL.OBJ-3SG), *meq-mi°* (hold-PF.PTCP), *met°* < *meqt°* (hold-IMP.2SG>SG.OBJ), *meq-la°* (hold-INCH.3SG), and so on. Examples of forms derived from the oblique stem *meq-ηa-* are *meq-ηa-xəh-s°* (hold-OBL-3DU-PST), *meq-ηa-r°* (hold-OBL-2SG), *meq-ηa-da* (hold-OBL-3SG>SG.OBJ) and *meq-ηa-xəyu-da* (hold-OBL-DU.OBJ-3SG). The focus marker can either precede or follow *ηa*, cf. *me-l'i-ηa-da* < *meq-r'i-ηa-da* (hold-

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<sup>3</sup> Some (intransitive) verbs do not appear to have focus forms; instead a periphrastic strategy is employed in which the lexical verb takes the form of the accusative action nominal, hosts the focus marker and is followed by the finite auxiliary *meq-* ‘to hold’ or *pæər-* ‘to do’. This strategy needs more investigation, but it shows similarity to other languages where a formal separation of the lexical content of the predicate from its morphosyntactic content is required for the purpose of focussing, as e.g. the English *do*-support structures (Birner & Ward 1998).

FOC-OBL-3SG>SG.OBJ) and *meq-ŋa-r'i-da* (hold-OBL-FOC-3SG>SG.OBJ). These forms are in free variation, although the former appears to be more frequent.

Note that intransitive verbs fall into two inflectional classes, traditionally called the 'subjective' and the 'reflexive' class. Class membership is a lexical feature of the verb, which is only made obvious in finite inflection (Nikolaeva 2014: 224–226). Only the 'subjective' intransitive verbs have the oblique stem. The reflexive verbs only have one stem, and the position of the focus marker is invariant on such verbs: it always follows the stem and precedes agreement. Thus, the position of the focus marker is sensitive to the inflectional class of the verb in the sense that variability is only observed in the subjective class.

Non-finite verb forms also demonstrate variable placement of the focus marker. In Tundra Nenets non-finites head dependent clauses and include participles (used in relative clauses), clausal nominalizations/action nominals (used primarily in complement clauses), and converbs (used primarily in adverbial clauses). All these forms are productively derived by suffixation. The focus marker precedes the suffixes which derive converbs, e.g. *yab'erilə-r'i-b°q* (sparkle-FOC-COND.CVB) 'only if it sparkles', but must follow the suffixes of action nominals. Action nominals take agreement that cross-references the dependent subject and is formally identical to possessive agreement. The focus marker is internal to such agreement, e.g. *yeqy°tə-qma-r'i-da* (have.share-PF.AN-FOC-3SG) 'only him having his share'. The relative order of the focus marker and the participial suffixes is not fixed, e.g. *mənc°ra-na-r'i* (work-IPF.PTCP-FOC) ~ *mənc°ra-r'i-na* (work-FOC-IPF.PTCP) 'only working'.

Consequently, we also find variation in the finite moods historically based on participles. For instance, the inferential, termed 'narrative' in Salminen (1997), is part of the modal paradigm. It is based on the grammaticalized perfective participles in *-wi°/-mi°/-me°/-we-* used as finite predicates, when the participial suffix was reanalysed as the inferential mood. Examples (5) show that the focus can be placed either before the inferential or after it,

immediately before any agreement morphology.

- (5) a. *wark<sup>o</sup>-h*     *ηāwa*     *ηā-r'i-wi<sup>o</sup>*  
bear-GEN     head     be-FOC-INFR  
‘It turned out that it [was (indeed)]<sub>F</sub> a bear head.’
- b. *xasawa*     *kniga-m*     *tola-we-r'i-da*  
man     book-ACC     read-INFR-FOC-3SG>SG.OBJ  
‘The man only [read]<sub>F</sub> the book (he didn’t write it).’

