

# THE PRAGMATICS AND SYNTAX OF THE FINNISH *-HAN* PARTICLE CLITIC

by

JENNIMARIA KRISTIINA PALOMÄKI

(Under the Direction of Vera Lee-Schoenfeld)

## ABSTRACT

This dissertation gives a pragmatic and syntactic account of the Finnish *-han* second position particle clitic.

The pragmatic account of *-han* argues for a relevance theoretic approach to its polyfunctionality that is grounded in the distinction between procedural and conceptual meaning. I make the case that *-han* contributes to procedural meaning by communicating to addressee(s) the speaker's belief that they have access to the information necessary to recover the intended interpretation. Through use of native speaker judgments and naturally occurring spontaneous Finnish speech, I show that *-han* is restricted from occurring in 'out of the blue' utterances and that the various functions attributed to it in previous research are by-products of the interpretive process its presence triggers.

The syntactic account of *-han* proposes that *-han* heads a functional projection in the left-periphery of Finnish called ForceP (à la Lopez 2009). To derive correct word order in sentences where *-han* is attached to the right of a constituent originating in the lexical layer of the clause, I propose that movement occurs to the specifier of Spec-ForceP to satisfy an uninterpretable feature there. I assume the map of the Finnish clause proposed by Holmberg et al. (1993) and Holmberg and Nikanne (2002), taking into account the modifications proposed by Kaiser (2006).

I also make the case that *-han* undergoes a type of local inversion, which may be prosodically motivated, with the functional head it immediately dominates when there is no movement into Spec-ForceP.

I also propose a non-cartographic approach to the syntax of *-han*-containing sentences, which takes Zwart's (2005, 2009) strictly derivational approach to clausal structure as its premise. The proposal is made that *-han* is a positional dependency marker, analogous to V2 (à la Zwart 2005), which emerges via the same derivational mechanism regardless of the material to which it is attached. This account has the benefit of allowing parallels to be drawn between different kinds of second position phenomena in two genetically unrelated languages. Finally I explore the implication of Lopez's (2009) conception of the syntax-pragmatics interface for an account of *-han*.

Since the research presented in this dissertation focuses on a single particle clitic from the Finnish particle clitic system, more work is needed to account for the discourse-pragmatics and syntax of the particle clitics of Finnish both independently and in combination with one another.

INDEX WORDS: Finnish language, Finnish linguistics, Particle clitics, Discourse particles, Discourse markers, Wackernagel clitics, Second position clitics, Finnish pragmatics, Finnish syntax, Finnish left-periphery, Discourse configurationality, Finnish word order, Relevance Theory, Cartography

THE PRAGMATICS AND SYNTAX OF THE FINNISH *-HAN* PARTICLE CLITIC

by

JENNIMARIA KRISTIINA PALOMÄKI

B.A., The University of Georgia, 2009

A Dissertation Submitted to the Graduate Faculty of the University of Georgia in Partial

Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GA

2016

© 2016

Jennimaria Palomäki

All Rights Reserved

THE PRAGMATICS AND SYNTAX OF THE FINNISH *-HAN* PARTICLE CLITIC

by

JENNIMARIA KRISTIINA PALOMÄKI

Major Professor: Vera Lee-Schoenfeld  
Committee: Sarah Blackwell  
Pilar Chamorro  
Timothy Gupton

Electronic Version Approved:  
Suzanne Barbour  
Dean of the Graduate School  
The University of Georgia  
May 2016

## DEDICATION

This dissertation is dedicated to my mother, who is always on my side, to my father, who has shown me the meaning of hard work, to John Dixon, my infinitely patient cheerleader and best friend, and to Vera Lee-Schoenfeld, who has taught me so much about the kind of academic I want to be.

## ACKNOWLEDGMENTS

This dissertation represents the combined efforts, patience, faith, and resources of a large number of people. I do not know how other people go about obtaining graduate degrees, but for me the road has been paved with the support of some truly extraordinary people. I am lucky to have them, and I am glad for the opportunity to acknowledge them.

I was a student in Vera Lee-Schoenfeld's seminar on German syntax and Pilar Chamorro's Semantics class when I first became interested in *-han*. Both of my final papers for those courses dealt with the clitic, and were it not for the encouragement of these wonderful linguists, I would not have had the confidence I needed to tackle this topic for my dissertation.

Sarah Blackwell convinced me to probe deeper into the discourse-pragmatic function of *-han*, which has proved to be a fruitful and fascinating line of research.

Timothy Gupton asked me questions about Finnish that made me realize I knew much more about my native language than I imagined, and gave me the crucial insight I needed to examine the interaction of *-han* with information structure in this amazing language.

Besides giving me encouragement and guidance in the process of researching and writing this dissertation, Vera Lee-Schoenfeld, Pilar Chamorro, Sarah Blackwell, and Timothy Gupton have also provided me with invaluable examples of what it means to be a linguist and academic. Vera Lee-Schoenfeld has been both a friend and mentor to me during my graduate studies. She has shown more patience, exhibited more generosity of spirit, and corrected more comma splices than any graduate student has any right to expect from their major professor. I cannot imagine having completed this dissertation under any other person's direction. Pilar Chamorro reminded

me at a crucial point in my graduate career that the reason we become linguists is because we see the beauty of human language. Sarah Blackwell taught me the importance of unceasing curiosity about things we think we already understand. Timothy Gupton convinced me of the importance of trusting my own intuition and that being an academic can be fun. I am lucky to have had these four linguists agree to be a part of my dissertation committee.

The University of Georgia Linguistics Program offered me the space I needed to grow as a person, academic, and linguist over the last four years. I am sad to leave this wonderful and quirky place.

I traveled to Finland three separate times to conduct the research presented in this dissertation. The last of these trips was financed by the generous UGA Graduate School Dean's Award. This assistance allowed me to return to Finland to collect data from a larger area of Finnish speakers, thereby making my data more diverse. This trip also allowed me to spend three days at the University of Helsinki library and to take advantage of their materials.

Joshua Hanna and Lindsey Antonini have helped me in numerous ways, both big and small.

Erkki and Mirjami Orrenmaa gave me encouragement and welcomed me into their homes on each of my research trips. Erkki drove me around Southern Ostrobothnia to meet with participants he and Mirjami had helped me recruit. Their kindness and hospitality were humbling.

Minna Orrenmaa was pivotal in helping me meet and recruit participants. Her enthusiasm encouraged me to take the first crucial steps in beginning the research conducted for this dissertation.



My parents, Liisa and Antti Palomäki, have provided emotional and monetary support to me throughout graduate school. I am grateful to them not only for raising me to believe that I am a capable person, but also for always accepting me as the bookworm that I am.

Brittany Robinson has been a source of comfort and encouragement throughout my graduate career.

Finally, John Dixon has been the best partner a person could ask for. He has watched my dog and quelled my doubts about my own abilities countless times.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS.....	v
CHAPTER	
1 INTRODUCTION.....	1
1.1 Introduction to the dissertation.....	1
1.2 Purpose/Goals of the research.....	6
1.3 The issue of terminology: Framing the discussion of <i>-han</i> .....	8
1.4 Assumptions and limitations of the research.....	11
2 LITERATURE REVIEW.....	12
2.1 The literature on <i>-han</i> .....	12
2.2 On discourse particles.....	13
2.3 On clitics.....	18
2.4 Discussion.....	23
3 THE PRAGMATICS OF <i>-HAN</i> .....	25
3.1 Introduction.....	25
3.2 Theoretical background.....	29
3.3 Relevance theoretic studies of DPs/DMS .....	41
3.4 Previous analyses of <i>-han</i> .....	50
3.5 A Relevance theoretic account of <i>-han</i> .....	57
3.6 Discussion.....	80

4	A SYNTACTIC ACCOUNT OF <i>-HAN</i> -CONTAINING SENTENCES.....	82
4.1	Introduction to the chapter.....	82
4.2	Background.....	84
4.3	The case for a dedicated projection in the left periphery headed by <i>-han</i> .....	103
4.4	An alternative approach to the syntax of <i>-han</i> -containing sentences.....	126
4.5	An alternative approach to information structure.....	134
4.6	Discussion.....	139
5	CONCLUSION.....	142
5.1	Summary.....	142
5.2	Implications.....	143
	REFERENCES.....	147

# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction to the dissertation

Finnish is a member of the Finno-Ugric language family. It is one of two official languages of the Republic of Finland, the other being Swedish. Its closest relatives are Estonian, Karelian, Veps, Olonetian, Ingrian, Votian, Ludian, and Livonian. Finnish and Estonian are the most widely spoken of these (Karlsson 1983). It is estimated that Finnish reached its current form around the end of the first millennium C.E. (Karlsson 1982, Leino 1989).

Finland has eight distinct dialect areas (Karlsson 1983); the varieties of Finnish spoken in these areas differ to certain degrees from standard Finnish. The data in this dissertation is mostly standard Finnish, with the exception of the naturally occurring native Finnish speech examined in chapter 3, which was recorded in Southern Ostrobothnia and is therefore reflective of the variety of Finnish spoken there.

Finnish is an agglutinative, morphologically rich language. Its complex, yet highly regular morpho-phonological system includes inflectional affixes with a wide variety of functions, a large number of derivational affixes (mostly suffixes), and a system of enclitic particles, one of which, *-han*, is the focus of this dissertation. The enclitic particles occur at the end of a word after all other endings (often the word appears in a particular position of the sentence) (Sulkala & Karjalainen 1992).

The Finnish language has five commonly occurring (en)clitic particles that contribute to the pragmatic interpretation of the sentence in which they are found (Karlsson 1983, Sulkala & Karjalainen 1992). Of these, the enclitic particle *-han* has been the focus of a number of studies from both discourse-pragmatic and morpho-syntactic perspectives (see Karttunen 1974, 1975a, Hakulinen 1976, Nevis 1986 & Välimaa-Blum 1987). It should, however, be noted that this dissertation represents the first attempt to understand *-han* specifically from both a pragmatic and syntactic perspective. Given the wide variety of functions attributed to *-han* in previous literature, which range from giving a sentence a flavor that appeals to the listener (Penttilä 1957), contradiction (Karttunen 1975a), marking both familiar (Hakulinen 1976) and new (Välimaa-Blum 1987) information, it is not surprising that *-han* has generated so much interest among linguists. The basic use of *-han* is demonstrated below.

- (1) Maria=*han*                    on                    Pauli-n                    kanssa.  
       Maria=*han*                    be.3S                    Pauli-GEN                with  
       “Maria is with Pauli.”

(1) means essentially the same as its non *-han*-containing counterpart. Namely, the utterance of (1) asserts the speaker’s belief in the truth of the proposition of the utterance. But the different meanings (1) can have in context indicate that *-han* presents an interesting pragmatic puzzle.

For example, the utterance of (1) could be used to express the speaker’s surprise at the fact that Maria is with Pauli. To illustrate this, consider a scenario in which Maria’s friends, Anna and Laura, are walking home from school and wondering where Maria is. Maria usually walks home with them, but did not meet them after school on this particular day. Anna and Laura

turn the corner down the street where all three girls live and see Maria about some distance ahead of them, holding hands with Pauli. Anna turns to Laura and utters (1). By doing so, Anna isn't really just communicating the truth of the proposition expressed by (1). Instead, (1) allows Anna to indicate that the utterance contains the explanation for their inability to account for Maria's whereabouts, or perhaps that the reason for Maria's absence on their walk home is surprising to her. Alternatively, (1) could contain an expression of incredulity if perhaps Anna and Laura were both previously under the impression that Maria did not care for Pauli. Anna could even utter (1) to communicate all of these things simultaneously.

To illustrate the versatility of *-han*, I will now ask you to consider a different scenario. Imagine that Maria's mother and father are discussing their plans for dinner. Perhaps Maria's father suggests that they order a pizza with mushrooms, pepperoni, and olives. Maria's mother reminds Maria's father that Maria doesn't like olives. Maria's father utters (1) to communicate that Maria's antipathy to olives is not a concern, because Maria is with Pauli. Maria's father might be using the utterance of (1) to communicate a reminder; perhaps Maria told both of her parents that she was planning on spending the evening with Pauli, Maria's mother had simply forgotten this fact.

So what exactly does *-han* mean in these scenarios? Some of the literature on *-han* characterizes it as not having a meaning of its own at all but simply as serving a pragmatic function (Karlsson 1983, Nevis 1986, & Hakulinen et al. 2004). However, many of these analyses have still attempted to reduce *-han* to a core pragmatic function that subsumes its other functions (see Karttunen 1975a, Hakulinen 1976, Välimaa-Blum, and Hakulinen et al. 2004 in particular); others have merely listed its functions (Penttilä 1957).

My interest in *-han* is driven by my curiosity as both a linguist specializing in Finnish and a native speaker of Finnish. The linguist in me is fascinated by the myriad functions attested for this linguistic element, its contribution to meaning, and its syntax. The native speaker in me is flabbergasted that, while I cannot describe exactly what *-han* means, I am certain that I understand what other Finnish speakers mean when they use it and that I am able to use it correctly myself (a sentiment shared by many native speakers of Finnish consulted in the course of this research). The desire to satisfy my curiosity as both a linguist and speaker of Finnish motivated the research that led to the first half of this dissertation.

Not only is *-han* interesting in its contribution to how utterances are interpreted, it also has the particular syntactic distribution of what is known in the literature as a *clitic*. In particular, *-han* is a second position enclitic, meaning that it attaches to the right edge of the first constituent of a sentence. A cursory investigation of the word order variability in Finnish reveals that this characterization is not as simple as it seems, since the first constituent of a Finnish sentence can be any of a number of syntactically different elements. Consider the data in (2).

- (2) a. On=*han*      Maria Pauli-*n*      kanssa.  
                  be.3S      Maria Pauli-GEN      with  
                  “Maria is with Pauli.”
- b. Pauli-*n*      kanssa=*han*      Maria on.  
                  Pauli-GEN      with=*han*      Maria be.3S  
                  “Maria is with Pauli.”

- c. Nyt=hän Pauli-n kanssa Maria on.  
 now=han Pauli-GEN with Maria be.3S  
 “Now, Maria is with Pauli.”

(2) a. shows *-han* attached to the fronted verb of the sentence, b. shows it attached to the postposition of a postpositional phrase, and finally c. shows it attached to an adverb. Since *-han* is a clitic, this freedom of attachment is not surprising: clitics are famously promiscuous with respect to the category of their host (see Zwicky 1977, 1985, Zwicky & Pullum 1983).

Next, consider the data in (3), where capitalized constituents indicate prosodic focus. (The fact that prosodic focus can be realized in both the left periphery and *in-situ* in Finnish is supported by Vilkuna 1989 & 1995, Vallduvi and Vilkuna 1998, and Kaiser 2006 and will be demonstrated and discussed thoroughly in chapter 4 of this dissertation).

- (3) a. MARIA=han on Pauli-n kanssa.  
 Maria=han be.3S Pauli-GEN with  
 “[It is] Maria [that] is with Pauli.”
- b. Maria=han on PAULI-n kanssa.  
 Maria=han be.3S Pauli-GEN with  
 “[It is] Pauli [that] Maria is with.”
- c. Maria=han ON Pauli-n kanssa.  
 Maria=han be.3S Pauli-GEN with  
 “Maria IS with Pauli.”



The data in (3) indicate that either the constituent to which *-han* is attached may bear prosodic focus, or prosodic focus may occur elsewhere in the clause. This means that not only is *-han* promiscuous with respect to the syntactic category of its host, it is also not syntactically associated with a particular information structural function.

Assuming that Finnish has an articulated left periphery à la Rizzi (1997) in which the information structural functions of Topic and Focus are realized in dedicated phrasal projections, the data in (3) indicate that *-han* can be hosted by constituents in different left peripheral projections. So where does *-han* originate in the Finnish clause? Answering this question takes up the second half of this dissertation, which examines the syntax of *-han*-containing sentences.

## 1.2 Purpose/Goals of the research

The central goals of the research conducted for this dissertation was to answer two broad research questions:

RQ1: Can a unified account be given for the various functions of *-han*?

RQ2: What is the syntactic position occupied by *-han* and its host and how is that position generated or derived?

RQ1 is a question about the pragmatics of *-han* and was therefore approached from the perspective of studying *-han* as a discourse particle. RQ2 is about *-han* as a clitic with particular distributional properties and therefore is concerned with the syntax of the sentences in which it is found. Since the research questions address different components of the grammar, they require different approaches.

The pragmatic research on *-han* presented in chapter 3 makes use of both native speaker judgments of acceptability and naturally occurring native Finnish speech. I examine the native speaker judgments to determine the kinds of contexts that license the use of *-han*. I discuss previous analyses of *-han* in light of the account I provide, and I analyze segments from recorded conversations held with native speakers of Finnish in Ostrobothnia, Finland. I make the case that *-han* contributes to meaning procedurally (à la Blakemore 1987, 1992) and that the different meanings associated with *-han* are byproducts of the inferential process its presence prompts the hearer to undertake. Furthermore, I argue that the current analysis of *-han* as encoding a conventional implicature (Hakulinen et al. 2004) is not able to account for the many functions and meanings that have been associated with the particle.

Since RQ2 is essentially a question about the syntax of *-han*-containing sentences, it led me to investigate word order, information structure, and the left-periphery of Finnish, all of which are discussed in detail in chapter 4. Through grammatical and ungrammatical examples, I make the case that *-han* is the realization of the functional projection ForceP (Rizzi 1997) in the left periphery of the Finnish clause. I propose that the canonical second-position position of *-han* is derived either via movement of some constituent into the specifier of ForceP or via prosodic inversion of *-han* with the verbal material in the head immediately beneath it (either PolP or FP). I also examine an alternative approach to the syntax of *-han*-containing sentences under Zwart's (2005, 2009) non-cartographic, strictly derivational approach to clausal structure. I make the case that, in Zwart's system, *-han* can be analyzed as the positional marking of dependency similar to the way Zwart (2005) analyzes V2 in Germanic languages. Finally, I discuss implications for an account of *-han* under Lopez's (2009) approach to information structure, which sees information

structural functions as being assigned to syntactic elements by the pragmatic component of the grammar.

This dissertation is organized as follows: chapter 2 provides a broad overview of the central topics that this dissertation deals with. I first discuss the particle clitic system of Finnish briefly, then provide background on pragmatic studies of the linguistic elements known alternatively as discourse particles or discourse markers, and finally I discuss the morphological, phonological, and syntactic differences between clitics, independent words, and morphemes. Chapters 3 and 4 provide the pragmatic and syntactic accounts of *-han* as they are described above. Chapter 5 provides a discussion of the contributions this dissertation makes to the understanding of *-han* and more broadly, to the understanding of Finnish pragmatics and syntax. The chapter will also forecast possibilities for future research into the particle clitic system of Finnish and into the syntax of the left periphery of Finnish clauses.

### **1.3 The issue of terminology: Framing the discussion of *-han***

From a pragmatic perspective *-han* shares characteristics with the group of linguistic elements known as discourse particles, or more broadly as discourse markers or operators. Distributionally, *-han* is a second position clitic, which needs to be recapitulated here because not all conceptions of discourse particles include linguistic elements that are identified as clitics (Fischer 2006), although studies in clitic typology typically categorize clitics that contribute to discourse as ‘discourse particles’ (see Spencer & Luis 2012). For the sake of clarity, I will refer to *-han* throughout this dissertation as a discourse particle, though I do not intend my use of this term to represent a strong typological or theoretical stance. While the term *discourse particle* has often been used to exclude clitics specifically, I use the term here to discuss approaches to items that are functionally similar to *-han*, and to avoid confusion through consistency, but note that

*-han* is perhaps most appropriately referred to as a *discourse clitic*. Furthermore, much of the literature on the clitic system of Finnish refers to these items as *particle clitics* (from the Finnish *liitepartikkeli* ‘attachment particle’) so the use of the term *particle* serves to tie my work to earlier literature on *-han*.

While a more thorough background of the literature on both discourse particles and clitics is provided in chapter 2, it is worth briefly discussing the interesting intersection that *-han* represents in the study of language. On one hand, *-han* must be regarded as belonging to a heterogeneous class of items that are mainly studied with an aim to understand their contribution to meaning and discourse. On the other hand, *-han* belongs to a group of elements that straddle the boundary between syntax and morphology and between word and morpheme, whose idiosyncratic distribution continues to puzzle syntacticians. I believe that the major contribution of this dissertation is the fact that it provides an in depth examination of *-han* from both perspectives.

The general conception of discourse particles is that they are small words that do not contribute to the propositional content of the sentence containing them (Aijmer & Vandenberg 2003). Examples from English include words like *so*, *but*, and *however*. While the literature on *-han* varies as to its specific functions, there is some consensus that it has a pragmatic function rather than having propositional content (see Karlsson 1983, Nevis 1986, Välimaa-Blum 1987, Sulkala & Karjalainen 1992, and Hakulinen et al. 2004). The fact that so many functions have been attested exhibits another key component of *-han* that is characteristic of discourse particles: polyfunctionality.

Approaching *-han* from the perspective of discourse particles provides the benefit of grounding the research into its polyfunctionality in an existing body of literature that deals with

items exhibiting the same type of behavior. Within approaches to discourse particles there are several models for how to explain the polyfunctionality and the relationship of the multiple functions of a single discourse particle to one another. This is exactly what has been missing in the literature on *-han*. While previous researchers have provided ample descriptions of the polyfunctionality of *-han*, they have not provided a satisfactory account of how its different functions are related or how speakers are able to access these different functions. Furthermore, the extant research on *-han* needs to be connected to the larger body of work on similar items cross-linguistically.

In contrast to discourse particles, clitics are linguistic elements that are phonologically dependent on a neighboring host word. They sometimes correspond to a full form word in the languages in which they are found, but sometimes do not. They are similar to affixes in that they must attach to a word but, while affixes must attach to words of a particular category, clitics are promiscuous in the selection of their host (Zwicky & Pullum 1983, Zwicky 1985, Spencer & Luis 2012). In fact, distinguishing clitics from affixes on the one hand and from independent words on the other is one of the central concerns of research into clitics (Zwicky & Pullum 1983, Zwicky 1985).

As a second position (2P) clitic *-han* belongs to a group of clitics first described for Indo-European by (and also named after) Jacob Wackernagel (1892). As such, *-han* is an example of a special clitic. It does not correspond to a free form variant and is therefore always found attached to a host. This is in contrast to *simple clitics*, which have a free form variant that occupies the same syntactic position. Again, *-han* is a special clitic without a free form variant, it is always phonologically dependent on a host.

#### 1.4 Assumptions and limitations of the research

The preliminary research conducted for this dissertation relied on a small group of native speakers of Finnish in the United States and in Finland. My consultations with them were crucial in shaping my understanding of the scope and direction my research should take. Later, these speakers also provided me with contacts to a larger group of speakers who I consulted for their judgments of the acceptability of *-han* utterances and who allowed me to record our conversations to examine usages of *-han* in naturally occurring native Finnish speech. These speakers and participants mostly came from Southern Ostrobothnia, Finland. Therefore, the results of the native speaker judgments and the naturally occurring native Finnish speech represent the dialect of Finnish spoken in and around Ostrobothnia.<sup>1</sup>

This dissertation takes an approach that is in some ways more concerned with depth than breadth. That is, my research on *-han* is particular to the pragmatics of *-han* by itself and the syntax of sentences containing *-han* as their only clitic. It is important to note that Finnish, like many languages with clitic systems, has the possibility of multiple clitics attached to the same host (for more on clitic clusters in Finnish see chapter 2).

---

<sup>1</sup> My debt of gratitude to the speakers who I consulted with initially, as well as the speakers who participated in my

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 The literature on *-han*

As mentioned in chapter 1, the Finnish language has five commonly occurring particle clitics (Karlsson 1983). Karttunen (1975b) adds a sixth, the enclitic *-s*, to this list, and provides the following grid to represent their attachment possibilities.

(1)	I.	II.	III.
	<i>-kin</i>	<i>-ko</i>	<i>-han</i>
	<i>-kaan</i>	<i>-pa</i>	<i>-s</i>

Generally, the particle clitics of Finnish are thought to have a meaning which cannot be described with reference to semantics alone but must take into account the pragmatics of the context in which they are used (Hakulinen & Karlsson 1979, Karlsson 1983). Hakulinen et al. (2004) call this group of particle clitics ‘tone’ particles (from Finnish *sävy*, which can indicate attitude or disposition) because they add some kind of additional meaning to the propositional content of the utterance containing them.

The particle *-kin* occurs attached to verbs. Karlsson (1983) describes it as indicating the fulfillment of expectations, marking a sense of surprise, or strengthening an exclamation. The particle *-ko* has a more straightforward function in that it is used to form yes/no questions. The

particle *-kaan* is the equivalent of *-kin* in negative sentences. Karlsson (1983) gives *-pa* the function of adding emphasis (1983). The particle *-s* occurs primarily in questions and directives and has been analyzed as having a softening or mitigating effect (Hakulinen et al. 2004, Raevaara 2004). Various functions have been attested for *-han*; these will be discussed in detail in chapter 3.

In Karttunen's (1975b) account of the particle clitic system of Finnish, one clitic may be selected from each group in (1), indicating that clitics in the same group should be mutually exclusive. Nevis (1986) takes the position that *-s* is not a true clitic, citing the fact that it has slightly more limited combinatory potential than the other clitics. Nevis notes that since host promiscuity is a key characteristic of clitics (see Zwicky & Pullum 1983), the restricted host selection of *-s* makes it more akin to affixes. Earlier accounts of the Finnish particle clitic system include more elements in the groupings in (1) (see Penttilä 1957 in particular), but most current grammars of Finnish include only *-kin*, *-kaan*, *-ko/-kö*, *-pa/-pä*, and *-han/-hän*.

Of the group in (1), *-han*, *-pa*, and *-ko* are second position enclitics: they typically attach to the head of the first phrasal constituent in a sentence. The clitics *-kin* and *-kaan* are also enclitics but can occur attached to hosts in various positions in the sentence (Karlsson 1983).

## 2.2 On discourse particles

The extensive body of literature on the group of linguistic elements known alternatively as discourse markers, discourse particles, or discourse connectives puts a thorough review of these items well beyond the scope of this dissertation. Here I will outline some of the central issues surrounding the different perspectives discourse particles have been studied from, the



characteristics associated with these items, and attempts to classify them and account for their function in discourse.

Generally speaking discourse particles are thought to belong to a larger group of expressions that contribute to what has often been called non-truth conditional or non-propositional meaning, though as we shall see in chapter 3, there are notable exceptions to this view (Schourup 1999). This roughly means that they are likened to functional elements of language like prepositions and articles and in contrast to more obviously contentful words like proper nouns. While there have been some studies that have attempted to approach DPs in a general way (see particularly Schiffrin 1987 and references in Schourup 1999), there is little consensus as to the appropriate terminology and classification of these items (Schourup 1999, Fischer 2006).

