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Negation and the left periphery in Finnish

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Abstract

This paper investigates the effects of negation and contrast on Finnish word order. It is well known that prosodically focused, contrastive constituents only occur in certain syntactic positions in Finnish. However, many of these patterns are reversed in negative sentences when negation is preposed from its canonical post-subject position to a sentence-initial location. Corpus examples show that preposed negation is used to negate propositions which are old/known information to the discourse participants. I present a detailed analysis of the structure of the Finnish left periphery which makes use of this information-structural property in order to account for the seemingly surprising changes concerning the positions where contrastive constituents can occur.
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1. Introduction

Finnish word order is infamously flexible, and in regular transitive sentences, the subject, verb and object can occur in any order. However, it is well known that this word order variation is not random and is driven by discourse-pragmatic factors (e.g. Vilkuna, 1989). In this paper, I focus on the effects of contrast on Finnish word order. Constituents which are prosodically focused and interpreted contrastively can only occur in certain syntactic positions in Finnish (Vilkuna, 1989; Vallduví and Vilkuna, 1998, inter alia). Surprisingly, many of these patterns are reversed in negative sentences when negation is preposed from its canonical post-subject position to a sentence-initial

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location. Why should preposed negation prompt such a striking reversal of word order patterns? I use corpus examples to illustrate that this preposed negation is used to negate propositions which are already old/known information to the discourse participants by virtue of the discourse contexts in which they occur, and that it is this characteristic which can be used to account for the seemingly surprising changes concerning the positions where contrastive constituents can occur.

The data presented in this paper raise a host of questions about the nature of the syntax-pragmatics interface–specifically, how much (if any) discourse-pragmatic information should be encoded in syntax. Some researchers introduce pragmatic features into the syntactic representation in order to capture the properties of noncanonical structures (e.g. Rizzi, 1997), whereas others argue against the encoding of specific discourse notions in syntax (e.g. Snyder, 2000). The Finnish word order patterns and the striking effects of fronted negation suggest, in my opinion, that there is a close relationship between pragmatics and syntax in Finnish. However, as we will see in the course of this paper, languages clearly differ in their pragmatic word order patterns; for example, the constraints on the placement of contrastive constituents in Finnish do not apply to Hungarian, which has its own set of word order patterns (Vallduví and Vilkuna, 1998). Thus, whatever the nature of the syntax-pragmatics relationship, it must be sufficiently flexible/underspecified to accommodate a wide range of crosslinguistic variation. In light of the crosslinguistic data, we should not assume there to be a universally fixed ordering of pragmatic projections or a universal set of basic discourse features encoded in syntax. We will return to these issues in the conclusion in Section 6.

The structure of the paper is as follows. In Section 1.1, I discuss the basic characteristics of word order variation in Finnish, and Section 1.2 is about Finnish negation. The syntactic structure of Finnish is discussed in Section 1.3. In Sections 2.1–2.3, I address the ways in which focus and contrast guide word order variation in Finnish, prior to which I define what I mean by these terms. In Section 2.4, I discuss a syntactic account which aims to capture the Finnish word order patterns. I turn to negation in Section 3, and show how, surprisingly, fronted negation leads to some of the earlier word order patterns being reversed. I also address the discourse function of fronted negation in Finnish. In Section 3.3, the syntactic analysis presented in Section 2.4 is extended to the word order patterns that arise with preposed negation. Section 4 is about the affirmative counterpart of preposed negation, a sentence-initial affirmative particle. I show how the word order facts with this particle follow from my analysis of the preposed negation data. The landing site of preposed negation and its relation to other left-peripheral elements, such as wh-words and the complementizer, are discussed in Section 5. Section 6 is the conclusion and addresses some of the questions that this paper raises about the nature of the syntax-discourse interface.

1.1. Word order variation in Finnish

Finnish is a highly inflected, articleless language with flexible word order. The canonical order is svo, but all six possible permutations of these three elements are grammatical under the appropriate discourse conditions (e.g. Vilkuna, 1989, 1995). In this

paper, we will be focusing on the left periphery, and thus will be concerned mainly with orders that have two preverbal arguments, i.e. Osv and Sov, as well as the canonical order svo (capital letters are used throughout this paper to indicate prosodic focus). As has often been noted in the literature, in Sov and Osv orders there is some kind of 'focus'–both semantic/pragmatic (Hakulinen and Karlsson, 1988) and prosodic (Välimaa-Blum, 1988) – on the first constituent (ex. 1b–c). These sentences can often be approximately paraphrased as cleft sentences in English. In contrast, sentences with canonical svo order in Finnish (ex. 1a) do not seem to have a main pitch accent that differs phonetically or phonologically from other accented syllables in the utterance (see e.g. Välimaa-Blum, 1988: 99). The exact nature of the focus in sov and osv orders – as well as the question of whether it should be called 'focus'– is discussed in more detail in Section 2. In Section 3 we will see that the placement of focus in these kinds of sentences changes drastically when a certain kind of sentence-initial, noncanonical negation is present.[1]

(1)	a.	Samppa Lajunen voitti kultaa. Svo [canonical order]
		Samppa Lajunen-NOM won gold-PART
		'Samppa Lajunen won gold.'
(1)	b.	SAMPPA LAJUNEN kultaa voitti (eikä Jaakko Tallus). Sov
		'It was Samppa Lajunen who won gold (not Jaakko Tallus).'
(1)	c.	KULTAA Samppa Lajunen voitti (eikä hopeaa). Osv
		'It was the gold that Samppa Lajunen won (not silver).'

Let us also briefly consider the other possible orders in Finnish. Verb-initial orders (Vso and Vos) are rather marked, and usually have the function of emphasizing the assertion made by the sentence (Välimaa-Blum, 1988: 78–79; Vilkuna, 1995: 250). For example, if someone has just claimed that Samppa Lajunen did not win gold, and I know that he did, I can utter (1d).

| (1) | d. | VOITTI Samppa Lajunen kultaa.   Vso |
| | | 'Samppa Lajunen DID win gold.' |

Finnish also permits ovs order, as in ex. (1e). In fact, the alternation between svo and ovs order correlates with the discourse-status of the referents. Like many other languages, Finnish tends to place old information towards the beginning of the sentence, and new information towards the end (see e.g. Chesterman, 1991; Hiirikoski, 1995). Noncanonical ovs order is used when the object is discourse-old and the subject discourse-new. Canonical svo order (ex. 1a) is used when both arguments are old, or when the subject is old and the object new. It is important to note that in Finnish, it is the discourse-status of the referents (i.e. whether or not they have been mentioned in the current discourse) that is relevant here – not their hearer-status (whether they are known/new to the hearers, see Prince, 1992 for details on this distinction). Thus, even people's names can be treated as 'new' information

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[1] Case abbreviations used in this paper are as follows: PART: partitive, NOM: nominative, ACC: accusative, ALLAT: allative, ABES: abessive, ADES: adessive, ILL: illative, ABL: ablative. Also, Px: possessive suffix.

if they have not been mentioned in the current discourse, even though they are known to both the speaker and the hearer.[2]

(1)   e.   Kultaa voitti Samppa Lajunen.   ovs
              'Gold was won by Samppa Lajunen ∼ The winner was Samppa Lajunen.'

In the next sections, we will look at some background facts about Finnish, namely the nature of negation and the syntactic structure that is assumed to hold for Finnish finite clauses. Then, in Section 2, we will consider Sov and Osv orders in more detail, in order to see how they can be captured under the syntactic structure that has been proposed for Finnish. In the second half of the paper we will then look at how a special kind of noncanonical negation interacts with Sov and Osv orders.

1.2. Negation in Finnish

Negation in Finnish is an auxiliary verb that agrees with the subject in person and number, but is not inflected for tense (Holmberg et al., 1993: 178). Negative sentences in tenses other than the present tense are formed by compounding (e.g. Karlsson, 1999: 69; Sulkala and Karjalainen, 1992: 115, see also Julien, 2003). The full paradigm for the negative verb is given below.

(2)   Finnish negative paradigm
         sg.   pl.
1st   en   emme
2nd   et   ette
3rd   ei   eivät

A 'regular' affirmative sentence is shown in (3a). Here, both number/person and tense are marked on the verb. In the negative sentence in (3b), the present-tense negative verb agrees with the subject in person and number, and the verb 'to buy' surfaces as a bare inflectional stem with no ending. As shown in ex. (3c), in the simple past tense, negation looks the same as in the present tense, and the main verb surfaces as a past participle. In the perfect tense (3d), negation is once again unchanged, the main verb 'to buy' is a past participle, and the auxiliary 'to be' surfaces as a bare inflectional stem.[3] The object in a negative sentence is marked for partitive case, but in 'regular' sentences, objects are usually accusative or partitive, depending on factors such as aspect and the count/mass distinction (see e.g. Kiparsky, 1998). The canonical 'linear' position of negation – and 'regular' auxiliaries – is between the subject and the main verb, as illustrated in (3b,c). However, as we will see in Section 3, negation can also be fronted to a sentence-initial position.

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[2] The Finnish sentence is in the active, not the passive voice. However, Finnish ovs sentences are often translated into passives in English—perhaps because that makes it possible to maintain the object-subject order.

[3] For a more detailed discussion of the Finnish verb morphology, negation and the structure of finite clauses in Finnish, see Holmberg et al. (1993).

(3)   a.   Liisa   ostaa   kirjan.
                 Liisa-NOM buys-sg.3rd book-ACC
                 'Liisa buys a/the book.'

(3)   b.   Liisa   ei   osta kirjaa.
                 Liisa-NOM neg-sg-3rd buy book-PART
                 'Liisa does not buy a/the book.'

(3)   c.   Liisa   ei   ostanut kirjaa.
                 Liisa-NOM neg-sg-3rd bought book-PART
                 'Liisa did not buy a/the book'

(3)   d.   Liisa   ei   ole ostanut kirjaa.
                 Liisa-NOM neg-sg-3rd is   bought book-PART
                 'Liisa has not bought a/the book.'

Since Finnish negation agrees with the subject in person and number, it assumed to be a head (see e.g. Holmberg et al., 1993). Moreover, because number/person agreement and tense marking end up on different elements in negative sentences (on negation and on the main verb, respectively), NegP is assumed to be located very high, between AGRsP and TP (e.g. Mitchell, 1991, this volume, Holmberg et al., 1993). The main verb in negative sentences is assumed to remain in a position below NegP, presumably in T.

Finnish has no negative quantifiers. Instead, negative polarity items are used with negation, as shown below, as well as negatively-oriented adverbs such as *tuskin* 'hardly' (see Heinämäki, 1994; Kaiser, 2002).

(3)   e.   Liisa   ei   ostanut mitään.
                 Liisa-NOM neg-sg-3rd bought anything-PART.
                 'Liisa bought nothing ∼ Liisa didn't buy anything.'

Finally, it is worth noting that Finnish negation cannot occur below the syntactic position discussed above, and Finnish does not have morphologically or syntactically marked constituent negation for DPs, PPs etc.[4] Thus, sentences such as 'Liisa bought not books, but CDs' or 'He put the sauce not in the fridge, but in the pantry' are simply expressed with negation in the regular position, between the subject and the lexical verb.

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[4] Related to this, the abessive case ending – which means 'without X' – can be attached to nouns (ex. a) and the so-called 'third infinitive' of verbs (ex. b, example of 'regular' negation in c). See Sulkala and Karjalainen (1992: 116) and Karlsson (1999: 127) for details. However, as Karlsson (1999) notes, the abessive case is rare. With nouns the preposition *ilman* 'without' is normally used instead. Since the present paper is primarily concerned with the fronting of negation, which can only occur with 'regular' negation, I will not discuss the use of the abessive here.

(a)   Hän lähti ulkomaille rahatta ja passitta.
         S/he-NOM went abroad-ALLAT money-ABES and passport-ABES
         'S/he went abroad without money and without a passport.' (Karlsson, 1999: 127)

(b)   Hän on ollut kaksi päivää syömättä.
         S/he-NOM is been two days eat-3 inf-ABES
         'S/he has been without eating for two days. ∼ She has not eaten for two days.'

(c)   Hän ei ole syönyt kahteen päivään.
          S/he-NOM neg-3rd is eat-PP two-ILL days-ILL.
         'S/he has not eaten for two days.'

1.3. Syntactic structure of Finnish

In this paper, I assume that Finnish finite clauses have the following structure, following Holmberg and Nikanne (2002), Holmberg et al. (1993), and Mitchell (1991).