Even more interestingly, the focus marker can be infixated morpheme-internally. The Tundra Nenets locative case in *-xāna/-x<sup>o</sup>na* and the ablative in *-xād<sup>o</sup>/-x<sup>o</sup>dā* are historically complex and go back to locational cases usually reconstructed for Northern Samoyedic as *\*-kâ-nâ* / *\*-kâ-nä* and *\*-kâ-tâ-*, respectively (Mikola 2004: 98). According to the widely held view, the actual case markers here were *\*-nâ/-nä* and *\*-tâ*, whereas the element *\*-kâ-* is usually analyzed as an old derivational affix with the locational meaning (Künnap 1971: 125), a postposition which in its turn could take case inflections (Mikola 1975) or an old lative/dative case (Mikola 2004: 101). The Tundra Nenets reflexes behave like morphologically simplex suffixes in the modern language, except that the nominal plural *-q* is inserted between *-xā/-x<sup>o</sup>* (< *\*-kâ-*), on the one hand, and *-d<sup>o</sup>/-dā* (< *\*-tâ*) or *-na* (< *\*-nâ/-nä*), on the other hand. The focus in the singular precedes a local case, whereas in the plural it follows the number marker but precedes the actual complex case. This ensures that the element *-xā/-x<sup>o</sup>* appears twice in the word form. In the following, infixation is shown using

angle brackets.

(6)	<i>ηανο</i>	boat	‘boat’
	<i>ηανο-xανα</i>	boat-LOC	‘in the boat’
	<i>ηανο-r'i-xανα</i>	boat-FOC-LOC	‘only in the boat’
	<i>ηανο-q</i>	boat-PL	‘the boats’
	<i>ηανο-r'i-q</i>	boat-FOC-PL	‘only the boats’
	<i>ηανο-xα&lt;q&gt;na</i>	boat-LOC<PL>	‘in the boats’
	<i>ηανο-xα&lt;q&gt;&lt;r'i&gt;xανα</i>	boat-LOC<PL><FOC>	‘only in the boats’

There are also instances where the focus breaks a locational case even in the absence of the plural. Perfective action nominals in the ablative in *-xαd°/-x°dα* head adverbial temporal clauses which express temporal anteriority with respect to the main clause.

(7)	<i>xon'o-qma-x°dα-n'i</i>	<i>sæwæn°</i>	<i>wirmabərηa-q</i>
	sleep-PF.AN-ABL-1SG	eye.PL.1SG	hardly.open-3PL

‘After I have slept, my eyes can hardly open.’

In such forms the focus marker renders a meaning close to ‘as soon as’ and varies in position.

It can precede the ablative  $-xəd^\circ/-x^\circ də$ , but it is also possible for it to ‘break’ the case suffix.

- (8) *to-qma-r'i-x^\circ də-n'i*                      ~                      *to-qma-xə<r'i>də-n'i*  
 come-PF.AN-FOC-ABL-1SG                      come-PF.AN-ABL<FOC>-1SG  
 ‘as soon as I came’

In the latter instance the position of the focus marker is the same as the position of the plural in the ablative.

Some kind of infixation is also observed on personal pronouns. They have a peculiar morphological structure and are historically based on pronominal stems augmented by what can be considered a (genitive or nominative) possessive affix in the respective person and number, e.g. *mə-n'°* 1SG, *pidə-r°* 2SG, *pi-da* 3SG etc. Here  $-n'°$ ,  $-r°$  and  $-da$  are regular possessive affixes for 1SG, 2SG and 3SG, respectively, but they have been reanalysed as part of the pronominal stem. When these pronouns host the focus marker, it generally follows the residual possessive affix and may be followed by an additional possessive marker doubling the first one. This triggers some idiosyncratic phonological changes:  $mə-n'° > mə-n'°<r'i>n°$  (I-GEN.1SG<FOC>) ‘only me’,  $pidə-r° > pid^\circ-r'i-r°$  (thou-FOC-2SG) ‘only thou’,  $pi-da > pi-d^\circ<r'i>da$  (he/her-3SG<FOC>) ‘only him/her’. Non-nominative cases are derived from suppletive pronominal stems. There is no doubling but the focus precedes the possessive marker, cf. for the accusative *s'iq-l'i-m'i* (I.OBL-FOC-ACC.1SG) ‘only me (ACC)’ and *s'iq-l'i-mt°* (thou.OBL-FOC-ACC.2SG) ‘only thou (ACC)’.