The terminological discussion of discourse particles has most recently centered on the use of the term *discourse particle* versus the term *discourse marker* (Fischer 2006). The term *discourse particle* (henceforth DP) points to small uninflected words that are only loosely integrated into sentence structure. The term is meant to distinguish these items from clitics, full words, and bound morphemes as well as larger entities like phrasal idioms. This characterization is problematic because, as Fisher (2006) notes, there is reason to believe that these items are functionally related to a larger class of items that may include heavy speech formulae in different languages.

Schourup (1999) claims that the use of the term *particle* is problematic because it has traditionally been used as a syntactic term and is troubling even as a syntactic label. Additionally, she points out that the term has often been used to describe elements that do not seem to fit easily into any established class of words. She also argues, as Schiffrin (2006) does,

that the use of the term seems to be too restrictive. However, as I discuss in the beginning of this chapter, the term *particle* is used in much of the literature on *-han* to describe it and the group of clitics that it belongs to, despite the fact that some definitions of the term exclude the class of items known as clitics.

The term *discourse marker* (henceforth DM) is more widespread, more inclusive and is used from a more functional perspective. Fischer (2006) maintains that this has the benefit of avoiding unnecessary formal limitations. However, she points out that there are several open questions with respect to strictly functional definitions. The first of these has to do with identifying a functional range that can be used to identify a DP or DM. This is a significant issue because of the point made above, namely, that many of the functions fulfilled by these items, such as conversational management, are also fulfilled by speech formulae and non-lexicalized metalinguistic devices (Fischer 2006). This issue is echoed in the research on the particle clitics of Finnish, which have been likened to the use of prosody and word order.

There is also some lack of consensus on the issue of identifying the canonical characteristics of DPs/DMs and how those characteristics should be conceived. Again, these characteristics are often discussed in terms of *function*. Fraser (1996) discusses different types of functions in terms of the kinds of signals they are associated with. He separates the information encoded by linguistic expressions into propositional content and those parts of meaning that do not contribute to the propositional content but rather are the linguistically encoded cues that communicate the speaker's potential intentions. Fraser proposes that this non-propositional part of sentence meaning can be analyzed into different types of signals, which Fraser terms pragmatic markers (Fraser 1990, 1996). He separates pragmatic markers into four groups based on the kinds of messages they are associated with. The first group consists of *basic markers* that

signal the force or mood of the basic message. This might, for example, include the use of an adverbial like *admittedly* to mark the content of a sentence as being an admission. Fraser also identifies a group of *commentary markers*, which include expressions like *frankly* or *stupidly*. A third group of pragmatic markers, which Fraser terms *parallel markers*, include expressions of exasperation like *in God's name*. These markers are associated with parallel messages that are entirely separate from basic and commentary messages. The final group of pragmatic markers identified by Fraser are *discourse message pragmatic markers*, which specify how the message conveyed by a sentence is related to the foregoing discourse.

Schourup (1999) provides a list of the characteristics that are typically associated with DPs but does not attempt to group them based on these functions in the way Fraser (1996) does. She notes that while connectivity, optionality, and non-truth conditionality are generally taken to be necessary characteristics of DPs, they have also been characterized as exhibiting weak-clause association, initiality, orality, and multi-categoriality. An interesting approach to the discussion of the characteristics and functions of DPs is provided by Fischer (2006), who suggests that the notion of integratedness can make sense of the wide variety of approaches to DPs by associating certain functions with different approaches. Fischer makes a distinction between approaches that focus on items that are wholly integrated into their host utterances and those items which are more or less syntactically, semantically, or prosodically independent.

As chapter 3 of this dissertation shows, *-han* exhibits some of the characteristics associated with items typically identified as DPs or DMs, including optionality and non-truth conditionality. However, the literature on *-han* has discussed it as a *particle clitic*, and has not emphasized its role in discourse. Furthermore, the research on *-han* has generally not discussed

it in comparison to items from other languages that function in similar ways. Chapter 3 makes clear that the items *-han* has the most in common with in terms of function are indeed DPs/DMs.

As mentioned in chapter 1, the polyfunctionality of DPs has been explained under multiple models. Since the polyfunctionality of *-han* is one of its defining characteristics, it is worth examining these different models and explaining why the model provided by relevance theory best accounts for the polyfunctionality of *-han*.

Fischer (2006) takes the basis of the discussion about approaches to polyfunctionality as being the aspects of meaning that are taken up in the lexical representation. On the one hand, there are monosemy approaches that assume that a single invariant meaning is associated with each phonological or orthographic form. On the other hand, there are homonymy approaches, which assume that polyfunctional items have a number of distinct and identifiable meanings that are not connected. These approaches represent the opposite ends of the spectrum of approaches to the polyfunctionality of DPs. In between, there are a number of approaches that may be described as polysemic; these assume that a single phonological or orthographic form may be associated with a number of different interpretations that are assumed to be related.

Polysemy approaches vary based on whether or not they assume a single invariant meaning component. Narrow polysemy assumes a single form to be associated with a number of distinct readings that are related by a set of general relationships that do not necessarily share common meaning aspects (see Hansen 2006 for more on this type of approach). Other polysemy approaches take the monosemy approach as a starting point but attempt to account for the different interpretations associated with an item by providing models of mechanisms that connect these interpretations.

The relevance theoretic approach taken here falls roughly into the polysemy approaches. It assumes a connection between the different interpretations associated with *-han*, but at the same time it argues that this connection arises from a particular type of meaning that *-han* encodes. As we shall see in the next chapter, the type of meaning I argue for is not equivalent to the type of lexical meaning that is assumed by many monosemy approaches.

### 2.3 On clitics

Clitics are linguistic elements that rely on a phonological host. In this respect they are similar to affixes, but importantly, unlike affixes, which are selective with respect to their host, clitics are promiscuous with respect to the identity of their host (Spencer and Luis 2012). Clitics sometimes have equivalent full form words and appear in the same syntactic position as those full-form words do: the clitic *'s* corresponds to the free form *is* in English, for example, allowing a speaker to use (2) a. or b. with no difference in meaning.

- (2) a. She's going to the store.  
b. She is going to the store.

These types of clitics are known as *simple clitics* (Zwicky 1977). The clitics to which *-han* belongs are *special clitics*, known as such because of their unique syntactic positioning. As mentioned in chapter 1, *-han* specifically belongs to a subgroup of special clitics occurring in second position known as *Wackernagel clitics* (Wackernagel 1892).

Clitics can convey many different types of information. In general, any category of word that may appear unaccented in different languages is eligible for cliticization. These include

auxiliaries, pronouns, determiners, dummy nouns, prepositions and postpositions, conjunctions, complementizers, and various adverbials. The last of these may include a wide array of adverbial functions including place and time adverbs, adverbs marking sentence type, emphatic adverbs, epistemic adverbs, and narrative adverbs (Zwicky 1977).

The study of clitics is complicated by a number of issues. One of these is the fact that clitics lie at the intersection of the major modules of grammar (Spencer & Luis 2012). To exemplify this, consider the fact that the clitic 's in (2) forms a phonological unit with the subject pronoun but a syntactic unit with the rest of the predicate. Zwicky (1985) neatly summarizes this issue:

“There is not much point in proposing that cliticization is an ordinary syntactic operation, describable by the same formalism as ordinary syntactic rules, and capable of interacting with them; or that it is a type of affixation, describable by the same formalism as ordinary inflectional affixation, and interacting with other morphological rules but not with ordinary syntactic rules.”

(p. 283)

In other words, Zwicky (1985) posits that cliticization is fundamentally different from both ordinary syntax and ordinary morphology. The syntactic account of *-han* in chapter 4 of this dissertation shows that this characterization holds true for *-han* as well; while narrow syntactic operations go a long way in explaining how the syntactic position of *-han* is derived, reference must be also be made to a type of prosodically-conditioned local reordering.

Another issue in the study of clitics is differentiating between simple and special clitics. Zwicky (1977) (citing Givón 1971 and Hale 1973) points out that special clitics are often

remnants of an earlier system of simple clitics. Related to this issue is the difficulty of determining the syntactic source of special clitics that have no class of corresponding nonclitic constituents (Zwicky 1977). This issue is particularly unclear for *-han*, which appears in a position that is typically unique to special clitics, but is asserted by Penttilä (1957) to have evolved from the 3<sup>rd</sup> person pronoun *hän* (he/she), which makes it look more like a simple clitic. Speculation about this issue is well beyond the scope of this dissertation, but is noted here with some interest.

Zwicky (1985) points out that any speculation about clitics must distinguish the linguistic element in question from inflectional affixes on the one hand and from independent words on the other. As this section shows, clitics in general and *-han* in particular, have characteristics of both. According to Zwicky (1985), the category label of ‘clitic’ can only be applied to a linguistic element which exhibit a number of ‘symptoms’ that are normally associated with that label. In other words, the criteria for distinguishing clitics from words and affixes are not absolute; if a certain linguistics element fails to meet some of them, this does not automatically exclude that element from membership in the group of items known as clitics. Conversely, since clitics share properties with both words and affixes (inflectional affixes in particular), it is important to note that items of both of these classes will meet some of the criteria for clitic-hood while still being distinct.

Zwicky and Pullum (1983) establish tests that distinguish clitics from affixes. They note that one of the distinctions between clitics and affixes is the module of the grammar that determines their combinatory potential. The combinability of affixes and stems is determined by morphological and lexical considerations, whereas the combinability of a word or phrase and a clitic is governed by syntactic considerations. And while clitics and words share certain

properties, Zwicky (1985) also lays out tests that reveal important distinctions between words and clitics.

While clitics form a phonological unit with an independent word, many of them, and *-han* in particular, are affected by and condition both internal and external rules of sandhi (Zwicky 1985, Nevis 1986). For the purposes of stress assignment and vowel harmony, *-han* behaves like a proper subpart of a word (Nevis 1986). The stress pattern of a Finnish word is such that primary stress is placed on the first syllable and secondary stress on every other syllable thereafter, except for the last one (Karlsson 1983). When *-han* encliticizes to a word, the last syllable of the word is able to bear stress, because *-han* is part of the phonological word for the purposes of stress assignment. Example (3), taken from Nevis (1986), demonstrates this.

- (3) a. Périuna (\*pérunà) kásvaa. ‘The potato grows.’  
b. Pérunàhan kasvaa. ‘The potato grows, you know.’

In (3), a. can only be pronounced without secondary stress on the final syllable, but the addition of *-han* in b. allows secondary stress on that same syllable, because it is no longer the word final syllable.

As mentioned previously, *-han* also participates in vowel harmony. The clitic alternates between the variant with a front vowel, *-hän*:[-hæn], and the variant with the corresponding back vowel, *-han*:[-han], depending on the backness of the vowels in the stem. This is exemplified by the examples in (4).



- (4) a. Maria=*han* osti kirja-n  
 Maria=*han* buy.3.S.PST book-GEN  
 “[It was] Maria [that] bought the book.”
- b. Heidi=*hän* osti kirja-n.  
 Heidi=*han* buy.3.S.PST book-GEN  
 “[It was] Heidi [that] bought the book.”

(3) and (4) demonstrate how *-han* conditions and is affected by processes of internal sandhi. However, as Nevis (1986) points out, *-han* also participates in processes of external sandhi. He provides the following examples to illustrate *-han*'s behavior in the phonological process of gemination, a process that typically only occurs only at the word boundary in Finnish.

- (5) a. Vene tulee. [venet:ule:]  
 boat come.3.S.PRS  
 “The boat comes.”
- b. Talonsa=*han* [talonsah:an]  
 house.1.POSS=*han*  
 “his house”

Nevis (1986) points to the gemination that takes place between the two independent words in (5) a. and between the word stem and the clitic in (5) b. to illustrate the fact that the particle clitics in Finnish not only participate in phonological processes that are generally

considered to affect proper subparts of words but also in phonological processes that generally affect individual words at the word boundary.

The participation of *-han* in the stress assignment of an independent word and its participation in vowel harmony indicate that it is a proper subpart of a word. This evidences *-han*'s status as a clitic rather than an independent word. And while affixes also participate in these types of word internal phonological and prosodic processes, it is important to reiterate that clitics, unlike affixes, exhibit promiscuity with respect to host selection, and are therefore distinct in their distributional properties, even as they are similar in their phonological properties.

While the phonological behavior of clitics is generally taken to be evidence for the claim that they belong to a phonological word, some independent words can also form phonological units with words adjacent to them. As Zwicky (1985) points out, the difference between these types of units is a question of a phonological word on the one hand and a phonological unit on the other. And while clitics share some characteristics with independent words that form phonological units with adjacent words, it's important to note that clitics, unlike those independent words, cannot undergo syntactic processes such as replacement or deletion (Zwicky 1985).

## **2.4 Discussion**

This chapter has given an overview of the fields of research that the work here is embedded in. I provide background on *-han*, the terminological issues I came across in my research, and how the mixed identity of *-han* as a discourse particle and clitic can be understood from both perspectives. The issues I address in this chapter, with respect to what kinds of

linguistic items are identified by the term *discourse particle* and whether or not items known as *clitics* rightly belong to this class, are left open.

## CHAPTER 3

### THE PRAGMATICS OF *-HAN*

#### 3.1 Introduction

As discussed in Chapter 2, accounting for the polyfunctionality of discourse particles is one of the central issues in research on items of this class (Fischer 2006). This issue is well represented in studies on *-han* (see Penttilä 1957, Nevis 1986, Karttunen 1975, Hakulinen 1976, Välimaa-Blum 1987, & Hakulinen et al. 2004). The literature on *-han* is divided not only as to its functions (detailed in 2.1.1 and discussed further in section 3.4 of this chapter), but also as to how and whether these functions are related via some underlying meaning. In this chapter, I argue that the polyfunctionality of *-han* is best accounted for via a relevance theoretic approach, which conceptualizes *-han* as encoding procedural meaning (see Blakemore 1987, 1992, 2002, Sperber & Wilson 1986, 1995, 2002, and Wilson & Sperber 2012). Specifically, I propose that *-han* provides a signal to the addressee(s) that the speaker believes them to have access to the information necessary to recover the intended meaning of the *-han*-containing utterance. Furthermore, I maintain that the current analysis of *-han* by Hakulinen et al. (2004), which sees *-han* as conventionally implicating that the situation referenced by the *-han*-containing utterance is familiar to the interlocutor(s), is not able to explain the wide variety of uses attested for *-han* in the literature.

The most significant departure of my analysis of *-han* from the current analysis by Hakulinen et al. (2004) is my argument that *-han* is not associated with a particular invariant

meaning from one context to another, but rather that it communicates a procedure which hearers must perform in order to recover the intended interpretation of the utterance containing it. This analysis of *-han* relies on the work of Sperber and Wilson (1986, 1995, 1998, 2002; see also Wilson & Sperber 2004, 2012) and the contributions made to their relevance theoretic framework by Blakemore (1987, 1992, 2002), particularly the distinction between conceptual and procedural meaning that she first developed. Procedural meaning is information that constrains the inferential process of communication. The notion of inference is central to the way Wilson and Sperber (1993, 1995) see non-truth conditional meaning as enriching linguistically encoded semantic representations that in turn yield cognitive representations. With respect to discourse particles (DPs), the relevance theoretic approach allows for a more nuanced examination of how they contribute to utterance interpretation. This is because the relevance theoretic notion of procedural meaning allows a lexical item to encode a procedure that may yield different types of interpretations from one use to the next. In contrast, the Gricean notion of a lexical item or linguistic construction conventionally implicating a particular meaning, which has often been used to analyze discourse particles, forces an analysis of DPs whereby a lexical item communicates the same underlying meaning from one use to the next, regardless of how disparate the interpretations associated with that item may be; or it forces an analysis in which a single DP that is associated with disparate uses maps to homophonous but distinct lexical items (Fisher 2006).

I support my proposal by examining a number of relevance theoretic analyses of discourse particles, but I rely in particular on Ler's (2006) relevance theoretic approach to the discourse particle *lah* in Singapore Colloquial English (SCE). Ler examines how the polyfunctionality attributed to *lah* in SCE can be unified by a relevance theoretic approach

whereby the different functions associated with *lah* are analyzed as resulting from its procedural contribution to utterance interpretation. As previously stated, I contend that the polyfunctionality attributed to *-han* is similarly a product of the contribution it makes to the inferential process of utterance interpretation via its encoding of procedural meaning.

This chapter will attempt to answer the following research questions.

- (1) What kind of meaning does *-han* encode?
- (2) How does the presence of *-han* constrain the context upon which an utterance containing it is meant to be interpreted?
- (3) Can a unified account be given for the various functions attributed to *-han*?

To answer the first research question I shall seek support for the argument that *-han* contributes to procedural meaning rather than conceptual meaning. The second research question deals with *how* the presence of *-han* contributes to procedural meaning. I examine this first through native speaker judgments of acceptability that show that *-han*-containing utterances cannot be uttered ‘out of the blue’ (which has been suggested by Välimaa-Blum 1987). Research question 3 deals with the question of whether or not it is possible to give a unified account for the various functions attested for *-han*.

This chapter is organized as follows. Section 3.2 provides the theoretical background for the subsequent analysis by introducing the principles of relevance theory and discussing how it developed as a response to Gricean and neo-Gricean approaches to pragmatics. I discuss how this theory conceptualizes the divide between semantics and pragmatics, communication, utterance interpretation, truth conditions, and meaning. I also define the notion of procedural

meaning and show how it serves to constrain the interpretation of utterances (Blakemore 1987, 1992, 2002) and how this in turn led to the identification of DPs as elements that contribute to procedural meaning. I also discuss the notions context and common ground.

In section 3.3 I detail previous relevance theoretic approaches to DPs. I begin by discussing Blakemore's seminal work on the contributions of English *so* and *but*. I then focus on Ler's (2006) analysis of the Singapore English DP *lah*, because they share a lot of characteristics with *-han*.

In 3.4, I examine some of the previous analyses of *-han* and review the functions most frequently attributed to it: amelioration/mitigation, contradiction, expression of surprise, and marking either new or familiar information. I show how these functions can be analyzed as falling out from the procedural contribution of *-han* to the interpretation of utterances containing it.

In section 3.5 I outline my relevance theoretic account of *-han*, making the case that *-han* encodes procedural meaning that constrains the inferential process of communication by examining native speaker judgments of acceptability to establish the kinds of contexts in which *-han* is and is not acceptable. I then examine naturally occurring uses of *-han* in order to determine how speakers use it to refer to shared assumptions.

Finally, in 3.6, I summarize the conclusions from this study and identify avenues for future research. I also discuss how the relevance theoretic examination of *-han* provided here contributes to the larger body of literature on DPs/DMs.

### 3.2 Theoretical Background

Relevance theory developed as a response to perceived problems with Gricean and neo-Gricean approaches (Clark 2013). And while the particulars of Gricean and relevance theoretic approaches to pragmatics differ significantly, they both rely on the assumption that there is a gap between *what is said* and *what is meant*. Indeed, Wilson and Sperber claim that relevance theory may be seen as an attempt to work out in detail Grice's central claims about how communication works (2002). Grice (1989) argued that an essential feature of communication is the expression and recognition of intentions. Wilson and Sperber (2002) point out that in developing this claim, Grice laid the foundations for an inferential model of communication. Within this inferential model, communicators provide evidence for their intentions to convey a certain meaning, which the audience uses as the basis on which to make inferences about these intentions. Grice's inferential model of communication provided the foundation of a theory of communication in which the linguistic meaning recovered by decoding linguistic expressions is just one of the inputs to an inferential process that yields an interpretation of the speaker's meaning. Similar to Grice, Sperber and Wilson's relevance theoretic approach to communication assumes that meaning is interpreted via encoding *and* inference.

Generally speaking, within Gricean approaches to meaning the difference between *what is said* and *what is meant* is explained in terms of implicatures, which are seen as arising from the so called Co-operative Principle: "make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged" (Grice 1989, p. 45). Grice identified two types of implicature: conversational implicature and conventional implicature (which I will discuss in connection to DPs). Conversational implicatures are meanings that are implied by the speaker of an utterance and



arise either from the speaker's following or flouting of one or more of four maxims of conversation (Quality, Quantity, Manner, and Relevance). Thus, a conversational implicature is part of what a speaker means but not part of the linguistically encoded meaning of the sentence (Huang 2007). To illustrate this, consider (4), taken from Grice (1989).

- (4) A: I am out of petrol.  
B: There is a garage round the corner.

(p. 51)

As analyzed by Grice, speaker B's response is intended to communicate to speaker A that the garage in question is open and that speaker A may obtain petrol there. This takes place through *implicature*.

In Relevance theoretic approaches to meaning the gap between *what is said* and *what is meant* is also filled by implicatures, but within Relevance Theory these implicatures arise from a single Communicative Principle of Relevance (see Sperber & Wilson 1986, Wilson & Sperber 2004, Sperber & Wilson 2005 and Clark 2013), which is as follows:

- (5) Communicative Principle of Relevance

Every ostensive stimulus conveys a presumption of its own optimal relevance.

(Sperber & Wilson 1995, p. 266-272)

This principle asserts that intentional communication should help the addressees decide what the communicator intends to convey and that addressees assume that the communicator has an interpretation in mind that is worth the effort it takes to arrive at that interpretation.

Another significant difference between relevance theory and Gricean pragmatics is in how they see the recovery of explicit content. Explicit content, or explicature, is the relevance theoretic term used to indicate *what is said* (Sperber and Wilson 1986, 1995), which Grice generally refers to the conventional meaning of an utterance to the exclusion of any conversational implicature (Grice 1989, Huang 2007). Thus, in the example above, the explicit content includes the conventional meaning of the words themselves, but not the conversational implicature which allows speaker A to infer that he can get petrol at the garage around the corner.

As Wilson and Sperber (2002) point out, “it is now increasingly recognized that even the explicitly communicated content of an utterance goes well beyond what is linguistically encoded” (p. 260). Blakemore (2002) points to Carston’s (1988, 1998, 1999, 2002) criticism of Grice’s notion of the distinction between explicit and implicit content to underline the significance of the departure relevance theory makes in their delineation. Carston notes that while Grice recognized the role of context in reference assignment and disambiguation, he did not acknowledge that the process of recovering the information necessary to assign reference and disambiguate meaning is governed by the same general pragmatic principles that lead to the recovery of implicatures. Consider the example Blakemore (2002) points to, taken from Wilson and Sperber’s (1981) early criticism of Grice’s theory of conversation.

(6) I refuse to admit them.

(Blakemore 2002, p. 73, citing Wilson and Sperber 1981)

Wilson and Sperber point out that (6), when interpreted in the context of the question in (7) a., will yield (7) b., but when interpreted in the context of the question in (8) a., (6) will yield the interpretation in (8) b.:

- (7) a. What do you do when you make mistakes?
- b. The speaker refuses to confess to the mistakes he makes.
- (8) a. What do you do with gate-crashers?
- b. The speaker refuses to let the gate-crashers in.

(Blakemore 2002, p. 73, citing Wilson and Sperber 1981)

Examples like this inform the relevance theoretic view that explicitly encoded information is *not* equivalent to conventionally encoded information. Rather, it sees linguistically encoded semantic representation as providing an input to an inferential process that develops it to yield an *explicature* as providing a premise to an inferential process that yields *implicatures*. In other words, where Grice's approach connects explicit content to implicatures through inference, relevance theory sees inference as occurring even before explicit content can be computed.

The notion of conventional implicature refers to a type of meaning that is not derivable from the saying of what is said, but rather is attached by convention to a particular linguistic element (Huang 2007). It is distinct from conversational implicature, because it is not computed on the basis of the particular situation, but carries the same meaning from one situation to the

next. This notion has been used in non-relevance theoretic accounts of DPs, including *-han* (see in particular Hakulinen et al. 2004). The problem with these accounts for polyfunctional DPs like *-han* is that they are unable to account for how they seem to have so many different functions from one use to the next. For example, consider the following constructed example:

- (9) Isä=hän                      pesi                      pyykit.  
Isä=hän                      wash.3S.PST    laundry  
“Dad did the laundry.”

Hakulinen et al. (2004) argue that *-han* conventionally implicates that the situation referenced by the speaker is familiar to the interlocutor(s). But consider the different ways that the presence of *-han* in (9) can communicate ‘familiarity’. The utterance of (9) would be acceptable for the hypothetical speaker ‘Minna’ to utter in each of the following hypothetical situations:

- (10) Minna sees her daughter about to put what she knows to be clean laundry in the wash.
- (11) Minna’s son is having breakfast in his pajamas while Minna is packing his lunch. He complains that he doesn’t have a shirt to wear for school.
- (12) Minna comes home with a friend after they have been out for a jog together. They walk into the laundry room together and see piles of folded clothes.

In each of these situations we can sense that there is a reference to something familiar in the utterance of (9), but it is not at all clear whether it can be said that the situation is what is familiar

in each of these scenarios. Furthermore, the intended meaning of (9) in each of these situations is not primarily concerned with bringing the interlocutor's attention to the familiarity of the situation being referenced. In (10), the utterance of (9) serves to inform Minna's daughter that she should stop what she is doing, namely, trying to wash the laundry, as it is made unnecessary by the information that the laundry has already been done. In (11), Minna utters (9) to contradict her son's assumption that he does not have anything to wear and to instruct him to look for a clean shirt in the laundry room. In (12), Minna's utterance of (9) communicates her surprise to her friend that the laundry is done, as evidenced by the folded clothes. In (10), the laundry itself is familiar, so this situation is not overly problematic for Hakulinen et al.'s (2004) analysis of *-han*. However, it still does not account for how the presence of *-han* is connected to Minna's intended meaning. In (11), Minna can communicate her intended meaning by uttering (9) even if her son is unable to see the clothes, and indeed the laundry itself can be new information to her son when she utters it. In (12), Minna can utter (9) even if she believes her friend has not yet noticed the laundry. My argument is that the presence of *-han* in (9) allows Minna to express a belief that her interlocutor is able to recover her intended meaning, thereby guiding them to it.

With respect to the broader category of linguistic items to which *-han* belongs, namely discourse particles (DPs), there are significant differences with respect to how their contribution to meaning is framed in relevance theoretic and non-relevance theoretic approaches. The distinctions made in relevance theory is between procedural and conceptual meaning, while in non-relevance theoretic approaches the distinction is often between truth conditional and non-truth conditional meaning. As we shall see, the distinction goes beyond a difference in terminology.

In relevance theory, conceptual meaning provides information that contributes to representations of content, while procedural meaning provides information about how to interpret the content (see Blakemore 1987, 1992, & 2002). Linguistic expressions that contribute to procedural meaning guide the hearer in the process of reaching the intended interpretation of an utterance. Discourse particles have been shown to encode procedural meaning. The following examples from Ler (2006) illustrate this type of meaning:

(13) Benjamin Bratt likes to please Julia Roberts.

