

Exploring possibilities for a syntactic account for the Finnish *-han* enclitic

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Abstract: This paper explores a non-cartographic and a cartographic approach for the syntax of the Finnish *-han* enclitic. These sketches are based on an analysis which posits that *-han* is used as a particle that can mark topic, focus, and contrastive focus. It provides some background on the pragmatic uses of *-han* as well as an existing account for its syntax. *-han* is a particularly interesting target of study because it must be approached from a point of view that is concerned with the interface between discourse functions and syntax. The tentative proposal will be made that *-han* heads a functional phrase in the left periphery of the Finnish clause. This paper sketches out the implications of a non-cartographic approach to *-han* as well as the implications of a cartographic approach. Given the variety of uses of *-han* a strictly cartographic approach to the syntax of the Finnish clause necessarily assumes a highly articulated left periphery, which leads to the assertion that a non-cartographic approach may have benefits in simplifying the syntactic account for *-han* and similar phenomena.

0. Introduction: *-han*, the pragmatic particle

Clitics present an interesting puzzle for syntacticians. They are found at the interfaces between the major modules of grammar due to their unique phonology, syntax, and morphology and represent various stages in the process of grammaticalization (Spencer & Luis 2012). When placed strictly in the domain of syntax the behavior of clitics prompts us to make an account for their idiosyncratic behavior. In fact, Spencer and Luis (2012) argue that a purely syntactic approach complicates the grammar, as in (1);

- (1) Maria's going to the store tomorrow.

where the clitic *'s* represents the main verb of the sentence *is*. The interesting aspect of these types of constructions is that while phonologically *'s* forms a morphological unit with *Maria*, syntactically the verb forms a unit with the rest of the verb phrase *going to the store*. See Spencer and Luis (2012) for more on these aspects of clitics.

Generally speaking, Finnish syntax presents an interesting challenge given the wide variability of grammatical word orders. Finnish allows all possible permutations of simple transitive sentences with few marked structures. Statistically and based on intuitions about degrees of markedness, Finnish is generally considered to be an SVO language (Vilkuna 1994).

The Finnish language has five common enclitic particles (Karlsson 1983). This paper is concerned in particular with exploring possibilities for a syntactic account of the Finnish *-han* enclitic.¹ Broadly speaking, *-han* is a member of a class of clitics classically identified early in clitic studies by Wackernagel as 'second place clitics' which occupy the second-position of the sentence (after the first constituent of a sentence) (Nevis 1986). *-han* almost always appears in this position attached to the first constituent with some exceptions explored by Nevis (1986) and Välimaa-Blum (1987). *-han* belongs to a group of particle clitics which have vague meanings and therefore rely on the pragmatics of a sentence for interpretation (Hakulinen & Karlsson

¹ *-han* has the allomorph *-hän* which is brought about due to the fact that the Finnish language has vowel harmony.

1979, Nevis 1986). Välimaa-Blum (1987) asserts that *-han* does not have a meaning of its own at all but serves a strictly pragmatic function. The particle certainly has several different pragmatic uses. These range from marking a sentence as containing contextually new information to changing the illocutionary force of a sentence or expressing surprise (Hakulinen 1976, Välimaa-Blum 1987, Raevaara 2001). Karlsson (1983) notes that *-han* can also be used to soften questions. Distributionally *-han* exhibits the behavior expected from clitics in that it is indiscriminate with respect to the category of constituent which it attaches to (Spencer & Luis 2012). Example (2) illustrates its basic use. Assume a normal intonation pattern for both sentences.