What this discussion appears to demonstrate is that the morphological status of the focus marker is somewhat more complicated than the status of regular suffixes, which never

show variable placement in Tundra Nenets. If we apply Spencer & Luís' (2012) criteria, we can say that it exhibits some of the canonical properties of clitics. In particular, it is associated with a 'discourse function' and these do not tend to be expressed by either canonical inflection or canonical derivation. It also shows no or low selectivity towards its host.<sup>4</sup> However, given the word-based view of morphology which I am assuming here, the focus marker does not correspond to an independent syntactic terminal since it appears word-internally and is fully integrated into the phonology of the host word. I therefore conclude that *-r'i/-l'i* is an affix with a number of clitic-like properties.

I will take *-r'i/-l'i* to be a morphological expression of the focus feature [F]. For the present purpose its value can loosely be defined as some semantic expression that introduces a set of alternatives from which the focused element is drawn (for standard formalization see Rooth 1992). Admittedly, it is a non-canonical privative feature in the Jakobsonian sense, because no alternative values can be postulated and there is no active [-F]. While focus may be understood as a kind of semantic operator, no-focus is just a name for whatever is obtained without applying this operator, and the absence of focus is not associated with any special marking leaving the unfocussed element underspecified. However, the realization of [F] is sensitive to the morphological context (e.g. inflectional class) and conditions variation in form, at least with respect to morphotactics, therefore [F] appears to have some status in

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<sup>4</sup> The property of 'promiscuous attachment' is shared by a number of other discourse markers in Tundra Nenets. These were referred to as 'multi-based affixes' in Nikolaeva (2014), but could perhaps be more appropriately characterized as mesoclitics. However, none of them shows variable placement nor can break up a morpheme like the focus marker.

morphology.

### 3. Multiple representation of focus

This section deals with focus which scopes over the whole DP.<sup>5</sup> As expected, the exponent of focus is formally associated with the phrasal head, but it can also be hosted by a non-head daughter, without apparent difference in scope or meaning. The adnominal dependents that can host additional focus marking include simple adjectival modifiers and attributive participles. Participles define a clausal domain where the pronominal dependent subject triggers person/number agreement on the clause-external head noun.<sup>6</sup> Modification by adjectives and participles is shown in (9).

- (9) a. *pāw°d'a(-r'i)*      *pedara-r'i-x°na*  
dark-FOC                  forest-FOC-LOC  
‘only [in the dark forest]<sub>F</sub>’
- b. *[mən° s'erta-wi°/s'erta-we-r'i]*      *m'aq-l'i-m'i*  
1SG    make-PF.PTCP/make-PF.PTCP-FOC    tent-FOC-1SG  
‘only [the tent I made]<sub>F</sub>’

In (9) the focus marker on the modifier is optional and redundant from the semantic point of

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<sup>5</sup> Exactly the same patterns are observed in the (rare) situation when focus scopes over the head noun alone to the exclusion of dependent elements; I will not show these examples here for lack of space.

<sup>6</sup> See Ackerman & Nikolaeva (2013) for a detailed discussion of this relative clause pattern.

view. The demand comes from elsewhere: its presence is fully determined by the syntactic environment in which it occurs, namely, the head-modifier configuration. So at the first glance it appears to qualify as an instance of attributive agreement.

Tundra Nenets does indeed exhibit optional attributive agreement on simple adjectives and participles, although it is rather infrequent and typically restricted to specific registers. Modifiers agree with the head noun in number (singular, dual or plural) and – more rarely – in grammatical case and person/number which cross-reference the possessor in possessive constructions. The rules regulating how these features interact are quite complex (see Nikolaeva 2014 for more discussion) and will not play a role here. Some combinations are illustrated below; example (10c) shows that focus doubling is fully compatible with

attributive agreement in person/number and case.

- (10) a. *serako-x<sup>o</sup>tət<sup>o</sup>*                      *te-x<sup>o</sup>tət<sup>o</sup>*  
white-PL.ABL.2SG                      reindeer-PL.ABL.2SG  
‘from your white reindeer (PL)’
- b. *wol<sup>o</sup>tampə-we-mt<sup>o</sup>*                      *xoba-mt<sup>o</sup>*  
dislike-PF.PTCP-ACC.2SG                      skin-ACC.2SG  
‘the skin (ACC) that you disliked’
- c. *serako-r'i-mta*                      *te-r'i-m-ta*  
white-FOC-ACC.3SG                      reindeer-FOC-ACC.3SG  
‘only [his/her white reindeer]<sub>F</sub> (ACC)’

Given these patterns, one may wonder whether focus doubling on the modifier should be analyzed as an instance of attributive agreement on a par with agreement in case, number and possessive person/number. However, there are strong arguments against such an analysis. The patterns of agreement appear rather different from the rules that govern the occurrence of focus on the modifier.