(14) He loves Julia Roberts.

(Ler 2006, p. 151)

As Ler points out, (13) and (14) can be interpreted as being related to each other in a variety of ways. Either one can be taken as evidence for the truth of the other, or they can be understood as two independent facts. Consider how the italicized material in (15) and (16) affects the interpretation of the relationship between (13) and (14).

(15) a. Benjamin Bratt likes to please Julia Roberts.

b. *After all*, he loves Julia Roberts.

(16) a. Benjamin Bratt likes to please Julia Roberts.

b. *So*, he loves Julia Roberts.

(Ler 2006, p. 151)

Although the ordering of the utterances in (15) and (16) is the same, in (15), a. is understood to be the conclusion and b. is understood as providing the evidence for this conclusion. In (16), b. is understood to be the conclusion, while a. is the evidence for that conclusion. In (15), the speaker expects the hearer to access the assumption in (17), while in (16), the speaker expects the hearer to access the assumption in (18).

(17) If X loves someone then X likes to please this person.

(18) If X likes to please someone then X loves this person.

(Ler 2006, p. 151)

The presence of *after all* in (15) and *so* in (16) constrains the way a hearer understands the two utterances (13) and (14) to be related to one another. In this way, they contribute to the procedural meaning of those utterances.

Similarly, the presence of *-han* in (9) constrains the way the hearer interprets the utterance in the situation in which it is uttered by serving as an instruction to the addressee that Minna has some interpretation in mind which they are able to recover. In each of the hypothetical situations described, the meaning which Minna intends goes well beyond the explicit content of the utterance itself. Her use of *-han* helps point the addressee towards this meaning by providing an *explicit* guarantee of relevance.

Non-relevance theoretic accounts of discourse particles often view them in terms of their contribution to non-truth conditional content (see Schourup 1999, Aijmer & Vandenberg 2003, among others). Within this approach, the meaning of a sentence is given by the conditions that must hold for the world in order for that sentence to be true, in other words, a sentence's truth

conditions. Huang (2007) compares truth conditions to truth values, noting that while the notion of truth value is associated with propositions, the notion of truth conditions is associated with sentences. This means that while truth values are assigned to actual utterances, truth conditions are something that hold for a sentence outside of a particular context. This means that a proposition may be true or false on a particular occasion. Huang illustrates this characteristic of propositions by noting that the proposition expressed by a sentence such as (19), when uttered, is true in a situation in which the book is on the desk and false in a situation in which the book is not on the desk.

(19) The book is on the desk.

(Huang 2007, p. 18)

Sentences, on the other hand, do not have truth values apart from particular utterances of sentences. They are evaluated based on the hypothetical state of affairs that would have to hold for that sentence to be true, if uttered. This can be formalized as in (20):

(20)  $S$  is true iff  $p$

(Huang 2007, p. 19)

Where  $s$  refers to a sentence in a language, and  $p$  refers to the set of conditions under which that sentence is true. Huang (2007) gives the following examples to illustrate how the notion of truth conditions contributes to sentence-meaning.



- (21) a. Only John<sub>1</sub> voted for John<sub>1</sub>.  
b. Only John<sub>1</sub> voted for himself<sub>1</sub>.

(Huang 2007, p. 19)

For (21) a. to be true, John must have only been voted for by himself. For (21) b. to be true, however, John could have been voted for by many people, including himself. Therefore, (21) a. and (21) b. have different meanings because they have different truth conditions. Of course, there are aspects of meaning that cannot be accounted for in terms of truth conditions, including discourse particles. Huang (2007, p. 19) gives the following simple example to illustrate this point:

- (22) a. We want peace and they want war.  
b. We want peace but they want war.

(22) a. and (22) b. have the same truth conditions, because the connectives *and* and *but* are not seen as contributing to the truth conditional content of these sentences, although the two sentences would be used differently.

The problem with an approach to *-han*'s contribution to meaning that is grounded in the truth conditional/non truth-conditional distinction is that it is not able to explain how addressees are able to interpret speaker meaning. While *-han* can be said to contribute to non-truth conditional content (which is the consensus of all previous literature on *-han*), like the notion of implicature, this identification of its contribution to meaning does not provide a tool for explaining the polyfunctionality of *-han*.

My analysis of *-han* in naturally occurring Finnish speech shows that the inferences that hearers are prompted to make on the basis of utterances containing *-han* rely crucially on the role of context. Van Dijk (2008) discusses context both as a general notion that relates an event to the environment in which it occurs and as an academic term used in fields as diverse as literature, biology, and art to account for different properties of discipline specific texts or phenomena. He notes that, within linguistics, the notion context did not become important to the study of language until the emergence of interdisciplines such as pragmatics, psycholinguistics, sociolinguistics, and the ethnography of speaking in the 1960's. However, some linguists still omit the role of context from linguistic accounts, citing its chaotic and idiosyncratic nature. In contrast to this point of view, Van Dijk (2008) argues that we cannot properly understand complex phenomena without understanding their context.

According to Huang (2007), a precise definition of context is elusive, but from a theory-neutral point of view it can be described as "referring to any relevant features of the dynamic setting or environment in which a linguistic unit is systematically used" (p. 16). He points to Ariel's (1990) 'geographic' division of context as a way to view context as a composition of sources, including the physical context, linguistic context, and general-knowledge context. The physical context refers to the physical setting of an utterance whereas the linguistic context of an utterance refers to the utterances in the same discourse. General-knowledge context refers roughly to a set of background assumptions that are shared by the speaker and addressee. Stalnaker (1974) referred to these background assumptions as *common ground*, which he described as propositions whose truth a speaker takes for granted, or seems to take for granted, when making a statement. He termed these assumptions *presuppositions*. He argues that the ability to take certain facts for granted makes communication more efficient, and that the

efficiency of communication increases as common ground increases. Furthermore, he points out that unless some facts can reasonably be treated as part of the common ground, communication would not be possible at all. Stalnaker (1974) illustrates the notion of common ground informally by noting that when he would discuss politics with his barber, they would both take an elementary set of facts for granted. These included the fact that Richard Nixon was president, that he had recently defeated George McGovern to become president, and that the United States had recently been involved in a war in Vietnam. Formally, Stalnaker defines common ground as the approximation of the notion of pragmatic presupposition, which he defines as follows:

(23) A proposition  $P$  is a pragmatic presupposition of a speaker in a given context just in case the speaker assumes or believes that  $P$ , assumes or believes that his addressee assumes or believes that  $P$ , and assumes or believes that his addressee recognizes that he is making these assumptions, or has these beliefs.

(Stalnaker 1974, p. 49)

To avoid confusing Stalnaker's use of the term *presupposition* with semantic or semantico-pragmatic uses of the term, in this study I use the term *common ground* to refer to background assumptions of the kind Stalnaker intended. Within relevance theoretic terms, common ground assumptions can be seen as subsuming hypotheses speakers and listeners make about each other's cognitive environments.

As the native speaker judgments of acceptability and the naturally occurring spontaneous Finnish speech data show, information in the common ground and the context of a conversation (including physical context) is where hearers find the information that the interpretation of a

*-han*-containing utterance relies on. The data also illustrate that the inferences hearers make from one situation to the next changes based on the information in the common ground. In other words, inferences prompted by the presence of *-han* in an utterance are entirely contextually dependent. This underscores my argument that an analysis of *-han* whereby its function is taken to be invariant from one use to the next is not able to account for its polyfunctionality.

### 3.3 Relevance theoretic studies of DPs/DMs

The differences between relevance theoretic approaches to DPs and other approaches are not limited to the theoretical and terminological distinctions discussed in section 3.2. They also differ with respect to how they characterize DPs. Within Gricean approaches to DPs, these elements have been characterized primarily as carrying out a connective function in discourse (Schourup 1999). These analyses have often framed DPs as contributing to discourse coherence by connecting units of discourse or text. As Blakemore (1987) points out, this characterization cannot be maintained in light of data like the following, involving uses of *so*:

- (24) a. You take the first turning on the left.  
b. So we don't go past the university (then).

(p. 85)

- (25) [Seeing someone return home with parcels.]  
So you've spent all your money.

(p. 86)

Blakemore argues that both uses of *so* mark an implicated conclusion and that rather than framing *so* as connecting two units of discourse, it must be seen as relating propositional content that may or may not have actually been expressed. Schourup (1999) notes that, while examples like (24) and (25) seem to suggest that the characterization of DPs as contributing to discourse coherence should be abandoned, there has been reluctance to do so because this characterization is based on a more general assumption that discourse coherence is central to utterance interpretation (see Hobbs 1979). Within relevance theoretic studies, coherence is seen as a derivative product of successful communication, which itself is driven by the search for relevance (see section 2 of this chapter) (Schourup 2011). Therefore, examples like (24) and (25) can be given a unified account. Furthermore, while relevance theory treats coherence as a by-product of the search for relevance, it too sees connectivity as a central characteristic of DPs (Schourup 1999).

Still, while the notion of connectivity can be used to describe how *-han* functions in certain contexts, it is not able to account for the wide variety of uses attested for *-han*. This is probably why Hakulinen et al.'s (2004) Gricean analysis of *-han* as conventionally implicating that the situation referenced by the *-han*-containing utterance is familiar to the interlocutors does not include the claim that *-han* connects units of text. Also, as the native speaker judgments of *-han* utterances in section 3.5 will show, *-han* utterances can be used so long as the addressee has some way of deriving the speaker's intended meaning and do not have to be connected to previous discourse. In fact, the scenarios used to test native speaker judgments of acceptability do not embed *-han* in discourse at all.

In Blakemore's (1987) early work, she uses the term *discourse connective* to identify "expressions that constrain the interpretation of the utterances that contain them by virtue of the

inferential connections they express” (p. 105). This connectivity is framed in light of the fact that relevance theory sees cognitive processes rather than discourse as the object of study in research on communication. Thus, while non-relevance theoretic approaches have viewed this connectivity as being between units of discourse, relevance theorists have analyzed it in terms of the input that is provided by DPs to the cognitive processes that underlie successful communication.

Schourup’s (2011) analysis of *now* provides a good example of how the two approaches to DPs discussed above differ from another. Schourup discusses Schiffrin (1987) and Aijmer’s (1988) coherence based analyses of *now* before arguing for a relevance theoretic approach. Schiffrin claims that *now* occurs in discourse when the speaker is progressing through a cumulative series of subordinate units. She provides the following schema to illustrate the positioning of *now* in a discourse sequence. Note that parentheses indicate optionality.

(26) (explicit identification of unit 1)

(**now**) subordinate unit 1a

((**now**) subordinate unit 1b)

(Schourup 2011, p. 2111, citing Schiffrin 1987 p. 232)

Example (27) illustrates a use of *now* in which all of the options in (26) are illustrated:

(27) They aren’t brought up the same way. **Now** Italian people are very outgoing, they’re very generous. When they put a meal on the table it’s a meal. **Now** these boys were Irish. They lived different.

(Schourup 2011, p. 2111, citing Schiffrin 1987, p. 233)

Schiffrin argues that the first statement in (27) introduces the comparison and each of the statements introduced by *now* as introducing the subtopics involved in the comparison.

Aijmer's (1988) account of *now* also focuses on its role in contributing to discourse coherence. She argues that the general function of *now* is to “establish and maintain textual coherence between parts in the discourse which seem at first sight to lack coherence or where coherence can only be established by means of presuppositions, thematic connections between elements in the text etc. [...] *Now* can be viewed as a signal to the hearer to reconstruct a discourse structure in which the coherence of the utterances connected by *now* becomes apparent” (Schourup 2011, p. 2112, citing Aijmer 1988, p. 16). Aijmer points to uses of *now* that mark shifts from disputable events and other instances of *now* in which the speaker modifies or qualifies his ideas or opinions in relation to those expressed by the interlocutor (or some other contrasting opinion). The following example illustrates the latter function:

(28) People in housing estates are living on the charity of their neighbors and whether they like it or not they can't help it. Now, I do not agree with evicting these people.

(Schourup 2011, p. 2113, citing Aijmer 1988, p. 21)

Thus, both Schiffrin (1987) and Aijmer see *now* as functioning to contribute to inter-utterance discourse coherence (Schourup 2011). In contrast, Schourup analyzes *now* as a discourse marker that provides an input to the inferential processes that relevance theory views

as central to its cognitive approach to communication. He notes that examples such as (30) and (31) suggest that the function of *now* cannot be seen as contributing to coherence relations:

(30) [New teacher to students on the first day of class.]

**Now**, before we begin, let me just be sure everyone is here for the course in applied cosmology.

(31) [Kim knows her son Paul has applied to Stanford, but she knows this only because she happened to see the application materials on his desk weeks earlier. When he returns home one evening, she hands him a thick, unopened envelope.]

Kim: **Now**, don't get too excited, but this came in the afternoon mail.

(Schourup 2011, p. 2118)

Schourup notes that the functions attributed to *now* by Schiffrin and Aijmer, and illustrated in the examples above, can broadly be generalized as referring to points of discontinuity in discourse. He adds that the problem with coherence-based approaches to this discontinuity is that they cannot account for examples like (30) and (31) because there is no linkage to a prior utterance segment, which coherence-based approaches see as central to *now*'s role in discourse.

Similarly, the analysis of *-han* by Hakulinen et al. (2004), as conventionally implicating the familiarity of the situation referenced by the *-han*-containing utterance, relies on a single feature of its contribution to discourse. Just as *now* is able to link segments of discourse, *-han* is able to occur in an utterance which refers to a situation that is familiar to the interlocutors, but



this does not mean that these are central to their contribution to discourse. These types of analyses are particularly problematic for polyfunctional elements like *-han*. To explore this issue, I examine Ler's analysis of the Singapore Colloquial English (SCE) DP *lah*.

Ler (2006) provides a relevance theoretic account of the SCE DP *lah*. She argues that the monosemic approach to these particles made possible by relevance theory is preferable. The DP *lah* has been variously analyzed as functioning as an intensifying particle, a marker of informal style, signaling intimacy, as persuading, wheedling, or rejecting, as expressing solidarity or emphasis, and as communicating attitudes of obviousness, persuasion, impatience, friendliness, hostility, and annoyance (see references in Ler 2006). Ler notes that even the extensive list of functions she provides is not exhaustive. She proposes that *lah* as a marker of solidarity, persuasion, and annoyance can be explained in terms of a relevance theoretic approach, and she argues that her account can also explain all the communicative effects associated with *lah*.

The examples Ler analyzes in her study are taken mainly from either personal conversations or overheard statements and from the lexical corpus of Singapore English (ICE-SIN). She notes that the following types of examples have been used to argue that *lah* is a marker of solidarity:

(32) Don't be shy *lah*. [We are friends]

(33) No use trying to hide our roots *lah*. [We are Singaporeans]

(2006, p. 155)

Ler makes the case that the problem with such an analysis is that it cannot account for uses of *lah* that do not communicate a feeling of solidarity (which will be discussed shortly). She argues that

the examples above, as well as counterexamples, can be accounted for if *lah* is instead analyzed as contributing to procedural meaning by communicating that the speaker wishes for the hearer to recognize their shared assumptions. This analysis explains the function of *lah* as a marker of solidarity by connecting the appeal to shared assumptions to a feeling of rapport between communicators. Ler phrases this by saying that, “if I make known to you that there are common assumptions between us, I am treating you as someone I can relate to, as a member of a certain community which is also mine. In so doing, I create an impression of rapport between us” (2006, p. 160).

Ler shows that her analysis of *lah* can also account for uses of the particle in imperatives to add a sense of pleading or persuading. Consider the following example:

(34) Come with us *lah*. [Won't you?]

(Ler 2006, p. 156, citing Oxford English Dictionary online, 2000)

As with uses of *lah* analyzed as a marker of solidarity, Ler argues that the sense of pleading or persuading arises from the speaker's desire for the hearer to recognize the shared assumptions behind the utterance. If a hearer seems unable to recognize these assumptions, then *lah* can be seen as an “attempt to persuade the hearer to accept the speaker's point of view” (p. 161).

Ler explains the use of *lah* as conveying annoyance or hostility along the same lines. Consider (35).

(35) I don't want to eat *lah*. [Don't force me!]

(Ler 2006, p. 156)

Ler argues that, in cases like (35), if the hearer seems to not recognize shared assumptions as they are intended to by the speaker, then the speaker's insistence that the hearer do so can communicate an attitude of annoyance. To illustrate how the hearer derives these communicative effects, consider another example:

(36) Context: A and B are discussing how the economic downturn has affected business and as a consequence organizations have to be prudent to protect the interests of shareholders.

A: So you know we are not spared *lah*.

B: Uhm nice to know that I am not alone in all this.

A: You are not spared okay.

(Ler 2006, p. 159, citing ICE-SIN-S1B-077)

Recall that relevance theory sees the task of constructing an appropriate hypothesis about the intended contextual assumptions as one of the sub-tasks in the overall comprehension process. Ler suggests the following list is included in A's contextual assumptions.

(37) Premise 1. The economic downturn has affected A's business.

Premise 2. A knows that other businesses have been also affected by the downturn.

- Premise 3. A wants B to know that his business has been affected by the downturn.
- Premise 4. A wants to reassure B that he has his understanding.
- Premise 5. A knows that he has to be prudent.

(Ler 2006, p. 159)

Ler suggests that in uttering the *lah*-containing sentence in (37), the speaker is not only informing B that they are not spared the consequences of the economic downturn but also indicating his desire for B to recognize the shared assumption behind the utterance, which Ler paraphrases as in (38):

- (38) A wants to reassure B that he has his sympathy.

(Ler 2006, p. 160)

Ler argues that *lah* provides the instruction to recognize this assumption, which B does by saying that it is nice to know that he is not alone in all this.

Ler maintains that the other various uses of *lah*, such as obviousness and friendliness, can be explained as resulting from this same appeal for the hearer to recognize shared assumptions, which is communicated by *lah* in the examples above. Ler further sees this functions as an explicit guarantee of relevance, which encourages the hearer to expand the contextual assumptions needed to obtain intended contextual effects.

As Ler does in her analysis of the DP *lah*, in my analysis of the DP *-han* I argue that the various functions attested for the DP result from its procedural contribution to meaning. To make this case, I begin by discussing previous accounts of *-han* in the next section.

### **3.4 Previous analyses of *-han***

As noted in the introduction to this chapter, the previous research on *-han* is characterized by a lack of consensus about the different meanings and functions it can have as well as the relationship between these meanings and functions. I suggest that this is due to the fact that all of the previous analyses of *-han*'s contribution to meaning have been driven by a search for the meaning of the element itself. The fundamental difference between my approach and previous analyses is that I argue that *-han* itself does not encode meaning in the conceptual sense at all, but rather encodes a procedure whereby the intended interpretation of an utterance containing it can be recovered based on information that the speaker assumes is accessible to the addressee. The benefit of this approach is that it allows for a unified way of accounting for many of the functions and meanings previously associated with *-han*. Rather than trying to find a common underlying meaning, I argue that the meanings previously associated with *-han* are actually by-products of the inferential process signaled by its presence. The examples and translations in this section are repeated here exactly as they appear in the cited sources. The translations include different types of speech formulae, such as *you know*, *after all*, *I wonder* and others, to capture the contribution of *-han* from one example to another. It is important to note that *-han* is not exactly equivalent to any of these, and translating sentences containing it into English is not only highly dependent on the utterance and context it is found in, but also on the translator.

Some of the earliest work on *-han* comes from Penttilä (1957), who does not give *-han* any kind of core lexical meaning but merely lists its functions. The first function Penttilä attributes to *-han* is the ability to give a sentence a flavor that is appealing to the listener. He cites the following example to illustrate this function:

- (39) Olet=han                    itse=kin            samaa            mieltä  
       be.2.S.PRS=han        self=also        same.PART    mind.PART  
       “You are yourself of the same opinion, you know.”

(p. 120)

Penttilä does not say what he means by ‘appealing to the listener’. However, with respect to the example above, we can imagine that the ‘appeal’ is for the listener to recognize the truth of the proposition expressed by the utterance of (39). Following the approach to *-han* put forth in this dissertation, the notion of ‘appealing to the listener’ can be seen as a derivative function of the instruction to access the information necessary to make the intended inferences.

Penttilä also attributes to *-han* the ability to mitigate an expression. This function is also noted by both Karttunen (1975a) and Hakulinen (1976), who assert that *-han* can be used for sentence amelioration, and by Raevaara (2004), who observes that *-han* can be used to soften questions or to give them the flavor of a suggestion. Penttilä provides the following examples to illustrate this function of *-han*:

- (40) a. Mitä=hän            tuolla            tehdään?  
       what=han            there            do.PRS.PASS

“What’s being done over there, I wonder?”

b. On=ko=han            moisessa            perää?

be.3.S=Q=han            such.INE            truth

“Is there any truth in something like that, I wonder?”

(p. 120)

I suggest that this feature of *-han*, whereby it changes the flavor of questions to which it is attached, can also be explained as resulting from procedural encoding. Since *-han* communicates the belief on the part of the speaker that the addressee can recover their meaning, I suggest that with questions, the presence of *-han* shifts the interpretation towards what the speaker means by his or her question and away from an expectation of an answer to that question. For example, (40) a. is meant less as a means to find out what is happening at a location removed from the speaker and addressee and more as a way of bringing the addressee’s attention to a mutual point of reference. While it would not be unacceptable to provide an answer for the question by saying for example ‘I think those two men are fighting’, it would be equally acceptable for the addressee to provide an acknowledgment that she has determined the reference for *over there* by directing her attention to the correct location. Similarly, (40) b. can be seen less as a question about whether or not there is any truth to the claim or topic at hand and more as a suggestion that there is reason to question the truth of whatever is being discussed. Furthermore, it suggests that the addressee has reason to know why the speaker would make this suggestion. Again, while one can respond to the utterance in (40) b. with an answer, one can also respond to it with just an acknowledgment of the reasons the speaker is wondering whether or not there is any truth to “something like that”, perhaps by saying “yeah, really!”.

Finally, Penttilä characterizes *-han* as being explanatory of what was said before, which he illustrates with the following example:

- (41) Hän tuntee minut, on=han  
he/she know.3.S.PRS me  
be.3.S.PRS=han  
hän opettaja-ni  
he/she teacher-1POSS  
“He/she knows me, he/she is, after all, my teacher.”

(p. 120)

Of all of the functions Penttilä attributes to *-han*, this one is perhaps most straightforwardly explained as resulting from its procedural encoding. In the first clause, the speaker claims that she is known by someone:

- (42) Hän tuntee minut...  
he/she know.3.S.PRS me  
“He/she knows me....”

The second clause provides a premise for this claim:

- (43) ... on=han hän opettaja-ni  
be.3.S.PRS=han he/she teacher-1POSS



... he/she is, after all, my teacher.”

This clause communicates the speaker’s assumption that, if someone is your teacher, then it provides a premise for making the claim that he or she knows you. What is the information that the speaker assumes the addressee has access to in order to derive this meaning? In this case, it is both the linguistic context (the explicitly stated information that the speaker knows someone and that he is their teacher) and the premise that students know their teachers.

Similar to Penttilä, Karttunen (1975a) provides a list of functions for *-han*, including amelioration, contradiction, new discovery, and reminder of new truth. Unlike Penttilä, Karttunen reduces these functions to one basic meaning, which is essentially an acknowledgment of the speaker’s authority to make a particular claim. This sentiment can be explained by the procedural encoding of *-han*. If a speaker uses *-han* to communicate to the hearer that the hearer has access to the contextually relevant information needed to recover the intended interpretation of an utterance, the speaker must simultaneously communicate his belief that he is in a position to encourage the hearer to access this contextually relevant information.

Hakulinen (1976) attributes several functions to *-han*, including appealing to the listener, serving as something akin to the meaning of an explanatory conjunction, expressing something newly discovered, and making statements milder. In the last of these, she includes such functions as implying possibility or doubt and expressing modesty or indifference. Similar to Karttunen, Hakulinen reduces these functions to two: when attached to a verb *-han* serves to soften questions, assertions, and commands; when attached to the first constituent of a declarative sentence *-han* marks the sentence as containing familiar rather than new information. She gives *-han* the fundamental function of conventionally implicating that the idea contained in the

sentence is in some way familiar. This analysis was directly challenged by Välimaa-Blum (1987), who analyzes *-han* as marking contextually new rather than familiar or given information. Välimaa-Blum argues that since most sentences contain given information marking a sentence as containing given information is redundant. She proposes that *-han* is instead a marker of a deviation from the regular flow of information.

Note that this type of contradiction between functions attributed to a single DP is also found in previous accounts of the Singapore Colloquial English DP *lah* discussed in section 3.3. While it is problematic for a single DP to be associated with contradictory functions when it is analyzed as having a particular contentful meaning, the relevance theoretic analysis of *-han* can account for cases where *-han* seems to mark old information as well as cases where it seems to mark new information. Consider the following example:

- (44) Tämä käsitys pohjautuu kielen kritiikkiin.  
 this view bases language's critique  
 "This view is based on a critique of language...  
*Kielen=hän* aina epäillään kavaltavan ajatuksen  
 language=han always suspect reveal thought.  
 ...Language, after all, is always suspected to reveal the thought."

(Välimaa-Blum 1987, p. 473, citing Hakulinen 1976, p. 29)

Hakulinen uses this example to show how *-han*-containing sentences make reference to givenness. She makes the case that *kieli* (found in the example in the genitive form *kielen*) is marked with *-han* because its occurrence in the previous sentence makes it given information.

Välilmaa-Blum (1987) asserts that, in (44), the *-han*-containing sentence actually introduces new information that supports the claim made by the speaker in the first sentence. Specifically, she argues that the presence of *-han* prompts the addressee to infer that the fact that ‘language is suspected to reveal thought’ is a premise for the view held by the speaker (the particulars of which are not provided by the data). This does not give any indication as to whether or not the speaker expects the hearer to know the information communicated by the *-han*-containing sentence in (62). However, the function of *-han* is independent of whether the sentence in which it is found expresses old or new information.

Under my account, the presence of *-han* in (44) communicates to the hearer the speaker’s belief that he has access to the information necessary to understand why the fact that language is suspected to reveal thought should be interpreted as a premise for the preceding statement. If the speaker in (44) has reason to believe that the hearer is familiar with the idea that language is suspected to reveal thought, then the use of *-han* points the hearer towards information that is familiar to them. If the speaker in (44) does not believe that the hearer is familiar with the idea that language is suspected to reveal thought, then the use of *-han* communicates the speaker’s belief that the hearer has access to the relevant contextual information necessary to interpret this fact as a premise for the preceding statement.