(4)

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CP
 \
  FP (FiniteP)
   \
    NegP
     \
      TP (TenseP)
       \
        AuxP
         \
          PtcP
           \
            VP
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As shown in the structure above, Holmberg et al. (1993) and Holmberg and Nikanne (2002) use the term FP (finite-P) for the position that is usually called AgrSP. They opt for the term FP because of the link between finiteness and agreement in Finnish sentences: ''in all finite constructions [in Finnish] there is an AGR-like suffix independently of whether it agrees or does not agree with anything'' (Holmberg et al., 1993: 182). In the structure above, AuxP stands for Auxiliary phrase, where the auxiliary verb *ole* 'be' is generated, and PtcP is Participle phrase, which is where agreement on participles occurs (see Holmberg et al., 1993 for further discussion). Holmberg and Nikanne (2002) stick with the label FP for AgrSP, and they also claim that this is the location where both subject and non-subject topics land—thus echoing a conclusion drawn by Vilkuna (1995: 265) that topics in Finnish are located in spec-IP. The term 'topic' is used here to mean referents that have already been mentioned in the discourse, i.e. discourse-old entities (see the discussion of example (1e) above). It is important to note that a constituent that occurs in spec-FP in Finnish because it is a 'topic' (i.e. discourse-old), as in example (1e) or example (5b) below, should not be equated with a so-called topicalized structure in languages like English (see e.g. Prince (1999) for a detailed discussion of the discourse-functions of osv structures in English and Yiddish).

Holmberg and Nikanne analyze Finnish svo and ovs sentences as both having the preverbal argument in spec-FP, as shown below.

(5)   a.   Graham Greene   on kirjoittanut tämän kirjan.
            Graham-NOM Greene-NOM is written   this-ACC book-ACC

'Graham Greene has written this book.'
[Holmberg and Nikanne, 2002: 84]

(5) b. Tämän kirjan   on kirjoittanut   Graham Greene.
         this-ACC book-ACC is written   Graham-NOM Greene-NOM
         'This book is written by Graham Greene' (active voice in Finnish)
         [Holmberg and Nikanne, 2002:84]

(5) a′. [FP Graham Greene_i [F′ on_j [TP t_j [T′ t_j [AuxP t_j [PrtP kirjoittanut_k [VP t_i [V′ t_k tämän kirjan]]]]]]]]

(5) b′. [FP [Tämän kirjan]_i [F′ on_j [TP t_i [T′ t_j [AuxP t_j [PrtP kirjoittanut_k [VP Graham Greene [V′ t_j t_i]]]]]]]]

Thus, according to Holmberg and Nikanne (2002) and Vilkuna (1995), the landing site of the preverbal object in ovs order is the same as that of the subject in svo order. More specifically, Holmberg and Nikanne state that both subject and non-subject topics can land in spec-FP, and the finite verb needs to raise to the head F – also in ovs order – for feature-checking reasons. To account for the fact that the verb agrees with the subject even in ovs order, Holmberg and Nikanne follow Chomsky (1995) and assume that "the phi-features of the subject move covertly (i.e., without pied-piping the phonological and other features of the subject), adjoining to F (...), entering a checking relation with the features of the finite inflection" (Holmberg and Nikanne, 2002: 99). Other research along similar lines includes Wurmbrand's (2001) work on AGREE (Chomsky, 1998, 2000), a relation which does not require that a noun phrase move to the specifier of the relevant head, and instead is based on the idea that features can be matched/licensed abstractly without movement.

Let us now step back from the details of the derivation and consider why Holmberg and Nikanne argue that the special 'subject head' (AgrSP) should be eliminated in favor of a general 'topic head' (FP) in Finnish. Holmberg and Nikanne assume that all arguments have the feature [+/−Foc], and that arguments with the feature [−Foc] – which they say are topics – are attracted to the head F, by the presence of an EPP-feature on F (Holmberg and Nikanne, 2002: 79). The feature [+Foc] marks the "information focus" of the sentence in the sense of Valldużi and Engdahl (1996), i.e., roughly speaking, the new information. In contrast, [−Foc] marks an argument as belonging to the 'ground' (cf. Valldużi and Engdahl, 1996) – in other words, in Holmberg and Nikanne's approach, an argument that is [−Foc] belongs to the presupposition of the sentence, and is old/given information (Holmberg and Nikanne, 2002: 79).

According to Holmberg and Nikanne's theory, [−Foc] is an uninterpretable feature (in the sense of Chomsky, 1995) and thus needs to be checked before LF. They claim that it can be checked by a feature of the head F, and that the focus domain – i.e. the domain where [+Foc] constituents can be located – is TP (Holmberg and Nikanne, 2002: 79, 98), and "arguments which are not part of the information focus must ultimately be moved out of the focus domain" (79).[5] When a sentence contains multiple elements with a [−Foc] feature, however,

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[5] Holmberg and Nikanne use data from Finnish multiple subject constructions to argue that there is no particular [+Foc] focus-position in Finnish; "instead there appears to be a focus domain, stretching from F down to the bottom of VP" (Holmberg and Nikanne, 2002: 98). Moreover, they suggest that the "distribution of focused arguments inside the focused domain is essentially free" (Holmberg and Nikanne, 2002: 98).

only one of these needs to move overtly to the spec of FP. The other occurrences presumably move covertly. In sum, according to Holmberg and Nikanne, the EPP effects observed in Finnish can be captured by means of the feature [focus], which they define semantically. Thus, they – like Svenonius (2002) and many of the papers therein – treat the EPP not as a purely syntactic reflex, but as something that is connected to the discourse notion of topicality.

Holmberg and Nikanne focus on svo and ovs orders and do not make any claims about the other orders that are possible in Finnish, such as Osv and Sov. In Section 2, I present an analysis that extends and builds upon Holmberg and Nikanne's structure as well as work by Vilkuna (1989, 1995) in order to also capture the characteristics of Sov and Osv order. In Sections 3 and 4, I consider some seemingly surprising effects of negation on word order, and discuss how they fit into this analysis.

2. Focus, contrast and word order

Having reviewed the syntactic structure of Finnish, let us consider the word order variation at the left periphery in more detail. First, we will take a closer look at the term 'focus.' This term has been used in different ways by different authors. Holmberg and Nikanne (2002) use the [+/−Foc] feature to refer to, roughly speaking, old versus new information in svo and ovs orders. In contrast, Hakulinen and Karlsson (1988) and Holmberg (1997) use the term 'focusing' to refer to the prosodically salient, initial argument in Sov and Osv order (see also Välimaa-Blum, 1988; Heinämäki, 1982). Crucially, however, these two kinds of 'focus' are not the same, at least not in Finnish (see e.g. Vilkuna, 1995): The first is a matter of information status, whereas the second is more tied to the notion of 'focus' in alternative semantics.

2.1. *Vallduví and Vilkuna (1998)*

To reconcile the two different uses of the term 'focus' mentioned above, I will follow Vallduví and Vilkuna (1998)'s analysis. They point out that two different notions are often conflated under the label 'focus', namely rhematicity (new information) and 'kontrast.' They define 'kontrast' as follows: If a given expression is kontrastive, then a set of alternatives is generated (in the sense of Rooth, 1985, 1992) and "becomes available to semantic computation as some sort of quantificational domain" (Vallduví and Vilkuna, 1998: 83). For example, in the utterance 'John introduced BILL to Sue', BILL is kontrastive, and thus a membership set of alternatives (e.g. Bill, Carl, Mark) is generated. The exact membership of the set is restricted both ontologically and contextually, e.g. if the above sentence is uttered in the context of a discussion about John's dinner party, then only people who were present at the dinner can be in the set (Vallduví and Vilkuna, 1998: 84).

As Vallduví and Vilkuna emphasize, conceptually kontrastiveness is orthogonal to information status, i.e. rhematicity and thematicity (see also Vilkuna, 1995; Pereltsvaig, 2004). They also note that there exists evidence from Finnish which shows that these notions are treated differently in the syntax. Crucially, a kontrastive, sentence-initial argument in Finnish Sov/Osv order can be rhematic (what some might call a 'contrastive

focus') or thematic (what some might call a 'contrastive topic'[6]). For example, as Vallduví and Vilkuna point out, the sentence in (6b) could be uttered in a context where the flowers are new information (context (i)) or old information (context (ii)):

(6) a. (i) What is it that Anna got for her birthday?
         (ii) What about the flowers? Did Anna buy some or did she get them for free?
(6) b. Kukkia   Anna   sai.
         Flowers-PART Anna-NOM got-sg-3rd.
         Flowers Anna got.
         [Vallduví and Vilkuna, 1998:91]

Thus, the observation that in Finnish, the first argument in Sov and Osv order is always contrastive but can be old or new information ([−Foc] or [+Foc] in Holmberg & Nikanne's terms, thematic or rhematic in Vallduví & Vilkuna's terms), provides clear syntactic evidence against a unified notion of focus. This initial constituent receives "special phonetic prominence" (Välimaa-Blum, 1988: 75, see also Vallduví and Vilkuna, 1998), which I will refer to as prosodic focus. In this paper, I will refer to constituents that bear this kind of prosodic focus and are interpreted kontrastively as 'kontrastive expressions'.[7]

On the whole, according to Vallduví and Vilkuna, the position of a kontrastive element in Finnish (i.e. being in the 'special peripheral slot,' to be discussed in more detail in Section 2.4) is determined purely by its kontrastiveness; rhematicity/thematicity is irrelevant. Non-kontrastive elements in Finnish, on the other hand, behave differently depending on rhematicity/thematicity. Rhematic non-kontrastive elements occur low in the structure, in the VP, and thematic non-kontrastive elements occur in the specifier of IP (Vallduví and Vilkuna, 1998: 90). This second observation parallels Holmberg & Nikanne's description of the behavior of old and new information in Finnish – but now it is clear why using the feature [+focus] to refer to new information can be misleading, especially when combined with a discussion of kontrastiveness.

The patterns observed for Finnish, however, are by no means intended to be crosslinguistic universals. Vallduví and Vilkuna also discuss Hungarian, Catalan and English, and show that in different languages, rhematicity/thematicity and kontrastiveness are encoded differently in the syntax. In fact, they emphasize that languages differ in how they "conventionalize the pairings of interpretative categories and structural categories" (Vallduví and Vilkuna, 1998: 103). For example, in Hungarian, thematic constituents appear in a clause-peripheral topic position, regardless of their kontrastiveness. Rhematic

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[6] For work related to the notion of 'contrastive topic' in English and Dutch, see Rodman (1997) and van Hoof (1997), respectively.

[7] For reasons of brevity, I will put aside for now the terminological complications associated with the term 'contrast.' In this paper, I use it to mean a prosodically focused expression with a kontrastive interpretation. However, this is not to say that the notion of contrast cannot be decomposed into more basic primitives. Prince (1999) shows, based on data for English and Yiddish object-subject-verb order, that contrast is not a "primitive notion," and that contrastive readings "[arise] when alternative members of some salient set are evoked, and, most importantly, when there is felt to be a salient opposition predicated of them" (Prince, 1999: 10, see also Ward and Prince, 1991). According to her, the contrastive nature of the object in English object-subject-verb order is a result of this order being used to mark the preposed constituent as being in a partially-ordered set (poset) relation (see Hirschberg, 1985) to entities already mentioned in the discourse. In fact, as Prince shows, contrast is only one kind of poset relation. In this paper, I will not address other types of poset interpretations, but the reader should thus keep in mind that contrast can be regarded as a kind of poset interpretation.

constituents which are kontrastive appear in a marked preverbal slot, and non-kontrastive rhematic constituents remain in their canonical position, according to Vallduví and Vilkuna, 1998 (see also Puskás, 2000 for a detailed syntactic analysis of focus and topic at the Hungarian left periphery). Finnish and Hungarian thus differ in how kontrast and rhematicity/thematicity are reflected in syntax. A detailed comparison of the word order patterns of these two related languages is unfortunately beyond the scope of this paper, but is an important direction for future research.

2.2. Kontrastive objects

In the next two sections, I discuss the nature of the word order variation at the left periphery in Finnish, and discuss what kind of syntactic structure we need to capture these patterns. I will focus primarily on where kontrastive constituents can occur in svo, Sov and Osv orders.[8] Let us first consider objects. In Finnish, kontrastive objects can occur *in situ*,[9] as illustrated by ex. (7a) or at the leftmost periphery, as shown in (7b).[10] However, a kontrastive, preposed object cannot be preceded by a unstressed (i.e. not prosodically focused) subject (ex. (7c)), even though the same Sov order is fine with a different prosodic pattern, as we will see in ex. (8a). (As before, capital letters indicate prosodic focus.)[11]

(7)   a.   Jussi   osti   HEVOSEN   (eikä   lehmää).   √ svO
              Jussi-NOM bought HORSE-ACC (and-not cow-PART)
              'It was a HORSE that Jussi bought (and not a cow).'
              [Heinämäki, 1982:99]

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[8] I will not discuss the role of prosody or kontrast with ovs order in any detail in this paper, as I am focusing on the left periphery. Moreover, it is not yet clear whether the postverbal subject in ovs order is VP-internal or perhaps right-dislocated, whether its structural position varies depending on which constituent is prosodically focused. In light of these uncertainties, I leave the syntactic details of ovs order for future work.