First, as I argued in detail in Nikolaeva (2005), number, case and possessive person/number are encoded as part of noun's CONCORD specification and therefore are

(optionally) copied on the modifier via modifier-head agreement.<sup>7</sup> They must originate on the head noun, as indicated by the fact that these features cannot be expressed on the modifier alone when the head noun is not overtly specified for them. This can be seen from the following set of data. Possessive agreement on the head is optional when the possessor is lexical. Possessive affixes on the adjective/participle are only possible in the presence of possessive agreement on the head. When the adjective/participle bears no possessive marking, the head noun either takes the 3<sup>rd</sup> person possessive affix or not (11a). However, when the adjective/participle is marked for person/number, the possessive affix is obligatorily present on the head (11b).

- (11) a. *Wəta-h serako ti / te-da*  
Wata-GEN white reindeer / reindeer-3SG  
'Wata's white reindeer'
- b. *Wəta-h serako-da te-da / \*ti*  
Wata-GEN white-3SG reindeer-3SG / reindeer  
'Wata's white reindeer'

The same is true for case and non-possessive number: these features are only available on the modifiers in the presence of overt markers of the same feature on the head, so example (12)

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<sup>7</sup> In Nikolaeva (2005) I followed the basic insights of Wechsler & Zlatić (2003): CONCORD was understood as a sharing of morphosyntactic features between certain designated elements.

contrasts with (10a) above.

(12) \**serako-x<sup>o</sup>tət<sup>o</sup>*      *ti*

white-PL.ABL.2SG    reindeer

‘from your white reindeer (PL)’

This confirms that agreement in case, number and possessive person/number is an instance of true attributive agreement between the head and the modifier. In contrast, the focus marker is allowed to appear on the modifier alone in the absence of focus marking on the head, without any change of meaning, cf. (9) and (13).

(13) a.    *pāw<sup>o</sup>d'a-r'i*    *pedara-x<sup>o</sup>na*

dark-FOC      forest-LOC

‘only [in the dark forest]<sub>F</sub>’

b.    [*mən<sup>o</sup>*      *s'erta-we-r'i*]      *m'aq-m'i*

1SG              make-PF.PTCP-FOC    tent-1SG

‘only [the tent I made]<sub>F</sub>’

This is impossible as far as attributive agreement is concerned.

Second, attributive agreement is restricted to the dependents that participate in the modifier-head relation (adjectives and participles) and never occurs on non-modifiers.

However, the ‘doubling’ focus marker is available on non-modifier constituents, e.g. possessors. In this instance, too, the focus may be marked on the head alone, the possessor alone, or both the head and the possessor, without any affect on its semantic scope.

- (14)  $mən^{n̄} m'aq-l'i-m'i$  1SG tent-FOC-1SG  
 $mən^{n̄} <r'i> n̄ m'aq-m'i$  1SG<FOC> tent-1SG  
 $mən^{n̄} <r'i> -n̄ m'aq-l'i-m'i$  1SG<FOC> tent-FOC-1SG  
‘only [my tent]<sub>F</sub>’

The possessor never exhibits agreement with the head in number and/or case; a lexical possessor always stands in the genitive and a pronominal possessor is nominative. Therefore the behavior of CONCORD features contrasts with the behavior of focus.

Third and perhaps most importantly, double representation of focus occurs in syntactic phrases other than DPs. In PPs the object of the postposition stands in the genitive case and can host the focus marker in the absence of focus marking on the postposition itself.

Alternatively, the focus can be located on the postposition only or both on the genitive object

and the postposition.