The most current analysis of *-han* comes from Hakulinen et al. (2004). Their account of *-han* is essentially the same as that found in Hakulinen (1976), which asserts that *-han* conveys the conventional implicature that the sentence containing the clitic references a situation that is familiar to the interlocutors. The analysis does not provide detail about whether the notion of ‘familiar’ includes only information in the common ground or if it can also include information made familiar to interlocutors through the physical context of the conversation. Nevertheless, my

analysis differs from that of Hakulinen et al. (2004) in an important way because I argue that *-han* does not conventionally encode anything, but rather that it signals an interpretive procedure that hearers must undertake.

### 3.5 A Relevance Theoretic Account of *-han*

The overall goals of the data collection for the present study were to determine what type of meaning *-han* encodes in spontaneous spoken Finnish and to identify the kinds of situations licensing the use of *-han*. My interest in determining the latter grew out of the apparent contradictions in previous analyses of *-han*.

By presenting a group of 12 native speakers with constructed scenarios and then asking them to judge the acceptability of the use of an utterance with *-han* versus the use of an utterance without *-han*, I was able to determine that what is significant with respect to a context licensing or not licensing the use of a *-han*-containing utterance is not the newness or oldness of the information in that utterance but rather the speaker's belief that the addressee has the ability to access the information (whether through previous knowledge, immediate context, etc.) needed to interpret the utterance as the speaker has intended.

I also collected data through naturally occurring conversations with native speakers of Finnish in order to examine the use of *-han* in spontaneous speech. The excerpts from these conversations will show how the different meanings associated with *-han* arise from inferences the hearer is prompted to make by the *-han*-containing utterance. However, before examining native speaker judgments of *-han* and naturally occurring uses of it in conversation, I first address the issue of whether or not the presence of *-han* affects the truth conditions of the

utterance containing it. Consider the pair of sentences below. The first is a sentence without *-han* and the second is its counterpart with *-han*.

(45) a. Mervillä on uusi koira.  
Mervi.ADE have.3.S.PRS new dog  
“Mervi has a new dog.”

b. Mervillä=hän on uusi koira.  
Mervi.ADE=han have.3.S.PRS new dog  
“Mervi has a new dog.”

Under the classic notion of truth conditions (based on Lewis 1972, Davidson 1984 and broadly adopted within Gricean and neo-Gricean approaches to pragmatics), the truth conditions of (45) a. and b. are identical. In other words, both a. and b. are true iff the specific *Mervi* in question has a new dog. Within a relevance theoretic approach, where truth conditions are paired with cognitive representations rather than sentences, I argue that *-han* falls on the non-truth conditional side of meaning. The exact implicature conveyed by the presence of *-han* in (45) b. is dependent upon the context in which it is uttered. It might be uttered to a friend upon sighting Mervi in the park with an unfamiliar dog. The speaker’s use of *-han* might indicate their surprise at Mervi’s acquisition of a dog, perhaps if Mervi had previously revealed to the speaker an allergy to dogs or a reluctance to take on the responsibilities of pet ownership. However, the fact of the speaker’s surprise or the reasons for it need not be inferred as such by the hearer. The presence of *-han* will merely signal to the hearer the speaker’s belief that the hearer will be able

to interpret the utterance containing it. If both speaker and hearer are sitting on a park bench when Mervi and her new dog come into view, *-han* signals the fact that Mervi and her new dog are contextually salient for both listener and hearer and that mention of them is made relevant by this fact. However, this is not part of the truth conditions of what is communicated by (45) b. The utterance of (45) b. is not made false if the hearer is sitting so that she cannot see Mervi and her new dog, although its utterance might seem awkward to the hearer until they are able to discern through context what the relevance of the utterance is.

It is important to note that the speaker's surprise at the fact of Mervi having a new dog can be communicated without the use of *-han*. The speaker's intonation might signal this fact, for example. The difference in interpretation would arise in the scenario in which the hearer cannot see Mervi and her new dog. The utterance of (45) a. in this scenario would not be at all awkward to the hearer because they would not have an expectation that the utterance is supposed to be made relevant by some type of contextual factor. This points to a distinguishing feature of *-han* constructions explored next, which is the fact that the use of *-han* is infelicitous in 'out of the blue' utterances.

The data that follows reveals that native speakers of Finnish have clear intuitions about the kinds of contexts that license the use of a *-han*-containing utterance. First I present evidence that native speakers find the use of *-han* unacceptable when the utterance containing it describes a situation that is either unfamiliar or unrecoverable from the discourse context. Then I demonstrate that native speakers find the use of *-han* acceptable when the utterance makes reference to a situation that the speaker believes is previously unknown to the hearer as long as the situation is recoverable either from the immediate extralinguistic context in which the exchange takes place or from some information contained in the utterance itself. Finally, I show

that the occurrence of *-han* in contexts where native speakers find its presence acceptable is entirely optional. In other words, *-han* is not obligatory to preserve the intended meaning.

The data in (46) and (47) are a minimal pair differing only in the presence of *-han*. They were constructed to test my proposal that *-han* communicates that the speaker assumes the hearer to have the information necessary to interpret the *-han*-containing utterance in the way the speaker has intended. If this is correct, then the use of *-han* should be unacceptable in a situation in which the hearer does not have access to information necessary to interpret the *-han*-containing utterance. The native speaker judgments of acceptability below will show that this is in fact the case.

(46) Context: You notice that a window in the kitchen has a crack in it. Upon noticing the window with the crack, you walk into the living room where your spouse is sitting on the couch. You have no reason to believe that your spouse knows about the window in the kitchen with the crack. You tell your spouse about the window by uttering A:

A:           Ikkuna=*han*           on     rikki.  
          window=*han*           is     broken

“The window is broken.”

Judgment of all native speakers:     “That’s odd”

Comparing (46) to (47), we see that removing *-han* from the utterance informing the hypothetical interlocutor of the broken window changes the native speaker judgment of acceptability.

(47) Context: Same as in (46).

A: Ikkuna on rikki.  
window is broken  
“The window is broken.”

Judgment of all native speakers: “That’s fine”

These native speaker judgments of acceptability reveal that it is perfectly acceptable to inform someone of a broken window, even if the addressee is unable to see the window, as long as the utterance conveying this information does not contain *-han*. The presence of *-han* in this case is unacceptable because the hearer is unable to access the information necessary to interpret the utterance containing it. This is because the presence of *-han* communicates an assumption of relevance that relies on the hearer’s ability to access some information that the speaker believes is accessible to the hearer. In the case of (47), the speaker is simply informing the hearer of entirely new information, which does not require the hearer to have access to any specialized information regarding the window. This type of situation does not permit the use of *-han*.

However, this does not mean that the situation referenced by the *-han*-containing utterance must be in some way familiar to the hearer (as suggested by Hakulinen et al 2004). In fact, the information in the *-han*-containing utterance can be entirely new, so long as the speaker has reason to believe the hearer has access to the information necessary to interpret the utterance. To illustrate this point, consider the following native speaker judgment.



(48) Context: You and your spouse return home from a shopping trip. As your spouse is putting away groceries in the kitchen cabinets, you notice that a window in the kitchen has a crack in it that was not there when you left for the shopping trip. You have no reason to assume your spouse has seen the window. To inform them of the window you utter:

A: Ikkuna=*han* on rikki.  
window=*han* is broken  
“The window is broken.”  
Judgment: “That’s fine.”

The significant difference between the contexts in (46) and (48) is that the contextual information necessary to interpret the speaker’s utterance is accessible to the hearer in (48), but not in (46). I argue that this is because the procedural meaning of *-han* is incompatible with situations in which the hearer cannot access the information necessary to retrieve the speaker’s intended meaning. However, note that speakers had the same judgment of (49), which is (48)’s counterpart without *-han*.

(49) Context: Same as in (48).

A: Ikkuna on rikki.  
window is broken  
“The window is broken.”  
Judgment: “That’s fine.”

Since one of the features often associated with DPs is that they are optional (see chapter 2), it is not surprising that speakers find *-han*'s absence acceptable. However, as with *lah* in Singapore Colloquial English, I argue that the use of *-han* guides the interpretation of an utterance by communicating the speaker's belief that the hearer has access to *specific* information that will allow them to interpret the intended meaning. The presence of *-han* guides the hearer to search for the relevant information and it expresses the assumption that the hearer will succeed in finding this information (e.g., the presence of the cracked window). On the other hand, the absence of *-han* would likely lead the hearer to ask for the more specific information needed, perhaps by asking 'where' or 'which one'?

Next, I present data that demonstrates the use of *-han* in naturally occurring spontaneous spoken Finnish. The data illustrate how some of the different meanings associated with *-han* in previous literature on the clitic fall out from the inferences hearers are prompted to make based on the utterance containing *-han* and the context of the utterance. I discuss these inferences in terms of the sub-tasks of the overall comprehension process, as laid out in relevance theory (see section 3.2), which involve the formulation of hypotheses on the part of the hearer about implicated premises and implicated conclusions. Again, I show that the presence of *-han* communicates the speaker's belief that the hearer has access to the information necessary to recover the speaker's intended meaning and thereby contributes to procedural meaning. I present data by first giving the context in which the speech being analyzed occurred and then give a line by line translation of the data with a detailed gloss of the utterance containing *-han*.

I collected the data with the prior consent from six participants who are all native Finnish speakers from Southern Ostrobothnia, Finland. The speakers in the examples consist of one man

and five women who range in age from 18 to 79. All have resided in Ostrobothnia for the majority of their lives. In each example my conversational turn is marked by JP. The first example is between me and a woman and her daughter.

(50) Context: Susanna describes her remote pursuit of a degree from the University of Jyväskylä to me. Her daughter Kaija is sitting next to her mother during this conversation. Susanna and Kaija live in Ilmajoki, a town in Ostrobothnia, Finland, which is approximately 128 miles from Jyväskylä. Kaija is an 18-year-old student and her mother works at a daycare center in nearby Seinäjoki. Kaija takes local transit to and from school each day.

JP: ...minkä yliopiston kautta sä teet?

“which university are you doing [it through]?”

Susanna: Jyväskylän

“Jyväskylä” (meaning the University of Jyväskylä)

JP: Jyväskylä, niin pitääkö sun mennä Jyväskylään asti vai?

“Jyväskylä, so do you have to go all the way to Jyväskylä or?”

Susanna: no, nyt tota

“well, now”

Kaija: yleensä

“usually”

Susanna: kyllä, yleensä on pitäny, nyt tällä Jyväskylän yliopistolla on niinku

“yes, I’ve usually had to, now the University of Jyväskylä has...

oma piste täällä niin mä saan tehdä siirtotentinä

...its own point here so I can do remote exams”

JP: joo

“yeah”

Kaija: nii mut silti se saa jäädä kotihin koko muuksi päiväksi

“so but still she can stay home for the rest of the day”

Susanna: joo

“yeah”

Kaija: (addressing Susanna)

niin ja sä=*hän* voit sitten viedä ja hakea

so and you=*han* can then take and get

mut koulusta

me school

“so *you=han* can take me to and get me from school”

Susanna: en voi

“no, I can’t”

The conversation preceding Kaija’s *-han*-containing utterance begins with Susanna explaining to me that she is pursuing a degree from the University of Jyväskylä. As noted in the description of the context, Jyväskylä is well over a hundred miles from Kaija and Susanna’s home in Southern Ostrobothnia. When I ask her whether she has to travel all the way to Jyväskylä in pursuit of her degree, she tells me that this used to be the case, but that now the university has a remote point (referring to a satellite campus) in her local area, allowing her to take exams remotely. Kaija

adds that this allows Susanna to be at home for the rest of the day (in reference to days that Susanna takes exams). Susanna affirms this fact. At this point, Kaija utters:

(51) *niin ja sä=han voit sitten viedä ja hakea*

so and you=han can then take and get

*mut koulusta*

me school

“so *you=han* can take me to and get me from school”

Here Kaija claims that Susanna can take her to and get her from school. We can see that Kaija’s claim relies on the information she herself revealed immediately before her utterance, namely, that Susanna is home for much of the day when she takes remote exams. However, the connection between Susanna’s previous utterance and Kaija’s utterance is not explicit. To infer Kaija’s meaning, Susanna must make hypotheses about Kaija’s implicated premises and conclusions. The former must include at least the following.

(52) a. Susanna is less busy or somehow more available on remote exam days.

b. Kaija wants Susanna to take her to and from school.

The implicated conclusions of Kaija’s utterance can be phrased as in (53).

- (53) a. Kaija believes that Susanna can take her to and from school on exam days because she does not have to travel.
- b. Kaija is suggesting that Susanna take her to and from school.

The implicated premises and conclusions may or may not consist of more than what I have put forth in (52) and (53), including past requests by Kaija for Susanna to take her to and from school, the inconvenience of using alternative ways of getting to school, etc. However, to infer Kaija's intended meaning, Susanna only needs to access the implicated premises in (52) and to arrive at the implicated conclusion in (53) (perhaps even excluding (53) b.). The presence of *-han* instructs Susanna to access the information necessary to infer Kaija's intended meaning, which relies on the premises and conclusions implicated by Kaija's utterance, and which can be paraphrased as follows:

(54) I believe that you (Susanna) can take me to and from school on days when you take remote exams since you do not have to travel on those days.

Kaija's use of *-han* illustrates the function of *-han* which Karttunen paraphrased as the sentiment "I am in a position to say this to you" (Karttunen 1975a). Kaija is "in a position" to make the claim in (51) because of the information previously revealed by Susanna that she does not have to travel to take remote exams. Kaija's *-han*-containing utterance might also be seen as illustrating *-han*'s ability to mitigate or ameliorate certain expressions, another function noted by Karttunen (1975a), and also by Hakulinen (1976), and Raevaara (2004). The presence of *-han* in Kaija's utterance allows her to *suggest* that it is possible for Susanna to take her to and get her

from school rather than directly *asserting* it. This function of *-han* is in some ways more abstract than others and relies on the intuitive sense of native speakers that an assertion, question, or command with *-han* has less ‘strength’ than one without *-han*.

Kaija’s utterance can also be seen as expressing something newly discovered, a function suggested by Hakulinen (1976). Because Kaija conveys the underlying premise of her utterance as being the information she has just shared about Susanna’s schedule on remote exam days, it suggests that the explicit content of Kaija’s utterance has just occurred to her. In this sense, Kaija’s utterance also aligns with Vålímáa-Blum’s (1987) analysis of *-han* as marking sentences that contain new information. However, it can also be seen as aligning with Hakulinen’s and Hakulinen et al.’s (2004) analysis of *-han* as marking utterances that refer to situations familiar to the interlocutors. Since Kaija’s utterance refers to Susanna’s schedule on exam days (via the implicated premise), it refers to information that is mutually known to Kaija and Susanna, even though the explicit content of the utterance is new.

All of these functions simply describe how the *-han*-containing utterance is used in discourse. However, they fall out from the interpretive process that the hearer (in this case, Susanna) must undertake in order to arrive at the speaker’s (Kaija’s) intended meaning.

As the next example illustrates, *-han*-containing utterances may function differently from one another, but their interpretation always relies on information that the speaker assumes the hearer to have access to.

(55) Context: Helena describes the location of a time-share vacation home recently acquired by her mother near the town of Ähtäri, Finland. Many Finns own or have access

through relatives to summer cabins and typically spend several weeks out of each year at cabins either in forests or by lakes. Helena and her mother both reside in Seinäjoki, Finland.

Helena: siinä on se Mesikämmen Hotelli, ihan muutaman sadan metrin  
“there is the Mesikämmen Hotel, just a few hundred meters...  
päässä niin se ei ole minkään metän keskellä.  
...away so it’s not in the middle of any kind of forest”

JP: joo  
“yeah”

Helena: *ei-hän* äiti uskaltaisi olla  
Neg=han mother dare be  
“mother wouldn’t dare be there [otherwise]”

In (55), Helena’s use of *-han* can be seen as having the same type of intuitive connection to the preceding discourse as Kaija’s use of *-han* in (50). Having just explained that her mother’s vacation home is proximate to a large hotel, and not in the middle of the forest (as many Finnish summer cabins tend to be), Helena uses the *-han*-containing utterance to explain that her mother wouldn’t dare to be there if this were not the case. Helena’s *-han*-containing utterance relies on a number of implicated premises including at least the following:

- (56) a. Most Finnish summer cabins are located in remote areas.
- b. Helena’s mother’s time-share is not located in a remote area.



- c. There are dangers associated with being in remote areas.

The conclusion reached from Helena's utterance can be phrased as follows:

(57) It would be undesirable for Helena's mother's time-share to be located in a remote area.

The conclusion in (57) relies on additional background knowledge that is not explicitly stated in (55) at all, which is the fact that Helena's mother stays at the time-share by herself. Helena's intended meaning can be paraphrased as follows:

(58) My mother would not dare to spend time at a traditional summer cabin that was located in a remote area.

The information the hearer needs to access in order to recover the intended meaning put forth in (58) include at least the premises and conclusions in (56) and (58), but as with Kaija's *-han*-containing utterance in (50), may or may not include more.

Helena's *-han*-containing utterance can be seen as illustrative of the function of *-han* that Penttilä (1957) characterized as being explanatory of what was said before. The implicature in (55) explains the relevance of the information Helena has revealed in the preceding discourse about the location of her mother's time-share. This instance of *-han* cannot be straightforwardly identified as illustrating the function of marking either old or new information, since it is more of an expression of opinion rather than a statement of fact. If we examine the next example, we can

see that there is reason to believe that the distinction between old and new information is entirely incidental to uses of *-han*, and that the presence of the particle relies entirely on the speaker's assumption about the hearer's ability to recover their meaning.

(59) Context: Amilia describes to me a situation in which she travelled with the wrong type of bag, which she did not realize until she arrived at her destination.

Amilia: Tuli väärä laukku mukaan, se pitää olla semmoinen että molemmat  
“I took the wrong purse, it has to be the kind that it leaves...  
kädet jää vapaaksi, sen sitten vasta huomasin siellä  
... both of your hands free, I only realized that when I got there..  
*oli=han* sitä tavaraa  
was=han that stuff  
“[Although] I had my stuff..  
oli kännykkä ja oli rahaa ja kaikkia  
...I had my cell-phone and money and everything”

The use of *-han* in (59) relies specifically on the relevance theoretic notion that communication involves entertaining representations of the cognitive environment of listeners. Amilia's *-han*-containing utterance serves to clarify her previous utterance stating that she has taken the wrong purse. In order for the hearer to be able to interpret Amilia's utterance, she not only has to access Amilia's assumption that her previous statement might have been misinterpreted, but also Amilia's assumptions about *how* her previous statement might have been misinterpreted. The

former is Amilia's implicated premise, while the latter forms Amilia's implicated conclusion.

These are formalized below:

(60) Implicated premise:

It is possible that the hearer misinterpreted the previous statement about the speaker having taken the wrong purse to mean that she did not have her belongings with her.

(61) Implicated conclusion:

The previous statement about the speaker having taken the wrong purse does not mean she did not have her belongings with her.

In addition to (60) and (61), the hearer must access more specific information in the previous discourse, such as the fact that Amilia did not specify that she took the wrong *kind* of purse rather than the *wrong* purse. Amilia's intended meaning can be paraphrased as follows:

(62) I had taken the wrong *type* of purse not the wrong purse (not someone else's, an empty one, etc), so I had all my belongings.

This meaning relies on Amilia's assumptions about how her previous statement might have been misinterpreted. Furthermore, it relies on Amalia's implicit assumption that the hearer entertains a representation of Amilia's cognitive environment, which includes a representation of the hearer's cognitive environment.

This type of correction on the part of the speaker of a misunderstanding she assumes to have caused by what she has said is also found in the beginning of the next example, which is a longer excerpt of conversation containing two uses of *-han*.

(63) Context: Tiina, the director of a daycare center in Seinäjoki, describes the challenges she has faced teaching Finnish to a young Estonian girl at her daycare whose family has recently moved to Finland.

Tiina: Se tyttö oppi kielen kyllä tosi hyvin ja se oli hirveän aktiivinen itsekin...

“That girl learned the language very well and was very active herself...

...ja ne oli kotona ostanut kirjoja jossa oli yksinkertaisia sanoja.

...and at home they had bought books with simple words.”

*Aluksi=han* se jutteli oikeastaan vaan aikuisten kanssa

beginning=han she spoke actually only adults with

“Actually, in the beginning she spoke only with adults.”

Prior to the *-han*-containing utterance, Tiina is discussing a young girl’s Finnish fluency and aptness to learn the language, as well as the fact that her family had provided her with books with simple Finnish words. Similar to Amilia’s *-han*-containing utterance in (59), Tiina’s utterance communicates to the hearer Tiina’s belief that the preceding discourse might have led the hearer to misunderstand her. It communicates Tiina’s belief that the hearer might have been led to think that the young girl in question was immediately fluent in Finnish with everyone and simultaneously corrects this possible misunderstanding. In order for the hearer to be able to

interpret Tiina's utterance, she has to access Tiina's assumption that her previous statements might have been misinterpreted and Tiina's assumptions about how these statements might have been interpreted. As with Amilia's utterance, these assumptions inform Tiina's implicated premises and conclusions. These are formalized as follows:

(64) Implicated premise:

It is possible that the hearer misinterpreted the previous statement regarding the fluency of the young girl learning Finnish to mean that the girl in question was immediately fluent in Finnish with everyone.

(65) Implicated conclusion:

The previous statement regarding the fluency of the young girl learning Finnish does not mean that the girl in question was immediately fluent in Finnish with everyone.

The intended meaning of Tiina's *-han*-containing utterance can be phrase as follows:

(66) By saying that this young girl learning Finnish learned it very well I did not intend to say that she was immediately fluent with everyone. In the beginning she spoke only with adults.

Just as with the interpretation of Amilia's *-han*-containing utterance in (59), the interpretation of Tiina's utterance in (63) relies on the ability of interlocutors to entertain representations of each other's cognitive environments, which includes ideas about possible misunderstandings and misinterpretations. In fact, in both of these examples the information that *-han* points to, which

the speaker assumes the hearer to have access to, is actually part of the speaker's own cognitive representation of the hearer's cognitive representation. The interpretation of the *-han*-containing utterances in (59) and (63) both rely on the hearer's ability to access the speaker's assumption about the possibility of the hearer having misunderstood the speaker's intended meaning. These types of corrective uses of *-han* illustrate Hakulinen's (1976) suggestion that *-han* serves to make statements milder by implying possibility or doubt. Alternatively, rather than implying the doubt the speaker has created for the hearer, we can see these uses of *-han* as communicating the contradiction that Karttunen (1975a) argues that *-han* communicates. Both of these examples are united by the interpretive procedure outlined above: the hearer must access the speaker's assumptions about how she might have interpreted the discourse. And while the *-han*-containing utterance in the example does not express contradiction of doubt in this way, it still relies on this interpretive procedure. In the same conversation, Tiina uses a *-han*-containing utterance to introduce new information that underscores an implied point in the preceding discourse.

- (67) Tiina: Mutta, jo viime kevääseen mennessä puhui jo pitkiä lauseita...  
 “But, already by last spring [she] spoke long sentences...  
 ...ja pystyi niinku pärjäämään ja samoin tuota esiopetukses...  
 “...and was able to hold her own and same thing in pre-school...”  
 ...kun se aloitti meillä niin pärjäs hirveen hyvin tehtävien annossa.  
 “when she started with us [she] did very well with assignments.”  
 Ajattele et *se=hän* oli kuitenkin jo siinä vaiheessa kolmikielinen!  
 Think that *she=han* was still already that point trilingual  
 “Consider that she was already trilingual at that point!”

Tiina's *-han*-containing utterance in (67) illustrates the abstract function attributed to *-han* that Penttilä (1957) characterized as 'appealing to the listener'. The preceding discourse provides a number of examples of Tiina's belief that the child in question is exceptional with respect to her acquisition of Finnish. She mentions that the child was using long sentences by this point and that she was performing well in pre-school on her assignments. The *-han*-containing utterance presents new information that the child in question is trilingual, underscoring Tiina's opinion of her. Her intended meaning relies on the assumption that the hearer has taken the information preceding and part of the *-han*-containing utterance as evidence for Tiina's implied opinion that the child in question is exceptional. The information revealed in the *-han*-containing utterance provides evidence for this opinion. This can be formalized as follows:

(68) Implicated premises:

- a. The information in the immediately preceding discourse is a premise for thinking that the child in question is exceptional.
- b. Being trilingual is exceptional.

(69) Implicated conclusion:

The fact that the child in question is trilingual is proof that she is exceptional.

Tiina's intended meaning can be phrased as follows:

(70) The fact that the child I am speaking of is trilingual is proof of my (implied) opinion that she is exceptional.

The interpretation of Tiina's *-han*-containing utterance relies not just on the information explicitly revealed in the preceding discourse but also on the hearer's inference as to what Tiina means to express by sharing that information. Even though the connection between Tiina's description of the young girl's exceptional capabilities seems straightforwardly connected to her implied opinion of her exceptional ability, she never explicitly states it. Even in the *-han*-containing utterance itself Tiina does not explicitly say that there is something exceptional about the fact that the child is trilingual, she simply implies that this is the case, and that it provides proof for the implication of the previous discourse.

Finally, consider this last example:

(71) Context: Seppo and I are talking about going out on weekends when we were young. Seppo is now in his mid-thirties and is discussing his lifestyle as an 18-year-old.

Seppo: Silloin olin viikonloput leipomolla töis...  
“At the time I was working weekends at the bakery...”  
...ja oli koulua, mutta silti ainakin kolme iltaa viikosta...  
“...and I had school, but still at least three nights a week...”  
...oli meno päällä.  
“...I went out.”

JP: Joo.  
“Yeah.”

Seppo: Ja sitä mä mietin et mistä se raha tuli?



“And I wonder where all that money came from?”

JP: Aivan.

“Exactly.”

Seppo: *On=han* siltä ajalta paljon hyviä muistoja.  
are=*han* that time many good memories

“Of course, there are many good memories from that time.”

Seppo discusses his habit of going out as a younger man, which he now has trouble understanding. He mentions that despite being in school and working on the weekends, he still managed to go out at least three times a week. Similar to Amilia and Tiina’s uses of *-han*, in which the *-han*-containing utterance corrects an assumed misunderstanding on the part of the hearer, Seppo’s *-han*-containing utterance serves to ensure the hearer that Seppo does not have entirely negative feelings about this part of his life, despite the impression he might have given in previous discourse. As with previous examples of these types of corrective uses of *-han*, the assumed misinterpretation is not derived from anything that has been explicitly stated, but rather from something the speaker has implicated. Though Seppo has not actually said that there was nothing enjoyable about this particular period of his life, his *-han*-containing utterance communicates an assumption on his part that the hearer might have interpreted him in this way.