[9] By the phrase *in situ*, I mean positions other than those reached by discourse-driven movement. For example, in English, objects can be prosodically focused in their regular postverbal positions (inside VP) and subjects in the spec-AgrSP position that they have raised to for grammatical feature-checking reasons.

[10] There is some debate about the status of *in situ* contrastive constituents, and whether they are the 'same' as preposed contrastive constituents. Vallduví and Vilkuna (1998) note that "some [+K] (kontrastive) expressions may be realized in the V-field" (fn.6), but at the same time they claim that kontrastive arguments are usually located in the CP-domain. Heinämäki (1982) treats *in situ* prosodically focused objects as contrastive just like preposed objects. According to Dryer (1996: 476), English sentences where focus is marked only by intonation have different pragmatic presuppositions than sentences where focus is also marked morphosyntactically (in clefts in English, according to Dryer). It would not be surprising if this was the case in Finnish as well (see Vilkuna, 1989). I will not offer a definitive answer to this question in this paper, and for the time being I will make the simplifying assumption that there is no crucial difference between the prosodically focused, contrastive expressions that are *in situ* versus those at the left periphery – or at least no difference that is incompatible with my analysis. It is worth noting that if prosodic focus on *in situ* constituents and prosodic focus on preposed constituents lead to different 'interpretations', then that would offer a nice way of explaining why prosodically focused arguments in Einnish can occur in two positions. This same discussion applies to prosodically focused subjects, discussed in the next section. Crucially, the existence of a distinction between preposed versus *in situ* focus would not undermine the analysis presented in this paper, and would in fact have the advantage of eliminating the existence of seemingly optional variation between remaining *in situ* versus being preposed.

[11] Many of the examples in this paper come from Heinämäki (1982), who discusses them from a rather different perspective. She addresses the question of whether Finnish has two underlying basic orders – a verb-medial and a verb-final order – but does not present a formal syntactic analysis of the structures underlying the different orders.

(7)   b.   HEVOSEN Jussi   osti   (eikä   lehmää).   √ Osv
           Horse-ACC Jussi-NOM bought   (and-not cow-PART)
           'It was a HORSE that Jussi bought (and not a cow).'
           [Heinämäki, 1982:99]
(7)   c.   *Jussi   HEVOSEN   osti   (eikä   lehmää).   *[12]sOv
           Jussi-NOM HORSE-ACC bought   (and-not cow-PART)
           'It was a HORSE that Jussi bought (and not a cow). [intended meaning]
           [adapted from Heinämäki, 1982:102]

2.3. Kontrastive subjects

Kontrastive subjects are usually preposed to the leftmost periphery, in front of a preverbal object (ex. 8a). A kontrastive subject cannot be preceded by an unstressed (prosodically unfocused) object (ex. 8b). It seems that kontrastive subjects can also occur in the canonical sentence-initial preverbal position (ex. 8c), but this position is less preferred than Sov order shown in ex. (8a). This difference can be viewed as a consequence of the word order tendencies of Finnish, specifically the tendency to place discourse-old objects preverbally (as discussed in Section 1.1). If the subject is kontrastive, then (at least part of) the rest of the proposition is known/old. Consider, for example, the following mini-dialogue between two people: ''*Peter bought that new horse over there, right?*'' ''*No. It was JUSSI who bought the horse.*'' Here, the object *horse* is old information. Thus, it is not surprising that the object 'prefers' to be located preverbally in these kinds of sentences.

(8)   a.   JUSSI   hevosen   osti   (eikä Kalle).   √ Sov
           JUSSI-NOM horse-ACC bought   (and-not Kalle-NOM)
           'It was JUSSI who bought the horse (and not Kalle).'
           [modified from Heinämäki, 1982:99]
(8)   b.   *Hevosen JUSSI   osti   (eikä Kalle).   *oSv
           horse-ACC JUSSI-NOM bought   (and-not Kalle-NOM)
           'It was JUSSI who bought the horse (and not Kalle).' [intended]
           [modified from Heinämäki, 1982: 102]
(8)   c.   JUSSI   osti   hevosen   (eikä Kalle).   √ Svo
           JUSSI-NOM bought horse-ACC (and-not Kalle-NOM).
           'It was JUSSI who bought the horse (and not Kalle).'
           [see Välimaa-Blum, 1988: 75]

In sum, in the last two sections we saw that kontrastive elements in Finnish can occur at the left periphery, or in their canonical svo positions. A non-kontrastive constituent that has been preposed cannot occur in front of a kontrastive consti-

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[12] In this paper, I use the symbol * (ungrammatical) instead of # (infelicitous), even though I am writing about a pragmatic/discourse phenomenon. This choice reflects the intuition of many native speakers of Finnish that some of these pragmatic word order pattern violations sound as 'bad' as ungrammatical sentences do – and moreover, for the most part, cannot be ameliorated by context.

tuent (*sOv, *oSv). The same applies for non-kontrastive non-arguments, as illustrated below for subjects in (9a) and objects in (9b), see also Vainikka (1989: 42).

(9)   a.   *Eilen/   Liisalle/   Kaupasta JUSSI   hevosen   osti.
              Yesterday/Liisa-ALLAT/Store-ELAT Jussi-NOM horse-ACC bought.
              'Yesterday/For Liisa/From the shop, it was JUSSI who bought the horse.'
(9)   b.   *Eilen/   Liisalle/   Kaupasta HEVOSEN Jussi   osti.
              Yesterday/Liisa-ALLAT/Store-ELAT horse-ACC Jussi-NOM bought.
              'Yesterday/For Liisa/From the shop, it was a HORSE that Jussi bought.'

We can summarize the basic word order patterns we saw in the preceding sections as shown in (10) below:

(10)   Data summary:
          kontrastive object   *kontrastive subject*
          svO   Sov
          Osv   * oSv
        * sOv   Svo

2.4. Syntactic account

In this section we will consider how the data presented above could be captured syntactically. The discussion in this section makes use of Holmberg & Nikanne's work as well as the analyses presented in Vainikka (1989), Vilkuna (1995), Vallduví and Vilkuna (1998) and Rizzi (1997). First we consider Vainikka's and Vallduvi and Vilkuna's approaches, and then turn to Rizzi's work and discuss how his approach differs from the first two.

As mentioned above, according to Vallduví and Vilkuna (1998), in Finnish, kontrastive elements [+K] in Finnish occur in the CP-domain (in spec-CP, according to Vilkuna, 1995). Non-kontrastive thematic (old, [−Rh]) elements are in spec-IP, and non-kontrastive rhematic (new, [+Rh]) elements in VP. As Vallduví & Vilkuna emphasize, this structure (illustrated below) is not intended as a crosslinguistic generalization, since languages differ in terms of how (and whether) they encode categories such as kontrast and rhematicity/ thematicity in the syntax.

(11)   a.   [$_{CP}$ .... [$_{IP}$ .... [$_{VP}$ ....]]]
              [+K, +/−Rh] [−K, −Rh] [−K, +Rh]

Another influential approach to the left periphery is work by Rizzi (1997). On the basis of evidence from a number of languages – with an emphasis on Italian – Rizzi claims that 'topicalized' constituents (by which he means salient, old information) are located in the spec of a TopP, and 'focalized' constituents (by which he means new information) in the spec of FocP, as illustrated below in (11b). The star '*' marks a head as being possibly recursive. The actual heads Foc and Top are phonologically null in languages such as Italian and English (but see Aboh (1999) on Gungbe).

(11)   b.   [$_{ForceP}$ .... [$_{TopP*}$ .... [$_{FocP}$ .... [$_{TopP*}$ .... [$_{FinP}$ ....]]]]]

In Rizzi's analysis, a preposed entity that is in focus "introduces new information," whereas a preposed topic is "old information, somehow available and salient in previous discourse" (Rizzi, 1997: 285). He further notes that a preposed focus position is limited to 'contrastive focus' in some languages, but not in others (Rizzi, 1997: 286). The data discussed above show that Finnish is one of the languages in which this position is limited only to contrastive constituents – or, in Vallduví and Vilkuna's words, kontrastive constituents. Moreover, as we saw above, these constituents do not need to be new information ('focus' in Rizzi's terms) in Finnish, as long as they are kontrastive. Thus, Rizzi's use of the label FocP is not appropriate for this position in Finnish. I will refer to this projection in Finnish as KontrastP.

There are also other differences between Rizzi's structure and what the previous research on Finnish suggests. Vallduví and Vilkuna's spec-IP – the landing site for non-kontrastive thematic elements in Finnish – resembles Holmberg and Nikanne's FP and Rizzi's TopP. These positions are all intended to house old/known information. However, the crucial difference is that, according to Vainikka, Vallduví and Vilkuna and Holmberg and Nikanne, in Finnish both subjects and objects can land in spec-IP/spec-FP and there is no landing site that is reserved exclusively for subjects. In contrast, according to Rizzi, the canonical (surface) position of subjects is in spec-AgrSP, which is located below FinP and is distinct from TopP.

Furthermore, according to Vilkuna (1995) and Vallduví and Vilkuna (1998), the 'topic position' in Finnish is in spec-IP, below the 'kontrast position', spec-CP. In contrast, according to Rizzi's analysis, the focus projection is sandwiched between topic projections. As we saw above (ex. 9a–b), in Finnish a kontrastive constituent cannot be preceded by topics, which suggests that, unlike in Italian, there is no TopP in Finnish above the position that houses preposed kontrastive elements.

In the subsequent parts of this Section I will argue that the structure in (12), with a projection FP shared by both subjects and objects, is sufficient to capture the word order facts discussed in Sections 2.2–2.3. This structure is basically what Vallduví and Vilkuna argue for. It also closely resembles Holmberg and Nikanne's tree, except with the important addition that FP is dominated by a KontrastP in sentences which contain a preposed contrastive constituent. I differ from Rizzi's FocP in that I treat KontrastP as a landing site for old or new expressions which are kontrastive.[13] Note that according to this structure, a 'topicalized' constituent cannot precede a 'contrastive' constituent, since KontrastP dominates FP.

(12)   [$_{\text{KontrastP}}$ .... [$_{\text{FP}}$ .... [$_{\text{NegP}}$ .... [$_{\text{TP}}$ .... [$_{\text{VP}}$ ....]]]]]

2.5. Applying the syntactic account

Let us now turn to the Finnish word order data to see how they can be captured under the structure in (12). Many of the structures that I present here have also been mentioned by Vilkuna (1995) and Vallduví and Vilkuna (1998). I aim here to supplement these earlier works by providing a very thorough discussion of how the data from Sections 2.2 and 2.3 can be captured with the structure proposed in (12). This discussion will also act as an important starting point when we turn to the negation data in Section 3 which, as we will see, differ strikingly from the basic data we discuss in this section.

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[13] Or expressions that are in some kind of a set relation to already-mentioned entities, as discussed in footnote 7.

First, we will look at the orders where the object is prosodically focused. (Examples (7a–c) are repeated here schematically.)

(7)   a.   svO = $\sqrt{}$ [$_{FP}$ sv [$_{VP}$ O]]

Example (7a), with svO order, is grammatical, which is to be expected if objects in Finnish can be kontrastive *in situ* (see notes 9, 10). Note that I follow Holmberg and Nikanne in positing that, in Finnish, the verb raises to the head F in all sentences for feature-checking reasons, just like it raised to the head AgrS in the 'traditional' AgrSP structure.

(7)   b.   Osv = $\sqrt{}$ [$_{KontrastP}$ O [$_{FP}$ sv]]

In example (7b), with Osv order, the preposed object is in spec-KontrastP, and the subject and the verb are in FP as usual.

(7)   c.   * sOv

The reason why example (7c) is ungrammatical is the absence of a landing site for the subject above KontrastP. Here, since the object is in focus and precedes the verb, we can tell that it is in spec-KontrastP. In the structure in (12), there is no head above KontrastP, and thus there is no place for the subject to land in. Hence this order cannot be generated.

Let us now turn to the orders where the subject is prosodically focused. Again, examples (8a–c) are repeated here schematically.

(8)   a.   Sov = $\sqrt{}$ [$_{KontrastP}$ S [$_{FP}$ ov [t t t]]]

According to this analysis, in the order Sov, the subject is in spec-KontrastP, and the object has raised to spec-FP (as expected in light of its discourse-status, see discussion above for the original ex. 8a). The verb has moved to F (the 'old' AgrS head) (see Holmberg and Nikanne, 2002). (For an alternative way of deriving Sov order, as suggested by Holmberg (2000), see Section 3.5 below.)

(8)   b.   * oSv

In oSv order, the preverbal subject is presumably in spec-KontrastP.[14] Thus, as was the case with (7c), the ungrammaticality of (8b) can be attributed to the lack of a landing site for the object above KontrastP.