- (15) *yes'a-r'i-h jeqm<sup>o</sup>n'a*                      money-FOC-GEN for  
*yes'a-h yeq<l'i>w<sup>o</sup>na*                      money-GEN for<FOC>  
*yes'a-r'i-h yeq<l'i>w<sup>o</sup>na*                      money-FOC-GEN for<FOC>  
'only [for money]<sub>F</sub>'

In (16) I show a construction with the content verb in the form of a non-changeable same-subject converb and an auxiliary-like verb; the latter has the properties of the syntactic head in terms of its position and inflectional behaviour. Such constructions are monoclausal and differ from regular complement clauses in that they are transparent for the purpose of object agreement (Nikolaeva 2014: 348–351). They also allow variation in the position of focus: if the scope of focus is the whole phrase, the exponence of focus may be hosted by the auxiliary

verb, the non-head sub-constituent or both.

- (16) a. *[ya-m p'ir'empa-r'i-°] p'irŋa-w°*  
soup-ACC cook-FOC-SS can-1SG>SG.OBJ
- b. *[ya-m p'ir'empa-°] p'ir-l'i-ŋa-w°*  
soup-ACC cook-SS can-FOC-OBL-1SG>SG.OBJ
- c. *[ya-m p'ir'empa-r'i-°] p'ir-l'i-ŋa-w°*  
soup-ACC cook-FOC-SS can-FOC-OBL-1SG>SG.OBJ
- ‘I only [can cook soup]<sub>F</sub> (and don’t do anything else).’

No other types of syntactic phrase smaller than clause can reliably be identified for Tundra Nenets, since the existence of VP is questionable (for some discussion see Nikolaeva 2014). The variation in focus marking may then be taken as one of the tests for syntactic constituency.

The same pattern is observed in some biclausal structures, namely, non-finite adverbial clauses headed by action nominals in the genitive case. They are introduced by postpositions which specify the type of semantic relation between the dependent and main clause; for example, the postposition *s'erq* indicates a general temporal relation. The three alternative options for the position of the focus marker which takes scope over the whole adverbial

clause are illustrated in (17).

- (17) a. *mən<sup>o</sup>*      *to-wa-r'i-n'i*      *s'er<sup>o</sup>h*  
1SG      come-IPF.AN-FOC-GEN.1SG      when
- b. *mən<sup>o</sup>*      *to-wa-n'i*      *s'er<sup>o</sup>r'i*  
1SG      come-IPF.AN-GEN.1SG      when.FOC
- c. *mən<sup>o</sup>*      *to-wa-r'i-n'i*      *s'er<sup>o</sup>r'i*  
1SG      come-IPF.AN-FOC-GEN.1SG      when.FOC
- ‘only [when I come]<sub>F</sub>’

The adverbial and complement clauses not based on postpositional constructions do not exhibit multiple marking of focus. It remains to see what synchronic properties of syntactic structure make it available in (17), but (17) is clearly parallel to (15) and perhaps it goes back historically to non-clausal postpositional constructions. The general point is this: the exclusive focus marker is located relatively freely within DPs, PPs, auxiliary verbal complexes and some dependent clauses, being able to attach either to the phrasal head or its immediate phrasal subconstituent. It can also be expressed more than once without producing any meaning-related effects.

To conclude this section, I have argued that multiple representation of focus does not fall under attributive (or indeed any other kind of) agreement, and is therefore better analyzed as a piece of information that can be expressed simultaneously in more than one place in the appropriate syntactic domain due to structure-sharing and an independent requirement that it

should be allowed to appear on all immediate subphrasal elements over which it has semantic scope (but not on more deeply embedded elements). Such repetition of information is known from other languages, and Corbett (2006: 29) suggests that it would be appropriate to term it ‘concord’. Korean honorification is perhaps the best studied example. Kim & Sells (2007) argued that multiple expression of honorific marking within the same clause has an incremental cumulative effect and progressively elevates the social status of the relevant referent. The multiple phrase-internal expression of focus in Tundra Nenets does not signify independent degrees of focusness as focus only gets interpreted once, but it appears to contribute some expressive information, being primarily restricted to the expressive language of folklore.