As with previous examples, the hearer’s ability to interpret Seppo’s intended meaning relies on her ability to make hypotheses about Seppo’s implicated premises and implicated conclusions. These can be formalized as follows:

(72) Implicated premise:

The information in the immediately preceding discourse is a premise for thinking that the speaker did not enjoy the time period of his life that he is discussing.

(73) Implicated conclusion:

The speaker did enjoy the time period of his life that he is discussing.

Seppo's intended meaning can be phrased as follows:

(74) By implying that I now wonder how I was able to maintain my lifestyle as a young man, I do not mean to say that I have only negative feelings towards it; I have many good memories from that time.

The examples of *-han* utterances in naturally occurring native Finnish speech illustrate that many of the functions attributed to it result from the inferential process hearer's undertake to interpret the utterance *-han* is found in. I have argued that, rather than being tied to any of these functions, *-han* actually signals the interpretive process that a hearer must perform to recover a speaker's intended meaning. The by-products of this interpretive procedure may include a sense of appeal to the listener, mitigation, or any of the other functions that have been attributed to *-han*. However, it is important to note that these functions are incidental to the context in which the *-han*-containing utterance is used, and not part of its core function or meaning.

### 3.6 Discussion

This chapter has made the case for a relevance theoretic account of *-han*. I have argued that rather than encoding a particular invariant meaning from one use to the next, *-han* encodes a procedural meaning that encourages a hearer to access the information necessary to recover the speaker's intended meaning. The data I have presented showed that *-han* contributes to meaning in a non-truth conditional way, that its use is only acceptable when the hearer has the ability to recover the information necessary to interpret a speaker's intended meaning, and that many of the functions previously attributed to it fall out from the interpretive procedure that *-han* encodes.

The most significant contribution of the research presented in this chapter is its contribution to the discussion of how polyfunctional items are best accounted for. For *-han* the notion of conventional implicature is conceptually limited. The myriad functions of *-han* preclude an analysis whereby it communicates a single invariant meaning from one use to the next, which is how conventional implicature, by definition, must conceptualize such elements. The relevance theoretic notion of procedural meaning provides a more powerful and nuanced way to analyze such elements.

While this chapter has provided a point of departure for a discussion of *-han* as an encoder of procedural meaning that contributes to interpretation in contextually dependent ways, more work is needed to determine the features of the context that contribute to the interpretation of *-han* utterances. While the native speaker judgments of acceptability paired *-han* utterances with a context that relied on the physical context of the speech act, the naturally occurring data only illustrated use of *-han* that rely on the context and common ground assumptions provided by the preceding discourse. Therefore, more natural data is needed to assess *how* speakers use

*-han* utterances to refer to non-linguistic contexts. Additionally, more data is needed to determine whether there is variation in the use of *-han* across speakers.

## CHAPTER 4

### A SYNTACTIC ACCOUNT OF *-HAN*-CONTAINING SENTENCES

#### 4.1 Introduction to the chapter

This chapter is primarily concerned with providing an account of the syntactic structure of *-han*-containing sentences. I propose that *-han* is the realization of a head of a functional projection in the left-periphery (henceforth LP) of the Finnish clause. For reasons that are made clear in section 4.3, I follow Lopez (2009) in calling this projection ForceP. Evidence is given to support this proposal in the form of constructed examples, which indicate that *-han* can attach to material generally assumed to be in Spec-FP (Finite-P), Spec-KontrastP, or to the head of a functional projection FP, which is the host of phi-features in Finnish (though I will show that this assumption cannot be maintained). Additionally *-han* can attach to WhPs, which Lopez has shown must occupy the specifier of a projection below CP, called ForceP. However, it is important to note that *-han* is unable to attach to material considered to be in C, such as complementizers. This inability to attach to complementizers specifically is a common distributional feature of second position clitics (Halpern & Zwicky 1996).

The variability of the material to which *-han* may attach, and where that material is assumed to be generated or moved to, requires reference to two different mechanisms to ensure that *-han* occupies its canonical second position in different types of sentences. The first mechanism applies when *-han* attaches to the head of some constituent originating in the lexical layer of the clause. I propose that correct word order is derived by movement of that constituent

into the specifier of ForceP. In accordance with the Minimalist Program (Chomsky 1995), I take the motivation of the movement to be the checking of an uninterpretable feature of the target of the movement. The second mechanism applies to sentences in which *-han* is attached to material associated with functional heads in the LP of Finnish, I propose that *-han* undergoes a type of local inversion, (which may be prosodic in nature) with the material in the head of the projection that it immediately dominates (KontrastP in the case of the finite verb and PolP in the case of preposed negation). In the case of local inversion, Force is merged into the derivation without any features that would motivate movement into Spec-ForceP.

An alternative, non-cartographic analysis for the syntax of *-han*-containing sentences is also explored. The non-cartographic approach takes as its premise Zwart's (2005, 2009) strictly derivational approach to clausal structure. While the first approach sees syntactic positions as being fixed to some degree, the non-cartographic approach sees them as being strictly the result of the derivation in question.

Finally, I discuss Lopez's (2009) approach to the pragmatics-syntax interface and what its implications are for *-han* constructions. It has the benefit of explaining the occurrence of *-han* as being strictly pragmatic, therefore tying the syntactic positioning of *-han* to its function in discourse, but as we shall see, this approach runs into some problems.

In section 4.2, I provide a review of the relevant literature for this chapter. In section 4.3, I give my cartographic account of *-han*, arguing that *-han* is the realization of the head of a functional projection in the LP of Finnish. I demonstrate the attachment possibilities of *-han* through the use of grammatical and ungrammatical examples, which lead to the cartographic proposal of a functional projection in the Finnish LP realized by *-han* in the LP of Finnish. Sections 4.4 and 4.5 discuss the alternative approaches to *-han* constructions discussed above.

Finally, section 4.6 concludes this chapter with a discussion of the contribution my research has made to the literature on Finnish syntax. It also addresses issues raised by my work that indicate the necessity of more research on the syntax of the Finnish particle clitic system, Finnish information structure, and the Finnish LP in both cartographic and non-cartographic approaches.

## 4.2 Background

Nevis (1986) bases his account of the Finnish particle clitic system on the syntactic, semantic and prosodic properties that clitics share with modal adverbs. Nevis asserts that the particle clitics of Finnish are best analyzed as phonologically bound words. The particle clitics are prosodically similar to modal adverbs in that both are able to appear without phrasal prominence. However, Nevis points out that most of the adverbs are able to bear emphatic or contrastive stress, whereas the clitics are not able to bear any stress at all. Semantically, the particle clitics are similar to modal adverbs in that both types of elements contribute to meaning in a way that relies on the pragmatics of the situation in which they are used. With respect to syntactic placement, Nevis argues that the particle clitics and modal adverbs bear the same lexical feature, which derives their sentential position. Since the focus of my research is on *-han*, which always occurs in second position, I will report on the part of Nevis's analysis that accounts for second position phenomena.

Nevis's syntactic approach is grounded in General Phrase Structure Grammar (GPSG). He adds to this theory by positing the features [FIRST] and [LAST], which allow reference to the margins of constituents, and a group of features [A, B C, D] that are ordered linearly in a specific way in relationship to the features [FIRST] and [LAST]. The positioning of second position clitics and adverbs is derived as the result of linear precedence rules, which requires a

constituent bearing the feature [FIRST] to occupy the first sentential slot and a modal adverb or clitic bearing the feature [B] to occupy the second sentential slot. Nevis also posits a post-syntactic process he calls *liaison*, which phonologically subordinates clitics to their host word, and which distinguishes clitics from the modal adverbs he likens them to.

My approach to *-han* differs in a number of significant ways from that of Nevis'. The GPSG framework that Nevis adopts conceives of a highly restricted theory of syntax that does not include transformations or co-indexing devices (Gazdar 1980). Within GPSG, sentences derive from phrase structure rules that establish dominance relationships and linear precedence. The Minimalist approach I adopt consists of a generative grammar, which is crucially able to move constituents. This approach assumes a hierarchy of projections, within which positions are not stipulated by rules but rather result from the selectional needs of lexical items. Our approaches are similar in that we both assume that positions are derived by features, but in Nevis' approach, features affect positioning via rules, and, as stated, in the Minimalist approach I take, features motivate movement.

Theoretical differences aside, Nevis' account is problematic due to the fact that it relies heavily on the similarity of second position clitics to modal adverbs. The fact that some modal adverbs may occur in second position is an unsatisfactory premise for arguing that their syntactic positions are derived by the same mechanism, especially since these adverbs can occur in other syntactic positions. Furthermore, Nevis does not show that the ability of these modal adverbs to appear in second position is as invariable as it is for *-han*, which can attach to a wide variety of material to maintain its second position. Finally, Nevis does not account for the wide range of information structural functions that are realized in the LP of Finnish, which interact with *-han* syntactically.



Cartographic approaches to syntactic structure, such as the one that is put forth in this chapter, are based on the assumption that non-canonical word orders can be accounted for if pragmatic features are accounted for by syntax, as by Rizzi (1997). Such an approach, whereby pragmatic features are built into the syntax, has been argued against, for example by Snyder (2000), Pereltsvaig (2004), and Szendrői (2001, 2004),<sup>2</sup> but I follow Kaiser (2006), who notes that the word order patterns of Finnish suggest a close relationship between pragmatics and syntax in Finnish.<sup>3</sup>

The approach to the syntax of *-han*-containing sentences presented in this chapter assumes the map of the Finnish clause proposed by Holmberg et al. (1993) and Holmberg and Nikanne (2002). I also adopt Kaiser's (2006) proposal that "kontrastive" constituents in the LP of Finnish occupy a projection KontrastP above FP and below CP. As we will see, this approach is heavily informed by Rizzi's (1997) approach to syntactic structure, whereby different discourse functions are hosted in distinct projections in the LP. The difference is in the particular functional projections proposed by Rizzi for Italian and by Holmberg et al. (1993), Holmberg and Nikanne (2002), and Kaiser (2006) for Finnish. Rizzi's map of the clause for Italian includes separate functional projections in the complementizer layer for topics and foci, including separate projections for topics that occur before or after sentence focus. The word order possibilities of Finnish do not indicate that these functions should be hosted by dedicated functional projections; there is only one projection hosting topics. I first develop the proposal that *-han* is the realization of the head of the functional projection ForceP (which is not part of

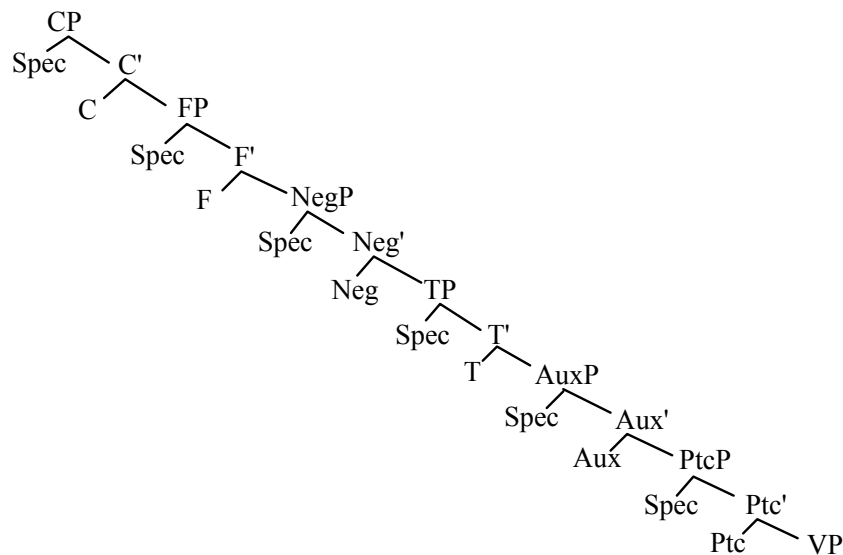
---

<sup>2</sup> Szendrői's argument, that including pragmatic features in the lexicon violates the Inclusiveness Condition in Chomsky (1995), is particularly worth noting.

<sup>3</sup> However, Kaiser is careful to point out (citing Vallduví and Vilkuña 1998) that cross-linguistic variation in the realization of information structure suggests that the mapping between pragmatics and syntax is rather underspecified. I note agreement with this point as well, though I do not take a position on whether or not cartographic approaches are able to account for cross-linguistic patterns or commonalities in the syntactic realization of pragmatic information.

the tree structure below) assuming only the map of the Finnish sentence put forth in Holmberg et al. (1993) and Holmberg and Nikanne (2002), and then I discuss how this projection fits in with Kaiser's (2006) account in a separate section. The map of the clause of Finnish proposed by Holmberg and Nikanne is as shown in (1).

(1) Finnish clause



(2002, p. 3)

Holmberg and Nikanne (2002) argue that spec-FP is the canonical position of subject or non-subject topics and suggest that movement to this position by some constituent is obligatory. The reasons for this are made clear later in the next section.

Before providing a background of the variable word order of Finnish, it will be necessary to clarify what I intend when I use terms such as ‘focus’, ‘topic’, and ‘old’ versus ‘new’ information. Much of the research on Finnish syntax and information structure is grounded in Chafe’s (1976) notions of the Common Ground and the distinctions he makes between Common Ground content and Common Ground management and the understanding of how those notions should be adapted into the linguistic realization of information packaging by Vallduví and

Engdahl (1996). Common Ground (CG) content refers to a model for the information that is mutually known to be shared and modified in conversation (Krifka 2008, citing Stalnaker 1974, Karttunen 1974, & Lewis 1979). The notion is important for information structure because the way information is packaged must correspond with the CG at the point at which an interlocutor makes an utterance. CG management has to do with the way in which the CG content should develop. This notion is intended to provide a model for how communicators make their interests and goals known in conversation. Krifka (2008) cites questions as an example of CG management: though they do not add information to CG content, they serve to indicate the needs of one participant in conversation that should be satisfied by a conversational turn of the other participant (s).

Vallduví and Engdahl (1996) approach information packaging, the term they use for information structure, as the structuring of sentences that arises from the need to meet the communicative demands of a particular context or discourse. They give the following example to illustrate how information packaging affects linguistic structure and interpretation:

- (2) a. Mary hates chocolate.
- b. Chocolate Mary hates.
- c. Chocolate Mary loves.

(p. 2)

Vallduví and Engdahl note that while (2) a. and b. are truth conditionally equivalent (see 3.2 for a discussion of truth conditions), they differ in how they say what they say about the world, in other words, they are differently packaged. (2) b. and (2) c. on the other hand, while different in

their truth conditional content, have a similar way of packaging the information they contain. Importantly, Vallduví and Endgahl note that (2) a. and b. cannot be used interchangeably but are constrained by context. So that, while (2) a. may be used to answer the question *What does Mary hate?*, (2) b. may not be.

Vallduví and Endgahl (1996) argue that the partition of sentences into focus-ground, topic-comment, rheme-theme, or old-new can be reduced to a partition between ground and focus on the one hand and topic and comment on the other. Vallduví and Engdahl use the term ‘focus’ for that part of the sentence that provides new information relative to a given context. The ground focus articulation of a sentence partitions the sentence into the non-informative, expected or known part which forms the ground and an informative and dominant focus. They give the examples in (3) to illustrate different instantiations of focus in English (labeled brackets [F] delimit the focus and caps indicate the part of the focus associated with sentential nuclear stress).

- (3) a. The pipes are [F RUSTY].
- b. The pipes [F ARE RUSTY].
- c. [F The PIPES are rusty].
- d. [F The PIPES] are rusty.
- e. The pipes [F ARE] rusty.

(Vallduví and Engdahl 1996, p. 3)

(3) a. and b. represent narrow focus and wide focus, respectively. (3) c. illustrates an entirely informative sentence which lacks a ground altogether. (3) d. illustrates the denotation of a known

entity, whereby the existence of rusty things has been established but not the identity of the thing or things which are rusty. Finally, (3) e. is an example of what Vallduví and Engdahl note is sometimes called *verum* focus. To illustrate how the use of the sentences in (4) is restricted by context, Vallduví and Engdahl pair them with questions they are each an appropriate answer for.

- (4) a. What about the pipes? In what condition are they?  
The pipes are [<sub>F</sub> RUSTY].
- b. What about the pipes? What's wrong with them?  
The pipes [<sub>F</sub> ARE RUSTY].
- c. Why does the water from the tap come out brown?  
[<sub>F</sub> The PIPES are rusty].
- d. I have some rust remover. You have any rusty things?  
[<sub>F</sub> The PIPES] are rusty.
- e. I wonder whether the pipes are rusty.  
The pipes [<sub>F</sub> ARE] rusty.

(p. 4)

Vallduví and Engdahl (1996) note that not all uses of the term 'focus' align with their characterization of it; the term has been used phonologically to indicate intonational prominence. They further note that in many languages, though not all, the informationally focused element must also contain the sentential stress, so for some languages these two uses of the term 'focus' may indicate the same element. Focus is also used in conceptual treatments of cognitive status or psycho-linguistic analyses of reference (see Vallduvi and Engdahl 1996 who cite Grosz 1981,

Garrod and Sanform 1982, and Grudel et al. 1993). The conception of focus adopted by Vallduvi and Engdahl (1996) is closest to the notion of ‘new’ in Halliday 1967, or ‘NewInfo’ in Välimaa-Blum 1988.

Within Finnish, Holmberg and Nikanne (2002) have used ‘focus’ in the sense it is used in Vallduví and Engdahl (1996), to indicate the presence or absence of a feature Focus, [+/- Foc], which corresponds to the distinction between new (+Foc) versus old (-Foc) information, respectively. Kaiser (2006) points to a second type of focus in Finnish, which Vallduví and Vilkuna (1998) call ‘kontrast’, which generates a set of alternatives. Crucially, kontrastive constituents can be either new or old information. Focus in the sense of Holmberg and Nikanne (2002) and Vallduví and Engdahl (1996) is related to notions of relationally new information and occurs only *in-situ*, while kontrast in the sense of Vilkuna (1989, 1995) and Kaiser (2006) may be either new or old information and occurs either *in-situ* or in the LP of Finnish. Consider the data below to illustrate this difference (capital letters indicate prosodic focus).

- (5) a. MINNA osti kissan.  
 Minna buy.3.S.PST cat.GEN  
 “MINNA bought a cat.”
- b. Minna OSTI kissan.  
 “Minna DID buy a cat.”
- c. Minna osti KISSAN.  
 “Minna bought A CAT.”
- d. KISSAN Minna osti.  
 “A CAT [is what] Minna bought.”

The distinction between new information focus and *kontrast* in these examples is as follows: while any of the prosodically focused constituents in (5) a., b., and c. may represent new information focus or old or new *kontrastive* focus, the prosodically focused constituent in (5) d. may *only* be *kontrastively* focused since it has been moved to the LP.

Vallduví and Engdahl (1996) point to several conceptualizations of the notion of ‘topic’ found in the literature. The topic in Vallduvi and Engdahl’s (1996) account of information packaging performs the role of anchoring the present discourse to the previous discourse, while the comment is what makes some new contribution to the discourse. They provide the following truth conditionally equivalent sentences to illustrate three different topic assignments (topics are in **bold**).

- (6) a.     **John** saw the play yesterday.  
      b.     **Yesterday** John saw the play.  
      c.     **The play** John saw yesterday.

(Vallduví and Engdahl 1996, p. 6 who cite Halliday 1967, p. 212)

Vallduví and Engdahl note that, as with the term ‘focus’, ‘topic’ is terminologically complex and a point of some contention in the literature. Holmberg and Nikanne (2002) identify the topic of the sentence as the constituent that refers to the entity that the sentence is about. It is featurally distinguished from focus as [-Foc]. They identify Finnish as topic prominent in the sense that the sentence-initial constituent does not have to be the subject but can be any category

that can serve as the topic of the sentence. The feature [-Foc] is uninterpretable, and is checked in the specifier of FP, which according to Holmberg and Nikanne (2002), hosts both subject and non-subject topics in Finnish. They note that, though more than one constituent may bear the [-Foc] feature, only one must obligatorily pied-pipe its phonological features to Spec-FP. Consider the data below, taken from Holmberg and Nikanne (2002).

- (7) a. Sitä leikki lapsia kadulla.  
 EXP play children in-street
- b. Kadulla leikkii lapsia.  
 in-street play children
- c. Lapsia leikkii kadulla.  
 children play in-street  
 Children are playing in the street./ There are children playing in the street.
- d. \*Leikkii lapsia kadulla.

(p. 1-2)

Note that, if one of the possible topics in a sentence does not pied-pipe its phonological features to spec-FP, the result is an ungrammatical sentence, as in (7) d. Each of the grammatical variants has essentially the same meaning as the translation given for (7) c. The only difference is in what the sentence is about. Strictly on the basis of word order, the ungrammaticality of (7) d. might seem in conflict with the data in (8), which is based on the claim by Vilkuna (1989, 1995) that all six possible word orders of a simple transitive sentence are grammatical given the right discourse



interpretation.<sup>4</sup> However, I argue that this is not an issue because the ungrammaticality of (7) d. is caused by the fact that the verb is not prosodically focused. This fact is not discussed by Holmberg and Nikanne (2002), but is supported by the data from Manninen (2003) that is presented in the next section, which shows that verbs can be the left most constituent of a Finnish sentence when they are prosodically focused. As we shall see, this type of data has consequences for where we must assume verbs bearing prosodic focus in the LP to have been moved to.

Holmberg and Nikanne (2002) assume Spec-CP to host kontrastive constituents in Finnish, and Lopez (2009) assumes both kontrastive constituents and topics in Finnish occupy Spec-FP, while Kaiser (2006) gives strong evidence that LP kontrastive constituents must occupy a separate functional projection in the LP of Finnish called KontrastP. I follow her in differentiating contrast in Finnish from informational focus and in assuming that LP kontrastive constituents occupy a projection KontrastP, between CP and FP.

The wide variety of grammatical word orders in Finnish presents an interesting puzzle for syntacticians. While Finnish is SVO statistically and in terms of markedness (Vilkuna 1989, 1995), a simple transitive sentence of Finnish is grammatical in any permutation of its constituents, given the right context. Consider the data below, where information structural functions have been left out to illustrate word order possibilities in isolation.

- (8) a. Minna osti kissan.  
b. Minna kissan osti.  
c. Kissan Minna osti.  
d. Kissan osti Minna.

---

<sup>4</sup> This is claim that is backed up by native speaker intuitions and generally taken for granted in works on Finnish word order.

- e. Osti Minna kissan.
- f. Osti kissan Minna.

Importantly, each word order possibility represents a different discourse interpretation. To illustrate this, consider the data below, compiled from Manninen (2003), which represents a different transitive sentence with all possible word orders and realizations of prosodic focus. (9) e. is my addition and is supported by Kaiser (2006), who observes that prosodic stress can occur on any phrasal constituent *in situ*, including the verb. In my explanations of each example, I follow Kaiser (2006), who notes that left-peripheral prosodic focus is grammatical in Finnish as long as the constituent is meant to be interpreted contrastively, while prosodic focus *in-situ* can indicate either that the constituent is discourse-new or that the constituent should be interpreted contrastively. Each permutation of the sentence in (9) a. is paired with its corresponding interpretation in English (capital letters indicate prosodic focus in the translations). Note that while there are only six word order possibilities, the manipulation of focus combined with the permutation of word order yields more possibilities.

- (9) a. Sirkku tappoi etana-n  
 Sirkku kill.3.S.PST snail-GEN  
 “Sirkku killed a slug.”
- b. SIRKKU tappoi etanan.  
 “It was SIRKKU who killed a slug.”

- c. SIRKKU etanan tappoi.  
 “It was SIRKKU who killed a slug.”
- d. Sirkku tappoi ETANAN.  
 “It was a SLUG that Sirkku killed.”
- e. Sirkku TAPPOI etanan.  
 “Sirkku KILLED a slug.”
- f. TAPPOI Sirkku etanan.  
 “Sirkku DID kill a slug.”
- g. TAPPOI ETANAN Sirkku.  
 “It WAS Sirkku who killed a slug.”
- h. TAPPOI SEN (it) Sirkku.  
 “Sirkku DID KILL IT.”
- i. ETANAN Sirkku tappoi.  
 “It was a SLUG that Sirkku killed.”
- j. Etanan tappoi SIRKKU.  
 “It was SIRKKU who killed the slug.”

Manninen (2003) cites the fact that only the neutral pronunciation of (9) a. can be used to answer the question “What happened?” as evidence that SVO word order is unmarked in Finnish. All other word orders must be contextually licensed because changes to word order give rise to changes in interpretations. Kaiser (2006) notes that SVO word order in Finnish is either used in a situation in which all of the information is new, or in a situation in which the subject is old within the discourse context but the rest of the sentence is new.

Following Kaiser (2006), I assume that preposed constituents bearing prosodic focus are interpreted contrastively but can be either discourse-old or new. Therefore, (9) b. would be appropriately uttered in a context in which *Sirkku*, rather than some other contextually salient individual, is being asserted to have killed a slug. As noted by Kaiser (2006), this word order is slightly marked, and in general, when the subject is prosodically focused, the non-prosodically stressed object is also pre-verbal as in (9) c. I follow her in explaining the difference between these two word orders (9.b. and 9.c.) as resulting from the word order tendencies of Finnish, whereby old information tends to occur pre-verbally. Given this, any interpretive difference between (9) b. and (9) c. may be a slight difference in the discourse salience of *the slug* to discourse (with 9.c. being appropriate in a situation in which *the slug* is more salient). (9) d. exhibits *the slug* prosodically focused *in-situ*, indicating that it is either new or contrastive information. Therefore, (9) d. is distinct from (9) h. in that, while in (9) d. *the slug* may be interpreted as new information OR contrastive information, in (9) h. it must be interpreted contrastively. (9) e. asserts the fact that Sirkku killed, rather than, say, adopted, the slug. This makes it distinct from (9) f., which specifically asserts the fact that Sirkku killed the slug. While (9) e. is appropriate either in a situation in which it has been asserted that Sirkku did something

other than kill the slug (like pet it or adopt it), or in a situation in which the fact that Sirkku killed the slug is entirely new information, (9) f. is only appropriate in a situation in which it has been asserted that Sirkku did not kill the slug. (9) g. also requires the situation which makes (9) f. acceptable (since preposing entails contrastiveness in Finnish), but as noted by Manninen (2003), is slightly more marked unless *the slug* is exchanged for a pronoun, as in (9) h (also my addition). (9) h. is similar to (9) d., but is appropriate in a situation in which it is asserted that Sirkku did something other than *kill the slug* and not in a situation in which *the slug* is new information. Note that the pre-verbal subject indicates its discourse salience, as in (9) c. Finally, (9) i. is appropriate in a situation in which *Sirkku* but not the slug, is new information, although it can also be uttered in a situation in which *Sirkku* is meant to be interpreted contrastively.