- (2)
- | | | | |
|----|---|------------|-----------|
| a. | Maria | meni | kauppa-an |
| | Maria-NOM | go-PAST-SG | store-ILL |
| | “Maria went to the store.” | | |
| | | | |
| b. | Maria=han | meni | kauppa-an |
| | Maria-NOM=han | go-PAST-SG | store-ILL |
| | “Someone went to the store [and it was Maria].” | | |

The assertion made here is that the minimal difference between (2a) and (2b) is that the utterance of (2b) implies a pre-existing context upon which the utterance is interpreted. Its use requires that prior to the utterance of (2b), it was assumed that either no one had gone to the store, that the store goer had not been known, or that Maria had not gone to the store. Either Maria or the act of going to the store, however, must have been a topic of discourse to license its use. Regular intonation in the pronunciation of (2b) brings about a focus reading of the entire utterance, or *Maria* can be contrastively focused when it bears primary stress in the utterance. *-han* constructions in which the subject is *-han*-cliticized also allow the verb to bear primary stress; in these constructions the verb is contrastively focused and the *-han*-cliticized subject is interpreted as the topic. These will be explored further below.

1. Background on *-han*

An early syntactic account for *-han* comes from Nevis (1986), which assumes a phrase structure governed by rewrite rules for Finnish. Nevis’ analyzes *-han* as a particle which belongs to the clausal domain (daughter of the ‘S-node’ in his account).

Nevis accounts for the syntax of *-han* and similar particle clitics by likening them to modal adverbs due to the fact that they share similar characteristics with respect to their semantic, syntactic and prosodic properties. They also appear in what Nevis identifies as the second position of the sentence occurring after the first constituent. Nevis proposes that *-han* and other particle clitics are members of the lexicon bearing a [+/- liaison] feature. His analysis is cast in the framework of Generalized Phrase Structure Grammar (GPSG) that he contributes to by positing the [+/- liaison] feature that makes reference to the margins of constituents in the syntax. This feature allows the particles and the class of adverbs that he places them in to occur in the second position of the sentence. In Nevis’ account the margin feature is sentential and is percolated down to only one daughter node, therefore placing *-han*, other particle clitics, and the class of adverbials which appear in the second position of the sentence in the clausal domain. Clitics are distinguished from the class of adverbs in which Nevis categorizes them post-syntax by a phonological operation ‘liaison’ which subordinates particle clitics to their host words.

This analysis builds on Nevis (1986) but conceptualizes *-han* constructions in the Minimalist framework.

The account here explores two possible analyses for the syntax of *-han* which represent different extremes within the minimalist program; a strictly derivational non-cartographic analysis and a more traditional cartographic analysis. The former analysis is informed by Jan-Wouter Zwart's (2005) analysis of V2 constructions in Dutch and German as a positional marking of a dependency relationship created by the operation Merge as well as later work in which he further explores a non-cartographic approach to Germanic syntax (2009). The cartographic approach is informed by Rizzi's (1997, 2013) account of the structure of the left periphery, as well as by later work by Frascarelli and Hinterhölzl (2007) concerning types of topics in German and Italian.

The fundamental difference between the two types of approaches is essentially in whether or not they conceptualize a fixed map of the clause and the mechanisms by which the *-han*-cliticised element comes to occupy its position as the first constituent of the sentence. The non-cartographic analysis will examine implications of an approach to Finnish *-han* constructions in which syntactic positions are defined in terms of local environments that are created by the structure-building procedure Merge. In this framework *-han*-cliticized constituents occupy their position as the first constituent of the sentence due to Internal Merge which resolves conflict lower in the derivation in ways that will be explained. The strongest versions of this approach deny universal phrase structure rules, in that it considers to be universal only the nature of lexical items, the way in which elements are merged, and the products that this operation yields (Zwart 2009).

The cartographic approach that I am proposing assumes a fixed map of Finnish phrase structure, without making assertions as to all the possible functional projections that may or may not be part of the Finnish clausal domain, although it should be noted that both analyses assume a CP, IP and VP domain for the Finnish clause, per Vainikka (1989). Since *-han* has a wide variety of uses a strict cartographic approach to its syntax has the consequence that different information structural functions of the same *-han* construction must have different syntactic structures. Since *-han*-cliticized constituents can be interpreted as the topic, focus, or contrastive focus and *-han* constructions also have a number of other pragmatic uses the cartographic approach prompts the question of whether each of these uses of *-han* has a unique syntactic explanation and whether or not this is problematic from an acquisitional and cognitive point of view.