(8)   c.   Svo = $\sqrt{}$ [$_{KontrastP}$ S [$_{FP}$ vo]]

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[14] As mentioned earlier, I assume that, in addition to being focused in certain other positions, constituents can also be kontrastive *in situ*, which I interpret to mean positions other than those attained by discourse-driven movement. It follows from this that, in my account, constituents in spec-FP cannot be kontrastive, as movement to spec-FP is discourse-driven, more specifically driven by the information status of the referent.

Here, the kontrastive subject is in spec-KontrastP (see notes 9,10). In sum, we see that by positing the structure shown in (12), we can capture the word order and kontrast facts discussed in this section.

It is worth noting that if we assume a larger structure with a separate AgrSP and a Topic phrase and without FP (i.e., $[_{\text{KontrastP}} [_{\text{TopP}} [_{\text{AgrSP}} \ldots]]]$) then the data can also be accounted for – although not as straightforwardly as with the smaller structure. Again, we see that subjects and objects can be prosodically focused in their canonical positions (svO, Svo), or fronted to spec-KontrastP (Osv, Sov). In Sov order, if we assume the larger structure with separate TopP and AgrSP, the object has also raised to spec-TopP, as it is discourse-old information (as mentioned earlier). In the two ungrammatical orders (*sOv, *oSv), we again see that a preposed non-contrastive constituent cannot precede a contrastive constituent. The ungrammaticality of *sOv can be attributed to the observation that if the object is in spec-KontrastP, there is no landing site for the subject above it. However, when using this larger structure, the ungrammaticality of *oSv within the larger structure is not quite as straightforward. If the object is in spec-TopP, and the subject is spec-AgrSP, why is the sentence not grammatical? We could hypothesize that the sentence is ungrammatical because the verb, which is also old information, should have raised to the head of TopP, as a sentence with ovS order is grammatical. As mentioned above, in a sentence where the subject is contrastive and the rest of the sentence has no prosodic stress, the rest of the proposition is old – i.e. both the object and the verb. Claiming that verbs are also subject to 'discourse-driven' movement may sound rather unusual, but actually, in the literature on Finnish linguistics, many researchers have noticed that verbs can be preposed to a sentence-initial position (as we saw in ex. (1d)) in order to emphasize the truth of the proposition. According to Vilkuna (1989, 1995), the verb in such sentences is located in the K-domain (where 'K' is intended to "be mnemonic" for the notion of Contrast, but not to stand for it, Vilkuna, 1995: 244). Thus, claiming that in *oSv order, the verb needs to raise to Top (because the head of Top needs to be filled if the spec is filled) is not entirely without precedent. However, it is admittedly more complex than the explanation needed to rule out *oSv order with the 'smaller' structure shown in (12).

In sum, then, we see that the smaller structure, with KontrastP and FP, can account for the data more straightforwardly and with less additional assumptions than a larger structure, with separate projections for KontrastP, TopP and AgrSP. Thus, in the remainder of this paper, I will focus only on the smaller structure.

3. Negation and focus

We saw in the preceding section that a preposed non-kontrastive element cannot precede a preposed kontrastive element (e.g. ex. (7c), (8b)), and we captured this syntactically by positing that KontrastP dominates FP. However, surprisingly, this ordering *can* occur when the sentence is negative and negation has been fronted to sentence-initial position.[15] In this

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[15] In this section, I will focus on the cases where negation has been fronted to a sentence-initial position. As far as I can tell, sentences with canonical negation (with the basic order s-neg-v-o and its scrambled variations) seem to pattern, for the most part, like the 'affirmative' sentences discussed in Sections 2.2 and 2.3, and thus I will not discuss them here in any detail.

section, we look at the syntactic and pragmatic properties of this construction in order to see why it permits different word order possibilities.

3.1. Fronted negation

In Finnish negation can be fronted to sentence-initial position, from its canonical position between the subject and the main verb. This is illustrated by the corpus example in (13), where the preposed negation is underlined.

(13)   Äiti: Mutta et   tilaa alkoholia?
         Mother: but   neg-2nd-sg order alcohol-PART
         Mother: 'But you won't order alcohol, will you?'

         Poika: <u>En</u>   minä   viitsi   riskeerata mitään –   vielä.
         Son: neg-sg-1st I-NOM feel-like risk   anything-PART yet
         Son: 'I don't feel like taking any risks – yet'
         (Pennanen, 1979: 29, cited by Vilkuna (1989: 118)

This kind of fronted negation marks the rest of the proposition as already asserted or somehow known or presupposed (see Lindén, 1963; Vilkuna, 1989: 118–120). In other words, when negating an 'old' proposition, a speaker can prepose the negation to the front of the sentence. This construction differs in its semantics and syntax from yes/no replies, which in Finnish can also have sentence-initial noncanonical negation (see Holmberg, 2001 for an analysis of the syntax of yes/no replies).

Let us now consider in more detail what degree of 'contextual accessibility' is needed for noncanonical negation to be an option. In order for a proposition to be negated by means of preposed negation, how 'accessible' does that proposition need to be? Is it sufficient if it is inferrable from something that has already been mentioned? Or does the proposition itself need to be mentioned in preceding discourse?

First, the strongest degree of accessibility is, of course, explicit mention of the relevant proposition in the preceding discourse. As example (14a) illustrates, this kind of context in Finnish licenses use preposed negation.

(14)   a.   *Explicit mention*
         A: Teiltä   saattoi mennä ohi vastaukseeni   sisältynyt ironia [. . .]
               You-pl-ABLAT may go past answer-ILLAT-px-1st contained irony-NOM
               'You may have missed the irony in my answer.' (lit. The irony in
               my answer may have passed you by)
         B: No <u>ei</u>   se   mennyt
               Well neg-sg-3rd it-NOM go-PP
               'Well no I didn't.' (lit. Well no it didn't go.)
               (*sfnet.keskustelu.politiikka, 11.5.2001*)

Moreover, as example (14b) illustrates, even if the proposition is only inferrable from something else in the discourse context, non-canonical preposed negation can be used.

Here, Annukka is thinking about Seppo, her new boyfriend, who has suddenly started talking strangely. The possibility that, if he turns out to be mentally unstable, she might become his 'caretaker' is inferrable from the context, and thus preposed negation can be used.

(14)   b.   *Inferrable from something that was explicitly mentioned*
              [Context: Annukka and Seppo have recently started dating, and one night are sitting in his apartment when he starts talking bizarrely.]
              Siihen saakka Sepon tarinointi oli kuullostanut järkevältä, mutta nyt.
              Miehen täytyi olla hullu - jotenkin sairas sisältä. Annukka
              mietti miten pääsisi helpoimmin pois tästä tilanteesta, pois
              Sepon läheltä; . . ..

   'Until then Seppo's story-telling had sounded sensible, but now. The man must be crazy – somehow sick inside. Annukka wondered how she could best get out of this situation, away from Seppo; . . ..'

. . . <u>ei</u>   hän   halunnut ruveta hullun   holhoojaksi.
. . . neg-sg-3rd s/he-NOM wanted become crazy-GEN caretaker-TRANS
. . .'she didn't want to be a crazy person's caretaker.'
(*sfnet.harrastus.kirjoittaminen, 17.6.2001*)

   As shown in ex. (14c), when the proposition is presupposed by the preceding context, preposed negation can also be used. Here, the sentence 'Pekka's children are smart' presupposes that Pekka has children. The second speaker can thus felicitously negate this claim by using fronted negation.

(14)   c.   Presupposed by preceding context
         A: Pekan lapset ovat tosi fiksuja.
               Pekka's children are really smart.
         B: <u>Ei</u>   Pekalla   ole lapsia!
               neg-sg.3rd Pekka-ADES is children-PART
               'Pekka doesn't have children!'

   In sum, we have seen that in Finnish, preposed negation can be used to negate propositions that are old information due to the discourse context in which they occur – either already mentioned, inferrable or presupposed. The use of noncanonical negation to mark a proposition as 'old information' is not restricted to Finnish. Schwenter (2001) notes that Romance languages such as Catalan, Italian and Brazilian Portuguese use noncanonical negation structures to "encode the denial of a discourse-old or inferrable proposition" (Schwenter, 2001: 1).[16] Consider the following examples in (15) from

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[16] See also Romero and Han (2004), who show that yes/no questions with and without preposed negation differ in the implicatures that they trigger.

Brazilian Portuguese. The standard negation is *não*, which occus preverbally, and the noncanonical form is the so-called 'embracing negation' *não...não*, with the second negation occuring postverbally (see Schwenter, 2001: 6). The noncanonical negation "presuppose[s] a previous affirmative assertion of assumption which (it) seek(s) to contradict" (Schwenter, 1991: 194).

(15)　　a.
　　　　A:　　O que você não fiz no Rio que queria fazer?
　　　　　　　'What didn't you do in Rio that you wanted to do?'
　　　　B:　　Eu não fui à praia (#não).
　　　　　　　'I didn't go to the beach.'

(15)　　b.
　　　　A:　　Você gostou da praia no Rio?
　　　　　　　'Did you like the beach in Rio?'
　　　　B:　　Eu não fui à praia não.
　　　　　　　'I didn't go to the beach.'

　　Thus, in the first example (15a), use of noncanonical negation leads to pragmatic infelicity (#), because the discourse context does not contain the proposition 'B went to the beach.' However, in the second example (15b), where A's question presupposes that B went to the beach, the noncanonical negation is felicitous. The Finnish noncanonical negation thus seems to share the pragmatic functions of this emphatic negation, but differs from the Romance data in that the contrast in Finnish is not between two different ways of marking negation, but is dependent on the position of the negation.

　　Let us now return to the Finnish negation data. Surprisingly, when canonically post-subject negation occurs in a sentence-initial position, some of the judgments regarding the ordering of contrastive versus old/'topical' constituents, as discussed in Section 2, are reversed. I discuss these new data in the next two sections, and present an analysis for them in Section 3.4.

3.2. Kontrastive objects

　　Let us first consider configurations in which the object is prosodically focused and kontrastive. As shown in (16a), it can be kontrastive *in situ* with 'regular' negation. Ex. (16b) shows that the object can also be kontrastive *in situ* when negation has scrambled to the front of the sentence.[17] As shown in (16c), if the kontrastive object is fronted between the negation and the subject, the resulting sentence is ungrammatical, even

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[17] Preposing negation to the front of the sentence also affects its scope; in (16a), negation has narrow scope. Heinämäki (1982: 102) notes that here, "people are arguing about what [Jussi] did not buy", whereas in (16b), negation has wide scope, as "people are arguing what [Jussi] bought" (Heinämäki, 1982: 102). I leave the details of the effect of negation preposing on scope and kontrast for future research.

though it was grammatical back in (7b) without the (fronted) negation (Osv). Interestingly, example (16d) – where the kontrastive object has been fronted to a preverbal position, and the subject is between the sentence-initial negation and the preverbal object – is grammatical with preposed negation. The same sentence without fronted negation is ungrammatical, as we saw back in (4c), repeated here as (16e) (*sOv).

(16) a.   Jussi   ei   ostanut HEVOSTA.   s-neg-v-O
            Jussi-NOM neg-sg.3rd buy-PP HORSE-PART
            'It was a HORSE that Jussi did not buy.'
      b.   Ei   Jussi   ostanut HEVOSTA   (vaan auton).   neg-s-v-O
            Neg-3rd Jussi-NOM buy-PP HORSE-PART (but car-ACC)
            'It was not a HORSE that Jussi bought (but a car)
      c.   *Ei HEVOSTA Jussi ostanut.   * neg-O-s-v
            [Heinämäki, 1982:102]
      d.   Ei Jussi HEVOSTA ostanut.   neg-s-O-v
            [Heinämäki, 1982:102, see also Välimaa-Blum, 1988: 78]
      e.   * Jussi HEVOSEN osti.   * s-O-v
            [Heinämäki, 1982:102]

3.3. Kontrastive subjects

If we now turn to cases where the subject is prosodically focused, we see a slightly different pattern. The subject can be kontrastive in its canonical preverbal position with either canonical or preposed negation, as shown in (17a,b). Ex. (17c) illustrates that, if negation occurs in a sentence-initial position, the kontrastive subject can precede a preverbal non-kontrastive object – as is also the case for sentences without fronted negation (ex. 8a). Moreover, a kontrastive subject can also be preceded by a non-kontrastive object, as shown in (17d), if negation is preposed. This contrasts with the sentence we saw in ex. (8b), repeated here as (17e), which is ungrammatical with oSv order.