To reiterate, the word order facts in (9) indicate that prosodically focused constituents in Finnish may occur either in the LP or *in situ*. While *in situ* focus may indicate either new or contrastive information, LP focus *must* be associated with a contrastive interpretation (Kaiser 2006).

The consideration of sentences containing complex verbs prompts the observation that word order in Finnish is not quite as free as the facts above might suggest. The ordering of functional elements, such as negation or the auxiliary verb *olla*, is entirely fixed (Holmberg et al. 1993, Koskinen 1998 & Holmberg & Nikanne 2002). To illustrate this, consider the data below, again compiled from Manninen (2003).<sup>5</sup>

(10)	a.	Sirkku ei	tappanut	etana-a.
		Sirkku NEG.3.S	kill.PRS	snail-PART

---

<sup>5</sup> Note that the presence of the negation also causes the object to appear in partitive case. For more on negation in Finnish see Karlsson (1983) and Kaiser (2006).

“Sirkku did not kill the slug.”

b. \*Sirkku tappanut ei etana-a.  
Sirkku kill.PRS NEG.3.S snail-PART

c. Sirkku ei ole tappanut etana-a.  
Sirkku NEG.3.S be.PRS kill.PTCP snail-PART

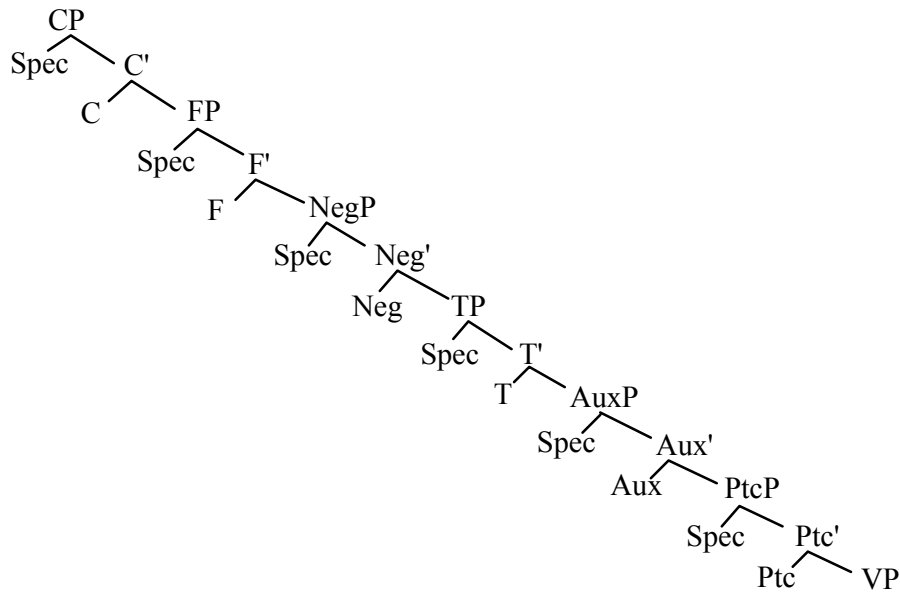
“Sirkku has not killed the slug.”

d. \*Sirkku ei tappanut ole etana-a.  
Sirkku NEG.3.S kill.PTCP be.PRS snail-PART.

As exhibited in these examples, the addition of negation has consequences for how subject-verb agreement is realized: negation shows subject-verb agreement while the auxiliary or main verb shows tense.

The complexity of these facts is in part accounted for by Holmberg et al.’s (1993) and Holmberg and Nikanne’s (2002) clause structure map, given in (1) and repeated here.

(10) Finite clause in Finnish (Holmberg & Nikanne 2002, p. 3)



In the map above, FP (Finite-P) is the functional projection which hosts subject agreement features. It is similar to what is usually called AgrP. Holmberg et al. (1993) and Holmberg and Nikanne (2002) (following Holmberg et al. 1993) use the category label ‘F’ rather than ‘Agr’ because the finite passive verb form of Finnish which is invariant, shows no agreement, though it corresponds to subject agreement in terms of its morphological distribution. Another reason Holmberg et al. (1993) and Holmberg and Nikanne (2002) prefer this label is that the spec-FP position may be filled by something other than the nominative subject. They note that while AgrS is associated with the head of FP it is not a defining property of it.

Holmberg and Nikanne (2002) posit that SpecFP is filled by a constituent bearing a [-Foc] feature, which, as noted, may or may not be the subject. They support this proposal by noting that TP is the canonical domain of focus in Finnish, and that therefore constituents which are [-Foc] must raise out of the TP. As mentioned previously, they note that, while more than one constituent may bear [-Foc], only one constituent pied-pipes its phonological content when it raises. Put succinctly, this analysis conceptualizes Spec-FP as the canonical Topic position in

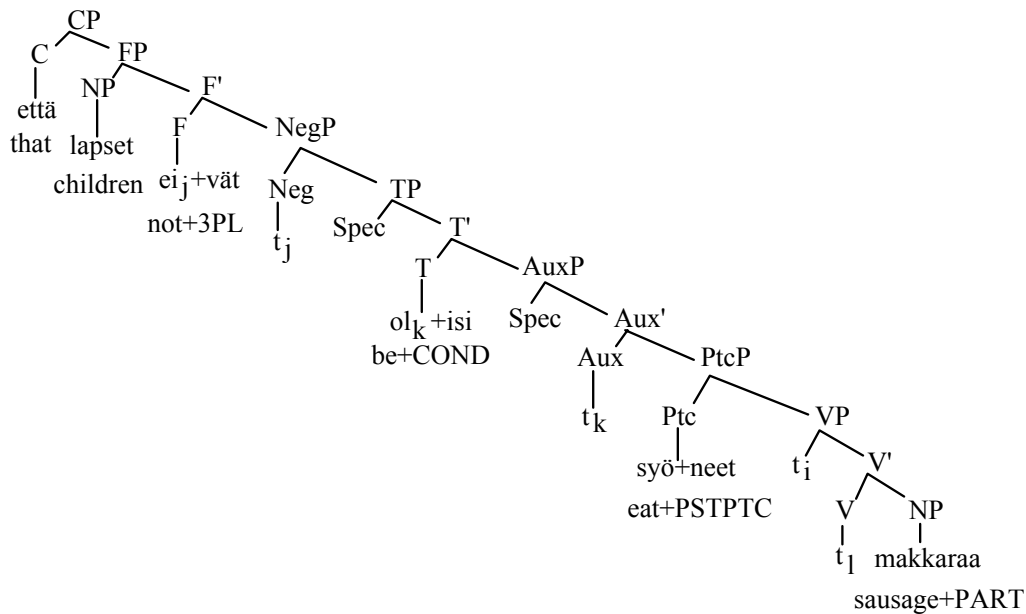
Finnish. AuxP is where the auxiliary verb *olla* is generated. PtcP is where the participle gets agreement. This map of the Finnish clause above allows for a simple explanation of the ungrammaticality of the examples in (9). Because negation and the auxiliary are generated above the participle, they cannot appear linearly after it as in b. and d.

Only F and T (tense) are obligatory in the structure of the finite clause given in (10) (Holmberg & Nikanne 2002). To demonstrate a sentence with all possible categories projected, consider (11), taken from Holmberg & Nikanne. Note that mood is considered a feature of the category T in Finnish (Holmberg et al. 1993). Note also that negation raises to F for subject agreement features.



(11) “that (the) children wouldn’t have eaten (the) sausage” (p. 5)

*että lapset eivät olisi syöneet makkaraa*



Holmberg et al. (1993) and Holmberg and Nikanne (2002) propose that movement to Spec-FP is motivated by the need to check an uninterpretable feature in F. They conceptualize this feature as having the semantic effect that the argument is interpreted as part of the presupposition or ‘ground’ of the sentence (see Vallduvi & Engdahl 1996). And while the constituent that moves to the specifier of FP does not have to be the subject, the material in F, whether negation, an auxiliary, or a main verb, head-moves to F to gain subject-verb agreement features. In other words, objects in Spec-FP do not trigger object agreement on the material in F (Holmberg and Nikanne 2002).

The map of the Finnish clause in (10) is my departure point for the syntactic account of *-han*-containing sentences laid out in the next section. I show that the word order facts of Finnish cannot be accounted for with the map of the Finnish clause proposed by Holmberg and Nikanne (2002) and that an additional functional projection must be integrated into the LP of

Finnish to account for *-han* constructions. It is important to note that, while Holmberg and Nikanne account for the derivation of topics in Finnish, they do not account for the LP occurrence of focus in Finnish. I will separately account for LP focus in Finnish in section 4.3, where I integrate Kaiser’s (2006) account of preposed negation.

### 4.3 The case for a dedicated projection in the left periphery headed by *-han*

This section demonstrates the attachment possibilities of *-han*. Grammatical and ungrammatical examples are compared to illustrate the combinability of *-han* with different elements in the LP. The first set of examples demonstrates *-han* attached to the N head of the first DP constituent. For clarity, the translations given are of the interpretation imposed by word order. As emphasized in chapters 1, 2, and 3, each *-han*-containing utterance can be interpreted in a wide variety of ways based on the context of the discourse in which it is uttered.

- (12) a. Iso sisko-ni=*han* osti koira-n  
 big sister-1POSS=*han* buy.3.S.PST dog-GEN  
 “My big sister bought a dog.”
- b. Koira-n=*han* iso sisko-ni osti.  
 dog-GEN=*han* big sister-1POSS buy.3.S.PST  
 “It was a DOG that my big sister bought.”
- c. \*Iso sisko-ni koira-n=*han* osti.

big sister-1POSS dog-GEN=*han* buy.3.S.PST

As indicated here, *-han* must attach to the head of the first constituent in a sentence and cannot appear lower in the clause. However, *-han* can also attach to whatever element is in F, whether it be negation or a main verb.<sup>6</sup> This entails that one of these elements is first in the sentence, as illustrated by the ungrammaticality of (13) c.

- (13) a. Ei=*hän* iso sisko-ni ostanut koira-a.  
 NEG.3.S=*han* big sister-1POSS buy.PTCP dog-PART  
 “My big sister DIDN’T buy a dog.”
- b. Osi=*han* iso sisko-ni koira-n.  
 buy.3.S.PST big sister-1POSS dog-GEN  
 “My big sister DID buy a dog.”
- c. \*Iso sisko-ni ei=*hän* ostanut koira-a.  
 big sister-1POSS NEG.3.S.PST buy.PTCP dog-PART

So far, this data suggests that *-han* can attach both to material that is generally thought to be in Spec-FP (whether subject or non-subject topics) and to material generally thought to be in the head of FP (negation or some other verbal element showing subject-verb agreement). This suggests that *-han* cannot surface lower than FP in the clause, otherwise we would expect (13) c.

---

<sup>6</sup> For now I will assume fronted verbs and negation to be in FP, though Kaiser’s work will show that this assumption cannot be maintained.

to be grammatical. We also can't suggest that *-han* originates in F because if it did, we would not expect (13) c. to be ungrammatical, for different reasons. Since negation in Finnish moves to F to get phi-features, we might expect that if *-han* originated there it would head-adjoin with the negation, allowing constructions like (13) c. In addition, since F is the host of phi-features, there is reason not to expect uninflected material to appear there.

Additional data suggests that *-han* has an origin site higher than FP in the map of the Finnish clause.

- (14) a. Mitä=hän    iso    sisko-ni    osti?  
           what=han    big    sister-1POSS    buy.3.S.PST  
           “What did my big sister buy?”
- b. \*Mitä        iso    sisko-ni=han    osti  
           what        big    sister-1POSS=han    buy.3.S.PST

In (14) a. we see *-han* attached to a wh-element, and (14) b. illustrates that, when a wh-element is present, *-han* cannot grammatically attach to any other element in the clause. I follow Lopez (2009) in proposing that WhPs in Finnish must occupy the specifier of a projection called ForceP.<sup>7</sup> Lopez cites the following data (taken from Vainikka 1989) to support this claim.

---

<sup>7</sup> It should be noted that this represents a terminological and theoretical departure from cartography as it is laid out by Rizzi (1997). According to Rizzi, the articulation of the complementizer leads to the disappearance of CP as an independent projection. The Finnish data indicates that the proliferation of projections in the LP still includes a complementizer, which I assume can still occupy C. This is also assumed by Holmberg and Nikanne (2002).

- (15) Maija kysyi että mitä Pekka oli syönyt.  
 Maija ask.3S.PST that what Pekka be.3S.PST eat.PTCP  
 “Maija asked what Pekka had eaten.”

(p. 85)

Lopez notes that to account for the fact that WhPs (which Lopez identifies as a subset of contrastive constituents) can be preceded by a complementizer, we must propose that, similar to Italian, Finnish has a split C. It should be noted that Lopez does not assume Kaiser’s (2006) proposal that fronted kontrastive constituents in Finnish move to the specifier of KontrastP. Following Holmberg and Nikanne (2002), Lopez assumes that both topics and preposed, prosodically focused constituents (kontrastive constituents in Kaiser 2006) occupy Spec-FP. As Kaiser (2006) demonstrates (see my section 4.3.4), there is good reason to believe that this is not the case.

Consider the data in (16), with *-han* added.

- (16) Maija kysyi että mitä=hän Pekka oli  
 Maija ask.3S.PST that what=han Pekka be.3S.PST  
 syönyt.  
 eat.PTCP  
 “Maija asked what Pekka had eaten.”

(16) shows that *-han* must attach to the material in Spec-ForceP. Note that when no WhP is present in the embedded clause, another constituent may move into this position.

(17) Hän väitti...  
 he/she claim.3.S.PST  
 “He/she claimed...”

a. ...että Minna=*han* osti koira-n.  
 ...that Minna=*han* buy.3.S.PST dog-GEN  
 “...that Minna bought a dog.”

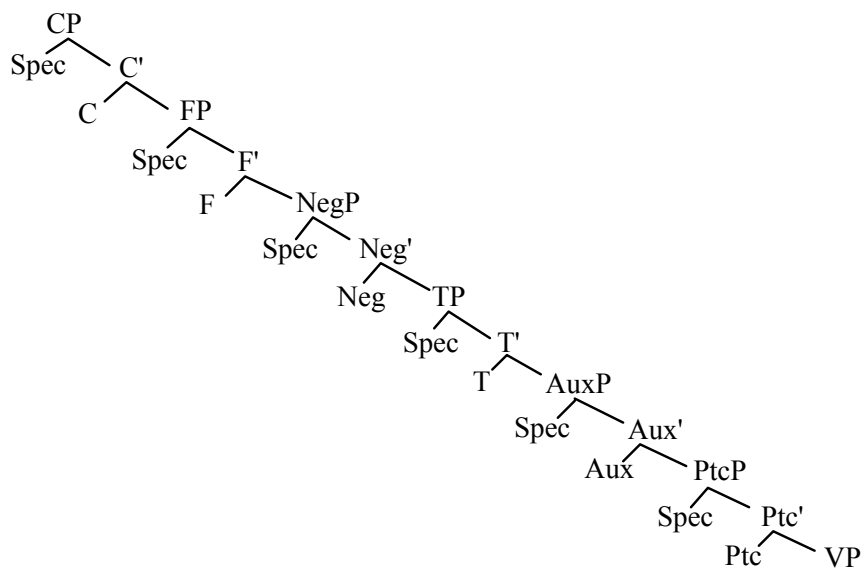
b. \*...että=*hän* Minna osti koira-n.  
 ...that=*han* Minna buy.3.S.PST dog-GEN

In (17) a. we see *-han* attached to the N-head of the first DP, just as we would expect in a main clause without a complementizer. In (17) b. we see that *-han* cannot grammatically attach to the complementizer. This indicates that *-han* cannot attach to the material in C, even if this means *-han* is no longer in second position. This is notable, since this is the only construction in which *-han* is not found in the second position of its clause. It should be noted that *-han* is generally restricted to occurring in embedded clauses in which the matrix verb is one that is semi-factive (see Karttunen 1975b for more on *-han* in embedded clauses).

The grammaticality facts presented in this section indicate that *-han* can neither be below FP, nor in CP. This suggests that *-han* occupies an independent projection between CP and FP. I propose that *-han* is the realization of the head of a functional projection in the LP of Finnish

that Lopez (2009) calls ForceP.<sup>8</sup> For reference, the map of the Finnish clause taken from Holmberg et al. (1993) and Holmberg and Nikanne (2002) is repeated here once more.

(18) Finite Clause in Finnish (Holmberg & Nikanne 2002, p.3)

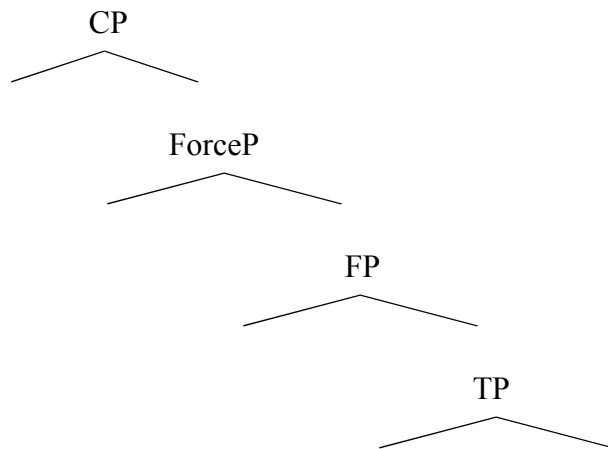


My proposal follows Lopez (2009), by adding another functional projection to the Finnish clause, which must be below CP and above FP. This is demonstrated below.

---

<sup>8</sup> The term ‘Force’ is typically used to indicate a projection that indicates clause type (declarative, interrogative, etc) (Rizzi 1997).

(19) LP of Finite clause in Finnish with ForceP



The proposal made here is that *-han* is the realization of the head of the functional projection ForceP. Force may be merged to the structure with or without an uninterpretable feature, which attracts some XP to its specifier. I leave open the exact nature of the feature that is responsible for XP movement into Spec-ForceP, but note that it is related to the discourse-pragmatic properties of the derivation. When Force is merged with this feature, some XP bearing a corresponding feature must move into the specifier of ForceP prior to interpretation at LF. When Force is merged without this feature, *-han* undergoes prosodic inversion with the next lower head in the derivation as a last resort.

This proposal accounts for the word order facts in (12) and (17) by ensuring that *-han* always occurs attached to the first constituent of a main clause and embedded clause sentence but does not occur attached to the complementizer. This is demonstrated by the examples below, where (12) a. and (17) a. are repeated as (20) and (21). Note that I assume that the constituent to which *-han* is attached first raises to Spec-FP in accordance with Holmberg and Nikanne (2002), who argue that at least one constituent bearing a [-Foc] feature must raise to this position in each sentence.

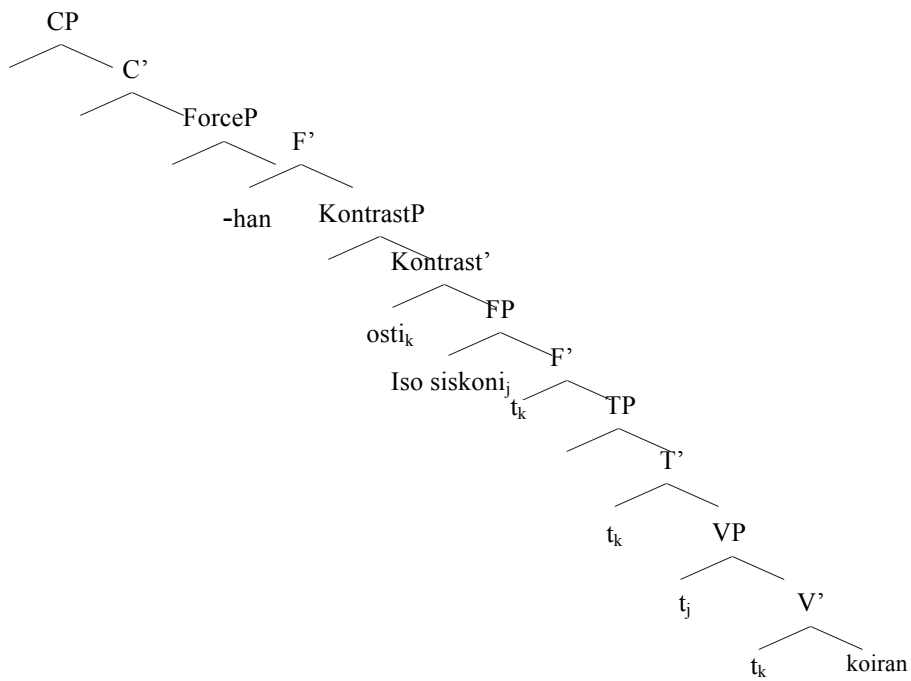




- (23) Mitä=hän    iso    sisko-ni    osti?  
 what=han    big    sister-1POSS    buy.3.S.PST  
 “What did my big sister buy?”

The word order facts in (23) are a case of WhP movement into Spec-ForceP (an analysis suggested by Lopez 2009). The word order facts in (22) cannot be accounted for as simply. The first issue is how we can account for the fact that *-han* is attached to material that is assumed to be moved into the head of FP. The second issue is how we can account for the fact that, if Holmberg and Nikanne’s (2002) argument that some constituent must move into spec-FP is correct, the constituent does not intervene with the process whereby the finite verb becomes attached phonologically to *-han*. I argue that the latter of these problems is rather straightforwardly explained if the fronted finite verb moves to the head of *kontrastP* (support for the existence of this projection is given in 4.3.4) rather than remaining in FP. Information structurally this is logical since the only time that a verb can be the left most element in a Finnish clause is when it bears prosodic focus and is interpreted contrastively. This is represented in the following tree structure of (13.b/22).

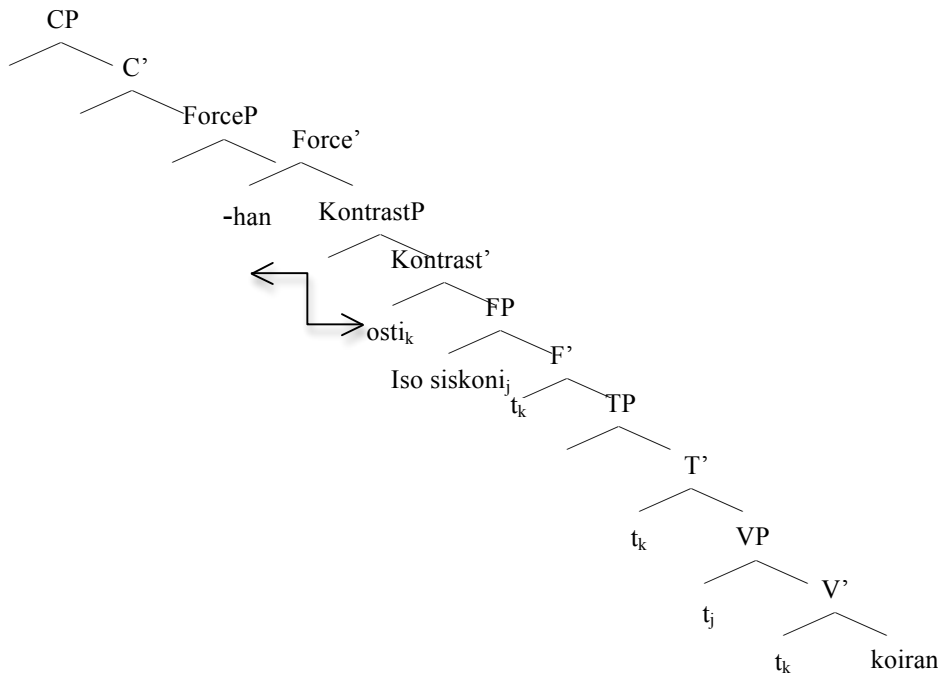
(24) Verb in the head of *kontrastP* prior to prosodic inversion



My argument is that in the case when *-han* is attached to a finite verb that has moved to *spec-kontrastP*, a process of prosodic inversion takes place that yields the correct word order.

This is represented below.

(25)



Thus the correct word order is derived by a phonological process that ensures that the verb occupying the head immediately below *-han* (in this case, the verb in the head of KontrastP) precedes it. This analysis is independently supported by the fact that *-han* is unable to bear prosodic stress and since the accentuation pattern of Finnish places primary stress on the first syllable of a word (see chapter 2), the inversion occurs to prevent a violation of prosodic constraints in Finnish.

As noted by Embick and Noyer (2001), the need for reference to non-syntactic movements has been clearest in the case of clitic placement, particularly, the placement of second position (2P) clitics. Embick and Noyer propose that certain movement operations,

including certain cases of clitic placement, occur after the syntactic derivation, in the PF (phonological form) component. In their discussion of approaches to clitic placement, Embick and Noyer point out that the possible alternatives are essentially as in (26).

- (26) a. Syntax only: syntax performs operations that are explicitly executed so as to resolve a morpho-phonological problem. Patterns of apparent post-syntactic movement are reducible to the effects of these “special” syntactic processes.
- b. PF movement: syntax generates and moves terminals according to its own principles and is oblivious to morpho-phonological concerns. PF takes the output of syntax and resolves morpho-phonological dependencies according to its own principles.

(p. 557)

Embick and Noyer endorse the latter approach in (26) b., noting that, unless the syntactic component incidentally provides a host for a clitic, the PF can perform movement operations to satisfy a clitic dependency (see Embick & Noyer 2001 who cite Marantz 1984, Halpern 1992, Shcütze 1994, Embick and Izvorski 1995).

The assumption that syntax only incidentally provides a host for a clitic extends to my analysis of *-han*; I assume that unless some constituent raises into the specifier of ForceP, *-han* undergoes prosodic inversion with the material in the head of the projection below it. This entails that the syntactic component does not perform movement operations to satisfy the clitic dependency of *-han* itself, but rather to satisfy the feature associated with the head that *-han* is a realization of. The phonological attachment of *-han* to the head of the constituent in Spec-

ForceP is independent of the syntactic operation that makes that constituent proximate to *-han*. When *-han* is attached to the material in the head of FP, I propose that the operation that provides a host for *-han* is phonologically motivated and occurs when the syntactic component of the grammar has failed to incidentally provide a host for *-han*. This proposal distinguishes between the derivation of sentences where *-han* is found attached to the head of a constituent in Spec-ForceP and sentences where *-han* is found attached to the material in the head of FP. The former here is taken to be syntactically derived and the latter is taken to be phonologically derived. This distinction is also reflected in Halpern's (1995) work on second position clitics.