Before delving into a syntactic account of *-han*, a case will be made for *-han* as a particle which can mark topic, focus, and contrastive focus. The syntactic analysis presented is for this particular use of *-han*, and leaves analyses of constructions which are not related to information structure to future research.

2. *-han* as a marker of topic, focus, and contrastive focus

The analysis here is concerned in particular with the use of *-han* as a pragmatic particle which marks topic, focus and interacts with prosody to bring about a contrastive reading of *-han*-marked constituents. Therefore, the interaction of syntax and information structure as well as differences between types of information structure are significant. The analysis of *-han* as a general focus and contrastive focus marker relies on the typology of topic and focus proposed by Neeleman, Titov, van de Koot, and Vermeulenwhich (2009). It expands notions of topic and focus as types of information structure by allowing them to be enriched in a way that yields a

contrastive interpretation. Focus in this typology is the information that is highlighted in a proposition; the rest of the sentence functions as the background to the focus. Focus is also canonically understood as information that is added to the common ground (Krifka 2006). This is separate from the information structural function of topic, which serves to communicate what the utterance is about and implies that the topic is previously known to both interlocutors. Contrast enriches these two notions by allowing constituents that are contrastive to be understood as belonging contextually to a set of entities out of which they are selected to the exclusion of at least some of the members of that set. In English both contrastive foci and topics are marked by special intonation that Jackendoff (1972) calls A-accent and B-accent, respectively. The use of *-han* in the data presented here shows that *-han* constructions focus information in a general sense by adding information to the common ground but can also interact with prosody to bring about contrastive interpretations of constituents, though not necessarily the *-han* marked constituent (as will be exhibited, verbs can have special status in *-han* constructions). For reasons of space, the many different pragmatic uses of *-han* which are not for focus, contrastive focus or otherwise information structural functions will not be explored here. The data here will exhibit *-han* attached to the subject, object, and main verb of the sentence in constructions that bring about interpretations of focus and contrastive focus of elements. The analysis of the data and the particular interpretations triggered by *-han* constructions are informed by my own judgments as a native speaker of Finnish as well as two other native speakers of Finnish.² The first two sentences are a repeat of the data from (2). Note that in (3) bold face indicates primary stress.

- (3)
- | | | | |
|----|---|---------------|-----------------------------|
| a. | Maria | meni | kauppa-an |
| | Maria-NOM | go-PAST-SG | store-ILL |
| | “Maria went to the store.” | | |
| b. | Maria=han | meni | kauppa-an. (Neutral stress) |
| | Maria-NOM=han | go-PAST-SG | store-ILL |
| | “Someone went to the store [and it was Maria].” | | |
| c. | Maria =han | meni | kauppa-an |
| | Maria-NOM=han | go-PAST-SG | store-ILL |
| | “[It was] Maria [that] went to the store.” | | |
| d. | Maria=han | meni | kauppa-an. |
| | Maria-NOM=han | go-PAST-SG | store-ILL |
| | “Maria [did] go to the store.” | | |
| e. | Maria=han | käveli | kauppa-an. |
| | Maria-NOM=han | walk-PAST-SG | store-ILL |
| | “Maria walked to the store.” | | |

Sentences (3a) and (b) exhibit the basic use of *-han*. Sentence (3b) bears general focus in which the *-han* marked constituent, *Maria*, is not contrasted to alternatives. While (3a) can be uttered without any prior linguistics or non-linguistic context, i.e. out of the blue, (3b) requires a context in which the event of going to the store or *Maria* have been a topic of discuss prior to its

² Thank you to my parents, Liisa and Antti Palomaki, whose judgments and encouragement are invaluable. Analysis of the data is my own and therefore any mistakes in judgment are also mine.

utterance. The new information is either that the event of going to the store did in fact take place, or that it was Maria who performed the action. This reading is brought about by a regular falling intonation pattern characteristic of neutral stress in Finnish (Karlsson 1983). (3c) shows the use of *-han* as a contrastive focus marker. When *Maria* bears primary stress the assumption is that prior to the utterance of the sentence it was assumed that somebody else went to the store, the new information is that it was in fact Maria who went to the store.