(17) a.   JUSSI   ei   ostanut tätä   hevosta.
            JUSSI-NOM neg-sg.3rd bought this-PART horse-PART
            'It was not JUSSI who bought this horse.'
      b.   Ei JUSSI ostanut tätä hevosta.   neg-S-v-o
      c.   Ei JUSSI tätä hevosta ostanut.   neg-S-o-v
            [Heinämäki, 1982: 102, see also Välimaa-Blum, 1988: 78]
      d.   Ei tätä hevosta JUSSI ostanut.   neg-o-S-v
            [Heinämäki, 1982: 102]
      e.   * Tämän hevosen JUSSI osti.   * o-S-v
            [Heinämäki, 1982: 102]

In sum, we see that when negation is preposed sentence-initially, orders which were ungrammatical (*sOv, *oSv) become grammatical. In other words, the requirement that preposed kontrastive elements not be preceded by non-kontrastive preposed constituents no longer holds when negation is preposed. In addition, Osv order is not grammatical with preposed negation (16c), even though it is fine without it. Thus, it appears that there is something going on with the relative ordering of kontrastive and non-kontrastive preposed elements.[18]

3.4. Syntactic account

In this section, I discuss how the data presented in the preceding section, as well as the contrasts between sentences with and without preposed negation, can be captured by the structure in (18). The main idea is that negation, when fronted to a sentence-initial position (presumably to some kind of high PolarityPhrase, see also Laka, 1990; Zanuttini, 1997; Holmberg, 2001)[19] evokes – i.e. selects as its sister – an additional projection, here labelled TopP. In other words, sentence-initial negation creates a new landing site for constituents that are old information. Intuitively, this makes sense, given that preposed negation marks a proposition as being in some sense known/old (Section 3.1). Also, with the structure in (18), it is clear why the requirement that preposed contrastive elements not be preceded by unfocused preposed constituents no longer holds.
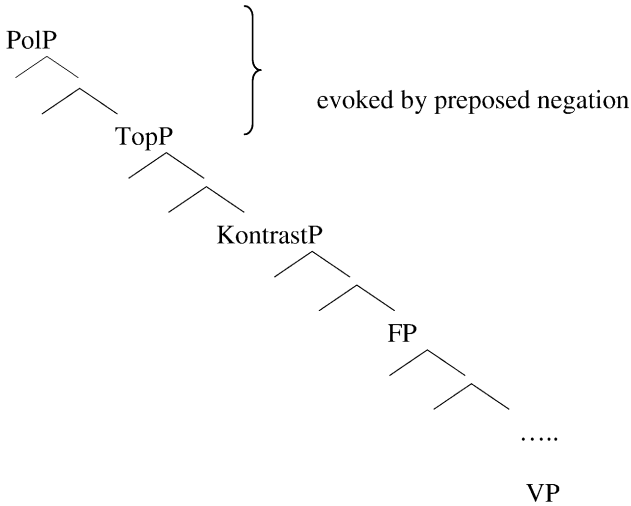
It is worth noting that, as Vallduví and Vilkuna (1998), Prince (1998), Snyder (2000) and others have pointed out, languages differ in terms of their syntax-discourse mappings. Thus, the structure in (18) should not be viewed as a crosslinguistic universal. We will return to the implications of crosslinguistic variation in the conclusion, Section 6.

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[18] As noted by one of the reviewers, constructions with fronted negation do not necessarily involve contrast (see also Holmberg, 2001: 146). Thus, schematically speaking, sentences like neg-osv and neg-sov are grammatical. In fact, even without preposed negation, it is possible for a sentence to contain a preposed kontrastive constituent, followed by more than one non-kontrastive element, as illustrated below (see Vainikka, 1989: 43). In addition, in certain contexts, osv and sov orders do not appear to require kontrast (for a discussion of osv order, see Kaiser, 2000; for a discussion of sov order in embedded contexts, see Holmberg, 2000). These patterns could probably be captured by following Rizzi's claim that TopP (or, in our case, FP) is recursive, as this would allow two non-kontrastive arguments to occur next to each other. I leave the details of this proposal for future work.

(a)   EILEN Jussi hevosen osti.
           yesterday Jussi-NOM horse-ACC bought
           'It was yesterday that Jussi bought the horse.'

[19] This raises the question of how the negative auxiliary is fronted to this position, as it does not seem to be affected by the presence of intervening heads. Interestingly, there are other cases of discourse-driven 'head scrambling' in Finnish that do not seem to be sensitive to the Head Movement Constraint (see e.g. Vilkuna, 1995: 252 on finite verb fronting).

(18)

```
        PolP ⌐
            /\            ⎫
           /  \           ⎬  evoked by preposed negation
          TopP            ⎭
              /\
             /  \
          KontrastP
                 /\
                /  \
               FP
                 /\
                /  \
                    …..

                       VP
```

Let us now consider how the data discussed in Sections 3.2 and 3.3 can be captured by this structure. First, we will consider the orders where the object is prosodically focused and kontrastive. We see in (16a) and (16b), repeated here schematically, that the object can be kontrastive *in situ* both with canonical and with fronted negation. In both (16a) and (16b), the subject is in spec-FP.

(16)   a.   √ s-neg-v-O
         b.   √ neg-s-v-O
         c.   * neg-O-s-v (s not in spec-TopP)

According to the structure in (18), (16c) is ungrammatical because the sentence contains a non-kontrastive, discourse-old subject, which should have raised to spec-TopP. In fact, example (16d) shows that when the subject does raise to spec-TopP, the sentence is grammatical. The requirement that the subject in a sentence with preposed negation and a kontrastive object move to spec-TopP is plausible in light of the observation that fronted negation marks a proposition as known/familiar.

(16)   d.   √ neg-s-O-v
         e.   *s-O-v

As mentioned above, the grammaticality of (16d) can be explained straight-forwardly: Here, the subject is in spec-TopP, and the object is in spec-KontrastP. The same order without fronted negation is ungrammatical, because no TopP is present in such cases, and thus there is no landing site for the subject above the kontrastive object.

Let us now turn to the orders where the subject is prosodically focused and kontrastive. The examples from (17) are repeated below. If we follow the assumption that constituents can be kontrastive *in situ*, where *in situ* means a position attained by non-discourse driven movement, then it follows that in both (17a) and (17b), the subject is in spec-KontrastP (see note 14).

(17) a. S-neg-v-o
      b. neg-S-v-o

In (17c), we see that, just as was the case without preposed negation, a kontrastive subject can precede an object that precedes the main verb. Here, the subject is in spec-KontrastP, and the object is in spec-FP.

(17) c. neg-S-o-v

The interesting case is (17d), since it is here that we see an order that was not grammatical without preposed negation (as shown in 17e).

(17) d. neg-o-S-v
      e. *o-S-v

According to my analysis, the object in (17c) is in spec-FP, and it seems that in (17d), it is in the spec of TopP, the new projection evoked by negation. The subject is in spec-KontrastP in both (17c) and (17d). We could now simply say that old objects can optionally raise to either spec-FP or spec-TopP, and leave open the reasons driving the choice between the two landing sites. However, there is a subtle discourse-based difference between (17c) and (17d) that sheds some light on the two possible landing sites of the object. The order in (17c) (repeated as 19b below) sounds most felicitous in a context such as (19a), where both the horse and Jussi have been mentioned in the discourse, but Jussi is currently the most salient referent:

(19) a. Context: ''Jaakko bought that small sheep, and Jussi bought this beautiful horse. Jussi is very good at buying animals.''
      b. Ei   JUSSI tätä   hevosta   ostanut, vaan Liisa.
          Neg-3rd-sg JUSSI this-PART horse-PART bought, but Liisa-NOM
          'It wasn't JUSSI who bought this horse, but Liisa.'

In contrast, the order in (17d) (repeated as (19d) below) fits better with a context where the horse is currently more salient, even though Jussi and the horse have both been mentioned earlier:

(19) c. Context: ''Jussi bought a new horse yesterday. It's a beautiful, brown mare. Right now Sami is feeding it in the stable.''
      d. Ei tätä   hevosta   JUSSI   ostanut, vaan Liisa.
          neg this-PART horse-PART JUSSI-NOM bought, but Liisa-NOM
          'JUSSI wasn't the one who bought this horse – it was Liisa.'

We can now hypothesize that the location of the object in spec-FP (19b) versus spec-TopP (19d) is not wholly optional, and is related to its salience (here, how 'strongly' discourse-old it is) at that point in the discourse. Interestingly, subjects seem to lack this salience-based variation. A topical non-kontrastive subject in a sentence with preposed negation must raise to TopP, and thus *neg-O-s-v is ungrammatical.

Why should there be this difference between subjects and objects? Further work is clearly needed in this area, but a potential explanation lies in the often-observed difference in the 'inherent salience' of subjects and objects. Work on discourse structure and anaphora resolution has found that (agentive) subjects are more salient than objects (see e.g. Brennan et al., 1987; Matthews and Chodorow, 1988; Crawley and Stevenson, 1990 and many others), with this greater salience often being attributed to the semantic properties of subjects (e.g. Turan, 1998). In other work, the salience of subjects has been attributed to syntactic position (Carminati, 2002). Thus, if we combine these ideas, we reach the conclusion that there is a connection between the inherent 'semantic' salience of subjects and syntactic position.

So, if we think back to the structure at hand, we can hypothesize that since subjects are inherently salient, they cannot remain low in the tree. However, since objects are not inherently highly salient, they can remain lower – but if an object gains in salience by virtue of being discourse-old, it can occur higher in the tree (see Strube and Hahn, 1999; Kaiser, 2003 on the relation between salience and discourse-oldness). These salience-derived positional differences between subjects and objects explain why objects can occur in either spec-FP or spec-TopP, whereas subjects must be located in spec-TopP.

The grammaticality of (17c) neg-S-o-v, combined with the ungrammaticality of (16c) *neg-O-s-v, shows that if a discourse-old non-kontrastive subject is present in a sentence with preposed negation, it must raise to TopP – if this doesn't happen, the sentence is ungrammatical, e.g. *neg-O-s-v. However, what happens with a kontrastive subject, as in neg-S-o-v? It presumably raises only to KontrastP, not to TopP. Given that neg-o-S-v is grammatical, it makes sense to say that the kontrastive subject only raises as high as KontrastP. In a structure such as neg-S-o-v, the higher TopP might thus be missing altogether. Roughly speaking, I follow the gist of Rizzi's claim that "it is reasonable to assume that the topic-focus system is present in a structure only if 'needed', i.e. when a constituent bears topic or focus features to be sanctioned by a spec-head criterion" (Rizzi, 1997: 288).

3.5. Effects of focus-fronting

This section would not be complete without a discussion of work by Vilkuna (1989, 1995) and Holmberg (2000) on the phenomenon of 'Focus-fronting.' They note that Focus-fronting (i.e. filling the CP, see Vilkuna, 1995: 263) makes object-verb order possible – but not obligatory – in contexts where it could otherwise not occur.

(20)   a.   Milloin Jussi   olisi   kirjoittanut romaanin? [VO]
               When Jussi-NOM is-cond-pst written-cond novel-ACC
               'When would Jussi have written a novel?'
        b.   Milloin Jussi olisi romaanin kirjoittanut? [OV]
               [Holmberg, 2000: 128]

(21)   a.   Annahan[20]   sai   Mikolta   kukkia. [VO]
            Anna-NOM-clitic received-3rd Mikko-ABLT flowers-PART
            'Anna got flowers from Mikko.'
       b.   Annahan Mikolta kukkia sai. [OV]
            [Vilkuna, 1995: 264]

Holmberg (2000) offers a formal syntactic analysis of these patterns. According to his analysis, OV order is generated by VP-fronting to the specifier of a higher projection. The two main components of Holmberg's analysis that concern us here are a new projection (NewP) that he argues for, as well as an optional variation between head-movement and XP movement at certain points in the derivation. Let us consider these two notions in more detail. First, Holmberg claims that there exists a projection NewP, which takes the VP as its complement and defines the VP as ''the domain of new information'' (Holmberg, 2000: 143). According to his approach, in Finnish, the New head can be checked by the verb. Furthermore, every sentence must contain at least one New head, i.e. cannot be all presupposed or old information[21] – or, if the sentence contains a constituent in C with a focus feature (e.g. wh-word or contrastively focused element, in Holmberg's analysis), then the New head is not needed.

Now, let us consider the issue of head-movement versus XP-movement. Consider the pre-Spell-Out structure in ex. (22a) below (see Holmberg, 2000: 138). Here, the wh-element in the CP domain means that no NewP is needed. According to Holmberg, the V verb stem can raise to the participial affix [-nut] by head-movement, as in (22b), or by VP-movement, as in (22c). If VP movement is what happens, then the verb must end up adjacent to the inflectional suffix, for morphological reasons. Thus, in this case the resulting order is object-verb.

It is important to note that if a sentence contains a NewP, and V raises to New via head-movement, then Holmberg claims that this head-movement rules out subsequent XP-movements (due to a stipulation he proposes regarding feature checking, Holmberg 2000: 141). In other words, it is only in the presence of a focus constituent in the CP domain – and the resulting licit omission of the New head – that object-verb order can arise, according to this analysis.