#### **4. Focus spreading**

In this section I discuss the focus that only takes scope over a non-head daughter of a DP, in particular, an attributive modifier or possessor. The interpretation goes as follows: ‘only in a [dark]<sub>F</sub> forest (as opposed to a light forest)’ or ‘only [my]<sub>F</sub> tent (as opposed to yours)’. Non-surprisingly, the focus marker is hosted by the element within its scope, as in the following

examples:

- (18) a. *pæw°d'a-r'i*      *pedara-x°na*  
dark-FOC      forest-LOC  
‘only in a [dark]<sub>F</sub> forest’
- b. *mæn'°<r'i>n°*      *m'aq-m'i*  
1SG<FOC>      tent-1SG  
‘only [my]<sub>F</sub> tent’

Crucially, focus must be a featural property of the head of the relevant phrase, even though it needs no morphological expression and semantically the head is excluded from its scope. The syntactic evidence for this claim comes from the distribution of object agreement.

As described in more detail in Dalrymple & Nikolaeva (2011) and Nikolaeva (2014), object agreement in Tundra Nenets is largely determined by information structure. Agreement is in number only; the marker of dual objects on the verb is *-xəyu-/-x°yu-*, and the marker of plural objects is *-yə-/-iə-*. The marker for singular objects is always phonologically null, so in this case the verb takes a cumulative agreement affix referring both to the person/number of the subject and the singular object. Object agreement is optional in the sense that only a subset of objects agree. Agreeing and non-agreeing objects do not differ in their positional and/or behavioral properties, but are associated with different semantic properties and information-structure roles. The basic distribution is as follows. Only 3<sup>rd</sup> person objects agree; 1<sup>st</sup> and 2<sup>nd</sup> person objects never trigger agreement. 3<sup>rd</sup> person objects

must agree if they are either topical (typically, secondary topics as defined in Dalrymple & Nikolaeva 2011), or part of the wide focus domain and specific. A 3<sup>rd</sup> person object in the scope of narrow focus never triggers agreement, regardless of specificity. Consider example (19).

- (19) *ti-m*                      *xada*<sup>o</sup> / *xadaə-da*  
reindeer-ACC              kill.3SG / kill-3SG>SG.OBJ  
‘He killed a/the reindeer.’

In (19) the object-agreeing form of the verb *xadaəda* would be appropriate either in the answer to the question ‘What did John do with the reindeer?’, which establishes the secondary topic role for ‘reindeer’, or in the answer to ‘What did John do?’ when the object ‘reindeer’ is part of the focus domain and the speaker means a specific reindeer.<sup>8</sup> In contrast, the non-agreeing form *xada*<sup>o</sup> must be used in the answer to the question ‘What did John kill?’, which establishes a narrow focus role for the object, or the question ‘What did John do?’ if the object is understood as non-specific.

So there is no actual agreement in focus/topic/specificity; instead these are agreement conditions in the sense of Corbett (2006). The point important for the present discussion is that agreement on the verb with the focused object is strictly ungrammatical, cf. (19) and

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<sup>8</sup> My assumption here is that information structure roles can be unambiguously established through question-answer pairs. This is fairly standard but a gross oversimplification; see e.g. Matic & Wedgwood (2013) in relation to problems with this approach.

(20).

(20) a. *ti-m*                      *xada*<sup>o</sup> / \**xadaə-da*  
reindeer-ACC              kill.3SG / kill-3SG>SG.OBJ

‘He killed [a/the reindeer]<sub>F</sub>.’

b. *te-r'i-m*                      *xada*<sup>o</sup> / \**xadaə-da*  
reindeer-FOC-ACC      kill.3SG / kill-3SG>SG.OBJ

‘He only killed [a/the reindeer]<sub>F</sub>.’

The focused object in (20) cannot trigger agreement, whether it is associated with exclusive focus morphologically marked by *-r'i-* or is operationally defined as information focus and a target of a *wh*-question. Both types of focus show identical behavior in the relevant respect.

Agreement is equally impossible when narrow focus is semantically associated with a sub-constituent of the object DP instead of the object phrase as a whole. This is shown below for the possessor (21) and a adjectival modifier (22), either marked by *-r'i-* or not, but the

same holds true for the nominal complements of the head noun.

- (21) a. Whose reindeer did he kill?

[*Wera-h ti-m*] *xada*<sup>o</sup> / \**xadaə-da*

Wera-GEN reindeer-ACC kill.3SG / kill-3SG>SG.OBJ

‘He killed [Wera’s]<sub>F</sub> reindeer.’