(3d) exhibits an interesting characteristic of *-han* constructions. The verb bears primary stress and is focused. It triggers the assumption that prior to the utterance of (3d) it was not known whether Maria had or had not gone to the store. The fact that the verb can be focused even when it is not the *-han*-marked constituent is of particular interest to the analysis of the syntax of *-han* constructions. It should be noted that this type of construction is very limited; only a non *-han* marked verb can bear primary stress and thereby be focused in *-han* constructions. Additionally, the non *-han* marked verb can only bear primary stress when the word order of the sentence is SVO. While the stressed *-han* marked constituents in the data here usually operate information structurally as a focused or contrastively focused item, in (3d) the *-han* marked constituent is actually the Topic. *Maria* is the entity of whom we are asserting new information about and it is understood by its utterance that she has been a previous topic of discourse.

(3e) shows the verb *walk* bearing focus in a *-han* construction. It is similar to (3d) but it triggers the assumption that it was not known before its utterance how Maria had gone to the store, only that she had gone, perhaps by bicycle or car.

- (4) a. Kauppa-an=han Maria meni
Store-ILL=han Maria-NOM go-PAST-SG
“[It was] to the store [that] Maria went.”

(4a) offers only one interpretation regardless of the stress pattern. It triggers the assumption that prior to its utterance it was assumed that Maria went somewhere else rather than the store. It is the store as the goal of the action that is new information. This construction does not allow the verb or any other constituent to bear primary stress as to be focused or contrastively focused.

- (5) a. Meni=hän Maria kauppa-an
Go-PAST-SG=han Maria-NOM store-ILL
“Maria [**did**] go to the store.”
b. Käveli=hän Maria kauppa-an.
Walk-PAST-SG=han Maria-NOM store-ILL
“Maria [**did**] walk to the store.”

(5a) differs from (3d) slightly. While (3d) triggers the assumption that it was at question whether or not Maria had gone to the store by focusing the verb, (5a) triggers the assumption that it was specifically asserted prior to its utterance that Maria had not gone to the store by contrastively focusing the verb. It asserts that the event, which was assumed not to have taken place did in fact take place, the contrast being made to the negation of the verb. This *-han* construction can only trigger this interpretation. Similarly (5b) triggers the assumption that prior to its utterance it was assumed specifically that Maria had not walked to the store, but does not imply an existing proposal as to her alternative means of transportation.

3. Two Possible Syntactic Accounts for *-han*

3.1 A Non-cartographic Account for *-han*

The non-cartographic account for *-han* presented here takes as its premise Zwart's (2005, 2009) conceptualization of how syntactic structure is built in terms of a sequence of applications of the operation Merge, which takes two elements 'x' and 'y' and Merges them to create <x, y>. This approach differs crucially from a cartographic approach in terms of syntactic positions. Under a non-cartographic account, syntactic positions are defined in terms of sisterhood relations that are created by the operation Merge in local environments as emerging properties of the derivation, which Zwart also calls 'the workspace'. These syntactic positions are created to satisfy some local requirement that is blind to the overall syntactic architecture of the sentence and are created to resolve 'internal conflict' within the derivation. Conflicts can include subjects contained within predicates or topic elements contained within a focus domain (Zwart 2005, 2009).

According to the non-cartographic approach the structure building operation Merge that creates syntactic positions also automatically creates a dependency relation that may be marked positionally or morphologically. This dependency relationship is realized at the left edge of the dependent element 'y' by an element Zwart terms the 'linker' that is merged with the element 'x' as in (8) (Zwart 2005, 2009).

(8) < x 'linker' y >

In Zwart's (2005) account, linkers appear as a function of Merge that spells out the morphological dependency of the dependent element 'y'. The linker may be a dummy element expressing tense as in English where 'do-insertion' represents the dependency between a wh-element and a dependent element 'y' which 'do' marks the left edge of 'y' as in (9).

(9). Where *did* you find the syntax book?