(22)   a.   Milloin Jussi   olisi   [$_{PrtcP}$ -nut [$_{VP}$ romaanin kirjoitta- t$_{object}$]]
            when   Jussi-NOM would-have -en   novel-ACC writ-
       b.   Milloin Jussi   olisi [$_{PrtcP}$ kirjoitta-nut [$_{VP}$ romaanin t$_{verb}$ t$_{object}$]]
            when   Jussi-NOM would-have writ -en novel-ACC
       c.   Milloin Jussi olisi [$_{PrtcP}$ [$_{VP}$ romaanin kirjoitta] -nut t$_{VP}$]
            when Jussi would-have   novel   writ-   -en
            'When would Jussi have written a novel?'

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[20] In this context, the pragmatic clitic [-hAn] can be roughly paraphrased as 'as you should know' (Vilkuna, 1995: 264). The clitic is assumed to be located in the CP domain and can only occur on the leftmost element in a clause.

[21] This is a statement which I feel would benefit from further clarification and research, especially in light of research such as Walker (1993) on informationally-redundant utterances.

Now, if we take a closer look at the discourse-related aspects of Holmberg's analysis, it appears that his definitions of the notions 'new' and 'focus' are inconsistent. Holmberg treats the term 'focus' as meaning 'new information' (Holmberg, 2000: 143), similar to Rizzi's usage. He claims that every independent sentence has to contain an instantiation of [focus], "that is to say, an independent sentence cannot be all presupposition; some part of the sentence must be interpretable as focus/new information" (Holmberg, 2000: 143). Intuitively, then, it makes sense for him to argue that the presence of a 'new information' feature in the CP domain makes it possible for NewP to be omitted lower down – since the sentence will still contain some new information, in the CP domain.

However, it is not very clear how the elements in the CP domain that permit OV order are related to this notion of 'new' information. In other words, why is it that "the focus features which appear in C, including Q and Contrast, count as instantiations of the feature [focus]" (Holmberg, 2000: 143)? More specifically, Holmberg treats sentence such as (23) as having the relevant [focus] feature in the CP domain which allows OV order to surface. He does not discuss the implications of his analysis for sentences with other kinds of kontrastive constituents, such as Osv or neg-oSv, since he focuses on object-verb order).

(23)   JUSSI romaanin kirjoitti.

As Vallduví and Vilkuna (1998) have shown, in Finnish, left-peripheral elements can be either rhematic or thematic, as long as they are kontrastive. The case that is especially relevant for the present discussion – namely thematic, kontrastive constituents – is exemplified below. In (24b), the subject is kontrastive and thematic. A naturally-occurring example of the same type is given in (24c).

(24)   a.   Did you know that Jussi and Pekka took part in a writing course? Liisa
            said that Jussi wrote a beautiful poem, and Pekka wrote an entire novel.
            I've heard that the novel is wonderful.
       b.   JUSSI   sen   romaanin   kirjoitti (eikä Pekka).
            Jussi-NOM that-ACC novel-ACC wrote (and-not Pekka-NOM)
            'It was Jussi who wrote the novel, not Pekka'
            [example modified from Holmberg]
       c.   [Preceding context: Discussion of the origins and members – Tomi, Pertti,
            Jussi and Urpo – of a Finnish band.]
            Kun kellarissa soittamiseen haluttiin lisää potkua, keksittiin tarjoutua
            soittamaan jo edesmenneeseen Leevin Kuppiin Viinikkaan. Yhtyeen
            keikkailmoitukseen tarvittiin nimi.
            'When playing in a basement got too boring, they thought of offering
            to call the now-closed Leevin Kuppi in Viinikka. A name was needed
            for the band's concert announcement.'

            . . ..Jussi sen keksi: remington.
            . . . Jussi-NOM it-ACC invented: remington

    . . . 'It was Jussi who invented it: remington'
(*http://manseyhteisot.uta.fi/viinikkala/remington/rem_hist.html*)

Given that OV order is possible in (24b,c), if we follow Holmberg's approach we end up concluding that elements that are kontrastive – regardless of whether they are thematic or rhematic – have the [focus] feature that makes it possible to omit NewP. In other words, even when the subject 'JUSSI' is thematic, a sentence such as (24b) contains enough new information to satisfy Holmberg's claim that all independent sentences contain something that can be interpretable as focus/new information. This suggests that kontrastiveness counts as 'newness' in the relevant sense.

However, if we conclude this and try to apply his analysis to the data I am concerned with in this paper, we are faced with a problem, because sentence such as (25) are grammatical:[22]

(25)   neg-s-O-v

Here, the object is kontrastive *and* OV order is grammatical. According to Holmberg, OV order is only possible in the absence of NewP – so according to his analysis, (25) presumably does not contain a NewP. However, Holmberg also points out that if the VP contains new information – such as an object that is new – then, even in the presence of initial focus, NewP must be present. As we saw above, kontrastiveness in the CP domain counts as 'newness' in the sense that it licenses the omission of NewP. We are then faced with the question: Why, in (25), does the kontrastive (and therefore new) object not entail the presence of NewP? How can NewP be omitted in (25) despite the presence of new information in the VP domain?

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[22] This same pattern holds for wh-questions, as illustrated in (a) below. Moreover, wh-questions also allow object-subject order (which Holmberg does not discuss) if the subject, but not the object, is kontrastive, as shown in (b,c). This is the same pattern we saw with preposed negation. Perhaps this similarity could be linked to the fact that preposed negation is used when the proposition is old/known, and adjunct wh-questions are also used when the proposition itself (e.g. Jussi bought a car) is known information. I leave the details of the analysis for future work, but see ex. (30) which shows that preposed negation and wh-words do not occupy the same position in the tree.

(a)   wh-sOv
        Minkä takia Jussi AUTON osti?
        Why Jussi-NOM car-ACC bought?
        'Why did Jussi buy a CAR?'
(b)   wh-oSv
        Minkä takia sen auton juuri JUSSI osti?
        why that-ACC car-ACC exactly Jussi-NOM bought?
        'Why did exactly JUSSI have to buy that car?'
        (i.e., why not someone else?)
(c)   wh-Osv
        * Minkä takia AUTON Jussi osti?
        Why car-ACC Jussi-NOM bought?
        'Why did Jussi buy a CAR?'

Thus, there seems to be an inconsistency in how Holmberg defines the notions of 'new/focus'. It seems that on one occasion (as in ex. 24b), constituents that are thematic and kontrastive are treated as 'new' and satisfy the condition that all sentence have contain something that can be interpreted as focus/new information – but that on another occasion (as in ex. 25), they are not new as they do not require the presence of NewP.

In addition, all the 'tools' needed to generate the structure shown in (5a) are also needed for independent reasons: (1) Holmberg & Nikanne and Vallduví & Vilkuna argue that non-subjects can land in spec-FP, and (2) Osv sentences – which Holmberg's analysis does not address – show that in Finnish there is a slot at the left periphery for kontrastive elements. In sum, in light of these three reasons, in this paper I will not follow Holmberg's analysis.[23]

4. Emphatic *kyllä* 'yes'

In Finnish, there is also an affirmative counterpart to preposed negation, namely the sentence-initial affirmative word *kyllä* 'yes'. As we will see in this section, the structural consequences of this affirmative element match the consequences of preposed negation. As expected, *kyllä* can function as a 'regular' *yes* in the answer to a yes/no question (e.g. *Yes, I fed the cats*), and then it is separated from the rest of the sentence by an intonational break (or by a comma in written text). However, it also has another usage, and it is this second usage that we are concerned with here. As shown in (26a), in this usage there is no intonational break between *kyllä* and the rest of the sentence (and a comma is not used in written text), and the sentence does not have to be an answer to a question.

(26)   a.

      Soitin Poseidoniin. Baarimestari teki jo lähtöä kotiin. Sovimme,
      että hän jättää laukkuni sisäpihan rautaportin taakse. Pari tuntia
      myöhemmin menin piilolle, mutta laukku ei ollutkaan siellä.
      Soitin kännykällä kotiin baarimestarille, joka vahvisti unenpöpperöisenä, että. . . ..
      'I called Poseidon [a restaurant]. The barkeeper was already getting
      ready to leave. We decided that he would leave my bag behind the iron
      gate of the inner courtyard. A couple of hours later, I went to the hiding
      place, but the bag wasn't there. I used my cell phone to call the barkeeper
      at home, who confirmed, still half-asleep, that. . . ..
      <u>kyllä</u> hän   sen   sinne jätti.
      yes   he-NOM it-ACC there left
      'he had indeed left it there.'
(http://www.helsinginsanomat.fi/uutiset/juttu.asp?id=20010108KA5)

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[23] Holmberg (2001) briefly mentions a new way of deriving OV order by fronting the VP not to spec-PrtcP, but to spec-TopP. I have not worked out the details of how his approach could be applied to the data I am concerned with here (especially since I am also looking at orders other than OV and also focusing on the differences between kontrastive and non-kontrastive constituents), but it seems that the definitional complications described above might carry over into this account as well.

The function of this preposed *kyllä*[24] construction is to focus the truth of the proposition (B's answer), similar to verum focus (see e.g. Höhle, 1992, see also Vilkuna (1989: 119) for a brief discussion of *kyllä*). Thus, in (12a), the utterance with preposed *kyllä* reflects the barkeeper's emphatic claim that he had left the bag at the agreed-upon location, even though the caller suspects otherwise. Similarly, Höhle (1992) notes that in German, prosodic focus can be placed on the finite verb, with the effect of focusing the truth of the proposition:

(26)   b.
      A: ich habe Hanna gefragt, was Karl grade macht, und sie hat die alberne
            Behauptung aufgestellt, dass er ein *Dreh*buch schreibt.
      B: (das stimmt) Karl *schreibt* ein Drehbuch
            [Höhle, 1992: 112]
      A: I asked Hanna what Karl is doing these days, and she made the silly
            claim that he is writing a movie script
      B: (that's true) Karl *is* writing a movie script.
            [my translation]

The discourse-status of the proposition that can be focused by means of preposed *kyllä* resembles the patterns for preposed negation. In other words, *kyllä* can be used to focus an already-mentioned proposition, as we saw in the example above (26a), but it can also be used to emphasize the truth of a proposition which is somehow inferrable from, or expected in light of, the context (see also Vilkuna, 1989: 120). This is illustrated below.

(27)   [from a movie review]
       Tom Hanks   on loistava Forrestina. Kyllä hän   sai ansaitusti
       Tom-NOM Hanks-NOM is great Forrest-ESS. Yes he-NOM got deserverdly
       Oscarinsa.
       Oscar- ACC-Px.3rd
       'Tom Hanks is great as Forrest. He deserved to receive his Oscar.'
(http://www.saunalahti.fi/samsal/elokuvat.html)

In sum, then, it seems that in terms of its discourse function, preposed *kyllä* bears a close resemblance to preposed negation: Both are used with a proposition that is in some sense familiar to the hearer due to the preceding discourse, and whereas *kyllä* focuses the truth of this proposition, *ei* focuses its falsity.

4.1. Kontrastive objects

Having considered the pragmatic functions of preposed *kyllä*, let us now take a look at how it interacts with word order variation and prosodic focus/kontrast. First, we will look at

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[24] The preposed *kyllä* (underlined) is not translated literally into the English version.

cases where the object is kontrastive. Here, we see that the pattern for kontrastive objects is the same as with preposed negation:

(28)   a.   Kyllä Jussi   osti   HEVOSEN.   yes-s-v-O
             yes   Jussi-NOM bought horse-ACC
             'Jussi did buy a cow (and not a horse or something else)'
             [Heinämäki, 1982: 103]

       b.   * Kyllä HEVOSEN Jussi osti.   * yes-O-s-v
             [Heinämäki, 1982: 103]

       c.   Kyllä Jussi HEVOSEN osti.
             [Heinämäki, 1982: 103]*   yes-s-O-v

4.2. Kontrastive subjects

Now, when we turn to cases where the subject is kontrastive, we see again that the pattern is the same as for preposed negation:

(29)   a.   Kyllä JUSSI   osti   tämän   hevosen.   yes-S-v-o
             yes JUSSI-NOM bought this-ACC horse-ACC
             'It *was* Jussi who bought this horse (and not anyone else).

       b.   Kyllä JUSSI tämän hevosen osti.   yes-S-o-v

       c.   Kyllä tämän hevosen JUSSI osti.   yes-o-S-v

In sum, the preposed affirmative particle *kyllä* patterns like preposed negation. I thus assume that sentences with fronted negation and fronted *kyllä* share the same structure, i.e. that in both cases, *ei/kyllä* fronts to a PolarityPhrase and evokes a TopP.[25]

5. Where does negation land?

In the preceding discussion I hypothesized that fronted negation and the fronted affirmative particle *kyllä* land in a PolarityPhrase. This raises the question, what about other elements that occur at the left periphery of the clause, such as wh-words and complementizers? A full discussion of these issues is beyond the scope of this paper, but I address some of them briefly here, primarily focusing on preposed negation in questions and embedded contexts. We will see that PolP is present in wh-questions,

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[25] The behavior of preposed *kyllä* provides additional evidence against the larger structure (with AgrsP and TopP) briefly mentioned in Section 2.5. Unlike negation, preposed *kyllä* 'yes' is not verbal. Thus, the complicated verb-movement account that was necessary for the AgrSP structure to capture the neg-o-S-v (ex. 17d) order is of no help in explaining why (28c) is grammatical. The order *oSv was claimed to be ungrammatical because the 'old' verb failed to move to TopP. However, an account that relies on head movement of a verbal element runs into trouble with (28c), which is grammatical despite the lack of any head that could have moved through, or landed in, TopP.

below the landing site of wh-words, as well as in embedded clauses, below the complementizer.