- b. [*Wera-r'i-h ti-m*] *xada*<sup>o</sup> / \**xadaə-da*

Wera-FOC-GEN reindeer-ACC kill.3SG / kill-3SG>SG.OBJ

‘He only killed [Wera’s]<sub>F</sub> reindeer.’

- (22) a. What kind of reindeer did he kill?

[*serako ti-m*] *xada*<sup>o</sup> / \**xadaə-da*

white reindeer-ACC kill.3SG / kill-3SG>SG.OBJ

‘He killed a [white]<sub>F</sub> reindeer.’

- b. [*serako-r'i ti-m*] *xada*<sup>o</sup> / \**xadaə-da*

white-FOC reindeer-ACC kill.3SG / kill-3SG>SG.OBJ

‘He only killed a [white]<sub>F</sub> reindeer.’

In all these cases both the head of the DP and its dependent have to be specified as focus.

That the dependent bears the focus feature is primarily evident from its semantics: it is in fact

the only element that falls within the scope of narrow focus here. This may be additionally indicated by the overt focus marker *-r'i/-l'i*. That the head must be specified as [F] in syntax follows from the pattern of object agreement: the verbal form has access to information provided by the head of the object phrase. Morphosyntactic facts therefore make it clear that both the subconstituent and the head carry the same value for the focus feature [F], despite the head being semantically unfocused.

In the examples above the head noun does not carry focus marking, but the marking may actually be overt. An alternative way of expressing the same meaning is seen when one compares (18) above with (23). In (23) the morphological focus *-r'i/-l'i* is hosted by the head noun itself in the absence of focus marking on the semantically focused dependent element. These two options have fully identical readings.

- (23) a. *pāw°d'a*    *peda-r'i-x°na*  
dark            forest-FOC-LOC  
‘only in a [dark]<sub>F</sub> forest’
- b. *mān'°* *m'aq-l'i-m'i*  
1SG    tent- FOC-1SG  
‘only [my]<sub>F</sub> tent’

Examples (23) demonstrate a mismatch between the morphological location of focus and its semantic scope. We can see that focus is not necessarily interpreted on each element where it appears and it is not necessarily marked on every element over which it scopes. This creates a

certain level of ambiguity. When the focus is expressed once, either on the dependent or the head, it can take scope either over this dependent or the whole phrase.

(24) a. *pāw°d'a-r'i pedara-x°na*

dark-FOC forest-LOC

b. *pāw°d'a peda-r'i-x°na*

dark forest-FOC-LOC

‘only [in a dark forest]<sub>F</sub> (not in the tundra)’

‘only in a [dark]<sub>F</sub> forest (not in a light forest)’

However, when focus is overtly expressed both on the head and its dependent, only one interpretation appears possible: the focus takes scope over the whole phrase, as demonstrated by a number of examples in Section 3.

In Matic & Nikolaeva (2014) we also showed that relative clauses behave identically to simple DPs with respect to focus-sensitive object agreement. If a subconstituent of a relative clause is focused and the relative clause modifies the object of the main verb, this verb cannot be marked for object agreement. There are no apparent syntactic restrictions on the type of the element which is immediately embedded within a relative clause and exhibits this kind of behavior. Since the maximal projection also carries the focus feature as evidenced by the lack of agreement, we proposed that some kind of mechanism that passes the [F] feature to the head from where it can enter the syntactic relationship with the verb

must be in place here.

Such mechanisms have been explored elsewhere, in particular, for languages with the transmission of one element's focus to another known as 'focus pied-piping'. Examples include Hausa (Hartmann & Zimmermann 2007) and Hungarian (Horváth 2007), where only part of the syntactically moved material is pragmatically understood as focused (cf. Krifka 2006; Wagner 2006), as well as languages with covert focus movement that show violations of island effects (Ortiz de Urbina 1993; Nishigauchi 1990, 1999, among others).

Focus pied-piping is usually understood as resulting from the percolation of the abstract focus feature to a higher phrasal node.<sup>9</sup> The peculiarity of Tundra Nenets is that, unlike in most languages for which focus percolation has been postulated, exclusive focus is not abstract: it is associated with a dedicated morphological marker. The marker is associated with a semantically focused element, but the focus feature is passed to the phrasal head. It may receive overt expression on the head alone. These facts appear to indicate that both the head and its dependent are specified as [F], but [F] may not be phonologically realized more than once in the phrase, if the focus falls on the dependent.