Zwart analyzes the V2 phenomena in German as this type of positional dependency marking where an element 'x', a term of 'y', is merged with 'y' and the verb is then moved to the left edge of 'y' to reflect the dependency relationship between the two merged elements. This analysis has the benefit of analyzing the various phenomena that satisfy the V2 constraint in V2 languages such as subject placement, topicalization, expletive insertion, etc. as the products of the same operation. However, this approach also allows the target for these operations (the movement of some X and XP) to be variable, which leads to a more dynamic analysis of V2, where the verb does not always occupy the position C (Zwart 1993). However, verb movement under this analysis is generic; movement of some constituent 'x' is the triggered process that is then accompanied by verb movement. The proposal put forth by Zwart does not make any assertions concerning the phrase structural realization of the linker but makes no objection to viewing the linker's position as a head position. Crucial to the realization of the linker as a positional dependency marker is the speculation that it perhaps appears universally only to mark the end of a derivation, or possibly a well-defined subpart of the derivation. Zwart calls this a Cycle, which is constituted either when no further operations of Merge take place or when the non-dependent element added on to the workspace is a lexical term (Zwart 2005, 2009).

Accounting for the syntax of the enclitic *-han*

The Finnish enclitic *-han* constructions are conducive to an analysis in which *-han* is conceptualized as the positional marking of a dependency relation, or a ‘linker’ similar to the verb in V2 constructions as analyzed by Zwart (2005). Since *-han*-cliticized constituents in the data examined here serve information structural functions, they must occupy the C-domain of the Finnish clause. The general mechanics of this operation are here asserted to be in line with the analysis of topicalization and other constituent fronting operations as the resolution of an ‘inner conflict’ within the workspace which externalizes elements from the workspace via a new instantiation of the operation Merge and a subsequent deletion of the offending element from the workspace. An exact mechanism of this operation has not been proposed, but what is crucial is that this type of operation is triggered by properties of the workspace rather than driven by feature checking (Zwart 2009). The analysis here proposes that *-han* constructions can be conceptualized from a non-cartographic point of view as the resolution of internal conflict within the workspace so that the sentence (3a) is related to sentences (b), (c), (d), and (e) in that it represents the workspace of the latter group of sentences prior to externalization, or ‘re-Merge’, of the element creating the internal conflict. (10) illustrates a tentative proposal for the process by which (3b) and (c) are derived.

- (10) a. Maria meni kauppaan. (Neutral Stress)
 Maria MERGE > Maria meni kauppaan
 Maria ~~Maria~~-meni kauppaan.
 Maria =han meni kauppaan
 Maria=han meni kauppaan.
 “Someone went to the store (and it was Maria).”
- b. Maria meni kauppaan.
 Maria MERGE> Maria meni kauppaan
 Maria ~~Maria~~-meni kauppaan.
 Maria =han meni kauppaan
Maria=han meni kauppaan.
 “[It was] Maria [that] went to the store.”

The exact mechanics of a strictly non-cartographic approach have not been proposed; syntactic positions are the result of local environments under this analysis and no proposal will be made here as to the particulars of the nature of the syntactic positions created but will be left to future research. (10) illustrates the externalization of the element *Maria* out of the workspace where its information structural function of focus creates an inner conflict. This externalization resolves the inner conflict. The lower copy of *Maria* must subsequently be deleted, and the upper copy re-Merged. If *-han* is analogous to V2 in German then it is merely a byproduct of this operation and marks the dependency of the predicate on the re-Merged element. After externalization, the *-han* marked constituent can also be stressed to allow a contrastive reading of *Maria*. Under this approach, this may be the result of a different instantiation of re-Merge and delete.