Halpern (1995) distinguishes between two types of second position (2P) clitics: those that are attached to the first constituent of a sentence (2D "second daughter") and those that are attached to the first word of a sentence (2W "second word"). Since constructions in which *-han* is found attached to the material in the head of FP only ever have *-han* attached to a single word, *-han* is arguably both a 2D and a 2W clitic, depending on the material to which it is attached. This type of alternation with respect to the placement of 2P clitics is also found in Serbo-Croatian, as detailed by Halpern (1995). In Halpern's account 2W clitics may "trade places" with a prosodic unit it is adjacent to in a process he calls prosodic inversion (note that I have adopted his term in my analysis). Halpern notes that 2D clitics are generally not amenable to being characterized as deriving their position in prosodic terms and shows that for Serbo-Croatian, 2D clitics are the result of the fronting of a phrase (similar to the fronting I propose occurs in Finnish when *-han* attaches to the head of a constituent). Halpern argues that when this kind of fronting happens, prosodic inversion does not take place.

Halpern (1995) motivates his proposal for a prosodic inversion account for 2W clitics by pointing to the fact that verbal clitics in Bulgarian may appear either before or after the verb to

which they are attached. Clitics precede the verb (27) a. so long as this does not make them the first element of the clause. In sentences where the verb is initial (27) b., clitics immediately follow the verb.

(27) a. Tja =mi =go dade.  
she to.me it gave  
“She gave it to me.”

b. Dade =mi =go  
gave to.me it  
“(She) gave it to me.

(Halpern 1995 p. 27, citing Ewen 1979, p. 40-41)

This type of optionality indicates that clitics can in fact be manipulated in the phonological component of the grammar. It is notable that in Finnish, when *-han* appears attached to a single word and therefore distributes as a 2W clitic, it is always attached to a verbal element. This type verb-conditioned clitic inversion is also seen in Romance, in a process known as ‘verb swallowing’ (see Raposo & Uriagereka 2005 and Gupton 2012).

Halpern (1995) argues that the syntax is responsible for the larger scale ordering of clitic placement, while prosodic inversion is limited to local re-orderings. This locality restriction on non-syntactic clitic-placement is echoed by Embick and Noyer (2001), who call movement in the PF component ‘local inversion’. I adopt Halpern’s (1995) term because, as already hinted at,

there is reason to believe that the inversion of *-han* with the material in the head of FP is motivated not only by clitic dependency, but also by prosody.

The stress pattern of Finnish places primary stress on the first syllable of a word. As discussed in chapter 2, for the purposes of stress assignment, *-han* forms a proper subpart of a word (see chapter 2 and references therein for more on the mixed status of clitics). Since *-han*, like many clitics, is unable to bear stress, it cannot simply procliticize to the material in the head of FP, because this would place it in the position where primary stress is assigned to a word.

So while the simplest solution for Finnish might be the procliticization of *-han* to the material in the head of FP, the prosodic pattern of Finnish makes such a construction ungrammatical. Since clitics are generally unable to bear an accent of their own (Zwicky 1985), and since the primary word stress in Finnish is placed on the first word (Karlsson 1983), *-han* as a clitic cannot be the first syllable in a word because this would place it in a position to receive primary stress assignment. This is represented by the data below, where the placement of primary word stress on *-han* results in ungrammaticality.

- (28) \*Hanósti                    iso    siskoni        koiran.  
han=buy.3.S.PST    big    sister-1POSS   dog-GEN

“My big sister DID buy a dog.”

It is not enough for *-han* to have a host, it must encliticize to that host so that the prosodic pattern of Finnish is not violated.

Besides the evidence given here for a functional projection above FP, Kaiser (2006) gives evidence that contrastively interpreted constituents in Finnish optionally prepose to a functional



projection above FP. Kaiser (2006) (citing Vilkuna 1989, 1995) notes that prosodic focus can be realized both *in-situ* and in the LP of Finnish. However, she distinguishes between *in-situ* and LP prosodic focus by noting that LP focus is restricted to constituents that are meant to be interpreted contrastively, while prosodically focused constituents *in-situ* may be interpreted either as bearing information focus or contrastive focus. She further notes that an unstressed constituent may not precede the prosodically focused preposed constituent (exceptions arise when negation is preposed, an issue explored shortly). She proposes that these prosodically focused constituents are *kontrastive* in the sense that their interpretation requires reference to a set of alternatives, and that they occupy a functional projection in the LP called KontrastP (her spelling is adopted henceforth), to which they move. Importantly, Kaiser (2006) points out that constituents in KontrastP may be either discourse-new or old, which runs somewhat counter to the notion that the domain of new information in Finnish is TP (Holmberg et al. 1993, Holmberg & Nikanne 2002). The following examples are taken from Kaiser (2006) (who uses examples taken from Heinämäki 1982: modifications have been made to the original glosses to remain consistent with the glossing style adopted here), and demonstrate the distribution of kontrastive objects (as previously, capital letters indicate prosodic focus).

- (29) a. Jussi osti HEVOSEN (eikä lehmää). ✓svO  
 Jussi buy.3.S.PST horse.ACC (and-not cow.PART)  
 “It was a HORSE that Jussi bought (and not a cow).”
- b. HEVOSEN Jussi osti (eikä lehmää). ✓Osv  
 horse.ACC Jussi buy.3.S.PST (and-not cow.PART)

“It was a HORSE that Jussi bought (and not a cow).”

- c. \*Jussi HEVOSEN osti (eikä lehmää). \*sOv  
Jussi horse.ACC buy.3.S.PST (and-not cow.PART)  
(p. 323-324)

These examples demonstrate that while prosodically focused constituents can occur *in-situ* (29) a. or in the LP (29) b., a prosodically focused constituent may not be preceded by an unstressed constituent in the LP (29) c. Note that the same word order is grammatical when the subject is prosodically focused as in (30) a., but note also that, as with kontrasted objects, kontrasted subjects may not be preceded by an unstressed constituent in the LP, as demonstrated by the ungrammaticality of (30) b. (examples taken from Kaiser 2006).

- (30) a. JUSSI hevosen osti (eikä Kalle). ✓Svo  
Jussi horse.ACC buy.3.S.PST (and-not Kalle)  
“It was Jussi who bought the horse (and not Kalle).”
- b. \*Hevosen JUSSI osti (eikä Kalle). \*oSv  
horse.ACC Jussi buy.3.S.PST (and-not Kalle)
- c. JUSSI osti hevosen (eikä Kalle). ✓Svo  
Jussi buy.3.S.PST horse.ACC (and-not Kalle)  
“It was JUSSI who bought the horse (and not Kalle).”

The data in (30) indicate that just as with objects, preposed kontrastive subjects must occur at the left edge of the LP or *in-situ*. Kaiser (2006) proposes that these preposed kontrastive constituents move to a dedicated functional projection, KontrastP, in the LP of Finnish. This proposal is in line with Vilkuna (1995) and Vallduvi and Vilkuna (1998) who note that Topics in Finnish move to Spec-TP, while Foci in Finnish move to Spec-CP. The difference is only that Kaiser (2006) follows Rizzi (1997) in assuming a more highly articulated LP. The following are taken from Kaiser (2006) and give a schematic representation of how the word orders represented in (29) and (30) are derived in Kaiser's account. (31) Shows the positioning of kontrastive objects, and (32) shows the positioning of kontrastive subjects (note that Kaiser 2006 follows Holmberg and Nikanne in assuming that the finite verb in Finnish moves to the head of FP in all sentences for feature-checking reasons).

- (31) a. svO = ✓ [FP s [V O]]  
 b. Osv = ✓ [KontrastP O [FP sv]]  
 c. \*sOv
- (32) a. Sov = ✓ [KontrastP S [FP ov]]  
 b. \*oSv

c. Svo = ✓ [KontrastP S [FP vo]]

(p. 327)

This schema helps explain the ungrammaticality of (31) c. and (32) b. as resulting from the fact that the preposed unstressed constituent has no landing site above KontrastP.

The facts given here might lead to the conclusion that *-han* is actually the realization of the head of KontrastP, especially since both *-han* and preposed kontrastive constituents must be at the left edge of the LP of Finnish. Additionally, (30) a. from above with the addition of *-han* demonstrates that *-han* can attach to contrastive constituents.

(33) JUSSI-han hevosien osti.  
Jussi horse.ACC buy.3.S.PST (and-not Kalle)  
“It was Jussi who bought the horse (and not Kalle).”

However, there is reason to believe that ForceP (the projection I propose is headed by *-han*) dominates KontrastP. Kaiser (2006) notes that, when negation preposes in Finnish, the word order facts attested above change considerably. Consider the data in (34), taken from Kaiser (2006), which illustrates the interaction of negation and a kontrastive object (for the sake of efficiency, only the first example, which illustrates the canonical position of negation between the subject and verb, is glossed).

(34) a. Jussi ei ostanut HEVOSTA. s-neg-v-O

Jussi neg.3.S buy.PTCP horse.PART

“It was a horse that Jussi did not buy.”

- b. Ei Jussi ostanut HEVOSTA. neg-s-v-O
- c. \*Ei HEVOSTA Jussi ostanut. \*neg-O-s-v
- d. Ei Jussi HEVOSTA ostanut. neg-s-O-v
- e. \*Jussi HEVOSEN osti. \*s-O-v

Note that, while the word order in (34) e. is ungrammatical, the same word order with preposed negation is grammatical in (34) d. Now compare the interaction of negation with kontrastive subjects in (35) (as in (34) only the first example is glossed).

- (35) a. JUSSI ei ostanut tätä hevosta.  
Jussi neg.3.S buy.PTCP this 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

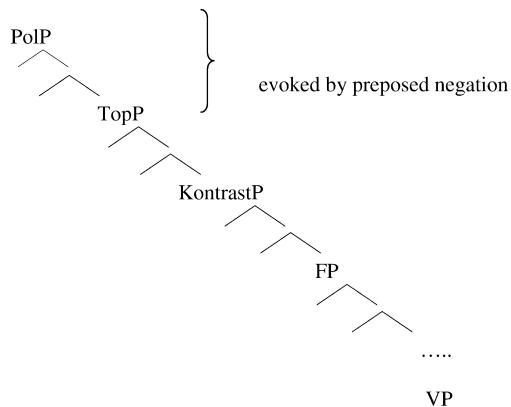
d. Ei tätä hevosta JUSSI ostanut. neg-o-S-v

e. \*Tämän hevosen JUSSI osti. \*o-S-v

The data in (34) and (35) illustrate that preposed negation allows previously ungrammatical word orders. Where before contrastive constituents could not be preceded by unstressed constituents, preposed negation allows this ordering. Note also that Osv ordering is ungrammatical with preposed negation (34.c), even though without it this word ordering is fine.

Kaiser (2006) explains the word order facts of (34) and (35) by proposing that preposed negation projects a functional projection called PolP, which selects as its sister a TopP, both of which dominate FP, the canonical topic position in Finnish. (36) shows the structure of a Finnish clause containing preposed negation as proposed by Kaiser (2006).

(36)



(Kaiser 2006, p. 334)

Crucially, Kaiser (2006) proposes that preposed negation marks a proposition as known or familiar, and that as a result, a non-contrastive, discourse-old subject must raise to TopP when there is a preposed contrastive object. This explains the ungrammaticality of the neg-O-s-v ordering, where, with negation, contrastive objects may not precede non-contrastive subjects.

Finally, consider the placement of *-han* in the examples from above, both with and without preposed negation. (37) a. shows *-han* attached to a contrastive subject, b. shows *-han* attached to a preposed contrastive object, c. shows *-han* attached to preposed negation, and d. shows that *-han* cannot attach to material below preposed negation.

(37) a. JUSSI=*han*            osti            hevosen.  
           Jussi=*han*            buy.3.S.PST    horse.ACC  
           ‘‘It was JUSSI that bought the horse.’’

b. HEVOSEN=*han*        Jussi            osti.  
           horse.ACC=*han*        Jussi            buy.3.S.PST  
           ‘‘It was a horse that Jussi bought.’’

c. Ei=*hän*            Jussi    HEVOSTA    ostanut.  
           neg.3.S            Jussi    horse.ACC    buy.PTCP  
           ‘‘Jussi DID not buy a horse.’’

d. \*Ei            Jussi=*han*    HEVOSTA    ostanut.  
           neg.3.S            Jussi=*han*    horse.ACC    buy.PTCP





The account given here suggests that the functional projection headed by *-han* must necessarily project immediately below CP. This is borne out by the fact that regardless of the material to which *-han* is phonologically attached, it is always found in the second position of the clause, excepting instances in which C is occupied by a complementizer, in which case *-han* is attached to the element immediately following the complementizer.

While the analysis I have given here goes a long way towards providing a possible explanation for the syntax of *-han*-containing sentences and contributes to the understanding of the syntactic realization of information structure in Finnish, it is problematic in one important way. The syntactic placement of *-han* can be described in a cartographic framework, but it cannot be motivated in a way that makes reference to purely syntactic mechanisms. In chapter 3 of this dissertation I reiterate the argument made by previous research on *-han* that its contribution to meaning is purely pragmatic.

#### **4.4 An alternative approach to the syntax of *-han*-containing sentences**

As pointed out by Zwart (2009), much of the current work in syntax assumes that derivations work toward a fixed goal: “a universal syntactic structure characterized by strict hierarchies among functional elements...” (p. 55). The non-cartographic, strictly derivational approach to syntactic structure argues for a stricter understanding of the structure building operation Merge. In this approach, Merge and therefore the derivation of the sentence proceed on a strictly local basis that is driven by the need to satisfy local requirements in a way that is blind to the overall architecture of the sentence. Another term Zwart (2009) gives for the non-cartographic approach is the dynamic approach, reflecting the fact that this approach sees

syntactic positions as existing only because a particular derivation needs them, rather than as existing because there is some fixed map of the clause.

Zwart (2009) notes that weak versions of the cartographic and non-cartographic approaches could be made compatible. This would require the cartographic approach to reconsider the necessity of every derivation projecting certain functional projections and require the non-cartographic approach to accept a map of the clause as an abstraction of different clauses or clause types. Zwart cites word order transitivity failures as reason to believe that even a weak cartographic approach fails to account for the seemingly inherent flexibility of the way structure is created. The strongest formulation of the non-cartographic approach denies the existence of universal phrase structure rules all together, seeing as universal only the way in which elements are merged. For the purposes of the proposal made here, I assume a strong non-cartographic approach, the mechanisms of which I explain below.

In the non-cartographic approach the structure building operation Merge takes an element  $\alpha$  from a certain resource (which Zwart 2009 implies is similar to the Numeration of Chomsky 1995) and assigns it to a workspace  $\delta$ , yielding  $\langle \alpha, \delta \rangle$ . Citing Jaspers (1998), Zwart notes that this type of operation is inherently asymmetric because the product contains a previously existing part and a newly added element. Therefore, the position of  $\alpha$  is defined as an occurrence of  $\delta$ , and is created because of the needs of  $\delta$ . Formally stated:

(40) given a workspace  $\delta$  of a derivation  $P$ , and an element  $\alpha$  merged to  $\delta$ , the position of  $\alpha = OCC(\delta)$  in  $P$ .

(Zwart 2009, p. 57)

Zwart conceptualizes the ‘needs’ of the workspace not in terms of uninterpretable features but in terms of a need for a resolution of an inner conflict. Examples of inner conflict include subjects contained within predicates or topics within a focus domain. The movement that the inner conflict triggers is an externalization of an offending element causing inner conflict. This happens via a second instantiation of Merge of the offending element from the resource (which includes the workspace). This offending element may subsequently be struck from the workspace, leaving either a gap or a trace.

The central assumption of this approach is that Merge is triggered by properties of the workspace. Therefore, syntactic positions are not absolute but are relative to a given workspace. This has implications for the assumption that Spec, TP is the typical position hosting a subject (Chomsky 1981, 2001). As Zwart (2009) notes, the mysterious EPP feature (Chomsky 2001) can be defined in terms of the externalization of an offending element from the workspace. He tentatively proposes the following for the derivation of the subject.

- (41) a. VP/vP represents a lexical domain (a structure of a verb and its arguments)  
b. Tense adds tense/aspect features, turning the derivation into an event  
c. the Subject adds a center to the event

(Zwart 2009, p.69)

Zwart (citing Travis 2000) argues that the lexical domain as conceived of in his system lacks anchoring in time and cannot refer to a state of affairs, which is why it needs to be supplemented with Tense features to yield an event. The event is incomplete without a subject, or ‘center’. Zwart formulates the EPP and the term ‘proposition’ as follows.

(42) *EPP*

An event must be centered

(43) *Proposition*

A proposition is the expression of a centered event

(Zwart 2009, p. 69)

Under this formulation, it is possible to explain the universality of Spec, TP as the subject position. Zwart argues that this is unrelated to any feature residing in T which attracts the subject, but rather is the result of an inherent characteristic of Tense features which add the need for a subject to the derivation.

An important aspect of the non-cartographic approach is the automatic creation of a dependency relation between  $\alpha$  and the workspace,  $\delta$ . The dependency of  $\delta$  on  $\alpha$  may optionally be marked either positionally or morphologically by a ‘linker’. This is represented by the schema

(44)  $\langle \alpha \text{ linker } \delta \rangle$

Zwart (2005) analyzes Germanic verb second phenomena as a type of positional dependency marking. In his system, V2 is seen as a function of the operation Merge, which joins  $\alpha$  to  $\delta$ , and not as the result of movement that is motivated by the need to check functional

features on a head.<sup>9</sup> To illustrate what this schema looks like mapped onto a sentence of a Germanic V2 language, consider the example below.<sup>10</sup>

(45)            Ich    habe            das Buch gelesen.  
                  <     α    linker                    δ                    >

In this representation, the subject ‘*ich*’ is merged to the workspace,  $\delta$ . The dependency of  $\delta$  on the subject is marked by the finite verb ‘*habe*’. This analysis of V2 in Germanic languages differs from traditional analyses in a number of ways. The first has already been stated; the mechanism by which V2 comes to occupy second position is not feature driven, but rather a function of the structure building operation itself. This reconceptualizes what has previously been seen as a particular verb movement (à la the V2 constraint) and generic XP movement as an operation that is primarily driven by particular XP movement that is accompanied by generic verb movement.

In most conceptions of Germanic V2, the verb is thought to occupy the head of CP, where it head-moves out of the VP, and the first constituent of the sentence is thought to occupy Spec, CP in declarative main clauses. This view of Germanic syntax is supported by the complementarity between the finite verb and the complementizer in embedded clauses in many Germanic languages. This is illustrated by the following examples. Compare (29) to (30).

---

<sup>9</sup> In Zwart’s (2005) system, the relationship between the position of the verb and its morphosyntactic features is indirect and governed by a principle that Zwart calls *Consistency*. Consistency requires a linker, which is a term of the dependent to mark dependency both positionally and morphologically (for more see Zwart 2005).

<sup>10</sup> The example is glossed here to maintain the ease of understanding the correspondence of the example and the functions of each part of the clause in Zwart’s system

(i)    Ich    habe    das    Buch    gelesen.  
       I      have   the    book    read  
       “I have read the book.”

- (46) a. Ich denke, dass ich das Buch gelesen habe.  
 I think that I the book read have  
 “I think that I have read the book.”
- b. \*Ich denke, dass habe ich das Buch gelesen.
- c. \*Ich denke, dass ich habe das Buch gelesen.

The inability of the finite verb to raise out of the verbal complex is seen as resulting from the competition for the head of CP between it and the complementizer. In the non-cartographic approach this complementarity falls out from when positional dependency marking may occur. In Zwart’s system, positional dependency marking is limited to operations constituting a cycle: embedded clauses don’t mark positional dependency between the subject and its sister because they don’t constitute a cycle. Zwart proposes that in embedded constructions it is the complementizer that marks positional dependency, in this case between the matrix verb and the embedded clause. It is important to reiterate that, in this approach, the competition between the complementizer and the finite verb is not for an absolute position but a relative one that is constituted by the left edge of the workspace (Zwart 2005).

Sentences containing *-han* are conducive to an analysis in which *-han* is the positional marking of dependency of a workspace on the element to which *-han* is phonologically attached. In other words, *-han* can be analyzed as analogous to V2 in Germanic languages under a non-cartographic approach. Similar to V2, this approach has the benefit of analyzing the variety of

clause types in which *-han* is found in the second position of the sentence as resulting from the same mechanism. Regardless of whether *-han* is attached to the material in the head of FP, to the head of some other constituent, or to WhP, its position after the first element of the sentence can be analyzed as resulting from the operation which externalizes the element which *-han* is attached to.

Zwart (2009) has not proposed the exact mechanisms of his non-cartographic approach. He notes that this approach does not assign a syntactic position to anything other than the element being merged to the workspace. In other words, the strictest interpretation of the non-cartographic approach does not conceptualize the workspace itself as occupying a hierarchy of fixed projections. Rather, the entire workspace represents a single syntactic element. The element being merged to this workspace occupies a syntactic position that emerges as a property of the derivation due to the needs of the workspace. If my interpretation of Zwart's system is correct, I take this to mean that an advanced non-cartographic approach would do away with the kind of articulated phrase structure we are used to seeing altogether. The examples I provide here are approximations of how a derivation would proceed in this system.

Because the non-cartographic approach limits positional dependency marking to an operation that completes a cycle, the positioning of *-han* after the first element of the sentence falls out from the completion of the derivation via the externalization of the first element. This can be represented as follows.

- (47) a.      WORKSPACE,  $\delta$   
               Henna       osti    koiran.  
               Henna       MERGE >   Henna osti koiran

Henna            ~~Henna~~ osti koiran

Henna =han osti koiran

$\alpha$  linker  $\delta$

b. Henna=han osti koiran-n.

Henna=han buy.3.S.PST dog-GEN

“Henna bought a dog.”

The derivation of the sentence in (47) b. is represented in (47) a. In accordance with Zwart’s (2005) conceptualization, the externalization of an element occurs to resolve some type of inner conflict within the workspace. The inner conflict can exist for a number of different reasons; Zwart (2009) gives the examples of subjects within predicates and topics within focus domains. Presumably, the type of inner conflict that causes an externalization which results in overt positional dependency marking in Finnish is different in some way than those externalizations which do not result in overt positional dependency marking. However, given the data presented in section 4.2 of this chapter, which indicates that *-han* can attach to constituents serving different information structural functions, there is reason to believe that either the externalization that results in the positional marking of dependency by *-han* occurs after externalization motivated by information structural reasons, or that within each type of externalization there is a variety that includes overt positional dependency marking.



#### 4.5 An alternative approach to information structure: Implications for *-han*

Lopez (2009) provides an approach to the pragmatics-syntax interface that explains information structural functions as the result of the pragmatic module of the grammar, taking the output of the syntactic module of the grammar and tagging constituents with features relevant for the integration of that syntactic object into discourse. This can be stated as in (48).

- (48) Pragmatics takes the syntactic object  $\Sigma$ , yielding the annotated structure  $\Sigma_{[p]}$ ,  
where  $\Sigma_{[p]}$  is the information structure of  $\Sigma$

(Paraphrased from Lopez 2009, p. 1)

The view of information structure espoused in (48) is markedly different from pragmatic approaches to information structure that are framed in terms of speaker intentions or assumptions. Lopez notes that such approaches lead us to a view of information structure whereby a syntactic structure is mapped onto a state of affairs in the speaker's mind. Lopez's proposal differs from previous syntactic approaches to information structure in that it takes the syntactic phase, rather than the sentence, to be the level at which the syntactic and interpretive component of the grammar interact. Another major departure Lopez makes from previous approaches to information structure is his adoption of the binary features [+/- a(naphor)] and [+/- c(contrast)] as the crucial information structural notions. He argues that the notions 'topic' and 'focus' are descriptive terms that represent bundles of features, but are not theoretical primitives. Lopez takes phase edges to be the point at which pragmatic rules apply. This occurs so that the positive values [+a] and [+c] are assigned to phase edges while the negative values are assigned to the complement domain of the phase head. Crucially, the pragmatic features assigned to

constituents stay with those constituents as they proceed with the derivation. These features constrain the set of possible derivations that the constituents can engage in.

Lopez argues that phrase-internal movement has interpretive consequences that are distinct from movement to phase edges. In his account, phase internal positions are not involved in rule-governed, obligatory assignment of interpretive features. Furthermore, contra Chomsky (2001), he argues that movement occurs to both phase edges and to phase internal positions, differing in their interpretive consequences. Movement to phase internal positions is relevant for interpretation because it makes constituents visible for binding or anchoring, giving rise to specific/referential or generic interpretations. Importantly, Lopez argues that all movement in his system is triggered by feature checking exclusively.

Lopez's (2009) approach to the pragmatics-syntax provides valuable insight into how pragmatic elements like *-han* might be accounted for. My pragmatic account of *-han* makes the claim that it contributes to meaning in an exclusively procedural way. In other words, I suggest that *-han* makes no contribution to linguistically encoded meaning and that it is entirely pragmatic. Within Lopez's approach to information structure, *-han* might be analyzed as an overt marking of the pragmatic module of the grammar. Perhaps the most important question that must be answered by this type of approach is whether *-han* overtly marks the sentence in which it is found or the constituent to which it is attached. To answer this question, I will determine whether constituents to which *-han* can attach may be analyzed as sharing a featural distinction within Lopez's theory.

As mentioned above, Lopez views the crucial information structural features as being those of [+/- a(naphor)] and [+/- c(contrast)]. He argues that, at least for Romance languages, the notions of topic (a la Reinhart 1981) and focus, fail to identify a coherent class of constructions

(2009). He shows that the tests for topichood put forth by Reinhart fail for dislocates in Romance (see Lopez 2009). He argues that, instead, dislocates in Romance should be analyzed as anaphoric elements. In Lopez's account, anaphoric constituents are ones that necessarily look for an antecedent in the immediately preceding discourse context.

Lopez also argues that the notion of focus cannot provide an adequate explanation for focus fronting (henceforth FF). He points to Jackendoff's (1972) characterization of focus, which sees it as a resolution for a variable left open in previous discourse and says that this characterization fails to account for the crucial role of contrast in these constructions. Lopez provides the following example from Catalan to illustrate this point.

- (49) [Context: You gave him the spoons.]
- |               |        |          |        |
|---------------|--------|----------|--------|
| -ELS GANIVETS | li     | vaig     | donar. |
| the knives    | CL.DAT | PAST.1SG | give   |
- 'THE KNIVES, I gave him.'

(Lopez 2009, p. 28)

Lopez notes that the capitalized constituent performs two functions. It creates a variable, thereby transforming the assertion 'you gave him/her the spoons' into the predicate ' $\lambda x$  you gave him/her  $x$ ', which opens up the set ( $\{x|x=\text{things I may give him/her}\}$ ). The FF also simultaneously provides a value for  $x$  ( $x=\text{the knives}$ ). Crucially, Lopez argues that the previous discourse does not leave open a variable to be resolved, which distinguishes FF from the type of focus described by Jackendoff (1972).