5.1. Questions

In Finnish, wh-questions are formed by wh-movement, by "obligatory movement of one and only one wh-phrase to spec-CP" (Holmberg, 2000: 125). In Rizzi's CP system, wh-words are located in FocP, at least in Italian (Rizzi, 1997: 299), and can thus be preceded by topics (see (11b)). In Finnish, however, the wh-word must be leftmost and cannot be preceded by topicalized constituents. As shown below, preposed negation also occurs below wh-words. These patterns suggest that the landing site of wh-phrases is above PolP, and also that the KontrastP projection in Finnish differs from FocP in Rizzi's analysis in that wh-words do not land in KontrastP – which, from a semantic perspective, is not surprising, since wh-words have long been viewed as involving focus, but not Kontrast in Vallduví and Vilkuna (1998)'s sense.

(30)   Minkä takia ei   JUSSI   ostanut   autoa?
         Why   neg-sg.3rd Jussi-NOM bought-PP   car-ACC?
         'Why didn't JUSSI buy a car?'

Standard yes-no questions in both matrix and embedded contexts are formed by verb-movement to the CP domain, and the question particle [−kO] occurs on the constituent being questioned (31a). Since negation is a verbal element, in a negative question negation necessarily moves and surfaces with the question particle (31b). The affirmative particle cannot occur in a yes-no question (31c,d) even though it is grammatical in the declarative form of the same sentence (31e), which can be attributed to a clash of illocutionary forces. The affirmative particle is used to emphasize the truth of the proposition – and thus it makes no sense to simultaneously query the truth of that same proposition by means of a yes-no question.

(31) a.   Ostiko   Jussi   auton?
           bought-QUEST Jussi-NOM car-ACC?
           'Did Jussi buy a car?'
      b.   Eikö   Jussi   ostanut   autoa?
           Neg-QUEST Jussi-NOM bought-PP car-ACC?
           'Didn't Jussi buy a car?'
      c.   * Kylläkö   JUSSI   osti   auton?
           Yes-QUEST Jussi-NOM bought car-ACC?
           'Did Jussi buy a car?'
      d.   * Ostiko   kyllä JUSSI   auton?
           bought-QUEST yes   Jussi-NOM car-ACC?
           'Did Jussi buy a car?'
      e.   Kyllä JUSSI osti auton.
           yes Jussi-NOM bought car-ACC
           'It *was* Jussi who bought a car.'

In sum, the data suggest that the landing site of wh-phrases is above PolP, and that KontrastP differs from Rizzi's FocP, as wh-words do not land in KontrastP.

5.2. Embedded contexts

In this section, we will see that for the most part, the word order variation discussed in Sections 2 and 3 is also possible in various embedded contexts in Finnish for both affirmative sentences and those with preposed negation (see also Vilkuna, 1995: 261–263). According to Rizzi's analysis, the possibility of preposed constituents in embedded contexts is not surprising, as the complementizer, according to him, is in the Force position (see (11b) – i.e. it is above TopP and FocP (Rizzi, 1997: 295).[26]

Let us first consider embedded affirmative sentences. The Finnish equivalent of English 'that', *että*, cannot be omitted, unlike its English counterpart. Most of the ordering patterns described in Section 2 also hold for embedded finite clauses, as shown by the examples below. These examples use the factive verb *tietää* 'to know', but the same basic pattern seems to obtain for the nonfactive verb *luulla* 'to think'.[27] A comparison of the examples in (22–23) with those in (7–8) reveals that the only difference between main clauses and embedded clauses is Osv order. This is fine in main clauses, but slightly marked in embedded clauses (32b).

(32)   a.   Pekka   tietää, että Jussi   osti   TUON   HEVOSEN (eikä tätä toista).
                    Pekka-NOM knows that Jussi-NOM bought THAT-ACC HORSE-ACC (and-not this-PART other-PART)
                    'Pekka knows that Jussi bought THAT HORSE (and not this other one).'   svO

        b.   ? Pekka   tietää, että TUON   HEVOSEN Jussi   osti (eikä tätä toista).
                    Pekka-NOM knows that that-ACC horse-ACC Jussi-NOM bought (and-not this-PART other-PART)   Osv

        c.   * Pekka tietää, että Jussi TUON HEVOSEN osti (eikä tätä toista).   sOv

(33)   a.   Pekka   tietää, että JUSSI   hevosen osti   (eikä Kalle).
                    Pekka-NOM knows that JUSSI-NOM horse-ACC bought (and-not Kalle-NOM)
                    'Pekka knows that it was JUSSI who bought the horse (and not Kalle).'   Sov

        b.   * Pekka tietää, että hevosen JUSSI osti (eikä Kalle).   oSv

        c.   Pekka tietää, että JUSSI osti hevosen (eikä Kalle).   Svo

I would like to suggest that the reason for the slightly marked status of Osv order in these kinds of embedded contexts is due to the discourse contribution of subordinate clauses. As noted by Lindén (1963: 255) *inter alia*, subordinate clauses of the type discussed here tend

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[26] It is worth noting that in addition to 'regular' embedded clauses of the type considered here, Finnish also has so-called 'clausal complements' (*lauseenvastikkeet*). These constructions do not allow nominative subjects, and they cannot contain the negative verb or the auxiliary *olla* 'to be' (Vainikka, 1989: 243). In fact, Vainikka notes that "it appears that these constructions do not have a CP: there is no WH-movement, topicalization, or complementizers in the non-finite constructions" (Vainikka, 1989: 244). The word order variation within clausal complements is very restricted (Hakulinen and Karlsson, 1988: 357, see also Vainikka, 1989). Unfortunately a detailed discussion of these structures is beyond the scope of this paper, and thus I leave it as a question for future research.

[27] Finnish seems to pattern differently from preposing/topicalization patterns observed for embedded contexts in English and Japanese (e.g. Maki et al., 1999).

to contain old information (see also Carlson, 1983; Vilkuna, 1989: 126). Now, how is this relevant for Osv order? In Section 2, the structures in (34) were posited for Osv order and Sov order. In other words, in both cases the preposed kontrastive element is in spec-KontrastP, and the immediately preverbal constituent is in spec-FP. Thus, it seems that if Sov is grammatical in embedded contexts, shouldn't Osv order also be possible?

(34)   a   [O[_{FP} sv . . .]]
         b.   [S [_{FP} ov . . .]]

From a purely syntactic perspective, the answer is yes, we would expect Osv order to be possible. However, in my view, the slightly marked status of (32b) is the result of a clash between the discourse properties of Osv order and those of the embedded contexts we are looking at here. In other words, the discourse function of Osv order is not always compatible with embedding in the kinds of contexts we are considering here. Why is this?

The crucial difference between Sov order and Osv order is not where the kontrastive constituent is, but what is located in spec-FP. It is a well-known generalization that, in Finnish, objects in spec-FP are old/known information. Subjects in spec-FP, however, are not always old, since spec-FP is the default position for subjects in Finnish. For example, in a sentence in which both the subject and the object are new information, the word order is SVO and the subject is in spec-FP. Thus, the crucial difference between subjects and objects in spec-FP is that the former can occur there when discourse-new, but the latter must be discourse-old. Given that embedded propositions like those in (32) tend to be all old/known information, it is thus not surprising that Sov order is preferred over Osv order. In fact, even Osv order sounds much better when we use pronouns, which force both constituents to be interpreted as discourse-old (ex. 34c). Thus, we can conclude that, generally, the ordering facts for affirmative sentences described in Sections 2-3 also hold for the embedded finite clauses considered here. The main difference (32b vs. 33b) presumably stems from the different discourse properties of embedded vs. main clauses.

(34) c. Pekka   tietää, että SEN   he huomaavat heti   aamulla.
          Pekka-NOM knows, that it-ACC they notice   right-away morning-ABL
          'Pekka knows, that they will notice THAT first thing in the morning.'

Having considered embedded affirmative clauses, let us now turn to embedded clauses with preposed negation. As the examples below show, these show the same pattern as unembedded main clauses with preposed negation (examples in 16–17).[28]

(35) a. Pekka   tietää, että ei   Jussi ostanut HEVOSTA   (vaan auton).
          Pekka-NOM knows that neg-sg.3rd Jussi-NOM buy-PP HORSE-PART (but car-ACC)
          'Pekka knows that it was not a HORSE that Jussi bought (but a car) neg-s-v-O
      b. * Pekka tietää, että ei HEVOSTA Jussi ostanut.   * neg-O-s-v
      c. Pekka tietää, että ei Jussi HEVOSTA ostanut.   neg-s-O-v

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[28] In Finnish, there is also a combined form of the complementizer *että* and negation *ei*, namely *ettei*. Various other conjunctions (e.g. *jos* 'if' and *mutta* 'but') also have such combined forms. I do not discuss these forms here.

(36)   a.   Pekka   tietää, että ei   JUSSI   ostanut tätä   hevosta.
            Pekka-NOM knows that neg-sg.3rd JUSSI-NOM bought this-PART horse-PART
            'Pekka knows that it was not JUSSI who bought this horse.'   neg-S-v-o
       b.   Pekka tietää, että ei JUSSI tätä hevosta ostanut.   neg-S-o-v
       c.   Pekka tietää, että ei tätä hevosta JUSSI ostanut.   neg-o-S-v

In contrast to affirmative clauses, there is no asymmetry between the acceptability of Osv order in embedded and main clauses here. In light of my analysis of Osv order in embedded clauses, this is to be expected. I suggested above that the reason some Osv sentences sound slightly marked when embedded is because these contexts tend to be used with all-old utterances. Now, as we mentioned above, sentences with preposed negation are old/inferrable, and thus it is not surprising that they are compatible with these kinds of embedded contexts.

6. Conclusions and some comments on the syntax-discourse interface

In this paper, I looked at constraints on the word order of Finnish sentences that contain kontrastive, prosodically focused constituents and discussed a possible syntactic analysis of the Finnish left periphery that captures the word order patterns that arise with 'regular' declaratives. Interestingly, these patterns change drastically if noncanonical sentence-initial negation is present or if an affirmative particle occurs sentence-initially. In particular, the requirement that preposed contrastive elements not be preceded by unfocused preposed constituents no longer holds.

With the help of naturally-occurring examples, I discussed the discourse functions of fronted negation and the affirmative particle *kyllä*, and I showed how the syntactic structure proposed in Section 2 (repeated in (12) below, building on existing work on Finnish) can be extended to capture the effects of fronted negation and the affirmative particle. More specifically, I claimed that negation and the affirmative particle, when fronted to a sentence-initial position (presumably some kind of PolarityPhrase), evoke an additional projection, here labelled TopP – thereby creating a new landing site for constituents that are old information (see the structure shown in (18), repeated below). This structure captures the striking change in word order patterns between 'regular' sentences and those with preposed negation. In addition, I also provide some data which indicates that PolP is present in wh-questions, below the landing site of wh-words, as well as in embedded clauses, below the complementizer.

(12)   [$_{\text{KontrastP}}$ ... [$_{\text{FP}}$ .... [$_{\text{NegP}}$ .... [$_{\text{TP}}$ .... [$_{\text{VP}}$ ....]]]]]

(18)   [$_{\text{PolP}}$ .... [$_{\text{TopP}}$ .... [$_{\text{KontrastP}}$ .... [$_{\text{FP}}$ .... [$_{\text{NegP}}$ .... [$_{\text{TP}}$ .... [$_{\text{VP}}$ ....]]]]]]

However, many questions still remain open. For example, I have not looked at prosodically focused vs. unfocused postverbal subjects in any detail in this paper, and they should be addressed in future work. A larger-scale corpus study of the functions of preposed negation and *kyllä* would also be useful. From a more syntactic perspective, the

nature of the movements analysed here is also an important topic for future work, e.g. we would like to know whether we dealing with A-movement or A-bar movement, whether this kind of movement generates crossover effects or island effects, and so on.

On a more abstract level, this paper brings up many questions about the syntax-discourse interface. One of the main questions in this area is whether discourse factors drive certain syntactic phenomena (e.g. fronting of constituents), or whether the pragmatic component simply interprets what it gets from the syntactic component (see Snyder, 2000; Peretsvaig, 2004). According to Chomsky (1998), for example, the syntactic component is 'blind' to discourse information. In contrast, Rizzi (1997)'s approach ties together syntax and discourse very closely, as he argues that constituents with different discourse properties land in different syntactic positions.