Since the positions created by differently motivated externalizations may be different, an account must be made for the difference between the *-han*-cliticised and contrastively focused *Maria* in (3c) and (3d), where *Maria* is the topic and the non *-han* marked verb is contrastively focused. The tentative proposal here is that the operation of externalization and dependency marking are exactly the same, it is only the internal conflict that the externalization seeks to resolve that is different. While (3c) exhibits the externalization of a focus-bearing element out of

the workspace, (3d) exhibits the externalization of a topic out of the focus domain, which has the additional consequence of asserting that the TopicP in Finnish is above the FocusP . This is illustrated in (11);

- (11) a. Maria meni kauppaan.
 Maria MERGE> Maria **meni** kauppaan.
 Maria ~~Maria~~ meni kauppaan.
 Maria =han meni kauppaan.
 “Maria [did] go to the store.“

In (11) *Maria* has been fronted because of the conflict caused by a topic element in the focus domain of the phrase. The externalization of the offending element resolves the conflict, and once the lower copy is deleted the higher copy is re-Merged and *-han* marks the dependency relation between the Merged elements.

Zwart (2005) asserts that the linker in dependency relationships is realized on the left edge of the element ‘y’, but the data here show it phonologically attached to the element ‘x’, this can be argued to be a result of a phonological process.³

Assuming a one to one mapping of prosody and syntactic structure, the positions created by differently motivated externalizations in *-han* constructions under a non-cartographic approach must be different syntactic positions. The data here indicate that *-han*-cliticised constituents can function as topic, foci, and contrastive foci. It is not controversial under either a non-cartographic approach or a cartographic approach to assume separate syntactic positions for topic and foci. However, the proposal here will not go so far as to conjecture whether or not foci and contrastive foci are separate syntactic positions in a non-cartographic approach or whether foci can be enriched to give contrastive readings in the same syntactic position. This aspect of the non-cartographic approach to *-han* constructions also needs further research.

The conclusion to be drawn is that a non-cartographic account for *-han* constructions requires a great degree of further inquiry and additional work when it comes to the mechanisms which drive different types of syntactic processes, the types of syntactic positions created, and how they interact with different levels of linguistics structure.

3.2 A Cartographic Account for *-han*

A cartographic account for *-han* enjoys the advantage of a great degree of extant literature about the left periphery, or clausal domain of the sentence. Rizzi’s (1997) account of the structure of the left periphery is particularly informative about the syntactic hierarchy of information structural projections in the C-domain. Rizzi argues for a highly articulated conceptualization of the clausal domain based on evidence from languages like Italian in which constituent ordering is particular with respect to information structural function.

Due to the high degree of variability of constituent ordering in the clausal domain of Finnish, an exhaustive account of possible functional projections will not be made here, although the cartographic conceptualization here tentatively asserts a TopicP projection as well as a FocusP projection in the C-domain since we see topic and focus operant in (3d) and (e) in the

³ I broached the issue of dependency marking on the right edge of ‘x’ with Dr. Jan-Wouter Zwart (p.c.). His response indicated that in a top-down derivation this would be the only possible account, but traditionally dependency is thought of as being realized on ‘y’.

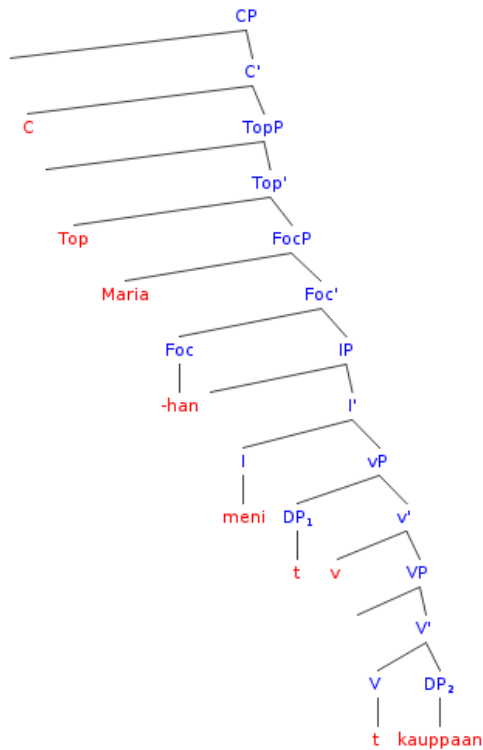
order TopP>FocP. Rather the purpose of this section is to explore implications of an account for *-han* that assumes a fixed clausal structure for Finnish.