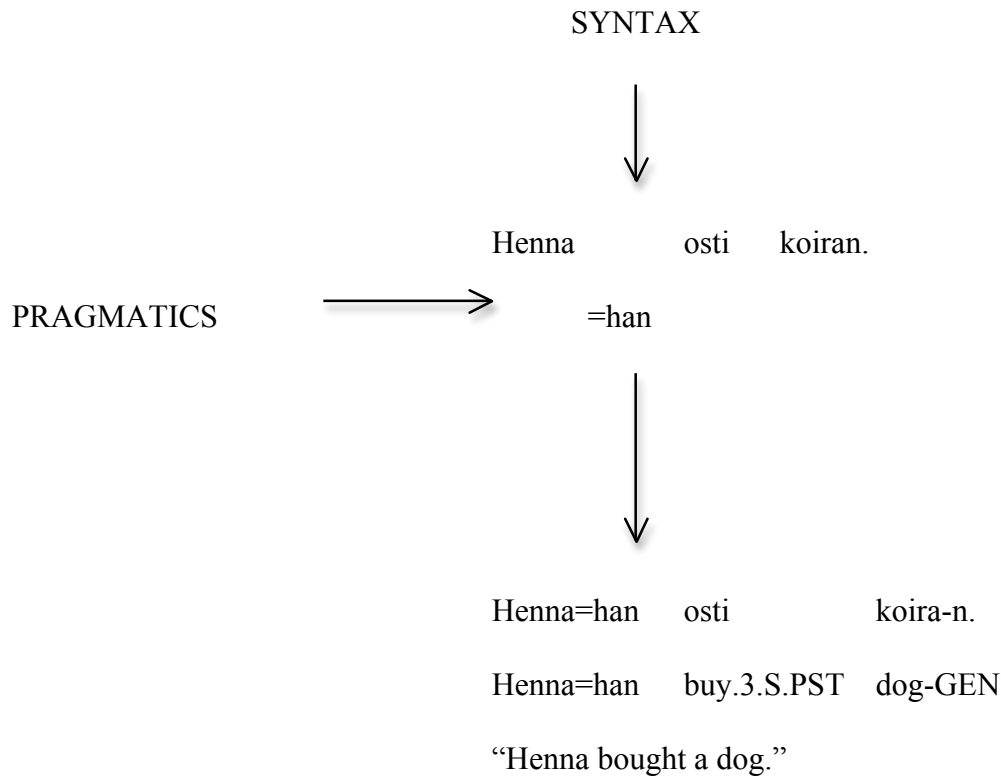
I have shown that *-han* can attach to constituents regarded as topics and foci in the literature on Finnish syntax, as well as *wh*-elements. As noted above, Lopez argues for the feature [+/- a] as providing a more valuable theoretical primitive than topic. With respect to *-han* marked topics in Finnish (moving to Spec-FP), there is no reason why the approach Lopez applies could not be adopted for Finnish. Recall that, in Finnish, one constituent bearing the feature [-Foc] must move to occupy Spec-FP. If we replace this feature instead with the feature [+a], we can account for the topic prominence of Finnish in essentially the same way as Holmberg et al. (1993) and Holmberg and Nikanne (2002), though the featural content motivating movement and the mechanisms whereby these features are assigned differ. However, Lopez argues that foci and *wh*-elements, are [-a], in other words, non-anaphoric, suggesting that anaphoricity cannot be the feature which defines *-han* marked constituents. Lopez's notion of contrast is more promising, since he argues that the feature [+c] is associated with the left periphery. He notes that foci and *wh*-elements share the feature [+c], which he associates with the left periphery of the clause. The fact that *-han* can also attach to topics does not preclude this analysis, since Lopez argues that clitic left dislocates (CLLD) are distinct from clitic right dislocates (CLRD) in that the former is [+a, +c], while the latter is [+a, -c], suggesting that a topic may bear the feature [+c] as well. However, as Kaiser (2006) points out, and as I maintain in my analysis, contrastively focused constituents may remain *in situ* in Finnish, suggesting that *-han* cannot be analyzed as being associated with a feature of contrastiveness either. Otherwise, we would not expect *-han*-containing structures to be compatible with *in-situ* focus. The example below repeats (20) b. from above, and shows that this type of construction is in fact grammatical for Finnish.

(50) Ei=hän            Jussi   ostanut            HEVOSTA.  
neg=han            Jussi   bought            horse.PART

“It wasn’t the HORSE that Jussi bought.”

However, the mechanism by which Lopez suggests syntactic structures interact with the pragmatic module provides an interesting alternative to an account whereby the derivation of *-han* is syntactic. In my pragmatic analysis of *-han*, I argue that *-han* contributes to procedural meaning. In other words, I argue that *-han* does not have any conventionally encoded linguistic meaning but rather that it is entirely connected to the inferential process of interpretation. Under Lopez’s approach, *-han* can be conceptualized as the overt marking of the pragmatic module, which is inserted into the derivation after narrow syntactic operations have taken place. This is schematized in (51).

(51)



However, this kind of approach would need to answer the question of what triggers the insertion of *-han*. In addition to this, it is not clear that López’s system is able to account for the realization of information structural functions in Finnish.

#### 4.6 Discussion

This chapter has provided both a cartographic and a non-cartographic approach to the syntax of *-han*-containing sentences. The cartographic approach proposed that *-han* heads a functional projection in the LP of Finnish called ForceP. The many attachment possibilities of *-han* required reference to more than one mechanism by which *-han* comes to occupy the second position of the sentence. I made the case that, when *-han* is found attached to the head of

a constituent, that constituent occupies Spec, ForceP. I argued that constituents which have moved out of Spec-ForceP to check features in the functional projection above ForceP would pied-pipe *-han*, resulting in a structure in which *-han* occupies Spec-CP attached to a Wh-phrase. Finally, I argued that *-han* undergoes a type of local inversion with the material in the head of FinP, which may be a finite verb or negation, the element that shows subject verb agreement in Finnish. And while this account may seem overly complex, there is good reason to think it is necessarily correct. As explained in this chapter, the accentuation pattern of Finnish places primary stress on the first syllable of a word. One of the most common characteristics of clitics cross-linguistically is their inability to bear stress, so the inversion of *-han* with the material in FinP can be motivated for independent reasons, namely prosodic ones.

The non-cartographic approach to the syntax of *-han*-containing sentences is a tentative proposal for how not only *-han*, but perhaps second position phenomena more generally, can be accounted for. The fact that this approach allows for parallels between seemingly disparate phenomena is promising because it provides a plausible explanation for the fact that there is something special about the second position of the sentence in many, genetically unrelated languages.

My discussion of Lopez's approach to information structure suggests that, while Lopez's system is not currently able to account for the realization of information structural functions in Finnish, his proposal of how the syntactic and pragmatic modules of the grammar interact might provide a promising way to account for the realization of *-han*. More research is needed to determine whether or not this approach can be tweaked to work for *-han*.

Each of the approaches discussed here requires further investigation. This research focuses exclusively on just one of the particle clitics of Finnish, *-han*. The benefit of this narrow

focus is the rather detailed understanding of how *-han* functions in discourse and patterns syntactically. However, a full understanding of the LP of Finnish in a cartographic approach can only emerge once the syntax of all 2P clitics in Finnish have been accounted for. Within the non-cartographic approach, much more work is required to understand the nature of the inner conflict that motivates an externalization, the nature of positional dependency marking, and the ‘needs’ of the workspace that drive motivations more generally.



## CHAPTER 5

### CONCLUSION

#### 5.1 Summary

The study presented in this dissertation set out to determine whether a unified account could be provided for the various meanings ascribed to the Finnish discourse particle *-han* and how its syntactic position could be accounted for. The previous pragmatic account of *-han* maintained that it contributes to meaning by conventionally implicating that the utterance containing it references a situation that is familiar to the interlocutors (Hakulinen et al. 2004). As I have shown in chapter 3 of this dissertation, this account of *-han* is not able to explain the many different meanings associated with the clitic. The previous syntactic account of *-han* from Nevis (1986) precedes the extensive amount of work on the left periphery of the Finnish clause by Holmberg et al. (1993), Holmberg and Nikanne (2002), and Kaiser (2006) and therefore does not provide a satisfactory account of how *-han* interacts with information structural functions, negation, and questions. Furthermore, prior to this dissertation, no study has been dedicated solely to an examination of *-han* from both a pragmatic and syntactic perspective.

I provide a pragmatic account of *-han* that is grounded in the relevance theoretic distinction between procedural and conceptual meaning. I argue that *-han* contributes to meaning procedurally by communicating the speaker's belief that the addressee has access to the information necessary to recover the intended interpretation of the utterance. This analysis ties together the functions and meanings attested for *-han* in previous research by arguing that they

are by-products of the interpretive procedure that *-han*'s presence instructs the addressee to undertake.

I also provide a syntactic account of *-han*-containing sentences. I make the case that *-han* occupies the head of a functional projection in the left periphery of the Finnish clause called ForceP (á la Lopez 2009). Based on the variety of material to which *-han* can attach and the position in which this material is assumed to be generated or moved to under the current understanding of the Finnish clause, I maintain that two mechanisms must be made reference to in order to derive *-han*'s canonical second position. I argue that the first of these mechanisms involves the movement of some phrase into the specifier of ForceP to satisfy an uninterpretable feature there that is connected to the discourse-pragmatics of the clause containing it. And I argue that, when *-han* is found attached to a verb or negation (a type of verb in Finnish), surface word order is derived via local movement, more specifically, prosodic inversion with the functional head immediately dominated by *-han*.

This last chapter discusses how the contribution made by this dissertation to *-han* and the current understanding of Finnish clause structure should be developed in future research and how it might influence theoretical considerations.

## **5. 2 Implications**

This dissertation focuses solely on the pragmatics and syntax of *-han*. As such, it has the benefit of providing a broad understanding of a single discourse particle clitic. The combinatorial potential of the Finnish particle clitic system (see chapter 1) prompts further investigation into how they can be accounted for both individually and as clitic clusters. This research needs to consider both the pragmatic function of these clusters and their syntactic realization. The

combinatorial possibilities of these clitics as well as their individual functionality make this a daunting but necessary task.

The pragmatic account of *-han* I give argues for a relevance theoretic approach to its polyfunctionality. The data this analysis is based on was collected in Ostrobothnia, and it is therefore reflective of the variety of Finnish spoken there. The dialectal diversity in Finland necessitates cross-dialectal research that compares how speakers of different dialects understand and use not only *-han* but also the other particle clitics of Finnish. It would be particularly interesting to examine what the compositional meanings of these clitics are and whether their combinatorial potential varies from one dialect to another. Larger corpora of Finnish data should also be studied to determine whether variation in the use of particle clitics can be correlated to sociolinguistic or extra-linguistic factors.

Furthermore, my pragmatic account of *-han* prompts discussion about how polyfunctional linguistic elements can best be explained. The relevance theoretic approach has the benefit of providing a distinction between procedural and conceptual meaning, which provides a more nuanced way of accounting for the contribution to meaning made by elements like *-han*. I argue that the previous analysis of *-han* (Hakulinen et al. 2004), which sees it as contributing to meaning via the Gricean notion of conventional implicature (Grice 1989) is unable to account for its polyfunctionality. Indeed, I believe the argument can be made that the notion of conventional implicature is not able to account for polyfunctional linguistic elements in a satisfactory way. However, the criticism of the relevance theoretic notion of relevance (Mey 1993) merits a closer examination of whether this theory can provide a true alternative to neo-Gricean and Gricean approaches, or whether the two approaches might be integrated.

The syntactic account of *-han* provided in chapter 4 of this dissertation explores information structure, word order possibilities, and the position of negation in Finnish. While there is a great deal of literature on these topics, more work needs to be done on marginal word orders, the effect of other functional elements on word order (such as in questions), and differences in word order possibilities across different dialects of Finnish. Given that there seems to be a strict ordering between the particle clitics of Finnish (see chapter 2), more work is needed to determine how this ordering can be accounted for under both cartographic and non-cartographic approaches. More work is also needed under both approaches to understand the interaction between the particle clitics of Finnish and information structure, and whether or not the current map of the Finnish clause holds up once all of the particle clitics have been accounted for.

In general more work is needed to understand what the nature of second position phenomena is, and whether the fact that we find certain linguistic elements there in different languages is arbitrary or motivated by some deeper generalization that can be made. The non-cartographic approach given here for the syntax of *-han*-containing sentences offers a starting point for exploring this issue.

Furthermore, my syntactic account of *-han* based on Zwart (2005, 2009) and Lopez (2009) offer ways of accounting for syntactic placement of *-han* in a way that is connected to its pragmatic function. Including these kinds of functions in narrow syntactic operations is considered problematic by some syntacticians. The problem with the approach provided by Zwart's framework is that it has not been developed further and applied to a variety of second position phenomena cross-linguistically. More work needs to be done to explore how much his system has to add to the understanding of the derivation of syntactic structures and the

significance of second position phenomena. The issue with Lopez's approach is that it is not able to account for all the realization possibilities of information structural functions in Finnish. However, his conceptualization of the syntax-pragmatics interface provides a particularly promising framework through which to understand the realization of pragmatic elements of language.

## References

- Aijmer, K. (1988). Now may we have a word on this: the use of now as a discourse particle. *Corpus linguistics: hard and soft. Amsterdam and Atlanta: Rodopi.*
- Aijmer, K., & Simon-Vandenberg, A. M. (2003). The discourse particle well and its equivalents in Swedish and Dutch. *Linguistics*, 41(6; ISSU 388), 1123-1162.
- Ariel, M. (1990). *Assessing noun-phrase antecedents*. London: Routledge.
- Blakemore, D. (1987). Semantic constraints on relevance.
- Blakemore, D. (1992). *Understanding utterances: An introduction to pragmatics* (pp. 155-78). Oxford: Blackwell.
- Blakemore, D. (2002). *Relevance and linguistic meaning: The semantics and pragmatics of discourse markers* (Vol. 99). Cambridge University Press.
- Carston, R. (1988). Implicature, explicature and truth-theoretic semantics. *Mental representations: the interface between language and reality*, ed. by R. Kempson, 155–81.
- Carston, R. (1998). Pragmatics and the Explicit–Implicit distinction.
- Carston, R. (1999). The semantics/pragmatics distinction: A view from relevance theory. *The semantics/pragmatics interface from different points of view*, 85125.
- Carston, R. (2002). *Thoughts and Utterances: The Pragmatics of Explicit Communication*. Wiley-Blackwell, Oxford.
- Central Intelligence Agency. (2014). Finland. In the World Factbook. Retrieved from: <https://www.cia.gov/library/publications/the-world-factbook/geos/fi.html>
- Clark, B. (2013). *Relevance Theory*. Cambridge University Press.
- Chafe, W. L., & Li, C. N. (1976). Givenness, Contrastiveness, Definiteness, Subjects, Topics, and Point of View in Subject and Topic.

- Chomsky, N. 1981. Lectures on government and binding. Dordrecht: Foris.
- Chomsky, N. (1995). *The minimalist program* (Vol. 28). Cambridge, MA: MIT press.
- Chomsky, N. (2001). Derivation by phase. Ken Hale: a life in language, ed. by M. Kenstowicz, 1–52.
- Davidson, D. (1984). Truth and interpretation. *Claredon, New York*.
- Embick, D., & Izvorski, R. (1995). Participle-auxiliary word orders in Slavic. In *Annual Workshop on Formal Approaches to Slavic Linguistics: the Cornell Meeting* (Vol. 4, pp. 210-239).
- Embick, D., & Noyer, R. (2001). Movement operations after syntax. *Linguistic inquiry*, 32(4), 555-595.
- Ewen, R. C. (1983). *A grammar of Bulgarian clitics*. University Microfilms.
- Fischer, K. (Ed.). (2006). *Approaches to discourse particles*. Amsterdam: Elsevier.
- Fraser, B. (1990). An approach to discourse markers. *Journal of Pragmatics*, 14(3), 383-398.
- Fraser, B. (1996). Pragmatic markers. *Pragmatics*, 6, 167-190.
- Gazdar, G. (1982). Phrase structure grammar. In *The nature of syntactic representation* (pp. 131-186). Springer Netherlands.
- Givón, T. (1971, April). Historical syntax and synchronic morphology: an archaeologist's field trip. In *Chicago Linguistic Society* (Vol. 7, No. 1, pp. 394-415).
- Grice, H.P. (1989). *Study in the Way of Words*. Cambridge. Harvard University Press.
- Gupton, T. (2012). Object Clitics in Galician and Complications for Clausal Analyses. In *Selected Proceedings of the 14th Hispanic Linguistics Symposium* (pp. 272-284).
- Hakulinen, A. (1975). Sanajärjestyksen eri tehtävistä. *Virittäjä*, 79(1), 85.

- Hakulinen, A. (1976). Liitepartikkelin –han/-hän syntaksia ja pragmatiikkaa. *Reports on Text Linguistics: Suomen kielen generatiivista lauseoppia 2*. Meddenlanden Fran Stiftelsens for Abo Akademi Forskninstitut, Nr. 7.
- Hakulinen, A., & Karlsson, F. (1979). *Nykysuomen lauseoppia* (Vol. 350). Suomalaisen kirjallisuuden seura.
- Hakulinen, A., Vilkuna, M., Korhonen, R., Koivisto, V., Heinonen, T.R., & Alho, I. (2004). *Iso Suomen Kielioppi*. Suomalaisen Kirjallisuuden Seura: Helsinki.
- Hale, K. (1973). *Person marking in Walbiri*.
- Halliday, M. A. (1967). Notes on transitivity and theme in English: Part 2. *Journal of linguistics*, 3(02), 199-244.
- Halpern, A. L. (1992). *Topics in the placement and morphology of clitics*. Stanford University.
- Halpern, A. (1995). *On the placement and morphology of clitics*. Center for the Study of Language (CSLI).
- Halpern, A. L., & Zwicky, A. M. (1996). Approaching second: Second position clitics and related phenomena. *CSLI lecture notes*, 61.
- Hansen, M. B. M. (2006). A dynamic polysemy approach to the lexical semantics of discourse markers (with an exemplary analysis of French toujours). *Approaches to Discourse Particles, 1*, 21-42.
- Heinämäki, O. (1982). Problems of basic word order. *Approaches to Word Order*, 95-106.
- Hobbs, J. R. (1979). Coherence and coreference. *Cognitive science*, 3(1), 67-90.
- Holmberg, A., Nikanne, U., Oraviita, I., Reime, H., Trosterud, T. (1993). The structure of INFL and the finite clause in Finnish. *Case and other functional categories in Finnish syntax*, 39, 177.



- Holmberg, A., & Nikanne, U. (2002). Expletives, subjects, and topics in Finnish. *Subjects, expletives, and the EPP*, 71-106.
- Horn, L.R. (1984). Towards a taxonomy for pragmatic inference: Q- and R- based implicature. In D. Schiffrin (ed) *Meaning, Form, and Use in Context*, 11-42. Georgetown University Round Table on Languages and Linguistics. Georgetown University Press. Washington DC.
- Horn, L.R. (1988). Pragmatic theory. In F. Newmeyer (ed.) *Linguistics: The Cambridge Survey, 1: Linguistic Theory: Foundations*, 113-45. Cambridge University Press.
- Huang, Y. (2007). *Pragmatics—Oxford Textbooks in Linguistics*.
- Jackendoff, R. S. (1972). Semantic interpretation in generative grammar.
- Jaspers, D. (1998). Categories and recursion. *INTERFACE-BRUSSELS-*, 12, 81-112.
- Kaiser, E. (2006). Negation and the left periphery in Finnish. *Lingua*, 116(3), 314-350.
- Karlsson, F. (1982). *Suomen peruskielioppi* (Vol. 378). Suomalaisen kirjallisuuden seura.
- Karlsson, F. (1983). *Finnish: An Essential Grammar*. Routledge Essential Grammars. Routledge.
- Karttunen, F. (1974). More Finnish Clitics: Syntax and Pragmatics. *Mimeo*. University of Texas Press.
- Karttunen, F. (1975a). Functional Constraints on Finnish Syntax. In *CLS Parasessions on functionalism*, 232-243.
- Karttunen, F. (1975b). The syntax and pragmatics of the Finnish clitic-han. In *Texas Linguistic Forum* (Vol. 1, pp. 41-50).
- Koskinen, P. H. (1998). Features and categories, non-finite constructions in Finnish.

- Krifka, M. (2008). Basic notions of information structure. *Acta Linguistica Hungarica*, 55(3-4), 243-276.
- Leino, P. (1989). *Suomen kielioppi*. Otava.
- Vivien, L. S. L. (2006). A relevance-theoretic approach to discourse particles in Singapore English. *Approaches to discourse particles*, 149.
- Lewis, D. (1972). *General semantics* (pp. 169-218). Springer Netherlands.
- López, L. (2009). *A derivational syntax for information structure* (Vol. 23). Oxford University Press.
- Manninen, S. (2003). *Small phrase layers: A study of Finnish manner adverbials* (Vol. 65). John Benjamins Publishing.
- Marantz, A. (1984). On the nature of grammatical relations. *Linguistic Inquiry Monographs Cambridge, Mass.*, (10), 1-339.
- Mey, J. (1993). *Pragmatics: an introduction*. Oxford: Blackwell.
- Nevis, J.A. (1986). *Finnish particle clitics and general clitic theory*. Ohio State University.
- Oxford English Dictionary. (2000). Internet edition, Simpson, J. (Ed.). Oxford University Press, Oxford. <http://oed.com>.
- Penttilä, A. (1957). *Suomen Kielioppi*. Werner Söderström Osakeyhtiö, Porvoo.
- Pereltsvaig, A. (2004). Topic and focus as linear notions: evidence from Italian and Russian. *Lingua*, 114(3), 325-344.
- Raevaara, L. (2004). Mitäs me sovittais: s-partikkelin sisältävien hakukysymysten tehtävistä. *Virittäjä*, 4. S. 532-558.
- Raposo, E., & Uriagereka, J. (2005). Clitic placement in Western Iberian: A minimalist

- view. *Handbook of comparative syntax*, 639-697.
- Reinhart, T. (1981). Pragmatics and Linguistics: An Analysis of Sentence Topics in Pragmatics and Philosophy I. *Philosophica anc Studia Philosophica Gandensia Gent*, 27(1), 53-94.
- Rizzi, L. (1997). The fine structure of the left periphery. In *Elements of grammar* (pp.281-337). Springer Netherlands.
- Schiffrin, D. (1987). *Discourse Markers*. Cambridge: Cambridge University Press.
- Schourup, L. (1999). Discourse markers. *Lingua*, 107(3), 227-265.
- Schourup, L. (2011). The discourse marker now: A relevance-theoretic approach. *Journal of Pragmatics*, 43(8), 2110-2129.
- Schütze, C. (1994). Serbo-Croatian second position clitic placement and the phonology-syntax interface. *MIT working papers in linguistics*, 21, 373-473.
- Snyder, K. (2000). Reconfiguring syntax, or some good reasons why we shouldn't. In *Conference on the Interaction Between Syntax and Pragmatics*.
- Spencer, A., & Luis, A. R. (2012). *Clitics: An Introduction*. Cambridge University Press.
- Sperber, D. & Wilson, D. (1986). *Relevance: Communication and Cognition*. Wiley-Blackwell, Oxford and Harvard University Press, Cambridge MA.
- Sperber, D., & Wilson, D. (1995). *Relevance: Communication and cognition*.
- Sperber, D., & Wilson, D. (2002). Pragmatics, modularity and mind-reading. *Mind & Language*, 17(1-2), 3-23.
- Sperber, D. & Wilson, D. (2005). Pragmatics. In F. Jackson and M. Smith (eds.) *Oxford Handbook of Contemporary Analytic Philosophy*, pp. 468-501. Oxford University Press.
- Stalnaker, R. (1974). Pragmatic presuppositions. *Semantics and philosophy*, ed. by Milton K.

- Munitz and Peter Unger, 197–213.
- Sulkala, H., & Karjalainen, M. (1992). Finnish (Descriptive Grammars). *London and New York, NY: Routledge*.
- Szendrői, K. (2001). *Focus and the syntax-phonology interface* (Doctoral dissertation, University College London).
- Szendrői, K. (2004). Focus and the interaction between syntax and pragmatics. *Lingua, 114*(3), 229-254.
- Travis, L. (2000). Event structure in syntax. *Events as grammatical objects: The converging perspectives of lexical semantics and syntax*, 145-185.
- Välímää-Blum, R. (1987). The discourse function of the Finnish clitic-han: another look. *The Nordic Languages and Modern Linguistics, 6*, 471-481.
- Välímää-Blum, R. M. (1988). *Finnish existential clauses—their syntax, pragmatics and intonation* (Doctoral dissertation, The Ohio State University).
- Vainikka, A. M. (1989). Deriving syntactic representations in Finnish.
- Vallduví, E., & Engdahl, E. (1996). The linguistic realization of information packaging. *Linguistics, 34*(3), 459-520.
- Vallduví, E., & Vilkuna, M. (1998). On rheme and kontrast. *Syntax and semantics*, 79-108.
- Van Dijk, T. A. (2008). Discourse and context. *A sociocognitive approach*.
- Vilkuna, M. (1980). Referenssi ja spesies suomenkielisten tekstien tulkinnessa.
- Vilkuna, M. (1989). Free Word Order in Finnish. Its Syntax and Discourse Functions.

- Suomalaisen Kirjallisuuden Seura, Helsinki.
- Vilkuna, M. (1995). Discourse configurationality in Finnish. *Discourse configurational languages*, 244-268.
- Wackernagel, J. (1892). Ueber die reine Gestalt der indogermanischen Wortstellung. *IF I* (1892): 333-436.
- Walker, R. (1975). Conversational Implicature. In S. Blackburn (ed.) *Meaning, Reference, and Necessity*. Cambridge University Press.
- Wilson, D., & Sperber, D. (1981). On Grice's theory of conversation. *Conversation and discourse*, 155-78.
- Wilson, D. & Sperber, D. (2004). Relevance Theory. In Horn, L.R. & Ward, G. (eds), pp. 607-632.
- Wilson, D., & Sperber, D. (2012). *Meaning and relevance*. Cambridge University Press.
- Zwart, J. W. (2005). Verb second as a function of Merge. *The function of function words and functional categories*, 2005, 11-40.
- Zwart, J. W. (2009). Uncharted territory. *Towards a Non-Cartographic Account of Germanic Syntax*, 2009, 59-84.
- Zwicky, A. (1977). On clitics. Bloomington: Indiana University Linguistics Club.
- Zwicky, A. M., & Pullum, G. K. (1983). Cliticization vs. inflection: English n't. *Language*, 502-513.
- Zwicky, A. M. (1985). Clitics and particles. *Language*, 283-305.