This situation is not dissimilar to the phenomenon known as 'definiteness spreading', i.e. the multiple representation of definiteness. In Hebrew Construct State the head noun never carries the definite article, but at least for a certain class of Construct States the definiteness value of the entire phrase is determined by the definiteness of the embedded genitive. A number of analyses of definiteness spreading have been proposed in the literature; for an overview see Danon (2008). Without going into details, most of them accept the idea

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<sup>9</sup> For an alternative approach see Cable (2010) and Heck (2008, 2009), who argue that feature percolation has no place in syntactic theory.

that definiteness spreading is an instance of agreement, cf. ‘the definiteness agreement equation’ in Welsh (Sadler 2000) or phrase-internal feature-sharing (Danon 2001, 2008).

If Tundra Nenets is to be analyzed along the same lines, we can think of focus spreading from the element where it is interpreted to the higher node as some kind of agreement. The focused subconstituent acts as agreement controller and the head is the target. Although the expression of focus is optional on either constituent, focus spreading shows a number of canonical agreement properties as defined by Corbett (2006): it is realized in a local domain and has affixal marking; it is semantically redundant since the feature is realized twice but interpreted once;<sup>10</sup> it is syntactically simple and asymmetric; the controller must be present and its part of speech is irrelevant (given the domain); the target always agrees and has no choice of controller; there is no choice of feature value and no conditions. The question that is central for the present paper is what this means for the typological status of the focus feature.

## **5. The status of the focus feature in Tundra Nenets**

This paper has touched upon two issues that prove relevant for the typology of feature systems: the inventory of morphosyntactic features available in human language, and the

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At least in some relative clauses focus percolation has an additional semantic effect: it results in the formation of a pairwise list in which the head denotes a set of entities defined in terms of the properties specified in the focus phrase, so both the head of the phrase and its sub-constituent are focused (Matić & Nikolaeva 2014). An agreement analysis would be less appropriate for such structures because focus percolation is semantically informative.

relation between the features which operate in syntax, morphology and semantics.

Given how often we find focus effects in the languages of the world, there is rather limited evidence for a non-abstract focus feature, and if it is found it is hardly ever morphosyntactic. Most commonly, focus is just a piece of semantic information imposed over the non-verbal phrase that can be marked either on this phrase itself or the associated verb. I have shown that Tundra Nenets has a dedicated marker of (exclusive) focus which is fully morphologically and phonologically integrated into the inflected word form. Crucially, unlike in a number of other languages, focus-related information gets transmitted between distinct elements within a DP. Its behavior within the DP domain was accounted for by two different mechanisms.

First, if focus semantically originates on the whole phrase or on its head alone, it is passed down from head to the immediate constituents of the phrase and can have single or multiple representation. I have argued that multiple representation does not involve agreement. Focus is not assigned by government either, therefore for Tundra Nenets it should perhaps be qualified as an inherent morphosemantic feature whose value is determined semantically.

However, the situation is different when focus semantically originates on a non-head daughter of the phrase. In this instance it must be overtly realized once, either on the focused constituent itself or on the head of the phrase. I have proposed that this relationship can best be described in terms of an operation with the focus feature [F]. Independently of the location of the morphological focus marker, the head must be specified as [F] as is evident from its behavior within the larger syntactic domain. I have referred to the mechanism that ensures that the head of the phrase and its constituent must share the same focus specification as ‘focus spreading’, by analogy to ‘definiteness spreading’. Focus spreading

has some properties of agreement, albeit not fully canonical, which makes [F] relevant for syntax and, consequently, a good candidate for a marginal morphosyntactic feature. This implies that the Tundra Nenets *-r'i/-l'i* should be viewed as a morphological exponent of two non-equivalent and not necessarily overlapping features: the morphosemantic focus and morphosyntactic focus. The former operates at the interface of morphology and semantics, and the latter is relevant for morphology, syntax and semantics, similar to the feature of definiteness in a number of languages.

In sum, the morphological expression of focus, semantic focusness and the syntactic role of focus do not always correlate. There is a fair amount of mismatch between the three components, but there is also (admittedly, rather limited) evidence for the focus feature in the morphological interfaces.

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