Since the analysis of the data in Section 2 indicates that *-han*-cliticized elements operate information structurally as topic, focus, or contrastive focus, the assertion made here is that *-han* can be analyzed as a functional head which may occupy one or more functional projections in the clausal domain of Finnish. This assertion is supported by other uses: *-han* as softening interrogatives and imperatives (and therefore presumably occupying C) (Hakulinen 1976, Valimaa-Blum 1987, Raevaara 2001). Since *-han*-cliticised constituents can have different information structural functions as well as a wide variety of other uses that are not related to information structure a cartographic account of *-han* constructions must answer the question of the syntactic reality of these different uses.

The particle *-han* minimally indicates a construction which bears general focus when the subject of a sentence is *-han*-cliticized and contrastive focus when the subject or another *-han*-cliticized constituent bears main stress and appears in the pre-verbal field. The proposal made here is that *-han* heads a Focus Phrase projection in the left periphery of the Finnish clausal domain and bears an uninterpretable [_uF] feature which is checked by constituents bearing a [+F] feature which move into the specifier of the FocusP. Since *-han*-cliticized constituents can also be phonologically realized as topics when the verb is contrastively focused, an account must be given for these constructions. Since the proposal here posits that *-han* is the head of a FocusP in the C-domain, it excludes the possibility that at some point in the derivation *-han* and the verb are in a spec-head configuration in which *-han* can have its [_uF] checked by a [+F] on the verb. Therefore, the account of how the verb comes to bear contrastive focus and the *-han*-cliticized constituent comes to function as the topic is left to forthcoming research.⁴ However, it is asserted that in these constructions both the *-han*-cliticized constituent and the verb occupy the C-domain of the Finnish clause.

Since the analysis here is only tentative and meant as a framework on which to build future research into the syntax of *-han* constructions, the tree below is rudimentary and not complete with respect to different types of A-movement and A-bar movement in Finnish. Per Vainikka (1989) it reflects V to I movement in Finnish.

⁴ A view suggested by Franks (2000) may offer a plausible account. Franks suggests that these second position clitics are actually attached to the verb, which then moves via a copying operation into second position. Crucially, she also asserts that the copy of the verb in second position is not pronounced. This would allow for the verb to have a contrastive reading in constructions in which it is not the *-han*-cliticised element, but presents its own problems as well.

(12) *-han* indicating general focus (3b)

The tree above presents a tentative and at best rough sketch of *-han* constructions under a cartographic approach. It is prior to spell-out and serves to illustrate a possible account for the data presented here. The motivation of the movement of constituents is in line with the minimalist conception of feature checking, see Adger (2003).

Another question which a cartographic approach must account for is how *-han*-cliticized constituents come to have contrastive interpretations. Here the proposal is that *-han* can bear an additional $[_u\text{C}]$ feature which is satisfied by a $[\text{+C}]$ feature on a constituent which moves to check the uninterpretable feature. This proposal is motivated by work by Frascarelli and Hinterhölzl (2007), who propose that contrast is not an inherent feature of topic or focus constituents but rather a functional feature that is licensed in the C-domain. It is also in line with Neeleman, Titov, van de Koot, and Vermeulen's (2009) typology of topic and focus as information structural functions which are enriched by contrastive interpretations, rather than as information structural functions which are entirely separate from contrast.

One further question which a cartographic approach must answer is how constituents in a *-han* construction receive the appropriate stress to bring about the different readings of certain *-han* constructions. Frascarelli and Hinterhölzl (2007) propose a strict hierarchy of functional projections in the left periphery of German and Italian, where different topic types have distinct prosodic and syntactic properties. Given the very limited amount of Finnish data analyzed here no proposal will be made as to whether positions in the C-domain are associated with specific

types of prosodic properties. More data would be needed which examined the interaction between different types of information structural elements to work out such analyses.