In the present paper, I have adopted what may superficially look like a rather 'Rizzian' approach in treating the word order patterns in Finnish as a result of the existence of different syntactic positions for constituents with different discourse functions. However, if we abstract away from Finnish and look at word order variation from a crosslinguistic perspective, it becomes clear that the mapping between syntax and pragmatics must be rather underspecified. Languages vary in terms of whether they are 'syntactically sensitive' to notions such as topic, focus and kontrast, and also in terms of the linear order in which topics, foci and kontrastive constituents constituents occur. Recall the earlier summary of Vallduví and Vilkuna (1998), who compare Finnish, Hungarian, Catalan and English, and show that in different languages, rhematicity/thematicity and kontrastiveness are encoded differently in the syntax. They point out that languages differ in how they ''conventionalize the pairings of interpretative categories and structural categories'' (Vallduví and Vilkuna, 1998: 103). For example, in Finnish, kontrastive constituents can be rhematic or thematic, and this rheme/theme difference is not encoded in the syntax. In contrast, in Catalan, rhematic constituents can be kontrastive or non-kontrastive, and this [+/−kontrast] difference is not reflected in syntax (Vallduví and Vilkuna, 1998).

In my opinion, we can draw three important conclusions from these kinds of findings: (1) any approach which assumes there to be a universally fixed ordering of pragmatic projections will run into trouble; (2) any approach that assumes there to be universal set of pragmatic features that are encoded in the syntax will also encounter problems, given that not all languages encode the same pragmatic information in syntax, and (3) even within one language, not all aspects of the discourse-function of a sentence are encoded in the syntax (e.g. kontrastive constituents at the Finnish left periphery can be rhematic or thematic).

Instead, I think a better way of thinking about the relationship between syntax and pragmatics might be something along the lines of Snyder (in press). Snyder notes that the presence of 'extra' syntactic projections, such as the positions in which preposed NPs in topicalization constructions occur, may indeed be well-motivated. However, she uses data from a range of languages (Tahitian French, standard English and Yiddish English (from Prince, 1998)), to show that associating these projections with specific pragmatic features is problematic. Modifying Snyder's claims somewhat, I conclude that (1) the Finnish data indicates that there are indeed some kind of 'extra' syntactic positions at the left periphery, and (2) in Finnish, these syntactic positions are associated with certain discourse-pragmatic properties, but that these discourse-pragmatic properties and the details of the syntax-discourse mapping are by no means universal. Thus, the discourse-oriented labels used the

structures presented in this paper are purely 'Finnish-centric', as I aimed in this paper to add to our crosslinguistic knowledge of syntax-discourse relations by looking at detail in Finnish.

In the end, in order to better understand the nature of the syntax-discourse interface, the extent of crosslinguistic variation – as well as the interpretation of discourse information that is not encoded in the syntax – will need to be further explored in future work.

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References

Aboh, E.O., 1999. From the syntax of Gungbe to the grammar of Gbe. Ph.D. dissertation, University of Geneva.

Brennan, S.E., Friedman, M.W., Pollard, C.J., 1987. A Centering Approach to Pronouns. In: Proceedings of the 25th Annual Meeting of the Association for Computational Linguistics. Stanford, CA, pp. 155–162.

Carlson, L., 1983. Dialogue Games: An Approach to Discourse Analysis. Reidel, Dordrecht.

Carminati, M.N., 2002. The processing of Italian subject pronouns. Ph.D. dissertation, University of Massachusetts, Amherst.

Chesterman, A., 1991. On Definiteness. Cambridge University Press, Cambridge.

Chomsky, N., 1995. The Minimalist Program. MIT Press, Cambridge, MA.

Chomsky, N., 1998. Minimalist Inquiries: The Framework. MIT Occasional Papers in Linguistics 15.

Chomsky, N., 2000. Minimalist inquiries: the framework. In: Martin, R., Michaels, D., Uriagereka, J. (Eds.), Step by Step: Essays in Minimalist Syntax in Honor of Howard Lasnik. MIT Press, Cambridge, MA, pp. 89–155.

Crawley, R.A., Stevenson, R., 1990. Reference in single sentences and in texts. Journal of Psycholinguistic Research 19, 191–210.

Dryer, M., 1996. Focus, pragmatic presupposition, and activated propositions. Journal of Pragmatics 26, 475–523.

Hakulinen, A., Karlsson, F., 1988. Nykysuomen Lauseoppia. Suomalaisen Kirjallisuuden Seura, Helsinki.

Heinämäki, O., 1982. Problems of basic word order. In: Enkvist, N.E., Kohonen, V. (Eds.), Approaches to Word Order. Åbo Akademi, Åbo, Finland, pp. 95–106.

Heinämäki, O., 1994. Aspect as boundedness in Finnish. In: Bache, C., Basbøll, H., Lindberg, C.-E. (Eds.), Tense, Aspect, and Action: Empirical and Theoretical Contributions to Language Typology. Mouton de Gruyter, Berlin, pp. 207–233.

Hiirikoski, J., 1995. Organization in discourse. In: Wårwik, B., Tanskanen, S.K., Hiltunen, R. (Eds.), Proceedings of the Turku Conference (Anglicana Turkuensia). pp. 289–299.

Hirschberg, J., 1985. A Theory of Scalar Implicature. Ph.D. dissertation, University of Pennsylvania.

Höhle, T., 1992. Über Verum-Fokus im Deutschen. Linguistische Berichte, Sonderheft 4, 112–141.

Holmberg, A., 1997. Word order variation in some European SVO languages: a parametric approach. In: Siewierska, A. (Ed.), Constituent Order in the Languages of Europe. Mouton de Gruyter, Berlin, pp. 553–598.

Holmberg, A., 2000. Deriving OV order in Finnish. In: Svenonius, P. (Ed.), The Derivation of VO and OV. John Benjamins, Philadelphia/Amsterdam, pp. 123–152.

Holmberg, A., 2001. The syntax of yes and no in Finnish. Studia Linguistica 55 (2), 140–174.

Holmberg, A., Nikanne, U., 2002. Expletives, subjects and topics in Finnish. In: Svenonius, P. (Ed.), Subjects, Expletives, and the EPP. Oxford University Press, Oxford, pp. 71–105.

Holmberg, A., Nikanne, U., Oraviita, I., Reime, H., Trosterud, T., 1993. The structure of INFL and the finite clause in Finnish. In: Holmberg, A., Nikanne, U. (Eds.), Case and Other Functional Categories in Finnish Syntax. Mouton de Gruyter, Berlin, pp. 177–206.

Julien, M., 2003. On the negated past in Finnic and Saami. In: Nelson, D., Manninen, S. (Eds.), Generative Approaches to Finnic and Saami Linguistics. CSLI Publications, Stanford, pp. 409–436.

Kaiser, E., 2000. The discourse functions and syntax of OSV word order in Finnish. Papers from the Regional Meetings of the Chicago Linguistic Society 36, 179–194.

Kaiser, E., 2002. Case alternations and NPIs in questions in Finnish. In: Proceedings of the 21st West Coast Conference on Formal Linguistics (WCCFL 21), Cascadilla Press, Somerville, Mass..

Kaiser, E., 2003. The quest for a referent: a crosslinguistic look at reference resolution. Ph.D. dissertation, University of Pennsylvania.

Karlsson, F., 1999. Finnish: An Essential Grammar. Routledge, New York.

Kiparsky, P., 1998. Partitive case and aspect. In: Butt, M., Geuder, W. (Eds.), The Projection of Arguments. CSLI Publications, Stanford, pp. 265–307.

Laka, I.M., 1990. Negation in syntax: On the nature of functional categories and projections. Ph.D. dissertation, MIT.

Lindén, E., 1963. Kieltolauseen sanajärjestyksestä suomen kirjakielessä. Virittäjä 67, 214–225.

Maki, H., Kaiser, L., Ochi, M., 1999. Embedded topicalization in English and Japanese. Lingua 109, 1–14.

Matthews, A., Chodorow, M.S., 1988. Pronoun resolution in two-clause sentences: effects of ambiguity, antecedent location, and depth of embedding. Journal of Memory and Language 27, 245–260.

Mitchell, E., 1991. Evidence from Finnish for Pollock's theory of IP. Linguistic Inquiry 22, 373–379.

Pereltsvaig, A., 2004. Topic and focus as linear notions: evidence from Italian and Russian. Lingua 114 (3), 325–344.

Prince, E.F., 1992. The ZPG letter: subjects, definiteness and information status. In: Mann, W., Thompson, S. (Eds.), Discourse Description: Diverse Analyses of A Fund-raising Text. Benjamins, Amsterdam, pp. 295–325.

Prince, E., 1998. On the limits of syntax, with reference to topicalization and left-dislocation. In: Culicover, P., McNally, L. (Eds.), The Limits of Syntax, vol. 29. Academic Press, New York, pp. 281–302.

Prince, E.F., 1999. How not to mark topics: 'topicalization' in English and Yiddish. Ms., University of Pennsylvania.

Puskás, G., 2000. Word Order in Hungarian: the Syntax of A'-Positions. John Benjamins, Amsterdam/Philadelphia.

Rizzi, L., 1997. On the fine structure of the left periphery. In: Haegeman, L. (Ed.), Elements of Grammar—Handbook of Generative Syntax. Kluwer, Dordrecht, pp. 281–338.

Rodman, R., 1997. On left dislocation. In: Anagnostopoulou, E., van Riemsdijk, H., Zwarts, F. (Eds.), Materials on left dislocation. John Benjamins, Amsterdam, pp. 31–54.

Romero, M., Han, C.-h., 2004. On negative yes/no questions. Linguistics and Philosophy 27 (5), 609–658.

Rooth, M., 1985. A theory of focus interpretation. Ph.D. dissertation, University of Massachusetts, Amherst.

Rooth, M., 1992. A theory of focus interpretation. Natural Language Semantics 1, 75–116.

Schwegler, A., 1991. Predicate negation in contemporary Brazilian Portuguese: a change in progress. Orbis 34, 187–214.

Schwenter, S., 2001. Noncanonical Negation and Information Structure. Handout of talk given in Penn Linguistics Club Speaker Series, University of Pennsylvania, November 2001.

Snyder, K., 2000. "Reconfiguring syntax, or some good reasons why we shouldn't". Ms, University of Pennsylvania.

Strube, M., Hahn, U., 1999. Functional centering: grounding referential coherence in information structure. Computational Linguistics 25 (3), 309–344.

Sulkala, H., Karjalainen, M., 1992. Finnish. Routledge, London/New York.

Svenonius, P. (Ed.), 2002. Subjects, Expletives, and the EPP. Oxford University Press.

Turan, Ü.D., 1998. Ranking forward-looking centers in Turkish. In: Walker, M.A., Joshi, A.K., Prince, E.F. (Eds.), Centering Theory in Discourse. Clarendon Press, Oxford, pp. 139–160.

Vainikka, A., 1989. Deriving syntactic representations in Finnish. Ph.D. dissertation, University of Massachusetts, Amherst.

Välimaa-Blum, R., 1988. Finnish existential clauses—their syntax, pragmatics and intonation. Ph.D. dissertation, Ohio State University.

Vallduví, E., Engdahl, E., 1996. The linguistic realization of information packaging. Linguistics 34, 459–519.

Vallduví, E., Vilkuna, M., 1998. On rheme and kontrast. In: Culicover, P., McNally, L. (Eds.), The Limits of Syntax, vol. 29. Academic Press, New York, pp. 79–108.

van Hoof, H., 1997. Left dislocation and split topicalization in Brabant Dutch. In: Anagnostopoulou, E., van Riemsdijk, H., Zwarts, F. (Eds.), Materials on Left Dislocation. John Benjamins, Amsterdam, pp. 275–306.

Vilkuna, M., 1989. Free Word Order in Finnish. Its Syntax and Discourse Functions. Suomalaisen Kirjallisuuden Seura, Helsinki.

Vilkuna, M., 1995. Discourse configurationality in Finnish. Oxford University Press, New York.

Walker, M., 1993. Informational redundancy and resource bounds in dialogue. Ph.D. dissertation, University of Pennsylvania.

Ward, G., Prince, E.F., 1991. On the topicalization of indefinite NPs. Journal of Pragmatics 16, 167–177.

Wurmbrand, S., 2001. AGREE: The other VP-internal subject hypothesis. In: Megerdoomian, K., Bar-el, L.A. (Eds.), Proceedings of the 20th West Coast Conference on Formal Linguistics (WCCFL 20). Cascadilla Press, Somerville, MA, pp. 635–648.

Zanuttini, R., 1997. Negation and Clausal Structure: A Comparative Study of Romance Languages. Oxford University Press, New York.