4. Conclusion

The purpose of this paper is to sketch out and explore implications of different syntactic analyses of *-han*. It does not assert that one approach is superior to another. However, a cartographic approach does seem to have the benefit of making an account in which the different information structural functions of *-han*-cliticized constituents is a result of their syntactic positions. It is also in line with the rich information structural ordering identified by Vilkuna for Finnish (1994). It is however, problematic when the wide variety of *-han*-constructions, both information structural and otherwise are taken into account. Here the non-cartographic approach has the benefit of deriving different *-han*-constructions through the same mechanism which can yield different results. It may be that both approaches are needed to make a comprehensive account for the data seen here.

More broadly speaking, more research is needed into different types of uses of *-han* and corresponding constructions and whether a unified syntactic account can be given for these constructions. This would necessitate a larger base of native speakers of Finnish to ensure a reliable interpretation of different *-han* constructions. Given that *-han* constructions minimally require a prior context, i.e. cannot be uttered out of the blue, it is probably safe to assert that *-han* is discourse driven but realized syntactically as a 2nd position clitic. This paper has sketched two possible analyses of the phenomenon, further details of which are left for future research.

5. References

- Adger, D. (2003). *Core syntax: A minimalist approach* (Vol. 33). Oxford University Press.
- Anderson, S. R. (2005). *Aspects of the Theory of Clitics*. Oxford University.
- Franks, S. (2000). Clitics at the interface. *Clitic phenomena in European languages*. John Benjamins Publishing.
- Frascarelli, M., & Hinterhölzl, R (2007). Types of topics in German and Italian. *On information structure, meaning and form*: 87-116.
- Hakulinen, A. (1976). Liitepartikkelin *-han/-hän* syntaksia ja pragmatiikkaa. *Reports On Text Linguistics: Suomen kielen generatiivista lauseoppia 2*. Meddenlanden Fran Stiftelsens for Abo Akademi Forskningsintitut, Nr, 7.
- Hakulinen, A. and Karlsson, F. (1979) *Nykysuomen lauseoppia*. ('Modern Finnish grammar') Jyväskylä, Finland: SKS.
- Jackendoff, R. (1972). *Semantic interpretation in generative grammar* Cambridge: MIT press.
- Karlsson, R. (1983). *Finnish: An Essential Grammar*. Routledge Essential Grammars. Routledge.
- Krifka, M. (2006). Basic notions of information structure. *Interdisciplinary studies on information structure* 6:13-55.
- Neeleman, A., Titov, E., van de Koot, H. & Vermeulen, R. (2009). A syntactic typology of topic, focus and contrast. *Alternatives to Cartography*. Berlin: Mouton de Gruyter (2009): 15-51.
- Nevis, J. A. (1986). *Finnish particle clitics and general clitic theory*. Ohio State University.

- Raevaara, L. (2001). Mitas me sovittais: S-partikkelin sisältävien hakukysymysten tehtävistä. *Virittäjä*, 4. S. 532-558.
- Rizzi, L. (1997). The fine structure of the left periphery. *Elements of grammar*. Springer Netherlands, 1997. 281-337.
- Rizzi, L. (2013). Notes on cartography and further explanation. *Probus* 25.1:197-226.
- Spencer, A. & Luis, A. (2012). *Clitics; an Introduction*. Cambridge University Press.
- Vainikka, A. M. (1989). *Deriving syntactic representation in Finnish*. University of Massachusetts Amherst.
- Valimaa-Blum, R. (1987) *The Discourse Function of the Finnish Clitic-han; Another Look*. Brigham Young University.
- Vilkuna, M. (1994). Discourse configurationality in Finnish. *Discourse Configurational Languages*. edited by Kiss. E. Oxford University Press.
- Zwart, C.J.W. (1993). Dutch syntax: A minimalist approach. Ph.D. dissertation, University of Groningen.
- Zwart, C.J.W. (2009). Uncharted territory. *Towards a Non-Cartographic Account of Germanic Syntax* (2009): 59-84.
- Zwart, C. J.W. (2005). Verb second as a function of Merge. *The function of function words and functional categories* (2005): 11-40.